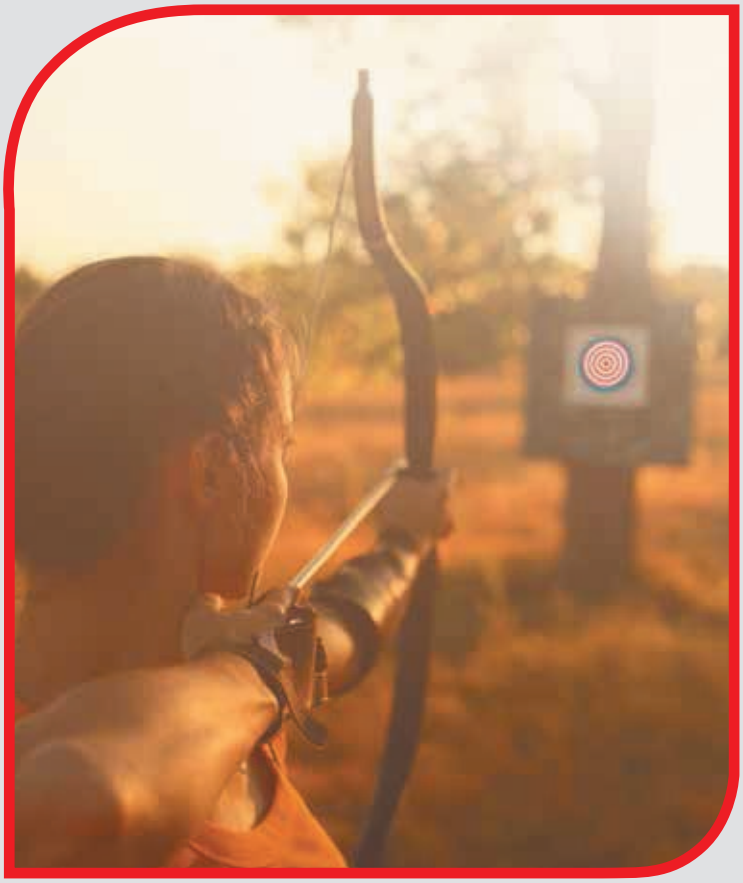


THERMAX

38th Annual Report 2018-19



About the Cover

Scoring a bull's-eye implies the perfect interplay of one's own preparedness through practice, patience and perseverance; and the ability to gauge external weather conditions. As businesses continue to operate in a volatile and ever-changing environment, the need of the hour is to constantly review and enhance their capabilities, keeping the target in focus and strike when the time is right.

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Our Vision

To be a globally respected high performance organisation offering sustainable solutions in energy and the environment



Corporate Information

Board of Directors

Meher Pudumjee
Chairperson

M.S. Unnikrishnan
Managing Director & CEO

Dr. Valentin A.H. von Massow

Nawshir Mirza

Pheroz Pudumjee

Dr. Jairam Varadaraj

Harsh Mariwala

S.B. (Ravi) Pandit

Rajani Kesari

Executive Council

Ravinder Advani

Sharad Gangal

Pravin Karve

B.C. Mahesh

Hemant Mohgaonkar

Amitabha Mukhopadhyay

Dr. R.R. Sonde

M.S. Unnikrishnan

Rajendran Arunachalam

Prosenjit Sengupta

Key Managerial Personnel

M.S. Unnikrishnan
Managing Director & CEO

Amitabha Mukhopadhyay
EVP and Group CFO
(till May 31, 2019)

Kedar P. Phadke
Company Secretary &
Compliance Officer

Rajendran Arunachalam
EVP and Group CFO
(effective June 1, 2019)

Registered Office

D-13, M.I.D.C Industrial Area, R.D. Aga Road, Chinchwad, Pune - 411 019.
Ph.: 020-66122100/66155000
Fax: 020-66122142

Corporate Identity No.
L29299PN1980PLC022787

Corporate Office

Thermax House,
14, Mumbai-Pune Road,
Wakdewadi, Pune - 411 003.
Ph.: 020-66051200/25542122
Fax: 020-25541226

Website: www.thermaxglobal.com

Registrar & Share Transfer Agent

Karvy Fintech Pvt. Ltd.
Karvy Selenium Tower B,
Plot No. 31 & 32, Gachibowli,
Financial District, Nanakramguda,
Serilingampally, Hyderabad - 500 032.
Tel: 040-67161500/33211000
Fax: 040-23001153/23420814
Toll free: 1800 345 4001
E-mail: einward.ris@karvy.com
Website: www.karvy.com

Bankers

Union Bank of India
Bank of Baroda
Canara Bank
Citibank NA
Corporation Bank
ICICI Bank Ltd.
State Bank of India
HSBC

Auditors

SRBC & CO. LLP Chartered Accountants C-401, Panchshil Tech Park, Yerwada, Pune - 411 006.
ICAI Firm Reg. No. 324982E/E300003

Subsidiaries

Domestic

1. First Energy Pvt. Ltd.
2. Thermax Babcock & Wilcox Energy Solutions Pvt. Ltd.
3. Thermax Engineering Construction Company Ltd.
4. Thermax Instrumentation Ltd.
5. Thermax Onsite Energy Solutions Ltd.
6. Thermax SPX Energy Technologies Ltd.
7. Thermax Sustainable Energy Solutions Ltd.

Overseas

1. Boilerworks A/S, Denmark
2. Boilerworks Properties ApS, Denmark
3. Danstoker A/S, Denmark
4. Danstoker Poland Spółka Z Ograniczona Odpowiedzialnoscia
5. Ejendomsanpartsselskabet Industrivej Nord 13, Denmark
6. PT Thermax International, Indonesia
7. Rifox-Hans Richter GmbH Spezialarmaturen, Germany
8. Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd., China
9. Thermax Denmark ApS
10. Thermax do Brasil-Energia e Equipamentos Ltda, Brazil
11. Thermax Energy & Environment Lanka (Private) Limited, Sri Lanka
12. Thermax Energy & Environment Philippines Corporation
13. Thermax Engineering Construction FZE, Nigeria
14. Thermax Engineering Singapore Pte Ltd.
15. Thermax Europe Limited, UK
16. Thermax Inc., USA
17. Thermax International Ltd., Mauritius
18. Thermax Netherlands B.V.
19. Thermax Nigeria Limited
20. Thermax SDN. BHD., Malaysia
21. Thermax Senegal S.A.R.L

Thermax Portfolio

Power | Heating | Cooling | Water | Chemicals



Utilities

Raw Material



Desired Products

Waste



Wastewater Treatment



Air Pollution Control



Hazardous Waste Treatment



Waste to Energy Generation

Our Core Businesses

ENERGY SEGMENT

Heating

- Boilers & Fired Heaters
  - Atmospheric Fluidised Bed Combustion Boilers
  - Circulating Fluidised Bed Combustion Boilers
  - Grate Fired Boilers
  - Spentwash Boilers
  - Auxiliary Boilers
  - Heat Recovery Steam Generators
  - Waste to Energy Boilers
  - Waste Heat Recovery Boilers
  - Fired Heaters and Process Furnaces
- Steam Boilers
- Thermal Oil Heaters and Vapourisers
- Hot Water Generators
- Hot Air Generators
- High Pressure Boilers
- Heat Recovery Systems
- Energy Plants
- Packaged and Modular Units

Cooling

Absorption Cooling and Heating

- Vapour Absorption Chillers
- Heat Pumps
- Hybrid Chillers
- Chiller-Heaters
- Heat Transformers

Process Cooling

- Wet Cooling Solutions
  - Evaporative Condensers
  - Closed Loop Cooling Towers
  - Adiabatic Coolers
- Dry Cooling Solutions
  - Dry Coolers
  - Radiators
  - Air Cooled Condensers
  - Air Cooled Heat Exchangers

Power Generation

EPC Solutions for:

- Captive Power Plants
- Independent Power Plants
- Waste Heat Recovery Power Plants
- Cogeneration Systems

Renewable Energy

- Solar Thermal Hybrid Systems for Cooling and Heating
- Solar Concentrators
- Rooftop Solar PV Plants
- Ground Mounted Solar PV Plants

ENVIRONMENT SEGMENT

Air Pollution Control

- Electrostatic Precipitators
- Bagfilters/Baghouse
- Scrubbers (Particulate/Gaseous)
- Combofilters
- Flue Gas Desulphurisation (FGD)
- DeNOx Systems
- Heat Exchangers
- Coal Grinding Systems

Water & Waste Solutions

- Water Treatment Solutions
- Wastewater Treatment Solutions
  - Sewage Treatment and Recycle
  - Industrial Effluent Treatment and Recycle
- Zero Liquid Discharge (ZLD) Solutions
- Desalination Plants
- Waste Incineration

CHEMICAL SEGMENT

- Ion Exchange Resins
- Water and Fuel Treatment Chemicals
- Oil Field Chemicals
- Construction Chemicals

Reliable Support for Industries


Automobile


Cement


Edible Oil


Distilleries


EPC Majors and Consultants


Food


Chemicals & Fertilisers


Paper & Pulp


Hotels & Commercial Complexes


Oil & Gas


Refineries & Petrochemicals


Paint


Sugar


Pharmaceuticals


Rubber


Textiles


Space Heating


Steel


Tank Farm Heating


Power Generation

Board of Directors



Meher Pudumjee



M.S. Unnikrishnan



Pheroz Pudumjee



Nawshir Mirza



Harsh Mariwala



Dr. Valentin A.H. von Massow



Dr. Jairam Varadaraj



Ravi Pandit



Rajani Kesari

Thermax Limited - Financials at a Glance

Rs. crore

PARTICULARS	2018-19*	2018-19	2017-18	2016-17	2015-16#	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Domestic Sales (Excluding Excise Duty)	2427	3072	2522	2501	2828	3452	3067	3581	3977	3598	2432
Export (Including Deemed Export)	1061	2026	1262	1176	1446	1092	1101	984	1143	1066	656
% to Total Sales	*30%*	*40%*	*33%*	*32%*	*34%*	*24%*	*26%*	*22%*	*22%*	*23%*	*21%*
Total Sales	3488	5098	3784	3677	4274	4544	4168	4565	5120	4664	3088
Growth	*(8%)*	*35%*	*3%*	*(14%)*	*(6%)*	*9%*	*(9%)*	*(11%)*	*10%*	*51%*	*(4%)*
Operating Income	53	77	84	87	65	59	61	59	60	64	97
Revenue from Operation	3541	5175	3868	3764	4339	4603	4231	4624	5180	4728	3185
Other Income	123	137	104	103	114	117	64	73	70	83	50
Total Income	*3664*	*5312*	*3972*	*3866*	*4453*	*4720*	*4295*	*4697*	*5250*	*4811*	*3235*
Total Expenses	3291	4749	3497	3389	3964	4139	3821	4116	4595	4193	2801
Profit before Depreciation, Interest, Extraordinary Items and Tax	373	563	475	477	489	581	474	581	655	618	434
(% to Total Income)	*10%*	*11%*	*12%*	*12%*	*11%*	*12%*	*11%*	*12%*	*12%*	*13%*	*13%*
Depreciation	50	63	64	65	61	64	58	55	47	43	40
Interest	5	8	8	4	5	20	9	10	7	2	2
Extraordinary Items of Expenses	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*0*	*115*
Exceptional Items of Expenses	48	48	25	133	0	0	0	0	0	0	0
Profit before Tax	270	444	378	275	423	497	407	516	601	573	277
(% to Total Income)	*7%*	*8%*	*10%*	*7%*	*9%*	*11%*	*9%*	*11%*	*11%*	*12%*	*9%*
Tax	109	169	140	130	126	161	154	166	194	191	136
Profit after Tax	161	275	238	145	297	336	253	350	407	382	141
Other Comprehensive Income (Net of Tax)	(13)	(21)	4	9	(2)	NA	NA	NA	NA	NA	NA
Total Comprehensive Income (Net of Tax)	148	254	242	154	295	NA	NA	NA	NA	NA	NA
Gross Block	1171	1439	1259	1090	1059	1039	1008	873	805	717	688
Net Block (including CWIP)	742	827	764	684	643	648	664	645	574	516	505
Investments	1424	1424	1796	1404	1378	1257	1096	804	553	404	378
Current Assets	2618	4165	3571	2860	3134	3566	3496	2886	2990	2778	1664
Current Liabilities	1766	3339	2739	2117	2283	2693	2689	2229	2410	2366	2044
Net Current Assets	852	826	832	743	851	873	807	657	580	412	(380)
Capital Employed	2736	2736	2566	2410	2343	2268	2026	1869	1601	1293	1051
Equity Share Capital	24	24	24	24	24	24	24	24	24	24	24
Reserves and Surplus	2712	2712	2542	2386	2318	2243	2001	1845	1577	1269	1027
Net Worth	2736	2736	2566	2410	2342	2267	2025	1869	1601	1293	1051
Loan Funds	0	0	0	0	1	1	1	0	0	0	0
Fixed Asset Turnover Ratio	*4.70*	*6.16*	*4.95*	*5.38*	*6.65*	*7.01*	*6.28*	*7.07*	*8.93*	*9.03*	*6.12*
Current Ratio	*1.48*	*1.25*	*1.30*	*1.35*	*1.37*	*1.32*	*1.30*	*1.29*	*1.24*	*1.17*	*0.81*
Return on Capital Employed	*10%*	*17%*	*15%*	*12%*	*18%*	*23%*	*21%*	*28%*	*38%*	*44%*	*37%*
Return on Net Worth	*6%*	*10%*	*9%*	*6%*	*13%*	*15%*	*12%*	*19%*	*25%*	*30%*	*13%*
Cash Earnings Per Share (Rs.)	*17.75*	*28.37*	*25.38*	*17.65*	*30.08*	*33.57*	*26.08*	*33.97*	*38.09*	*35.73*	*24.90*
Earnings Per Share	*13.51*	*23.10*	*19.99*	*12.15*	*24.97*	*28.19*	*21.23*	*29.37*	*34.15*	*32.09*	*21.51*
Dividend	*350%*	*350%*	*300%*	*300%*	*300%*	*350%*	*300%*	*350%*	*350%*	*450%*	*250%*
Book Value per Share (Rs.)	*230*	*230*	*215*	*202*	*197*	*190*	*170*	*157*	*134*	*108*	*88*

* Includes only continuing operations, hence the data is not comparable with previous periods

Figures for FY 2015-16 have been reclassified as per Indian Accounting Standards (Ind AS) as prescribed by Ministry of Corporate Affairs. Figures for the subsequent years are as per Ind AS.

Note: The net current assets figures for 2009-10 are based on Schedule VI classification and hence are not strictly comparable.

Thermax Group - Financials at a Glance

Rs. crore

PARTICULARS	2018-19	2017-18	2016-17	2015-16#	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10
Domestic Sales (Excluding Excise Duty)	3249	2668	2813	3210	3618	3199	3898	4333	3873	2556
International Sales/Business	2637	1703	1573	1859	1624	1758	1468	1574	1250	720
% to Total Sales	*45%*	*39%*	*36%*	*37%*	*31%*	*35%*	*27%*	*27%*	*24%*	*22%*
Total Sales	5886	4371	4386	5069	5242	4957	5366	5907	5123	3276
Growth	*35%*	*0%*	*(13%)*	*(3%)*	*6%*	*(8%)*	*(9%)*	*15%*	*56%*	*(4%)*
Other Operating Income	87	94	97	76	62	72	59	60	90	94
Revenue from Operation	5973	4465	4483	5145	5304	5028	5425	5967	5213	3370
Other Income	150	116	114	122	123	72	85	84	58	52
Total Income	6123	4581	4597	5267	5427	5100	5510	6051	5271	3422
Total Expenses	5516	4064	4049	4716	4843	4592	4935	5377	4640	2975
Profit before Depreciation, Interest, Extraordinary Items and Tax	607	517	548	551	584	508	575	674	631	447
(% to Total Income)	*10%*	*11%*	*12%*	*10%*	*11%*	*10%*	*10%*	*11%*	*12%*	*13%*
Depreciation	92	82	82	72	134	92	77	66	54	44
Interest	14	13	10	12	82	27	17	12	4	2
Extraordinary Items of Expenses	0	0	0	0	0	0	0	0	0	115
Exceptional Items of Expenses	90	0	18	0	49	0	0	0	0	0
Profit before Tax	411	422	438	467	319	389	481	596	573	286
(% to Total Income)	*7%*	*9%*	*10%*	*9%*	*6%*	*8%*	*9%*	*10%*	*11%*	*8%*
Tax	85	166	156	144	171	169	177	204	196	142
Profit after Tax before Non Controlling Interest and Share in Loss of Associate and Joint Venture	326	256	282	323	148	220	304	392	377	144
Share in Joint Venture/Associates Loss	(1)	(25)	(66)	(41)	NA	NA	NA	NA	NA	NA
Minority Interest	NA	NA	NA	NA	(62)	(26)	(16)	(12)	(5)	(0)
Profit after Tax, Minority and Share in Associate's/Joint Venture's Loss	325	231	216	282	210	246	320	404	382	144
Other Comprehensive Income	(22)	27	(19)	22	NA	NA	NA	NA	NA	NA
Total Comprehensive Income Attributable to:	304	258	197	304	NA	NA	NA	NA	NA	NA
Equity Holders of the Parent	304	259	204	304	NA	NA	NA	NA	NA	NA
Non Controlling Interest	-	(1)	(7)	-	NA	NA	NA	NA	NA	NA
Gross Block	2236	1741	1515	1438	2051	2044	1296	1193	1068	742
Net Block (including CWIP)	1352	1076	952	887	1474	1580	1390	1091	821	548
Investments	829	1472	1083	1050	822	708	443	240	230	370
Current Assets	4737	4102	3297	3610	4185	4125	3287	3406	3065	1832
Current Liabilities	3654	3079	2365	2615	3274	2999	2509	2758	2563	2239
Net Current Assets	1083	1023	932	995	911	1126	778	648	502	(407)
Capital Employed	3050	2768	2585	2450	2719	2695	2362	1829	1452	1095
Equity Share Capital	23	23	23	23	24	24	24	24	24	24
Reserves and Surplus	2992	2692	2515	2393	2123	2014	1845	1605	1291	1054
Net Worth	3015	2715	2538	2416	2147	2038	1869	1629	1315	1078
Minority Interest	-	-	1	-	78	140	110	112	52	9
Loan Funds (long term)	35	53	46	34	494	517	383	88	85	8
Fixed Asset Turnover Ratio	*4.35*	*4.06*	*4.61*	*5.71*	*3.56*	*3.14*	*3.86*	*5.42*	*6.24*	*5.98*
Working Capital Turnover Ratio	*5.43*	*4.28*	*4.71*	*5.10*	*5.75*	*4.40*	*6.90*	*9.11*	*10.21*	*0.00*
Current Ratio	*1.30*	*1.33*	*1.39*	*1.38*	*1.28*	*1.38*	*1.31*	*1.24*	*1.20*	*0.82*
Return on Capital Employed	*14%*	*15%*	*15%*	*18%*	*15%*	*15%*	*21%*	*33%*	*40%*	*37%*
Return on Net Worth	*11%*	*9%*	*9%*	*12%*	*10%*	*12%*	*17%*	*25%*	*29%*	*13%*
Cash Earnings Per Share (Rs.)	*37.06*	*27.93*	*27.08*	*31.48*	*28.86*	*28.38*	*33.33*	*39.42*	*36.57*	*15.82*
Earnings Per Share (Rs.)	*28.90*	*20.61*	*19.80*	*25.07*	*17.61*	*20.64*	*26.87*	*33.86*	*32.03*	*12.11*
Dividend	*350%*	*300%*	*300%*	*300%*	*350%*	*300%*	*350%*	*350%*	*450%*	*250%*
Book Value per Share (Rs.)	*268*	*241*	*225*	*215*	*180*	*171*	*157*	*137*	*110*	*90*

Figures for FY 2015-16 have been reclassified as per Indian Accounting Standards (Ind AS) as prescribed by Ministry of Corporate Affairs. Figures for the subsequent years are as per Ind AS.
Note: The net current assets figures for 2009-10 are based on Schedule VI classification and hence are not strictly comparable.

Highlights of the Year 2018-19

1. Thermax Group clocked a revenue (income) of Rs. 6,123 crore in FY 2018-19, a **growth of 33%** as compared to last year's Rs. 4,602 crore (includes excise duty). Profit after tax for the year was Rs. 325 crore (Rs. 231 crore).

2. Thermax **concluded an order of Rs. 340 crore from a leading Indian steel major** for a specially designed waste heat boiler, electric turbo generators and ancillary equipment for their production facility in Maharashtra, India.



3. Thermax **inaugurated its state-of-the-art manufacturing facility at Sri City, Andhra Pradesh, on January 31, 2019**. In the first phase, the plant will roll out 400 vapour absorption machines - chillers, heat pumps and heaters. It deploys high levels of automation to facilitate zero-defect processes and superior quality products.

4. During the year, **Thermax acquired the JV partner's stake in Thermax Babcock & Wilcox Energy Solutions (TBWES)**, which became a wholly owned subsidiary of the company. Subsequently, the shareholders approved the transfer of the Boiler & Heater (B&H) business to TBWES through a 'slump sale'.

5. Thermax has **acquired the entire stake in Thermax SPX Energy Technologies Ltd. (TSPX)** held by the joint venture partners namely, Mutares Holding-24 AG, Germany and Balcke Duerr GmbH, Germany. Subsequent to the acquisition, TSPX has now become a wholly owned subsidiary of Thermax.

6. **Commissioned a 40 MW coal-based captive power plant** for a leading cement and clinker manufacturer in the UAE; Thermax's first full-fledged EPC project in the Middle East.

7. Thermax **commissioned 21 units of exhaust gas boilers for a power generation and distribution company in Bangladesh for their 200 MW integrated power plant.** This is the highest number of boilers supplied by Thermax for a single project so far.

8. Several renowned bodies in India such as CII, ISHRAE and the Energy and Environment Foundation recognised Thermax for its **contribution to sustainability by developing innovative and energy efficient technologies.**



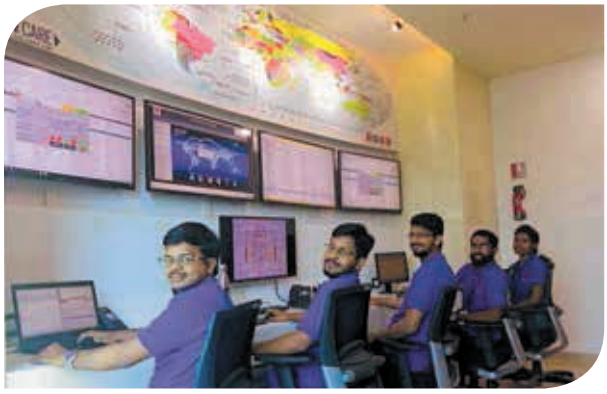
The 'Global Excellence Awards-2019' in the gas sector was presented to Dr. R. R. Sonde, head of Research & Innovation at Thermax by the Energy and Environment Foundation under the aegis of the Petroleum & Natural Gas, Coal and Power ministries.



Thermax (Channel Business Group) organised its 'Top Channel Partners Meet' at Prague and Krakow with the theme of 'Empowered to Win'.



The Power EPC division commissioned its 100th power plant during the year.



As a value add to customers, Thermax introduced the Remote Online Service Support System for monitoring and troubleshooting its absorption chillers installed across the globe.



Dr. Raghunath Mashelkar and Anu Aga retired as directors on the Board at the 37th Annual General Meeting, held on August 8, 2018.

Chairperson's Message



My dear shareholder,

It is my privilege to present the 38th Annual Report of your company. Riding on a healthy opening order book in 2018, Thermax Group posted a revenue of Rs. 6,123 crore in 2018-19 as compared to Rs. 4,602 crore (including excise duty) in the previous year.

Profit after tax was Rs. 325 crore (Rs. 231 crore).

Revenue from the international business was higher by 46.9% at Rs. 2,636 crore, as compared to Rs. 1,794 crore in the previous year.

With a 33% rise in the group revenue, it's been a good year for your company, after several years of declining topline. Apart from considerable growth in the energy segment, our environmental businesses have also turned around and done reasonably well. The industries that presented opportunities for your company comprised cement, food processing, textile, pharma, tyre and paper.

On behalf of the Board, I'd like to thank our Managing Director & CEO, M.S. Unnikrishnan, his team and all our employees for their commendable efforts and outcome. Our thanks to all our customers for their continued support. I'd also like to express my sincere gratitude to our Board members who continue to guide us in propelling the company's growth ambitions.

Let me extend a warm welcome to Rajani Kesari (Regional Finance Head - India, SEA & Australia at LafargeHolcim) who has joined our Board. Her expertise in the financial domain, as well as experience of working with reputed engineering companies in product and project portfolios, will add a lot of value to Thermax going forward.

Although we had a good year, on the global economic front, uncertainty and volatility continue to be the order of the day. Rising protectionism, amplification of trade war between China and the US, the troubled atmosphere in Europe around Brexit and the cloud of political tension looming over the Middle East, softened investor sentiment.

The Indian economy was no exception and slowed down considerably during the last two quarters, in anticipation of the general elections, impacting new investment, especially in the core sectors. Substantial Non Performing Assets (NPA) in the banking and NBFC sectors are affecting liquidity in the market; moreover, stretched balance sheets of several conglomerates are further dampening private capacity enhancement. These factors impacted the order booking of Thermax Group, reducing it by 11.7% to Rs. 5,633 crore.

Our biggest export order from the largest refinery in Africa announced last year, progressed as per plan. I am pleased to share with you that this is the first such shipment of a battery of large modularised boilers from India and is indeed a very proud moment for us. This reinforces Thermax's execution capabilities on a global platform.

We have experienced a paradigm shift in global outlook towards energy and environment norms, starting with the COP 21 Paris agreement for climate change, reinforced by the recently concluded COP 24 summit. Thermax began thinking green, especially in terms of waste to energy and combustion of all forms of biomass waste since inception, which today, is the need of the hour. Last year, Thermax developed a unique solution for paper mills, tackling the problem of non-recyclable paper waste management. This waste is fuel for our boilers and is being used to meet the captive power needs of customers. We had created solutions for distillery waste (spentwash) on similar lines, a few years ago, which has proliferated the market

today. Through continuous innovation and technological upgrade, your company is trying to offer cleaner and greener solutions. Luckily, thanks to COP 21 and a greater awareness of climate change, the market is moving in this direction too.

India is not just tightening environment norms, but making sure they are implemented, which is a very progressive move - both in water and air pollution. One such area is the demand for Flue Gas Desulphurisation (FGD) - a mandate to reduce sulphur dioxide, where our company will be partaking selectively in the coming year. We are also judiciously participating in the Solar PV sector. However, concerns regarding profitability, on account of government regulations and intense competition have constrained us from growing aggressively in this sector.

I am pleased to share that our acquisition of shares in TBWES concluded during the year, making it a wholly owned subsidiary of Thermax. Subsequently, the Boiler & Heater division of the company is in the process of being transferred to TBWES through a slump sale, to leverage the synergies between the two businesses in terms of product offerings, customer base and manufacturing infrastructure, particularly the modern facility of TBWES at Shirwal. This plant is now operational and geared to execute domestic and export orders.

Your company continued to navigate its strategy of selective internationalisation and focus on expanding its product footprint. The order intake for our products from international markets increased by 20% over the last year. This was supported by our overseas sales offices as well as manufacturing locations. Our project businesses are also opening local EPC offices, so that South East Asia becomes a second home market, after India.

Taking cognisance of the prolonged troubles pertaining to our subsidiary in China, we have decided to stop manufacturing and have planned for progressive closure of the facility.

We commenced commercial production of vapour absorption machines from our latest manufacturing plant at Sri City. This is our first digitally oriented factory, with a Manufacturing Execution System (MES) that enables it to be paperless and smart. This system will give real-time status updates to our customers. I am delighted to share that this new factory has been constructed leveraging the Indian Green Building Council (IGBC) green factory norms and has recently been awarded the highest 'platinum' status. It means the factory is environmentally responsible and resource efficient throughout the building's life cycle from planning to design, construction, operation and maintenance.

With the formation of the new government at the centre in India, pending reforms in labour laws and land acquisition being addressed, stringent action being taken in the financial sector, interest rate cuts and a general move to kickstart a higher GDP growth rate, we are hopeful of improved capacity utilisation. However, international tensions may have an impact on the Indian economy, should they persist.

Coming to CSR, Thermax Foundation continued its support to strengthen its public-private partnership with the Pune Municipal Corporation and our NGO partners. The partnership entered another successful year, where, the yardstick of its impact was evident from the encouraging results of Akanksha alumni, who have secured admission into prestigious universities and some have received scholarships for studying abroad.

It is heartening to see some of the changes suggested in the draft National Education Policy; extending the RTE Act from 3 to 18 years of age, as against the earlier policy of 6 to 14 years, thus encouraging early childhood education as also completion of school until standard XII.

It's wonderful to see the overwhelming participation by Thermax employees in various initiatives across the country. Over time, we look forward to our employees contributing their skills and domain expertise in addressing critical societal challenges. Further to our resolve to work for communities in the vicinity of our manufacturing locations in India, Thermax Foundation is in the final stages of signing off an implementation plan in collaboration with credible NGO partners.

On behalf of the Board, let me once again thank all our employees, customers, supplier partners, channel associates, shareholders and other stakeholders for their continued support to Thermax.

Warmly,
Meher Pudumjee

Letter from the Managing Director



Dear shareholder,

It gives me a lot of satisfaction to report a thirty-three percent growth in revenue for the Thermax Group after three consecutive years of decline. The innate strength of your company in diligently executing both product and project orders has certainly helped in achieving this all-time high revenue. Our Q4 performance that crossed a milestone of Rs. 2,000 crore, indicates our capacity and competency to scale up further with marginal line balancing.

The magnitude of growth in the topline could not be matched with a proportionate increase in profitability owing to the negative performance of our European subsidiary as well as cost overruns in two of our ongoing EPC projects.

During the first half of the financial year, the domestic market witnessed a positive momentum that translated into steady and healthy order intake. This trend reversed starkly through the second half as capacity utilisation started declining in most of the consumer-facing segments along with no order conclusions in steel, oil & gas, power, fertilisers, heavy chemicals and non-ferrous metal sectors during this period. The only exception was a steel sector order concluded in the first quarter of the year, which was received by your company. Cement sector that was reporting increased capacity utilisation during the first half of the year saw a decline towards the end of the financial year, affecting order finalisation.

Containment of cost combined with product innovations led to your company increase its market share in sectors like food processing, auto ancillaries, textiles, dairies, light engineering, pharma and paper that helped us maintain our overall domestic order intake at the same levels as the previous year.

The international operations of your company faced varied challenges, impacting our order booking. The US economy remained strong although disrupted occasionally by the Government's unanticipated moves. China, the world's second-largest economy, grappled with an economic slowdown that was further accentuated by its trade war with the US, moving our Chinese subsidiary deeper into red, compelling us to prune down its operations considerably. Investment climate continued to be subdued across the globe, especially the Middle East, Africa, South America and Eastern Europe, which generally supports our project businesses. A decline in the project order intake was partially compensated by the improved performance of our product divisions in majority of markets.

It was heartening to see all the three new manufacturing facilities commissioned by your company in the recent past reach stability in process adherence, output quality and capacity utilisation. The resin facility at Dahej surpassed almost 60% of its installed capacity during the year. This has encouraged the management to go ahead with the second phase of expansion of this plant, elevating its rated capacity to 22,000 m^3 per annum. Our Indonesian boiler manufacturing plant has already

moved closer to a full single shift operating capacity and is slated to move into a double shift operation based on the rate of orders received. Acceptance of the product quality delivered by this plant to the market is evident with repeat orders from our Indonesian customers as well as new orders from other ASEAN countries like the Philippines, Myanmar, Vietnam, Malaysia and Thailand. Though inaugurated only in the fourth quarter, our modern engineering manufacturing facility at Sri City, deploying robotic welding for superior product quality, has steadily increased its output and should reach a 75% capacity utilisation by the end of second quarter of the current year.

The manufacturing facility acquired by us in Poland became fully operational during the year. The installed capacity of this plant was further enhanced by machinery transferred from our Boilerworks facility of Denmark. As we expand this plant to its full capacity during the second half of the current year, it will support our entire European operations as an anchor facility. Following the decision to transfer our B&H business to TBWES, its manufacturing facility at Shirwal resumed operations. This state-of-the-art plant will certainly enhance the standard and quality of B&H offerings.

Your company has initiated an all-encompassing digitalisation programme that will transform every aspect of our processes and operating systems to a digital platform - possibly, the first in India and one among the earliest in the world for a capital goods company. The programme is led by an Executive Council member designated as the Chief Digital Officer and is supported by one of the leading consulting firms of the world. Multiple initiatives that run across all the different strategic business units of the company are being planned for making operations of our company *smarter*. As a part of it, our product, project and service offerings will transition to an IoT platform that will enable continuous remote monitoring and possibly, remote servicing. In the evolving Artificial Intelligence enabled digital manufacturing wave of the world, your company is preparing to be a forerunner and dependable business partner for the industry of tomorrow.

The Research, Technology and Innovation Centre of the company was selected by the Department of Science and Technology, Government of India for the development of 'Methanol from Coal' technology in partnership with the Indian Institute of Technology, Delhi. The methanol thus generated from domestic coal with a high ash content is expected to be used as an input to create hydrogen as a fuel. Once commercialised through fuel cells, this process will substantially contribute to achieving our national carbon footprint reduction targets stipulated through the COP 21 Paris agreement.

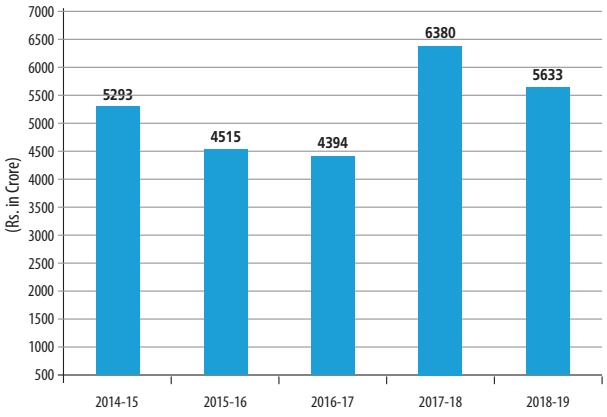
Opening the current year with a lower order carry forward in a hazy global market, full of uncertainties will certainly necessitate exceptional efforts to garner a growth. But, policy continuity, accompanied by mega projects, in the wake of the government's continuity, should resurrect the investment path in the domestic market atleast towards second half of the current financial year. We will ensure our active presence in all the select global and domestic markets where orders are concluded, specifically focussing on short cycle projects to target for a possible topline enhancement. We have an energised and competent team that is capable of delivering on this commitment when the market demand turns around.

Looking forward to your continued support…

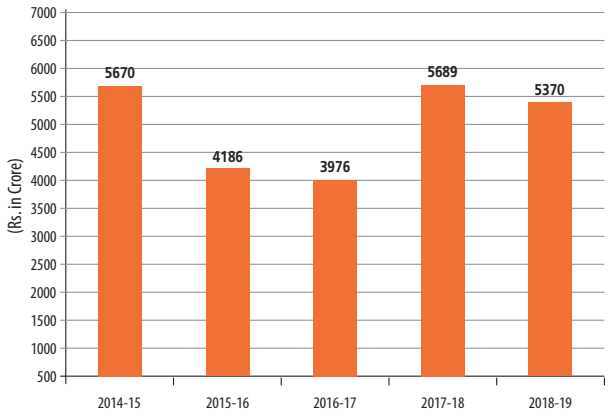
With best wishes,
M.S. Unnikrishnan

Key Financial Indices - Thermax Group

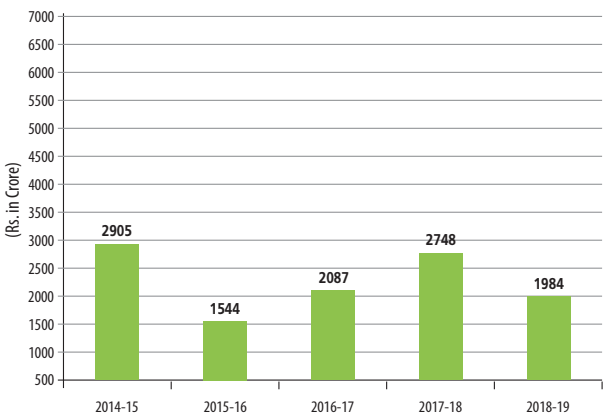
Order Booking#



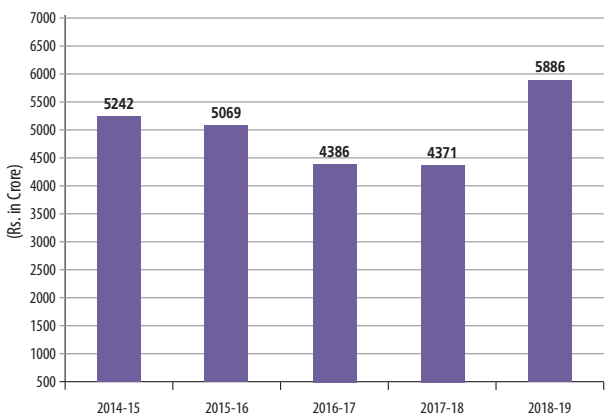
Order Balance#



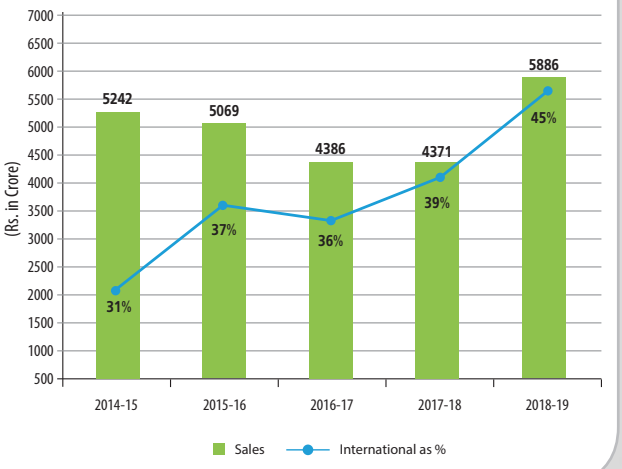
International Order Booking#



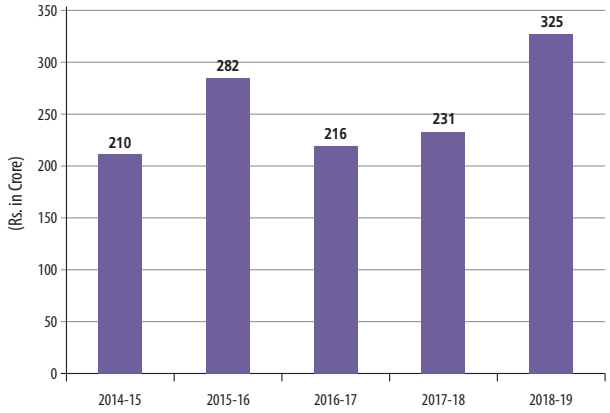
Sales (Excluding Excise Duty)#



International Sales as a % of Total Sales#

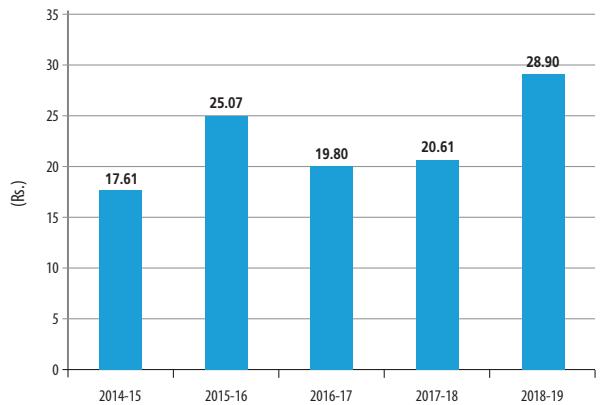


Profit After Tax (PAT)*

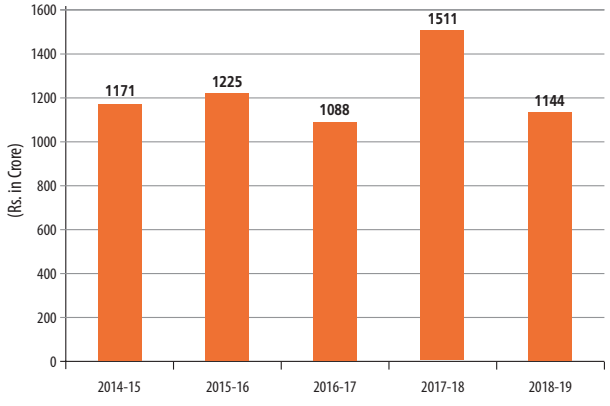


*After minority interest and share of JV

Earnings Per Share (EPS)



Cash & Cash Equivalents#
(including current investments)



#The numbers for 2014-15 are including Joint Ventures as per old accounting standards.

Directors' Report

Dear shareholder,

Your directors are pleased to present the Thirty-Eighth Annual Report, together with the audited financial statements of your company for the year ended March 31, 2019.

Financial Results

(Rupees in crore)

Particulars	Standalone		Consolidated	
	2018-19	2017-18	2018-19	2017-18
Total revenue	3663.90	2845.53	6123.05	4602.03
Profit before finance cost, depreciation and tax	373.52	338.43	607.32	517.33
Finance cost & depreciation	55.39	53.39	106.34	95.29
Profit before tax & exceptional items	318.13	285.04	500.98	422.04
Exceptional items	(47.85)	(25.00)	(89.54)	-
Profit before tax but after exceptional items	270.28	260.04	411.44	422.04
Provision for taxation (incl. deferred tax)	109.26	98.90	84.94	165.75
Share of profit/(loss) on joint venture	NA	NA	(1.07)	(25.19)
Profit after tax from continuing operations	161.02	161.14	325.43	231.10
Profit after tax from discontinuing operations	114.22	77.11	NA	NA
Other comprehensive income	(20.82)	3.59	(21.72)	27.03
Total comprehensive income	254.42	241.84	303.71	258.13
Total equity	2735.85	2565.56	3014.29	2714.74
Earnings Per Share (EPS) (Rs.) face value per share Rs. 2/- from continuing operations	13.51	13.52	28.90	20.61
Earnings Per Share (EPS) (Rs.) face value per share Rs. 2/- from continuing and discontinuing operations	23.10	19.99	28.90	20.61

The current year's revenue is exclusive of Goods and Service Tax (GST), while last year's revenue includes excise duty, and hence, they are not comparable. Further, the results of B&H business have been classified as discontinued operations in the standalone financial statements. However, this will not impact the consolidated group accounts.

Annual Performance

Your company posted a total revenue of Rs. 3,664 crore for the financial year 2018-19, against last year's revenue of Rs. 2,846 crore. On a consolidated level, the group revenue was at Rs. 6,123 crore (Rs. 4,602 crore).

The energy segment contributed 80.3% (78%) to the group's operating revenues in FY 2018-19.

On a standalone basis, revenue from exports have gone up by 54.4% to Rs. 1,061 crore (Rs. 687 crore) and the group international business was higher by 46.9% at Rs. 2,636 crore (Rs. 1,794 crore). This was due to a large refinery order in Africa and opportunities in the Middle East and South East Asia.

Consolidated order booking for FY 2018-19 reduced by 11.7% to Rs. 5,633 crore (Rs. 6,380 crore) with standalone order booking from continuing operations at Rs. 3,325 crore, a decrease of 8.5% over the previous year (Rs. 3,634 crore). Order booking in international markets at Rs.1,984 crore was lower by 27.8% and accounted for 35.2% of the consolidated figure as compared to Rs. 2,748 crore last year (43.4%).

On a standalone basis, the exceptional item of expenditure of Rs. 48 crore (Rs. 25 crore) represents an impairment of investment in subsidiary companies, Thermax (Zhejiang) Cooling & Heating Engineering Co. Limited (TZL), First Energy Pvt. Ltd. (FEPL), Thermax SPX Energy Technologies Limited and Thermax Netherlands B.V., and after considering reversal of impairment of investments made in earlier years in Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES). Profit after tax and exceptional items from continuing operations stood at Rs. 161 crore, same as the previous year. EPS were at Rs. 13.51 (Rs. 13.52).

During the year, both global and domestic economies witnessed a slowdown in growth, impacting investor sentiments. Amidst the prevailing challenges globally, Thermax continued to focus on its strategy of selective internationalisation to combat volatility in the domestic CapEx cycles. Your company stabilised its new manufacturing facilities, both at Dahej, Gujarat and Indonesia apart from commencing commercial production at Sri City, Andhra Pradesh. Though the operations of Danstoker in Europe encountered difficulties during the year, the activities in its new Poland facility picked up and positioned the business to leverage the capacity building process of Eastern Europe. The localisation process in Thermax's new facility in Indonesia witnessed an encouraging response from the market.

Dividend

The directors have recommended a dividend of Rs. 7/- (350%) per equity share of the face value Rs. 2/-. The dividend, if approved by the shareholders, will translate in a payout of Rs. 101 crore, including dividend distribution tax of Rs. 17 crore.

Share Capital

The paid-up equity share capital of the company was Rs. 23.83 crore as on March 31, 2019. There was no public, rights, preferential or bonus issue during the year. The company has neither issued any shares with differential voting rights, sweat equity shares, nor has it granted any stock options.

Subsidiaries

Annual accounts of the subsidiary companies and related detailed information are available to the shareholders of the holding and subsidiary companies as well as to the statutory authorities. On request, these documents will be made available for inspection at the company's corporate office.

The company does not have any 'material subsidiary' whose income or net worth exceeds 20% of the consolidated income or net worth, of the listed entity and its subsidiaries in the immediately preceding accounting year.

The report on the growth trends and outlook of those subsidiaries which impact your company's performance reasonably are captured in the Management Discussion and Analysis section of this Report. Comprehensive details



Thermax commissioned a 25 MW captive cogen plant for a paper manufacturing unit located in Samaal, the Philippines on an EPC basis to generate power and steam for the process. This was a repeat order from the customer, the earlier one being the first overseas power plant for Thermax.

on each subsidiary including their financial performance and contribution to the overall performance of the company during the year are available in AOC-1, on page no. 274.

Information on Newly Incorporated Subsidiaries and Acquisition during the Year

The company, has set up a step-down subsidiary company in Nigeria (through Wholly Owned Subsidiary (WOS) of the company, Thermax Engineering Construction Company Limited), named 'Thermax Engineering Construction FZE', which was incorporated on August 31, 2018, as a pre-requisite for executing projects in the region.

During the year, the company has acquired 100% equity stake in the erstwhile joint venture, TBWES, which has now become a WOS of Thermax. This was done by way of purchase of shares from Babcock & Wilcox India Holdings Inc., the joint venture partner.

The company has also acquired 100% equity stake of Thermax SPX Energy Technologies Limited (TSPX) on April 11, 2019 by purchasing shares from Mutares Holding-24 AG Germany (23%) and Balcke Duerr, Germany (26%) the joint venture partners. TSPX has now become a WOS of the company.

Management Discussion and Analysis

The Management Discussion and Analysis section, highlighting the performance and prospects of the company's energy, environment and chemical segments, including details of subsidiaries, information on company's health, safety and environment measures, human resources, risk management and internal controls, is attached as Annexure 1 on page no. 26.

Corporate Governance Report

A detailed Corporate Governance Report regarding SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015 which also includes disclosures required as per Sections 134 and 177 of the Companies Act, 2013, is attached as Annexure 3 on page no. 42.

A certificate from the statutory auditors of the company regarding compliance with the conditions of corporate governance as required under Schedule V of the Listing Regulations is a part of this report.

Secretarial Standards

The company has complied with the revised Secretarial Standards on meetings of the Board of directors (SS-1) and Secretarial Standards on general meetings (SS-2).

Business Responsibility Report

In terms of the Listing Regulations, Business Responsibility Report describing the initiatives taken by the company from environmental, social and governance perspectives are enclosed as Annexure 4 on page no. 62.

Vigil Mechanism/Whistle Blower Policy

The company has a vigil mechanism named 'Whistle Blower Policy' to deal with instances of fraud and mismanagement, if any. The details of the policy are provided in the Corporate Governance Report and also posted on the website of the company, www.thermaxglobal.com.

Employee Strength

The total number of permanent employees on the rolls of the company as on March 31, 2019, were 4,110 compared to 3,664 employees in the previous year.

Industrial Relations

The overall Industrial Relations at all locations were amicable. The wage settlement signed with the unions at Savli, Chinchwad and Paudh works were implemented as per agreed terms.

Particulars of Employees

The information required pursuant to Section 197 read with Rule 5 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, duly amended, in respect of employees of the company, will be provided upon request. In terms of Section 136 of the Act, the Annual Report excluding the aforesaid information is being sent to all the members and others entitled to receive it. Any shareholder interested in obtaining such particulars may write to the company secretary at the corporate office of the company. The information is also available for inspection at the corporate office during working hours up to the date of the Annual General Meeting.

Details of Trusts for the Benefit of Employees

a) ESOP and Welfare Trust

The company has a Thermax Employees ESOP and Welfare Trust which holds 29,06,250 equity shares of Rs. 2/- each of the company.

The Trust has not entered into any transaction of buying or selling of shares in the secondary market.

The company, at present, does not have any ESOP scheme under this Trust.

b) Employee Welfare Trusts

The company has various Employee Welfare Trusts primarily for providing medical and educational aid to its employees and their families. These trusts presently hold 36,35,190 equity shares of Rs. 2/- each of the company. None of the trusts had any dealings in the secondary market.

The relevant disclosures as required under the SEBI (Share-based Employee Benefits) Regulations, 2014 on Employee Welfare Trusts will be made available on the company's website: www.thermaxglobal.com.

Disclosure: Anti-Sexual Harassment Policy

The company has in place an Anti-Sexual Harassment Policy in line with the requirements of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition & Redressal) Act, 2013. All employees (permanent, contractual, temporary and trainees) are covered under this policy. To build awareness in this area, the company has been carrying out induction/refresher programmes in the organisation on a periodical basis.

An Internal Complaints Committee (ICC) has been set up to redress complaints received regarding sexual harassment under the provisions of the Sexual Harassment of Women at the Workplace (Prevention, Prohibition & Redressal) Act, 2013.

The following is a summary of sexual harassment complaints received and disposed of during the year 2018-19:

- Number of complaints received - Nil
- Number of complaints disposed of - NA

Energy Conservation, Technology Absorption and Foreign Exchange Earnings and Outgo

The information on the conservation of energy, technology absorption and foreign exchange earnings and outgo stipulated under Section 134(3)(m) of the Companies Act, 2013, read with Rule 8 of the Companies (Accounts) Rules, 2014, is provided as Annexure 5 on page no. 76.

Corporate Social Responsibility Initiatives

As a part of its initiatives under 'Corporate Social Responsibility' (CSR), the company has undertaken projects mainly in the area of education. The projects are largely in accordance with Schedule VII of the Companies Act, 2013. Since 2007, the CSR initiatives have been undertaken through the Thermax Foundation. The detailed report on CSR is provided as Annexure 2 on page no. 38.

The details of the CSR committee and CSR policy are available on the company's website: www.thermaxglobal.com.

The Annual Report on CSR activities and CSR policy is provided as Annexure 6 on page no. 78.

Directors

All independent directors of the company have given declarations that they meet the criteria of independence as laid down under Section 149(6) of the Companies Act, 2013 (the Act) and the Listing Regulations.

The company has formulated a policy on 'familiarisation programme for independent directors' which is available on the company's website: www.thermaxglobal.com.

In accordance with the provisions of the Companies Act, 2013 and the company's Articles of Association, M.S. Unnikrishnan retires by rotation at the ensuing AGM and being eligible, offers himself for re-appointment as a director.

Rajani Kesari has been inducted on the Board of your company as an additional director on November 14, 2018 in the category of non-executive independent director to hold office up to the ensuing 38th AGM in accordance with the provisions of Section 161 of the Act. In terms of Section 149 and other applicable provisions of the Act,



A Water Treatment Plant commissioned by Thermax for a Swedish furnishing major's first store in India. The plant produces 2,000 litres of treated water per hour, catering to the potable and non-potable water requirement of the entire store.



Thermax commissioned a 1.285 MW ground mounted solar photovoltaic system for a leading consumer brand's manufacturing facility at Sri City, Andhra Pradesh. The system is integrated with diesel generator sets to minimise the customer's fuel consumption and dependence on grid power.

she is proposed to be appointed as an independent director of the company for five consecutive years, up to November 13, 2023. The requisite notice has been received pursuant to Section 160 of the Act, proposing her as a director of the company. A resolution appointing her as an independent director has been set out in the notice of the ensuing AGM for the approval of shareholders.

The Nomination & Remuneration Committee of the company has recommended the appointment of Dr. Jairam Varadaraj and Nawshir Mirza, as independent directors from July 22, 2019 up to July 21, 2024 and Dr. Valentin A.H. von Massow, as independent director from July 22, 2019 up to July 21, 2022. These appointments would be placed before the shareholders for their approval at the ensuing Annual General Meeting.

Meetings

A calendar of meetings is prepared and circulated in advance to the directors.

During the year, six Board meetings were convened and held, the details of which are given in the Corporate Governance Report.

Remuneration Policy

The Remuneration Policy details for selection, appointment and remuneration of directors and senior management is given in the Corporate Governance Report and the said policy is available on the company's website www.thermaxglobal.com.

Board Evaluation

Pursuant to the provisions of the Companies Act, 2013 and Listing Regulations, the Board has carried out an annual evaluation of its performance. The details of the Board/Committee evaluations are given in the Corporate Governance Report.

Directors' Responsibility Statement

In terms of Section 134 (3)(c) of the Companies Act, 2013, your directors, to the best of their knowledge and belief and according to the information and explanations obtained by them in the normal course of their work, state that, in all material respects;

a) In the preparation of the annual financial statements for the year ended March 31, 2019, the applicable accounting standards have been followed;



Twenty-one exhaust gas boilers (EGB) were supplied and commissioned by Thermax to a power generation and distribution company in Bangladesh. The boilers installed at the outlet of the Diesel Generator (DG) sets help recover flue gases emanating from the fuel-fired engines of 9.8 MW capacity each, to produce 75 TPH steam at 18 bar(g) and 13 MW of electricity subsequently.

b) Appropriate accounting policies have been selected, applied consistently and judgement and estimates have been made that are reasonable and prudent to give a true and fair view of the state of affairs of the company as on March 31, 2019, and of the profit of the company for the year ended on that date;

c) Proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 2013 for safeguarding the assets of the company and for preventing and detecting fraud and other irregularities;

d) The annual financial statements have been prepared on a going concern basis;

e) Proper internal financial controls were in place and the financial controls were adequate and operating effectively; and

f) Proper systems to ensure compliance with the provisions of all applicable laws were in place and were adequate and operating effectively.

Please also refer to section H. of MDA for further details.

Related Party Transactions

All related party transactions entered into during the financial year were at an arm's length basis and were in the ordinary course of business. There were no materially significant related party transactions made by the company with promoters, directors, key managerial personnel or other designated persons which may have a potential conflict with the interest of the company at large.

All related party transactions are placed before the Audit Committee for approval. Prior omnibus approval of the Audit Committee/Board is obtained on a quarterly basis for the transactions which are of foreseen and repetitive nature. The transactions entered into pursuant to the omnibus approval so granted and a statement giving details of all related party transactions are placed before the Audit Committee for their approval on a quarterly basis. The company has developed a Related Party Transactions Manual and Standard Operating Procedures for purpose of identification and monitoring of such transactions.

The policy on Related Party Transactions as approved by the Board is available on the company's website: www.thermaxglobal.com.

None of the directors has any pecuniary relationships or transactions vis-à-vis the company except as disclosed under Sr. No. 2 A of the Corporate Governance Report.

Standalone and Consolidated Financial Statements

The financial statements for the year ended March 31, 2019, have been prepared as per Schedule III to the Companies Act, 2013. The consolidated financial statements of the group are prepared in compliance with the Accounting Standards and Listing Regulations as prescribed by SEBI. The cash flow for the year is attached to the balance sheet. A separate statement containing the salient features of subsidiaries and joint ventures in the prescribed Form (AOC-1) is also attached.

Significant and Material Orders Passed by the Regulators or Courts

There are no significant material orders passed by the regulators/courts which would impact the going concern status of the company.

Public Deposits

The company had no unpaid/unclaimed deposit(s) as on March 31, 2019. The company has not accepted any fixed deposits during the year.

Particulars of Loans, Guarantees or Investments

Details of loans, guarantees and investments covered under the provisions of Section 186 of the Companies Act, 2013, are given in the notes to the financial statements.

Material Changes and Commitments

There have been no material changes and commitments, affecting the financial position of the company, which have occurred between the end of the financial year and the date of this Report.

Committees of the Board

The details of all committees and their terms of reference are set out in the Corporate Governance Report.

Auditors

Statutory Auditors

M/s. SRBC & Co. LLP, Chartered Accountants, was appointed as the Statutory Auditors for a period of five years commencing from the 34th AGM until the conclusion of the 39th AGM.

In accordance with the Companies Amendment Act, 2017, enforced on May 7, 2018, by the Ministry of Corporate Affairs, the appointment of statutory auditors is not required to be ratified at every Annual General Meeting.

As required under the Listing Regulations, M/s. SRBC & Co. LLP, the auditors have confirmed that they hold a valid certificate issued by the Peer Review Board of the Institute of Chartered Accountants of India.

Cost Auditors

In terms of Section 148 of the Companies Act, 2013, read with the Companies (Cost Records and Audit) Amendment Rules, 2014, M/s. Dhananjay V. Joshi & Associates, Cost Accountants, Pune have been appointed as the Cost Auditors of the company for FY 2019-20.



Anu Aga received the 'Lifetime Achievement' Award from The Economic Times at the inaugural edition of the ET Prime Women Leadership Awards 2019.

Secretarial Audit

In accordance with the provisions of Section 204 of the Companies Act, 2013, and the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014, the company has appointed M/s. SVD & Associates, Company Secretaries, Pune, to undertake the Secretarial Audit of the company for FY 2019-20. The Secretarial Audit Report for FY 2018-19 is annexed as Annexure 7 on page no. 81.

The observations of the secretarial auditors in their report are self-explanatory and therefore, the directors do not have any further comments to offer on the same.

Annual Return

The details forming a part of the annual return in Form No. MGT-9 is annexed herewith as Annexure 8 on page no. 85. Copy of the annual return is also available on the company's website: www.thermaxglobal.com.

Awards and Recognition

Your company is proud to have received the following awards during the year:

- Thermax was awarded as the 'Outstanding Engineering Solution Provider' at the CNBC Awaaz CEO Awards organised in Raipur on July 7, 2018, in association with the Government of Chhattisgarh. M.S. Unnikrishnan, MD & CEO of Thermax received the award from Dr. Raman Singh, Chief Minister of Chhattisgarh.

- Thermax's Steam Engineering Group's High-Pressure High Temperature Condensate Recovery System (HPCRS) was recognised as an 'Innovative Energy Saving Product' and has bagged the 19th National Award for Excellence in Energy Management at the Energy Efficiency Summit organised by CII in Hyderabad.

- M.S. Unnikrishnan received the 'Power 100 2018' Award at the Renewable Energy India Expo, where India's 100 most powerful solar industry business leaders were recognised.

- Thermax has won the 'REFCOLD Emersion Award' in the 'Industrial Refrigeration' category for two of its innovative products - hybrid chiller and ultra low-pressure absorption chiller at REFCOLD India 2018. The award was conferred on Thermax Ltd. on 22nd November, 2018 in Gujarat.
- Dr. R.R. Sonde, head of Research & Innovation at Thermax received the 'Global Excellence Awards-2019' in the gas sector conferred by the Energy & Environment Foundation under the aegis of the Petroleum & Natural Gas, Coal and Power ministries, Government of India on February 15, 2019.
- Thermax received the 'EQ Tamil Nadu State Solar' Award on February 27, 2019 as the rooftop solar EPC company of the year in the 'Industrial' category.
- Thermax won the 'ACREX Award of Excellence 2019' in the 'Energy Saving' category for its hybrid heat pump and bagged the runners up in the 'Innovation' category for sub-zero absorption chiller at ACREX2019 in Mumbai on February 28, 2019.
- Celebrating women's excellence in business and innovation at the inaugural edition of the ET Prime Women Leadership Awards held on March 29, 2019, Anu Aga was presented with the Lifetime Achievement Award for her leadership role at Thermax and her philanthropic work.
- On the occasion of their Foundation Day in February 2019, the Army Institute of Technology (AIT), Pune presented the Lifetime Achievement Award to M.S. Unnikrishnan, for his contribution to green technologies, inventive thinking in business and an outstanding stint at reputed industry houses.

Acknowledgements

Your directors place on record their appreciation for the continued support extended during the year by the company's customers, business associates, suppliers, bankers, investors, government authorities and joint venture partners. They also place on record their appreciation for the dedication and value-added contributions made by all the employees.

Your directors would also like to thank all the shareholders for continuing to repose faith in the company and its future.

For and on behalf of the Board

Meher Pudumjee
Chairperson (DIN: 00019581)
Pune: May 22, 2019

Management Discussion and Analysis

A. Economic Outlook and Prospects

In 2018, the global economy took off at full throttle but started losing pace during the year and closed at an estimated 3% growth as compared to 3.1% in 2017. Trade tensions among major economies continued to persist, which had an impact on investor sentiments and softened manufacturing activities. Growth in most of the advanced economies was moderate, barring the U.S., which picked up to 2.9% from 2.2%. The growth of emerging markets and developing economies edged down to an estimated 4.2%. The main reason is attributed to rising borrowing costs as many advanced-economy central banks continue to tighten their monetary policies.

On account of the uncertainties and unpredictable turn of events globally, the capacity building in core sectors such as investment in cement, metals, power plants and infrastructure building was muted, impacting the derived demand for capital goods industry. Though crude oil prices stabilised during the year, there were no expansions or greenfield projects announced in the refinery sector either. As a result, the international order booking of large projects for your company witnessed a decline during the year. Consumer facing industries continued to invest, providing a 20% growth in Thermax's products internationally.

On the domestic front, economic growth lost steam in the last two quarters of the fiscal year ending March 2019, ahead of the general election. This slowdown was dominant in investments across the board. The limited scope of government spending and worsening scenario on the global economic front further added to the woes. These factors led to the estimated GDP growth being downwards to 7%, as compared to 7.2% in 2017-18, which is the lowest growth in the last five years. As a result of the slowdown, the capacity utilisation in most of the industrial segments started stagnating towards the second half of the year. Even though the enquiry pipeline continued to remain healthy, order conclusions were delayed. Towards the end of the financial year, anxiety related to the electoral outcome tempered decisions related to even small and mid-sized capacity creation.

To rejuvenate the infrastructure sector, the Government allocated a budget of Rs. 71,000 crore for national highways and Rs. 19,000 crore for development of rural infrastructure. This led to a boost in road construction, improving the cement industry capacity utilisation and resulted in captive power plants based on waste heat recovery. Though the growth also fuelled the demand for steel, which was up 1.3% during CY 2019, pending resolution of insolvency cases in NCLT against the stressed steel companies limited fresh investments. The only exception was an expansion project by an Indian steel major where your company was a beneficiary. Sustaining the momentum in infrastructure development could be a challenge due to an anticipated surge in borrowings by the NHAI (National Highway Authority of India) in the coming year.

Your company had a reasonably good run in the food processing and FMCG industries, estimated to have grown by 13% and 17% respectively during the year. The other sectors that contributed to a steady inflow of opportunities comprised tyre, chemical, pharma and textile.

The power supply position in the country has consistently improved over the years due to an increase in supply as also a decrease in demand, thanks to a number of energy efficiency measures being introduced. The deficit is estimated to be -0.8% as compared to -2% in the previous fiscal. However, as the momentum of industrialisation is expected to pick up in future, coupled with accelerated urbanisation, the energy demand will see a significant boost. Lack of addition in the past several years to the thermal, base-load generation capacity should open up avenues for captive industrial power in the medium term.

As a signatory to the COP 21 agreement for climate change, the MNRE (Ministry of New and Renewable Energy, Government of India) has formulated a plan to achieve 100 GW of solar power and 10 GW of biomass power by March 2022. However, India's solar capacity addition was subdued during the year as the industry continues to face policy and execution challenges.

On the other hand, industry mandates on effluent discharge, and water consumption has paved the way for positive momentum in the Environment businesses of water recycling and air pollution control.

With the government combating the liquidity crunch in the Indian market arising mainly on account of NPAs, coupled with global trade tensions and protectionist measures, the investment scenario in the core sectors appear challenging during the current year.

B. Thermax Operational Performance

In FY 2018-2019, Thermax Group posted revenues of Rs. 6,123 crore as compared to Rs. 4,602 crore (including excise duty) in the previous year, on account of a strong opening order book and growth in the products businesses during the year. At the standalone level, the total revenue from continuing operations, excluding the Boiler & Heater business of the company moving into its wholly owned subsidiary, TBWES, was Rs. 3,664 crore for the financial year 2018-19, against last year's Rs. 2,846 crore. The current year revenue is exclusive of Goods and Service Tax (GST), while last year's revenue includes excise duty, and hence, they are not comparable.

On a standalone basis, revenue from exports has gone up by 54.4% to Rs. 1,061 crore (Rs. 687 crore) and the group international business was higher by 46.9% at Rs. 2,636 crore (Rs. 1,794 crore). This was due to a large refinery order in Africa and opportunities in the Middle East and South East Asia.

Consolidated order booking for FY 2018-19 reduced by 11.7% to Rs. 5,633 crore (Rs. 6,380 crore), with standalone order booking from continuing operations at Rs. 3,325 crore, a decrease of 8.5% over the previous year (Rs. 3,634 crore). Order booking in international markets at Rs.1,984 crore accounted for over 35.2% of the consolidated figure as compared to Rs. 2,748 crore last year (43.4%), a decline of 27.8% on account of slowdown in global investments and no large project orders.

C. Operating Structure

Thermax operates through three segments - Energy, Environment and Chemical, spanning a wide range of products and services, which can be grouped into three categories:

1) Products, both standard and custom-designed. Larger units are generally custom-designed and built.

2) Projects and EPC contracts, especially for the larger non-standard products

3) Lifecycle and O&M services to operate plants and other services that the company provides to customers



Massive edifices were manufactured at Thermax's state-of-the-art production facilities in Savli (Gujarat), Pune and Shirwal (Maharashtra) for its prestigious export order from an African conglomerate. They have been assembled and set sail from the company's port facility at Mundra. The utility boilers, heat recovery steam generators and flue gas steam generators being supplied by Thermax will be commissioned at the customer's refinery and petrochemical project coming up in Nigeria.

The group has 16 manufacturing facilities across the world, ten in India, two in Denmark, and one each in Indonesia, Poland, China and Germany.

D. Business Segments of the Company

This section comprises the performance of the group, segment-wise along with that of the related subsidiaries. The MDA captures only the growth trends and outlook of those subsidiaries which impact the segmental performance reasonably and the comprehensive details on each subsidiary is available in AOC-1, on page no. 274.

1. Energy Segment

The energy segment contributed 80.3% (78%) of the group's operating revenues in FY 2018-19. The segment comprises the following businesses: 1) Heating 2) Cooling 3) Boilers for steam and power generation 4) Power EPC 5) Solar 6) Service arms for the businesses including Power O&M services.

For 2018-19, the Energy segment posted an operating revenue (Net) at the group level of Rs. 4,799 crore (Rs. 3,497 crore). The segment profits were at Rs. 322 crore (Rs. 283 crore). The profitability of the energy segment was impacted by losses in the company's European subsidiary, Danstoker Group (discussed below under Subsidiaries) and challenges faced in executing a couple of large EPC projects. Your company is in the process of implementing a turnaround strategy for the Danstoker Group, to restore its profitability.

The order booking for the current year was lower at Rs. 4,476 crore (Rs. 5,309 crore). Last year's figure comprised some sizeable orders including a single large export order of Rs. 1,000 crore from a large refinery in Africa - a trend not witnessed during the current fiscal, due to the slowdown in investments seen globally.

i. Heating

The standard products of the Heating business - small packaged boilers and heaters saw a significant improvement in revenue as a result of opportunities from the consumption-oriented sectors and aggressive channel sales. The international businesses continued to be challenging, mainly in Europe, due to the subdued performance of the Danstoker group as explained subsequently.

Among the new launches of 2017-18, Shellmax series boilers for the global market and the underfeed stoker technology (UFS) in the Enerbloc and Combloc boilers, customised for Asian countries have performed well in the current year, on both parameters of demand and performance.



An aerial view of Thermax's newly inaugurated IGBC 'Platinum' rated absorption cooling manufacturing facility at Sri City, Andhra Pradesh, constructed on a 40 acre plot to produce energy recovery products for the domestic and global market.

The product business is expected to continue its positive momentum in 2019-20 with opportunities from the tyre and food processing industries in the domestic market. With the ongoing shift to renewables in Europe, Thermax has developed a customised offering to increase its market share. The integration of the service business with the product division (details provided in the last year's MDA) was completed successfully and sustained its growth during the year.

The project business of Heating viz. large boiler subset (B&H) registered substantial growth in revenues on account of a higher opening order book. The drivers for this business are a lack of reliable power and enhancement of energy efficiency. The business made significant progress in the execution of its large export order received last year from a refinery in Africa which entails assembly of equipment at Thermax's port facility, Mundra. The company started dispatches of sub-assemblies and is on track to complete this prestigious project as per schedule. Most of the equipment supplied will be used to generate power and steam efficiently to the refinery. Additionally, continued efforts by industries to go green and enhance energy efficiency using waste heat, along with new investments in refineries, present an optimistic scenario for this business in the next year.

Services supporting the large boiler subset intensified its focus on the spare parts business and continued to expand its geographical presence by penetrating Latin America. It is also executing a first-of-a-kind complex relocation and revamping of a steam generation equipment for a leading refinery in India. The opportunities arising from a fuel shift drive by refineries to cater to the new emission norms, diversification of the portfolio by introducing new service initiatives and utility offerings to Independent Power Producers (IPPs), as well as the ongoing reliability and efficiency programmes, present a positive outlook for the business.

Subsidiaries

Danstoker A/S (Denmark)

Danstoker A/S, a step-down subsidiary is engaged in the business of design, production and sale of boilers and related equipment to the European market, including rebuilding and servicing of boilers. The first three quarters of 2018-19 witnessed a sluggishness in the Scandinavian market due to delay in decision making by customers. This subsidiary has incurred losses during the year owing to cost overruns in some of the projects. With an enhanced order carry forward, shifting of manufacturing to its lower cost facility at Poland and improved order execution, efforts are afoot to improve the performance of this subsidiary.

Boilerworks A/S (Denmark)

Boilerworks A/S, a part of Danstoker Group and a step-down subsidiary of the company specialises in the manufacture and supply of high-pressure boilers and components for power plants, waste and biomass-fired plants, industrial and petrochemical plants.

Due to challenges arising from cost and time overruns, the subsidiary will now focus on smaller service jobs where the risks are considerably lower, instead of participating in large projects.

It also plans to shift its operations to Danstoker Poland for leveraging capabilities of the new facility.

Danstoker Poland Społka Z Ograniczona Odpowiedzialnoscia

Danstoker Poland is a step-down subsidiary of Danstoker A/S and is engaged in the design, manufacturing and supply of boilers, hot oil heaters and other related equipment to the Eastern European region.

In its first year of operations, the subsidiary received orders mainly from food processing, chemicals and light engineering industries. A healthy order book presents a promising year ahead.

PT Thermax International, Indonesia (PT TII)

PT TII is a subsidiary of Thermax Engineering Singapore Pte Limited and is engaged in the design, manufacturing, supply, installation, commissioning and servicing of boilers, heaters and other related equipment with a focus on serving the South East Asian region.

In July 2017, Thermax inaugurated its state-of-the-art manufacturing facility in Indonesia, expanding its footprint in international markets, especially the ASEAN countries. During the first year, the facility progressed well on its localisation strategy and witnessed traction for its indigenously manufactured boilers in the local market along with exports to other South East Asian countries. Though the revenues were subdued for the year, the subsidiary anticipates an optimistic year ahead with order booking picking up in the last two quarters.

ii. Cooling

After a period of slump, Thermax's Absorption Cooling products business witnessed significant growth in 2018-19, mainly attributed to revenues from sectors such as fertilisers, petrochemicals, food & beverage and pharmaceuticals. The international business continued to be challenging in Europe, China and the US, while the Middle East witnessed a moderate growth. In South East Asia and Bangladesh, the Absorption Cooling products saw a reasonable demand, though plagued by intense global competition.

On January 31, 2019, Thermax inaugurated its production unit at Sri City, Andhra Pradesh to manufacture a wide range of vapour absorption machines comprising chillers, heat pumps and heaters in its first phase, with a capacity of 400 machines per year. The division launched a Remote Online Support System (ROSS) - a web-based solution that helps to monitor, troubleshoot and supervise chillers remotely. During the year, the company introduced a new series of Thermax absorption chillers that are designed to provide an additional efficiency of 7% to 8% over traditional offerings. With the increasing demand for energy efficient products backed by capacity building and digital initiatives of the company, the outlook for the next year is positive.

Process Cooling in its first year of operation as an independent Strategic Business Unit supplied products to the steel, dairy and automobile sectors. Some of the new applications developed include closed loop cooling tower for furnace cooling in glass manufacturing and adiabatic coolers for engine testing in earth moving construction companies. The business will continue to pursue similar opportunities in the coming year and work in tandem with TSPX to leverage the synergies in their customer base.

Subsidiaries

Thermax (Zhejiang) Cooling & Heating Engineering Co. Limited, China (TZL)

TZL, a wholly owned subsidiary of the company is engaged in the manufacture, sales and service of vapour absorption systems. The subsidiary has been facing a tough time in the Chinese market; moreover, the cost arbitrage of Chinese manufacturing versus manufacturing in India has reduced significantly. Hence TZL plans to progressively close its manufacturing operations.

iii. Power EPC Business

The drivers for the captive power and cogeneration market have been the lack of reliable power, energy efficiency and promotion of green energy. Revenue for the Power division was significantly higher owing to a



Thermax's Steam Engineering Group was recognised by the Confederation of Indian Industry (CII) for its High-Pressure High-Temperature Condensate Recovery System (HPCRS) that saves 15% to 25% of fuel costs for boilers. The team received the 19th National Award for Excellence in Energy Management at the CII Energy Efficiency Summit.

healthy order carry forward at the start of the year. Order booking during the year continued to be positive, though comparatively lower as compared to last year.

Major orders received during the year include a repeat order for a gas-based cogeneration plant, solid fuel-based cogeneration projects, waste heat recovery power plants and international projects in South East Asia and the Middle East.

It also commissioned its first full-fledged EPC project in the Middle East for a leading cement company in the UAE.

For FY 2019-20, in the domestic market, this group expects continued business from waste heat recovery and cogeneration segments. It is also continuing its efforts to pursue prospects in middle range captive power plants in international markets.

The Power O&M services acquired new customers in the domestic segment during the year. The business is focusing on growing its portfolio of value-added services to customers and expanding its presence in the international market.

Following a year of record revenue but lower order carry forward, growth in the coming year will be subject to new order bookings with short cycle execution period.

Solar Business

Capacity addition in the solar PV sector remained subdued during the year, further impacted by government policies and intense competition from the unorganised sector.

However, the business will continue to focus on expanding its presence in this business selectively.

Subsidiaries

Thermax Instrumentation Limited (TIL)

TIL, a wholly owned subsidiary is engaged in construction and commissioning of captive power plants. Given the lower carry forward, growth for the subsidiary in FY 2019-20 will be subdued.

2. Environment Segment

The environment segment, accounting for 12.8% (14.1%) of the group's operating revenues, consists of air pollution control and water and waste solutions.

Operating revenues (Net) for the Environment segment in FY 2018-19 was at Rs. 828 crore (Rs. 694 crore). The profit for the segment was Rs. 57 crore, higher as compared to Rs. 29 crore in the last financial year, mainly due to stability in commodity prices, which improved the margins of the air pollution control business.

Order booking for the Environment segment for FY 2018-19 was at Rs. 741 crore (Rs. 729 crore).

i. Air Pollution Control Business (Enviro)

The revenue for Air Pollution Control was higher in 2018 -19, due to a higher order backlog as well as new orders received during the year; while the margins improved due to stability witnessed in commodity prices. The sectors presenting opportunities to the business comprised cement, steel, power, food processing, pharma and tyre. The implementation of stringent emission norms laid by the Indian Ministry of Environment & Forests called for customers to upgrade their equipment to meet the new standards which improved prospects for this division. Business also had accelerated growth in South East Asia where implementation of pollution control norms with highest rigour was seen in cement, steel, palm oil and power sectors. The company will selectively participate in Flue Gas Desulphurisation (FGD) projects, announced to regulate SOx emissions from coal-fired power plants in the current year. Riding the surge in opportunities in both domestic and ASEAN region, the business is poised for healthy growth in the coming year.

ii. Water

The Water business continued its successful run in the third consecutive year with significantly higher revenue and a strong order booking. The division focussed on quality projects with shorter gestation period. Acute water scarcity, regulatory norms being implemented for waste water as also urbanisation, will continue to drive this business.

A majority of the opportunities came from sectors such as metals, food processing, tyre, cement and commercial construction. Some one-of-a-kind solutions included partnering with a mining major under the Smart City Mission to commission a 25 MLD sewage treatment plant and providing a ZLD (Zero Liquid Discharge) solution to a leading engine manufacturer, which is designed to operate at near silent decibel levels, owing to its proximity to a residential zone.



A 40 MW coal-based captive power plant commissioned for a leading cement and clinker manufacturer in the UAE. It comprises two CFBC boilers of 90 TPH capacity each that are capable of firing multiple varieties of coal along with a first-of-a-kind 30% wood chip firing.

In the international market, the business bagged a repeat order from a leading EPC company for a water treatment plant to be installed in a gas-based power plant; it also supplied high rate filters to a steel major in Oman, through an EPC contractor.

With industry norms becoming more stringent regarding the use of recycled water and effluents discharged, Thermax expects continued growth from this business in the coming year.

3. Chemical Segment

The Chemical segment accounts for 6.9% (7.9%) of the group's operating revenues. It comprises the following business segments - boiler and water chemicals, resins, performance chemicals, paper chemicals, construction chemicals and oil field chemicals.

Besides the domestic market, this segment has customers in several international markets such as the Middle East, Japan, Europe and the USA.

It is supported by manufacturing facilities in Paudh (Maharashtra), Jhagadia and Dahej (Gujarat).

In FY 2018-19, the Chemical business segment posted operating revenues of Rs. 415 crore (Rs. 361 crore). The profit for the segment was Rs. 62 crore as compared to Rs. 54 crore in the previous fiscal. The profitability of the Chemical segment was impacted due to expenses incurred in the stabilisation phase of the new resin facility at Dahej, Gujarat. Order booking for the segment in FY 2018-19 stood at Rs. 416 crore (Rs. 342 crore).

The Chemical business achieved growth in revenue, attributed to a healthy order booking from domestic and international customers in FY '19.

The ion exchange resin business registered a substantially higher growth over last year with marginal improvement in profitability, which is under pressure due to volatility in raw material prices, currency fluctuation and the additional burden of depreciation and operating cost of its new manufacturing location at Dahej. Significant

orders were received from large OEMs in the US, India and Europe for water treatment and process applications. The development of breakthrough resin technologies for catalyst applications and deploying them across geographies helped in securing prestigious orders.

Production from phase-1 of the Dahej facility has been streamlined to achieve 70 percent of the capacity. Phase-2 of the project is expected to be commissioned in October 2019. This additional capacity will help the business in executing major orders in FY '20.

The performance chemicals business registered a higher growth and crossed the Rs. 100 crore mark during the year. Majority of the orders came from power, steel and fertiliser segments. The product portfolio has been strengthened by the development of a non-phosphate based polymer for cooling water treatment. The F&B sector in India will present growth opportunities in the coming year.

Construction chemicals also witnessed a commendable increase in revenue over the last financial year attributed to the growth in the domestic infrastructure segment and this momentum is expected to continue in this year.

Other Subsidiaries

Thermax Onsite Energy Solutions Limited (TOESL)

TOESL, a wholly owned subsidiary, is engaged in the build-own-operate business of providing sustainable solutions by supplying utilities such as steam to its customers.

The company won several contracts for steam supply to new customers and won its first order for supplying treated water to a polyester company in Maharashtra.

With increased attention to climate change, leading to the adoption of non-fossil fuels, the market for agro-waste based steam solutions is expected to grow steadily.

Thermax Inc. (USA)

Thermax Inc., a step-down subsidiary in the USA is the sales and service arm of the company and operates in two segments- energy (sales of absorption chillers) and chemicals (sale of ion exchange resins). The subsidiary registered a substantially higher revenue in FY '19 on account of growth in the chemicals business.

With encouraging prospects for both Cooling and Chemical businesses, the outlook for the subsidiary looks promising.

E. Opportunities and Threats

1. Opportunities

1) The growing thrust by nations to improve their energy security will intensify the demand for biofuel and other new generation technologies. The preference for methanol as a fuel may kickstart the hydrogen economy. These trends are likely to augment your company's vision of providing sustainable energy and environment solutions.

2) The rising need for reducing energy consumption in the industrial sector, which accounts for close to 38% of the global energy use, shall improve the opportunities for Thermax's energy segment comprising waste heat recovery, absorption and process cooling, solar PV, cogeneration and trigeneration captive power plants, biomass-fueled boilers and power plants.

3) Following the COP 21 and COP 24 agreements on climate change, several countries have intensified their measures to ensure rigorous implementation of environmental norms, thus paving the way for a positive momentum in the environment segment of the company.

4) Your company's strategy of internationalising the projects business in chosen markets will fortify its global presence and devolatalise the EPC business from the domestic cyclicality.

5) The growth in consumer-facing industries presents an opportunity for your company to increase it products businesses both in the domestic and international markets.

6) The growing demand for FGD systems across the globe, on account of various federal laws and regulations that mandate SOx emitting industries to install air quality control equipment, is likely to improve the prospects for the environment business.

2. Threats

The rising trade tensions among the USA, China, the EU and other major economies, furthered by the losing relevance of WTO in ensuring a level playing field amongst trading nations, has emerged as a threat to Indian companies participating in global trade. The recent denial of preferential status to India by the US will affect the margins on your company's exports to the US.

The burden of Non Performing Assets (NPAs) on the banking & financial sector and other economic challenges comprising trade deficit, private investment and infrastructure slowdown will limit the prospects for the company in the domestic market.

F. Risk Management

The company has an Enterprise Risk Management (ERM) framework in place for identification, assessment, mitigation and reporting of risks. The Risk Management Council of the company carries out a detailed review of key risks facing the company, its impact on strategic decisions and mitigation measures. The review of these risks is done based on the important changes in the external environment, which have a significant bearing on the risks. The company actively keeps track of changes in the domestic economic environment, geopolitical developments, key commodity prices such as oil and coal, currency and interest movement. Apart from mitigation, these risks are also monitored for any emerging business opportunities.

In view of the inherent risk involved due to the volatility of markets, the company's policy is to manage the treasury with highest priority accorded to the safety of investment, followed by liquidity and optimum returns. For a comprehensive analysis of financial risks and management, please refer to Note 40 (a) to the Consolidated Financial Statements.

Apart from these risks, the individual business units assess operational risks such as execution challenges, working capital challenges, human resource challenges etc., and appropriate timely action is taken to mitigate the risks.

The Audit Committee of the Board oversees risk management strategies and practices.

G. Internal Control

The company has an internal audit function which continuously evaluates the quality of its controls and the extent of compliance with them. The company has also introduced a process of control self-assessment by its operating managers. In addition, Internal Financial Controls were specifically audited by an external audit firm. The company uses various enterprise resource planning packages in its operations that contain a variety of in-built controls. Careful analysis is done for variations between performance and plan. The company has a strong culture and processes that reduce the risk of unethical conduct. These include a clear code of conduct and whistle-blowing processes. Based on all of the above, the Board believes that the internal controls are adequate and that they operated effectively during the year.

Similarly, the company has a process by which operating managers are kept up-to-date with legal amendments affecting their areas of operation. Operating managers confirm compliance with various provisions every month. Additionally, the internal auditors, the statutory auditors and the secretarial auditors check compliance with certain laws related to their areas of work. The company has a culture that reduces the risk of non-compliance with the laws. Based on the foregoing, the Board believes that the systems to ensure compliance with applicable laws are proper and that they operated effectively.

H. Financial Performance

In FY 2018-19, the group revenue was Rs. 6,123 crore (Rs. 4,602 crore). The profit before tax and exceptional items at Rs. 501 crore, was substantially higher than last year's Rs. 422 crore. The current year's revenue is exclusive of Goods and Service Tax (GST), while last year's revenue includes excise duty, and hence they are not comparable.

After accounting for exceptional items of the expense of Rs. 90 crore (Rs. Nil) and income tax expense of Rs. 85 crore (Rs. 166 crore), the profit after tax, exceptional items and share of joint venture stood at Rs. 325 crore as compared to Rs. 231 crore last year. For details of the exceptional items, please refer to Note 4 (c.) and Note 42 to the Consolidated Financial Statements.

The effective tax rate has come down due to the recognition of deferred tax asset in TBWES.

The net cash outflow from operations is Rs. 117 crore (Rs. 507 crore inflow). At the consolidated level, the net cash outflow from operating activities stood at Rs. 115 crore (Rs. 534 crore inflow). The negative cash flow is mainly on account of a substantial increase in the Contracts in Progress (CIP), owing to a few major projects under execution. The same is appearing as unbilled revenue of Rs. 1,121 crore (Rs. 539 crore) in the group's other assets. This situation is expected to improve during the current financial year.



Thermax successfully commissioned a 40 MW Boiler Turbine Generator (BTG) cogeneration biomass power plant for a reputed sugar producer in the Philippines. The plant supplies steam and power to the customer and also provides clean green energy to the grid.

During the year, your company invested Rs. 70 crore in a new manufacturing facility for its Cooling business in Sri City (Andhra Pradesh) and a further Rs. 25 crore for its chemical manufacturing facilities at Dahej and Jagadia.

Thermax's cash and bank balances and investments, other than investments in joint ventures and subsidiaries, stood at Rs. 820 crore (excluding discontinued operations).

Key Financial Ratios

In accordance with the SEBI (Listing Obligations and Disclosure Requirements 2018) (Amendment) Regulations, 2018, the company is required to give details of significant changes (change of 25% or more as compared to the immediately previous financial year) in key sector-specific financial ratios.

The company has identified the following ratios as key financial ratios:

	*Standalone		Consolidated	
	FY'19	FY'18	FY'19	FY'18
Debtors Turnover Ratio	4.06	3.41	4.30	3.63
Inventory Turnover Ratio	8.05	8.21	7.62	7.29
Interest Coverage Ratio	59.84	51.14	35.98	33.84
Current Ratio	1.25	1.30	1.30	1.33
Net Profit Margin	5%	6%	5%	5%
Return on Capital Employed	17%	15%	14%	15%
Return on Net Worth (RONW)	10%	9%	11%	9%

*For comparison with FY '18, the ratio for FY '19 include the discontinued operation of B&H.

There are no ratios where there have been significant change from fiscal 2018 to fiscal 2019.

Return on net worth (RONW) is computed as net profit by closing net worth. For Thermax Limited, the increase in PAT, attributable to substantially higher revenue, has resulted in higher RONW. The PAT at the consolidated level was further augmented on account of the recognition of previously unrecognised deferred tax credit.

I. Joint Ventures

Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES)

During the year, Thermax entered into a definitive agreement to acquire the stake of Babcock & Wilcox India Holdings Inc. (B&W) in TBWES which was concluded on July 19, 2018. Accordingly, TBWES changed its status from JV to a wholly owned subsidiary of the company.

Subsequent to the acquisition of the remaining shares in TBWES, the Board of directors approved the transfer of the Boiler & Heater (B&H) business of Thermax through a slump sale. Consequently, the results of B&H business have been classified as discontinued operations in the standalone financial statements. However, this will not impact the consolidated group accounts.

Thermax SPX Energy Technologies Limited (Thermax SPX)

Thermax SPX Energy Technologies Limited (TSPX) is a joint venture between Thermax Limited (51%), Mutares Holding-24 AG Germany (23%) and Balcke Duerr GmbH Germany (26%).

Based on the share purchase agreement dated February 25, 2019, the company acquired the entire stake held by the joint venture partners. Subsequent to the acquisition, TSPX has now become a wholly owned subsidiary of Thermax Ltd.

J. Human Resources

The key highlights of the year comprised the Employee Engagement Survey (EES), conducted across the organisation with a participation of 96.5%; rollout of SAP SuccessFactors, an advanced digital platform for people management; and commencement of a 'Wellness' programme to sensitise employees on the importance of good health and help them achieve their fitness goals. Details of these initiatives are provided in the Business Responsibility Report.

Among other ongoing HR initiatives, the Leadership Development Programme for the middle cadre (LDP II) is going on for 32 managers, and junior levels (LPD III) was completed for 52 managers. The training programme for workmen named 'Disha' which focusses on developing their interpersonal skills and take ownership at work, progressed well and was launched at the company's chemical facility in Paudh. The 'Urja' initiative for women empowerment comprising training and deployment of women welders continued at an impressive pace at Thermax's Savli and Sri City facility with over 28 women being inducted on the shop floor during the year.

Given the competitive scenario in attracting young talent, your company launched an internship programme for young engineers to augment its time-tested Graduate Engineer Trainee programme. From a modest beginning of four in the first year, it has grown to an intake of fifteen in the current year. The two-month internship programme comprises business application-based projects that provide students with the platform to demonstrate their technical skills and learning appetite. It also helps trainees to experience the organisation and Thermax to undertake structured evaluation; resulting in seamless assimilation of the trainees when they join the organisation.

The relation between the Union and the Management across locations continued to be cordial and initiatives were undertaken to encourage a two-way communication along with communication skills and capability development.

The total number of permanent employees on the rolls of Thermax Limited as on March 31, 2019, were 4,110 compared to 3,664 employees in the previous year.

K. Health, Safety and Environment

The safety performance of the company is reviewed every quarter by the managing director. Divisional safety councils review their divisional performance and carry out preventive as well as corrective actions to ensure high levels of performance.

Enviro division has implemented an Integrated Management System (IMS) through TUV:SUD as a certifying agency. In the IMS system, Enviro has adopted and implemented for the first time, ISO 45001:2018 & ISO 14001:2014. Water division was recertified as per OHSAS 18001:2007 through Bureau Veritas during the financial year.

Surveillance audits for OHSAS 18001:2007 were conducted by DNV.GL for TOESL & Heating EPC and by Bureau Veritas for B&H (TECC) and Power division. Chinchwad, Savli and Mundra works were audited for OHSAS 18000:2007 and ISO 14001:2004 by DNV.GL, while Paudh and Jhagadia (chemical plants) were audited by Bureau Veritas during the financial year.

1,530 internal audits and 51 external safety audits and inspections were carried out in FY18-19.
Special safety audits for fire prevention were conducted at office locations and manufacturing plants in Pune. All manufacturing and project locations have developed an



Thermax successfully commissioned two ultra-low pressure vapour driven absorption chillers of 1000 TR each for a food & beverages major at their production facility in Saudi Arabia. These chillers conserve energy by capturing vapour released during the potato frying process to provide chilled water for cooling needs of the customer.

emergency preparedness plan. They have also imparted training on fire prevention and control and conducted mock drills on emergency evacuation at plants and office locations.

Regular safety trainings are conducted for employees, contractors, vendors and suppliers. To align the standards of safety with its growing global presence, Thermax organised the IOSH (Institution of Occupational Safety & Health, UK) programme in partnership with the British Safety Council for four of its divisions (Heating, Power, B&H and Water) involving about seventy participants. The employees are now certified as safety practitioners across all countries.

The continued use of a mobile app on incident reporting has improved the reporting of leading indicators, which are helping in minimising the hazards and risks at plants and sites.

At manufacturing plants which are under the Environment Management System, a number of management programmes on waste/resource reduction have been successfully implemented throughout the year.

Cautionary Statement

Statements in this Management Discussion and Analysis describing the company's objectives, projections, estimates and expectations may constitute "forward-looking statements" within the meaning of applicable laws and regulations. Actual results may differ materially from those either expressed or implied.

Report on Corporate Social Responsibility

Thermax's CSR philosophy stems from the conviction that 'business cannot succeed in a society that fails'. The company believes that one of the key enablers to holistic, sustained and inclusive growth of the society is education. Hence Thermax Foundation (TF), the non-profit CSR wing of Thermax was established in 2007, focusing primarily on offering children from economically underprivileged backgrounds a level playing field through quality education, so that they are able to make choices in life and lift themselves out of poverty.

The projects and activities undertaken last year include:

1. The School Project
2. Supporting other non-profit organisations
3. Employee participation in CSR activities of the company

The School Project

Through a public private partnership model, TF funds five Pune Municipal Corporation (PMC) schools run by its NGO partner, Akanksha Foundation - K.C. Thackeray Vidya Niketan English Medium School (KCTVN), Acharya Vinoba Bhave School (AVBS), Late Anantrao Pawar English Medium School, Matoshri English Medium School and Savitri Bai Phule English Medium School.

Among the five schools funded by Thermax only KCTVN and AVBS have classes upto tenth. Keeping the trend of good results in the year 2017-18, 63% of the students from KCTVN passed with distinction and from AVBS, 19% of the students passed with distinction. AVBS is a secondary intervention school for 8th, 9th and 10th standard students and the students are enrolled directly in the eighth grade from PMC schools.

To measure the impact of their work, Akanksha schools evaluate their performance on a quarterly basis on the parameters of students' achievement, youth development and community engagement.

In 2018, three students from Akanksha schools secured admissions in prestigious educational institutions such as Azim Premji University, Ashoka University and received scholarships from the United World College.

Highlights of the Year 2018-19

Akanksha teachers and students organised a Community Day on 16th February: an annual get together of like-minded evangelists of education from the city. 'Ekattha' was the theme chosen for the year based on the Akanksha values of collaboration and teamwork where



Welcoming the first batch of Junior K.G. students at K. C. Thackeray Vidya Niketan school.



Volunteers from the Thermax Lucknow office in association with channel partners from the region spent a day with differently abled people at an NGO. They also underwent a sensitisation programme to appreciate the challenges that physically and visually challenged people face in their daily lives.

best teaching-learning practices on the key aspects of holistic development such as 'recognition and response', 'differentiated learning', 'circle time', 'community playgroup clusters' and 'storytelling' were showcased. During the same event, students also shared their learnings received from various activity clubs for robotics, photography, embroidery, repair and maintenance as well as the Djembe club.

A group of 140 Akanksha alumni came together to celebrate the International Women's Day at K.C. Thackeray Vidya Niketan on 9th March 2019. The theme was women empowerment and the message was reinforced through cultural performances and a skit on the impact of stereotypes on women.

During the year, all the five schools of Akanksha engaged in various pedagogical activities to encourage experiential learning. **K C Thackarey Vidya Niketan** initiated the 'Ankur' programme, built on the ideology of learning through exploration and discovery. Many projects were identified by students such as learning how small businesses operate, how cost-effective heating and cooling systems can be made available for underprivileged communities, how water dispensers can be made available to schools with poor infrastructure. The students ideated on these projects during lunch breaks and after school and once ready, they will begin working on them. Like the previous year, this year too, students took part in a robotics competition and once again qualified up to the National Level. The school's SMC (School Management Committee) has been actively engaging with the nearby Barve School and training their management committee on relevant issues such as preventing sexual abuse of children and lunchbox systems.

At **Acharya Vinoba Bhave English Medium School**, an event called 'Gulmohar' was organsied where the students showcased their learning from both academic and non-academic areas. They won prizes at various inter-school competitions and participated in *kathak* dance concerts across Pune. The school elected its new student council members through a rigorous process of written applications, personal interviews and group discussions. In order to conduct meaningful community engagement, a survey of 1,200 families was conducted in the vicinity of the school. The survey revealed the need for digital literacy and skill building which will be the focus of community engagement programmes in the next acdemic year.

Apart from ongoing elocutions, presentations and quiz competitions throughout the year, a Literature Fest was organised at **Late Anantrao Pawar English Medium School** to inculcate the habit of reading in young minds. An interesting initiative of 'Each One Teach One' has been introduced where students from grade 6th, 7th and 8th work with grades 1st and 2nd once a week to help them with phonics, basic numerical operations, art skills, etc. Realising the importance of sensitising parents to support their children's education and to improve their mutual bonding, the school organised various activities during the year. Towards this objective, competitions like drawing *Rangoli* and preparing nutritious snacks were organised for parents, also an access to reading was provided to them and by introducing an open library, well stocked with Marathi and Hindi books, they were encouraged to read.

At **Matoshri English Medium School,** sessions on gender discrimination, violence and self-esteem were conducted by Red Door NGO for 9th grade students. 'Katta Bheit', meaning 'informal meetings', was introduced by the school, a space for parents to build their social circles. The school continues to use the system of GPS - 'Genuinely Praising Children' where teachers and staff members call



Meher Pudumjee attending a presentation by a teacher at K.C. Thackeray Vidya Niketan during the 'Community Day'.

parents and appreciate their children for their honest efforts such as improvement in behaviour or doing something beyond classwork.

The **Savitri Bai Phule English Medium School** formed peer learning circles for the all-round development of teachers, right from lesson planning to execution, while catering to their specific needs. 35 teachers in 7 circles engaged with each other during the year. The school also focused on the development on its extracurricular activities through its clubs for debates, traditional games, drama, calligraphy and origami. An initiative called 'Trifecta' has been rolled out that involves informal and unstructured interactions with parents which serve as an ice breaker and help in open and transparent discussions.

To assess the effectiveness of education imparted through Akanksha-run schools and map the career trajectory of their alumni, a survey was launched and to support Akanksha team in this work, sixty alumni surveys were conducted by employees from Thermax Pune as well as Mumbai offices.

Support for other Educational Initiatives

Teach For India (TFI): During the year, Thermax continued its support to Teach for India, a nationwide Fellowship that recruits college graduates and working professionals to serve as full-time teachers in low-income schools for two years. TF sponsored two community aggregators appointed by TFI in the old city and Wadgoan Budruk areas of Pune. Their role comprises conducting awareness programmes for the students' parents on topics such as the importance of financial literacy, basics of savings through bank accounts and other socio-economic skills.

Pune City Connect (PCC): Thermax Foundation is actively engaged in the educational initiatives of PCC, a collaborative platform between corporates, Pune Municipal Corporation (PMC) and NGOs for the development of the city of Pune. TF continued to support the educational arm of PCC through which a cadre of trainers (Sahyogi Dal) engage in the professional development of teachers in Marathi medium PMC schools.

CII Women Exemplar Programme

The CII Foundation Women Exemplar Programme recognises exemplary women working at the grassroots, particularly in the field of education, health and micro-enterprise. For the cohort of 31 women exemplars from 2017 and 2018, CII organised a leadership training and capacity building workshop to encourage collective learning amongst them where TF was one of the key sponsors. The training focused on the identification of personal strengths, the building of effective networking skills, advocacy, marketing and fundraising abilities needed for women to achieve their short term and long term goals. Additionally, sessions on softer aspects such as dance movement therapy, meditation, tile painting, efficient use of social media etc. were also conducted.

Employee Engagement in CSR Initiatives

A highlight of the year was a significant involvement of Thermax employees in various community initiatives, comprising regional and area offices, and manufacturing facilities across India. The key initiatives include:

Runathon of Hope: On the morning of 13th January 2019, 370 employees from Thermax woke up to a cause. At 5:45 am on a Sunday, they assembled at Nigdi, Pune to participate in the 'Runathon of Hope' organised by the Rotary Club for corporates; comprising half marathons ranging from 5 km to 21 km. In its ninth year, the theme chosen for the event was 'rural education'.



Students playing Djembes during the activity club session at Acharya Vinobha Bhave School.



The Kolkata team spent a day with the elderly in conversations, presenting them with gifts and seeking their blessings.

Road Safety Awareness: In another initiative, the Thermax Corporate Health, Safety and Environment (HSE) team, in coordination with the students of Dnyandeep Vidayalaya organised a 'Road Safety' drive, around the vicinity of Thermax's Chinchwad factory in Pune. A street-play was performed by the students to convey the consequences of not following traffic rules, and subsequently, they joined hands with the Thermax volunteers to distribute cards with the safety *Dos and Don'ts* to people in the area.

Thermax Foundation also conducted its annual **Blood Donation Camp,** organised every year in the memory of R.D. Aga; witnessing a large participation from over 730 employees across regional and area offices, manufacturing facilities and Pune locations.

Employees from Pune, regional and area offices participated in a plethora of meaningful initiatives during the year. To name a few, the Delhi, Chandigarh and Pune teams were involved in tree plantation and river cleanliness drives, while employees from Kolkata, Hyderabad and Ahmedabad visited nursing homes to offer their services as specified by the NGO like support to organic farming or organising a talk by a medical expert. The Chennai employees painted a classroom at a school for the orphans and destitute children, and the Lucknow office along with the channel associates visited a training centre for the differently abled, where they participated in sensitisation activities organised by the NGO to understand the challenges these people face in their daily lives.

Realising the need to diversify its CSR initiatives to Thermax's manufacturing locations outside Pune, TF completed a need identification study at Savli and Solapur and has collaborated with NGO partners to initiate relevant projects.

Annexure - 3 to the Directors' Report

Corporate Governance Report

1. Thermax's Philosophy on Corporate Governance

Thermax believes in following, in letter and spirit, high standards of corporate governance so that the company's performance will have a positive impact on its stakeholders - customers, shareholders, employees, vendor partners, business associates and the larger community. It upholds the core tenets of corporate governance for sustained growth and financial performance.

In order to enhance and retain the trust of its stakeholders, your company is committed to ethical business conduct, integrity and commitment to values, transparency and accountability, essential features of effective corporate governance.

Empowered by the Board, your company's key management officials implement policies and guidelines related to corporate governance. Our corporate governance framework is guided by our core values and is based on the following principles:

Corporate Governance at Thermax



2. Board of Directors

The Board of your company comprises nine directors - two non-executive promoter directors, six independent directors and the managing director & CEO.

A. Composition of the Board

The following table gives the composition of the Board and *inter alia* the outside directorships held by each of the directors of the company during the financial year 2018-19.

Name of the Director	Pecuniary or Business Relationship with the Company	Number of other Director-ships@	Committee Position@		Number of Shares held in the Company
			Chairperson	Member	
NON-EXECUTIVE PROMOTER					
Meher Pudumjee	None Except*	1	0	1	-
Pheroz Pudumjee	None Except*	-	1	1	6,000
INDEPENDENT					
Dr. Valentin A. H. von Massow	None	1	0	0	-
Dr. Jairam Varadaraj	None	9	1	4	-
Nawshir Mirza	None	5	5	1	-
Harsh Mariwala	None	7	0	1	-
S. B (Ravi) Pandit	None	3	0	2	-
Rajani Kesari#	None	0	0	1	-
EXECUTIVE					
M. S. Unnikrishnan	N.A.	3	-	1	-

@ Excludes private, foreign and Section 8 companies and other committees including Nomination & Remuneration Committee, Corporate Social Responsibility Committee, Strategic Business Development Committee, and International Investment Committee.

* During the year, the company has paid Rs. 17,75,000/- to Anu Aga and Rs. 12,72,320/- to Meher Pudumjee as rent for premises taken on lease. The company has given security deposit of Rs. 35,00,000/- to Anu Aga for the premises taken on lease. The company has also paid Rs. 12,72,320/- to Pheroz Pudumjee, being rent for premises taken on lease and maintained at Rs. 18,00,000/- as security deposit.

Rajani Kesari was appointed as an independent director w.e.f. November 14, 2018.

Note: Anu Aga and Dr. Raghunath A. Mashelkar ceased to be directors following their retirement w.e.f. August 8, 2018. Hence, their names are not included in the above table.

B. Attendance and Remuneration of each Director during the Financial Year 2018-19

Name of the Director	Attendance at AGM (August 8, 2018)	Total Attendance at Board Meetings	Sitting Fees*	Salary and Perquisite	Commission†	Total Remuneration
						Amount in Rs.
Meher Pudumjee	P	6	7,00,000	NA	45,00,000	52,00,000
Anu Aga**	P	3	2,00,000	NA	0	2,00,000
Dr. Raghunath A. Mashelkar**	P	3	1,50,000	NA	0	1,50,000
Dr. Valentin A. H. von Massow	P	6	7,00,000	NA	29,50,000 @	36,50,000
Pheroz Pudumjee	P	6	8,50,000	NA	20,00,000	28,50,000
Dr. Jairam Varadaraj	P	6	8,00,000	NA	15,00,000	23,00,000
Nawshir Mirza	P	6	5,50,000	NA	35,00,000	40,50,000
Harsh Mariwala	A	6	4,00,000	NA	20,00,000	24,00,000
S.B. (Ravi) Pandit	P	6	4,50,000	NA	15,00,000	19,50,000
Rajani Kesari (effective November 14, 2018)	-	3	1,50,000	NA	6,25,000	7,75,000
M.S. Unnikrishnan	P	6	NA	3,62,58,505	1,60,00,000	5,22,58,505

NA = Not applicable

* Sitting fees also include payments for Board appointed committee meetings.

† The commission proposed for the year ended March 31, 2019 will be paid, subject to deduction of tax, and as per the provisions of the Companies Act, 2013.

@ Euro 38,000 (Rate as on March 31, 2019 is Rs. 77.624 per euro)

** Anu Aga and Dr. Raghunath A. Mashelkar ceased to be directors w.e.f. August 8, 2018.

The non-executive directors are entitled to reimbursement of expenses incurred in the performance of duties as directors.

C. Number of Meetings of the Board held during the Year and the Dates of Meetings

The Board met six times during the financial year 2018-19 on the following dates: May 18, 2018, May 19, 2018, August 8, 2018, November 14, 2018, February 8, 2019 and March 7, 2019. The maximum time gap between any two sequential meetings was not more than 120 days.

D. Details of Directorships held in Other Listed Entities

Sr. No.	Name of the Director	Name of Listed Entity	Category
1	Meher Pudumjee	--	--
2	Pheroz Pudumjee	--	--
3	M.S. Unnikrishnan	--	--
4	Jairam Varadaraj	Elgi Equipments Ltd.	Managing Director
		Precot Meridian Ltd.	Director
		Magna Electro Castings Ltd.	Director
		Elgi Rubber Company Ltd.	Director
5	Nawshir Mirza	The Tata Power Company Limited	Independent Director
		Exide Industries Limited	Independent Director
6	Dr. Valentin A.H. von Massow	CG Power and Industrial Solutions Limited	Independent Director
7	Harsh Mariwala	Marico Limited	Chairman & Non-Executive Director
		Kaya Limited	Chairman & Non-Executive Director
		L & T Finance Holdings Limited	Independent Director
		Zensar Technologies Limited	Additional Independent Director
		JSW Steel Limited	Additional Independent Director
8	S.B. (Ravi) Pandit	--	--
9	Rajani Kesari	--	--

E. Disclosure of the Relationship between Directors Inter-se

Anu Aga, Meher Pudumjee and Pheroz Pudumjee are related to each other.

F. Familiarisation Programme Imparted to Independent Directors

Through this familiarisation programme, the company intends to achieve the following objectives:

- To apprise the directors about the business model, corporate strategy, nature of the industry, business plans and operations of the company
- To familiarise them with the company's financial performance, annual budgets, internal control processes and statutory compliances
- To apprise them about their roles and responsibilities in the company
- To familiarise them with the company's vision, values, ethics and corporate governance practices

The independent directors at the Board and committee meetings are provided with necessary documents, business model, annual budgets, significant developments, reports and internal policies to enable them to familiarise with the company's procedures and practices.

Periodic presentations are made at the Board and committee meetings on business and performance updates of the company, global business environment, business strategy and risks involved. Detailed presentations on the company's business segments are made at the Board retreat. Quarterly updates on relevant statutory, regulatory changes and landmark judicial pronouncements encompassing important laws are regularly circulated to the directors. Site visits to various plant locations are organised for the independent directors to enable them to understand and acquaint with the operations of the company. The details of such familiarisation programme for independent directors are put up on the company's website and can be accessed at www.thermaxglobal.com.

G. Independent Directors and their Meeting

Based on the declaration of independence provided by them, all independent directors fulfil the conditions specified in SEBI (LODR) Regulations, 2015 (as amended) and are independent of management.

During the year under review, the independent directors met once on March 8, 2019 where they were present *inter alia* to review the performance of the Board, chairperson and non-independent directors of the company. They also reviewed the quality, quantity, timelines and flow of information between the management and the Board.

H. Board Evaluation

As a part of the annual Board evaluation, detailed questionnaires were circulated to all the directors. The chairperson of the Board and the chairman of the Nomination and Remuneration Committee (NRC) evaluated the Board's performance and that of its committees. The chairperson of each committee shared the outcome of the evaluation process. The Board conducted evaluation of independent directors which included performance of directors and fulfilment of criteria as specified in SEBI (LODR) (Amendment) Regulations, 2018 and their independence from the management, where independent directors did not participate.

I. Chart/Matrix for Board Evaluation

The company follows an elaborate survey to evaluate the performance of the Board/its committees and members each year.

The Thermax Board comprises qualified members who bring in the required skills, competence and expertise that allow them to make effective contribution to the Board and its committees. The members are committed to ensure that the Thermax Board is in compliance with the highest standards of corporate governance.

3. Board Committees

The members of the committees are co-opted by the Board. The Board constitutes the committees and defines their terms of reference. The Board at present has six committees. The composition of Board committees is as under:

Board and committee composition							
Name of Director	Board	Audit and Risk Management Committee	Strategic Business Development Committee	Nomination and Remuneration Committee	Stakeholders Relationship Committee	Corporate Social Responsibility Committee	International Investment Committee
Meher Pudumjee	♟		♟	♟	♟	♟	
Pheroz Pudumjee	♟	♟	♟		♟		♟
Anu Aga*	♟			♟		♟	
Dr. Raghunath A. Mashelkar*	♟					♟	
M.S. Unnikrishnan	♟		♟		♟		♟
Dr. Valentin A. H. von Massow	♟		♟	♟			♟
Dr. Jairam Varadaraj	♟	♟	♟	♟			
Nawshir Mirza	♟	♟				♟	
Harsh Mariwala	♟			♟			
S.B. (Ravi) Pandit@	♟	♟			♟	♟	
Rajani Kesari#	♟	♟					
No. of Members	11	5	5	5	4	5	3

* Ceased to be a director and member of committees w.e.f. August 8, 2018.

Appointed as a director and member of the Audit and Risk Management Committee w.e.f. November 14, 2018.

@ Appointed as a member of Stakeholders Relationship Committee, Corporate Social Responsibility Committee and ceased to be a member of the Audit and Risk Management Committee w.e.f. November 14, 2018.

A. Audit & Risk Management Committee
(Erstwhile Audit Committee)

The Audit Committee was rechristened as Audit and Risk Management Committee in the Board meeting held on November 14, 2018. The committee presently comprises four members, all non-executive directors. The chairman of the committee, Nawshir Mirza, is a fellow member of The Institute of Chartered Accountants of India. Pheroz Pudumjee, Dr. Jairam Varadaraj and Rajani Kesari (w.e.f. November 14, 2018) are the other members of the committee. S.B. (Ravi) Pandit ceased to be a member of the committee effective November 14, 2018.

The committee met four times during the financial year 2018-19 on May 17, 2018, August 7, 2018, November 13, 2018 and February 7, 2019. Details of meetings attended by the members are as follows:

Committee Members	Category	Number of Meetings Attended
Pheroz Pudumjee	Non-Executive Promoter	4
Nawshir Mirza	Independent	4
Dr. Jairam Varadaraj	Independent	4
Ravi Pandit	Independent	2
Rajani Kesari	Independent	0

The constitution of the committee meets the requirements of Section 177 of the Companies Act, 2013.

The committee reviews various aspects of internal controls, internal auditors' reports on a regular basis. The committee also reviews information as per Regulation 18 of the SEBI (Listing Obligation and Disclosure Requirements) Regulations, 2015.

The internal auditor presents to the committee, observations and recommendations arising out of internal audits and also on issues having an impact on the control system and compliance. The Chief Financial Officer, Chief Internal Auditor and the representatives of Statutory Auditors are permanent invitees and attend all the meetings of the committee. The Company Secretary acts as the secretary to the committee.

The Board has approved the revised charter of the Audit and Risk Management Committee defining its role, responsibilities, powers and processes as amended pursuant to the SEBI (LODR) (Amendment) Regulations, 2018. The revised charter is available on the company's website i.e. www.thermaxglobal.com.

The terms of the charter broadly include:

- Overseeing the processes that ensure the integrity of financial statements
- Overseeing the processes for compliance with laws and regulations to ensure their effectiveness
- Approving transactions with related parties
- Enquiring into reasons for any default by the company in honouring its obligations to its creditors and members
- Overseeing the quality of internal accounting and other controls
- Overseeing the quality of financial reporting process, including the selection of accounting policies
- Ensuring the independence of the auditor
- Recommending to the Board the appointment and remuneration of the auditors
- Scrutinising inter-corporate loans and investments
- Monitoring the end use of funds raised through public offers, if any
- Conducting the valuation of any undertaking or asset of the company
- Structuring the internal audit function and approving the appointment of the Chief Internal Auditor
- Bringing to the notice of the Board any lacunae in the code of conduct
- Reviewing with the CEO and the CFO of the company the underlying process followed by them in their annual certification to the Board
- Approving the appointment of the CFO
- Recommending to the Board the appointment and remuneration of the secretarial and cost auditors
- To oversee the process for economic and efficient operation of the company
- To review the process for management of risks faced by the enterprise

The Audit & Risk Management Committee also periodically reviews the risk identification and mitigation framework of the company, which also covers cyber security.

B. Nomination and Remuneration Committee

The committee presently comprises four members, all non-executive directors. Harsh Mariwala (chairman), Dr. Jairam Varadaraj, Dr. Valentin A. H. von Massow and Meher Pudumjee are the members of the committee. Anu Aga ceased to be member of the committee effective August 8, 2018.

The committee met twice during the financial year 2018-19 on May 17, 2018, and February 7, 2019. Details of meetings attended by the members are as follows:

Committee Members	Category	Number of Meetings Attended
Anu Aga	Non-Executive Promoter	1
Meher Pudumjee	Non-Executive Promoter	2
Dr. Jairam Varadaraj	Independent	2
Harsh Mariwala	Independent	2
Dr. Valentin A. H. von Massow	Independent	2

The broad terms of reference of the committee are:

- Evaluate the performance including extension of contract of Executive Directors (EDs). The NRC would set the performance measures of EDs and evaluate their performance annually
- Recommend the remuneration for the EDs based on evaluation
- Evaluate the performance of senior management (one level below the EDs), including their employment extensions
- Recommend the remuneration of the senior management based on the evaluation
- Evaluate the need for EDs and recommend their appointment
- Identify all critical positions in the company among the EDs and senior management and review progress of succession plans
- Recommend to the Board the policy relating to the remuneration of directors and key management personnel
- Lay down criteria for selecting new non-executive directors (NEDs) based on the requirements of the organisation
- Carry out evaluation of the performance of NEDs and defining the system for linking it to their remuneration
- Review the succession plan for those NED positions that are likely to be vacant during the year
- Recommend to the Board, the appointment and removal of directors
- Review and approve, the annual compensation of the organisation, including a benchmarking with other companies
- Ensure periodic meeting of the senior management with the directors
- Initiate and review employee engagement surveys
- Review and approve the code of conduct for the company
- Review and approve the disclosures of the committee in the Annual Report
- Formulate policies related to human resources, including diversity

Details of Remuneration

• Non-Executive Directors

In recognition of the contribution by the non-executive directors, especially in adherence to the corporate governance policies and practices, the Board had adopted guidelines to remunerate the directors by way of commission.

The Nomination & Remuneration Committee (NRC) of the Board has framed a policy on selection and appointment of directors and their remuneration. Based on the recommendation of the NRC, the Board has approved the policy, which forms the basis for the remuneration of directors for the year 2018-19. The policy broadly consists of:

- Criteria for selection and appointment of directors and their remuneration
- Method of performance evaluation

As per the policy, the non-executive directors, apart from receiving sitting fees for attending Board/committee meetings, will be entitled to receive a commission on the net profits of the company.

The NRC may recommend payment of commission on uniform basis or may recommend higher commission to directors who are chairpersons of the Board or other committees, taking into consideration the higher responsibilities taken by them.

Furthermore, as per the policy, the NRC while determining the quantum of commission may consider membership of

the directors on the committees and their attendance at various meetings.

Based on the above and the recommendation of NRC, the Board has approved payment of remuneration to the directors.

• Managing Director & CEO

The company's Board at present comprises one executive director, namely, M.S. Unnikrishnan, who was reappointed as managing director & CEO effective July 1, 2017 for a period of three years. The remuneration of the managing director is governed by the agreement dated August 1, 2017, between the company and Mr. Unnikrishnan, which has been approved by the Board of directors and the shareholders. The remuneration broadly comprises fixed and variable components, i.e. salary, allowances, perquisites and other benefits. The variable component comprises a performance bonus. The NRC has recommended a remuneration policy for appointment of directors and their remuneration which has been approved by the Board. As per the policy while determining remuneration payable to the managing director & CEO, the following factors are considered:

a. The clarity of relationship between remuneration and performance
b. Balance between fixed and incentive pay reflecting short and long term performance objectives, appropriate to the working of the company and its goals
c. Responsibilities required to be shouldered by the managing director & CEO as per industry benchmarks and current trends
d. Performance of the company vis-à-vis the annual budget and individual performance vis-à-vis the KRAs/KPIs

C. Stakeholders Relationship Committee

The committee has been reconstituted pursuant to the requirements of the SEBI (LODR) (Amendment) Regulations, 2018 in the Board meeting held on November 14, 2018. It presently comprises four members, Pheroz Pudumjee (chairman), Meher Pudumjee, M.S. Unnikrishnan and S. B (Ravi) Pandit. Ravi Pandit, independent director of the company has been appointed as member of the committee effective November 14, 2018.

The committee met four times during the financial year 2018-19 on May 10, 2018, July 24, 2018, October 31, 2018 and January 21, 2019.

The Board of directors in its meeting held on November 14, 2018 has adopted terms of reference of the committee pursuant to SEBI (LODR) (Amendment) Regulations, 2018.

The broad terms of reference of the committee are:

- To approve and register transfer and/or transmission of shares
- To approve dematerialisation and rematerialisation of the company's shares
- To affix or authorise affixing of the common seal of the company on the share certificates
- To look into the shareholders/investors/debenture holders/security holders grievances and redress them
- To review measures taken for effective exercise of voting rights by shareholders
- To review adherence to the service standards adopted by the listed entity with respect to various services being rendered by the Registrar and Share Transfer Agent
- To review various measures and initiatives taken by the listed entity for reducing the quantum of unclaimed dividends and ensuring timely receipt of dividend warrants/annual reports/statutory notices by the shareholders of the company
- To do all such acts, things or deeds as may be necessary or incidental to the exercise of the above powers

The committee reviews the performance of Karvy Fintech Private Limited *(erstwhile Karvy Computershare Private Limited)*, the company's Registrar and Transfer Agent (RTA) and also recommends measures for overall improvement for better investor services. The committee specifically looks into complaints of shareholders and investors pertaining to transfer/transmission of shares, non-receipt of share certificates, non-receipt of dividend, etc.

Procedure of Share Transfer

The Board has empowered the stakeholder relationship committee to, *inter alia*, approve share transfers to reduce the lead-time for processing transfer of shares lodged.

The committee has delegated powers to the RTA to approve share transfer, transmission and transposition.

Summary of Complaints during FY 2018-19

Nature	Opening Balance	Received	Resolved	Closing Balance
Non-Receipt of Dividend	Nil	25	25	Nil
Letters from Statutory Authorities	Nil	2	2	Nil
Total	Nil	27	27	Nil

All complaints were resolved to the satisfaction of the shareholders and no complaint remained unattended/ pending for more than 30 days as on March 31, 2019. During the year, 9 physical share transfers comprising 4,100 number of equity shares were processed.

Shares Transferred to IEPF

In accordance with the provisions of Section 124 and 125 of Companies Act, 2013 and Investor Education and Protection Fund (Accounting, Audit, Transfer and Refund) Rules, 2016 (IEPF Rules), dividends not encashed/claimed within seven years from the date of declaration are to be transferred along with relevant shares, to the Investor Education and Protection Fund (IEPF) Authority.

Members can claim such transferred dividend/shares from the IEPF Authority.

In accordance with the IEPF Rules and its amendments, the company has sent notices to all the shareholders whose shares were due to be transferred to IEPF Authority and also simultaneously advertised in newspapers.

In terms of the provisions of Investor Education and Protection Fund (Accounting, Audit, Transfer and Refund Rules, 2016/Investor Education and Protection Fund (Awareness and Protection of Investors) Rules, 2001, total 8,819 shares of 23 shareholders of the company were transferred on October 30, 2018 to the IEPF.

Compliance Officer

Kedar P. Phadke, company secretary is the compliance officer for complying with the requirements of the Securities Laws and the Listing Agreements with the Stock Exchanges.

D. Corporate Social Responsibility (CSR) Committee

The Corporate Social Responsibility Committee has been reconstituted in a view of retirement of Anu Aga and Dr. Raghunath A. Mashelkar effective August 8, 2018 and comprises three members, Meher Pudumjee (Chairperson), Nawshir Mirza and S.B. (Ravi) Pandit. Ravi Pandit has been appointed as a member of the committee effective November 14, 2018.

The committee met once during the financial year 2018-19 on November 14, 2018 where all the members were present.

The broad terms of reference of this committee are:

- To formulate and recommend to the Board a CSR policy which shall indicate the activities to be undertaken by the company as specified under Schedule VII of the Companies Act, 2013.
- To recommend the amount of expenditure to be incurred on the CSR activities and
- To monitor the CSR policy of the company from time to time;
- Any other matter that may be referred by the Board from time to time or as may be necessary for compliance with the Companies Act, 2013 or rules made thereunder or any other statutory laws of India.

E. Strategic Business Development Committee

The primary objective of the Strategic Business Development Committee of the Board is to review and guide the strategic initiatives of the company.

The committee comprises five members, Dr. Valentin A. H. von Massow (chairman), Meher Pudumjee, Pheroz Pudumjee, M. S. Unnikrishnan and Dr. Jairam Varadaraj.

The committee met four times during the financial year 2018-19 on May 17, 2018, August 6, 2018, November 13, 2018 and February 8, 2019.

The broad terms of reference of the committee are:

- Review and recommend corporate strategy, including corporate brand and M&A
- Review and direct SBU, subsidiary and JV level strategies as well as selective SBU plans and business initiatives
- Initiate and impart guidance on best practices across the Board e.g. manufacturing, new markets, branding, etc.
- Review the key strategic performance indicators and milestones established by the company

F. International Investment Committee

The International Investment Committee comprises three members, Pheroz Pudumjee (chairman), Dr. Valentin A. H. von Massow and M.S. Unnikrishnan.

The committee met two times during the financial year 2018-19 on August 7, 2018, and February 7, 2019 where all members were present.

The broad terms of reference of the committee are:

- Monitor and review the performance with respect to the purpose and intent of business objectives
- Review human resources development and requirements
- Review of business operations and strategy implementation of new ventures/businesses
- Approval of appointment of Board members
- Formulate strategies with respect to overseas initiatives (including setting up of a company/office and acquisition/takeover/amalgamation)
- Review annual performance of international operations
- Review the strategic business plan annually

4. Annual General Meeting

A. The Details of Last Three Annual General Meetings (AGMs) of the Company are as follows:

Financial Year	Date	Venue	Time
2015-2016 (35th AGM)	August 10, 2016	Yashwantrao Chavan Academy of Development Administration, MDC (Auditorium) Building, Raj Bhavan Complex, Baner Road, Pune - 411007	11.30 a.m.
2016-2017 (36th AGM)	August 8, 2017		4.00 p.m.
2017-2018 (37th AGM)	August 8, 2018		4.00 p.m.

B. Postal Ballot

During the year, the company approached the shareholders through postal ballot. S.V. Deulkar (FCS: 1321 CP: 965), Partner of M/s. SVD & Associates, Company Secretaries, Pune, was appointed as a scrutiniser by the Board of directors of the company. The details of the postal ballot for the year are as follows:

Date of postal ballot notice:	February 22, 2019
Voting period:	February 25, 2019 to March 27, 2019
Date of approval:	March 27, 2019
Date of declaration of result:	March 29, 2019

Details of the Resolution	Type of Resolution	No. of Votes Polled	Votes Cast in Favour		Votes Cast Against	
			No. of Votes	%	No. of Votes	%
Transfer of Boiler & Heater Business of the Company by way of a Slump Sale as 'Going Concern' to Thermax Babcock & Wilcox Energy Solutions Private Limited, a Wholly Owned Subsidiary of the Company.	Special Resolution	9,70,87,353	9,69,93,079	99.90	94,274	0.10

C. Procedure of Postal Ballot

In compliance with Sections 108, 110 and other applicable provisions of the Companies Act, 2013, read with Rule 22 of the Companies (Management and Administration) Rules, 2014 and Regulation 44 of SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended from time to time, the company provides electronic voting (e-voting) facility, in addition to physical ballot, to all its members. For this purpose, the company has engaged the services of Karvy Fintech Private Limited.

Postal ballot notices and forms are dispatched, along with postage-prepaid business reply envelopes to registered members/beneficiaries. The same notice is sent by email to members who have opted for receiving communication through the electronic mode. The company also publishes a notice in the newspaper declaring the details and requirements as mandated by the Act and applicable rules.

Voting rights are reckoned on the paid-up value of the shares registered in the names of the members as on the cut-off date. Members who want to exercise their votes by physical postal ballot are requested to return the forms, duly completed and signed, to the scrutiniser on or before the close of the voting period. Those using the e-voting option are requested to vote before the close of business hours on the last date of e-voting.

The scrutiniser completes his scrutiny and submits his report to the chairperson, and the consolidated results of the voting are announced by the chairperson/ authorised officer. The results are also displayed on the company website, www.thermaxglobal.com besides being communicated to the stock exchanges, depository and registrar and share transfer agent. The last date for the receipt of postal ballot forms or e-voting shall be the date on which the resolution would be deemed to have been passed, if approved by the requisite majority.

D. Special Resolution(s) Passed

The details of special resolutions passed during last three Annual General Meetings are as under:

Date of Annual General Meeting	Details of Special Resolution
August 10, 2016	a) Approval for keeping & maintaining register of members and other registers/returns at the corporate office of the company. b) Approval to grant/extend benefits to the employees of the company under 'Welfare Scheme' c) Approval to grant/extend benefits to the employees of the company under 'ESOP & Welfare Trust'

5. Means of Communication

a) The company publishes the quarterly and yearly financial results in prominent English and regional language newspapers. The same are also displayed on its website.

b) The company's corporate website: www.thermaxglobal.com provides comprehensive information regarding the company's business portfolio, including CSR activities. The quarterly and yearly financial results are available in downloadable format for investors' convenience on the company's website. The Annual Report of the company is also available on the website in a user-friendly and downloadable form.

c) Transcripts of teleconferences with analysts are available on the website of the company.

d) The official news releases of the company are displayed on its website.

6. Shareholder Information

A. 38th Annual General Meeting for the Financial Year 2018-19

Date and time	Thursday, August 8, 2019 at 4.00 pm
Venue	Yashwantrao Chavan Academy of Development Administration, MDC (Auditorium) Building, Raj Bhavan Complex, Baner Road, Pune - 411007.

B. Financial Calendar

The financial results for the Financial Year 2018-19 were announced on:

Financial Results	As Indicated	Actual Date
Quarter ended June 2018	August 8, 2018	August 8, 2018
Quarter ended September 2018	November 14, 2018	November 14, 2018
Quarter ended December 2018	February 8, 2019	February 8, 2019
Year ended March 2019	May 22, 2019	May 22, 2019

For the year 2019-20 the indicative announcement dates are:

Results for the quarter ended June 2019	August 8, 2019
Results for the quarter ended September 2019	November 13, 2019
Results for the quarter ended December 2019	February 12, 2020
Results for the year ended March 2020	May 22, 2020
Record date for payment of dividend subject to approval of shareholders	July 27, 2019
Dividend payment date	August 14, 2019

Listing on stock exchanges	Stock Code
National Stock Exchange of India Ltd. (NSE)	THERMAX EQ
BSE Ltd. (BSE)	Physical - 411 Demat - 500411
International Security Identification No. for Equity shares (ISIN) in NSDL and CDSL	INE 152A01029
Corporate Identity No. (CIN)	L29299PN1980PLC022787

The company has paid listing fees to BSE and NSE and custodial fees to Central Depositories Services (India) Limited and National Securities Depository Limited for financial year 2019-20 on the basis number of beneficial accounts maintained by them, as on March 31, 2019.

C. Stock Data

(Amount in Rupees per share)

Month	MKT QUOTE-NSE		MKT QUOTE-BSE	
	High	Low	High	Low
April 2018	1,165.10	1,069.50	1,169.45	1,047.00
May 2018	1,200.00	1,085.30	1,204.90	1,065.55
June 2018	1,169.00	1,030.55	1,168.50	1,032.10
July 2018	1,178.00	990.50	1,180.95	995.00
August 2018	1,206.00	969.00	1,199.95	966.00
September 2018	1,054.00	902.50	1,050.00	904.95
October 2018	1,016.00	873.05	1,011.90	878.05
November 2018	1,070.00	960.05	1,070.90	962.10
December 2018	1,157.00	1,018.50	1,154.90	1,020.40
January 2019	1,173.95	1,031.60	1,174.00	1,034.50
February 2019	1,198.00	952.50	1,125.10	947.00
March 2019	1,076.95	948.00	1,078.00	940.00

D. Registrar and Share Transfer Agent

Karvy Fintech Private Limited
(Erstwhile Karvy Computershare Private Limited)
Karvy Selenium Tower B, Plot No. 31 & 32
Gachibowli, Financial District,
Nanakramguda, Serilingampally
Hyderabad - 500 032
Telephone: +91 040 67161510/512
Fax: 040 - 23420814
E-mail ID for redressal of grievances of shareholders/ investors: einward.ris@karvy.com
Website: www.karvyfintech.com

E. Share Transfer System

The company's shares are traded on the stock exchanges only in electronic mode. Shares received for transfer by the company or its Registrar and Transfer Agent in physical mode are processed and all valid transfers are approved. The share certificate(s) is/are duly transferred and dispatched within a period of 15 days from the date of receipt.

F. Distribution of Shareholding and Shareholding Pattern

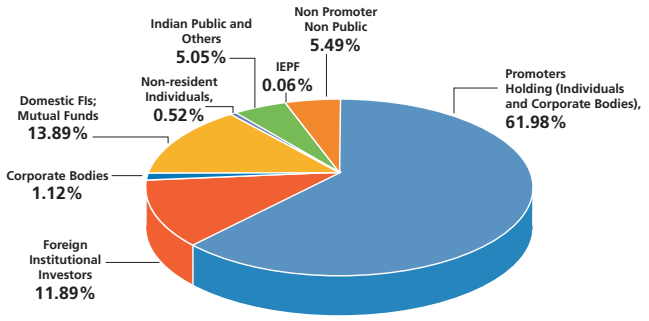
Distribution of Shareholding as on 31/03/2019 (Total)

Sr. No.	Category (Shares)	No. of Holders	% to Holders	No. of Shares	% to Equity
1	1 - 5000	32,474	98.96	48,80,595	4.10
2	5001 - 10000	95	0.29	6,63,540	0.56
3	10001 - 20000	64	0.20	9,03,429	0.76
4	20001 - 30000	26	0.08	6,53,936	0.55
5	30001 - 40000	14	0.04	5,10,064	0.43
6	40001 - 50000	20	0.06	9,14,832	0.77
7	50001 - 100000	51	0.16	38,16,375	3.20
8	100001 and above	71	0.22	10,68,13,529	89.64
	Total	32,815	100.00	11,91,56,300	100.00

Category of Equity Shareholders as on March 31, 2019

Category		Shares Held	% of Shareholding
(A) Promoters holding			
1.	Individuals	6,000	-
2.	Corporate Bodies	7,38,49,305	61.98
(A) Total Shareholding of Promoters		7,38,55,305	61.98
(B) Non-promoters Holding			
1	Mutual Funds, Banks, Financial Institutions, Insurance Companies, etc.	1,65,39,441	13.89
2	Foreign Institutional Investors	1,41,73,194	11.89
3	Corporate Bodies	13,30,242	1.12
4	Non-Resident Individuals	6,23,844	0.52
5	Indian Public & Others	60,22,906	5.05
6	IEPF	69,928	0.06
(B) Total Public Shareholding		3,87,59,555	32.53
(C) Non-promoter Non-public		65,41,440	5.49
Total (A)+(B)+(C)		11,91,56,300	100.00

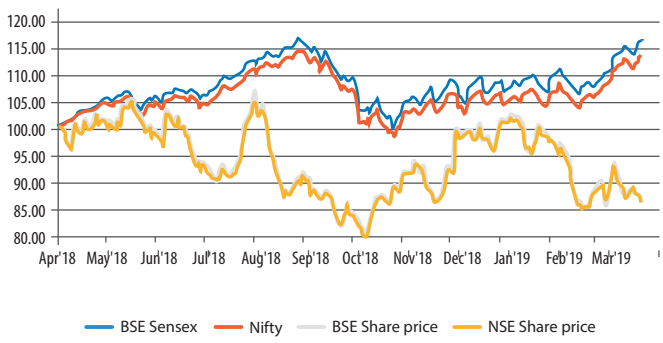
Shareholding pattern as on March 31, 2019



G. Details of Dematerialisations

The company's equity shares are under compulsory demat trading for all categories of investors. A total of 11,51,92,025 shares have been dematerialised as on March 31, 2019 representing 96.67% of the total equity capital.

Stock Performance



Note: The company's share price and indices have been indexed to 100 as on the first working day of the financial year 2018-19 i.e. April 2, 2018.

H. Outstanding GDRs/ADRs/Warrants or any Convertible Instruments, Conversion Date and likely impact on Equity

The company has not issued GDRs/ADRs/Warrants or any Convertible Instruments.

I. Foreign Exchange Risk and Hedging Activities

To mitigate the risk, the company has well-defined policy of hedging which is founded on the principle of prudence.

J. Plant Locations

Domestic

Pune

- D-13, MIDC Industrial Area, R. D. Aga Road, Chinchwad, Pune - 411 019, Maharashtra.
- 98-99, Bhosari MIDC Industrial Area, Bhosari, Pune - 411 026, Maharashtra.
- D-1 Block, MIDC Industrial Area, Chinchwad, Pune - 411 019, Maharashtra.

Solapur
Plot no T-1 MIDC, Chincholi, Taluka Mohol, Dist. Solapur - 413 255, Maharashtra.

Paudh
At Paudh, Post Mazgaon, Taluka Khalapur, Dist. Raigad - 410206, Maharashtra.

Savli
Plot no. 21/1-2-3, GIDC Manjusar, Taluka - Savli, Dist. Vadodara - 391775, Gujarat.

Mundra SEZ
Survey no-169, Village Dhrub, Taluka Mundra, Mundra - 370421, District Kutch, Gujarat.

Jhagadia
Plot No. 903/1, GIDC, Jhagadia Industrial Estate, Jhagadia, Dist. Bharuch - 393110, Gujarat.

Dahej
Plot No. Z/96/C, Dahej SEZ, Phase-II, Taluka Vagra Dist. Bharuch - 392 130, Gujarat.

Sri City
2700, Peepul Boulevard Sricity DTZ
Andhra Pradesh - 517 646

Shirwal
Plot No. A-2 & A-3, Khandala Industrial Area, Phase - I, MIDC, Village Kesurdi, Tal-Khandala, Dist. Satara - 412802, Maharashtra.

International

Danstoker, Denmark
Industrivej Nord 13 DK-7400 Herning

Indonesia
Jl. Eropal Kav P2, KIEC, Cilegon-Banten, Indonesia

Danstoker, Poland
ul. KOLEJOWA, nr 20, lok. ---, miejsc. OSTROWIEC SWIETOKRZYSKI, kod 27-400, poczta OSTROWIEC SWIETOKRZYSKI, kraj POLSKA

China
No. 645 Chayuan Road, Jiaxing Economic Developement Zone, Jiaxing, Zhejiang. PR China 314003

Rifox, Germany
Bertha-von-suttner-str. 928207 Breman, Germany HRB3148

Boilerworks A/S
Papegøjevej 7, Tønder, Denmark 6270

K. Address for Correspondence

Investors should address their correspondence to the company's Registrar and Transfer Agent, Karvy Fintech Private Limited *(erstwhile Karvy Computershare Private Limited)*, whose address has been provided in (D) above.

Shareholders, holding shares in dematerialised form should address their queries such as a change in bank account details, address, nomination, etc., to their respective Depository Participants (DPs).

Queries relating to the Annual Report may be addressed to:
The Company Secretary, Thermax Limited, Thermax House, 14, Mumbai-Pune Road, Wakdewadi, Pune - 411 003.
Email: cservice@thermaxglobal.com

7. Other Disclosures

a) Related Party Transactions:
Related party transactions during the year have been disclosed as part of financial statements as required under Ind AS 24 issued by The Institute of Chartered Accountants of India. The Audit Committee reviews these transactions. The Related Party Transactions policy as updated in pursuance of SEBI (LODR) (Amendment) Act, 2018 has been uploaded on the website of the company i.e. www.thermaxglobal.com.

b) Details of any non-compliance w.r.t. capital markets during the year:
During the previous three years there were no instances of non-compliance by the company or penalties, strictures imposed on the company by stock exchanges or SEBI or any other statutory authority on any matter related to capital markets.

c) Dividend Distribution Policy (DDP):
The company adopted the DDP effective February 8, 2017. There has been no change in the policy during the year and the same is disclosed on the company's website: www.thermaxglobal.com.

d) Whistle Blower Policy/Vigil Mechanism:
The Board has adopted a Whistle Blower Policy to promote reporting of any unethical or improper practice or violation of the company's Code of Conduct or complaints regarding accounting, auditing, internal controls or disclosure practices of the company. It gives a platform to the whistle blower to report any unethical or improper practice (not necessarily violation of law) and to define processes for receiving and investigating complaints. The company has assigned e-mail Ids - tlgovernance@gmail.com or nhm@nawshirmirza.com for reporting or sending a written complaint to the chairperson or the managing director. The Whistle Blower Policy is available on the website of the company. The confidentiality of such reporting is maintained and the whistle blower is protected from any discriminatory action.

e) Policy for determining material subsidiaries is disclosed on the website of the company i.e. www.thermaxglobal.com.

f) The company has complied with the corporate governance requirements as per the SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015.

g) The company has not raised funds through preferential allotment or qualified institutional placement as specified under Regulation 32(7A).

h) There was no recommendation proposed by the committees, which has not been approved by the Board.

i) Details of remuneration paid to the Statutory Auditors.
The details of total fees for all services paid by the company and its subsidiaries on a consolidated basis to statutory auditors are as follows:

Payment to Statutory Auditors and its Network Firms	March 31, 2019
As Auditor	
Audit and Limited Review Fee	2,98,76,443
Tax Audit Fee	-
In Other Capacity	
Taxation Matters	48,75,000
Other Services	51,73,504
Reimbursement of Expenses	10,92,233
Total	4,10,17,180

j) Disclosure in relation to sexual harassment of women at workplace (Prevention, Prohibition and Redressal) Act, 2013

Number of complaints filed during the financial year	Nil
Number of complaints disposed of during the financial year	Nil
Number of complaints pending as on end of the financial year	Nil

8. Non-Mandatory Requirements

The company has adopted the following discretionary practices as specified under Regulation 27(1) of SEBI (Listing Obligations & Disclosure Requirements) Regulations, 2015.

A. The Board

The chairperson's office is maintained at the company's expense, which is equipped with all required facilities. The chairperson is also allowed reimbursement of expenses incurred towards the performance of her duties.

B. Separate Post of Chairman and CEO

The company has separate positions of non- executive chairperson and managing director & CEO.

C. Reporting of Internal Auditor

The chief internal auditor of the company reports directly to the Audit Committee.

Certificate from MD & CEO

To the shareholders of Thermax Limited

Sub: Compliance with Code of Conduct

The company has adopted a Code of Conduct which deals with governance practices expected to be followed by Board members and senior management employees of the company.

I hereby declare that all the directors and senior management employees have affirmed compliance with the Code of Conduct adopted by the Board.

M.S. Unnikrishnan
Managing Director & CEO

Pune: May 22, 2019

Certification by Chief Executive Officer and Chief Financial Officer

To,
The Board of Directors,
Thermax Ltd., Pune.

Dear Sirs,

We hereby certify, to the best of our knowledge and belief, that:

a) We have reviewed financial statements and the cash flow statement for the year ended March 31, 2019 and that
i. these statements do not contain any materially untrue statement or omit any material fact or contain statements that might be misleading;

ii. these statements together present a true and fair view of the company's affairs and are in compliance with existing accounting standards, applicable laws and regulations.

b) There are, to the best of our knowledge and belief, no transactions entered into by the company during the year which are fraudulent, illegal or violate of the company's code of conduct.

c) We accept responsibility for establishing and maintaining internal controls for financial reporting and that we have evaluated the effectiveness of internal control systems of the company pertaining to financial reporting and we have disclosed to the auditors and the Audit Committee, those deficiencies, of which we are aware, in the design or operation of such internal controls, and we have taken the required steps to rectify these deficiencies.

d) We have indicated to the auditors and the Audit Committee that:
i. there have been no significant changes in internal control over financial reporting during the year;

ii. there have been no significant changes in accounting policies during the year and that the same have been disclosed in the notes to the financial statements; and

iii. there have been no instances of significant fraud, of which we have become aware involving management or an employee having a significant role in the company's internal control system over financial reporting.

For Thermax Ltd.

M.S. Unnikrishnan
Managing Director & CEO

Amitabha Mukhopadhyay
EVP & Group CFO

Date: May 22, 2019
Place: Pune

Certificate from Company Secretary in Practice

To,
The Members,
Thermax Limited,
D-13, MIDC, Chinchwad,
Pune - 411019

CERTIFICATE OF NON-DISQUALIFICATION OF DIRECTORS

(Pursuant to Regulation 34(3) and Schedule V Para C Clause (10)(i) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015)

We have examined the relevant registers, records, forms, returns and disclosures received from the Directors of Thermax Limited (hereinafter referred to as 'the Company'), having CIN - L29299PN1980PLC022787 and having registered office at D-13, MIDC, Chinchwad, Pune - 411019 produced before us by the Company for the purpose of issuing this Certificate, in accordance with Regulation 34(3) read with Schedule V Para-C Sub clause 10(i) of the Securities Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015.

In our opinion and to the best of our information and according to the verifications (including Directors Identification Number (DIN) status at the portal (www.mca.gov.in)) as considered necessary and explanations furnished to us by the Company & its officers, we hereby certify that none of the Directors on the Board of the Company as stated below for the Financial Year ending on 31st March, 2019 have been debarred or disqualified from being appointed or continuing as Directors of companies by the Securities and Exchange Board of India and Ministry of Corporate Affairs.

Sr. No.	Name of Director	DIN	Date of appointment in Company
1	Meher Pudumjee	00019581	January 15, 2001
2	Pheroz Pudumjee	00019602	January 15, 2001
3	Dr. Jairam Varadaraj	00003361	January 31, 2003
4	Nawshir Mirza	00044816	May 03, 2011
5	S.B. (Ravi) Pandit	00075861	May 30, 2017
6	Harsh Mariwala	00210342	November 10, 2016
7	Dr. Valentin von Massow	00239314	January 31, 2006
8	M.S. Unnikrishnan	01460245	July 1, 2007
9	Rajani Kesari	02384170	November 14, 2018

Ensuring the eligibility for the appointment/ continuity of every Director on the Board is the responsibility of the management of the Company. Our responsibility is to express an opinion on these based on our verification. This certificate is neither an assurance as to the future viability of the Company nor of the efficiency or effectiveness with which the management has conducted the affairs of the Company.

For SVD & Associates
Company Secretaries

S V Deulkar
Partner
FCS No: 1321 | C P No: 965

Date: May 22, 2019 | Place: Pune

Auditor's Certificate

Independent Auditor's Report on compliance with the conditions of Corporate Governance as per provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015

The Members of Thermax Limited
Thermax Limited
D-13, MIDC Industrial Area
R.D Aga Road
Chinchwad, Pune-411019

1. The Corporate Governance Report prepared by Thermax Limited (hereinafter the "Company"), contains details as required by the provisions of Chapter IV of Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015, as amended ("the Listing Regulations") ('Applicable criteria') with respect to Corporate Governance for the year ended March 31, 2019 ("reporting period"). This report is required by the Company for annual submission to the Stock exchange and to be sent to the Shareholders of the Company.

Management's Responsibility

2. The preparation of the Corporate Governance Report is the responsibility of the Management of the Company including the preparation and maintenance of all relevant supporting records and documents. This responsibility also includes the design, implementation and maintenance of internal control relevant to the preparation and presentation of the Corporate Governance Report.

3. The Management along with the Board of Directors are also responsible for ensuring that the Company complies with the conditions of Corporate Governance as stipulated in the Listing Regulations, i.e. clause 17 to 27 and clause 46 (2) (b) (i) issued by the Securities and Exchange Board of India.

Auditor's Responsibility

4. Pursuant to the requirements of the Listing Regulations, our responsibility is to express a reasonable assurance in the form of an opinion whether the Company has complied with the specific requirements of the Listing Regulations referred to in paragraph 3 above.

5. We conducted our examination of the Corporate Governance Report in accordance with the Guidance Note on Reports or Certificates for Special Purposes and the Guidance Note on Certification of Corporate Governance, both issued by the Institute of Chartered Accountants of India ("ICAI"). The Guidance Note on Reports or Certificates for Special Purposes requires that we comply with the ethical requirements of the Code of Ethics issued by the Institute of Chartered Accountants of India.

6. We have complied with the relevant applicable requirements of the Standard on Quality Control (SQC) 1, Quality Control for Firms that Perform Audits and Reviews of Historical Financial Information, and Other Assurance and Related Services Engagements.

7. The procedures selected depend on the auditor's judgement, including the assessment of the risks associated in compliance of the Corporate Governance Report with the applicable criteria. Summary of key procedures performed include:
   i. Reading and understanding of the information prepared by the Company and included in its Corporate Governance Report;

   ii. Obtained and verified that the composition of the Board of Directors w.r.t executive and non-executive directors has been met throughout the reporting period;

   iii. Obtained and read the Directors Register as on March 31, 2019 and verified that atleast one women director was on the Board during the year;

   iv. Obtained and read the minutes of the following committee meetings held during the reporting period:
   (a) Board of Directors meeting;
   (b) Audit Committee;

(c) Audit and Risk Management Committee (w.e.f November 14, 2018);
(d) Corporate Social Responsibility (CSR) Committee;
(e) Annual General Meeting;
(f) Nomination and Remuneration Committee;
(g) Stakeholders Relationship Committee
(h) International Investment Committee;
(i) Strategic Business Development Committee; and
(j) Independent Directors Meeting;

v. Obtained necessary representations and declarations from directors of the Company including the independent directors; and

vi. Performed necessary inquiries with the management and also obtained necessary specific representations from management.

The above-mentioned procedures include examining evidence supporting the particulars in the Corporate Governance Report on a test basis. Further, our scope of work under this report did not involve us performing audit tests for the purposes of expressing an opinion on the fairness or accuracy of any of the financial information or the financial statements of the Company taken as a whole.

Opinion

8. Based on the procedures performed by us as referred in paragraph 7 above, and according to the information and explanations given to us, we are of the opinion that the Company has complied with the conditions of Corporate Governance as stipulated in the Listing Regulations, as applicable for the year ended March 31, 2019, referred to in paragraph 2 above.

Other Matters and Restriction on Use

9. This report is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

10. This report is addressed to and provided to the members of the Company solely for the purpose of enabling it to comply with its obligations under the Listing Regulations with reference to compliance with the relevant regulations of Corporate Governance and should not be used by any other person or for any other purpose. Accordingly, we do not accept or assume any liability or any duty of care or for any other purpose or to any other party to whom it is shown or into whose hands it may come without our prior consent in writing. We have no responsibility to update this report for events and circumstances occurring after the date of this report.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Registration Number: 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership Number: 501160
Place of Signature: Pune

Date: May 22, 2019
UDIN - 19501160AAAAA17586

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Annexure - 4 to the Directors' Report

Business Responsibility Report

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Message from the Director's Desk

Dear stakeholders,

Last December, I had the opportunity to represent Thermax and India at the 24th Conference on Climate Change COP 24 in Katowice, Poland. Representatives of almost all the countries gathered to discuss the implementation plan which aims to limit global warming to 1.5 °C by 2030. As a part of the delegation from India, we presented the carbon footprint trends across select Indian industries; opportunities to mitigate them and the collaboration required among nations, particularly the developed ones.

Let me share with you that sustainability has evolved into a new era where it is steadily gaining traction around the world. Corporates have started showing their willingness to drive sustainable practices and incur higher levels of capital expenditures as they have realised that these investments give better returns over the project lifecycle. World over, governments have started taking cognisance of the impact that pollution can have on the overall development of their nations and the burden it can place on their economy and ecosystem.

During the year, your company developed unique applications, resulting in significant energy savings. Giving a new dimension to our journey in converting waste to useful energy, we deployed an innovative product - ReciproGate 2.0, for generating steam from non-recyclable solid waste created in the paper manufacturing process. Deployment of this technology negates the impact of pollution that would have otherwise emanated from this waste. A leading paper manufacturer, who opted for this solution, will be converting 33,000 tonnes of waste per year into useful energy.

We also partnered with a multinational food & beverage major to reduce their fresh water consumption by over 50% by decentralising the effluent treatment process and recycling the treated effluent for individual local usage.

We firmly believe that the aspirations of any progressive organisation can only be steered by employees who are not just committed to growth but also their health, fitness and wellness. Your company commenced a 'Wellness' initiative to focus on the four pillars of physical fitness, mental health, nutrition and cessation of smoking, with an intention to minimise the risks of lifestyle-related diseases and degeneration.

We will continue to focus on supporting the sustenance of the planet and its inhabitants by preserving its resources and the environment through improved solutions.

M.S. Unnikrishnan
Managing Director & CEO

SECTION A: General Information about the Company (Group)

1	Name of the company	Thermax Limited
2	Registered address	D-13, MIDC, Industrial Area, R. D. Aga Road, Chinchwad, Pune 411019
3	Website	www.thermaxglobal.com
4	E-mail id	cservice@thermaxglobal.com
5	Financial year reported	FY 2018-19
6	Sector(s) that the company is engaged in (industrial activity code-wise)	25131: boilers and heaters, absorption chillers/heat pumps, power plants, solar equipment, related services 37003, 20119: air pollution control equipment/systems, water and wastewater, recycle plant, ion exchange resins and performance chemicals, related services 20119: ion exchange resins, performance chemicals, construction chemicals, oil field chemicals, related services
7	List three key products/services that the company manufactures/provides (as in balance sheet)	1. Energy Segment - 80.3% (boilers & heaters, absorption chillers/heat pumps, power plants, solar equipment related services) 2. Environment Segment - 12.8% (air pollution control equipment/systems, water & waste recycle plant, ion exchange resins & performance chemicals, related services) 3. Chemical - 6.9% (boiler and water chemicals, ion exchange resins, performance chemicals, construction chemicals, oil field chemicals, related services)
8	Total number of locations where the company undertakes business activity	International - 6 manufacturing locations National - 10 manufacturing locations
	Number of International Locations (provide details of major 5)	The company has manufacturing facilities in China, Germany, Denmark (2 plants), Poland and Indonesia.
	Number of National Locations	Pune (2), Shirwal, Solapur, Savli, Paudh, Jhagadia, Mundra SEZ, Dahej and Sri City.
9	Markets served by the company - Local/State/National/International	National and International

SECTION B: Financial Details of the Company (Group)

1	Paid up Capital (INR)	Rs. 22.52 crore
2	Total Turnover (INR)	Rs. 6,123 crore
3	Total profit after taxes (INR)	Rs. 325 crore
4	Total Spending on Corporate Social Responsibility (CSR) as a percentage of profit before tax pursuant to Section 198 (%)	2% (Rs. 8.33 crore)
5	List of activities in which expenditure in 4 above has been incurred:-	Thermax created a formal structure named 'Thermax Foundation' to formulate and implement its CSR programme. The company has been focusing predominantly in the area of education of economically underprivileged children. Apart from education, Thermax addresses social discrimination through affirmative action, skill development and employability initiatives. The primary areas in which the expenditure has been incurred include - 1. The School Project 2. Support to pioneering educational NGOs 3. Employee engagement in CSR

SECTION C: Other Details

1	Does the Company have any Subsidiary Company/Companies?	Yes. Thermax has 28 subsidiary companies in India and abroad as on March 31, 2019.
2	Do the Subsidiary Company/Companies participate in the BR initiatives of the parent company? If yes, then indicate the number of such subsidiary company(s)	Yes. 7 domestic subsidiaries and 6 international subsidiaries
3	Do any other entity/entities (e.g. suppliers, distributors, etc.) that the Company does business with, participate in the BR initiatives of the Company? If yes, then indicate the percentage of such entity/entities? [Less than 30%, 30-60%, More than 60%]	No.

SECTION D: BR Information

1. Details of Director/Directors responsible for BR

(a) Details of the Director/Directors responsible for implementation of the BR policy/policies

1	DIN Number	01460245
2	Name	M.S. Unnikrishnan
3	Designation	Managing Director & CEO

(b) Details of the BR head

No.	Particulars	Details
1	DIN Number (if applicable)	07068529
2	Name	Sharad Gangal
3	Designation	Executive Vice President, HR, IR, Administration
4	Telephone number	020 - 66051200
5	E-mail id	Sharad.Gangal@Thermaxglobal.com

1. Principle-wise (as per NVGs) BR policy/policies

a. Details of compliance (Reply in Y/N)

No.	Questions	P1	P2	P3	P4	P5	P6	P7	P8	P9
1	Do you have a policy/policies for....	Yes.								
2	Has the policy being formulated in consultation with the relevant stakeholders?	Yes.								
3	Does the policy conform to any national/international standards? If yes, specify? (50 words)	Policies are prepared ensuring adherence to applicable laws and in line with international standards such as ISO, ILO (International Labour Organsation), and OHSAS.								
4	Has the policy being approved by the Board? If yes, has it been signed by MD/owner/CEO/appropriate Board Director?	Yes. The policies have been signed by appropriate authorities.								
5	Does the company have a specified committee of the Board/Director/ Official to oversee the implementation of the policy?	The Board has appointed a BR director to oversee policy implementation. Thermax has a well-established internal governance structure to ensure the implementation of various policies, internal regulations and procedures. We have internally mapped all policies, internal regulations and procedures to business functions responsible for implementation.								
6	Indicate the link for the policy to be viewed online?	Copies are available on www.thermaxglobal.com								
7	Has the policy been formally communicated to all relevant internal and external stakeholders?	Yes.								
8	Does the company have in-house structure to implement the policy/ policies?	Yes.								
9	Does the Company have a grievance redressal mechanism related to the policy/policies to address stakeholders' grievances related to the policy/ policies?	Yes.								
10	Has the company carried out independent audit/evaluation of the working of this policy by an internal or external agency?	Yes. All our policies and procedures are continuously evaluated by internal auditors.								

2. Governance related to BR

a	Indicate the frequency with which the Board of Directors, Committee of the Board or CEO to assess the BR performance of the company. Within 3 months, 3-6 months, annually, more than 1 year	Annually by the Board Quarterly by the CEO
b	Does the Company publish a BR or a Sustainability Report? What is the hyperlink for viewing this report? How frequently it is published?	Yes. The BRR is a part of the Annual Report and is available on the Thermax website, www.thermaxglobal.com

SECTION E: Principle-wise Performance

Principle 1 - Ethics, Transparency and Accountability

Company's Philosophy on Corporate Governance:
Inspired by the conviction of its ex-Chairman, R.D. Aga that, "profit is not a set of figures but of values", Thermax has set exemplary standards as an organisation, that is socially responsible, environmentally conscious and committed to high standards of governance.

The company considers ethical business conduct, integrity and commitment to values, transparency and accountability as integral to doing business and an enabler in enhancing and retaining the trust of stakeholders - a hallmark of effective corporate governance.

The Annual Report covers Thermax's philosophy on corporate governance, policies, details on appointments, various Board committees, nominations and remuneration of the Board and senior management, and the emphasis laid on compliance with the Code of Conduct and Ethics by the Board and senior management.

Whistle Blower Policy/Vigil Mechanism
The Board has adopted a Whistle Blower policy to promote reporting of any unethical or improper practice or violation of the company's Code of Conduct or complaints regarding accounting, auditing, internal controls or disclosure practices of the company (refer Corporate Governance Report of this Annual Report)

No complaints under Vigil Mechanism were received during the year.

Shareholder Complaints Redressal Mechanism
There is a structured mechanism to capture and resolve complaints from shareholders related to compliance and governance deficiencies.

The company has received 27 complaints from shareholders, and all were resolved as on March 31, 2019.

During the year, there were no cases filed against the company by shareholders, nor any pending cases regarding unfair trade practices, irresponsible advertising and anti-competitive behaviour.

Principle 2 - Product Life Cycle Sustainability

Sustainable Product Innovation
Since its inception, Thermax has been investing in Research & Development that has helped in making businesses more sustainable and contributed to technological advancement in the areas of energy and environment. Some of the pioneering innovations of the year include:

The Under Feed Stoker (UFS) Technology in Boilers
Thermax has partnered with its technology affiliate, Lambion Energy Solutions GmbH to introduce the latest UFS technology for Asian markets in its Enerbloc and Combloc series of boilers. Already prevalent in Europe and North America, this technology has been customised by hybridising UFS with sloped stationary grate for local fuels such as Indonesian coal, biomass briquettes, wood chips and pellets. As the name suggests, the fresh fuel is fed under a heap of burning fuel via a screw feeder running continuously, resulting in a combination of gasification and combustion. UFS can be applied to both boilers and heaters up to 5 MWth capacity.

The rationale for introducing this product in the Asian markets is two-fold. First, this variant will bridge the product gap between the low-end bubbling bed technology and a fully automatic boiler. While the cost economics is comparable to the former, the efficiency is almost at par with a high-end boiler, giving a choice to a customer looking for an efficient yet affordable solution. Secondly, with the emission norms becoming more stringent than before, the UFS will eventually be a preferred choice over the basic variants as it has a proven capability of reducing particulate release by 50%.



Combloc UFS 30, a 3 TPH boiler installed in Maharashtra for a German multinational producing animal feed. This biomass fuel-based boiler is semi-automatic, designed for small-sized plants.



Thermax's indigenously developed and internationally patented - One Degree Absorption Chiller.

One Degree Absorption Chiller
Thermax has developed and patented internationally it's 'One Degree Absorption Chiller' that is ideal for low-temperature cooling applications in industries such as dairies, beverages, edible oil and food processing. Being a glycol-free cooling solution, it eliminates the need for a secondary circulation system involving IBT or glycol-based PHE's, resulting in reduction of both capital and operating costs for the customer.

The integral chiller-heater design provides hot water at 90 ˚C without any additional energy consumption, resulting in a 40% saving in the overall process related costs, as compared to conventional chillers.

Supplying chilled water at temperatures as low as 1 ˚C while preventing the refrigerant which is water, from freezing, the innovative design of this chiller has surpassed the industry threshold of 3.5 ˚C.

Recycling of Sewage by Moving Bed Bioreactor Technology
Thermax has commissioned a sewage treatment plant of 25 MLD (25,000 m^3/day) capacity at Udaipur for a leading zinc-lead-silver producer. The plant is based on Thermax's MBBR (Moving Bed Bioreactor) technology, which uses anoxic and aerobic unit processes. Anoxic treatment is used for the reduction of nutrients like nitrogen from the sewage while the aerobic system treats the organic matter. The bio-solids are removed in an advanced sedimentation treatment unit called Klaritubesettler. This combination of MBBR and Klaritubesettler offers advantages of lower operating cost and reduced space, compared to other conventional systems. The sewage is further treated using rapid gravity sand filters, ensuring that it meets the desired disposal norms after disinfection. A sludge handling system is also provided to reduce water loss. The plant is designed for least manual interventions by providing motorised mechanical equipment. The treated water from the plant is reused by the customer at their processing unit, around 50 km away.

This utilisation of sewage water recycled by the Thermax STP is helping in rejuvenating water bodies in and around the area, significantly reducing the demand for fresh water.

Sustainable Sourcing
As Thermax continues to grow and expand its supply chain globally, it has adopted various contemporary practices for an inclusive growth and capacity building of its sourcing network.

Through the policy on Sustainable Sourcing, Thermax encourages the adoption of sustainable business practices throughout the supply chain while managing it's social, environmental as well as economic impact. Regular training is imparted to the procurement and supplier teams to upgrade the capabilities of Thermax as well as that of its sourcing partners.

While registering vendors, Thermax evaluates them on environmental, safety, governance and social considerations. The evaluation questionnaire highlights areas of improvement for the supplier to meet the sustainability criteria.

The company is also working closely with suppliers to improve their performance to 'self-certified' levels - a beneficial practice to both the parties as it eliminates the need for multiple inspections and focuses on building quality at the source. It also serves as a gateway to a process where inspection is waived, and vendors can supply items directly to a customer's shop or store for ultimate use.

Currently, 25.8% of the company's supply chain is fully compliant with sustainability requirements. Thermax plans to expand the coverage to 35% in the next three years.



The Water & Waste Solutions business of Thermax commissioned a Sewage Treatment Plant of 25 MLD (million litres per day) capacity at Udaipur for the world's leading zinc-lead-silver producer.

Recyclable Products and Waste
All the manufacturing facilities of Thermax have an Environment Management System (EMS) in place and are ISO 14001:2015 certified. Waste management practices are in line with EMS, where the waste is segregated into hazardous and non-hazardous categories. Hazardous waste is disposed of as per legal requirements. E-waste is recycled through the Central Pollution Control Board (CPCB) registered recycler. Other types of waste, wherever possible, are recycled or reused.

Thermax's manufacturing facilities in Chinchwad, Solapur, Shirwal, and Savli treat and reuse 100% wastewater for gardening.

Principle 3 - Employee Well-being

Diversity in Employment
Total number of employees of Thermax Group: 4,581 (including subsidiaries)
Number of permanent women employees: 272 (including subsidiaries)

Employee Association Recognised by Management
Thermax has workmen associations at factories, and the involvement of permanent employees in associations is 100% at Chinchwad (Maharashtra), 80% at Paudh (Maharashtra) and 80% at Savli (Gujarat) locations.

There were no cases of child labour, forced labour, involuntary labour, sexual harassment and discriminatory employment practices reported during the year.

The Wellness Programme at Thermax
As a progressive organisation, Thermax has been taking initiatives to create health awareness. However, the increasing levels of medical concerns among employees in the last couple of years led to the launch of the Thermax Wellness programme on June 4, 2018. This structured and comprehensive approach to health and wellbeing of employees encompasses four pillars of mental health, physical fitness, nutrition and smoking cessation. In the first phase focussing on 'Physical Wellbeing', a medical check-up was conducted that saw the participation of 2,480 employees (82%) across all Pune offices. The plan is to extend the check-up to other locations within India and implement the other pillars in a phased manner.

Ongoing Physical Health Initiatives
Health examination of all employees is carried out before they join the company, and after that, it is done based on risk factors. The monitoring of workplace parameters is carried out, and corrective actions are taken if required. Various training programmes on health awareness are regularly organised for the employees. A bi-annual preventive medical check-up is carried out for all the workmen, and in case of any abnormalities in the findings,



As a part of the National Safety Week 2019, workmen at a customer site in Madhya Pradesh are seen participating in fire mock drills to improve their readiness towards fire hazards.

the affected person is made aware of appropriate diet and nutritional practices and regular exercise regimes.

At Thermax, all employees and their dependents are covered under a mediclaim policy, which provides reimbursement for hospitalisation expenses. A medical trust is also established for the benefit of the workmen, where workmen and management contribute funds in the ratio of 1:2. All employees are covered under a Personal Accident Policy.

THERMLive: Rollout of SAP SuccessFactors

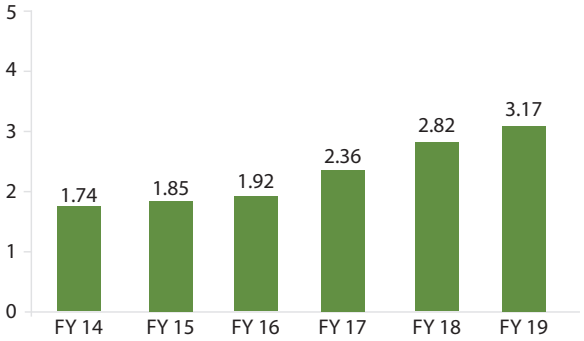
Thermax rolled out SAP SuccessFactors, a leading cloud human capital management (HCM) suite that uses the latest technologies in managing various facets of the employees' organisational lifecycle such as core HR and payroll; attendance and time logs; recruiting and onboarding; learning and development; and people engagement. This strategic people portal was adopted to address Thermax's increased footprint as a global player and growth in terms of employees and businesses in the last decade. It is aimed at integrating all employee operations while complying with the highest international standards. It has many advantages - device agnostic, customisable as per specific country needs, user-friendly and provides analytics by way of dashboards. The complete implementation will be done in three phases, and the first phase of Goal Management and Continuous Performance has been rolled out at the beginning of the new fiscal.

Safety Training

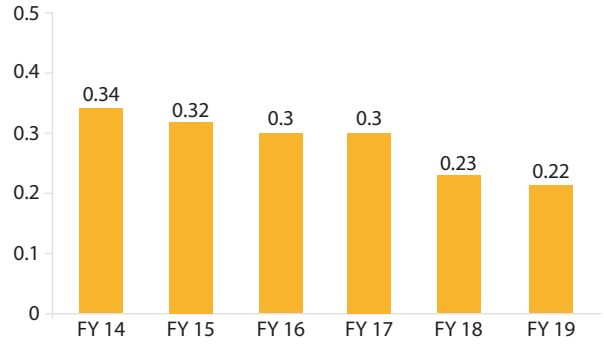
The company focuses on inculcating a sense of ownership towards safety across all levels in the organisation. It also drives behaviour-based safety initiatives and customised risk-based training programmes at various locations.

Beginning 4th March 2019, the company celebrated the National Safety Week. To commemorate this occasion, Thermax employees across offices, sites, and manufacturing locations participated in flag hoisting, taking the safety oath and sharing of best practices. Refresher training on near misses and mock drills were conducted at key customer sites to improve the preparedness in the wake of unforeseen incidents. A host of other activities were organised to address every aspect of occupational health and safety such as games to understand risk vs opportunities, safety quizzes, slogan and poster competitions, sessions on lifestyle and stress management as well as short training on handling health emergencies.

Safety Training (man days/employee/year)



Lost Time Injury Frequency Rate



During FY 2018-19, there was a 12% increase in the number of safety training conducted with approximately 3.17 man-days of training imparted per employee per year, including associate employees, on various internal safety standards. Such training aimed at inculcating best practices in safety, along with other proactive measures, have resulted in a reduction of 4% in Lost Time Injury Frequency Rate (LTIFR).

Drugs and Alcohol Policy

During the year, Thermax released its Drugs and Alcohol policy that provides a comprehensive framework to promote a safe working environment for all employees and upholds the company's ethos and values with its customers and other stakeholders. The policy is available on the company's website, www.thermaxglobal.com.

Employee Engagement Survey

Thermax believes in empowering employees, where their opinion plays a pivotal role in shaping the organisation. An employee engagement survey (EES) was conducted during the year to capture their insights to shape various people and cultural initiatives. This initiative also helps in creating an environment that is conducive to high levels of engagement at work. Conducted every three years, EES has helped the organisation stay contemporary in its people practices. The survey recorded high participation of 96%, which is a benchmark even by global standards. The results showed that 89% of employees find Thermax an exciting place to work.

Based on survey feedback, business management and human resource teams work together to create an action plan for implementation.

Principle 4 - Stakeholder Engagement

The company believes that an effective stakeholder engagement process is necessary for achieving sustainable and inclusive growth. Accordingly, it has identified its key internal and external stakeholders and engages with them through relevant forums and channels. The company has put in place systems and procedures to identify, prioritise and address the needs and concerns of its stakeholders across businesses and units in a continuous, consistent and systematic manner.

Thermax has well-established processes for identifying and engaging with stakeholder groups. Internal and external stakeholders are classified into six broad categories and their engagement mechanism is as follows:

Stakeholder	Method of Engagement
Customer	Customer satisfaction survey, customer meets, customer site audits, website, Fireside, (house magazine of Thermax group), mailers, exhibitions, promotional campaigns, brochures, road shows, social media, *In-touch* and seminars for customers.
Employee	Open forum, employee experience survey, leaders teach series, functional trainings, online trainings, employee committees, Thermax organisation and people development, leadership development, technology day, communication blogs, environment and safety week celebrations.
Vendors	Vendor meets, dealer conference, vendor selection process, site visits and personal communication, vendor visits and trainings.
Owner and shareholders	Annual general meeting, quarterly results, annual report, investor meets and press releases.
Government Authorities	Government forums, policy advocacy, interactions with statutory bodies like SEBI, tax department, stock exchanges, pollution control boards and labour authorities.
Community	Site visits, meetings with local communities/NGOs, website - www.thermaxglobal.com, discussions with academic institutions, fellowships and press.

Principle 5 - Human Rights

The company does not have a standalone Human Rights policy; however, Thermax Code of Conduct elaborates that the organisation stands against violation of human rights, child labour or violations of indigenous rights and



As a part of the 'Wellness' programme, employees participated in 'Desk Yoga' sessions conducted by fitness experts who later briefed the partcipants on the benefits of these exercises, given that most of them are engaged in desk jobs.

sexual harassment. The company has a well-established system in place to ensure implementation and compliance with its company's policies, standards and protocols.

These policies cover the company and extend to the group.

There were no complaints received and disposed of regarding violation of human rights during the reporting year.

Principle 6 - Environment

Thermax is committed to conducting business with a strong environmental conscience. The company's Health, Safety and Environmental (HSE) policy formulates the commitment towards conducting operations in a manner that does not harm the employees, customers, contractors, workmen, residents and the environment.

Thermax's initiatives to minimise the environmental impact of its products, manufacturing operations and supply chain are guided by its environment, health and safety policy. The Environmental Management Systems (EMS) of the company is certified as per the ISO 14001:2015 standards. The management system is further defined at group, country and site levels. As a part of EMS implementation, potential environmental risks are identified, and appropriate mitigation strategies are planned. The company has a dedicated department to manage different aspects of environmental performance.

Energy conservation implemented at all the plants and offices of the company have resulted in a reduction of 2,650 tCO_2e emissions in FY 2018-19.

The company follows a 'reduce, reuse and recycle' concept at all its manufacturing plants. All manufacturing facilities except chemical plants are 'zero discharge' plants, i.e. 100% effluent is treated and used for gardening, fire hydrant system and flushing in toilets within their premises with zero discharge.

This has resulted in a saving of 2,80,385 m^3 of freshwater requirement.

The details of the projects are mentioned in Annexure 5 to the Director's Report.

Implementation of rainwater harvesting to conserve natural resources as well as reduce dependence on fresh water supply has resulted in storage and consumption of approximately 19,421 cubic meters of rainwater through harvesting facilities at the Paudh, Jhagadia and Dahej plants.

The company has planted 3,600 trees across all manufacturing locations and customer sites.

The company celebrates various environment commemoration events like World Water Day, World Environment Day, Energy Conservation Week, etc. at all locations.

Thermax complies with prescribed permissible limits as per CPCB/SPCB for air emissions, effluent quality and discharge, solid and hazardous waste generation and disposal.

As on 31 March 2019, no show cause notice received from SPCB/CPCB are pending.

Principle 7 - Policy Advocacy

Thermax is a member of various trade chambers or associations, where senior management of the company represent Thermax and engage in discussions on various topics. Some of these associations include:

- All India Management Association
- Indo German Chamber of Commerce
- CII's National Committee for Capital Goods & Engineering



World Environment Day 2019 was celebrated with increased enthusiasm across the company. As seen in the picture, employees at the Savli (Gujarat) manufacturing facility planted 200 saplings in their premises and involved the range forest officials in the activity.

- CII National Committee on Industrial Relations
- Represents Capital Goods Industry on FICCI's Sectoral Skill Council
- Member of the Development Council appointed by the Ministry of Heavy Industries and Public Undertaking, Government of India
- Mahratta Chamber of Commerce Industry and Agriculture
- Member of FICCI Power Committee
- Member of CII National Committee of Bioenergy
- Member of DST's Water Technology Initiative (WTI)
- Member of Methanol Group, Niti Aayog
- Fellow of National Academy of Engineering (FNAE)
- Invitee to Central Committee of CII - Industrial Relations
- Member of Governing Council for Capital Goods Committee for Skill Development
- Bombay Management Association
- Technology Information, Forecasting and Assessment Council (TIFAC)
- Boilers and Pressure Vessels Sectional Committee, MED01, BIS

Principle 8 - Equitable Development

Thermax Foundation (TF) is committed to supporting children from underprivileged strata of the society guided by the belief that where a child comes from should not decide who he or she will become. To ensure that quality education is accessible to all children, TF is working to strengthen government efforts by working with municipal schools.

Thermax Foundation (TF), the not-for-profit CSR arm of Thermax implements the initiatives:

- The School Project
- Support for pioneering educational NGOs
- Employee Engagement in CSR

A separate report on the company's CSR initiatives is provided in Annexure 2 of the Annual Report.

Principle 9 - Customer Value

Thermax has deployed multiple approaches to anticipate customer's needs, expectations, preferences on products and services, and understand their current and future requirements. Its *Customer Relation Centre* captures all elements from customers either directly during interactions or indirectly through surveys and tracking of complaints. A series of structured engagements have been deployed. Data collection and analysis mechanisms have been put in place to assess customer needs periodically.

At Thermax, there is a structured mechanism to capture and resolve customer complaints. 3% of complaints from 2018-19 are pending for resolution. After a thorough investigation of the complaints, it was found that there was no concern regarding the safety profile of any product.

During the year, Thermax conducted a Customer Satisfaction Survey through a third party. The survey has captured customer experiences in various areas such as product quality, delivery, technical assistance, service support, customer orientation, relationship building,

company personnel and customer loyalty. The survey indicates an improvement in the overall customer satisfaction index as compared to the last one done three years ago.

During the reporting year, there were no complaints related to unfair trade practices, irresponsible advertising or anti-competitive behaviour against the company.

Thermax conducts various events for potential customers like seminars, conferences, road shows on products. Through these type of events, they are made aware of the company's capabilities in technological advancement, service support and people competencies, which are essential to maintain an edge in the competitive business environment.

Remote Online Service Support for Thermax Chillers

For creating a differentiated service offering to customers, the Global Technical Services (GTS) group of the Absorption Cooling division recently leveraged digitisation to launch its smart service, 'ROSS' (Remote Online Service Support). It's a web-based solution that helps to remotely monitor, troubleshoot, supervise and control Thermax chillers for optimal performance through 360° secured connection and customised reports for analytics. This intelligent analytical capability can be integrated easily into the existing chillers and available as an inbuilt feature in the new smart units with an ability to send notifications in case of any functional abnormality. A dedicated team of engineers are allocated for daily scanning of the connected units and updating their status to the customer. The condition-based analytics have been formulated by an expert team having over 30 years of experience in field service.



The Human Resource team rolled out the first phase of SAP SuccessFactors, an advanced Human Capital Management suite (HCM) to digitise people processes and provide a uniform experience to employees across the Thermax Group.

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Annexure – 5 to the Directors' Report

Energy Conservation, Technology Absorption and Foreign Exchange Earnings & Outgo

[Section 134(3)(m) of the Companies Act, 2013 read with Rule 8(3) of the Companies (Accounts) Rules, 2014]

A. Conservation of Energy

(i) Steps taken for Conservation of Energy

During the year, the following measures were taken for energy and resource conservation.

a. Electricity :

The company continued its efforts to utilise energy optimally at its manufacturing facilities and office locations in India. Conservation measures adopted across the company have made energy usage more efficient.

Lighting Systems were improved by changing over to light emitting diodes (LEDs), and replacing CFL and higher watt High-Pressure Sodium Vapour (HPSV) lamps with lower watt lamps. Another initiative comprised the implementation of inverter-based welding machines at one of the plants at Chinchwad, Pune, by scrapping the existing thyristor-based welding machines. Automation of blasting operations at Solapur plant and optimised use of air compressor at Jhagadia were also introduced.

b. Fuel:

Various initiatives were implemented at Paudh plant such as the implementation of x-plate for boiler operations, use of additives to improve combustion efficiency, heat recovery unit at drying section and commissioning of new vapour absorption machines. All these initiatives resulted in saving 177 MT of furnace oil.

At Chinchwad, LPG (Liquid Petroleum Gas) and LDO (Liquid Diesel Oil) were replaced with the commissioning of PNG (Pipe Natural Gas) for corrugation operation, SR operations and plant heating purpose.

All these measures, including solar rooftop installations, have resulted in an annual saving of Rs. 197 lakh.

c. Water:

The company continued its efforts to conserve water resources by recycling a significant portion of its wastewater, harvesting rainwater, reducing its freshwater consumption as well as controlling water losses in all manufacturing locations of the company. These efforts at factory locations of Chinchwad, Savli, Paudh, Solapur, Jhagadia, Shirwal and Dahej resulted in saving 2,80,385 m^3 water during the year.

d. Steps taken by the company for utilising alternative sources of energy:

The company continues its efforts to utilise alternate sources of energy at plant locations. The total installed capacity of 996.6 kWp of rooftop captive solar power generation projects at Savli, Sri City and offices at Pune have generated 6.47 lakh units of electricity during the year.

B. Technology Absorption

1. Efforts, in brief, made towards technology absorption

- Thermax received a financial support of Rs.13 crore in March, 2019 from the Department of Science and Technology, Ministry of Science & Technology, Government of India for the project titled,'

Methanol production from Indian coal: pilot plant demonstration, catalysis and scale-up technologies', in collaboration with IIT, Delhi. It involves setting up a pilot technology demonstration plant for generation of methanol from India's high ash coal at Thermax's facility in Pune. This project is intended to create an alternative to India's dependence on crude import.

- Based on the multi-effect evaporator technology for zero liquid discharge developed last year, new applications were introduced in textiles and chemicals sectors where the technology has been implemented on a commercial basis.
- Smart controller for electrostatic precipitator (ESP) which had achieved TRL-8 level of development and tested in the field last year has shown substantial performance enhancement in the ESP. This product is now being deployed on a commercial basis for nearly 100 units.

2. Benefits derived as a result of the above efforts – product improvement, cost reduction, product development, import substitution etc.

The fuel cell systems offer a viable solution as backup power generators for telecom towers. Indigenous development makes the product cost effective.

3. In case of imported technology (imported during the last three years reckoned from the beginning of the financial year), following information is furnished

Technology imported	Year of import	If technology has been fully absorbed	If not absorbed, reasons and future plan of action
Wet & Dry Flue Gas Desulfurisation (FGD)	2015	In the process of absorption	Your company will be selectively participating in bids during the year. Technology will be fully absorbed once orders are received, executed and commissioned with assistance from the technology partner.

4. Expenditure on R&D

Particulars	Amount in Rs. crore	
	Current Year 2018-19	Previous Year 2017-18
a. Capital	0.43	0.01
b. Recurring	31.43	22.61
c. Total	31.86	22.62
d. Total R&D expenditure as a percentage of turnover	**0.62%**	**0.59%**

C. Foreign exchange Earnings and Outgo

The company's operations in export markets are elaborated in the Management Discussion and Analysis Report.

During the year, the company had net foreign exchange inflows of Rs. 1,010 crore as against a net inflow of Rs. 545 crore in the previous year.

For and on behalf of the Board

Meher Pudumjee
Chairperson
DIN 00019581

Pune, May 22, 2019

Annexure – 6 to the Directors' Report

Annual Report on CSR Activities & CSR Policy

1. **A brief outline of the company's CSR policy, including an overview of projects or programmes proposed to be undertaken and a reference to the web-link to the CSR policy and projects or programme**

   The Board of Directors of Thermax Ltd., after taking into account the recommendations of the CSR Committee, has approved the CSR Policy for the company. The highlights of the policy are given in this report and the complete policy is uploaded on the company's website www.thermaxglobal.com.

   The company has been focusing predominantly in the area of education of economically underprivileged children.

   Apart from education, Thermax is also involved, in a small way, in addressing the issue of social discrimination, through affirmative action, skill development and employability initiatives.

   Thermax created a formal structure named Thermax Social Initiative Foundation as a Section 25 company (under the erstwhile Companies Act, 1956) in 2007, to design and implement its CSR programme. In 2015-16, it was renamed to 'Thermax Foundation' (TF).

2. **CSR Policy highlights**

   In a society characterised by widening inequalities of income and opportunity, Thermax believes that education is the single most powerful instrument of change that gives a child choices in life, hopefully leading a child out of the vicious cycle of poverty and thereby transforming the life trajectory of a family.

   Since Thermax has several factories outside Pune, the company is progressively focusing on CSR activities near its factory locations. The following methodology is adopted for carrying out CSR activities:

   - **Support to NGOs:** Support deserving and credible NGOs within India doing quality work, either as one-time in rare cases or for a long term, as the case may be. Evaluate and assess the need for projects and help in increasing their impact.
   - **Project evaluation & monitoring:** Study and evaluate the projects for funding from the perspective of funds available, people involved, impact, need and time frame and involve a third party, where applicable, for measurement of outcomes and social impact. Uphold accountability for the funds invested in the NGO's project through regular monitoring of the project's progress.
   - **Hands-on support and guidance:** Besides funding support, TF may decide to provide mentoring and, strategic as well as guidance to the projects funded on an ongoing basis.
   - **People focus and belief in value based partnership:** TF ensures the credibility of the NGO and people involved before funding a project. It values transparent and honest communication with its partners and works collaboratively in decision making.
   - **Employee involvement:** Thermax endeavours to engage its employees in implementing its CSR activities.

- **The CSR Committee :**

i) The committee shall be responsible for monitoring implementation and evaluating the impact, as also updating the policy from time to time. It would keep the Board informed.

ii) It shall ensure that the surplus (if any) arising out of CSR activities shall not form part of the business profit of the company.

iii) The committee will meet twice a year to monitor the progress and impact of the various projects undertaken.

3. Composition of the CSR Committee

In accordance with Section 135 of Companies Act, 2013 and the Rules pertaining thereto, a committee of the Board known as `Corporate Social Responsibility (CSR) Committee' comprising the following members has been constituted:

Chairperson	Meher Pudumjee	Non Executive Director
Member	S.B. (Ravi) Pandit	Independent Director
Member	Nawshir Mirza	Independent Director

Anu Aga and Dr Mashelkar discontinued as members of the committee, effective August 8, 2018, when they retired from the Board of the company

4. Average net profit of the company for the last three financial years, as per Section 198 of the Companies Act, 2013

The average net profit of the company for the last three financial years is Rs. 379.06 crore.

5. Prescribed CSR expenditure (two per cent of the amount as in item 4 above)

The company has contributed Rs. 7.60 crore to TF towards CSR during the financial year 2018-19 in accordance with the statutory requirement of 2% of the average profit for last three years (Rs. 379.06 crore for Thermax Limited).

6. Details of CSR spent during the financial year

a) Total amount to be spent for the financial year: Rs. 7.60 crore

b) Actual amount spent by the company for the financial year: Rs. 7.60 crore

c) Total amount spent by TF for the financial year: Rs. 8.84 crore

d) Amount underspent: Nil

e) Manner in which the amount spent during the financial year is detailed on the next page.

7. In case the company has failed to spend the two per cent, of the average net profit of the last three financial years or any part thereof, the company shall provide the reasons for not spending the amount in its Board Report

Not applicable

8. A responsibility statement of the CSR Committee that the implementation and monitoring of CSR Policy is in compliance with CSR objectives and Policy of the company

The CSR Committee confirms that the implementation and monitoring of the CSR Policy are in compliance with the CSR objectives and policy of the company.

M.S. Unnikrishnan
(Managing Director & CEO)

Meher Pudumjee
(Chairperson - CSR Committee)

Reporting on the CSR Activities

For the year ended March 31, 2019

1	2	3	4	5	6	7 *	8
Sr No.	CSR project or activity identified	Sector in which project is covered	Projects or programmes (1) Local area or others (2) Specify the state and district where projects or programmes were undertaken	Amount Outlay (budget) project or programme	Amount spent on projects or programme (1) Direct expenditure (2) Overhead	Cumulative expenditure up to the reporting period	Amount spent directly by Thermax Foundation or through implementing agency
				Rs. in lakh			
1	Strengthening the quality of education in five municipal schools (PPP- Thermax Foundation, Akanksha Foundation and Pune Municipal Corporation)	Education	School Project, Pune	830.63	830.63	NA	Through Akanksha Foundation
2	Capacity building programme for head masters and teachers from five municipal schools (till May 2018)	Education	Leadership Institute for Teachers (LIFT) - Pune	37.05	2.41	NA	Direct
3	Incubating two community aggregator roles to develop community in the vicinity of municipal schools	Education	Teach For India (TFI) - Pune	12.00	12.00	NA	Through Teach to Lead
4	Funding Sahayogi Dal teacher mentorship project	Education	Pune City Connect (PCC) - Pune	25.00	27.00	NA	Through Pune City Connect
5	Employee volunteering in CSR	Need based	Thermax locations	6.00	3.73	NA	Direct
6	Community need identification survey at Manjusar village near Thermax Savli factory, conducted by Maharaja Sayaji Rao University, Baroda (department of social work)	Need based	CSR at Factory		2.20	NA	Direct
7	Sponsoring women exemplar program for grass-root leadership building	Skill development	CII Foundation - Mumbai		5.00	NA	Direct
8	Running for a cause -Rotary club of Nigdi	Rural development	Runathon - Pune	1.00	1.00	NA	Through Rotary club of Nigdi, Pune (charitable trust)
	Total			**911.68**	**883.97**	**NA**	

*Note -All the above spends are not on a continuous basis but the project amount is decided annually. Hence cumulative expenditure is not applicable

Annexure – 7 to the Directors' Report

Form No. MR-3

Secretarial Audit Report

FOR THE FINANCIAL YEAR ENDED 31ST MARCH 2019

Pursuant to section 204(1) of the Companies Act, 2013 and Rule No.9 of the Companies (Appointment and Remuneration of Managerial Personnel) Rules, 2014 and
Pursuant to Regulation 24A of SEBI (Listing Obligation and Disclosure Requirements) Regulations, 2015]

To,
The Members,
Thermax Limited,
D-13, MIDC, Chinchwad,
Pune -411019

We have conducted the secretarial audit of the compliance of applicable statutory provisions and the adherence to good corporate practices by **Thermax Limited** (hereinafter called "the Company"). Secretarial Audit was conducted in a manner that provided us a reasonable basis for evaluating the corporate conducts/statutory compliances and expressing our opinion thereon.

Based on our verification of the Company's books, papers, minute books, forms and returns filed and other records maintained by the company and also the information provided by the Company, its officers, agents and authorized representatives during the conduct of secretarial audit, We hereby report that in our opinion, the Company has, during the audit period covering the financial year ended on **March 31st, 2019** complied with the statutory provisions listed hereunder and also that the Company has proper board-processes and compliance-mechanism in place to the extent, in the manner and subject to the reporting made hereinafter:

We have examined the books, papers, minute books, forms and returns filed and other records maintained by the Company for the financial year ended on March 31st, 2019 according to the provisions of:

(i) The Companies Act, 2013, as amended from time to time (the Act) and the rules made thereunder;
(ii) The Securities Contracts (Regulation) Act, 1956 ('SCRA') and the rules made there under;
(iii) The Depositories Act, 1996 and the Regulations and Bye-laws framed thereunder;
(iv) Foreign Exchange Management Act, 1999 and the rules and regulations made thereunder to the extent of Overseas Direct Investment;
(v) The following Regulations and Guidelines prescribed under the Securities and Exchange Board of India Act, 1992 ('SEBI Act'):-

a) The Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeovers) Regulations, 2011;
b) The Securities and Exchange Board of India (Prohibition of Insider Trading) Regulations, 2015

c) Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements), Regulations 2009 (as applicable till 8th November 2018) and The Securities and Exchange Board of India (Issue of Capital and Disclosure Requirements) Regulations, 2018 (effective from 09th November 2018) **(Not applicable to the Company during the Audit Period);**

d) The Securities and Exchange Board of India (Share Based Employee Benefits) Regulations, 2014 **(Not applicable to the Company during the Audit Period);**

e) The Securities and Exchange Board of India (Issue and Listing of Debt Securities) Regulations, 2008 **(Not applicable to the company during the Audit Period);**

f) The Securities and Exchange Board of India (Registrars to an Issue and Share Transfer Agents) Regulations, 1993 regarding the Companies Act and dealing with client;

g) The Securities and Exchange Board of India (Delisting of Equity Shares) (Amendment) Regulations, 2016 **(Not applicable to the Company during the Audit Period);** and

h) The Securities and Exchange Board of India (Buy-Back of Securities) Regulations, 1998 as applicable till 10th September 2018 and The Securities and Exchange Board of India (Buyback of Securities) Regulations, 2018 effective from 11th September 2018 **(Not applicable to the Company during the Audit Period);**

vi) We further report that having regard to the compliance system prevailing in the Company and on examination of the relevant documents and records in pursuance thereof, no other law was applicable specifically to the Company.

We have also examined compliance with the applicable clauses and regulations of the following:

(i) Secretarial Standards issued by 'The Institute of Company Secretaries of India'; and

(ii) The Listing Agreement entered into by the Company with Stock Exchange(s) pursuant to SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015.

During the period under review the Company has complied with the provisions of the Act, Rules, Regulations, Guidelines, Standards, etc. mentioned above subject to following observations:

I) Securities and Exchange Board of India (Listing obligation and disclosure requirements) Regulations, 2015: Following Stock exchange Intimation(s)/Filing(s) were filed as under:

Intimation(s)	***Regulation(s)***	***Filing due date and time***	***Actual filing detail(s)***
Voting results and Scrutinizer's Report for the Annual General Meeting held on 8th August 2018.	*Regulation 44 of Securities and Exchange Board of India (Listing obligation and disclosure requirements) Regulations, 2015*	*August 10, 2018 – 5.20 pm IST*	*NSE – August 10, 2018 – 5.39 pm IST*
Intimation of cessation of - i)Independent Director due to attaining the age of superannuation ii)Non-Executive Director due to end of term at AGM dated August, 8 2018	*Regulation 30 (Part A of Schedule III) of Securities and Exchange Board of India (Listing obligation and disclosure requirements) Regulations, 2015*	*Upon occurrence of such event*	*Not intimated to SE*

II) Companies Act, 2013:

As required under Section 125 and Rule 6 of IEPF Authority (Accounting, Audit, Transfer and Refund) Rules, 2016 the Company has not published a notice in the newspaper along with the contents listed out in the Rule 6 (3) (a) of the said rule.

We further report that,

The Board of Directors of the Company is duly constituted with proper balance of Executive Directors, Non-Executive Directors and Independent Directors. The changes in the composition of the Board of Directors that took place during the period under review were carried out in compliance with the provisions of the Act.

Adequate notice is given to all directors to schedule the Board Meetings, agenda and detailed notes on agenda were sent at least seven days in advance, and a system exists for seeking and obtaining further Information and clarifications on the agenda items before the meeting and for meaningful participation at the meeting.

All decisions at Board Meetings and Committee Meetings are carried out unanimously as recorded in the minutes of the meetings of the Board of Directors or Committees of the Board, as the case may be.

We further report that there are adequate systems and processes in the company commensurate with the size and operations of the company to monitor and ensure compliance with applicable laws, rules, regulations and guidelines.

We further report that during the audit period:

1. The Company has acquired the entire Shareholding of Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) from Babcock & Wilcox India Holdings Inc. on July 19th, 2018.
2. The members of the Company have approved the Special Resolution by way of Postal Ballot dated March 27th, 2019 for transfer of Boiler and Heater ("B&H") business of the Company by way of a Slump Sale as going Concern to Thermax Babcock & Wilcox Energy Solutions Private Limited.
3. The Company has entered into definitive agreement for acquisition of entire shareholding of Thermax SPX Energy Technologies Limited (TSPX) from the present JV partners viz. Mutares Holding- 24 AG, Germany and Balcke-Duerr GmbH, Germany

Place: Pune
Date: May 22nd, 2019

For SVD & Associates
Company Secretaries

S V Deulkar
Partner
FCS No: 1321
C P No: 965

Note: This report is to be read with letter of even date by the Secretarial Auditors, which is annexed as Annexure A and forms an integral part of this report.

'ANNEXURE A'

To,
The Members,
Thermax Limited,
D-13, MIDC, Chinchwad,
Pune -411019

Our Secretarial Audit Report of even date is to be read along with this letter.

Management's Responsibility

1. It is the responsibility of the management of the Company to maintain secretarial records, devise proper systems to ensure compliance with the provisions of all applicable laws and regulations and to ensure that the systems are adequate and operate effectively.

Auditor's Responsibility

2. Our responsibility is to express an opinion on these secretarial records, standards and procedures followed by the Company with respect to secretarial compliances.
3. We believe that audit evidence and information obtained from the Company's management is adequate and appropriate for us to provide a basis for our opinion.
4. Wherever required, we have obtained the management's representation about the compliance of laws, rules and regulations and happening of events, etc.

Disclaimer

5. The Secretarial Audit Report is neither an assurance as to the future viability of the Company nor of the efficacy or effectiveness with which the management has conducted the affairs of the Company.

Place: Pune
Date: May 22nd, 2019

For SVD & Associates
Company Secretaries

S V Deulkar
Partner
FCS No: 1321
C P No: 965

Annexure – 8

Form No. MGT-9

EXTRACT OF ANNUAL RETURN

As on the financial year ended on March 31, 2019

[Pursuant to section 92(3) of the Companies Act, 2013 and Rule 12(1) of the Companies (Management and Administration) Rules, 2014]

I. Registration and other Details :

I.	CIN	:	L29299PN1980PLC022787
II.	Registration Date	:	June 30, 1980
III.	Name of the Company	:	Thermax Limited
IV.	Category / Sub-Category of the Company	:	Public Company/Limited by shares
V.	Address of the Registered Office and Contact Details	:	D-13, MIDC Industrial Area, R. D Aga Road, Chinchwad - 411019, Pune, Maharashtra. Contact details: Corporate office Tel: +91-020-66122100 Fax: +91-020-25541226
VI.	Whether listed company	:	Yes
VII.	Name, Address and Contact Details of Registrar and Transfer Agent, if any	:	**1. Name**: Karvy Fintech Pvt. Ltd. **2. Address**: Karvy Selenium Tower B, Plot No. 31 & 32, Gachibowli Financial District, Nanakramguda, Serilingampally, Hyderabad - 500 032 India. **3. Contact** : i. Phone No.: 040-67161500, 33211000 ii. Fax No: 040-23420814, 23001153 iii. Toll free: 1800 3454 4001 iv. Email ID: einward.ris@karvy.com v. Website: www.karvyfintech.com

II. Principal Business Activities of the company

All the business activities contributing 10% or more of the total turnover of the company shall be stated:

Sl. No.	Name and Description of main products/services	NIC Code of the product/ service	% to total turnover of the company
1	Boilers and Heaters, Absorption Chillers/Heat Pumps, Power Plants, Solar Equipment, related services.	25131	78
2	Air Pollution Control Equipments/System, Water & Waste Recycle Plant, related services.	37003	15

III. Particulars of Holding, Subsidiary and Associate Companies

Sl. No	Name and Address of the company	CIN/GLN	Holding/Subsidiary/ Associates	% of Shares held	Applicable Section
1	RDA Holdings Private Limited* 501, 5th Floor, Marvel Alaina, Koregaon Park, Pune 411001	U45001PN1982PTC026507	Holding	53.99	2(46)
2	Thermax Onsite Energy Solutions Ltd. Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U40109PN2009PLC134659	Subsidiary	100	2(87)(ii)
3	Thermax Instrumentation Ltd. Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U72200MH1996PTC099050	Subsidiary	100	2(87)(ii)
4	Thermax Engineering Construction Company Ltd. Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U29246MH1991PLC062959	Subsidiary	100	2(87)(ii)
5	Thermax Sustainable Energy Solutions Ltd. Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U29219PN1987PLC045658	Subsidiary	100	2(87)(ii)
6	Thermax Babcock & Wilcox Energy Solutions Pvt. Ltd. Dhanraj Mahal, 2nd Floor, Chhatrapati Shivaji Maharaj Marg, Near Regal Cinema, Colaba, Mumbai 400039	U29253MH2010PTC204890	Subsidiary	100	2(87)(ii)
7	Thermax SPX Energy Technologies Ltd. Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U29299PN2009PLC134761	Subsidiary	100	2(87)(ii)
8	First Energy Private Limited Thermax House, 14-Mumbai-Pune Road, Wakdewadi, Pune 411003	U40200PN2008FTC139032	Subsidiary	76	2(87)(ii)
9	Thermax International Ltd. 9th Floor, Ebene Tower, 52 Cybercity, Ebene, Republic of Mauritius	NA	Subsidiary	100	2(87)(ii)
10	Thermax Europe Ltd. I Lumley Street, Mayfair, London W1K 6TT, UK	NA	Subsidiary	100	2(87)(ii)
11	Thermax Inc. 16200, Park Row, Suite 190, Houston, Texas 77084, USA	NA	Subsidiary	100	2(87)(ii)
12	Thermax do Brasil-Energia e Equipamentos Ltda. Av. Paulista, 37-04, ander-edificio Pq, cultural Paulista, São Paulo, Brazil	NA	Subsidiary	100	2(87)(ii)

Sl. No	Name and Address of the company	CIN/GLN	Holding/Subsidiary/ Associates	% of Shares held	Applicable Section
13	Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd. No.645, Chayuan Road, Jiaxing Economic Development Zone, Jiaxing, Zhejiang, China PRC. Post: 314003	NA	Subsidiary	100	2(87)(ii)
14	Thermax Denmark ApS Industrivej Nord 13, 7400 Herning, Denmark	NA	Subsidiary	100	2(87)(ii)
15	Thermax Netherlands B.V. Herikerbergweg 238 Luna Arena, 1101 CM Amsterdam Zuidoost, The Netherlands	NA	Subsidiary	100	2(87)(ii)
16	Danstoker A/S Industrivej Nord 13 DK-7400, Herning, Denmark	NA	Subsidiary	100	2(87)(ii)
17	Ejendomsanpartsselskabet Industrivej Nord 13 Industrivej Nord 13, DK-7400 Herning, Denmark	NA	Subsidiary	100	2(87)(ii)
18	Boilerworks A/S Papegøjevej 7, DK-6270, Tonder, Denmark	NA	Subsidiary	100	2(87)(ii)
19	Boilerworks Properties ApS Industrivej Nord 13, 7400, Herning, Denmark	NA	Subsidiary	100	2(87)(ii)
20	Rifox-Hans Richter GmbH Spezialarmaturen Bertha-Von-Suttner- Str. 9, 28207 Bremen, Germany HRB3148	NA	Subsidiary	100	2(87)(ii)
21	Thermax SDN. BHD. Suite 50-4-3A, 4th floor, Wisma UOA Damansara 50, Jalan Dungun 50490 Kuala Lumpur, Malaysia	NA	Subsidiary	100	2(87)(ii)
22	Thermax Engineering Singapore Pte Ltd. 100 Beach Road #30-00 Shaw Towers Singapore 189702	NA	Subsidiary	100	2(87)(ii)
23	PT Thermax International Gedung Menara Palma Lontai 9, Unit 9-02, B/03, J1 HR, Rasuna Said Block X2 Kav 6, Jakarta 12950, Indonesia	NA	Subsidiary	100	2(87)(ii)
24	Thermax Senegal S.A.R.L, Dakar Senegal Domicilia 29 Avenue Pasteur, Senegal	NA	Subsidiary	100	2(87)(ii)
25	Thermax Nigeria Limited Landmark Towers, Plot 5B, Water Corporation Road, Victoria Island, Lagos, Nigeria	NA	Subsidiary	100	2(87)(ii)
26	Thermax Energy & Environment Philippines Corporation 10/F 8 Rockwell Hidalgo – Plaza Drive Rockwell center Makati, Matro Manila, Philippines	NA	Subsidiary	100	2(87) (ii)
27	Danstoker Poland Spółka Z Ograniczona Odpowiedzialnoscia ul. kolejowa, nr 20, lok. ---,miejsc. ostrowiec swietokrzyski, kod 27-400, poczta ostrowiec, swietokrzyski, kraj polska	NA	Subsidiary	100	2(87) (ii)
28	Thermax Energy & Environment Lanka (Private) Limited Level 3, No 11, Castle Lane, Colombo 04	NA	Subsidiary	100	2(87) (ii)
29	Thermax Engineering Construction FZE Dangote Industries Free Zone Development Company, LFZ, Lekki Coastal Roadlbeju-Lekki, Lagos, Nigeria	NA	Subsidiary	100	2(87) (ii)

*ARA Trusteeship Company Pvt. Ltd. (ARA) holds 7.99% shares of the company. ARA also holds 99.99% equity share capital of RDA Holdings Pvt. Ltd. (RDA). This shareholding of ARA in RDA is in a fiduciary capacity (i.e. holding shares in trust) and hence it is not considered for the purpose of determining the 'holding-subsidiary' relationship between RDA and ARA in view of Ministry of Corporate Affairs circular no 20/2013 dated December 27, 2013. In view of this, RDA is the holding company of Thermax Limited.

IV. Shareholding Pattern (Equity Share Capital Breakup as percentage of Total Equity)

i) Category-wise Shareholding

Category of Shareholders	No. of shares held at the beginning of the year (As on 01-04-2018)				No. of shares held at the end of the year (As on 31-03-2019)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
A. Promoters									
(1) Indian									
a) Individual/HUF	6000	0	6000	0.00	6000	0	6000	0.00	0
b) Central Govnt	0	0	0	0	0	0	0	0	0
c) State Govnt(s)	0	0	0	0	0	0	0	0	0
d) Bodies Corp.	73849305	0	73849305	61.98	73849305	0	73849305	61.98	0
e) Banks/FI	0	0	0	0	0	0	0	0	0
f) Any Other (Relative of Director)	0	0	0	0	0	0	0	0	0
Sub-total (A)(1):	**73855305**	**0**	**73855305**	**61.98**	**73855305**	**0**	**73855305**	**61.98**	**0**
(2) Foreign	0	0	0	0	0	0	0	0	0
a) NRIs Individuals	0	0	0	0	0	0	0	0	0
b) Other – Individuals	0	0	0	0	0	0	0	0	0
c) Bodies Corp.	0	0	0	0	0	0	0	0	0
d) Banks/ FI	0	0	0	0	0	0	0	0	0
Sub-total (A)(2):-	0	0	0	0	0	0	0	0	0
Total shareholding of Promoter (A)= (A)(1)+(A)(2)	**73855305**	**0**	**73855305**	**61.98**	**73855305**	**0**	**73855305**	**61.98**	**0**
B. Public Shareholding									
1. Institution									
a) Mutual Funds	11740470	0	11740470	9.85	14579583	0	14579583	12.24	2.38
b) Banks/FI	1951431	0	1951431	1.64	1959858	0	1959858	1.64	0.01
c) Central Govt	0	0	0	0	0	0	0	0	0
d) State Govt(s)	0	0	0	0	0	0	0	0	0
e) Venture Capital Funds	0	0	0	0	0	0	0	0	0
f) Insurance Companies	0	0	0	0	0	0	0	0	0
g) FIIs	17626283	0	17626283	14.79	14173194	0	14173194	11.89	(2.90)

Category of Shareholders	No. of shares held at the beginning of the year (As on 01-04-2018)				No. of shares held at the end of the year (As on 31-03-2019)				% Change during the year
	Demat	Physical	Total	% of Total Shares	Demat	Physical	Total	% of Total Shares	
h) Foreign Venture Capital Funds	0	0	0	0	0	0	0	0	0
i) Any other	0	0	0	0	0	0	0	0	0
Sub-total(B)(1):	**31318184**	**0**	**31318184**	**26.28**	**30712635**	**0**	**30712635**	**25.78**	**(0.51)**
2. Non-Institutions									
a) Bodies Corp.									
i) Indian	1376075	1000	1377075	1.16	1329242	1000	1330242	1.12	(0.04)
ii) Overseas	0	0	0	0	0	0	0	0	0
b) Individuals									
i) Individual shareholders holding nominal share capital upto Rs. 1 lakh	4372365	998190	5370555	4.51	5084310	855470	5939780	4.98	0.48
ii) Individual shareholders holding nominal share capital in excess of Rs. 1 lakh*	3509248	3107305	6616553	5.55	3440174	3107305	6547479	5.49	(0.06)
c) Others (specify)									
– Directors Relative	0	0	0	0	0	0	0	0	0.00
– Trusts	120	0	120	0.00	7457	0	7457	0.01	0.01
– Foreign Bodies Corporate	0	0	0	0	0	0	0	0	0.00
– Foreign Bodies-DR	0	0	0	0	0	0	0	0	0.00
– Non Resident Indian	110109	500	110609	0.09	187280	500	187780	0.16	0.06
– NRI Non Repatriation	368326	0	368326	0.31	436064	0	436064	0.37	0.06
– HUF	0	0	0	0	0	0	0	0	0.00
– Clearing Members	75543	0	75543	0.06	57509	0	57509	0.05	(0.02)
– IEPF	61109	0	61109	0.05	69928	0	69928	0.06	0.01
Sub-total(B)(2):	9875816	4106995	13982811	11.73	10624085	3964275	14588360	12.24	0.51
Total Public Shareholding (B)=(B)(1)+ (B)(2)	**41194000**	**4106995**	**45300995**	**38.02**	**41336720**	**3964275**	**45300995**	**38.02**	**0.00**
Shares held by Custodian for GDRs & ADRs	0	0	0	0	0	0	0	0	0.00
Grand Total (A+B+C)	**115049305**	**4106995**	**119156300**	**100.00**	**115192025**	**3964275**	**119156300**	**100.00**	**0.00**

*Note : This includes 6541440 equity shares (5.49%) held by Employee Benefit Trust of the company which are being disclosed to the stock exchanges as 'Non promoter- Non public' category in the shareholding pattern.

ii) Shareholding of Promoters

Sl. No.	Shareholder's Name	Shareholding at the beginning of the year (As on 01-04-2018)			Shareholding at the end of the year (As on 31-03-2019)			
		No. of shares	% of total shares of the company	% of shares pledged/ encumbered to total shares	No. of shares	% of total shares of the company	% of shares pledged/ encumbered to total shares	% change in shareholding during the year
1	RDA Holdings Private Limited	64328500	53.99	0	64328500	53.99	0	**0**
2	ARA Trusteeship Company Private Limited	9520805	7.99	0	9520805	7.99	0	**0**
3	Arnavaz Rohinton Aga							
4	Meher Pudumjee				NIL			
5	Pheroz Pudumjee	6000	0	0	6000	0.00	0	**0**
	Total	**73855305**	**61.98**	**0**	**73855305**	**61.98**	**0**	**0**

iii) Change in Promoters' Shareholding

There is no change in promoter's shareholding during the year.

iv) Shareholding Pattern of top ten Shareholders (other than Directors, Promoters and Holders of GDRs and ADRs):

Sl. No.	Name of the shareholder	Shareholding		Date	Increase/ decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning 01-04-2018	% of total shares of the company				No. of shares	% of total shares of the company
1	Matthews Pacific Tiger Fund	5310034	4.46	31/03/2018			5310034	4.46
				01/02/2019	-35087	Transfer	5274947	4.43
				08/02/2019	-1644	Transfer	5273303	4.43
				15/02/2019	-92978	Transfer	5180325	4.35
				22/02/2019	-224901	Transfer	4955424	4.16
				01/03/2019	-25939	Transfer	4929485	4.14
				08/03/2019	-28842	Transfer	4900643	4.11
				15/03/2019	-719492	Transfer	4181151	3.51
				22/03/2019	-417382	Transfer	3763769	3.16
				30/03/2019			3763769	3.16
2	Pinebridge Investments GF Mauritius Limited	2472347	2.07	31/03/2018			2472347	2.07
				20/07/2018	-148000	Transfer	2324347	1.95
				17/08/2018	-77200	Transfer	2247147	1.89
				24/08/2018	-178000	Transfer	2069147	1.74
				31/08/2018	-42644	Transfer	2026503	1.70
				07/09/2018	-222491	Transfer	1804012	1.51
				14/09/2018	-52214	Transfer	1751798	1.47
				05/10/2018	-249600	Transfer	1502198	1.26
				12/10/2018	-200000	Transfer	1302198	1.09
				30/03/2019			1302198	1.09
3	Life Insurance Corporation Of India	1768720	1.48	31/03/2018			1768720	1.48
				30/03/2019			1768720	1.48

Sl. No.	Name of the shareholder	Shareholding		Date	Increase/ decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning 01-04-2018	% of total shares of the company				No. of shares	% of total shares of the company
4	Goldman Sachs India Limited	1608532	1.35	31/03/2018			1608532	1.35
				28/09/2018	-150000	Transfer	1458532	1.22
				22/02/2019	-94109	Transfer	1364423	1.15
				01/03/2019	-9155	Transfer	1355268	1.14
				30/03/2019			1355268	1.14
5	Kotak Emerging Equity Scheme	534810	0.45	31/03/2018			534810	0.45
				06/04/2018	67409	Transfer	602219	0.51
				13/04/2018	35000	Transfer	637219	0.53
				11/05/2018	6819	Transfer	644038	0.54
				01/06/2018	6974	Transfer	651012	0.55
				08/06/2018	17689	Transfer	668701	0.56
				29/06/2018	20000	Transfer	688701	0.58
				06/07/2018	12000	Transfer	700701	0.59
				13/07/2018	13023	Transfer	713724	0.60
				20/07/2018	13771	Transfer	727495	0.61
				27/07/2018	2439	Transfer	729934	0.61
				17/08/2018	15000	Transfer	744934	0.63
				24/08/2018	63004	Transfer	807938	0.68
				28/09/2018	20000	Transfer	827938	0.69
				25/01/2019	15052	Transfer	842990	0.71
				08/02/2019	12627	Transfer	855617	0.72
				15/02/2019	20000	Transfer	875617	0.73
				22/02/2019	20000	Transfer	895617	0.75
				01/03/2019	4674	Transfer	900291	0.76
				15/03/2019	100000	Transfer	1000291	0.84
				22/03/2019	2222	Transfer	1002513	0.84
				29/03/2019	14326	Transfer	1016839	0.85
				30/03/2019			1016839	0.85

Sl. No.	Name of the shareholder	Shareholding		Date	Increase/ decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning 01-04-2018	% of total shares of the company				No. of shares	% of total shares of the company
6	Kotak Funds -India Midcap Fund	534733	0.45	31/03/2018			534733	0.45
				25/05/2018	14281	Transfer	549014	0.46
				01/06/2018	26272	Transfer	575286	0.48
				15/06/2018	5000	Transfer	580286	0.49
				22/06/2018	15341	Transfer	595627	0.50
				20/07/2018	50107	Transfer	645734	0.54
				24/08/2018	224698	Transfer	870432	0.73
				31/08/2018	100000	Transfer	970432	0.81
				14/12/2018	-2706	Transfer	967726	0.81
				30/03/2019			967726	0.81
7	Reliance Capital Trustee Co Ltd. A/C Reliance Large	0	0.00	31/03/2018			0	0.00
				15/03/2019	950000	Transfer	950000	0.80
				30/03/2019			950000	0.80
8	SBI Magnum Balanced Fund	874677	0.73	31/03/2018			874677	0.73
				06/04/2018	-122599	Transfer	752078	0.63
				13/04/2018	-650682	Transfer	101396	0.09
				27/04/2018	-101396	Transfer	0	0.00
				30/03/2019			0	0.00
9	HDFC TrusteeCompany Ltd-A/C HDFC Mid–Cap Opportunities Fund	829600	0.70	31/03/2018			829600	0.70
				22/03/2019	-162200	Transfer	667400	0.56
				30/03/2019			667400	0.56
10	SBI Blue Chip Fund	784717	0.66	31/03/2018			784717	0.66
				30/03/2019			784717	0.66

Sl. No.	Name of the shareholder	Shareholding		Date	Increase/ decrease in shareholding	Reason	Cumulative shareholding during the year	
		No. of shares at the beginning 01-04-2018	% of total shares of the company				No. of shares	% of total shares of the company
11	Sundaram Mutual Fund A/C Sundaram Select Mid cap	777911	0.65	31/03/2018			777911	0.65
				12/10/2018	105029	Transfer	882940	0.74
				30/03/2019			882940	0.74
12	SBI Magnum Midcap Fund	683457	0.57	31/03/2018			683457	0.57
				27/04/2018	142016	Transfer	825473	0.69
				11/05/2018	88500	Transfer	913973	0.77
				30/03/2019			913973	0.77
13	Franklin Templet on Mutual Fund A/C Franklin India	662057	0.56	31/03/2018			662057	0.56
				13/04/2018	70000	Transfer	732057	0.61
				27/04/2018	22121	Transfer	754178	0.63
				11/05/2018	48180	Transfer	802358	0.67
				18/05/2018	3024	Transfer	805382	0.68
				01/06/2018	76675	Transfer	882057	0.74
				07/12/2018	-250000	Transfer	632057	0.53
				14/12/2018	-82773	Transfer	549284	0.46
				21/12/2018	-17227	Transfer	532057	0.45
				30/03/2019			532057	0.45

SBI Magnum Balanced Fund, HDFC Trustee Company Ltd - A/C HDFC Mid – Cap Opportunities Fund and Franklin Templeton Mutual Fund A/C Franklin India, have ceased to be in the list of top ten shareholders as on 31st March, 2019.

Kotak Emerging Equity Scheme, Kotak Funds - India Midcap Fund and Reliance Capital Trustee Co Ltd. A/C Reliance Large has become part of the top 10 shareholders as on 31st March, 2019.

v) Shareholding of Directors and Key Managerial Personnel

Sl. No.	Name	Shareholding		Date	Increase/ decrease in shareholding	Reason	Cumulative shareholding during the year (01-04-2018 to 31-03-2019)	
		No. of shares at the beginning 01-04-2018	% of total shares of the company				No. of shares	% of total shares of the company
A	**Director**							
1.	Pheroz Pudumjee	6000	0.00	31/03/2019	-	-	6000	0.00
B	**Key Managerial Personnel (KMP)**							
1.	Amitabha Mukhopadhyay (Group CFO)	450	0.00	31/03/2019	-	-	450	0.00

The Following Directors/ Key Managerial Personnel (KMP) did not hold any shares during FY 2018-19:
Arnavaz Aga (ceased to be a director w.e.f. August 8, 2018), Meher Pudumjee, Nawshir Mirza, Dr. Jairam Varadaraj, Dr. Raghunath A Mashelkar (ceased to be a director w.e.f. August 8, 2018), Dr. Valentin A. H. von Massow, S. B. Pandit, Harsh Mariwala and Rajani Kesari- Directors

M. S. Unnikrishnan – Managing Director & Chief Executive Officer (KMP)
Kedar P. Phadke– Company Secretary (KMP).

vi) Indebtedness

Indebtedness of the company including interest outstanding/accrued but not due for payment

(Rs. in lakh)

	Secured Loans excluding deposits	Unsecured Loans	Deposits	Total Indebtedness
Indebtedness at the beginning of the financial year (01.04.2018)				
i) Principal Amount	7649	4000	0	11649
ii) Interest due but not paid	0	0	0	0
iii) Interest accrued but not due	0	0	0	0
Total (i+ii+iii)	**7649**	**4000**	**0**	**11649**
Change in indebtedness during the financial year				
Addition	7863	7500	0	15363
Reduction	7649	4000	0	11649
Net Change	**214**	**3500**	**0**	**3714**
Indebtedness at the end of the financial year (31.03.2019)				
i) Principal Amount	7863	7500	0	15363
ii) Interest due but not paid	0	0	0	0
iii) Interest accrued but not due	0	0	0	0
Total (i+ii+iii)	**7863**	**7500**	**0**	**15363**

vii) Remuneration of Directors and Key Managerial Personnel

A. Remuneration to Managing Director, Whole-time Directors and/or Manager:

Sl. No.	Particulars of Remuneration of M S Unnikrishnan Managing Director & Chief Executive Officer	Total Amount (Rs. lakh)
1	**Gross salary**	
	a. Salary as per provisions contained in section17(1) of the Income-tax Act, 1961	**333.36**
	b. Value of perquisites u/s 17(2) Income-tax Act,1961	**7.94**
	c. Profits in lieu of salary under section 17(3) Income-tax Act,1961	0
2	Stock Option	0
3	Sweat Equity	Nil
4	Commission - as % of profit – Others, specify - lumpsum	160.00
5	Others, please specify (Retiral Benefits)	21.27
	Total (A)	**522.57**
	Ceiling as per the Act	Rs. 2090 .25 lakh (Being 5% of the net profit of the company as per Section 198 of the Companies Act 2013)

B. Remuneration to other Directors:

Sl. No.	Particulars of Remuneration	Name of Directors							Total (Rs. lakh)
1	**Independent Directors**	**Dr. Jairam Varadaraj**	**Dr. R. A. Mashelkar**	**Dr. Valentin A. H. von Massow**	**Nawshir Mirza**	**Harsh Mariwala**	**S. B. Pandit**	**Rajani Kesari**	
	Fee for attending Board/committee meetings	8.00	1.50	7.00	5.50	4.00	4.50	1.50	32.00
	Commission	15.00	-	29.50[@]	35.00	20.00	15.00	6.25	120.75
	Others, please specify	NA	NA	NA	NA	NA	NA	NA	NA
	Total (1)	**23.00**	**1.50**	**36.50**	**40.50**	**24.00**	**19.50**	**7.75**	**152.75**
2	**Other Non-Executive Directors**	**Meher Pudumjee**	**Pheroz Pudumjee**	**Arnavaz Aga**					
	Fee for attending board/ Committee meetings	7.00	8.50	2.00					17.5
	Commission	45.00	20.00	-					65
	Others, please specify	-	-	-					-
	Total (2)	**52.00**	**28.50**	**2.00**					**82.5**
	Total (B) = (1+2)	**75.00**	**30.00**	**38.50**	**40.50**	**24.00**	**19.50**	**7.75**	**235.25**
	Total remuneration to other Directors								
	Overall ceiling as per the Act		Rs. 418.05 lakh (Being 1% of Net profit of the Company calculated as per Section 198 of the Companies Act 2013)						
	Total Managerial Remuneration								**757.82**

@ 38,000 Euro (Rate applicable as on March 31, 2019 Rs. 77.624 per Euro)

C. Remuneration to Key Managerial Personnel other than MD/Manager/Whole-time Director:

(Rs. in lakh)

Sl. No.	Particulars of Remuneration	Key Managerial Personnel		
		Company Secretary	Chief Financial Officer	
		Kedar P Phadke	Amitabha Mukhopadhyay	Total
1	**Gross salary**			
(a)	Salary as per provisions contained in section 17(1) of the Income-tax Act,1961	28.86	211.78	240.64
(b)	Value of perquisites u/s 17(2) Income-tax Act,1961	0.61	2.22	2.83
(c)	Profits in lieu of salary under section 17(3) Income-tax Act, 1961	-	-	-
2	Stock Option	-	-	-
3	Sweat Equity	-	-	-
4	Commission- – as % of profit – Others, specify	-	-	-
5	Others, please specify (Retiral Benefits)	1.93	9.48	11.41
	Total	**31.40**	**223.48**	**254.88**

viii) Penalties/Punishment/Compounding of Offences

Type	Section of the Companies Act	Brief Description	Details of Penalty/ Punishment/ Compounding fees imposed	Authority (RD / NCLT / Court)	Appeal made, if any (give Details)
a) Company					
Penalty					
Punishment					
Compounding					
b) Directors					
Penalty					
Punishment			NIL		
Compounding					
c) Other Officers in Default					
Penalty					
Punishment					
Compounding					

INDEPENDENT AUDITOR'S REPORT

To the Members of Thermax Limited

Report on the Audit of the Standalone Ind AS Financial Statements

Opinion

We have audited the accompanying standalone Ind AS financial statements of Thermax Limited ("the Company"), which comprise the Balance sheet as at March 31, 2019, the Statement of Profit and Loss, including the statement of Other Comprehensive Income, the Cash Flow Statement and the Statement of Changes in Equity for the year then ended, and notes to the financial statements, including a summary of significant accounting policies and other explanatory information.

In our opinion and to the best of our information and according to the explanations given to us, the aforesaid standalone Ind AS financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the state of affairs of the Company as at March 31, 2019, its profit including other comprehensive income its cash flows and the changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the standalone Ind AS financial statements in accordance with the Standards on Auditing (SAs), as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Standalone Ind AS Financial Statements' section of our report. We are independent of the Company in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the standalone Ind AS financial statements.

Emphasis of Matter

We draw attention to note 32(A)(a) of the standalone Ind AS financial statements relating to the demand orders/ show cause notice on the Company for Rs. 1,383.51 crores (including penalty of Rs. 325.29 crores and excluding interest not presently quantified) by the Commissioner of Central Excise, Pune. The Company has filed an appeal against the said orders and filed replies to the show cause notice cum demand order. Our opinion is not qualified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the standalone Ind AS financial statements for the financial year ended March 31, 2019. These matters were addressed in the context of our audit of the standalone Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the standalone Ind AS financial statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the standalone Ind AS financial statements. The results of our audit procedures, including the procedures performed to address the matters below, provide the basis for our audit opinion on the accompanying standalone Ind AS financial statements.

Key audit matters	How our audit addressed the key audit matter
(a) Revenue recognition for Engineering, Procurement and Constructions contracts (refer note 21 of the standalone Ind AS financial statements)	

The Company's significant portion of business is undertaken through Engineering, Procurement and Construction (EPC) contracts. Revenue from these contracts is recognized over a period of time in accordance with the requirements of Ind AS 115, Revenue from Contracts with Customers. Due to the nature of the contracts, revenue is accounted over a period of time (using input method) which requires identification of contractual obligations, significant judgement with regards to determining contract costs incurred to date compared to estimated total contract costs, the Company's rights to receive payments for performance completed till date, changes in scope and consequential revised contract price and recognition of the liability for loss making contracts/ onerous obligations. Revenues and profits for the year under audit, may deviate significantly on account of change in such judgements and estimates.
 	
Revenue from such contracts amounted to Rs. 3,546.88 crores (including Rs. 1,556.87 pertaining to discontinued operations).
	Our audit procedures included the following
	• We understood the Company's policies and processes, control mechanisms and methods in relation to the revenue recognition for these contracts and evaluated the design and operative effectiveness of the financial controls from the above through our test of control procedures
	• We evaluated management's estimates and assumptions for a selected (risk-based method) sample contracts. We inspected the underlying documents which form the basis of revenue recognition under the input method. We evaluated the management's process to recognize revenue over a period of time, total cost estimates, status of the projects and re-calculated the arithmetical accuracy of the same.
	• Amongst others, for a sample of contracts, we performed the following procedures:
	  • Provision for liquidated damages: Our procedures involved discussions with management and project teams to understand the status of the project and on-going discussions with the customers in terms of likelihood of imposing any contractual penalties and analyzed the above through inspection of the relevant documents and correspondences.
	  • Contingency provisions: We understood the management's estimate and rationale for provision movement during the period. We analyzed the movement throughout the life of the contract, and discussed progress to date with individual project teams to determine whether the remaining contingency was sufficient to cover residual risks on the project.
	  • Assessment of costs-to-complete: We performed analytical procedures on balance cost estimation, tested the historical accuracy of previous forecasts and discussed variances with project teams. We tested that the costs incurred were accrued at year end and also tested the assumptions for balance costs-to-complete.

Key audit matters	How our audit addressed the key audit matter
	• We performed analytical procedures and checked exceptions for contracts with low or negative margins, loss making contracts, contracts with significant changes in cost estimates, probable penalties due to delay in contract execution and significant overdue net receivable positions for contracts with marginal or no movement to determine the level of provisioning required. • We read and tested the presentation and disclosure of such EPC contracts in the standalone Ind AS financial statements.
(b) Impairment of investment in subsidiaries (refer note 5 and note 40 of the standalone Ind AS financial statements)	
During the current year, impairment indicators were identified by the management on the investments of Rs 928.89 crores. Management's assessment for impairment of investments in subsidiaries requires estimation and judgement around assumptions used, including the recoverable value of underlying tangible assets. Furthermore, the value in use is highly sensitive to changes in some of the inputs used for forecasting the future cash flows. Changes to assumptions could lead to material changes in the estimated recoverable amount, impacting both potential impairment charges and also potential reversals of impairment taken in prior years. Accordingly, this is considered as a key audit matter.	Our audit procedures for investment balances included the following: • We understood the management's process of forecasting the future cash flows, evaluated the assumptions and compared the estimates to externally available industry, economic and financial data, wherever available & necessary; • We assessed that the methodology used by management to estimate the recoverable value of each investment is consistent with accounting standards; • We engaged experts to assess the assumptions and methodologies used by the management to determine the recoverable amount of the investment in subsidiaries; • We compared the carrying values of the Company's investment in these subsidiaries and joint ventures for which audited financial statements were available with their respective net asset values and discussed with management about their performance and future outlook; • We considered the potential impact of reasonably possible downside changes in these key assumptions as part of sensitivity analysis • We read and assessed the presentation and disclosure of such impairment in the standalone Ind AS financial statements.

Key audit matters	How our audit addressed the key audit matter
(c) Impairment of financial and contract assets: (refer note 7 and note 9(b) of the standalone Ind AS Financial Statements)	
Impairment of financial assets and contract assets is covered through Expected Credit Losses (ECL) method under Ind AS 109 and is expected is to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments. Impairment of financial assets is a key audit matter as the Company has devised a model to recognize impairment through ECL using individual receivables or for homogeneous group of receivables with similar credit risk characteristics. The calculation of the impairment allowance under expected credit losses is highly judgmental as it requires management to make significant assumptions on customer payment behaviour and other relevant risk characteristics when assessing the Company's statistics of historical information and estimating the level and timing of expected future cash flows. As at the March 31, 2019, the Company recorded an impairment provision of Rs 441.14 crores for its receivables and unbilled revenue.	Our audit procedures performed included the following: • We evaluated the management's key data sources and assumptions used in the Expected Credit Loss (ECL) model to determine impairment provisions; • We understood the management's basis to consider the associated risks for identifying homogeneous group of receivables; • We evaluated the process followed by the Company's for determination of credit risk and the resultant basis for classification of receivables into various stages. • For a sample of receivables, we tested the ageing of the receivables considered for impairment calculation; • We assessed the completeness of financial assets included in the ECL calculations as of the reporting date; • We considered the consistency of various inputs and assumptions used by the Company's management to determine impairment provisions; • We assessed the related disclosures in the notes to financial statements.

We have determined that there are no other key audit matters to communicate in our report.

Information Other than the Financial Statements and Auditor's Report Thereon

The Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Chairman's statement, managing director's statement, business responsibility report and director's report including annexure to the director's report of the annual report of the company, but does not include the standalone Ind AS financial statements and our auditor's report thereon.

Our opinion on the standalone Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the standalone Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have

nothing to report in this regard.

Responsibilities of Management and Those Charged with Governance for the standalone Ind AS Financial Statements

The Company's Board of Directors is responsible for the matters stated in section 134(5) of the Act with respect to the preparation of these standalone Ind AS financial statements that give a true and fair view of the financial position, financial performance including other comprehensive income, cash flows and changes in equity of the Company in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. This responsibility also includes maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Company and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the standalone Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error.

In preparing the standalone Ind AS financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Company or to cease operations, or has no realistic alternative but to do so.

Those Charged With Governance are also responsible for overseeing the Company's financial reporting process.

Auditor's Responsibilities for the Audit of the standalone Ind AS Financial Statements

Our objectives are to obtain reasonable assurance about whether the standalone Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the standalone Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Company has adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we

are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Company to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the standalone Ind AS financial statements, including the disclosures, and whether the standalone Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the standalone Ind AS financial statements for the financial year ended March 31, 2019 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Report on Other Legal and Regulatory Requirements

1. As required by the Companies (Auditor's Report) Order, 2016 ("the Order"), issued by the Central Government of India in terms of sub-section (11) of section 143 of the Act, we give in the "Annexure 1" a statement on the matters specified in paragraphs 3 and 4 of the Order.
2. As required by Section 143(3) of the Act, we report that:
   (a) We have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit;
   (b) In our opinion, proper books of account as required by law have been kept by the Company so far as it appears from our examination of those books;
   (c) The Balance Sheet, the Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Cash Flow Statement and Statement of Changes in Equity dealt with by this Report are in agreement with the books of account;
   (d) In our opinion, the aforesaid standalone Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;
   (e) The matter described in Emphasis of Matter paragraph above, in our opinion, may have an adverse effect on the functioning of the Company;
   (f) On the basis of the written representations received from the directors as on March 31, 2019 taken on record by the Board of Directors, none of the directors is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164 (2) of the Act;
   (g) With respect to the adequacy of the internal financial controls over financial reporting of the Company with reference to these standalone Ind AS financial statements and the operating effectiveness of such controls, refer

to our separate Report in "Annexure 2" to this report;

(h) In our opinion, the managerial remuneration for the year ended March 31, 2019 has been paid / provided by the Company to its directors in accordance with the provisions of section 197 read with Schedule V to the Act;

(i) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended in our opinion and to the best of our information and according to the explanations given to us:

i. The Company has disclosed the impact of pending litigations on its financial position in its standalone Ind AS financial statements – Refer Note 32(A)(a) to the standalone Ind AS financial statements;

ii. The Company has made provision, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts – Refer note 18(b) to the standalone Ind AS financial statements;

iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Company

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Registration Number: 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership Number: 501160

Place : Pune
Date: May 22, 2019

Annexure 1 as referred to in paragraph 1 under the heading 'Report on Other Legal and Regulatory Requirements' of our report of even date

Re: Thermax Limited ('the Company')

(i) (a) The Company has maintained proper records showing full particulars, including quantitative details and situation of fixed assets.

(b) All fixed assets have not been physically verified by the management during the year but there is a regular programme of verification which, in our opinion, is reasonable having regard to the size of the company and the nature of its assets. No material discrepancies were identified on such verification.

(c) According to the information and explanations given by the management, the title deeds of immovable properties included in property, plant and equipment are held in the name of the Company.

(ii) The inventories have been physically verified by the management during the year. In our opinion, the frequency of verification is reasonable. No material discrepancies were noticed on such physical verification. Inventories lying with third parties have been confirmed by them as at March 31, 2019 and no material discrepancies were noticed in respect of such confirmations.

(iii) According to the information and explanations given to us, the Company has not granted any loans, secured or unsecured to companies, firms, Limited Liability Partnerships or other parties covered in the register maintained under section 189 of the Companies Act, 2013 ('the Act'). Accordingly, the provisions of clause 3(iii)(a), (b) and (c) of the Order are not applicable to the Company and hence not commented upon.

(iv) In our opinion and according to the information and explanations given to us, provisions of section 185 and 186 of the Act in respect of loans to directors including entities in which they are interested and in respect of loans and advances given, investments made and, guarantees, and securities given have been complied with by the Company.

(v) In our opinion and according to the information and explanations given to us, the Company has not accepted any deposits within the meaning of Sections 73 to 76 of the Act and the Companies (Acceptance of Deposits) Rules, 2014 (as amended). Accordingly, the provisions of clause 3(v) of the Order are not applicable.

(vi) We have broadly reviewed the books of account maintained by the Company pursuant to the rules made by the Central Government for the maintenance of cost records under section 148(1) of the Act, related to the manufacture of chemicals, and are of the opinion that prima facie, the specified accounts and records have been made and maintained. We have not, however, made a detailed examination of the same.

(vii) (a) The Company is generally regular in depositing with appropriate authorities undisputed statutory dues including provident fund, employees' state insurance, income tax, duty of custom, goods and services tax, cess and other statutory dues applicable to it.

(b) According to the information and explanations given to us, no undisputed amounts payable in respect of provident fund, employees' state insurance, income tax, duty of custom, goods and services tax, cess and other statutory dues were outstanding, at the year end, for a period of more than six months from the date they became payable.

(c) According to the records of the Company, the dues of income-tax, sales-tax, service tax, duty of custom, duty of excise, value added tax and cess on account of any dispute, are as follows:

Name of the Statute	Nature of Dues	Forum where the dispute is pending	Period to which amount related	Disputed dues, not deposited*^ (Rs. in crores)
Central Excise Act, 1944	Excise Duty	Supreme Court	1997 - 98	- [net of deposit Rs 5.31]
		Appellate Tribunal	2000-01 to 2015-16	1,360.87 [net of deposit Rs 23.72]
Income Tax Act, 1961	Income Tax	High Court	AY 1993-94, AY 1996-97 and AY 1997-98	- (net of deposit Rs. 1.99)
		Appellate Tribunal	AY 2004-05 to AY 2009-10	38.70
		Appellate Authority upto Commissioner Level	AY 2015-16 and AY 2017-18	88.71
Central Sales Tax and Local Sales tax	Sales Tax and Value Added Tax	High Court	2000-01, 2001-02, 2010-11, to 2014-15	43.58 [net of deposit Rs 0.24]
		Appellate Tribunal	2003-04, 2006-07, 2008-09, 2013-14	0.44
		Appellate Authority upto Commissioner Level	2004-05, 2006-07 to 2014-15	18.55 [net of deposit Rs 0.58]
Finance Act, 1994	Service Tax	Appellate Tribunal	2012-13 to 2015-16	2.66 [net of deposit Rs 0.16]
Customs Act, 1962	Custom duty	Supreme Court	2005-06	- [net of deposit Rs 0.56]
		Appellate Authority upto Commissioner Level	2005-06	0.59 [net of deposit Rs 0.02]

*net of deposits paid under protest
^excluding the interest and penalty thereon

(viii) In our opinion and according to the information and explanations given by the management, the Company has not defaulted in repayment of loans or borrowings to banks. The Company has no loan/ dues towards any financial institution, debenture holders or from the government.

(ix) According to the information and explanations given by the management, the Company has not raised any money way of initial public offer/ further public offer/ debt instruments and term loans hence, reporting under clause (ix) is not applicable to the Company and hence not commented upon.

(x) Based upon the audit procedures performed for the purpose of reporting the true and fair view of the standalone Ind AS financial statements and according to the information and explanations given by the management, we report that no fraud by the Company or material fraud on the Company by the officers and employees of the Company has been noticed or reported during the year.

(xi) According to the information and explanations given by the management, the managerial remuneration has been paid/ provided in accordance with the requisite approvals mandated by the provisions of section 197 read with Schedule V to the Act.

(xii) In our opinion, the Company is not a nidhi company. Therefore, the provisions of clause 3(xii) of the order are not applicable to the Company and hence not commented upon.

(xiii) According to the information and explanations given by the management, transactions with the related parties are in compliance with section 177 and section 188 of the Act where applicable and the details have been disclosed in the notes to the standalone Ind AS financial statements, as required by the applicable Accounting Standards.

(xiv) According to the information and explanations given to us and on an overall examination of the balance sheet, the Company has not made any preferential allotment or private placement of shares or fully or partly convertible debentures during the year under review and hence, reporting requirements under clause 3(xiv) are not applicable to the Company and, not commented upon.

(xv) According to the information and explanations given by the management, the Company has not entered into any non-cash transactions with directors or persons connected with him as referred to in section 192 of the Act.

(xvi) According to the information and explanations given to us, the provisions of section 45-IA of the Reserve Bank of India Act, 1934 are not applicable to the Company.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Registration Number: 324982E/E300003

per **Tridevlal Khandelwal**
Partner
Membership Number: 501160

Place : Pune
Date: May 22, 2019

Annexure 2 as referred to in paragraph 2(g) under the heading 'Report on Other Legal and Regulatory Requirements' of our report of even date

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

We have audited the internal financial controls over financial reporting of Thermax Limited ("the Company") as of March 31, 2019, in conjunction with our audit of the standalone Ind AS financial statements of the Company for the year ended on that date.

Management's Responsibility for Internal Financial Controls

The Company's Management is responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the Institute of Chartered Accountants of India (ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the Company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's Responsibility

Our responsibility is to express an opinion on the Company's internal financial controls over financial reporting with reference to these standalone Ind AS financial statements based on our audit. We conducted our audit in accordance with the Guidance Note and the Standards on Auditing as specified under section 143(10) of the Act to the extent applicable to an audit of internal financial controls and, both issued by the ICAI. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these standalone Ind AS financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these standalone Ind AS financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting with reference to these standalone Ind AS financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these standalone Ind AS financial statements.

Meaning of Internal Financial Controls Over Financial Reporting with Reference to these financial statements

A company's internal financial control over financial reporting with reference to these standalone Ind AS financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these standalone financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and

directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting with Reference to these Standalone Ind AS Financial Statements

Because of the inherent limitations of internal financial controls over financial reporting with reference to these standalone financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these standalone Ind AS financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these standalone Ind AS financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Company has, in all material respects, adequate internal financial controls over financial reporting with reference to these standalone Ind AS financial statements and such internal financial controls over financial reporting with reference to these standalone Ind AS financial statements were operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Company considering the essential components of internal control stated in the Guidance Note issued by the ICAI.

For S R B C & CO LLP

Chartered Accountants

ICAI Firm Registration Number: 324982E/E300003

per **Tridevlal Khandelwal**

Partner

Membership Number: 501160

Place : Pune

Date: May 22, 2019

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Balance Sheet as at March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	Note No.	As at March 31, 2019	As at March 31, 2018
Assets			
I. Non-current assets			
Property, plant and equipment	4 (a)	697.97	645.54
Capital work-in-progress	4 (a)	29.17	92.33
Intangible assets	4 (b)	14.91	25.94
Investments in subsidiaries and joint ventures	5	657.55	554.87
Financial assets:			
(a) Investments	6 (a)	109.93	84.42
(b) Trade receivables	7 (a)	60.55	56.03
(c) Loans	8 (a)	12.09	17.15
(d) Other assets	9 (a)	0.05	0.12
Deferred tax assets (net)	10	49.35	104.17
Income tax assets (net)		48.70	35.35
Other assets	11 (a)	131.56	187.78
Total non-current assets		**1,811.83**	**1,803.70**
II. Current assets			
Inventories	12	230.44	298.30
Financial assets:			
(a) Investments	6 (b)	656.92	1,156.51
(b) Trade receivables	7 (b)	836.90	1,139.30
(c) Cash and cash equivalents	13 (a)	92.88	118.53
(d) Bank balances other than (c) above	13 (b)	25.88	0.82
(e) Loans	8 (b)	12.54	5.29
(f) Other assets	9 (b)	449.88	517.72
Income tax assets (net)		4.32	18.58
Other assets	11 (b)	308.59	316.38
Total current assets		**2,618.35**	**3,571.43**
III. Assets classified as held for disposal (transfer to group company)	29	1,708.67	-
Total assets		**6,138.85**	**5,375.13**
Equity and liabilities			
IV. Equity			
Equity share capital	14	23.83	23.83
Other equity	15	2,712.02	2,541.73
Total equity		**2,735.85**	**2,565.56**
V. Non-current liabilities			
Financial liabilities:			
(a) Trade payables	16 (a)	31.78	24.30
(b) Other liabilities	17 (a)	1.11	1.42
Provisions	18 (a)	7.49	9.84
Other liabilities	19 (a)	18.22	34.70
Total non-current liabilities		**58.60**	**70.26**
VI. Current liabilities			
Financial liabilities:			
(a) Borrowings	20	40.00	116.49
(b) Trade payables	16 (b)		
Total outstanding dues of micro and small enterprises		69.05	147.88
Total outstanding dues of creditors other than micro and small enterprises		729.89	795.24
(c) Other liabilities	17 (b)	95.80	118.28
Other liabilities	19 (b)	749.50	1,402.32
Provisions	18 (b)	71.13	148.19
Income tax liabilities (net)		11.02	10.91
Total current liabilities		**1,766.39**	**2,739.31**
VII. Liabilities directly associated with assets classified as held for disposal (transfer to group company)	**29**	1,578.01	-
Total equity and liabilities		**6,138.85**	**5,375.13**
Summary of significant accounting policies	2		
Summary of significant accounting judgements, estimates and assumptions	3		

The accompanying notes are an integral part of these financial statements.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place : Pune
Date : May 22, 2019

Statement of profit and loss for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	Note No.	Year Ended March 31, 2019	Year Ended March 31, 2018
A. Continuing Operations			
Income			
Revenue from operations	21	3,541.10	2,746.17
Other income	22	122.80	99.36
Total Income (I)		**3,663.90**	**2,845.53**
Expenses			
Cost of raw materials and components consumed	23	2,111.73	1,493.52
Purchase of traded goods		111.18	68.02
(Increase) in inventories of finished goods, work-in-progress and traded goods	24	(16.89)	(21.47)
Excise duty on sale of goods		-	18.75
Employee benefits expense	25	393.34	357.05
Finance cost	26	5.26	4.02
Depreciation and amortisation expense	27	50.13	49.37
Other expenses	28 (a)	691.02	591.23
Total expenses (II)		**3,345.77**	**2,560.49**
Profit before exceptional items and tax (III) = (I-II)		**318.13**	**285.04**
Exceptional items (IV)	40	(47.85)	(25.00)
Profit before tax from continuing operations (V) = (III - IV)		**270.28**	**260.04**
Tax expense of continuing operations	10		
Current tax		106.15	99.40
Deferred tax		3.11	(0.50)
Total tax expense of continuing operations (VI)		**109.26**	**98.90**
Profit for the year from continuing operations (VII) = (V - VI)		**161.02**	**161.14**
B. Discontinued operations			
Profit before tax from discontinued operations (VIII)		173.22	118.07
Total tax expense of discontinued operations (IX)	10	59.00	40.96
Profit for the year from discontinued operations (X) = (VIII - IX)		**114.22**	**77.11**
Profit for the year from continuing and discontinued operations (VII + X)		**275.24**	**238.25**
Other comprehensive income			
A. Items that will be reclassified subsequently to profit or loss	31		
Net gain / (loss) on cash flow hedge		(32.24)	0.88
Less: Income tax effect		11.14	(0.31)
		(21.10)	**0.57**
B. Items that will not be reclassified subsequently to profit or loss	31		
Re-measurement gain of defined benefit plan		0.44	4.64
Less: Income tax effect		(0.16)	(1.62)
		0.28	**3.02**
Net other comprehensive income for the year (net of tax)		**(20.82)**	**3.59**
Total comprehensive income for the year		**254.42**	**241.84**
Earning per equity share (Basic and Diluted) [Nominal value per share Rs. 2/- (March 31, 2018: Rs. 2/-)]	30		
From continuing operations		13.51	13.52
From discontinued operations		9.59	6.47
From continuing and discontinued operations		23.10	19.99
Summary of significant accounting policies	2		
Summary of significant accounting judgements, estimates and assumptions	3		

The accompanying notes are an integral part of these financial statements.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place : Pune
Date : May 22, 2019

Statement of Changes in Equity for the year March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

A Equity Share Capital

Particulars	Note No	March 31, 2019	March 31, 2018
Balance at the beginning of the year	14	23.83	23.83
Changes in equity shares capital during the year	14	-	-
Balance at the end of the year	14	**23.83**	**23.83**

B Other Equity

Particulars	Reserves and surplus						Other reserves	Total Other equity
	General reserve	Capital reserve	Capital redemption reserve	Retained earnings	Securities premium	Total	Cash flow hedge reserve	
As at April 1, 2017	**429.14**	**1.92**	**50.34**	**1,820.06**	**61.13**	**2,362.59**	**23.34**	**2,385.93**
Profit for the year (including profit from discontinued operations)	-	-	-	238.25	-	**238.25**	-	**238.25**
Other Comprehensive Income (net)	-	-	-	3.02	-	**3.02**	0.57	**3.59**
Total comprehensive income	-	-	-	241.27	-	**241.27**	0.57	**241.84**
Dividends paid	-	-	-	(71.49)	-	**(71.49)**	-	**(71.49)**
Dividend distribution tax paid	-	-	-	(14.55)	-	**(14.55)**	-	**(14.55)**
As at March 31, 2018	**429.14**	**1.92**	**50.34**	**1,975.29**	**61.13**	**2,517.82**	**23.91**	**2,541.73**
Profit for the year (including profit from discontinued operations)	-	-	-	275.24	-	**275.24**	-	**275.24**
Other Comprehensive Income (net)	-	-	-	0.28	-	**0.28**	(21.10)	**(20.82)**
Total comprehensive income	-	-	-	**275.52**	-	**275.52**	**(21.10)**	**254.42**
Dividends paid	-	-	-	(71.49)	-	**(71.49)**	-	**(71.49)**
Dividend distribution tax paid	-	-	-	(12.64)	-	**(12.64)**	-	**(12.64)**
As at March 31, 2019	**429.14**	**1.92**	**50.34**	**2,166.68**	**61.13**	**2,709.21**	**2.81**	**2,712.02**

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Cash flow statement for the year ended March 31, 2019

(All amounts are in Rupees Crore, except stated otherwise)

		Note No.	Year Ended March 31, 2019	Year Ended March 31, 2018
A)	**Cash flows from operating activities**			
	Profit before tax (after exceptional item)			
	Continuing operations		270.28	260.04
	Discontinued operations		173.22	118.07
	Adjustments to reconcile profit before tax to net cash flows			
	Depreciation on Property, plant and equipment	27	52.05	51.96
	Amortization on intangible assets	27	11.43	12.24
	Provision for impairment allowance of financial assets (net)		31.97	(9.64)
	Provision for impairment of investment in subsidiaries and joint ventures	5 & 6 (a)	47.85	25.00
	Interest expense		3.76	2.38
	Unrealized foreign exchange (gain)		(4.31)	(1.81)
	Bad debts/ advances written off		9.65	27.59
	Unwinding of discount		4.59	5.66
	Interest income	22	(7.46)	(3.57)
	Dividend income	22	(12.00)	-
	Liabilities no longer required written back		(17.28)	(11.22)
	Loss on sale/ discard of assets (net)		0.67	0.53
	Fair value gain on financial instrument at fair value through profit and loss (net)	22	(71.97)	(68.85)
	Working capital adjustments			
	(Increase) in trade receivables		(166.29)	(175.08)
	(Increase) in inventories		(169.52)	(69.65)
	(Increase) / decrease in other financial assets		(630.41)	48.27
	(Increase) in other assets		(47.97)	(92.83)
	Increase in trade payables		350.84	17.10
	Increase in other liabilities		248.11	527.08
	Increase in provisions		(27.89)	12.42
	Increase / (decrease) in other financial liabilities		6.32	(14.77)
	Cash generated from operations		**55.64**	**660.92**
	Direct taxes paid (net of refunds received)		(172.79)	(153.86)
	Net cash flow (used in)/ from operating activities		**(117.15)**	**507.06**
B)	**Cash flows from/(used in) investing activities**			
	Purchase of Property, plant and equipment and intangible assets		(125.14)	(144.80)
	Investment in subsidiaries and joint ventures		(191.30)	(26.68)
	Loan (given to)/repayment from subsidiaries		(6.00)	29.50
	Proceeds from maturity of fixed deposits		(28.39)	1.95
	Sale / (purchase) of other investments (net)		592.98	(320.81)
	Interest and dividend received		12.19	4.36
	Net cash flows from/(used in) investing activities		**254.34**	**(456.48)**
C)	**Cash flows (used in) financing activities**			
	Proceeds from borrowings (net)		37.14	50.27
	Interest paid		(3.76)	(2.38)
	Dividend paid and tax thereon		(83.96)	(86.04)
	Net cash flows (used in) financing activities		**(50.58)**	**(38.15)**

Cash flow statement for the year ended March 31, 2019

(All amounts are in Rupees Crore, except stated otherwise)

	Note No.	Year Ended March 31, 2019	Year Ended March 31, 2018
Net increase in cash and cash equivalents		**86.61**	**12.43**
Cash and cash equivalents at the beginning of the year		80.63	68.20
Cash and cash equivalents at the end of the year		**167.24**	**80.63**

Reconciliation of cash and cash equivalents as per the cash flow statement:

	Note No.	March 31, 2019	March 31, 2018
Cash and cash equivalents of continuing operations	13 (a)	92.88	118.53
Cash and cash equivalents of discontinued operations		96.55	-
Book overdraft of continuing operations	17 (b)	(22.19)	(37.90)
Cash and cash equivalents at the end of the year		**167.24**	**80.63**

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Notes to the Standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

1. Corporate information

Thermax Limited ('the Company') offers solutions to energy, environment and chemical sectors. The Company's portfolio includes boilers and heaters, absorption chillers/ heat pumps, power plants, solar equipment, air pollution control equipment/system, water and waste recycle plant, ion exchange resins and performance chemicals and related services.

The Company is a public limited company incorporated and domiciled in India. It is listed on the BSE Limited (BSE) and National Stock Exchange Limited (NSE) in India. The address of its registered office is D-13, MIDC Industrial Area, R.D. Aga Road, Chinchwad, Pune- 411019, India. The Board of Directors have authorized to issue these standalone financial statements on May 22, 2019. The CIN of the Company is L29299PN1980PLC022787.

2. Significant accounting policies

2.1. Basis of preparation and measurement

(a) Basis of preparation

These standalone financial statements have been prepared in accordance with the Indian Accounting Standards (Ind AS), notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act, 2013 (the Act), as applicable.

The preparation of the standalone financial statements requires the use of certain critical accounting judgements, estimates and assumptions. It also requires the management to exercise judgment in the process of applying the Company's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the standalone financial statements are disclosed in note 3.

The employee welfare trusts (including an ESOP trust) being separate legal entities, are not considered for the purpose of consolidation in the standalone financial statements. However, these trusts have been consolidated in the consolidated financial statements under Ind AS 110.

(b) Basis of measurement

The standalone financial statements have been prepared on the accrual and going concern basis under historical cost convention except the following:

- Derivative financial instruments;
- Certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments); and
- Defined benefit plans whereby the plan assets are measured at fair value.

In addition, the carrying values of recognised assets and liabilities designated as hedged items in fair value hedges that would otherwise be carried at amortised cost are adjusted to record changes in the fair values attributable to the risks that are being hedged in effective hedge relationships.

2.2. Changes in accounting policies and disclosures

The Company has adopted Ind AS 115 w.e.f. April 1, 2018. The nature and effect of the changes as a result of adoption of this new accounting standard are described below.

Ind AS 115 was issued on March 28, 2018 and supersedes Ind AS 11 Construction Contracts and Ind AS 18 Revenue and it applies, with limited exceptions, to all revenue arising from contracts with its customers. Ind AS 115 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognized at an amount that reflects the consideration to which an entity expects to be entitled in

exchange for transferring goods or services to a customer.

Ind AS 115 requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers.

On transition to Ind AS 115, the Company has elected to adopt the new revenue standard as per modified retrospective approach. Under this approach, there were no material adjustments required to the retained earnings at April 1, 2018. The comparative financial statements for year ended March 31, 2018 are therefore not restated under this approach.

Several other amendments and interpretations apply for the first time in the year ended March 2019, but do not have an impact on the standalone financial statements of the Company. The Company has not early adopted any standards or amendments that have been issued but are not yet effective.

2.3. Summary of significant accounting policies

a. Current and non-current classification

All assets and liabilities have been classified as current and non-current as per the Company's normal operating cycle and other criteria set out in the Schedule III to the Act. Based on the nature of products and services and the time between the acquisition of assets for processing and their realisation in cash and cash equivalents, the Company has ascertained its operating cycle as 12 months for the purpose of current and non-current classification of assets and liabilities. Deferred tax assets and liabilities are classified as non-current assets and liabilities.

b. Foreign currencies

The Company's standalone financial statements are prepared in INR, which is the also functional currency of the Company.

Transactions and balances

Transactions in foreign currencies are initially recorded at the functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Exchange differences arising on settlement or translation of monetary items are recognized in the Statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

c. Fair value measurement

The Company measures financial instruments, such as, derivatives at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- in the principal market for the asset or liability, or
- in the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Company. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Company uses valuation techniques that are appropriate in the circumstances and for which sufficient data are available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the standalone financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

External valuers are involved for valuation of significant assets and significant liabilities. Involvement of external valuers is decided upon annually by the management. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained.

For the purpose of fair value disclosures, the Company has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

This note summarizes accounting policy for fair value. Other fair value related disclosures are given in the relevant notes.

- Disclosures for significant judgements, estimates and assumptions (note 3)
- Quantitative disclosures of fair value measurement hierarchy (note 36)
- Financial instruments (including those carried at amortized cost) (note 36)

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

d. Investments in subsidiaries and joint ventures

Investments in subsidiaries and joint ventures are carried at cost less accumulated impairment losses in the Company's balance sheet. On disposal of such investments, the difference between disposal proceeds and the carrying amounts of the investments are recognized in the Statement of profit and loss.

e. Property, Plant and Equipment

Property, plant and equipment (PPE) and capital work in progress are stated at cost of acquisition or construction net of accumulated depreciation and impairment loss, if any. All significant costs relating to the acquisition and installation of PPE are capitalised. Subsequent costs/replacement costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying

amount of the replaced part is derecognised. All other repairs and maintenance are charged to the Statement of profit and loss during the financial year in which they are incurred.

The Company identifies and determines cost of each component/ part of the asset separately, if the component/ part has a cost which is significant to the total cost of the asset and has useful life that is materially different from that of the remaining asset.

Depreciation on PPE is calculated on a straight line basis using the rates arrived at based on the useful lives estimated by the management. The identified components are depreciated separately over their useful lives; the remaining components are depreciated over the life of the principal asset.

Leasehold land is amortized on a straight-line basis over the agreed period of lease ranging up to 99 years. The management has estimated, supported by independent assessment by professionals, the useful lives of certain classes of assets. The following useful lives are adopted by the management:

Asset category	Company's estimate of useful life (years)	Useful life as prescribed under Schedule II (years)
Factory buildings	28	30
Other buildings	58	60
Plant and equipment	5 to 25	15 to 20
Roads	5 to 30	5 to 10
Office equipment	15	15
Furniture and fixtures	15	10
Computers and data processing units	4 to 6	3 to 6
Vehicles	7 to 10	8

The residual values, useful lives and methods of depreciation of PPE are reviewed on a regular basis and changes in estimates, when relevant, are accounted for on a prospective basis.

f. Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangibles, excluding capitalized development costs, are not capitalized and the related expenditure is reflected in the Statement of profit and loss in the period in which the expenditure is incurred.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the Statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the Statement of profit and loss when the asset is derecognized.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Research and development costs

Research costs are expensed as incurred. Development expenditure incurred on an individual project is recognized as an intangible asset when the Company can demonstrate all the following:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- Its intention to complete the asset
- Its ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of adequate resources to complete the development and to use or sell the asset
- The ability to measure reliably the expenditure attributable to the intangible asset during development.

Following the initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortization and accumulated impairment losses, if any. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized on a straight line basis over the period of expected future benefit from the related project, i.e., the estimated useful life subject to a maximum of ten years. Amortization is recognized in the Statement of profit and loss unless such expenditure forms part of carrying value of another asset. During the period of development, the asset is tested for impairment annually.

A summary of amortization rates applied to the Company's intangible assets are as below:

Asset category	Life (years)
Technical know-how	3 to 6
Computer software	3 to 5

g. Inventories

Raw materials, components, stores and spares are valued at lower of cost and estimated net realizable value. Cost includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Cost is determined on a weighted average basis.

Finished goods and work in progress are valued at lower of cost and net realizable value. Cost includes direct materials and labour and a proportion of manufacturing overheads based on normal operating capacity. Cost is determined on a weighted average basis.

Traded goods are valued at lower of cost and net realizable value. Cost includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Cost is determined on a weighted average basis.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale. Write down of inventories are calculated based on an analysis of foreseeable changes in demand, technology, market conditions and ageing of inventories.

h. Revenue recognition

i. Revenue from Contracts with customers

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the Company expects to be entitled in exchange for those goods or services. Revenue is recognized when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and

collectability of consideration is probable. The Company has concluded that it is the principal in all of its revenue arrangements since it is the primary obligor in all the revenue arrangements as it has pricing latitude and is also exposed to inventory and credit risks. The Company collects goods and services tax on behalf of the government and, therefore, it is not an economic benefit flowing to the Company. Hence, it is excluded from revenue.

The disclosures of significant accounting judgements, estimates and assumptions relating to revenue from contracts with customers are provided in Note 3.

The Company has following streams of revenue:

- **Revenue from Engineering, Procurement and Construction contracts**

Engineering, Procurement and Construction (EPC) contracts are contracts (or a group of contracts secured together) specifically negotiated for the construction of an asset which refers to any project for construction of plants and systems, involving designing, engineering, fabrication, supply, erection (or supervision thereof), commissioning, guaranteeing performance thereof etc., execution of which is spread over different accounting periods. The Company identifies distinct performance obligations in each contract. For most of the project contracts, the customer contracts with the Company to provide a significant service of integrating a complex set of tasks and components into a single project or capability. Hence, the entire contract is accounted for as one performance obligation.

The Company may promise to provide distinct goods or services within a contract, in which case the Company separates the contract into more than one performance obligation. If a contract is separated into more than one performance obligation, the Company allocates the total transaction price to each performance obligation in an amount based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. The Company uses the expected cost plus a margin approach to estimate the standalone selling price of each performance obligation in case of contracts with more than one distinct performance obligations.

The Company assesses for the timing of revenue recognition in case of each distinct performance obligation. The Company first assesses whether the revenue can be recognized over a period of time if any of the following criteria is met:

(a) The customer simultaneously consumes the benefits as the Company performs, or

(b) The customer controls the work-in-progress, or

(c) The company's performance does not create an asset with alternative use to the Company and the Company has right to payment for performance completed till date

The Company recognizes revenue over time as it performs because of continuous transfer of control to the customer. For all project contracts, this continuous transfer of control to the customer is supported by the fact that the customer typically controls the work in process as evidenced either by contractual termination clauses or by the rights of the Company to payment for work performed to date plus a reasonable profit to deliver products or services that do not have an alternative use.

The Company uses cost-based measure of progress (or input method) for contracts because it best depicts the transfer of control to the customer which occurs as it incurs costs on contracts. Under the cost-based measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues, including estimated profits, are recorded proportionally as costs are incurred.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

The Company estimates variable consideration amount which it expects to be entitled under the contract and includes it in the transaction price to the extent it is highly probable that a significant reversal of cumulative revenue recognized will not occur and when the uncertainty associated with it is subsequently resolved. The estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the anticipated performance and all information (historical, current and forecasted) that is reasonably available.

Costs associated with bidding for contracts are charged to the Statement of profit and loss when they are incurred. Costs that relate directly to a contract and are incurred in securing the contract are included as part of the contract costs if they can be separately identified and measured reliably and it is probable that the contract will be obtained.

Contract modification, when approved by both the parties to the contract, are considered as modification, if it creates new or changes the existing enforceable rights and obligations. Most of the contract modifications are not distinct from the existing contract due to the significant integration service provided under the contract prior to modifications and are therefore, accounted for as part of the existing contract. The effect of a contract modification is recognized as an adjustment to revenue on a cumulative catch-up basis.

When it becomes probable that the total contract costs will exceed the total contract revenue, the Company recognizes the expected losses from onerous contract as an expense immediately.

Penalties for any delay or improper execution of a contract are recognized as a deduction from revenue. In the balance sheet, such provisions are presented on net basis of the contract receivables.

- ***Revenue from Sale of goods***

If the criteria for revenue under over-a-period of time as mentioned above are not met, the Company recognizes revenue at a point-in-time. The point-in-time is determined when the control of the goods or services is transferred which is generally determined based on when the significant risks and rewards of ownership are transferred to the customer. Apart from this, the Company also considers its present right to payment, the legal title to the goods, the physical possession and the customer acceptance in determining the point in time where control has been transferred. The Company provides for warranty provision for general repairs up to 18 – 24 months on its products sold, in line with the industry practice. A liability is recognized at the time the product is sold. The Company does not provide any extended warranties.

- ***Revenue from Sale of services***

Revenue in respect of operation and maintenance contract, awarded on a standalone basis or included in long term contracts and identified as a separate performance obligation, is recognized on a time proportion basis under the contracts.

Contract balances

Contract assets: A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Company performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration and are transferred to trade receivables on completion of milestones and its related invoicing. Contract assets are recorded in balance sheet as unbilled revenue.

Trade receivables: A receivable represents the Company's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Also refer note 2.3(i) below.

Contract liabilities: A contract liability is the obligation to transfer goods or services to a customer for which the Company has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Company transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Company satisfies the performance obligation. Contract liabilities are recorded in balance sheet as unearned revenue and Customer advances as the case may be.

ii. Interest income

For all debt instruments measured at amortized cost, interest income is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the gross carrying amount of the financial asset or to the amortized cost of a financial liability. Interest income is included in finance income in the statement of profit and loss.

iii. Dividend

Revenue is recognized when the Company's right to receive the payment is established, which is generally when shareholders approve the dividend.

iv. Rental income

Rental income from operating leases (net of any incentives given to the lessee) is recognised on a straight-line basis over the lease term.

i. Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

Financial assets

All financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through Profit and Loss, transactions costs that are attributable to the acquisition of the financial asset. For all subsequent measurements financial assets are classified in following categories by the Company:

i. Debt instruments at amortized cost

A 'debt instrument' is measured at the amortized cost if both the following conditions are met:

(a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

(b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate (EIR) method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of EIR. The EIR amortization is included in finance costs/income in the Statement of profit and loss. The losses arising from impairment are recognized in the Statement of profit and loss.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

ii. Debt instrument at FVTPL

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVTOCI is classified as FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes recognized in the Statement of profit and loss.

iii. Equity investments

All equity investments in scope of Ind AS 109 are measured at fair value. Equity instruments which are held for trading are classified as at FVTPL. For all other equity instruments, the Company may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Company makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Company decides to classify an equity instrument at FVTOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to the Statement of profit and loss, even on the sale of the investment. However, the Company may transfer the cumulative gain or loss within equity.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized when:

- The rights to receive cash flows from the asset have expired, or
- The Company has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Company has transferred substantially all the risks and rewards of the asset, or (b) the Company has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

In accordance with Ind AS 109, the Company applies Expected Credit Loss (ECL) model for measurement and recognition of impairment loss and credit risk exposure on the financial assets that are debt instruments measured at amortized costs e.g. loans, deposits, trade receivables, contractual receivables and bank balances. The Company follows 'simplified approach' for recognition of impairment allowance. The application of simplified approach does not require the Company to track changes in credit risk. Rather, it recognizes impairment allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

For recognition of impairment loss on other financial assets and risk exposure, the Company determines that whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognizing impairment allowance based on 12-month ECL.

ECL impairment allowance (or reversal) recognized during the period is recognized as income/expense in the Statement of profit and loss under the head 'other expenses'. ECL is presented as an allowance, i.e. as an integral

part of the measurement of those assets in the balance sheet. The allowance reduces the net carrying amount. Until the asset meets write-off criteria, the Company does not reduce impairment allowance from the gross carrying amount.

Financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at FVTPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Company's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments. Subsequent measurement of financial liabilities depends on their classification as fair value through profit and loss or at amortized cost.

All changes in fair value of financial liabilities classified as FVTPL is recognized in the Statement of Profit and Loss. Amortised cost category is applicable to loans and borrowings, trade and other payables. After initial recognition the financial liabilities are measured at amortised cost using the EIR method. Gains and losses are recognized in profit and loss when the liabilities are derecognized as well as through the EIR amortization process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or cost that are integral part on EIR. The EIR amortization is included as finance cost in the Statement of Profit and Loss.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires when an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the Statement of profit and loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

j. Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The Company uses derivative financial instruments, such as forward currency contracts, to hedge its foreign currency risks. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

Any gains or losses arising from changes in the fair value of derivatives are taken directly to the Statement of profit and loss, except for the effective portion of cash flow hedges, which is recognized in OCI and later reclassified to profit or loss when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment

At the inception of a hedge relationship, the Company formally designates and documents the hedge relationship to which the Company wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes the Company's risk management objective and strategy for undertaking hedge, the hedging/ economic relationship, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the Statement of profit and loss as finance costs. The Company has not undertaken Fair value hedges.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the Statement of profit and loss. The Company uses forward currency contracts as hedges of its exposure to foreign currency risk in forecast transactions and firm commitments. The ineffective portion relating to foreign currency contracts is recognized in finance costs.

Amounts recognized in OCI are transferred to the Statement of profit and loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized in OCI are transferred to the initial carrying amount of the non-financial asset or liability. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognized in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

k. Cash and cash equivalents

Cash and cash equivalent in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. For the purpose of the statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Company's cash management.

l. Government Grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in proportion to the depreciation charged over the expected useful life of the related asset. The Company accounts for export incentives for export of goods if the entitlements can be estimated with reasonable accuracy and conditions precedent to claim are fulfilled.

m. Share capital

Equity shares issued to shareholders are classified as equity. Incremental costs directly attributable to the issue of new equity shares are recognized as a deduction from equity, net of any related income tax effects.

n. Income tax

Current tax

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date.

Current income tax relating to items recognized outside profit or loss is recognized either in OCI or in equity. Current tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss (either in OCI or in equity). Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity and the same taxation authority.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

o. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

p. Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

Company as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Company is classified as a finance lease.

Finance leases are capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in finance costs in the Statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's general policy on the borrowing costs.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Company will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognized as an expense in the Statement of profit and loss on a straight-line basis over the lease term.

Company as a lessor

Leases in which the Company does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income.

q. Impairment of non-financial assets

The Company assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Company estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or Cash Generating Unit's (CGU) fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

Impairment losses including impairment on inventory are recognized in the Statement of profit or loss.

For assets, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Company estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the Statement of profit and loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

r. Non-current assets held for sale and discontinued operations

Non-current assets and disposal groups as held for sale if their carrying amounts will be recovered principally through a sale rather than through continuing use. The criteria for held for sale classification is regarded met only when the assets or disposal group is available for immediate sale in its present condition, subject only to terms that are usual and customary for sales of such assets (or disposal groups), its sale is highly probable; and it will genuinely be sold, not abandoned. Management must be committed to the sale/ distribution expected within one year from the date of classification.

Non-current assets held for sale and disposal groups are measured at the lower of their carrying amount and the fair value less costs to sell. Assets and liabilities classified as held for sale are presented separately in the balance sheet.

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations,
- Is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or;
- Is a subsidiary acquired exclusively with a view to resale

Discontinued operations are excluded from the results of continuing operations and are presented as a single amount as profit or loss after tax from discontinued operations in the Statement of profit and loss.

s. Provisions

Provisions are recognized when the Company has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Company expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the Statement of profit and loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Warranty provisions

Provisions for warranty-related costs are recognized when the product is sold or service provided to the customer. Initial recognition is based on historical experience. The initial estimate of warranty related costs is revised annually.

Provision for onerous contracts

A provision for onerous contracts is recognized when the expected benefits to be derived by the Company from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the expected net cost of continuing with the contract. Before a provision is established, the Company recognizes any impairment loss on the assets associated with that contract.

Decommissioning liability

The Company records a provision for decommissioning costs of its manufacturing facilities. Decommissioning costs are provided at the present value of expected costs to settle the obligation using estimated cash flows and are recognized as part of the cost of the particular asset. The unwinding of the discount is expensed as incurred and recognized in the Statement of profit and loss as a finance cost. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset.

t. Retirement and other employee benefits

Retirement benefit in the form of provident fund is a defined contribution scheme. The Company has no obligation, other than the contribution payable to the provident fund. The Company recognizes contribution payable to the provident fund scheme as an expense, when an employee renders the related service. If the contribution payable to the scheme for service received before the balance sheet date exceeds the contribution already paid, the deficit payable to the scheme is recognized as a liability after deducting the contribution already paid. If the contribution already paid exceeds the contribution due for services received before the balance sheet date, then excess is recognized as an asset to the extent that the pre-payment will lead to, for example, a reduction in future payment or a cash refund.

The Company operates a defined benefit gratuity plan in India, which requires contributions to be made to a separately administered fund. The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to the Statement of profit and loss in subsequent periods.

Past service costs are recognized in the Statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Company recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Company recognizes the following changes in the net defined benefit obligation as an expense in the Statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- Net interest expense or income

Accumulated leave, which is expected to be utilized within the next 12 months, is treated as short-term employee benefit. The Company measures the expected cost of such absences as the additional amount that it expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The Company treats accumulated leave expected to be carried forward beyond twelve months, as long-term employee benefit for measurement purposes. Such long-term compensated absences are provided for based on the actuarial valuation using the projected unit credit method at the year-end. The Company presents the leave as a current liability in the balance sheet as it does not have an unconditional right to defer its settlement for 12 months after the reporting date.

u. Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker.

The Board of Directors of the Company has identified the Managing Director and Chief Executive Officer as the chief operating decision maker of the Company.

v. Contingent liability

A disclosure for a contingent liability is made where there is a possible obligation that arises from past events and the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Company or a present obligation that arises from the past events where it is either not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount cannot be made.

w. Earnings Per Share (EPS)

The Company presents the basic and diluted EPS data for its equity shares. Basic EPS is computed by dividing the net profit for the year attributable to the equity shareholders of the Company by the weighted average number of equity shares outstanding during the year. Diluted EPS is computed by adjusting the net profit for the year attributable to the equity shareholders and the weighted average number of equity shares considered for deriving basic EPS for the effects of all the equity shares that could have been issued upon conversion of all dilutive potential equity shares (which includes the various stock options granted to employees).

x. Dividends

Dividend to equity shareholders is recognized as a liability in the period in which the dividends are approved by the equity shareholders. Interim dividends that are declared by the Board of Directors without the need for equity shareholders' approvals are recognized as a liability and deducted from shareholders' equity in the year in which the dividends are declared by the Board of directors.

3. Significant accounting judgments, estimates and assumptions

The preparation of the Company's standalone financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and the accompanying disclosures and the disclosure of contingent liabilities as at the reporting date. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

3.1 Judgments

In the process of applying the Company's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the standalone financial statements:

i. Revenue from contracts with customers

A significant portion of the Company's business relates to EPC contracts which is accounted using cost-based input method, recognizing revenue as the performance on the contract progresses. This requires management to make judgement with respect to identifying contracts for which revenue need to be recognised over a period of time, depending upon when the customer consumes the benefit, when the control is passed to customer, whether the asset created has an alternative use and whether the Company has right to payment for performance completed till date, either contractually or legally. The input method requires management to make significant judgements of the extent of progress towards completion including accounting of multiple contracts which need to be combined and considered as a single contract.

ii. Contingencies relating to tax and legal matters

The Company has received various orders and notices from tax authorities in respect of direct taxes and indirect taxes. The outcome of these matters may have a material effect on the financial position, results of operations or cash flows. Management regularly analyzes current information about these matters and provides provisions for probable losses including the estimate of legal expense to resolve such matters. In making the decision regarding the need for loss provisions, management considers the degree of probability of an unfavorable outcome and the ability to make a sufficiently reliable estimate of the amount of loss. The filing of a suit or formal assertion of a claim against the company or the disclosure of any such suit or assertions, does not automatically indicate that a provision of a loss may be appropriate.

iii. Segment reporting

Ind AS 108 'Operating Segments' requires Management to determine the reportable segments for the purpose of disclosure in standalone financial statements based on the internal reporting reviewed by Chief Operating Decision Maker (CODM) to assess performance and allocate resources. The standard also requires Management to make judgments with respect to aggregation of certain operating segments into one or more reportable segment.

Operating segments used to present segment information are identified based on the internal reports used and reviewed by the Managing Director and Chief Executive Officer to assess performance and allocate resources. The management has determined that some of the segments exhibit similar economic characteristics and meet other aggregation criteria and accordingly aggregated into three reportable segments i.e. energy, environment and chemical.

iv. Non-current assets held for sale and discontinued operations

As part of organisational restructuring, the Board of Directors of the Company at its meeting held on February 8, 2019, have approved the transfer of its Boiler & Heater (B&H) business to Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) on a going concern basis through slump sale. This was also approved by the Shareholders on March 27, 2019. Therefore, the operations of B&H business are classified as a disposal group held for sale to TBWES. The management considered the business to meet the criteria to be classified as held for distribution under Ind AS 105.

For more details on discontinued operations, refer note 29

3.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Company based its assumptions and estimates on parameters available when the standalone financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Company. Such changes are reflected in the assumptions when they occur.

i. EPC contracts:

- **Provisions for liquidated damages claims (LDs):** The Company provides for LD claims to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This requires an estimate of the amount of LDs payable under a claim which involves a number of management judgments and assumptions regarding the amounts to be recognized.
- **Project cost to complete estimates:** At each reporting date, the Company is required to estimate costs to complete on fixed-price contracts. Estimating costs to complete on such contracts requires the Company to make estimates of future costs to be incurred, based on work to be performed beyond the reporting date. This estimate will impact revenues, cost of sales, work-in-progress, billings in excess of costs, estimated earnings and accrued contract expenses.
- **Recognition of contract variations:** The Company recognises revenues and margins from contract variations where it is considered probable that they will be awarded by the customer and this requires management to assess the likelihood of such an award being made by reference to customer communications and other forms of documentary evidence.
- **Provision for onerous contracts:** The Company provides for future losses on EPC contracts where it is considered highly probable that the contract costs are likely to exceed revenues in future years. Estimating these future losses involves a number of assumptions about the achievement of contract performance targets and the likely levels of future cost escalation over time. Refer note 18(b) for details for provision for onerous contracts.

ii. Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit (CGU) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a Discounted Cash Flow (DCF) model. The cash flows are derived from the budget for the next five years as approved by the Management and do not include restructuring activities that the Company is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the expected future cash-inflows and the terminal growth rate used.

iii. Defined benefit plans - gratuity

The cost of the defined benefit gratuity plan and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. The parameter which is most subjected to change is the discount rate. In determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds in currencies consistent with the currencies of the post-employment benefit obligation. The mortality rate is based on Indian Assured Lives Mortality (2012-14) Ultimate. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases and gratuity increases are based on expected future inflation rates. Further details about gratuity obligations are given in note 34.

iv. Fair value measurement of unquoted financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of assumption is required in establishing fair values. Assumptions include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments. Refer note 36 for further disclosures.

v. Warranty provision

The Company generally offers warranty for its various products. Warranty costs are provided based on a technical estimate of the costs required to be incurred for repairs, replacements, material costs, servicing cost and past experience in respect of warranty costs. Management estimates the related provision for future warranty claims based on historical warranty claim information, as well as recent trends that might suggest that past cost information may differ from future claims. The assumptions made in current period are consistent with those in the prior year. Factors that could impact the estimated claim information include the success of the Company's productivity and quality initiatives. Warranty provisions are discounted using a pre-tax discount rate which reflects current market assessments of time value of money and risks specific to the liability. Refer note 18 for further details.

vi. Impairment of financial assets

The impairment provisions for financial assets are based on assumptions about risk of default, expected loss rates and timing of cash flows. The Company uses judgment in making these assumptions and selecting the inputs to the impairment calculation, based on the Company's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

As a practical expedient, the Company uses a provision matrix to determine ECL impairment allowance on portfolio of its trade receivables. The provision matrix is based on its historically observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed. On that basis, the Company estimates a default rate of total revenue for trade receivables and contract revenue for contract assets. The Company follows provisioning norms based on ageing of receivables to estimate the impairment allowance under ECL. For retention receivables, the Company additionally categorizes the receivables due from Public Sector Undertakings (PSUs) and Non-PSUs and follows a wider aged bucket provisioning norms as the performance guarantee tests require certain time period after the supplies are completed. Refer note 7 and 9(b) for details of impairment allowance recognized at the reporting date.

vii. Useful lives of property, plant and equipment and intangible assets

The Company determines, based on independent technical assessment, the estimated useful lives of its property, plant and equipment and intangible assets for calculating depreciation and amortisation. This estimate is determined after considering the expected usage of the asset or physical wear and tear. Management reviews the residual value and useful lives annually and future depreciation and amortisation charge would be adjusted where the management believes the useful lives differ from previous estimates. Refer note 2.3(e) and 2.3(f) above for further details.

viii. Deferred taxes

At each balance sheet date, the Company assesses whether the realization of future tax benefits is sufficiently probable to recognize deferred tax assets. This assessment requires the use of significant estimates with respect to assessment of future taxable income. The recorded amount of total deferred tax assets could change if estimates of projected future taxable income or if changes in current tax regulations are enacted. Refer note 10 for further information on potential tax benefits for which no deferred tax asset is recognized.

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Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

4 (a) Property, Plant and Equipment

Particulars	Freehold land	Leasehold land	Buildings	Plant and equipment	Office equipment	Computer	Furniture and fixtures	Vehicle	Total	Capital work in progress
Gross carrying amount as at April 1, 2017*	**7.36**	**35.22**	**309.61**	**479.68**	**30.73**	**51.35**	**35.93**	**10.77**	**960.65**	**126.28**
Additions	-	0.04	84.52	84.87	1.59	2.60	1.13	3.21	177.96	144.01
Disposals/ Transfers/ Adjustment	-	1.33	-	(1.87)	(0.18)	(7.43)	(2.48)	(2.40)	(13.03)	(177.96)
Gross carrying amount as at March 31, 2018	**7.36**	**36.59**	**394.13**	**562.68**	**32.14**	**46.52**	**34.58**	**11.58**	**1,125.58**	**92.33**
Additions	-	3.64	94.48	72.17	4.68	6.05	5.15	2.40	188.57	126.52
Disposals/ Transfers/ Adjustment	-	-	-	(4.69)	(0.48)	(2.12)	(1.96)	(1.31)	(10.56)	(188.57)
Reclassified as part of disposal group	-	-	(17.65)	(205.51)	(11.92)	(11.69)	(5.44)	(1.35)	(253.56)	(1.11)
Gross carrying amount as at March 31, 2019	**7.36**	**40.23**	**470.96**	**424.65**	**24.42**	**38.76**	**32.33**	**11.32**	**1,050.03**	**29.17**
Accumulated depreciation as at April 1, 2017*	**-**	**2.20**	**69.92**	**283.73**	**13.16**	**44.30**	**19.76**	**6.99**	**440.06**	**-**
Charge for the year	-	0.54	10.86	30.73	2.51	3.61	2.35	1.36	51.96	-
Disposals/ Transfers/ Adjustments	-	0.81	-	(1.51)	(0.10)	(7.16)	(1.93)	(2.09)	(11.98)	-
Accumulated depreciation as at March 31, 2018	**-**	**3.55**	**80.78**	**312.95**	**15.57**	**40.75**	**20.18**	**6.26**	**480.04**	**-**
Charge for the year	-	0.62	13.79	32.37	1.91	1.78	0.89	0.69	52.05	-
Disposals/ Transfers/ Adjustments	-	-	-	(3.47)	(0.41)	(2.15)	(1.68)	(1.26)	(8.97)	-
Reclassified as part of disposal group	-	(0.01)	(2.36)	(148.77)	(5.37)	(10.33)	(3.77)	(0.45)	(171.06)	-
Closing accumulated depreciation as at March 31, 2019	**-**	**4.16**	**92.21**	**193.08**	**11.70**	**30.05**	**15.62**	**5.24**	**352.06**	**-**
Net Block as at March 31, 2019	**7.36**	**36.07**	**378.75**	**231.57**	**12.72**	**8.71**	**16.71**	**6.08**	**697.97**	**29.17**
Net Block as at March 31, 2018	**7.36**	**33.04**	**313.35**	**249.73**	**16.57**	**5.77**	**14.40**	**5.32**	**645.54**	**92.33**

Capital work in progress majorly includes expenditure towards extension of manufacturing facilities.
The Company has given certain part of its office building on lease to group companies, the value of the same cannot be determined and the amounts are not significant (Refer note 32 B (c) ii).

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4 (b) Intangible assets

Particulars	Computer Software	Technical know-how#	Total	Intangible assets under development
Gross carrying amount as at April 1, 2017*	**52.25**	**77.34**	**129.59**	**2.83**
Additions	2.64	1.52	4.16	1.33
Disposals/ Transfers/ Adjustments	(0.14)	-	(0.14)	(4.16)
Gross carrying amount as at March 31, 2018	**54.75**	**78.86**	**133.61**	**-**
Additions	1.48	-	1.48	1.48
Disposals/ Transfers/ Adjustments	(0.14)	-	(0.14)	(1.48)
Reclassified as part of disposal group	(12.09)	(2.30)	(14.39)	-
Gross carrying amount as at March 31, 2019	**44.00**	**76.56**	**120.56**	**-**
Accumulated amortisation as at April 1, 2017*	**45.01**	**50.54**	**95.55**	**-**
Charge for the year	3.28	8.96	12.24	-
Disposals/ Transfers/ Adjustments	(0.12)	-	(0.12)	-
Accumulated amortisation as at March 31, 2018	**48.17**	**59.50**	**107.67**	**-**
Charge for the year	4.53	6.90	11.43	-
Disposals/ Transfers/ Adjustments	(0.06)	-	(0.06)	-
Reclassified as part of disposal group	(11.09)	(2.30)	(13.39)	
Closing accumulated amortisation as at March 31, 2019	**41.55**	**64.10**	**105.65**	**-**
Net Block as at March 31, 2019	**2.45**	**12.46**	**14.91**	**-**
Net Block as at March 31, 2018	**6.58**	**19.36**	**25.94**	**-**

*The Company had elected to continue with the carrying value of property, plant and equipment and intangible assets as recognised in the financial statements as per previous GAAP and had regarded those values as the deemed cost on the date of transition (i.e. April 1, 2015). The Company has disclosed the gross block and accumulated depreciation / amortisation above, for information purpose only. The total accumulated depreciation / amortisation as at April 1, 2015 was Rs. 429.75
Includes internally developed assets of net block Rs. 8.06 (March 31, 2018 Rs 12.37)

4. (c) Capitalisation of expenses

During the year, the Company has capitalized the following expenses of revenue nature to the cost of Property, plant and equipment / intangible asset. Consequently, expenses disclosed under the respective notes are net of amounts capitalized by the Company.

Particulars	March 31, 2019	March 31, 2018
Salaries and wages	1.56	2.02
Raw material and components	5.86	4.03
Others	1.98	1.13
Total	**9.40**	**7.18**

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Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

5 Investments in subsidiaries and joint ventures

	Face value per share	Number of shares		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investments in equity instruments :					
Investments valued at cost (fully paid)					
Equity shares in Subsidiaries (Unquoted)					
Thermax Engineering Construction Company Limited	Rs. 10	4,500,000	4,500,000	4.50	4.50
Thermax Instrumentation Limited	Rs. 10	9,000,000	9,000,000	6.06	6.06
Thermax Onsite Energy Solutions Limited	Rs. 10	18,650,000	18,650,000	18.65	18.65
Thermax Europe Limited	GBP 1	200,000	200,000	1.17	1.17
Thermax International Limited	USD 1	1,695,000	1,695,000	8.22	8.22
Thermax (Zhejiang) Cooling and Heating Engineering Co Ltd.	USD 1	14,470,000	13,470,000	40.42	33.17
Thermax Netherlands B.V.	Eur 1	22,500,000	22,500,000	148.69	148.69
Rifox-Hans Richter GmbH Spezialarmaturen	Eur 1	716,469	716,469	12.04	12.04
Thermax SDN. BHD	RM 1	500,002	500,002	0.87	0.87
Thermax Engineering Singapore Pte. Ltd.	USD 1	22,984,356	17,800,000	153.71	116.36
First Energy Private Limited	Rs. 10	10,234,437	10,234,437	20.94	20.94
Thermax Sustainable Energy Solutions Limited #	Rs. 10	4,750,000	4,750,000	-	-
Thermax do Brasil - Energia e Equipamentos Ltda. #	Real 1	1,087,130	1,087,130	-	-
Thermax Hong Kong Limited. #	HKD 1	5,983,833	5,983,833	-	-
Thermax Babcock & Wilcox Energy Solutions Private Limited ##	Rs. 10	628,222,500	-	374.31	-
Thermax SPX Energy Technologies Limited ^	Rs. 10	20,000,000	-	10.20	-
Equity shares in Joint Ventures (Unquoted)					
Thermax SPX Energy Technologies Limited^	Rs. 10	-	10,200,000	-	10.20
Thermax Babcock & Wilcox Energy Solutions Private Limited ##	Rs. 10	-	427,191,300	-	323.97
Investments in preference shares :					
Investments valued at cost (fully paid)					
Preference shares in Subsidiaries (Unquoted)					
Thermax International Ltd., Mauritius (6% Redeemable with conversion option)	USD 1	1,747,300	1,747,300	7.87	7.87
Share Application money :					
Thermax Netherlands B.V.	Eur 1	5,400,000	-	43.66	-
Total value of investments (A)				**851.31**	**712.71**
Less: Impairment in value of investments (refer note 40)					
Thermax (Zhejiang) Cooling and Heating Engineering Co Ltd.				40.42	25.00
Thermax Netherlands B.V.				126.38	-
First Energy Private Limited				16.76	16.00
Thermax SPX Energy Technologies Limited				10.20	5.00
Thermax Babcock & Wilcox Energy Solutions Private Limited				-	111.84
Total Impairment in value of investments (B)				**193.76**	**157.84**
Investments in subsidiaries and joint ventures (net) (A-B)				**657.55**	**554.87**
Aggregate amount of quoted investments				-	-
Aggregate amount of unquoted investments				851.31	712.71
Aggregate amount of impairment in the value of investments				193.76	157.84

Deemed cost is considered to be Rs. Nil as on April 1, 2015

The Company has completed the acquisition process for the equity shares held by Babcock and Wilcox India Holding Inc. (B&W) in Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) on July 19, 2018. Accordingly, TBWES has become a wholly owned subsidiary of the Company.

^ The company on February 25, 2019 entered into a share purchase agreement with Mutares Holding-24 AG and Balcke-Duerr GmbH to acquire the remaining 49% stake in Thermax SPX Energy Technologies Limited (SPX). All the conditions precedent to the transaction was completed before March 31, 2019 and hence SPX has become a wholly owned subsidiary of the Company.

6 (a) Non-current investments

	Face value per share/ unit	Number of shares / unit		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investments in equity shares :					
Investments at Fair Value through Profit and Loss					
Quoted equity shares (fully paid up)					
Metroglobal Limited	Rs. 10	2	2	**	**
Sanghvi Movers Limited	Rs. 2	16,453	16,453	0.18	0.29
Quoted equity shares (partly paid up)					
Parasrampuria Synthetics Limited (paid up Rs. 2.50 per share)	Rs. 10	125,000	125,000	**	**
Unquoted equity shares (fully paid up)					
Cosmos Co-operative Bank Limited	Rs. 20	1,375	1,375	**	**
GSL (India) Limited	Rs. 10	17,539	17,539	**	**
Sicom Limited #	Rs. 10	10,000	10,000	-	-
Total investment in equity shares				**0.18**	**0.29**
Investment in preference shares					
Investments at Fair value through Profit and Loss					
Unquoted Preference Shares in subsidiaries (fully paid up, redeemable)					
Thermax Sustainable Energy Solutions Limited (6%, Cumulative) #	Rs. 10	4,000,000	4,000,000	-	-
Thermax Instrumentation Limited (1%, Non cumulative)	Rs. 10	-	10,000,000	-	7.74
First Energy Private Limited (8%, Redeemable)	Rs. 10	11,999,999	11,999,999	11.93	10.94
Thermax Babcock & Wilcox Energy Solutions Private Limited (8%, Cumulative, Redeemable)	Rs. 10	52,700,000	-	55.65	-
Total investment in preference shares				**67.58**	**18.68**
Investments in mutual funds					
Investments at Fair value through Profit and Loss					
Unquoted					
ABSL Fixed Term Plan - Series OY (1218 Days) Direct Growth	Rs. 10	20,000,000	20,000,000	21.88	20.36
SBI Debt Fund Series C – 7 (1190 Days) - Direct - Growth	Rs. 10	15,000,000	15,000,000	16.33	15.25
SBI Debt Fund Series C – 27 (1260 Days) - Direct - Growth	Rs. 10	15,000,000	-	15.89	-
HDFC FMP 1167D January 2016 (1) - Direct - Growth- Series 35	Rs. 10	-	25,000,000	-	29.84
Total investments in Mutual Funds				**54.10**	**65.45**
Total value of Investments (A)				**121.86**	**84.42**
Less: Impairment in value of investment (refer note 40)					
First Energy Private Limited				11.93	-
Total Impairment in value of investments (B)				**11.93**	**-**
Total Non-Current Investments (net) (A-B)				109.93	84.42
Aggregate amount of quoted investments (Book value)				0.18	0.29
Aggregate amount of quoted investments (Market value)				0.18	0.29
Aggregate amount of unquoted investments				121.68	84.13
Aggregate amount of impairment in the value of investments				11.93	-

** represents amount less than a lakh rupees

Deemed cost is considered to be Nil as on April 1, 2015

Investments at fair value through profit or loss reflect investment in unquoted equity and debt securities. Refer note 37 for determination of their fair values.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

6 (b) Current Investments

Particulars	Face value per share/ unit	Number of shares/units		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investment in preference shares					
Investments at Fair value through Profit and Loss					
Unquoted Preference Shares (fully paid up, redeemable)					
Thermax Instrumentation Limited (1%, Non cumulative)	Rs. 10	10,000,000	-	10.00	-
Total investment in preference shares				**10.00**	**-**
Investments in Mutual Funds :					
Investments at Fair value through Profit and Loss					
Liquid/ Liquid Plus and Duration funds (unquoted)					
Aditya Fixed Term Plan Series MY (1107 Days) - Direct	Rs. 10	-	25,000,000	-	30.30
Aditya Birla Sun Life Money Manager Fund Growth- Regular	Rs. 100	4,866,314	4,866,314	121.84	112.45
Aditya Birla Sun Life Money Market Fund-Growth-Direct Plan	Rs. 100	1,917,730	-	48.27	-
DSP Low Duration Fund - Regular Plan - Growth	Rs. 1,000	-	44,070,717	-	55.57
DSP Strategic Bond Fund - Regular Plan - Growth	Rs. 1,000	-	190,392	-	38.45
DSP Liquidity Fund- Direct Plan - Weekly Dividend	Rs. 1,000	50,028	-	5.01	-
HDFC Arbitrage Fund-Wholesale Plan - Regular Plan - Growth	Rs. 10	-	12,398,949	-	25.77
HDFC Gilt Fund Long Term - Regular Plan - Growth	Rs. 10	-	3,967,490	-	13.90
HDFC Income Fund - Regular Plan - Growth	Rs. 10	-	3,610,670	-	13.83
HDFC Liquid Fund - Direct Plan- Growth Option	Rs. 1,000	7,372	-	2.71	
HDFC Liquid Fund - Direct Plan - Dividend Weekly	Rs. 1,000	439,685	-	45.41	
HDFC FMP 1167D January 2016 (1) - Direct - Growth - Series - 35	Rs. 10	25,000,000	-	32.06	-
ICICI Prudential Equity Arbitrage Fund - Growth	Rs. 10	-	11,225,411	-	25.82
ICICI Prudential Money Market Fund - Growth	Rs. 100	4,673,316	4,673,316	120.96	111.94
ICICI Prudential Money Market Fund - Direct Plan- Growth	Rs. 100	1,654,693	-	43.05	-
ICICI Prudential Liquid Fund -Direct Plan- Growth	Rs. 100	156	-	**	-
IDFC Cash Fund - Growth (Regular Plan)	Rs. 1,000	-	190	-	0.04
IDFC Cash Fund - Direct Plan- Growth	Rs. 1,000	-	963,103	-	203.23
Kotak Banking and PSU Debt Fund - Direct	Rs. 10	-	5,773,522	-	22.97
Kotak Bond Short Term Fund - Growth (Regular Plan)	Rs. 10	-	11,104,474	-	36.02
Kotak Equity Arbitrage Fund -Direct Plan- Growth	Rs. 10	-	15,946,102	-	40.69
Kotak Equity Arbitrage Fund - Growth (Regular Plan)	Rs. 10	-	10,404,615	-	25.87
Kotak Liquid Fund - Direct Plan- Growth	Rs. 1,000	-	58,722	-	20.68
Kotak Money Market Scheme - Direct Plan- Growth	Rs. 1,000	67,988	-	20.98	-
Kotak Liquid Direct Plan Weekly Dividend	Rs. 1,000	453,390	-	45.64	-
L&T Liquid Fund - Direct Plan- Growth	Rs. 1,000	4	-	**	-
L&T Liquid Fund - Direct Plan -Weekly Dividend	Rs. 1,000	151,893	-	15.22	-
Reliance Money Market Fund- Direct Growth Plan Growth Option	Rs. 1,000	23,805	23,805	6.76	6.23
SBI Debt Fund Series B – 26 (1100 Days) - Direct	Rs. 10	-	10,000,000	-	12.09
SBI Magnum Ultra Short Duration Fund Direct Growth	Rs. 1,000	6,237	28,616	2.60	11.00
SBI Liquid Fund - Direct Plan- Growth	Rs. 1,000	-	137	-	0.04
SBI Liquid Fund Direct Weekly Dividend	Rs. 1,000	145,549	-	15.45	-
Tata Money Market Fund - Regular Plan - Growth	Rs. 1,000	-	113	-	0.03
Tata Money Market Fund - Direct Growth	Rs. 1,000	-	771,434	-	211.25
UTI Liquid Cash Plan - Regular Growth Plan	Rs. 1,000	396,606	396,606	120.96	112.51
UTI-Arbitrage Fund- Regular Growth Plan	Rs. 10	-	11,032,511	-	25.84
Total Current Investments				**646.92**	**1,156.51**
Total value of Investments				**656.92**	**1,156.51**
Aggregate amount of quoted investments and market value thereof				-	-
Aggregate amount of unquoted investments				656.92	1,156.51
Aggregate amount of impairment in the value of investments				-	-

** represents amount less than a lakh rupees

Investments at fair value through profit or loss reflect investment in unquoted equity and debt securities. Refer note 37 for determination of their fair values.

7 Trade receivables

(a) Non-current trade receivables

	As at March 31, 2019	As at March 31, 2018
Trade receivables from:		
i) Related parties (note 35)	-	-
ii) Others	60.55	56.03
Total	**60.55**	**56.03**
Sub-classification of trade receivables		
Secured, considered good	-	-
Unsecured, considered good	93.08	79.10
Trade Receivables which have a significant increase in credit risk	-	-
Trade Receivables - credit impaired	-	-
	93.08	**79.10**
Less: Impairment allowance	(32.53)	(23.07)
Total	**60.55**	**56.03**

(b) Current trade receivable

	As at March 31, 2019	As at March 31, 2018
Trade receivables from:		
i) Related parties (note 35)	45.87	37.13
ii) Others	791.03	1,102.17
Total	**836.90**	**1,139.30**
Sub-classification of trade receivables		
Secured, considered good	122.15	179.53
Unsecured, considered good	938.98	1,261.02
Trade Receivables which have a significant increase in credit risk	3.13	55.45
Trade Receivables - credit impaired	15.90	17.24
	1,080.16	**1,513.24**
Less: Impairment allowance	(243.26)	(373.94)
Total	**836.90**	**1,139.30**

No trade or other receivables are due from directors or other officers of the company either severally or jointly with any other person. Nor any trade receivables due from firms or private companies respectively in which any director is a partner, a director or a member.
Provision amounting to Rs. 3.13 (March 31, 2018 : 50.80) is already taken in books for trade receivables which has a significant increase in credit.
For terms and conditions relating to related party receivables, refer note 35.
Trade receivables are non-interest bearing and are generally on terms of 30 to 90 days.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

8 Loans

(a) Non-current loans

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
At amortized cost		
Loans to employees	2.93	3.56
Security deposits*	9.16	13.59
Total	**12.09**	**17.15**

(b) Current loans

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
At amortized cost		
Loans to employees	1.68	1.43
Loans to related parties (note 35)	7.50	1.50
Security deposits*	3.36	2.36
Total	**12.54**	**5.29**

*Includes lease deposits given to directors of Rs. 0.53 (March 31, 2018 Rs. 0.53). The maximum amount due from directors during the year amounted to Rs. 0.53 (March 31, 2018 Rs. 0.53). This also includes deposits given to various other parties for rent, utilities etc. Refer note 35.

Loans are various kinds of non-derivative financial assets which generate fixed interest income for the Company. The carrying value may be affected by the changes in the credit risk of the counterparties. The tenure of such loans has different time range based on employee's eligibility.

No loans are due from directors or Key managerial personnel of the Company either severally or jointly with any other person or from private companies or firms in which any director is a partner, a director or a member respectively.

For terms and conditions relating to loans given to related parties, refer note 35.

9 Other financial assets

(a) Other non current assets

	As at March 31, 2019	As at March 31, 2018
Bank deposits with maturity of more than 12 months	0.05	0.12
Total	**0.05**	**0.12**

Above bank deposits are pledged as margin money.

(b) Other current assets

	As at March 31, 2019	As at March 31, 2018
Derivative instruments at fair value through OCI		
Cash flow hedges		
Foreign exchange forward contracts	33.41	2.69
Derivative instruments at fair value through profit or loss		
Derivative not designated as hedges		
Foreign exchange forward contracts	5.92	1.58
At amortized cost		
Export incentive receivable	26.38	51.59
Interest accrued on bank deposits and others (note 35)	1.08	0.01
Unbilled revenue (Contract assets)	383.09	461.85
Total	**449.88**	**517.72**

Financial assets at fair value through other comprehensive income reflect the change in fair value of foreign exchange forward contracts, designated as cash flow hedges to hedge highly probable forecast sales and purchases in various foreign currencies.

^Unbilled revenue is disclosed net of impairment allowance of Rs. 10.12 (March 31, 2018: Rs. 12.16) for contract assets.

10 Income taxes

The major components of income tax expense for the year ended March 31, 2019 and March 31, 2018 are:

Statement of profit and loss

Particulars	March 31, 2019	March 31, 2018
Current tax		
Continuing operations	106.15	99.40
Discontinued operations	67.65	41.18
Deferred tax		
Continuing operations	3.11	(0.50)
Discontinued operations	(8.65)	(0.22)
Income tax expense reported in the Statement of profit and loss	**168.26**	**139.86**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Other comprehensive income

Particulars	March 31, 2019	March 31, 2018
Deferred tax related to items recognised in other comprehensive income during the year		
Net gain or loss on revaluation of cash flow hedge	(11.14)	0.31
Net gain or loss on remeasurements of defined benefit plans	0.16	1.62
Deferred tax charged / (credited) in other comprehensive income	**(10.98)**	**1.93**

Reconciliation of tax expense and accounting profit multiplied by India's domestic tax rate for March 31, 2019 and March 31, 2018

Particulars	March 31, 2019	March 31, 2018
Accounting profit before tax (before exceptional items) for continuing operations	318.13	285.04
Accounting profit before tax (before exceptional items) for discontinued operations	173.22	118.07
At India's statutory income tax rate (as per Income Tax Act, 1961) of 34.944% (March 31, 2018: 34.608%)	171.70	139.51
- Dividend income	(4.19)	-
- Weighted deduction on research and development expenses	(2.44)	(1.99)
- Others (includes adjustment for fair valuation of investments and other differences)	3.19	2.34
Effective tax	168.26	139.86
Income tax expense reported in the Statement of profit and loss for continuing operations	**109.26**	**98.90**
Income tax expense reported in the Statement of profit and loss for discontinued operations	**59.00**	**40.96**
Total income tax expense reported in the Statement of profit and loss	**168.26**	**139.86**

Deferred tax

Statement of profit and loss

Particulars	March 31, 2019	March 31, 2018
Deferred tax relates to the following :		
Accelerated depreciation for tax purposes	8.70	1.95
Employee benefit obligations	(1.87)	(0.03)
Provision for doubtful debts and liquidated damages	(13.42)	(2.10)
Fair value gains on investment classified as fair value through profit and loss	(14.11)	14.94
Temporary differences in accounting treatment as required by Income tax standards	15.12	(14.19)
Items allowed on payment basis / temporary disallowances	(3.06)	(0.42)
Others	3.10	(0.87)
Deferred tax expense/ (income) in the Statement of profit and loss	**(5.54)**	**(0.72)**
Deferred tax expense/(income) reported in the Statement of profit and loss for continuing operations	**3.11**	**(0.50)**
Deferred tax (income) reported in the Statement of profit and loss for discontinued operations	**(8.65)**	**(0.22)**

Balance sheet

Particulars	As at March 31, 2019	As at March 31, 2018
Deferred tax relates to the following :		
Accelerated depreciation for tax purposes	(68.59)	(59.89)
Revaluation of cash flow hedges	(1.52)	(12.66)
Employee benefit obligations	15.59	13.88
Provision for doubtful debts and liquidated damages	172.17	158.75
Items allowed on payment basis / temporary disallowances	9.75	6.69
Fair value gains on investment classified as fair value through profit and loss	(11.20)	(25.31)
Temporary differences in accounting treatment as required by Income tax standards	4.63	19.75
Reclassified as a part of disposal group	(71.34)	-
Others (includes impact on account of temporary differences on accretion of interest on investments)	(0.14)	2.96
Net deferred tax assets	**49.35**	**104.17**

Reconciliation of deferred tax assets (net)

	March 31, 2019	March 31, 2018
Opening balance	**104.17**	**103.73**
Tax income during the period recognised in profit or loss	5.54	0.72
Tax expense during the period recognised in other comprehensive income	10.98	(1.93)
Tax on fair value adjustment of preference share investments	-	1.65
Reclassified as a part of disposal group	(71.34)	-
Closing balance	**49.35**	**104.17**

The Company offsets tax assets and liabilities if and only if it has a legally enforceable right to set off income tax assets and liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

The Company has tax losses which arose in India of Rs. Nil (March 31, 2018: Rs. 6.95) that are available for offsetting for eight years against future taxable profits.

Deferred tax assets have not been recognised in respect of these losses as they may not be used to offset taxable profits elsewhere in the Company and there are no other tax planning opportunities or other evidence of recoverability in the near future. If the Company were able to recognise all unrecognised deferred tax assets, the profit for the year would increase by Rs. Nil (March 31, 2018: Rs. 1.62).

During the year, the Company has paid dividends to its shareholders. This has resulted in payment of Dividend Distribution Tax (DDT) to the taxation authorities. The Company believes that DDT represents additional payment to taxation authority on behalf of the shareholders. Hence, DDT paid is charged to equity.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

11 Other assets

(a) Other non-current assets

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
Advance to suppliers	4.59	0.12
Capital advance	1.91	13.22
Advance to related parties (note 35)	1.00	-
Balances with government authorities	87.42	133.75
Prepayments	36.64	40.69
Total	**131.56**	**187.78**

(b) Other current assets

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
Advance to suppliers	71.03	98.52
Advance to employees	4.67	11.57
Advance to related parties (note 35)	10.52	1.75
Prepayments	5.99	6.53
Balances with government authorities	199.89	172.15
Prepaid employee benefits (note 34)	7.30	9.75
Others*	9.19	16.11
Total	**308.59**	**316.38**

*Others includes interest on tax refunds, other recovery of expenses, etc

There were no advances due by directors or officers of the Company or any of them severally or jointly with any other persons or amounts due by firms or private companies respectively in which such director is a partner or a member.

For terms and conditions relating to loans given to related parties, refer note 35.

12 Inventories (Valued at lower of cost and net realisable value)

	As at March 31, 2019	As at March 31, 2018
Raw materials, components and bought-outs**	115.37	193.79
Work-in-progress	87.00	64.60
Finished goods	17.42	22.45
Stores and spares	1.76	7.50
Traded goods	8.89	9.96
Total	**230.44**	**298.30**

**includes goods in transit Rs. 1.61 (March 31, 2018 Rs. 9.85)

For the year ended March 31, 2019 Rs. 5.10 (March 31, 2018 Rs. 2.51) was recognised (net of reversals) as an expense for inventories carried at net realisable value. These were recognised as expense during the year and included in 'cost of raw materials and components consumed in the Statement of profit and loss.

13 (a) Cash and cash equivalents

	As at March 31, 2019	As at March 31, 2018
Balances with banks		
- in current accounts	65.12	66.17
- in deposits with original maturity of less than three months	24.75	50.25
Cheques, drafts on hand	2.69	1.94
Cash on hand	0.32	0.17
Total	**92.88**	**118.53**

Short-term deposits are made for varying periods ranging between one day and three months, depending on the immediate cash requirements of the Company, and earn interest at the respective short-term deposit rates.

There are no repatriation restrictions with regard to cash and cash equivalents as at the end of the reporting period and prior periods.

13 (b) Other bank balances

	As at March 31, 2019	As at March 31, 2018
Deposits with original maturity of more than 3 months but less than 12 months	24.90	0.01
Unpaid dividend account (restricted)	0.98	0.81
Total	**25.88**	**0.82**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

13 (c) Changes in liabilities arising from financing activities

Particulars	Borrowings	Unpaid dividend
As on April 1, 2017	66.22	0.77
Cash flow	50.27	-
Other	-	0.04
As on March 31, 2018	**116.49**	**0.81**
Cash flow	37.14	-
Reclassified as part of disposal group	(113.63)	-
Other	-	0.17
As on March 31, 2019	**40.00**	**0.98**

14 Share capital

	As at March 31, 2019	As at March 31, 2018
Authorized shares (Nos)		
37,50,00,000 (March 31, 2018: 37,50,00,000) equity shares of Rs. 2/- each	75.00	75.00
	75.00	**75.00**
Issued, subscribed and fully paid share capital (Nos)		
11,91,56,300 (March 31, 2018: 11,91,56,300) equity shares of Rs. 2/- each	23.83	23.83
Total issued, subscribed and fully paid-up share capital	**23.83**	**23.83**

(a) Reconciliation of the shares outstanding at the beginning and at the end of the year

	No. of shares	Rs.
Equity share of Rs. 2 each issued, subscribed and fully paid		
As at April 1, 2017	119,156,300	23.83
Changes during the year	-	-
As at March 31, 2018	119,156,300	23.83
Changes during the year	-	-
As at March 31, 2019	**119,156,300**	**23.83**

(b) Terms/ rights attached to equity shares

The Company has one class of equity shares having a par value of Rs. 2 per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

(c) Equity share capital held by holding company

	As at March 31, 2019	As at March 31, 2018
Holding company		
RDA Holding and Trading Private Limited, India	12.87	12.87
6,43,28,500 (March 31, 2018: 6,43,28,500) equity shares of Rs. 2/- each fully paid		

(d) Details of equity shares held by shareholders holding more than 5% of the aggregate shares in the Company

	As at March 31, 2019	As at March 31, 2018
RDA Holding and Trading Private Limited, India		
%	53.99	53.99
No. of shares	64,328,500	64,328,500
ARA Trusteeship Company Private Limited, India		
%	7.99	7.99
No. of shares	9,520,805	9,520,805

(e) The Company has several trusts (73 nos) set up for welfare of employees and ESOP named Thermax Employee ESOP and Welfare Trust. Such trusts together hold 65,41,440 (March 31, 2018: 65,41,440) equity shares representing 5.49% (March 31, 2018: 5.49%) of equity share in the Company.

15 (a) Other equity

	As at March 31, 2019	As at March 31, 2018
Reserves and surplus		
Capital redemption reserve	50.34	50.34
Securities premium	61.13	61.13
Capital reserve	1.92	1.92
General reserve	429.14	429.14
Retained earnings		
Opening balance	1,975.29	1,820.06
Add: Profit for the year (including discontinued operations)	275.24	238.25
Less: Dividends paid	(71.49)	(71.49)
Less: Tax on dividend	(12.64)	(14.55)
Movement during the year	191.11	152.21
Items of other comprehensive income recognised directly in retained earnings:		
Re-measurement gain / (loss) on defined benefit plans, net of tax Rs. 0.16 (March 31, 2018 Rs. 1.62)	0.28	3.02
Net surplus in the Statement of profit and loss	**2,166.68**	**1,975.29**
Total Reserves and Surplus	**2,709.21**	**2,517.82**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Other Reserves		
Cash flow hedge reserve		
Opening balance	23.91	23.34
Add: Movement during the year (net)	(32.24)	0.88
Less: Tax on Movement during the year	11.14	(0.31)
Closing balance	**2.81**	**23.91**
Total	**2,712.02**	**2,541.73**

Capital redemption reserve

Pertains to reserve created towards redemption of debentures and can be utilised in accordance with the provisions of the Act.

Securities premium

Securities premium is used to record the premium on issue of shares. The reserve can be utilised in accordance with the provisions of the Act.

Capital reserve

Pertains to reserves arising on amalgamations in the past which is required to be maintained as per statute and cannot be distributed to the shareholders.

General reserve

Represents amounts transferred from retained earning in earlier years as per the requirements of the erstwhile Companies Act 1956.

Cash flow hedge reserve

This reserve comprises the effective portion of the cumulative net change in the fair value of the cash flow hedge instruments related to hedged transactions that have not yet occurred.

15 (b) Distribution made and proposed

	March 31, 2019	March 31, 2018
Cash dividend on equity shares declared and paid:		
Final dividend for the year 2017-18: Rs. 6 per share (2016-17: Rs. 6 per share)	71.49	71.49
Dividend Distribution Tax on the above	12.64	14.55
	84.13	**86.04**

Proposed dividend on equity shares are subject to approval at the annual general meeting and are not recognised as a liability (including Dividend Distribution Tax thereon) as at the reporting date.

Proposed dividend on equity shares:		
Proposed dividend for the year 2018-19: Rs.7 per share (2017-18: Rs. 6 per share)	83.41	71.49
Dividend Distribution Tax on the above	17.15	14.69
Total	**100.56**	**86.18**

The company has taken a set off of Rs. 2.05 (March 31, 2018; Rs. Nil) for Dividend Distribution Tax paid by one of the subsidiary of the company.

16 Trade payables

(a) Non current trade payables

	As at March 31, 2019	As at March 31, 2018
Trade payables:		
(i) Related Party (note 35)	7.33	5.79
(ii) Others	24.45	18.51
Total	**31.78**	**24.30**

There are no non-current outstanding dues of micro and small enterprises

(b) Current trade payables

	As at March 31, 2019	As at March 31, 2018
Total outstanding dues of micro and small enterprises (note 16 (c))	69.05	147.88
Total outstanding dues of creditors other than micro and small enterprises		
(i) Related parties (note 35)	20.43	31.32
(ii) Others	709.46	763.92
Total	**798.94**	**943.12**

For terms and conditions with related parties, refer note 35.
Trade payables are non-interest bearing and are generally on terms of 30 to 90 days.

(c) Details of dues to micro and small enterprises as defined under the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006

	March 31, 2019	March 31, 2018
The principal amount and the interest due thereon remaining unpaid to any supplier as at the end of each accounting year		
- Principal amount outstanding (whether due or not) to micro and small enterprises*	68.93	147.82
- Interest due thereon	0.12	0.06
The amount of interest paid by the Company in terms of section 16 of the MSMED Act, 2006 along with the amounts of the payment made to the supplier beyond the appointed day during each accounting year	0.19	0.33
The amount of payment made to the supplier beyond the appointed day during the year	59.50	28.67
The amount of interest due and payable for the period of delay in making payment (which have been paid but beyond the appointed day during the year) but without adding the interest specified under the MSMED Act, 2006	0.45	0.14
The amount of interest accrued and remaining unpaid at the end of each accounting year	0.57	0.20
The amount of further interest remaining due and payable even in the succeeding years, until such date when the interest dues as above are actually paid to the small enterprise for the purpose of disallowance as a deductible expenditure under section 23 of the MSMED Act 2006	0.02	0.06

* Excludes payable related to discontinued operations Rs. 100.01 as at March 31, 2019

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

17 Financial liabilities

(a) Other non current liabilities

	As at March 31, 2019	As at March 31, 2018
Trade deposits	1.11	1.42
Total	**1.11**	**1.42**

(b) Other current liabilities

	As at March 31, 2019	As at March 31, 2018
Derivative instruments at fair value through OCI		
Cash flow hedges		
Foreign exchange forward contracts	21.21	2.26
Derivative instruments at fair value through profit or loss		
Derivative not designated as hedges		
Foreign exchange forward contracts	0.85	1.27
At amortized cost		
Employee related payables	38.39	50.56
Payables for PPE and intangible assets	9.39	22.56
Book overdraft	22.19	37.90
Unpaid dividend	0.98	0.81
Other payables *	2.79	2.92
Total	**95.80**	**118.28**

* includes dealer deposits, security deposits, etc.

18 Provisions

(a) Non-current provisions

	As at March 31, 2019	As at March 31, 2018
Provision for warranties	1.04	3.50
Provision for decommissioning liability	6.45	6.34
Total	**7.49**	**9.84**

(b) Current provisions

	As at March 31, 2019	As at March 31, 2018
Provision for employee benefits		
Provision for leave encashment	35.85	44.67
	35.85	**44.67**
Other provisions		
Provision for onerous contracts	2.58	19.38
Provision for warranties	32.70	84.14
	35.28	**103.52**
Total	**71.13**	**148.19**

Provision for decommissioning liability

A provision has been recognised for decommissioning costs associated with the property taken on lease by the Company. The Company is committed to decommission the site as a result of the construction of manufacturing facility. The timing of cash outflows in respect of such provision cannot be reasonably determined.

Provision for warranties

Warranty costs are provided based on a technical estimate of the costs required to be incurred for repairs, replacements, material costs, servicing cost and past experience in respect of such costs. It is expected that this expenditure will be incurred over the contracted warranty period ranging upto 2 years. If warranty claim costs vary by 10% from management's estimate, the warranty provisions would be an estimated Rs. 3.37 higher or lower (March 31, 2018 Rs. 8.76)

Provision for onerous contracts

A provision is made when the unavoidable costs of meeting the obligation under the contract exceed the estimated economic benefits. The timing of cash outflows in respect of such provision is over the contract period.

Movement in provisions

	Provision for onerous contracts	Provision for warranties	Provision for decommissioning liability
As at April 1, 2018			
Balance at the beginning	19.38	87.64	6.34
Additional provision recognised	3.27	24.48	0.48
Unused amounts reversed	-	(40.11)	-
Unwinding of discount	-	3.83	0.29
Utilised during the year	(16.75)	(2.30)	-
Reclassified as part of disposal group	(3.32)	(39.80)	(0.66)
As at March 31, 2019	**2.58**	**33.74**	**6.45**
Details of provisions :			
Current	2.58	32.70	-
Non-Current	-	1.04	6.45
Total	**2.58**	**33.74**	**6.45**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

19 Other liabilities

(a) Other non-current liabilities

	As at March 31, 2019	As at March 31, 2018
Customer advances (Contract liability)	18.22	34.70
Total	**18.22**	**34.70**

(b) Other current liabilities

	As at March 31, 2019	As at March 31, 2018
Unearned revenue (Contract liability)	188.89	234.84
Customer advances (Contract liability)		
(i) Related Parties (note 35)	3.79	1.12
(ii) Others	546.87	1,154.26
Statutory dues and other liabilities*	9.95	12.10
Total	**749.50**	**1,402.32**

* mainly includes tax deducted at source, GST, provident fund, ESIC etc.

For terms and conditions with related parties, refer note 35.

20 Borrowings

Current borrowings

	As at March 31, 2019	As at March 31, 2018
Secured loans from banks	40.00	76.49
Unsecured loans from banks	-	40.00
Total	**40.00**	**116.49**

Secured loans pertains to bills discounted by suppliers amounting to Rs. 40.00 (March 31, 2018: Rs. 76.49) that are payable by the Company within 60 to 120 days from the invoice date.

These loans are secured by hypothecation of present and future stock of all inventories, stores and spares not related to plant and machinery, book debts and other moveable assets.

Unsecured loans pertains to packing credit of Rs. Nil (March 31, 2018: Rs. 40) carries an interest rate of 4.5% due for repayment within 280 days from date of disbursement or expected shipment date whichever is earlier.

21 Revenue from operations

a) Revenue from contracts with customers:

	March 31, 2019	March 31, 2018
Revenue from projects and products	3,164.95	2,397.94
Revenue from services	323.47	303.06
Total revenue from contracts with customers	**3,488.42**	**2,701.00**

Revenue from operations includes excise duty collected from customers of Rs. Nil (March 31, 2018 Rs. 18.75). Post applicability of Goods and Services Tax (GST) with effect from July 1, 2017, the revenue is disclosed net of GST. Accordingly, the revenue from operations is inclusive of excise duty invoiced till June 30, 2017 and are not comparable with revenue for year ended March 31, 2019 to that extent.

Refer note 2.2 in significant accounting policies relating to 'Adoption of Ind AS 115'.

b) Other operating revenue

	March 31, 2019	March 31, 2018
Export incentives	35.69	20.06
Sale of Scrap	9.45	8.73
Commission income	3.17	1.97
Exchange fluctuation gain (net)*	1.52	11.58
Royalty income	2.85	2.83
	52.68	**45.17**
* Includes mark to market gain on forward contracts not subjected to hedge accounting Rs. 5.07 (March 31, 2018 Rs. 0.30)		
Total Revenue from operations	**3,541.10**	**2,746.17**

(c) Disclosure pursuant to Ind AS 115: Revenue from Contracts with Customers

i) Revenue by category of contracts:

	March 31, 2019
Over a period of time basis	1,990.01
At a point-in-time basis	1,498.41
Total revenue from contracts with customers	**3,488.42**

Revenue by geographical market:

	March 31, 2019
Within India	2,427.05
Outside India	1,061.37
Total revenue from contracts with customers	**3,488.42**

Revenue by segment

	March 31, 2019			
	Energy	Environment	Chemical	Total
Revenue from contracts with customers				
External Revenue	2,354.46	824.37	378.78	3,557.61
Inter segment	(0.54)	(62.86)	(5.79)	(69.19)
Total revenue from contracts with customers	**2,353.92**	**761.51**	**372.99**	**3,488.42**
Other operating income	43.92	3.93	4.83	52.68
Total revenue from operations	**2,397.84**	**765.44**	**377.82**	**3,541.10**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

ii) Contract balances

The following table provides information about contract balances from contracts with customers as at the reporting date:

	As at March 31, 2019
Trade receivables (note 7)	897.45
Unbilled revenue (Contract asset) (note 9(b))	383.09
Unearned revenue (Contract liability) (note 19(b))	188.89
Customer advances (Contract liability) (note 19)	568.88

Contract assets primarily relate to the Company's rights to consideration for work completed but not billed at the reporting date from projects and customised contracts. The Contract assets are transferred to Trade receivables on completion of milestones and its related invoicing.

The contract liabilities relate to unearned revenue and customer advances where performance obligations are yet to be fulfilled as per the contracts. The fulfilment of the performance obligations will extinguish these liabilities and revenue will be recognised, with no impact on the Company's cash positions on specific projects.

iii) Revenue recognised in the reporting year that was included in the contract liability balance at the beginning of the year

	March 31, 2019
Unearned revenue ^	118.99
Customer advance#	238.04

^Excludes Rs 25.51 pertaining to discontinued operations

Excludes Rs 386.74 pertaining to discontinued operations

iv) Changes in unbilled revenue and unearned revenue for the year

The explanation of the significant changes in the unbilled and unearned balances during the reporting period is presented in the table below

	March 31, 2019	March 31, 2019
Opening unbilled revenue (refer note 9(b))	**461.85**	
Opening unearned revenue (refer note 19(b))	**234.84**	**227.01**
- Transfer of contract assets to receivable from opening unbilled revenue	(409.53)	
- Increase in revenue as a result of changes in the measure of progress from the opening unearned revenue	144.50	
- Transfer of contract assets to receivables	(2,592.47)	
- Increase in revenue as a result of changes in the measure of progress	3,427.24	
- Others*	(19.87)	
- Reclassified as part of disposal group	(582.68)	**(32.81)**
Closing unbilled revenue (refer note 9(b))	**383.09**	
Closing unearned revenue (refer note 19(b))	**188.89**	**194.20**

* includes adjustments on account of onerous contracts, impairment allowance for the year etc

v) Performance obligations

Performance obligation in project or a group of projects which are contracted at or near same time and negotiated simultaneously, are combined for the purpose of evaluation. The Company has estimtaed that multiple commitments pertaining to engineering procurement and commissioning of such projects is a single performance obligation which is spread over different accounting periods.

Performance obligation for products are evaluated on standalone basis, recognised at point in time. Generally, performance obligations for such contracts have an original expected duration of one year or less.

There are no major contracts with customers which have significant financing component included within them and therefore there is no difference between the timing of satisfaction of performance obligation vis a vis the timing of the payment.

Remaining performance obligations:

The following table includes revenue expected to be recognised in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date.
The Company applies practical expedient included in para 121 of Ind AS 115 and does not disclose information about its remaining performance obligations for contracts that have an original expected duration of one year or less.

	March 31, 2019
Amount of revenue yet to be recognised for contracts having original expected duration of more than in one year in progress as on March 31, 2019	1,573.87

The company expects that a significant portion of the remaining performance obligation will be completed within next 2 years.

vi) Reconciliation between revenue recognised in Statement of profit and loss and contract price

There is no significant variation between revenue recognised in Statement of profit and loss and contract price except price variation claims, which are considered to be part of contract price.

(d) Revenue from construction contracts (disclosure pursuant to erstwhile Ind AS 11)

	March 31, 2018
Contract Revenue recognised during the year *	1,371.16
In respect of contracts in progress as at March 31, 2018 :	
Aggregate amount of contract costs incurred and recognised profits (less recognised losses)	6,787.55

	March 31, 2018
Customer advance outstanding for contracts in progress	963.81
Retention money due from customers for contracts in progress	420.72
Gross amount due from customers (disclosed as unbilled revenue (Refer note 9 (b))	461.85
Gross amount due to customers (disclosed as unearned revenue (Refer note 19 (b))	234.84

* Excludes retaled to discontinued operations Rs. 1,017.38.

22 Other income

	March 31, 2019	March 31, 2018
Interest income from financial assets carried at amortized cost		
Loan to subsidiary	0.34	1.48
Bank deposits	0.93	0.07
Interest income from financial assets at fair value through profit and loss		
Loan to subsidiary (preference shares)	6.19	2.01
Other interest income	8.10	8.22
Dividend income from equity investments designated at fair value through profit and loss	2.00	0.01
Dividend income from equity investments carried at cost	10.00	-
Fair value gain on financial instrument at fair value through profit and loss (net)	71.97	68.86
Liabilities no longer required written back	7.86	9.74
Miscellaneous income^^	15.41	8.97
Total	**122.80**	**99.36**

^^Includes rent income of Rs 0.76 (March 31, 2018; Rs 0.66); refer note 32 B (ii)

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

23 Cost of raw material and components consumed

	March 31, 2019	March 31, 2018
Inventories at the beginning of the year for continuing operations	92.02	97.38
Add: Purchases	2,140.94	1,492.19
	2,232.96	**1,589.57**
Inventories at the end of the year for continuing operations	(115.37)	(92.02)
	2,117.59	**1,497.55**
Less: capitalised during the year (refer note 4 (c))	(5.86)	(4.03)
Total	**2,111.73**	**1,493.52**

24 (Increase)/ Decrease in inventories of finished goods, work-in-progress and traded goods

	March 31, 2019	March 31, 2018
Inventories at the beginning of the year for continuing operations		
Work-in-progress	64.01	45.37
Finished goods	22.45	19.04
Traded goods	9.96	10.54
	96.42	**74.95**
Less: inventories at the end of the year for continuing operations		
Work-in-progress	87.00	64.01
Finished goods	17.42	22.45
Traded goods	8.89	9.96
	113.31	**96.42**
Total	**(16.89)**	**(21.47)**

25 Employee benefits expense

	March 31, 2019	March 31, 2018
Salaries and wages	342.45	308.66
Contribution to provident and other funds	24.74	23.13
Gratuity expense (note 34)	4.82	6.60
Staff welfare expenses	22.89	20.68
	394.90	**359.07**
Less: capitalised during the year (refer note 4 (c))	(1.56)	(2.02)
Total	**393.34**	**357.05**

26 Finance costs

	March 31, 2019	March 31, 2018
Interest expense	3.73	2.13
Unwinding of discount	1.53	1.89
Total	**5.26**	**4.02**

27 Depreciation and amortisation expense

	March 31, 2019	March 31, 2018
Depreciation of property, plant and equipment (note 4 (a))	52.05	51.96
Amortization of intangible assets (note 4 (b))	11.43	12.24
Less: expense related to discontinued operations	(13.35)	(14.83)
Total	**50.13**	**49.37**

28 (a) Other expenses

	March 31, 2019	March 31, 2018
Consumption of stores and spare parts	46.17	42.62
Power and fuel	32.42	25.75
Freight and forwarding charges (net)	60.59	43.74
Site expenses and contract labour charges	284.89	260.70
Drawing, design and technical service charges	9.19	6.59
Sales commission	18.15	15.35
Advertisement and sales promotion	4.98	3.20
Rent (note 32 B (i))	11.70	10.80
Rates and taxes	5.97	7.99
Insurance	3.91	1.50
Repairs and maintenance:		
Plant and machinery	13.95	10.04
Buildings	4.93	5.88
Others	22.12	18.40
Travelling and conveyance	55.79	48.62
Legal and professional fees (includes payment to auditor; refer note 28 (b))	45.85	44.11
Director sitting fees	0.50	0.44
Bad debts/ advances written off	8.23	8.05
Provision for impairment allowance of financial assets (net)	27.08	6.95
Warranty expenses (net)	11.02	11.78
Loss on sale/ discard of assets (net)	1.03	0.56
CSR expenditure (note 28 (c))	7.60	8.65
Miscellaneous expenses (includes printing, communication, postage, security expense, etc.)	16.93	10.64
	693.00	**592.36**
Less: capitalised during the year (refer note 4 (c))	(1.98)	(1.13)
Total	**691.02**	**591.23**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

(b) Payment to auditors

	March 31, 2019	March 31, 2018
As auditor		
Audit and limited review fee	1.33	1.17
In other capacity		
Taxation matters	-	0.03
Other services	0.12	0.09
Reimbursement of expenses	0.08	0.08
Total	**1.53**	**1.37**

(c) Corporate Social Responsibility (CSR)

	March 31, 2019	March 31, 2018
Gross amount required to be spent by the Company during the year	7.48	8.65
Total	**7.48**	**8.65**

Amount spent during the year

	In Cash	Yet to spent in cash	Total
During the year ended March 31, 2019			
a. Construction/ acquisition of any asset	-	-	-
b. On purposes other than (a) above^	7.60	-	7.60
	7.60	**-**	**7.60**
During the year ended March 31, 2018			
a. Construction/ acquisition of any asset	-	-	-
b. On purposes other than (a) above^	8.65	-	8.65
	8.65	**-**	**8.65**

^The amount is contributed to Thermax Foundation, India (formerly known as Thermax Social Initiative Foundation, India). Refer note 35.

(d) Research and development costs

The Company has incurred expenses on research and development at R & D facilities approved and recognised by the Ministry of Science and Technology, Government of India.

	March 31, 2019	March 31, 2018
Revenue expenditure - charged to statement of profit and loss	13.17	11.30
Revenue expenditure - capitalised	-	-
Capital expenditure	0.43	-
Total	**13.60**	**11.30**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

29 Discontinued Operation:

The Company has acquired equity shares held by Babcock and Wilcox India Holding Inc. (B&W) in Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) on July 19, 2018. Accordingly, TBWES has become a wholly owned subsidiary of the Company. Subsequent to this acquisition, as part of organisational restructuring the Board of Directors of the Company at its meeting held on February 8, 2019 and subsequent approval of share holders on March 27, 2019, have approved the transfer of its Boiler & Heater (B&H) business to TBWES on a going concern basis through slump sale. The consideration for this transaction, which will not be less than the book value of B&H business and its effective date are not yet concluded. The operations form part of Energy segment.

Considering management's intention to transfer B&H business to TBWES, the B&H business has been classified as discontinued operations in the standalone financial statement as at March 31, 2019 in accordance with Ind AS 105. The financial parameters in respect of discontinued operations are stated below. The items of Statement of profit and loss of the previous period have accordingly been restated.

a) Financial performance and cash flow information

	March 31, 2019	March 31, 2018
Revenue including other income (excluding sales made to continuing operations Rs. 312.46 (March 31, 2018 Rs. 76.67))	1,648.00	1,147.08
Expenses*	1,474.78	1,029.01
Profit before income tax	173.22	118.07
Income Tax	59.00	40.96
Profit after income tax	114.22	77.11
Other comprehensive income	(7.57)	(2.84)
Total comprehensive income	106.65	74.27
Net cash flow from operating activities	72.37	(45.39)
Net cash flow from investing activities	(12.90)	(8.60)
Net cash flow from financing activities	38.64	53.29
Net cash generated from discontinued operation	98.11	(0.70)

* The Company has continued to charge depreciation on asset held as part of disposal, as these are proposed to be transferred to wholly owned subsidiary.

b) The carrying amount of assets and liabilities are as follows:

	As at March 31, 2019	As at March 31, 2018
Assets		
Property, plant and equipment	82.50	86.55
Capital work-in-progress	1.11	0.42
Intangible assets	1.00	1.60
Trade receivables	420.89	306.64
Loans	3.61	3.37
Inventories	237.38	108.69
Cash and bank balances*	100.06	(1.56)
Other financial assets	667.35	337.56
Other assets	123.43	107.23
Deferred Tax	71.34	58.38
Total assets	**1,708.67**	**1,008.88**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Liabilities		
Borrowings	113.63	74.99
Trade payables	464.18	319.44
Provisions	56.11	82.78
Other financial liabilities	26.68	13.41
Other liabilities	917.41	788.67
Total liabilities	**1,578.01**	**1,279.29**
Net Assets/ (liabilities)	**130.66**	**(270.41)**

*Includes balances with restricted usage Rs. 26.53 (March 31, 2018: Rs. Nil)

30 Earnings per share

	March 31, 2019	March 31, 2018
Net profit after tax attributable to the Equity shareholders		
Continuing Operations	161.02	161.14
Discontinued Operations	114.22	77.11
Total	**275.24**	**238.25**
Weighted average number of Equity shares of Rs.2/- each	119,156,300	119,156,300
Basic and diluted Earning per share (Rs.)		
Continuing Operations	13.51	13.52
Discontinued Operations	9.59	6.47
Total	**23.10**	**19.99**

31 Components of Other Comprehensive Income (OCI)

The disaggregation of changes to OCI by each type of reserve in equity is shown below:

For the year ended March 31. 2019

	Cash flow hedge Reserve	Retained Earnings	Total
Foreign exchange forward contracts	(40.05)	-	(40.05)
Reclassified to Statement of profit or loss (Net)	18.95	-	18.95
Re-measurement gains on defined benefit plans	-	0.28	0.28
Total	**(21.10)**	**0.28**	**(20.82)**

For the year ended March 31, 2018

	Cash flow hedge Reserve	Retained Earnings	Total
Foreign exchange forward contracts	0.95	-	0.95
Reclassified to Statement of profit or loss (Net)	(0.38)	-	(0.38)
Re-measurement gains on defined benefit plans	-	3.02	3.02
Total	**0.57**	**3.02**	**3.59**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

32 Contingent liabilities and commitments

A Contingent liabilities

a) During earlier years and in the current period, the Company has received demand notices/show cause-cum-demand notices from the Excise department covering period from June 2000 till June 2017 for Rs. 1,383.51 (March 31, 2018: Rs.1,376.92) (including penalty but excluding interest and further penalty thereon)These demands are of excise duty payable on inclusion of the cost of bought out items in the assessable value of certain products manufactured by the Company, though such duty paid bought out items are directly dispatched by the manufacturers thereof to the ultimate customer, without being received in the Company's factory. The Company has filed an appeal against the said orders received before CESTAT, Mumbai. Based on independent legal advice, the Company is confident of the issue being ultimately decided in its favour and accordingly no provision has been considered necessary.

b) **Taxes ***

	March 31, 2019	March 31, 2018
Excise, Customs Duty and Service tax	19.17	20.01
Sales tax	63.59	63.11
Income tax demands disputed in appellate proceedings	104.05	22.65
References/appeals preferred by the Income tax department in respect of which, should the ultimate decision be unfavourable to the Company	41.19	44.26
Others	0.10	0.09

* Excluding of interest and penalty thereon

c) **Guarantees on behalf of subsidiaries and joint ventures**

	March 31, 2019	March 31, 2018
Counter corporate guarantees issued to banks (Also refer 33)	39.29	20.38
Indemnity bonds, letter of support/comfort and corporate guarantees (Also refer 33)	253.86	241.48

The Company has issued various gurantees for performance, deposits, tender money,advances,etc. The management has considered the probability for outflow of the same to be remote and accordingly no amount has been disclosed here.

d) **Others**

	March 31, 2019	March 31, 2018
Liability for export obligations	78.82	87.65
Claims against the Company not acknowledged as debt	3.02	2.88

The timing and amount of the cash flow which will arise from these matters, will be determined by the relevant authorities on settlement of the cases or on receipt of claims from customers.

e) There are numerous interpretation issues relating to the Supreme Court judgement dated 28th February, 2019 on Provident fund. Pending clarity on this issue, the Company has not recorded any impact of the same in the accounts.

f) There are certain law suits, disputes, warranty claims, etc., including commercial matters that arises from time to time in the ordinary course of business for which amounts are not quantifiable by the management. Based on management's assessment under IND AS 37 "Provisions, Contingent Liabitities and Contingent Assets", the claims against the Company are not tenable/ probability of final outcome against the Company is low and therefore not disclosed as contingent liability.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

B Capital and other commitments

a) Liability in respect of partly paid shares Rs. 0.19 (March 31, 2018 Rs.0.19)

b) Estimated amount of contracts remaining to be executed on capital account (net of advances) and not provided for is Rs. 18.64 (March 31, 2018 Rs. 44.49). This excludes Rs 2.00 pertaining to discontinued operations.

c) Lease commitments

i. Operating lease: Company as lessee

The Company has taken office buildings and factory shed on operating lease. The tenure of such leases ranges from 1 to 5 years. Lease rentals are charged to the Statement of profit and loss for the year. There are no sub-leases. The leases are renewable on mutually agreeable terms. At the expiry of the lease term, the company has an option to terminate the agreement or extend the term by giving notice in writing.

	March 31, 2019	March 31, 2018
Lease payments for the year	11.70	15.70

	March 31, 2019	March 31, 2018
Future minimum lease rental payables under non-cancellable operating leases are as follows:		
Within one year	0.86	4.93
After one year but not more than five years	0.26	2.26
More than five years	-	-

*Future minimum lease rental payables under non-cancellable operating leases for year ended March 31, 2019 excludes Rs. Nil pertaining to discontinued operations

ii. Operating lease: Company as lessor

The Company has leased certain parts of its surplus office and buildings. The tenure of such lease agreements ranges from 1 to 5 years. All leases include a clause to enable upward revision of the rental charge on an annual basis according to prevailing market conditions. For nature of assets refer note 4(a)

	March 31, 2019	March 31, 2018
Lease received for the year*	0.76	2.28

* Lease received for the year ended March 31, 2019 excludes Rs. 1.49 pertaining to discontinued operations

	March 31, 2019	March 31, 2018
Future minimum lease rental receivable under non-cancellable operating leases are as follows:		
Within one year	-	-
After one year but not more than five years	-	-
More than five years	-	-

33 Disclosure required under Section 186(4) of Companies Act, 2013

a) Loans to related parties includes loan given to a subsidiary. The particulars of which are disclosed below as required by Sec 186(4) of Companies Act 2013.

Name of the party	Rate of interest (p.a.)	Due date and amount payable	Purpose	March 31, 2019 Amount	March 31, 2018 Amount
Thermax Engineering Construction Company Limited	10.05% (March 31, 2018: 10.15%)	October 28, 2019 : (Rs. 1) November 5, 2019: (Rs 2) December 23, 2019: (Rs.1.5) January 19, 2020: (Rs. 3)	The loan has been granted to the subsidiary for working capital requirements. The loan is repayable on demand	7.50	1.50

b) The Company has issued corporate guarantees on behalf of subsidiaries to banks. Details as below

Name of the party	March 31, 2019		March 31, 2018	
	Foreign currency (million)	Amount	Foreign currency (million)	Amount
Thermax Instrumentation Limited		18.37		9.78
Thermax Instrumentation Limited	USD 2.65	18.32	USD 1.35	8.80
Thermax Onsite Energy Solutions Limited		2.60		1.80
Total		**39.29**		**20.38**

Purpose : Bank guarantees issued favouring end customers on behalf of the subsidiaries

c) The Company has issued indemnity bonds, letter of support/comfort and corporate guarantees, counter corporate guarantees on behalf of subsidiaries. Details are given below:

Name of the party	March 31, 2019		March 31, 2018	
	Foreign currency (million)	Amount	Foreign currency (million)	Amount
Thermax Instrumentation Limited		30.00		30.00
Thermax Engineering Construction Company Limited		90.00		90.00
Thermax (Zhejiang) Cooling & Heating Engineering Company Ltd.	USD 6	41.49	USD 6	39.10
PT Thermax International Indonesia	USD 6.4	44.26	USD 5	32.59
Rifox-Hans Richter GmbH Spezialarmaturen	EUR 0.45	3.49	EUR 0.45	3.61
Thermax Denmark ApS	EUR 5.75	44.62	EUR 5.75	46.18
Total		**253.86**		**241.48**

The above guarantees have been issued for the purpose of various banking facilities for the subsidiaries.

34 Gratuity

The Company operates a defined benefit plan of gratuity for its employees. Under the gratuity plan, every employee who has completed at least specified years of service gets a gratuity on departure at 15 days (minimum) of the last drawn salary for each completed year of service. The scheme is funded with an insurance Company in the form of qualifying insurance policy. The fund has formed a trust and it is governed by the Board of Trustees.

The fund is subject to risks like changes in assets yields. In managing the plan assets, Board of Trustees reviews and manages these risks associated with the funded plan. Each year, the Board of Trustees reviews the level of funding in the gratuity plan. The Board of Trustees aim to keep annual contributions relatively stable at a level such that no plan deficits (based on valuation performed) will arise.

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Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

I **Changes in the net benefit obligation and fair value of plan assets are as follows :**

Particulars	Present value of obligation	Fair value of plan assets	Net amount
April 1, 2017	**85.16**	**(90.38)**	**(5.22)**
Current service cost	7.44	-	7.44
Interest expense/(income)	5.60	(6.44)	(0.84)
Total amount recognised in Profit or Loss	**13.04**	**(6.44)**	**6.60**
Experience adjustments	(1.04)	-	(1.04)
Actuarial loss from change in financial assumptions	(2.99)	-	(2.99)
Return on plan assets (income)	-	(0.61)	(0.61)
Total amount recognised in Other Comprehensive Income*	**(4.03)**	**(0.61)**	**(4.64)**
Employer contributions	-	(6.49)	(6.49)
Benefits paid	(10.37)	10.37	-
March 31, 2018	**83.80**	**(93.55)**	**(9.75)**
Current service cost	8.26	-	8.26
Interest expense/(income)	6.00	(7.17)	(1.17)
Total amount recognised in Profit or Loss*	**14.26**	**(7.17)**	**7.09**
Experience adjustments	(0.47)	-	(0.47)
Actuarial loss from change in financial assumptions	0.05	-	0.05
Return on plan assets (income)	-	(0.02)	(0.02)
Total amount recognised in Other Comprehensive Income*	**(0.42)**	**(0.02)**	**(0.44)**
Employer contributions	-	(4.20)	(4.20)
Benefits paid	(10.80)	10.80	-
Reclassified as part of disposal group	(27.93)	27.93	-
March 31, 2019	**58.91**	**(66.21)**	**(7.30)**

*Includes Rs. 2.27 in Profit or Loss and Rs.0.14 in Other Comprehensive Income pertaining to discontinued operations. As the liability at the year end is computed on consolidated basis, combined disclosure for continuing and discontinued operations has been presented.

II **The net liability disclosed above relates to funded plans which are as follows :**

Particulars	March 31, 2019	March 31, 2018
Present value of funded obligation	58.91	83.80
Fair value of plan assets	(66.21)	(93.55)
Surplus of funded plan	**(7.30)**	**(9.75)**

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III Significant assumptions

The principal actuarial assumptions were as follows :

Particulars	March 31, 2019	March 31, 2018
Discount rate	7.64%	7.65%
Salary growth rate	7.00%	7.00%
Normal retirement age	60 years	60 years
Mortality table	Indian Assured Lives Mortality (2012-14) Ultimate	Indian Assured Lives Mortality (2006-08) Ultimate
Employee turnover	5% to 10%	5% to 10%

IV Sensitivity analysis

The sensitivity of defined obligation to changes in the weighted principal assumptions is:

Assumption	Impact on defined benefit obligation	
	March 31, 2019	March 31, 2018
Discount rate		
1.00% increase	Decrease by 5.01	Decrease by 4.38
1.00% decrease	Increase by 5.65	Increase by 4.90
Future salary increase		
1.00% increase	Increase by 5.20	Increase by 4.47
1.00% decrease	Decrease by 4.70	Decrease by 4.07
Attrition rate		
1.00% increase	Increase by 0.15	Increase by 0.11
1.00% decrease	Decrease by 0.18	Decrease by 0.13

The above sensitivity analysis is based on a change in assumption while holding all other assumptions constant. In practice, this is unlikely to occur and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of defined benefit obligation calculated with the Projected Unit Credit Method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet.

The method and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous periods.

The following are the expected cash flows to the defined benefit plan in future years:

Particulars	March 31, 2019	March 31, 2018
Within next 12 months	10.46	12.80
Between 2-5 years	37.57	37.17
Between 6-10 years	29.37	27.20

The average duration of the defined benefit plan obligation at the end of the reporting period is 9 years (March 31, 2018: 8 years)

V The major categories of plan assets are as follows:

Particulars	March 31, 2019	March 31, 2018
Investments with Insurer (LIC of India)	100.00%	100.00%

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

35 Related party disclosures

A Subsidiaries

Unless otherwise stated, the subsidiaries have share capital consisting solely of equity shares that are held directly or indirectly by the Company, and the proportion of ownership interests held equals the voting rights held by the Company. The country of incorporation or registration is also their principal place of business.

Sr. No.	Name of the entity	Place of business/ Country of incorporation	Ownership interest March 31, 2019	Ownership interest March 31, 2018
1	Thermax Onsite Energy Solutions Limited	India	100%	100%
2	Thermax Instrumentation Limited	India	100%	100%
3	Thermax Engineering Construction Company Limited	India	100%	100%
4	Thermax Sustainable Energy Solutions Limited	India	100%	100%
5	Thermax International Limited	Mauritius	100%	100%
6	Thermax Europe Ltd.	United Kingdom	100%	100%
7	Thermax Inc.*	U.S.A.	100%	100%
8	Thermax do Brasil Energia-e Equipamentos Ltda.	Brazil	100%	100%
9	Thermax (Zhejiang) Cooling & Heating Engineering Company Ltd.	China	100%	100%
10	Thermax Netherlands B.V.	Netherlands	100%	100%
11	Thermax Denmark ApS*	Denmark	100%	100%
12	Danstoker A/S*	Denmark	100%	100%
13	Ejendomsanp artsselskabet Industrivej Nord 13*	Denmark	100%	100%
14	Boilerworks A/S*	Denmark	100%	100%
15	Boilerworks Properties ApS Industrivej*	Denmark	100%	100%
16	Danstoker Poland S.p.Z.o.o. *	Poland	100%	100%
17	Rifox-Hans Richter GmbH Spezialarmaturen	Germany	100%	100%
18	Thermax Sdn. Bhd	Malaysia	100%	100%
19	Thermax Engineering Singapore Pte. Ltd.	Singapore	100%	100%
20	PT Thermax International*	Indonesia	100%	100%
21	Thermax Hong Kong Limited	Hong Kong	100%	100%
22	Thermax Senegal S.A.R.L.*	Senegal	100%	100%
23	First Energy Private Limited	India	76%	76%
24	Thermax Energy and Environment Philippines Corporation *	Philippines	100%	100%
25	Thermax Energy & Environment Lanka (Private) Limited *	Sri Lanka	100%	100%
26	Thermax Nigeria Limited*	Nigeria	100%	100%
27	Thermax Babcock & Wilcox Energy Solutions Private Limited (note 5)	India	100%	
28	Thermax SPX Energy Technologies Limited (note 5)	India	100%	
29	Thermax Engineering Construction FZE *	Nigeria	100%	NA
30	Thermax Employee ESOP and Welfare Trust**	India	-	

* Held indirectly

** The Company has all ESOP trust and Employee Welfare Trusts set up for the welfare of the employees. Pursuant to the arrangement between the Trusts and the Company, the Company has determined that it has power to direct the relevant activities of the trust while being exposed to variable returns from its involvement with these entities.

B Holding Company

Sr. No.	Name of the entity	Place of business/ Country of incorporation	Ownership interest March 31, 2019	Ownership interest March 31, 2018
1	RDA Holdings Private Limited	India	53.99%	53.99%

C Joint Ventures

Sr. No.	Name of the entity	Place of business/ Country of incorporation	Ownership interest March 31, 2019	Ownership interest March 31, 2018
1	Thermax Babcock & Wilcox Energy Solutions Private Limited (note 5)	India		51%
2	Thermax SPX Energy Technologies Limited (note 5)	India		51%

D Individuals having significant influence over the Company by reason of voting power and their relatives:

1 Mrs. Meher Pudumjee - Chairperson
2 Mrs. Anu Aga - Director (Retired on August 8, 2018)
3 Mr. Pheroz Pudumjee - Director
4 Mr. Zahaan Pudumjee - Relative of Chairperson / Director

E Key Management Personnel:

1 Mr. M S Unnikrishnan - Managing Director and Chief Executive Officer
2 Dr Raghunath A. Mashelkar - Independent Director (Retired on August 8, 2018)
3 Dr Valentin A. H. von Massow - Independent Director
4 Dr Jairam Varadaraj - Independent Director
5 Mr. Nawshir Mirza - Independent Director
6 Mr. Harsh Mariwala - Independent Director
7 Mr. Sashishekhar (Ravi) Balakrishna Pandit - Independent Director
8 Mrs. Rajani Kesari-Independent Director (w.e.f. November 14, 2018)
9 Mr. Amitabha Mukhopadhyay - Chief Financial Officer
10 Mr. Kedar Phadke - Company Secretary

F Enterprises with whom transactions have taken place during the year, over which control is exercised by individuals listed in 'D' and 'E' above:

1 Thermax Foundation, India
2 ARA Trusteeship Company Private Limited, India
3 Marico Limited, India
4 Aster DM Healthcare Limited, India
5 Elgi Ultra Industries Limited, India

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

G Transactions with related parties for the year ended March 31, 2019:

	Subsidiaries		Joint Ventures		Enterprises over which control is exercised by Individuals having Significant influence over the company and Key Management Personnel		Key Management Personnel and Individuals having Significant influence over the company mentioned in D		Total	
	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations
a. Transactions during the year										
Revenue from contracts with customers	149.23	1.11	-	-	1.07	-	-	-	**150.30**	**1.11**
Commission income	0.21	-	-	-	-	-	-	-	**0.21**	**-**
Miscelleneous income	0.77	0.95	-	0.36	-	-	-	-	**0.77**	**1.31**
Interest income	0.34	-	-	-	-	-	-	-	**0.34**	**-**
Dividend income	10.00	-	-	-	-	-	-	-	**10.00**	**-**
Recovery of expenses	10.31	3.21	-	-	-	-	-	-	**10.31**	**3.21**
Purchase of raw material and components	0.91	5.77	15.16	-	-	-	-	-	**16.07**	**5.77**
Site expenses and contract labour charges	23.44	15.66	-	-	-	-	-	-	**23.44**	**15.66**
Reimbursement of expenses^	10.34	6.21	-	-	-	-	-	-	**10.34**	**6.21**
Rendering of support services	2.43	-	-	-	-	-	-	-	**2.43**	**-**
Remuneration to key management personnel*	-	-	-	-	-	-	6.17	-	**6.17**	**-**
Donation	-	-	-	-	7.60	-	-	-	**7.60**	**-**
Purchase of property, plant and equipment	-	0.28	-	-	-	-	-	-	**-**	**0.28**
Investment in Equity shares	138.60	-	-	-	-	-	-	-	**138.60**	**-**
Investment in Preference shares	52.70	-	-	-	-	-	-	-	**52.70**	**-**
Loan given	6.00	-	-	-	-	-	-	-	**6.00**	**-**
Director's sitting fees	-	-	-	-	-	-	0.50	-	**0.50**	**-**
Commission paid	-	-	-	-	-	-	3.46	-	**3.46**	**-**
Rent paid	0.63	-	-	-	-	-	0.44	-	**1.07**	**-**

* Does not include gratuity and leave encashment since the same is calculated for all employees of the company as a whole.
^Includes free of cost supplies of Rs. 4.61 (March 31, 2018 Rs. Nil)
Note: Dividend paid to RDA Holdings Private Limited, India is Rs. 38.60 and to Employee welfare and ESOP trusts Rs 3.92

	Subsidiaries		Joint Ventures		Enterprises over which control is exercised by Individuals having Significant influence over the company and Key Management Personnel		Key Management Personnel and Individuals having Significant influence over the company mentioned in D		Total	
	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations
b. Balances as at reporting date										
Trade receivables	45.80	4.09	-	-	0.07	-	-	-	**45.87**	**4.09**
Interest accrued	0.17	-	-	-	-	-	-	-	**0.17**	**-**
Advances given	11.52	2.66	-	-	-	-	-	-	**11.52**	**2.66**
Loans given (including security deposit)	7.50	-	-	-	-	-	0.53	-	**8.03**	**-**
Trade payables	27.76	5.93	-	-	-	-	-	-	**27.76**	**5.93**
Advances received	3.79	-	-	-	-	-	-	-	**3.79**	**-**
Guarantee /letter of comfort given on behalf of subsidiaries and joint ventures	293.15	-	-	-	-	-	-	-	**293.15**	**-**

H Transactions with related parties for the year ended March 31, 2018:

	Subsidiaries		Joint Ventures		Enterprises over which control is exercised by Individuals having Significant influence over the company and Key Management Personnel		Key Management Personnel and Individuals having Significant influence over the company mentioned in D		Total	
	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations	Continuing operations	Discontinued operations
a. Transactions during the year										
Sale of products and services	118.80	0.08	0.07	-	-	-	-	-	**118.87**	**0.08**
Commission income	0.16	-	-	-	-	-	-	-	**0.16**	**-**
Miscelleneous income	0.66	0.61	3.92	0.36	-	-	-	-	**4.58**	**0.97**
Interest income	1.48	-	-	-	-	-	-	-	**1.48**	**-**
Recovery of expenses	8.21	1.01	-	-	-	-	-	-	**8.21**	**1.01**
Purchase of raw material and components	2.51	-	8.48	1.07	-	-	-	-	**10.99**	**1.07**
Site expenses and contract labour charges	28.67	73.13	-	-	-	-	-	-	**28.67**	**73.13**
Reimbursement of expenses	5.06	2.84	-	-	-	-	-	-	**5.06**	**2.84**
Remuneration to key management personnel*	-	-	-	-	-	-	5.65	-	**5.65**	**-**
Donation	-	-	-	-	8.65	-	-	-	**8.65**	**-**
Purchase of property, plant and equipment	-	-	-	0.60	-	-	-	-	**-**	**0.60**
Investment in Equity	20.33	-	-	-	-	-	-	-	**20.33**	**-**
Investment in Preference shares	6.00	-	-	-	-	-	-	-	**6.00**	**-**
Loan (recovered) / given	(29.50)	-	-	-	-	-	-	-	**(29.50)**	**-**
Director's sitting fees	-	-	-	-	-	-	0.40	-	**0.40**	**-**
Commission paid	0.66	-	-	-	-	-	2.79	-	**3.45**	**-**
Rent paid	0.60	0.05	-	-	-	-	0.39	-	**0.99**	**0.05**

* Does not include gratuity and leave encashment since the same is calculated for all employees of the company as a whole.
Note: Dividend paid to RDA Holdings Private Limited, India is Rs. 38.60 and to Employee welfare and ESOP trusts Rs 3.92

	Subsidiaries	Joint Ventures	Enterprises over which control is exercised by Individuals having Significant influence over the company and Key Management Personnel	Key Management Personnel and Individuals having Significant influence over the company mentioned in D	Total
b. Balances as at March 31, 2018					
Trade receivables	35.62	1.51	-	-	**37.13**
Advances given	0.46	1.29	-	-	**1.75**
Loans given (including security deposit)	1.50	-	-	0.53	**2.03**
Trade payables	35.80	1.31	-	-	**37.11**
Advances received	1.11	0.01	-	-	**1.12**
Guarantee /letter of comfort given on behalf of subsidiaries and joint ventures	241.48	-	-	-	**261.86**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

I **Related party transactions include transactions pertaining to the following parties with whom the transactions are considered to be individually significant (percentage of the transactions being 10% or more of the total of transactions given in note 'G' and 'H' above):**

Particulars	March 31, 2019	March 31, 2018
Transactions during the year		
Sale of product and services		
Thermax Inc., U.S.A.	93.02	73.75
Thermax Europe Limited., U.K	25.43	27.88
Thermax Onsite Energy Solutions Limited, India	11.91	12.26
Commission income		
Thermax Engineering Construction Company Limited, India	0.12	0.14
Thermax Instrumentation Limited, India	0.08	-
Miscellaneous income		
Thermax Engineering Construction Company Limited, India	0.87	0.61
Thermax Instrumentation Limited, India	0.61	0.58
Thermax SPX Energy Technologies Limited, India	0.36	4.27
Interest income		
Thermax Engineering Construction Company Limited, India	0.34	1.48
Dividend income		
Thermax Engineering Construction Company Limited, India	10.00	-
Recovery of expenses		
Thermax Engineering Construction Company Limited, India	2.90	1.83
Thermax Instrumentation Limited, India	5.64	4.39
Thermax Senegal S.A.R.L, Senegal	-	1.22
Purchase of raw material and components		
Thermax (Zhejiang) Cooling & Heating Engineering Company Limited., China	0.24	1.97
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	5.77	1.09
Thermax SPX Energy Technologies Limited, India	15.16	8.46
Site expenses and contract labour charges		
Thermax Engineering Construction Company Limited, India	12.56	73.13
Thermax Instrumentation Limited, India	23.40	28.67
Reimbursement of expenses		
Thermax Engineering Construction Company Limited, India	4.46	0.95
Thermax Instrumentation Limited, India	0.63	0.87
Thermax Europe Limited., U.K	1.89	1.37
Thermax Sdn. Bhd, Malaysia	2.92	2.31
Thermax Inc., U.S.A.	4.93	1.12

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	March 31, 2019	March 31, 2018
Rendering of support services		
Thermax Energy and Environment Philippines Corporation	2.43	-
Remuneration to key management personnel, excluding commission		
Mr. M. S. Unnikrishnan	3.63	3.47
Mr. Amitabha Mukhopadhyay	2.23	2.01
Donation		
Thermax Foundation, India	7.60	8.65
Purchase of property, plant and equipment		
Thermax Engineering Construction Company Limited, India	0.28	-
Thermax Babcock & Wilcox Energy Solutions Private Ltd., India	-	0.60
Investment in Equity		
Thermax Babcock & Wilcox Energy Solutions Private Ltd., India	50.34	-
Thermax Engineering Singapore Pte. Ltd., Singapore	37.35	6.46
Thermax Netherlands B.V.	43.66	13.88
Investment in Preference share		
First Energy Private Limited, India	-	6.00
Thermax Babcock & Wilcox Energy Solutions Private Ltd., India	52.70	-
Loan (recovered) / given		
Thermax Engineering Construction Company Limited, India	6.00	(29.50)
Directors sitting fees		
Mrs. Meher Pudumjee	0.07	0.06
Mrs. Anu Aga	0.02	0.04
Mr. Pheroz Pudumjee	0.09	0.07
Dr Valentin A. H. von Massow	0.07	0.07
Dr Jairam Varadaraj	0.08	0.06
Mr. Nawshir Mirza	0.06	0.05
Commission paid		
Mrs. Meher Pudumjee	0.45	0.35
Mrs. Anu Aga	-	0.14
Mr. Pheroz Pudumjee	0.20	0.15
Dr Valentin A. H. von Massow	0.30	0.30
Dr Jairam Varadaraj	0.15	0.11
Mr. Nawshir Mirza	0.35	0.30

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	March 31, 2019	March 31, 2018
Mr. Harsh Mariwala	0.20	0.17
M. S. Unnikrishnan	1.60	1.10
Commission paid		
Thermax Energy and Environment Philippines Corporation, Philippines	-	0.66
Rent paid		
Mrs. Meher Pudumjee	0.13	0.12
Mrs. Anu Aga	0.18	0.15
Mr. Pheroz Pudumjee	0.13	0.12
Thermax Instrumentation Limited, India	0.63	0.59
Balances as at year end		
Trade receivables		
Thermax Inc., U.S.A.	15.70	12.38
Thermax Europe Limited., U.K	12.95	9.25
Thermax Onsite Energy Solutions Limited, India	4.95	4.60
Thermax Engineering Construction Company Limited, India	2.67	3.99
Interest accrued		
Thermax Engineering Construction Company Limited, India	0.17	-
Advances given		
Thermax Instrumentation Limited, India	10.71	0.46
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	1.50	-
Thermax SPX Energy Technologies Limited, India	0.81	1.29
Loans given (including security deposit)		
Thermax Engineering Construction Company Limited, India	7.50	1.50
Trade payables		
Thermax Instrumentation Limited, India	16.43	19.52
Thermax Engineering Construction Company Limited, India	4.08	10.71
Advances received		
Thermax Onsite Energy Solutions Limited, India	1.16	0.97
PT Thermax International, Indonesia	2.63	0.14
Guarantee/ Letter of comfort given on behalf of subsidiaries and joint ventures*	293.15	261.86

* For details of guarantee/ letter of comfort given on behalf on subsidiaries and joint ventures, refer note 33

J Loans and advances in the nature of loans given to subsidiaries and firms/ Companies in which directors are interested:

Particulars	March 31, 2019	March 31, 2018
Thermax Engineering Construction Company Limited, India		
Balance outstanding	7.50	1.50
Maximum amount outstanding during the year	7.50	31.00

K Terms and conditions of related party transactions

The sales to and purchases from related parties are assessed to be at arm's length transactions by the management. Outstanding balances at the year-end are unsecured and interest free and settlement occurs in cash.

There have been no guarantees provided or received for any related party receivables or payables. For the year ended March 31, 2019, the Company has not recorded any impairment of receivables relating to amounts owed by related parties (March 31, 2018: Rs. Nil). This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates. All outstanding balances are unsecured and repayable in cash.

36 Segment information

In accordance with para 4 of Ind AS 108 "Operating Segments", the Company has disclosed segment information in the consolidated financial statements.

37 Fair value measurements

a) Category of financial instruments and valuation techniques

Details of financial assets carried at amortised cost

	As at March 31, 2019	As at March 31, 2018
Trade receivables	897.45	1,195.33
Loans	24.63	22.44
Other financial assets	410.60	513.57
Cash and cash equivalents	92.88	118.53
Bank balances other than cash and cash equivalents	25.88	0.82
Total	**1,451.44**	**1,850.69**
Current assets	1,378.75	1,777.39
Non-current assets	72.69	73.30
Total	**1,451.44**	**1,850.69**

The management has assessed that the carrying amounts of the above financial instruments appoximate their fair values.

Details of financial assets carried at fair value through profit and loss

	As at March 31, 2019	As at March 31, 2018
Investments	766.85	1,240.93
Total	**766.85**	**1,240.93**
Current assets	656.92	1,156.51
Non-current assets	109.93	84.42
Total	**766.85**	**1,240.93**

The fair values of the quoted shares and mutual funds are based on price quotations at the reporting date.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Details of derivative assets

	As at March 31, 2019	As at March 31, 2018
Derivative instruments		
Cash flow hedges		
Foreign exchange forward contracts	33.41	2.69
Derivative not designated as hedges		
Foreign exchange forward contracts	5.92	1.58
Total	**39.33**	**4.27**
Current assets	39.33	4.27
Non-current assets	-	-
Total	**39.33**	**4.27**

Details of financial liabilities carried at amortised cost

	As at March 31, 2019	As at March 31, 2018
Borrowings	40.00	116.49
Trade payable	830.72	967.42
Employee related payables	38.39	50.56
Other liabilities	36.46	65.61
Total	**945.57**	**1,200.08**
Current liabilities	912.68	1,174.36
Non current liabilities	32.89	25.72
Total	**945.57**	**1,200.08**

The management has assessed that the carrying amounts of the above financial instruments appoximate their fair values.

The Company enters into derivative financial instruments with banks. Foreign exchange forward contracts are valued using valuation techniques, which employs the use of market observable inputs which captures credit quality of counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies and currency basis spreads between the respective currencies. All derivative contracts are fully cash collateralised, thereby eliminating both counterparty and the Company's own non-performance risk. The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationships and other financial instruments recognised at fair value.

Details of derivative liabilities

	As at March 31, 2019	As at March 31, 2018
Derivative instruments		
Cash flow hedges		
Foreign exchange forward contracts	21.21	2.26
Derivative not designated as hedges		
Foreign exchange forward contracts	0.85	1.27
Total	**22.06**	**3.53**
Current liabilities	22.06	3.53
Non-current liabilities	-	-
Total	**22.06**	**3.53**

b) Fair value hierarchy

The following table provides the fair value measurement hierarchy of the Company's assets and liabilities.

Quantitative disclosures of fair value measurement hierarchy for assets as at March 31, 2019

	Date of valuation	Level 1	Level 2	Level 3 *
Financial assets				
Investments				
Equity instruments	March 31, 2019	0.18	-	-
Preference shares	March 31, 2019	-	-	65.65
Mutual funds	March 31, 2019	-	701.02	-
Derivative financial assets	March 31, 2019	-	39.33	-
Financial liabilities				
Derivative financial liabilities	March 31, 2019	-	22.06	-

Quantitative disclosures of fair value measurement hierarchy for assets as at March 31, 2018

	Date of valuation	Level 1	Level 2	Level 3 *
Financial assets				
Investments				
Equity instruments	March 31, 2018	0.29	-	-
Preference shares	March 31, 2018	-	-	18.68
Mutual funds	March 31, 2018	-	1,221.96	-
Derivative financial assets	March 31, 2018	-	4.27	-
Financial liabilities				
Derivative financial liabilities	March 31, 2018	-	3.53	-

There has been no transfer between Level 1 and Level 2 during the year.

Valuation of financial assets in Level 3 has been done based on discounting of future cash flows. There are no changes from previous year.

* The movement in Level 3 is on account of additional Investment in Preference shares, provision for impairment and Interest accretion.

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Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

38 (a) Financial risk management

The Company's principal financial liabilities, other than derivatives, comprise trade and other payables and borrowings. The main purpose of these financial liabilities is to finance the Company's operations. The Company's principal financial assets include loans, trade and other receivables and cash and cash equivalents that derive directly from its operations. The Company also holds FVTPL investments and enters into derivative transactions.

Risk is inherent in the Company's activities but it is managed through a process of ongoing identification, measurement and monitoring, subject to risk limits and other controls. This process of risk management is critical to the Company's continuing profitability and each individual within the Company is accountable for the risk exposures relating to his or her responsibilities. The Company is exposed to market risk, credit risk and liquidity risk.

The Company's Board of Directors is ultimately responsible for the overall risk management approach and for approving the risk strategies and principles. No significant changes were made in the risk management objectives and policies during the years ended March 31, 2019 and March 31, 2018. The management of the Company reviews and agrees policies for managing each of these risks which are summarised below:

I Market risk

Market risk is the risk that the value of an asset will fluctuate as a result of changes in market variables such as interest rates, foreign exchange rates and equity prices, whether those changes are caused by factors specific to the individual investment or its issuer or factors affecting all investments traded in the market.

Market risk is managed on the basis of pre-determined asset allocations across various asset categories, diversification of assets in terms of geographical distribution and industry concentration, a continuous appraisal of market conditions and trends and management's estimate of long and short term changes in fair value.

a Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Company is not currently exposed significantly to such risk.

b Foreign currency risk

Foreign exchange risk arises when future commercial transactions and relevant assets and liabilities are denominated in a currency that is not the Company's functional currency. Foreign exchange risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.

Foreign exchange risk is managed on the basis of limits determined by management and a continuous assessment of current and expected exchange rate movements and entering into derivative contracts(foreign currency forward contracts) that hedge the maximum period of exposure of underlying transactions (i.e. highly probable forecast sales and purchases).

When a derivative is entered into for the purpose of being a hedge, the Company negotiates the terms of those derivatives to match the terms of the hedged exposure. For hedges of forecast transactions the derivatives cover the period of exposure from the point the cash flows of the transactions are forecasted up to the point of settlement of the resulting receivable or payable that is denominated in the foreign currency.

Foreign currency sensitivity

The following table demonstrates the sensitivity to a reasonably possible change in USD, SEK, EUR and JPY exchange rates, with all other variables held constant. The impact on the Company's profit before tax is due to changes in the fair value of monetary assets and liabilities including foreign currency derivatives not designated as cash flow hedge and foreign currency derivatives with underlying foreign currency monetary assets/liabilities designated as cash flow hedge. The impact on the Company's pre-tax equity is due to changes in the fair value of forward exchange contracts designated as cash flow hedges.

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	Impact on profit before tax		Impact on other components of equity	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
USD Sensitivity				
INR/ USD - Increase by 1%	0.01	0.17	(1.25)	(8.07)
INR/ USD - Decrease by 1%	(0.01)	(0.17)	1.25	8.07
SEK Sensitivity				
INR/ SEK - Increase by 1%	0.02	0.08	0.14	-
INR/ SEK - Decrease by 1%	(0.02)	(0.08)	(0.14)	-
EURO Sensitivity				
INR/ EUR - Increase by 1%	(0.07)	0.07	(0.18)	-
INR/ EUR - Decrease by 1%	0.07	(0.07)	0.18	-
JPY Sensitivity				
INR/ JPY - Increase by 1%	(0.06)	0.12	-	-
INR/ JPY - Decrease by 1%	0.06	(0.12)	-	-

Favourable impact shown as positive and adverse impact as negative.

The exposure to other foreign currencies is not significant to the Company's financial statements.

c Price risk

The Company's equity securities are susceptible to market price risk arising from uncertainties about future values of the investment securities. These securities are unquoted. The Company manages the equity price risk through diversification and by placing limits on individual and total equity instruments. Reports on the equity portfolio are submitted to the Company's senior management on a regular basis. The Company's Board of Directors reviews and approves all equity investment decisions.

As at balance sheet, the exposure to equity shares at fair value was Rs.0.18 (March 31, 2018: Rs 0.29). At the reporting date, an increase / decrease of 10% market index would have a impact of approx gain / loss of Rs. 0.02 (March 31, 2018: Rs 0.03) respectively on Statement of profit and loss.

II Credit risk

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Company is exposed to credit risk from its operating activities (primarily trade receivables and contract assets) and from its financing activities, including deposits with banks, foreign exchange transactions and other financial instruments.

Trade receivables

Customer credit risk is managed by each business unit subject to the Company's established policy, procedures and control relating to customer credit risk management. An impairment analysis is performed at each reporting date on an individual basis for major clients. In addition, a large number of minor receivables are grouped into homogenous group and assessed for impairment collectively. The calculation is based on losses as per historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in notes 7 and 9(b) above. The charge of impairment to Statement of profit and loss is diclosed in note 28(a) above. The Company evaluates the concentration of risk with respect to trade receivables as low, as its customers are located in several jurisdictions and industries and operate in largely independent markets.

Financial instruments and bank deposits

Credit risk from balances with banks, mutual funds, loans and other financial assets are managed by the Company's treasury department in accordance with the Company's policy. Investments of surplus funds are made only with approved counterparties having a good market reputation and within credit limits assigned to each counterparty. The limits are set to minimise the concentration of risks and therefore mitigate financial loss through counterparty's potential failure to make payments.

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

The Company's maximum exposure to credit risk for bank balances and deposits as at March 31, 2019 and March 31, 2018 is the carrying amounts as disclosed in Note 9(a) and 13, maximum exposure relating to financial guarantees is disclosed in note 33 and financial derivative instruments in notes 9(b) and 17(b) to the financial statements.

III Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. Due to the dynamic nature of the underlying businesses, company treasury maintains flexibility in funding by maintaining availability under committed credit lines.

The management monitors rolling forecasts of the Company's liquidity position (comprising the undrawn borrowing facilities below) and cash and cash equivalents on the basis of expected cash flows. This is generally carried out at operating segments level in the Company in accordance with practice and limits set by the Company. In addition, the Company's liquidity management policy involves projecting future cash flows and considering the level of liquid assets necessary to meet these and monitoring balance sheet liquidity ratios against internal requirements.

(i) Maturities of financial liabilities

The tables below summarises the Company's financial liabilities into relevant maturity profile based on contractual undiscounted payments :

March 31, 2019	< 1 year	1 to 3 years	> 3 years
Non-derivative			
Borrowings	40.00	-	-
Trade Payables	798.94	31.78	-
Other financial liabilities			
Unpaid dividend	0.98	-	-
Other payables	72.76	1.11	-
Derivatives (net settled)			
Foreign exchange forward contracts	22.06	-	-
March 31, 2018	**< 1 year**	**1 to 3 years**	**> 3 years**
Non-derivative			
Borrowings	116.49	-	-
Trade Payables	943.12	24.30	-
Other financial liabilities			
Unpaid dividend	0.81	-	-
Other payables	113.94	1.42	-
Derivatives (net settled)			
Foreign exchange forward contracts	3.53	-	-

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38 (b) Hedging activities and derivatives

Cash flow hedges

Foreign currency risk

Foreign exchange forward contracts measured at fair value through OCI are designated as hedging instruments in cash flow hedges of forecast sales in USD, EUR, SEK and forecast purchases in USD, SEK, JPY. These forecast transactions are highly probable, and fully cover the Company's expected future sales and future purchases based on the orders received.

While the Company also enters into other foreign exchange forward contracts with the intention to reduce the foreign exchange risk of expected sales and purchases, these other contracts are not designated in hedge relationships and are measured at fair value through profit or loss.

The foreign exchange forward contract balances vary with the level of expected foreign currency sales and purchases and changes in foreign exchange forward rates.

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Fair Value of Foreign exchange forward contracts designated as hedging instruments	39.33	(22.06)	4.27	(3.53)

The terms of the foreign currency forward contracts match the terms of the expected highly probable forecast transactions. As a result, no hedge ineffectiveness arise requiring recognition through profit or loss. Notional amounts are as mentioned below.

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Cash flow hedge				
Foreign exchange forward contracts	488.86	(256.12)	995.53	(9.30)
Derivatives not designated as hedges				
Foreign exchange forward contracts	207.65	(20.00)	318.22	(82.44)

All the derivative contracts mature within the next 12 months.

The cash flow hedges of the expected future sales during the year ended March 31, 2019 were assessed to be highly effective and a net unrealised gain of Rs. 13.32 (March 31, 2018: Rs .0.26), with a deferred tax liability of Rs.4.65 (March 31, 2018: Rs 0.09) relating to the hedging instruments, is included in OCI.

The cash flow hedges of the expected future purchases during the year ended March 31, 2018 were assessed to be highly effective, and as at 31 March 2019, a net unrealised loss of Rs. 11.42 (March 31, 2018: Rs. Nil) with a related deferred tax asset of Rs.3.99 (March 31, 2018: Rs Nil) was included in OCI in respect of these contracts.

The amounts retained in OCI at March 31, 2019 are expected to mature and affect the Statement of profit and loss within the next 12 months .Reclassifications to profit or loss during the year gains or losses included in OCI are shown in Note 31.

39 Capital Management

The Company's objective for capital management is to maximise shareholder value, safeguard business continuity and support the growth of the Company. The Company determines the capital requirement based on annual operating plans and long- term and other strategic investment plans. The funding requirements are met through equity and operating cash flows generated. No changes were made in the objectives, policies or processes during the years ended March 31, 2019 and March 31, 2018. Capital represents equity attributable to equity holders of the Parent Company.

	March 31, 2019	March 31, 2018
Borrowings	40.00	116.49
Trade payables	830.72	967.42
Book overdraft	22.19	37.90
Less: Cash and cash equivalents	(118.76)	(119.35)
Net debt	**774.15**	**1,002.46**
Equity	2,735.85	2,565.56
Capital and net debt	**3,510.00**	**3,568.02**
Gearing ratio	**1 : 4.53**	**1 : 3.56**

Notes to the standalone financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

40 Exceptional Item

	March 31, 2019	March 31, 2018
Impairment of investment in subsidiaries *		
Thermax (Zhejiang) Cooling and Heating Engineering Co Ltd.	15.42	20.00
Thermax Netherlands B.V.	126.38	-
First Energy Private Limited - Equity shares	0.76	-
First Energy Private Limited - Preference shares	11.93	-
Thermax SPX Energy Technologies Limited	5.20	5.00
Reversal of Impairment of investment in subsidiaries		
Thermax Babcock & Wilcox Energy Solutions Private Limited #	(111.84)	-
	47.85	**25.00**

* Considering the current market scenario and performance of certain subsidiaries, the Company has accounted for impairment on certain investments in subsidiaries.

Subsequent to the acquisition of TBWES, as part of organisational restructuring the Board of Directors of the Company at its meeting held on February 8, 2019, subject to share holders approval, have approved the transfer of Boilers & Heaters (B&H) division of Thermax Limited to TBWES on a going concern basis through slump sale. The consideration for the transaction will be at book value of B&H division. In view of the expected business synergies, available order book and current and expected performance of B&H business, management has assessed the carrying value of Investments in TBWES in financial statements and have accordingly reversed the earlier impairment loss of Rs 111.84 (disclosed as exceptional item).

41 Standards issued but not yet effective

(a) Ind AS 116, Leases:

Ind AS 116 Leases was notified on March 30, 2019 and it replaces Ind AS 17 Leases, including appendices thereto. Ind AS 116 is effective for period beginning on or after April 1, 2019. It sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under Ind AS 17. The Standard includes two recognition exemptions for lessees – leases of 'low-value' assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessor accounting under Ind AS 116 is substantially unchanged from current accounting under Ind AS 17. Lessors will continue to classify all leases using the same classification principle as in Ind AS 17 and distinguish between two types of leases: operating and finance leases.

The Company continues to evaluate the available transition methods and its contractual arrangements. The ultimate impact on lease accounting from the application of Ind AS 116 will be subject to assessments that are dependent on many variable including, but not limited to, composition of the lease portfolio and the relevant discount rates at the date of adoption. The Company is in the process to evaluate the changes to accounting system and processes, and additional disclosure requirements that may be necessary.

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(b) Others:

Standards	Impacts
• Appendix C to Ind AS 12 Uncertainty over Income Tax Treatment • Ind AS 19 Employee Benefits • Ind AS 23 Borrowing Costs • Ind AS 28 Investments in Associates and Joint Ventures • Ind AS 109 Financial Instruments • Ind AS 111 Joint Arrangements	These amendments are unlikely to affect materially the Company's financial statements

42 Event after reporting date

There are no significant events that occurred after reporting date

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

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INDEPENDENT AUDITOR'S REPORT

To the Members of Thermax Limited

Report on the Audit of the Consolidated Ind AS Financial Statements

Opinion

We have audited the accompanying consolidated Ind AS financial statements of Thermax Limited (hereinafter referred to as "the Holding Company"), its subsidiaries (the Holding Company and its subsidiaries together referred to as "the Group") and its joint ventures comprising of the consolidated Balance sheet as at March 31 2019, the consolidated Statement of Profit and Loss, including other comprehensive income, the consolidated Cash Flow Statement and the consolidated Statement of Changes in Equity for the year then ended and notes to the consolidated Ind AS financial statements, including a summary of significant accounting policies and other explanatory information (hereinafter referred to as "the consolidated Ind AS financial statements").

In our opinion and to the best of our information and according to the explanations given to us and based on the consideration of reports of other auditors on separate financial statements and on the other financial information of the subsidiaries and joint ventures, the aforesaid consolidated Ind AS financial statements give the information required by the Companies Act, 2013, as amended ("the Act") in the manner so required and give a true and fair view in conformity with the accounting principles generally accepted in India, of the consolidated state of affairs of the Group, its joint ventures as at March 31, 2019, their consolidated profit including other comprehensive income, their consolidated cash flows and the consolidated statement of changes in equity for the year ended on that date.

Basis for Opinion

We conducted our audit of the consolidated Ind AS financial statements in accordance with the Standards on Auditing (SAs),as specified under section 143(10) of the Act. Our responsibilities under those Standards are further described in the 'Auditor's Responsibilities for the Audit of the Consolidated Ind AS Financial Statements' section of our report. We are independent of the Group in accordance with the 'Code of Ethics' issued by the Institute of Chartered Accountants of India together with the ethical requirements that are relevant to our audit of the financial statements under the provisions of the Act and the Rules thereunder, and we have fulfilled our other ethical responsibilities in accordance with these requirements and the Code of Ethics. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion on the consolidated Ind AS financial statements.

Emphasis of Matter

We draw attention to note 31A(a) of the consolidated Ind AS financial statements relating to the demand orders/ show cause notice on the Holding Company of the Group for Rs. 1,383.51 crores (including penalty of Rs. 325.29 crores and excluding interest not presently quantified) by the Commissioner of Central Excise, Pune. The Holding Company of the Group has filed an appeal against the said orders and filed replies to the show cause notice cum demand notice. Our opinion is not qualified in respect of this matter.

Key Audit Matters

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated Ind AS financial statements for the financial year ended March 31, 2019. These matters were addressed in the context of our audit of the consolidated Ind AS financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters. For each matter below, our description of how our audit addressed the matter is provided in that context.

We have determined the matters described below to be the key audit matters to be communicated in our report. We have fulfilled the responsibilities described in the Auditor's responsibilities for the audit of the consolidated Ind AS financial

statements section of our report, including in relation to these matters. Accordingly, our audit included the performance of procedures designed to respond to our assessment of the risks of material misstatement of the consolidated Ind AS financial statements. The results of audit procedures performed by us and by other auditors of components not audited by us, as reported by them, provide the basis for our audit opinion on the accompanying consolidated Ind AS financial statements.

Key audit matters	How our audit addressed the key audit matter
Revenue recognition for Engineering, Procurement and Constructions contracts *(as described in note 21(c) of the consolidated Ind AS financial statements)*	
The Holding company's significant portion of business is undertaken through Engineering, Procurement and Construction (EPC) contracts. Revenue from these contracts is recognized over a period of time in accordance with the requirements of Ind AS 115, Revenue from Contracts with Customers. Due to the nature of the contracts, revenue is accounted over a period of time (using input method) which requires identification of performance obligations, significant judgement with regards to determining contract costs incurred to date compared to estimated total contract costs, the Company's rights to receive payments for performance completed till date, changes in scope and consequential revised contract price and recognition of the liability for onerous contracts. Revenues and profits for the year under audit, may deviate significantly on account of change in such judgements and estimates. Revenue from such contracts amounted to Rs. 3,930.67 crores.	Our audit procedures included the following: • We understood the Holding Company policies and processes, control mechanisms and methods in relation to the revenue recognition for these contracts and evaluated the design and operative effectiveness of the financial controls from the above through our test of control procedures • We evaluated management's estimates and assumptions for a selected (risk-based method) sample contracts. We inspected the underlying documents which form the basis of revenue recognition under the input method. We evaluated the management's process to recognize revenue over a period of time, total cost estimates, status of the projects and re-calculated the arithmetic accuracy of the same • Amongst others, for a sample of contracts, we performed the following procedures: • Provision for liquidated damages: Our procedures involved discussions with management and project teams to understand the status of the project and on-going discussions with the customers in terms of likelihood of imposing any contractual penalties and analyzed the above through inspection of the relevant documents and correspondences • Contingency provisions: We understood the management's estimate and rationale for provision movement during the year. We analyzed the movement throughout the life of the contract, and discussed progress to date with individual project teams to determine whether the remaining contingency was sufficient to cover residual risks on the project • Assessment of costs-to-complete: We performed analytical procedures on balance cost estimation,

Key audit matters	How our audit addressed the key audit matter
	tested the historical accuracy of previous forecasts and discussed variances with project teams. We tested that the costs incurred were accrued at year end and also tested the assumptions for balance costs-to-complete • We performed analytical procedures and checked exceptions for contracts with low or negative margins, loss making contracts, contracts with significant changes in cost estimates, probable penalties due to delay in contract execution and significant overdue net receivable positions for contracts with marginal or no movement to determine the level of provisioning required We read and assessed the presentation and disclosure of such EPC contracts in the consolidated Ind AS financial statements
Impairment of financial and contract assets: *(as described in note 7 and note 9(b) of the consolidated Ind AS financial statements)*	
The Holding Company's accounting regarding with respect to Impairment of financial assets and contract assets is covered through Expected Credit Losses (ECL) method under Ind AS 109 and is expected to reflect the general pattern of deterioration or improvement in the credit quality of financial instruments. Impairment of financial assets is a key audit matter for the Holding company as the company has devised a model to recognize impairment through ECL method using simplified approach. The calculation of the impairment allowance under ECL method is highly judgmental as it requires management to make significant assumptions on customer payment behavior and other relevant risk characteristics when assessing the Group's statistics of historical information and estimating the level and timing of expected future cash flows. As at the March 31, 2019, the Holding Company recorded an impairment allowance of Rs 472.20 crores for its receivables and unbilled revenue.	Our audit procedures performed included the following: • We evaluated the management's key data sources and assumptions used in the ECL model to determine impairment allowance • We understood the management's basis to consider the associated risks for identifying homogeneous group of receivables • We evaluated the process followed by the Holding company for determination of credit risk and the resultant basis for classification of receivables into various stages • For a sample of receivables, we tested the ageing of the receivables considered for the calculation of impairment allowance • We assessed the completeness of financial assets included in the ECL calculations as of the reporting date • We considered the consistency of various inputs and assumptions used by the Company's management to determine impairment provisions • We assessed the related disclosures in the notes to consolidated Ind AS financial statements

Key audit matters	How our audit addressed the key audit matter
Impairment of Goodwill *(as described in note 4(c) of the consolidated Ind AS financial statements)*	
The auditors of Thermax Denmark ApS, a step-down subsidiary of the Holding Company has reported Impairment of goodwill as a Key Audit Matter. The consolidated balance sheet includes Rs 30.04 crores of goodwill as on March 31, 2019 pertaining to Thermax Denmark ApS, a step-down subsidiary of the Holding company. The assessment of impairment requires management to make significant estimates concerning the estimated future cash flows and associated discount rates and growth rates based on management's view of future business prospects. The impairment test model includes sensitivity testing of key assumptions, including revenue growth, operating margin and discount rate. The annual impairment testing is considered a significant accounting judgement and estimate in note 3(2)(ii) and related disclosures in note 4(c) to the consolidated Ind AS financial statements and therefore considered as a key audit matter	The procedures performed by the auditor of Thermax Denmark ApS, as reported by them, included the following: • Examined the impairment analysis prepared by management, which was performed in accordance with the discounted cash flow model, and assessed the assumptions considered by management • Assessed whether the calculation model is relevant and assessed the discount factor and growth rate levels • Examined procedures for the budget preparation and compared budgets with the Group Company's future plans. The expected net cash flows are based on budgets for the next five years and a terminal value. • Performed a retrospective review of management's ability to provide accurate budget • Tested the mathematical accuracy of the impairment test • Performed sensitivity analyses around the key assumptions used in the models As part of our procedures, we have • Discussed with the holding company management about the basis of impairment test and understood the business outlook • Re-performed arithmetical accuracy of the impairment test and confirmed working with subsidiary auditor. Assessed the disclosure notes in the consolidated Ind AS financial statements, including the disclosures on the sensitivity of assumptions used.
Accounting of Deferred taxes in Thermax Babcock and Wilcock Energy Solutions Private Limited *(as described in note 10 of the consolidated Ind AS financial statements)*	
Thermax Babcock and Wilcock Energy Solutions Private Limited (TBWES), a subsidiary of the Company has a net deferred tax asset ("DTA") of Rs. 94.13 crores from unused tax losses (Rs. 94.13 crores created during the year). Ind-AS 12 states that a DTA shall be recognised for the carry forward of unused tax losses and unused tax credits to the extent that it is probable that future taxable	As reported by the auditors of TBWES, following procedures were performed: • Obtained evidence and back up document to support deferred tax calculations including acquisition related documents and future projections (including revenue, profit before tax, order backlog, employee strength, etc)

Key audit matters	How our audit addressed the key audit matter
profit will be available against which the unused tax losses and unused tax credits can be utilised. The auditors of TBWES, considered the materiality and recoverability of deferred tax assets relating to tax loss carry forwards to be a key audit matter due to the significant judgments made by management in recognising the deferred tax assets	• Analysed the current and deferred tax calculations against the relevant provisions of accounting standards and tax legislation • Evaluated management assessment of the manner in which deferred tax assets would be realised by comparing this to evidence obtained As part of our procedures, we have • Enquired with the group management regarding assumptions and estimates made • Tested the mathematical accuracy of the deferred tax calculation. • Assessed the disclosures in the consolidated Ind AS financial statements.
Contingent liability relating to Tax matters in one of the foreign subsidiary *(as described in note 31(A)(i) of the consolidated Ind AS financial statements)*	
The Group companies generally receive tax related notification during the year. Accordingly, One of the Group company has received a tax notification adjustment for tax recovery and penalties in relation to review of earlier fiscal years. The auditor has identified the tax notification adjustment as key audit matter as it requires significant judgment in determining the likely outcome of the legal case.	As reported by the auditors of the subsidiary they have performed the following procedures : • Inspected the tax notices received from the tax administration. • Received and inspected the subsidiary's response to the tax administration drafted with the assistance of its tax expert. • Involved their internal tax specialists to perform an independent review about the sustainability of the underlying matters. As part of our procedures, we have enquired with the group management regarding assumptions and estimates made and assessed the disclosures in the consolidated Ind AS financial statements.

We have determined that there are no other key audit matters to communicate in our report.

Information Other than the Financial Statements and Auditor's Report Thereon

The Holding Company's Board of Directors is responsible for the other information. The other information comprises the information included in the Chairman's statement, managing director's statement, business responsibility report and director's report including annexure to the director's report of the annual report of the company, but does not include the consolidated Ind AS financial statements and our auditor's report thereon.

Our opinion on the consolidated Ind AS financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated Ind AS financial statements, our responsibility is to read the other information and, in doing so, consider whether such other information is materially inconsistent with the consolidated Ind AS financial

statements or our knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of Management for the Consolidated Ind AS Financial Statements

The Holding Company's Board of Directors is responsible for the preparation and presentation of these consolidated Ind AS financial statements in terms of the requirements of the Act that give a true and fair view of the consolidated financial position, consolidated financial performance including other comprehensive income, consolidated cash flows and consolidated statement of changes in equity of the Group including its joint ventures in accordance with the accounting principles generally accepted in India, including the Indian Accounting Standards (Ind AS) specified under section 133 of the Act read with the Companies (Indian Accounting Standards) Rules, 2015, as amended. The respective Board of Directors of the companies included in the Group and of its joint ventures are responsible for maintenance of adequate accounting records in accordance with the provisions of the Act for safeguarding of the assets of the Group and its joint ventures and for preventing and detecting frauds and other irregularities; selection and application of appropriate accounting policies; making judgments and estimates that are reasonable and prudent; and the design, implementation and maintenance of adequate internal financial controls, that were operating effectively for ensuring the accuracy and completeness of the accounting records, relevant to the preparation and presentation of the consolidated Ind AS financial statements that give a true and fair view and are free from material misstatement, whether due to fraud or error, which have been used for the purpose of preparation of the consolidated Ind AS financial statements by the Directors of the Holding Company, as aforesaid.

In preparing the consolidated Ind AS financial statements, the respective Board of Directors of the companies included in the Group are responsible for assessing the ability of the Group to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Group or to cease operations, or has no realistic alternative but to do so.

Those Charged With Governance of the companies included in the Group and of its joint ventures are also responsible for overseeing the financial reporting process of the Group and its joint ventures.

Auditor's Responsibilities for the Audit of the Consolidated Ind AS Financial Statements

Our objectives are to obtain reasonable assurance about whether the standalone Ind AS financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with SAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these standalone Ind AS financial statements.

As part of an audit in accordance with SAs, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated Ind AS financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances. Under section 143(3)(i) of the Act, we are also responsible for expressing our opinion on whether the Holding Company has adequate internal financial controls system in place and the operating effectiveness of such controls.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.

- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the ability of the Group and its joint ventures to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated Ind AS financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group and its joint ventures to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated Ind AS financial statements, including the disclosures, and whether the consolidated Ind AS financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group of which we are the independent auditors, to express an opinion on the consolidated Ind AS financial statements. We are responsible for the direction, supervision and performance of the audit of the financial statements of such entities included in the consolidated financial statements of which we are the independent auditors. For the other entities included in the consolidated financial statements, which have been audited by other auditors, such other auditors remain responsible for the direction, supervision and performance of the audits carried out by them. We remain solely responsible for our audit opinion.

We communicate with those charged with governance of the Holding Company and such other entities included in the consolidated Ind AS financial statements of which we are the independent auditors regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated Ind AS financial statements for the financial year ended March 31, 2019 and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Matters

(a) We did not audit the Ind AS financial statements and other financial information, in respect of 23 subsidiaries, branches of subsidiary and welfare trusts (73 nos), whose financial statements include total assets of Rs 1,480.60 crores and net assets of Rs. 1,004.95 crores as at March 31, 2019, and total revenues of Rs 796.20 crores and net cash outflows of Rs. 12.94 crores for the year ended on that date. These financial statements and other financial information have been audited by other auditors, which financial statements, other financial information and auditor's reports have been furnished to us by the management. The consolidated Ind AS financial statements also include the Group's share of net loss of Rs. 1.07 crores for the year ended March 31, 2019, as considered in the consolidated Ind AS financial statements, in respect of two joint ventures, whose financial statements and other financial information have been audited by other auditors and whose reports have been furnished to us by the management. Our opinion on the consolidated Ind AS financial statements, in so far as it relates to the amounts and disclosures included in respect of these subsidiaries, branches and joint ventures, and our report in terms of sub-sections (3) of Section 143 of the Act, in so far as it relates to the aforesaid subsidiaries and joint ventures, is based solely on the report of such other auditors.

(b) Our opinion above on the consolidated Ind AS financial statements, and our report on 'Other Legal and Regulatory Requirements' below, is not modified in respect of the above matters with respect to our reliance on the work done and the reports of the other auditors.

Report on Other Legal and Regulatory Requirements

As required by Section 143(3) of the Act, based on our audit and on the consideration of report of the other auditors on separate financial statements and the other financial information of subsidiaries and joint ventures, as noted in the 'other matter' paragraph we report, to the extent applicable, that:

(a) We/the other auditors whose reports we have relied upon have sought and obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purposes of our audit of the aforesaid consolidated Ind AS financial statements;

(b) In our opinion, proper books of account as required by law relating to preparation of the aforesaid consolidation of the financial statements have been kept so far as it appears from our examination of those books and reports of the other auditors;

(c) The Consolidated Balance Sheet, the Consolidated Statement of Profit and Loss including the Statement of Other Comprehensive Income, the Consolidated Cash Flow Statement and Consolidated Statement of Changes in Equity dealt with by this Report are in agreement with the books of account maintained for the purpose of preparation of the consolidated Ind AS financial statements;

(d) In our opinion, the aforesaid consolidated Ind AS financial statements comply with the Accounting Standards specified under Section 133 of the Act, read with Companies (Indian Accounting Standards) Rules, 2015, as amended;

(e) On the basis of the written representations received from the directors of the Holding Company as on March 31, 2019 taken on record by the Board of Directors of the Holding Company and the reports of the statutory auditors who are appointed under Section 139 of the Act, of its subsidiary companies and its joint ventures, none of the directors of the Group's companies and its joint ventures incorporated in India is disqualified as on March 31, 2019 from being appointed as a director in terms of Section 164(2) of the Act;

(f) The described in Emphasis of Matter above, in our opinion, may have an adverse effect on the functioning of the Group;

(g) With respect to the adequacy and the operating effectiveness of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements of the Holding Company and its subsidiaries and joint ventures incorporated in India, refer to our separate Report in "Annexure 1" to this Report;

(h) In our opinion and based on the consideration of reports of other statutory auditors of the subsidiaries and its joint ventures incorporated in India, the managerial remuneration for the year ended March 31, 2019 has been paid / provided by the Holding Company, its subsidiaries and its joint ventures incorporated in India to their directors in accordance with the provisions of section 197 read with Schedule V to the Act;

(i) With respect to the other matters to be included in the Auditor's Report in accordance with Rule 11 of the Companies (Audit and Auditors) Rules, 2014, as amended, in our opinion and to the best of our information and according to the explanations given to us and based on the consideration of the report of the other auditors on separate financial statements as also the other financial information of the subsidiaries and its joint ventures, as noted in the 'Other matters' paragraph:

   i. The impact of pending litigations on the consolidated financial position of the Group is disclosed in its consolidated Ind AS financial statements – Refer Note 31(A) to the consolidated Ind AS financial statements;

   ii. Provision has been made in the consolidated Ind AS financial statements, as required under the applicable law or accounting standards, for material foreseeable losses, if any, on long-term contracts including derivative contracts – Refer note 19(b) to the consolidated Ind AS financial statements in respect of such items as it relates to the Group; and

iii. There has been no delay in transferring amounts, required to be transferred, to the Investor Education and Protection Fund by the Holding Company, its subsidiaries and joint ventures incorporated in India during the year ended March 31, 2019.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Registration Number: 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership Number: 501160

Place : Pune
Date: May 22, 2019

Annexure 1 as referred to in paragraph 2(g) under the heading 'Report on Other Legal and Regulatory Requirements' of our report of even date

Report on the Internal Financial Controls under Clause (i) of Sub-section 3 of Section 143 of the Companies Act, 2013 ("the Act")

In conjunction with our audit of the consolidated financial statements of Thermax Limited as of and for the year ended March 31, 2019, we have audited the internal financial controls over financial reporting of Thermax Limited (hereinafter referred to as the "Holding Company") and its subsidiary companies, and joint ventures, which are companies incorporated in India, as of that date.

Management's Responsibility for Internal Financial Controls

The respective Board of Directors of the Holding Company, its subsidiary companies, and joint ventures, which are companies incorporated in India, are responsible for establishing and maintaining internal financial controls based on the internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note on Audit of Internal Financial Controls Over Financial Reporting (the "Guidance Note") issued by the Institute of Chartered Accountants of India (the ICAI). These responsibilities include the design, implementation and maintenance of adequate internal financial controls that were operating effectively for ensuring the orderly and efficient conduct of its business, including adherence to the respective company's policies, the safeguarding of its assets, the prevention and detection of frauds and errors, the accuracy and completeness of the accounting records, and the timely preparation of reliable financial information, as required under the Act.

Auditor's Responsibility

Our responsibility is to express an opinion on the company's internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements based on our audit. We conducted our audit in accordance with the Guidance Note and the Standards on Auditing, both, issued by the ICAI, and deemed to be prescribed under section 143(10) of the Act, to the extent applicable to an audit of internal financial controls. Those Standards and the Guidance Note require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether adequate internal financial controls over financial reporting with reference to these consolidated financial statements was established and maintained and if such controls operated effectively in all material respects.

Our audit involves performing procedures to obtain audit evidence about the adequacy of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements and their operating effectiveness. Our audit of internal financial controls over financial reporting included obtaining an understanding of internal financial controls over financial reporting with reference to these consolidated financial statements, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error.

We believe that the audit evidence we have obtained and the audit evidence obtained by the other auditors in terms of their reports referred to in the Other Matters paragraph below, is sufficient and appropriate to provide a basis for our audit opinion on the internal financial controls over financial reporting with reference to these consolidated financial statements.

Meaning of Internal Financial Controls Over Financial Reporting with Reference to these Consolidated Ind AS Financial Statements

A company's internal financial control over financial reporting with reference to these consolidated financial statements is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal financial control over financial reporting with reference to these consolidated Ind AS financial statements includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorisations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorised acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Inherent Limitations of Internal Financial Controls Over Financial Reporting with Reference to these Consolidated Ind AS Financial Statements

Because of the inherent limitations of internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements, including the possibility of collusion or improper management override of controls, material misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of the internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements to future periods are subject to the risk that the internal financial control over financial reporting with reference to these consolidated Ind AS financial statements may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Opinion

In our opinion, the Holding Company, its subsidiary companies and joint ventures, which are companies incorporated in India, have, maintained in all material respects, adequate internal financial controls over financial reporting with reference to these consolidated Ind AS financial statements and such internal financial controls over financial reporting with reference to these consolidated financial statements were operating effectively as at March 31, 2019, based on the internal control over financial reporting criteria established by the Holding Company considering the essential components of internal control stated in the Guidance Note issued by the ICAI.

Other Matters

Our report under Section 143(3)(i) of the Act on the adequacy and operating effectiveness of the internal financial controls over financial reporting with reference to these consolidated financial statements of the Holding Company, insofar as it relates to the 7 subsidiary companies which are companies incorporated in India, is based on the corresponding reports of the auditors of such subsidiaries incorporated in India.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Registration Number: 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership Number: 501160

Place of Signature: Pune
Date: May 22, 2019

Consolidated Balance Sheet as at March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	Note No.	As at March 31, 2019	As at March 31, 2018
Assets			
I. Non-current assets			
Property, plant and equipment	4 (a)	1,254.98	820.72
Capital work-in-progress	4 (a)	40.12	103.37
Goodwill	4 (b)	33.07	122.16
Other intangible assets	4 (b)	23.81	29.80
Investment in joint ventures	5	-	188.91
Financial assets:			
(a) Investments	6 (a)	54.28	65.74
(b) Trade receivables	7 (a)	60.40	56.03
(c) Loans	8 (a)	19.33	20.80
(d) Finance lease receivables	32	47.52	41.62
(e) Other assets	9 (a)	54.45	0.15
Deferred tax assets (net)	10	221.92	108.18
Income tax assets (net)		93.29	82.72
Other assets	11 (a)	159.65	203.27
Total non-current assets		**2,062.82**	**1,843.47**
II. Current assets			
Inventories	12	508.62	366.62
Financial assets:			
(a) Investments	6 (b)	775.06	1,217.08
(b) Trade receivables	7 (b)	1,378.13	1,243.21
(c) Cash and cash equivalents	13 (a)	308.23	246.35
(d) Bank balances other than (c) above	13 (b)	60.83	47.64
(e) Loans	8 (b)	7.13	5.38
(f) Finance lease receivables	32	5.63	4.30
(g) Other assets	9 (b)	1,221.91	597.00
Income tax assets (net)		5.23	19.84
Other assets	11 (b)	466.35	354.14
Total current assets		**4,737.12**	**4,101.56**
Total assets		**6,799.94**	**5,945.03**
Equity and liabilities			
III. Equity			
Equity share capital	14	22.52	22.52
Other equity	15 (a)	2,991.77	2,692.22
Total Equity		**3,014.29**	**2,714.74**
IV. Non-current liabilities			
Financial liabilities:			
(a) Borrowings	16 (a)	35.07	53.01
(b) Trade payables	17 (a)	28.76	21.88
(c) Other liabilities	18 (a)	6.10	4.76
Provisions	19 (a)	16.06	10.01
Deferred tax liabilities (net)	10	9.90	16.47
Other liabilities	20 (a)	35.95	45.42
Total non-current liabilities		**131.84**	**151.55**
V. Current liabilities			
Financial liabilities:			
(a) Borrowings	16 (b)	185.00	164.24
(b) Trade payables	17 (b)		
Total outstanding dues of micro and small enterprises		173.10	148.36
Total outstanding dues of creditors other than micro and small enterprises		1,197.55	890.24
(c) Other liabilities	18 (b)	148.17	153.63
Other liabilities	20 (b)	1,793.87	1,534.86
Provisions	19 (b)	143.27	174.46
Income tax liabilities (net)		12.85	12.95
Total current liabilities		**3,653.81**	**3,078.74**
Total equity and liabilities		**6,799.94**	**5,945.03**
Summary of significant accounting policies	2		
Summary of significant accounting judgements, estimates and assumptions	3		

The accompanying notes are an integral part of these financial statements.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003
per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Consolidated statement of profit and loss for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	Note No.	March 31, 2019	March 31, 2018
Income			
Revenue from operations	21	5,973.17	4,485.64
Other income	22	149.88	116.39
Total Income (I)		**6,123.05**	**4,602.03**
Expenses			
Cost of raw materials and components consumed	23	3,239.69	2,301.35
Purchase of traded goods		115.09	75.43
(Increase) in inventories of finished goods, work-in-progress and traded goods	24	(18.12)	(27.44)
Excise duty on sale of goods		-	20.76
Employee benefits expense	25	767.45	680.50
Finance cost	26	14.32	12.85
Depreciation and amortisation expense	27	92.02	82.44
Other expenses	28	1,411.62	1,034.10
Total expenses (II)		**5,622.07**	**4,179.99**
Profit before exceptional items, share of loss of joint ventures and tax (III) = (I-II)		**500.98**	**422.04**
Share of loss on joint ventures (IV)	37	(1.07)	(25.19)
Profit before exceptional items and tax (V) = (III-IV)		**499.91**	**396.85**
Exceptional items (VI)	42	(89.54)	-
Profit before tax (VII) = (V-VI)		**410.37**	**396.85**
Tax expense	10		
Current tax		194.00	158.99
Deferred tax		(109.06)	6.76
Total tax expense (VIII)		**84.94**	**165.75**
Profit for the year (IX) = (VII-VIII)		**325.43**	**231.10**
Other comprehensive income			
A. Items that will be reclassified subsequently to profit or loss	30		
i) Share of OCI [cash flow hedge (net of tax)] of joint ventures		(0.53)	(2.10)
Net gain / (loss) on cash flow hedges		(32.65)	1.41
Less: Income tax effect		11.15	(0.31)
		(22.03)	(1.00)
ii) Exchange differences on translation of foreign operations		0.46	24.54
		0.46	24.54
		(21.57)	**23.54**
B. Items that will not be reclassified subsequently to profit or loss	30		
Re-measurement gain/(loss) of defined benefit plan		(0.20)	5.28
Less: Income tax effect		0.05	(1.79)
		(0.15)	**3.49**
Net other comprehensive income for the year (net of tax)		**(21.72)**	**27.03**
Total comprehensive income for the year		**303.71**	**258.13**
Profit for the year			
Attributable to :			
Equity holders of the parent		325.43	232.11
Non-controlling interest		-	(1.01)
Other comprehensive income for the year			
Attributable to :			
Equity holders of the parent		(21.72)	27.03
Non-controlling interest		-	-
Total comprehensive income for the year			
Attributable to :			
Equity holders of the parent		303.71	259.14
Non-controlling interest		-	(1.01)
Earning per equity share [Nominal value per share Rs.2/- (March 31, 2018: Rs.2/-)]	29		
Basic and Diluted		**28.90**	**20.61**
Summary of significant accounting policies	2		
Summary of significant accounting judgements, estimates and assumptions	3		

The accompanying notes are an integral part of these financial statements.

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Consolidated statement of Changes in Equity for the year March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

A Equity Share Capital

Particulars	Notes No	March 31, 2019	March 31, 2018
Balance at the beginning of the year	14	22.52	22.52
Changes in equity shares capital during the year	14	-	-
Balance at the end of the year	14	**22.52**	**22.52**

B Other Equity

Particulars	Reserves and surplus					Other Reserves		Total Reserves and Surplus (including items of OCI)	Non-controlling interest	Total Other equity
	General reserve	Capital reserve	Capital redemption reserve	Retained earnings	Securities premium	Foreign currency translation reserve	Cash flow hedge reserve			
As at April 1, 2017	**435.31**	**17.82**	**50.34**	**1,933.67**	**57.28**	**(5.67)**	**26.34**	**2,515.09**	**1.39**	**2,516.48**
Profit for the year	-	-	-	232.11	-	-	-	**232.11**	(1.01)	**231.10**
Adjustments on account of acquisition of Non Controlling Interest	-	-	-	0.38	-	-	-	**0.38**	(0.38)	**-**
Other Comprehensive Income (net)	-	-	-	3.49	-	24.54	(1.00)	**27.03**	-	**27.03**
Total comprehensive income	**-**	**-**	**-**	**235.98**	**-**	**24.54**	**(1.00)**	**259.52**	**(1.39)**	**258.13**
Dividends paid	-	-	-	(67.84)	-	-	-	**(67.84)**	-	**(67.84)**
Dividend distribution tax paid	-	-	-	(14.55)	-	-	-	**(14.55)**	-	**(14.55)**
As at March 31, 2018	**435.31**	**17.82**	**50.34**	**2,087.26**	**57.28**	**18.87**	**25.34**	**2,692.22**	**-**	**2,692.22**
Profit for the year	-	-	-	325.43	-	-	-	**325.43**	-	**325.43**
Other Comprehensive Income (net)	-	-	-	(0.15)	-	0.46	(22.03)	**(21.72)**	-	**(21.72)**
Total comprehensive income	**-**	**-**	**-**	**325.28**	**-**	**0.46**	**(22.03)**	**303.71**	**-**	**303.71**
Arising on account of acquisition (note 36)	-	77.30	-	-	-	-	-	**77.30**	-	**77.30**
Dividends paid	-	-	-	(67.57)	-	-	-	**(67.57)**	-	**(67.57)**
Dividend distribution tax paid	-	-	-	(13.89)	-	-	-	**(13.89)**	-	**(13.89)**
As at March 31, 2019	**435.31**	**95.12**	**50.34**	**2,331.08**	**57.28**	**19.33**	**3.31**	**2,991.77**	**-**	**2,991.77**

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Consolidated statement of Cash flow for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

		Note No.	Year Ended March 31, 2019	Year Ended March 31, 2018
A)	**Cash flows from operating activities**			
	Profit before tax (after exceptional item and share of joint ventures)		410.37	396.85
	Share of loss on joint ventures		(1.07)	(25.19)
	Profit before tax (before exceptional items and share of loss of joint ventures)		411.44	422.04
	Adjustments to reconcile profit before tax to net cash flows			
	Depreciation on property, plant and equipment	27	78.31	69.72
	Amortization of intangible assets	27	13.71	12.72
	Provision for impairment allowance of financial assets (net)	28	39.50	(13.57)
	Provision for impairment of PPE and intangible assets	42	89.54	-
	Interest expense	26	9.70	7.19
	Bad debts/ advances written off	28	11.50	34.24
	Unwinding of discount on provisions	26	4.62	5.66
	Unrealized foreign exchange (gain)/ loss		(11.16)	(2.15)
	Interest income	22	(16.71)	(14.30)
	Dividend income	22	(4.59)	(0.06)
	Liabilities no longer required written back	22	(28.81)	(14.72)
	Fair value gain on financial instrument at fair value through profit and loss (net)	22	(77.51)	(72.24)
	Loss on sale / discard of assets (net)	28	0.55	1.35
	Working capital adjustments			
	(Increase) in trade receivables		(130.28)	(197.60)
	(Increase) in inventories		(140.13)	(83.37)
	(Increase)/ Decrease in other financial assets		(654.01)	82.64
	(Increase) in other assets		(37.23)	(104.31)
	Increase in trade payables		329.32	6.32
	Increase in other liabilities		226.75	571.46
	(Decrease) / Increase in provisions		(77.08)	24.49
	Increase/ (Decrease) in other financial liabilities		34.15	(24.79)
	Cash generated from operations		**71.58**	**710.72**
	Direct taxes paid (net of refunds received)		(187.00)	(177.13)
	Net cash inflow (used in)/ from operating activities		**(115.42)**	**533.59**
B)	**Cash flows from /(used in) investing activities**			
	Purchase of property, plant and equipment and intangible assets		(154.65)	(200.35)
	Investment in joint ventures		(103.04)	-
	(Investment) / proceeds in fixed deposits (net)		(43.32)	0.38
	Sale/ (purchase) of other investments (net)		546.53	(343.65)
	Interest and dividend received		20.00	12.53
	Net cash flows from/(used in) investing activities		**265.52**	**(531.09)**
C)	**Cash flows from/ (used in) financing activities**			
	Proceeds from borrowings (net)		25.62	69.27
	Interest paid		(9.70)	(7.20)
	Dividend paid and tax thereon		(81.29)	(82.39)
	Net cash flows (used in) financing activities		**(65.37)**	**(20.32)**

Consolidated statement of Cash flow for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

	Note No.	Year Ended March 31, 2019	Year Ended March 31, 2018
Net increase / (decrease) in cash and cash equivalents		**84.73**	**(17.82)**
Cash and cash equivalents at the beginning of the year		160.70	153.98
Exchange differences on translation of foreign operations		0.46	24.54
Cash and cash equivalents at the end of the year		**245.89**	**160.70**

Reconciliation of cash and cash equivalents as per the cash flow statement:

	Note No.	March 31, 2019	March 31, 2018
Cash and cash equivalents	13 (a)	308.23	246.35
Cash and cash equivalents arising on account of acquisition		(17.05)	-
Bank overdraft		(31.40)	(47.75)
Book overdraft	18 (b)	(13.89)	(37.90)
Balances as per Cash flow statement		**245.89**	**160.70**

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of
Thermax Limited

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Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place: Pune
Date: May 22, 2019

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

1. Corporate information

Thermax Limited ('the Holding Company') and its subsidiaries (together referred to as 'the Group') and joint ventures offers solutions to energy, environment and chemical sectors. The Group's portfolio includes boilers and heaters, absorption chillers/ heat pumps, power plants, solar equipment, air pollution control equipment/system, water and waste recycle plant, ion exchange resins and performance chemicals and related services.

The Company is a public limited company incorporated and domiciled in India. It is listed on the BSE Limited (BSE) and National Stock Exchange Limited (NSE) in India. The address of its registered office is D-13, MIDC Industrial Area, R.D. Aga Road, Chinchwad, Pune- 411019, India. The Board of Directors have authorized to issue these financial statements on May 22, 2019. The CIN of the Company is L29299PN1980PLC022787.

2. Significant accounting policies

2.1. Basis of preparation, measurement and consolidation

(a) Basis of preparation

These consolidated financial statements have been prepared in accordance with the Indian Accounting Standards (Ind AS), notified under the Companies (Indian Accounting Standards) Rules, 2015 (as amended from time to time) and presentation requirements of Division II of Schedule III to the Companies Act 2013 (the Act) as applicable.

The preparation of the consolidated financial statements requires the use of certain critical accounting judgements, estimates and assumptions. It also requires the management to exercise judgment in the process of applying the Group's accounting policies. The areas involving a higher degree of judgment or complexity, or areas where assumptions and estimates are significant to the consolidated financial statements are disclosed in note 3.

The accounting policies adopted for preparation and presentation of these consolidated financial statements have been consistently applied except for changes resulting from amendments to Ind AS issued by the Ministry of Corporate Affairs, effective for annual periods beginning on or after April 1, 2018 as disclosed in note 2.2.

(b) Basis of measurement

The consolidated financial statements have been prepared on the accrual and going concern basis under historical cost convention except the following:

- Derivative financial instruments;
- Certain financial assets and liabilities measured at fair value (refer accounting policy regarding financial instruments); and
- Defined benefit plans whereby the plan assets are measured at fair value.

(c) Basis of consolidation

The consolidated financial statements comprise the financial statements of the Company and its subsidiaries as at March 31, 2019. Control is achieved when the Group is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. Specifically, the Group controls an investee if and only if the Group has:

- Power over the investee (i.e. existing rights that give it the current ability to direct the relevant activities of the investee);
- Exposure, or rights, to variable returns from its involvement with the investee, and
- The ability to use its power over the investee to affect its returns.

Generally, there is a presumption that a majority of voting rights result in control. To support this presumption and

when the Group has less than a majority of the voting or similar rights of an investee, the Group considers all relevant facts and circumstances in assessing whether it has power over an investee, including:

- The contractual arrangement with the other vote holders of the investee;
- Rights arising from other contractual arrangements;
- The Group's voting rights and potential voting rights; and
- The size of the group's holding of voting rights relative to the size and dispersion of the holdings of the other voting rights holders.

The Group re-assesses whether or not it controls an investee if facts and circumstances indicate that there are changes to one or more of the three elements of control. Consolidation of an entity begins when the Group obtains control over the subsidiary and ceases when the Group loses control of the subsidiary. Assets, liabilities, income and expenses of a subsidiary acquired or disposed of during the year are included in the consolidated financial statements from the date the Group gains control until the date the Group ceases to control the subsidiary.

Consolidated financial statements are prepared using uniform accounting policies for like transactions and other events in similar circumstances. If a member of the group uses accounting policies other than those adopted in the consolidated financial statements for like transactions and events in similar circumstances, appropriate adjustments are made to that group member's financial statements in preparing the consolidated financial statements to ensure conformity with the group's accounting policies.

The financial statements of all entities used for the purpose of consolidation are drawn up to the same reporting date as that of the parent company, i.e., year ended March 31, 2019.

Consolidation procedure

(a) Combine like items of assets, liabilities, equity, income, expenses and cash flows of the parent with those of its subsidiaries. For this purpose, income and expenses of the subsidiary are based on the amounts of the assets and liabilities recognized in the consolidated financial statements at the acquisition date.

(b) Offset (eliminate) the carrying amount of the parent's investment in each subsidiary and the parent's portion of equity of each subsidiary. The accounting policy regarding business combinations and goodwill explains how to account for any related goodwill.

(c) Eliminate in full, intragroup assets and liabilities, equity, income, expenses and cash flows relating to transactions between entities of the group (profits or losses resulting from intragroup transactions that are recognized in assets, such as inventory and property, plant and equipment, are eliminated in full). Intragroup losses may indicate an impairment that requires recognition in the consolidated financial statements. Ind AS 12 'Income Taxes' applies to temporary differences that arise from the elimination of profits and losses resulting from intragroup transactions.

Profit or loss and each component of other comprehensive income (OCI) are attributed to the equity holders of the parent of the Group and to the non-controlling interests. All intra-group assets and liabilities, equity, income, expenses and cash flows relating to transactions between members of the Group are eliminated in full on consolidation.

A change in the ownership interest of a subsidiary, without a loss of control, is accounted for as an equity transaction. If the Group loses control over a subsidiary, it:

- Derecognizes the assets (including goodwill) and liabilities of the subsidiary;
- Derecognizes the carrying amount of any non-controlling interests;
- Derecognizes the cumulative translation differences recorded in equity;
- Recognizes the fair value of the consideration received;

Notes to the consolidated financial statements for the year ended March 31, 2019
(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

- Recognizes the fair value of any investment retained;
- Recognizes any surplus or deficit in profit or loss; and
- Reclassifies the parent's share of components previously recognized in OCI to profit or loss or retained earnings, as appropriate, as would be required if the Group had directly disposed of the related assets or liabilities

2.2. Changes in accounting policies and disclosures

The Group has adopted Ind AS 115 w.e.f. April 1, 2018. The nature and effect of the changes as a result of adoption of this new Accounting Standard are described below.

Ind AS 115 was issued on March 28, 2018 and supersedes Ind AS 11 Construction Contracts and Ind AS 18 Revenue and it applies, with limited exceptions, to all revenue arising from contracts with its customers. Ind AS 115 establishes a five-step model to account for revenue arising from contracts with customers and requires that revenue be recognized at an amount that reflects the consideration to which an entity expects to be entitled in exchange for transferring goods or services to a customer.

Ind AS 115 requires entities to exercise judgement, taking into consideration all of the relevant facts and circumstances when applying each step of the model to contracts with their customers.

On transition to Ind AS 115, the Group has elected to adopt the new revenue standard as per modified retrospective approach. Under this approach, there were no material adjustments required to the retained earnings at April 1, 2018. The comparative financial statements for year ended March 31, 2018 are therefore, not restated under this approach.

Several other amendments and interpretations apply for the first time in the year ended March 31, 2019, but do not have an impact on the consolidated financial statements of the Group. The Group has not early adopted any standards or amendments that have been issued but are not yet effective.

2.3 Summary of significant accounting policies

a. Business combinations and goodwill

Business combinations are accounted for using the acquisition method. The cost of an acquisition is measured as the aggregate of the consideration transferred measured at acquisition date fair value and the amount of any non-controlling interests in the acquiree. For each business combination, the Group elects whether to measure the non-controlling interests in the acquiree at fair value or at the proportionate share of the acquiree's identifiable net assets. Acquisition related costs are expensed as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their acquisition date fair values. For this purpose, the liabilities assumed include contingent liabilities representing present obligation and they are measured at their acquisition fair values irrespective of the fact that outflow of resources embodying economic benefits is not probable. However, the following assets and liabilities acquired in a business combination are measured at the basis indicated below:

- Deferred tax assets or liabilities, and the assets or liabilities related to employee benefit arrangements are recognized and measured in accordance with Ind AS 12 'Income Taxes' and Ind AS 19 'Employee Benefits', respectively.
- Reacquired rights are measured at a value determined on the basis of the remaining contractual term of the related contract. Such valuation does not consider potential renewal of the reacquired right.

When the Group acquires a business, it assesses the financial assets and liabilities assumed for appropriate classification and designation in accordance with the contractual terms, economic circumstances and pertinent conditions as at the acquisition date. This includes the separation of embedded derivatives in host contracts by the acquiree.

If the business combination is achieved in stages, any previously held equity interest is re-measured at its acquisition date fair value and any resulting gain or loss is recognized in profit or loss or OCI, as appropriate.

Goodwill is initially measured at cost, being the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests, and any previous interest held, over the net identifiable assets acquired and liabilities assumed. If the fair value of the net assets acquired is in excess of the aggregate consideration transferred, the Group re-assesses whether it has correctly identified all of the assets acquired and all of the liabilities assumed and reviews the procedures used to measure the amounts to be recognized at the acquisition date. If the reassessment still results in an excess of the fair value of net assets acquired over the aggregate consideration transferred, then the gain is recognized in OCI and accumulated in equity as capital reserve. However, if there is no clear evidence of bargain purchase, the entity recognizes the gain directly in equity as capital reserve, without routing the same through OCI.

After initial recognition, goodwill is measured at cost less any accumulated impairment losses. For the purpose of impairment testing, goodwill acquired in a business combination is, from the acquisition date, allocated to each of the Group's cash-generating units that are expected to benefit from the combination, irrespective of whether other assets or liabilities of the acquiree are assigned to those units.

A cash generating unit to which goodwill has been allocated is tested for impairment annually, or more frequently when there is an indication that the unit may be impaired. If the recoverable amount of the cash generating unit is less than its carrying amount, the impairment loss is allocated first to reduce the carrying amount of any goodwill allocated to the unit and then to the other assets of the unit, pro-rata, based on the carrying amount of each asset in the unit. Any impairment loss for goodwill is recognized in profit or loss. An impairment loss recognized for goodwill is not reversed in subsequent periods.

b. Investment in joint ventures

A joint venture is a type of joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the joint venture. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require unanimous consent of the parties sharing control.

The considerations made in determining joint control are similar to those necessary to determine control over the subsidiaries.

The Group's investments in its joint ventures are accounted for using the equity method. Under the equity method, the investment in a joint venture is initially recognized at cost. The carrying amount of the investment is adjusted to recognize changes in the Group's share of net assets of the joint venture since the acquisition date. Goodwill relating to the joint venture is included in the carrying amount of the investment and is not tested for impairment individually.

The Consolidated Statement of profit and loss reflects the Group's share of the results of operations of its joint ventures. Any change in OCI of those investees is presented as part of the Group's OCI. Unrealised gains and losses resulting from transactions between the Group and a joint venture are eliminated to the extent of the interest in the joint venture.

The aggregate of the Group's share of profit or loss of a joint venture is shown on the face of the Consolidated Statement of profit and loss.

The financial statements of the joint ventures are prepared for the same reporting period as the Group.

After application of the equity method, the Group determines whether it is necessary to recognize an impairment loss on its investment in its joint ventures. At each reporting date, the Group determines whether there is objective evidence that the investment in the joint ventures is impaired. If there is such evidence, the Group calculates the amount of impairment as the difference between the recoverable amount of the joint ventures and its carrying value, and then recognizes the loss as 'Share of loss of joint ventures' in the Consolidated Statement of profit or loss.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

c. Current and non-current classification

All assets and liabilities have been classified as current and non-current as per the Group's normal operating cycle and other criteria set out in the Schedule III to the Act. Based on the nature of products and services and the time between the acquisition of assets for processing and their realisation in cash and cash equivalents, the Group has ascertained its operating cycle as 12 months for the purpose of current and non-current classification of assets and liabilities. Deferred tax assets and liabilities are classified as non-current assets and liabilities.

d. Foreign currencies

The Group's consolidated financial statements are prepared in INR, which is also the functional currency of the Company. For each entity, the Group determines the functional currency and items included in the financial statements of each entity are measured using that functional currency. The Group uses the direct method of consolidation and on disposal of a foreign operation, the gain or loss that is reclassified to profit or loss reflects the amount that arises from using this method.

Transactions and balances

Transactions in foreign currencies are initially recorded at the functional currency spot rates at the date the transaction first qualifies for recognition. Monetary assets and liabilities denominated in foreign currencies are translated at the functional currency spot rates of exchange at the reporting date. Exchange differences arising on settlement or translation of monetary items are recognized in the Consolidated Statement of profit and loss.

Non-monetary items that are measured in terms of historical cost in a foreign currency are translated using the exchange rates at the dates of the initial transactions.

Group companies

On consolidation, the assets and liabilities of foreign operations are translated into INR at the rate of exchange prevailing at the reporting date and their statements of profit or loss are translated at exchange rates prevailing at the dates of the transactions. For practical reasons, the group uses an average rate to translate income and expense items, if the average rate approximates the exchange rates at the dates of the transactions. The exchange differences arising on translation for consolidation are recognized in OCI. On disposal of a foreign operation, the component of OCI relating to that particular foreign operation is recognized in profit or loss.

Any goodwill arising in the acquisition/ business combination of a foreign operation and any fair value adjustments to the carrying amounts of assets and liabilities arising on the acquisition are treated as assets and liabilities of the foreign operation and translated at the spot rate of exchange at the reporting date.

e. Fair value measurement

The Group measures financial instruments, such as, derivatives at fair value at each balance sheet date.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value measurement is based on the presumption that the transaction to sell the asset or transfer the liability takes place either:

- in the principal market for the asset or liability, or
- in the absence of a principal market, in the most advantageous market for the asset or liability

The principal or the most advantageous market must be accessible by the Group. The fair value of an asset or a liability is measured using the assumptions that market participants would use when pricing the asset or liability, assuming that market participants act in their economic best interest.

A fair value measurement of a non-financial asset takes into account a market participant's ability to generate economic benefits by using the asset in its highest and best use or by selling it to another market participant that would use the asset in its highest and best use.

The Group uses valuation techniques that are appropriate in the circumstances and for which sufficient data are

available to measure fair value, maximizing the use of relevant observable inputs and minimizing the use of unobservable inputs.

All assets and liabilities for which fair value is measured or disclosed in the consolidated financial statements are categorized within the fair value hierarchy, described as follows, based on the lowest level input that is significant to the fair value measurement as a whole:

- Level 1 - Quoted (unadjusted) market prices in active markets for identical assets or liabilities
- Level 2 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is directly or indirectly observable
- Level 3 - Valuation techniques for which the lowest level input that is significant to the fair value measurement is unobservable

External valuers are involved for valuation of significant assets and significant liabilities. Involvement of external valuers is decided upon annually by the management. Selection criteria include market knowledge, reputation, independence and whether professional standards are maintained.

For the purpose of fair value disclosures, the Group has determined classes of assets and liabilities on the basis of the nature, characteristics and risks of the asset or liability and the level of the fair value hierarchy as explained above.

This note summarizes accounting policy for fair value. Other fair value related disclosures are given in the relevant notes.

- Disclosures for significant judgements, estimates and assumptions (note 3)
- Quantitative disclosures of fair value measurement hierarchy (note 39)
- Financial instruments (including those carried at amortized cost) (note 39)

For assets and liabilities that are recognised in the financial statements on a recurring basis, the Group determines whether transfers have occurred between levels in the hierarchy by re-assessing categorisation (based on the lowest level input that is significant to the fair value measurement as a whole) at the end of each reporting period.

f. Property, Plant and Equipment

Property, Plant and Equipment (PPE) and capital work in progress are stated at cost of acquisition or construction net of accumulated depreciation and impairment loss, if any. All significant costs relating to the acquisition and installation of PPE are capitalised. Subsequent costs/replacement costs are included in the asset's carrying amount or recognised as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognised. All other repairs and maintenance are charged to the Consolidated Statement of profit and loss during the financial year in which they are incurred.

The Group identifies and determines cost of each component/ part of the asset separately, if the component/ part has a cost which is significant to the total cost of the asset and has useful life that is materially different from that of the remaining asset.

Depreciation on PPE is calculated on a straight line basis using the rates arrived at based on the useful lives estimated by the management. The identified components are depreciated separately over their useful lives; the remaining components are depreciated over the life of the principal asset.

Leasehold land is amortized on a straight-line basis over the agreed period of lease ranging up to 99 years.

The management has estimated, supported by independent assessment by professionals, the useful lives of certain classes of assets. The following useful lives are adopted by the management:

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(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Asset category	Group's estimate of useful life (years)	Useful life as prescribed under Schedule II (years)
Factory buildings	28	30
Other buildings	58	60
Plant and equipment	5 to 25	15 to 20
Roads	5 to 30	5 to 10
Office equipment	15	15
Furniture and fixtures	15	10
Computers and data processing units	4 to 6	3 to 6
Vehicles	7 to 10	8

The residual values, useful lives and methods of depreciation of PPE are reviewed on a regular basis and changes in estimates, when relevant, are accounted for on a prospective basis.

g. Intangible assets

Intangible assets acquired separately are measured on initial recognition at cost. The cost of intangible assets acquired in a business combination is their fair value at the date of acquisition. Following initial recognition, intangible assets are carried at cost less any accumulated amortization and accumulated impairment losses. Internally generated intangibles, excluding capitalized development costs, are not capitalized and the related expenditure is reflected in the Consolidated Statement of profit and loss in the period in which the expenditure is incurred.

Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for an intangible asset with a finite useful life are reviewed at least at the end of each reporting period. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset are considered to modify the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the Consolidated Statement of profit and loss unless such expenditure forms part of carrying value of another asset.

Gains or losses arising from derecognition of an intangible asset are measured as the difference between the net disposal proceeds and the carrying amount of the asset and are recognized in the Consolidated Statement of profit and loss when the asset is derecognized.

Research and development costs

Research costs are expensed as incurred. Development expenditure incurred on an individual project is recognized as an intangible asset when the Group can demonstrate all the following:

- The technical feasibility of completing the intangible asset so that it will be available for use or sale
- Its intention to complete the asset
- Its ability to use or sell the asset
- How the asset will generate future economic benefits
- The availability of adequate resources to complete the development and to use or sell the asset
- The ability to measure reliably the expenditure attributable to the intangible asset during development.

Following the initial recognition of the development expenditure as an asset, the cost model is applied requiring the asset to be carried at cost less any accumulated amortization and accumulated impairment losses, if any. Amortization of the asset begins when development is complete and the asset is available for use. It is amortized on a straight line basis over the period of expected future benefit from the related project, i.e., the estimated useful life subject to a maximum of ten years. Amortization is recognized in the Statement of profit and loss unless such expenditure forms part of carrying value of another asset. During the period of development, the asset is tested for impairment annually.

A summary of amortization rates applied to the Group's intangible assets are as below:

Asset category	Life (years)
Technical know-how	3 to 6
Computer software	3 to 5

h. Inventories

Raw materials, components, stores and spares are valued at lower of cost and estimated net realizable value. Cost includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Cost is determined on a weighted average basis.

Finished goods and work in progress are valued at lower of cost and net realizable value. Cost includes direct materials and labour and a proportion of manufacturing overheads based on normal operating capacity. Cost is determined on a weighted average basis.

Traded goods are valued at lower of cost and net realizable value. Cost includes cost of purchase and other costs incurred in bringing the inventories to their present location and condition. Cost is determined on a weighted average basis.

Net realizable value is the estimated selling price in the ordinary course of business, less estimated costs of completion and estimated costs necessary to make the sale. Write down of inventories are calculated based on an analysis of foreseeable changes in demand, technology, market conditions and ageing of inventories.

i. Revenue recognition

i. Revenue from Contracts with customers

Revenue from contracts with customers is recognized when control of the goods or services are transferred to the customer at an amount that reflects the consideration to which the group expects to be entitled in exchange for those goods or services. Revenue is recognized when it has approval and commitment from both parties, the rights of the parties are identified, payment terms are identified, the contract has commercial substance and collectability of consideration is probable. The Group has concluded that it is the principal in all of its revenue arrangements since it is the primary obligor in all the revenue arrangements as it has pricing latitude and is also exposed to inventory and credit risks. The Group collects goods and services tax on behalf of the government and, therefore, it is not an economic benefit flowing to the Group. Hence, it is excluded from revenue.

The disclosures of significant accounting judgements, estimates and assumptions relating to revenue from contracts with customers are provided in note 3.

The Group has following streams of revenue:

- ***Revenue from Engineering, Procurement and Construction contracts***

  Engineering, Procurement and Construction (EPC) contracts are contracts (or a group of contracts secured together) specifically negotiated for the construction of an asset which refers to any project for construction of plants and systems, involving designing, engineering, fabrication, supply, erection (or supervision thereof), commissioning, guaranteeing performance thereof etc., execution of which is spread over different accounting periods. The Group identifies distinct performance obligations in each contract. For

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most of the project contracts, the customer contracts with the Group to provide a significant service of integrating a complex set of tasks and components into a single project or capability. Hence, the entire contract is accounted for as one performance obligation.

The Group may promise to provide distinct goods or services within a contract, in which case the Group separates the contract into more than one performance obligation. If a contract is separated into more than one performance obligation, the Group allocates the total transaction price to each performance obligation in an amount based on the estimated relative standalone selling prices of the promised goods or services underlying each performance obligation. The Group uses the expected cost plus a margin approach to estimate the standalone selling price of each performance obligation in case of contracts with more than one distinct performance obligations.

The Group assesses for the timing of revenue recognition in case of each distinct performance obligation. The Group first assesses whether the revenue can be recognized over a period of time if any of the following criteria is met:

(a) The customer simultaneously consumes the benefits as the Group performs, or

(b) The customer controls the work-in-progress, or

(c) The group's performance does not create an asset with alternative use to the Group and the Group has right to payment for performance completed till date

The Group recognizes revenue over time as it performs because of continuous transfer of control to the customer. For all project contracts, this continuous transfer of control to the customer is supported by the fact that the customer typically controls the work in process as evidenced either by contractual termination clauses or by the rights of the Group to payment for work performed to date plus a reasonable profit to deliver products or services that do not have an alternative use.

The Group uses cost-based measure of progress (or input method) for contracts because it best depicts the transfer of control to the customer which occurs as it incurs costs on contracts. Under the cost-based measure of progress, the extent of progress towards completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. Revenues, including estimated profits, are recorded proportionally as costs are incurred.

The Group estimates variable consideration amount which it expects to be entitled under the contract and includes it in the transaction price to the extent it is highly probable that a significant reversal of cumulative revenue recognized will not occur and when the uncertainty associated with it is subsequently resolved. The estimates of variable consideration and determination of whether to include estimated amounts in the transaction price are based largely on an assessment of the anticipated performance and all information (historical, current and forecasted) that is reasonably available.

Costs associated with bidding for contracts are charged to the Consolidated Statement of profit and loss when they are incurred. Costs that relate directly to a contract and are incurred in securing the contract are included as part of the contract costs if they can be separately identified and measured reliably and it is probable that the contract will be obtained.

Contract modification, when approved by both the parties to the contract, are considered as modification, if it creates new or changes the existing enforceable rights and obligations. Most of the contract modifications are not distinct from the existing contract due to the significant integration service provided under the contract prior to modifications and are therefore, accounted for as part of the existing contract. The effect of a contract modification is recognized as an adjustment to revenue on a cumulative catch-up basis.

When it becomes probable that the total contract costs will exceed the total contract revenue, the Group recognizes the expected losses from onerous contract as an expense immediately.

Penalties for any delay or improper execution of a contract are recognized as a deduction from revenue. In the balance sheet, such provisions are presented on net basis of the contract receivables.

- ***Revenue from Sale of goods***

If the criteria for revenue under over-a-period of time as mentioned above are not met, the Group recognizes revenue at a point-in-time. The point-in-time is determined when the control of the goods or services is transferred which is generally determined based on when the significant risks and rewards of ownership are transferred to the customer. Apart from this, the Group also considers its present right to payment, the legal title to the goods, the physical possession and the customer acceptance in determining the point in time where control has been transferred. The Group provides for warranty provision for general repairs up to 18 – 24 months on its products sold, in line with the industry practice. A liability is recognized at the time the product is sold. The Group does not provide any extended warranties.

- ***Revenue from Sale of services***

Revenue in respect of operation and maintenance contract, awarded on a standalone basis or included in long term contracts and identified as a separate performance obligation, is recognized on a time proportion basis under the contracts.

Contract balances

Contract assets: A contract asset is the right to consideration in exchange for goods or services transferred to the customer. If the Group performs by transferring goods or services to a customer before the customer pays consideration or before payment is due, a contract asset is recognised for the earned consideration and are transferred to trade receivables on completion of milestones and its related invoicing. Contract assets are recorded in balance sheet as unbilled revenue.

Trade receivables: A receivable represents the Group's right to an amount of consideration that is unconditional (i.e., only the passage of time is required before payment of the consideration is due). Also refer note 2.3(j) below.

Contract liabilities: A contract liability is the obligation to transfer goods or services to a customer for which the Group has received consideration (or an amount of consideration is due) from the customer. If a customer pays consideration before the Group transfers goods or services to the customer, a contract liability is recognised when the payment is made or the payment is due (whichever is earlier). Contract liabilities are recognised as revenue when the Group satisfies the performance obligation. Contract liabilities are recorded in balance sheet as unearned revenue and customer advances as the case may be.

ii. Interest income

For all debt instruments measured at amortized cost, interest income is recorded using the effective interest rate (EIR). EIR is the rate that exactly discounts the estimated future cash payments or receipts over the expected life of the financial instrument or a shorter period, where appropriate, to the gross carrying amount of the financial asset or to the amortized cost of a financial liability. Interest income is included in finance income in the Consolidated Statement of profit and loss.

iii. Dividend

Revenue is recognized when the Group's right to receive the payment is established.

iv. Rental income

Rental income from operating leases (net of any incentives given to the lessee) is recognised on a straight-line basis over the lease term.

j. Financial instruments

A financial instrument is any contract that gives rise to a financial asset of one entity and a financial liability or equity instrument of another entity.

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Financial assets

All financial assets are recognized initially at fair value plus, in the case of financial assets not recorded at fair value through Profit and Loss, transactions costs that are attributable to the acquisition of the financial asset. For all subsequent measurements financial assets are classified in following categories by the Group:

i. Debt instruments at amortized cost

A 'debt instrument' is measured at the amortized cost if both the following conditions are met:

(a) The asset is held within a business model whose objective is to hold assets for collecting contractual cash flows, and

(b) Contractual terms of the asset give rise on specified dates to cash flows that are solely payments of principal and interest (SPPI) on the principal amount outstanding.

After initial measurement, such financial assets are subsequently measured at amortized cost using the effective interest rate (EIR) method. Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of EIR. The EIR amortization is included in finance costs/income in the Consolidated Statement of profit and loss. The losses arising from impairment are recognized in the Consolidated Statement of profit and loss.

ii. Debt instrument at FVTPL

FVTPL is a residual category for debt instruments. Any debt instrument, which does not meet the criteria for categorization as at amortized cost or as FVTOCI is classified as FVTPL.

Debt instruments included within the FVTPL category are measured at fair value with all changes recognized in the Consolidated Statement of profit and loss.

iii. Equity investments

All equity investments in scope of Ind AS 109 are measured at fair value. Equity instruments which are held for trading are classified as at FVTPL. For all other equity instruments, the Group may make an irrevocable election to present in other comprehensive income subsequent changes in the fair value. The Group makes such election on an instrument-by-instrument basis. The classification is made on initial recognition and is irrevocable.

If the Group decides to classify an equity instrument at FVTOCI, then all fair value changes on the instrument, excluding dividends, are recognized in the OCI. There is no recycling of the amounts from OCI to the Consolidated Statement of profit and loss, even on the sale of the investment. However, the Group may transfer the cumulative gain or loss within equity.

Derecognition

A financial asset (or, where applicable, a part of a financial asset or part of a group of similar financial assets) is primarily derecognized when:

- The rights to receive cash flows from the asset have expired, or
- The Group has transferred its rights to receive cash flows from the asset or has assumed an obligation to pay the received cash flows in full without material delay to a third party under a "pass-through" arrangement; and either (a) the Group has transferred substantially all the risks and rewards of the asset, or (b) the Group has neither transferred nor retained substantially all the risks and rewards of the asset, but has transferred control of the asset.

Impairment of financial assets

In accordance with Ind AS 109, the Group applies Expected Credit Loss (ECL) model for measurement and recognition of impairment loss and credit risk exposure on the financial assets that are debt instruments measured at amortized costs e.g. loans, deposits, trade receivables, contractual receivables and bank balances. The Group follows 'simplified approach' for recognition of impairment allowance. The application of simplified

approach does not require the Group to track changes in credit risk. Rather, it recognizes impairment allowance based on lifetime ECLs at each reporting date, right from its initial recognition.

For recognition of impairment loss on other financial assets and risk exposure, the Group determines that whether there has been a significant increase in the credit risk since initial recognition. If credit risk has not increased significantly, 12-month ECL is used to provide for impairment loss. However, if credit risk has increased significantly, lifetime ECL is used. If, in a subsequent period, credit quality of the instrument improves such that there is no longer a significant increase in credit risk since initial recognition, then the entity reverts to recognizing impairment allowance based on 12-month ECL.

ECL impairment allowance (or reversal) recognized during the period is recognized as income/expense in the Consolidated Statement of profit and loss under the head 'other expenses' in the Consolidated Statement of profit and loss. ECL is presented as an allowance, i.e. as an integral part of the measurement of those assets in the balance sheet. The allowance reduces the net carrying amount. Until the asset meets write-off criteria, the Group does not reduce impairment allowance from the gross carrying amount.

Financial liabilities

Financial liabilities are classified, at initial recognition, as financial liabilities at FVTPL, loans and borrowings, payables, or as derivatives designated as hedging instruments in an effective hedge, as appropriate. All financial liabilities are recognized initially at fair value and, in the case of loans and borrowings and payables, net of directly attributable transaction costs. The Group's financial liabilities include trade and other payables, loans and borrowings including bank overdrafts, financial guarantee contracts and derivative financial instruments.

Subsequent measurement of financial liabilities depends on their classification as fair value through profit and loss or at amortized cost.

All changes in fair value of financial liabilities classified as FVTPL is recognized in the Consolidated Statement of profit and loss. Amortised cost category is applicable to loans and borrowings, trade and other payables. After initial recognition the financial liabilities are measured at amortised cost using the EIR method. Gains and losses are recognized in profit and loss when the liabilities are derecognized as well as through the EIR amortization process. Amortised cost is calculated by taking into account any discount or premium on acquisition and fees or cost that are integral part on EIR. The EIR amortization is included as finance cost in the Consolidated Statement of profit and loss.

Derecognition

A financial liability is derecognized when the obligation under the liability is discharged or cancelled or expires when an existing financial liability is replaced by another from the same lender on substantially different terms, or the terms of an existing liability are substantially modified, such an exchange or modification is treated as derecognition of the original liability and the recognition of a new liability. The difference in the respective carrying amounts is recognized in the Consolidated Statement of profit and loss.

Offsetting of financial instruments

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet if there is a currently enforceable legal right to offset the recognized amounts and there is an intention to settle on a net basis, to realize the assets and settle the liabilities simultaneously.

k. Derivative financial instruments and hedge accounting

Initial recognition and subsequent measurement

The Group uses derivative financial instruments, such as forward currency contracts and interest rate swaps, to hedge its foreign currency risks and interest rate risks respectively. Such derivative financial instruments are initially recognized at fair value on the date on which a derivative contract is entered into and are subsequently re-measured at fair value. Derivatives are carried as financial assets when the fair value is positive and as financial liabilities when the fair value is negative.

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Any gains or losses arising from changes in the fair value of derivatives are taken directly to the Consolidated Statement of profit and loss, except for the effective portion of cash flow hedges, which is recognized in OCI and later reclassified to profit or loss when the hedge item affects profit or loss or treated as basis adjustment if a hedged forecast transaction subsequently results in the recognition of a non-financial asset or non-financial liability.

For the purpose of hedge accounting, hedges are classified as:

- Fair value hedges when hedging the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment
- Cash flow hedges when hedging the exposure to variability in cash flows that is either attributable to a particular risk associated with a recognized asset or liability or a highly probable forecast transaction or the foreign currency risk in an unrecognized firm commitment

At the inception of a hedge relationship, the Group formally designates and documents the hedge relationship to which the Group wishes to apply hedge accounting and the risk management objective and strategy for undertaking the hedge. The documentation includes the Group's risk management objective and strategy for undertaking hedge, the hedging / economic relationship, the hedged item or transaction, the nature of the risk being hedged and how the entity will assess the effectiveness of changes in the hedging instrument's fair value in offsetting the exposure to changes in the hedged item's fair value or cash flows attributable to the hedged risk. Such hedges are expected to be highly effective in achieving offsetting changes in fair value or cash flows and are assessed on an ongoing basis to determine that they actually have been highly effective throughout the financial reporting periods for which they were designated.

Hedges that meet the strict criteria for hedge accounting are accounted for, as described below:

(i) Fair value hedges

The change in the fair value of the hedged item attributable to the risk hedged is recorded as part of the carrying value of the hedged item and is also recognized in the Consolidated Statement of profit and loss as finance costs. The Group has not undertaken Fair value hedges.

(ii) Cash flow hedges

The effective portion of the gain or loss on the hedging instrument is recognized in OCI in the cash flow hedge reserve, while any ineffective portion is recognized immediately in the Consolidated Statement of profit and loss. The Group uses forward currency contracts as hedges of its exposure to foreign currency risk in forecast transactions and firm commitments. The ineffective portion relating to foreign currency contracts is recognized in finance costs.

Amounts recognized in OCI are transferred to the Consolidated Statement of profit and loss when the hedged transaction affects profit or loss, such as when the hedged financial income or financial expense is recognized or when a forecast sale occurs. When the hedged item is the cost of a non-financial asset or non-financial liability, the amounts recognized in OCI are transferred to the initial carrying amount of the non-financial asset or liability. If the hedging instrument expires or is sold, terminated or exercised without replacement or rollover (as part of the hedging strategy), or if its designation as a hedge is revoked, or when the hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss previously recognized in OCI remains separately in equity until the forecast transaction occurs or the foreign currency firm commitment is met.

The Group has an interest rate swap that is used as a hedge for the exposure of changes in the value of its fixed rate secured loan. See note 40 (b) for more details.

I. Share held by ESOP and Welfare trusts

The Group has created ESOP Trust and Welfare trusts for providing share-based payment to/welfare of its employees and various other employee benefit trusts for providing other employee benefits such as loans at

concessional rates for various purposes, collectively referred to as Employee Benefit Trusts (EBT). Own equity instruments are recognized at cost and deducted from equity.

m. Cash and cash equivalents

Cash and cash equivalent in the balance sheet comprise cash at banks and on hand and short-term deposits with an original maturity of three months or less, which are subject to an insignificant risk of changes in value. For the purpose of the Consolidated Statement of cash flows, cash and cash equivalents consist of cash and short-term deposits, as defined above, net of outstanding bank overdrafts as they are considered an integral part of the Group's cash management.

n. Government Grants

Government grants are recognized where there is reasonable assurance that the grant will be received and all attached conditions will be complied with. When the grant relates to an expense item, it is recognized as income on a systematic basis over the periods that the related costs, for which it is intended to compensate, are expensed. When the grant relates to an asset, it is recognized as income in proportion to the depreciation charged over the expected useful life of the related asset. The Group accounts for export incentives for export of goods if the entitlements can be estimated with reasonable accuracy and conditions precedent to claim are fulfilled.

o. Share capital

Equity shares issued to shareholders are classified as equity. Incremental costs directly attributable to the issue of new equity shares are recognized as a deduction from equity, net of any related income tax effects.

p. Income tax

Current tax

Current tax assets and liabilities are measured at the amount expected to be recovered from or paid to the taxation authorities. The tax rates and tax laws used to compute the amount are those that are enacted or substantively enacted, at the reporting date in the tax jurisdictions where the Group operates and generates taxable income.

Current income tax relating to items recognized outside profit or loss is recognized either in OCI or in equity. Current tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity. Management periodically evaluates positions taken in the tax returns with respect to situations in which applicable tax regulations are subject to interpretation and establishes provisions where appropriate.

Deferred tax

Deferred tax is provided using the liability method on temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes at the reporting date.

Deferred tax assets are recognized for all deductible temporary differences, the carry forward of unused tax credits and any unused tax losses. Deferred tax assets are recognized to the extent that it is probable that taxable profit will be available against which the deductible temporary differences, and the carry forward of unused tax credits and unused tax losses can be utilized.

The carrying amount of deferred tax assets is reviewed at each reporting date and reduced to the extent that it is no longer probable that sufficient taxable profit will be available to allow all or part of the deferred tax asset to be utilised. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realised or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

Deferred tax relating to items recognized outside profit or loss is recognized outside profit or loss (either in OCI or

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in equity). Deferred tax items are recognized in correlation to the underlying transaction either in OCI or directly in equity.

Deferred tax assets and deferred tax liabilities are offset if a legally enforceable right exists to set off current tax assets against current tax liabilities and the deferred taxes relate to the same taxable entity (or each tax group of entities when applicable) and the same taxation authority.

q. Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of an asset that necessarily takes a substantial period of time to get ready for its intended use or sale are capitalized as part of the cost of the asset. All other borrowing costs are expensed in the period in which they occur. Borrowing costs consist of interest and other costs that an entity incurs in connection with the borrowing of funds. Borrowing cost also includes exchange differences to the extent regarded as an adjustment to the borrowing costs.

r. Leases

The determination of whether an arrangement is (or contains) a lease is based on the substance of the arrangement at the inception of the lease. The arrangement is, or contains, a lease if fulfilment of the arrangement is dependent on the use of a specific asset or assets and the arrangement conveys a right to use the asset or assets, even if that right is not explicitly specified in an arrangement.

Group as a lessee

A lease is classified at the inception date as a finance lease or an operating lease. A lease that transfers substantially all the risks and rewards incidental to ownership to the Group is classified as a finance lease.

Finance leases are capitalized at the commencement of the lease at the inception date fair value of the leased property or, if lower, at the present value of the minimum lease payments. Lease payments are apportioned between finance charges and reduction of the lease liability so as to achieve a constant rate of interest on the remaining balance of the liability. Finance charges are recognized in finance costs in the Consolidated Statement of profit and loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Group's general policy on the borrowing costs.

A leased asset is depreciated over the useful life of the asset. However, if there is no reasonable certainty that the Group will obtain ownership by the end of the lease term, the asset is depreciated over the shorter of the estimated useful life of the asset and the lease term.

Operating lease payments are recognized as an expense in the Consolidated Statement of profit and loss on a straight-line basis over the lease term.

Group as a lessor

Leases in which the Group does not transfer substantially all the risks and rewards of ownership of an asset are classified as operating leases. Rental income from operating lease is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized over the lease term on the same basis as rental income.

Leases are classified as finance leases when substantially all of the risks and rewards of ownership transfer from the Group to the lessee. Amounts due from lessees under finance leases are recorded as receivables at the Group's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the net investment outstanding in respect of the lease.

s. Impairment of non-financial assets

The Group assesses, at each reporting date, whether there is an indication that an asset may be impaired. If any indication exists, or when annual impairment testing for an asset is required, the Group estimates the asset's recoverable amount. An asset's recoverable amount is the higher of an asset's or Cash Generating Unit's (CGU)

fair value less costs of disposal and its value in use. Recoverable amount is determined for an individual asset, unless the asset does not generate cash inflows that are largely independent of those from other assets or groups of assets. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount.

In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset. In determining fair value less costs of disposal, recent market transactions are taken into account. If no such transactions can be identified, an appropriate valuation model is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded companies or other available fair value indicators.

The Group bases its impairment calculation on detailed budgets and forecast calculations, which are prepared separately for each of the Group's CGUs to which the individual assets are allocated. These budgets and forecast calculations generally cover a period of five years. For longer periods, a long-term growth rate is calculated and applied to project future cash flows after the fifth year. To estimate cash flow projections beyond periods covered by the most recent budgets/forecasts, the Group extrapolates cash flow projections in the budget using a steady or declining growth rate for subsequent periods, unless an increasing rate can be justified. In any case, this growth rate does not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used. Impairment losses including impairment on inventory are recognized in the Consolidated Statement of profit or loss.

For assets excluding goodwill, an assessment is made at each reporting date to determine whether there is an indication that previously recognized impairment losses no longer exist or have decreased. If such indication exists, the Group estimates the asset's or CGU's recoverable amount. A previously recognized impairment loss is reversed only if there has been a change in the assumptions used to determine the asset's recoverable amount since the last impairment loss was recognized. The reversal is limited so that the carrying amount of the asset does not exceed its recoverable amount, nor exceed the carrying amount that would have been determined, net of depreciation, had no impairment loss been recognized for the asset in prior years. Such reversal is recognized in the Consolidated Statement of profit and loss unless the asset is carried at a revalued amount, in which case, the reversal is treated as a revaluation increase.

Goodwill is tested for impairment annually as at the year-end and when circumstances indicate that the carrying value may be impaired.

Impairment is determined for goodwill by assessing the recoverable amount of each CGU (or group of CGUs) to which the goodwill relates. When the recoverable amount of the CGU is less than its carrying amount, an impairment loss is recognized. Impairment losses relating to goodwill cannot be reversed in future periods.

t. Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation. When the Group expects some or all of a provision to be reimbursed, for example, under an insurance contract, the reimbursement is recognized as a separate asset, but only when the reimbursement is virtually certain. The expense relating to a provision is presented in the Consolidated Statement of profit and loss net of any reimbursement.

If the effect of the time value of money is material, provisions are discounted using a current pre-tax rate that reflects, when appropriate, the risks specific to the liability. When discounting is used, the increase in the provision due to the passage of time is recognized as a finance cost.

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Warranty provisions

Provisions for warranty-related costs are recognized when the product is sold or service provided to the customer. Initial recognition is based on historical experience. The initial estimate of warranty related costs is revised annually.

Provision for onerous contracts

A provision for onerous contracts is recognized when the expected benefits to be derived by the Group from a contract are lower than the unavoidable cost of meeting its obligations under the contract. The provision is measured at the present value of the expected net cost of continuing with the contract. Before a provision is established, the Group recognizes any impairment loss on the assets associated with that contract.

Decommissioning liability

The Group records a provision for decommissioning costs of its manufacturing facilities. Decommissioning costs are provided at the present value of expected costs to settle the obligation using estimated cash flows and are recognized as part of the cost of the particular asset. The unwinding of the discount is expensed as incurred and recognized in the Consolidated Statement of profit and loss as finance cost. The estimated future costs of decommissioning are reviewed annually and adjusted as appropriate. Changes in the estimated future costs or in the discount rate applied are added to or deducted from the cost of the asset.

u. Retirement and other employee benefits

Retirement benefit in the form of provident fund is a defined contribution scheme. The Group has no obligation, other than the contribution payable to the provident fund. The Group recognizes contribution payable to the provident fund scheme as an expense, when an employee renders the related service. If the contribution payable to the scheme for service received before the balance sheet date exceeds the contribution already paid, the deficit payable to the scheme is recognized as a liability after deducting the contribution already paid. If the contribution already paid exceeds the contribution due for services received before the balance sheet date, then excess is recognized as an asset to the extent that the pre-payment will lead to, for example, a reduction in future payment or a cash refund.

The Company and some of its Indian subsidiaries operate a defined benefit gratuity plan, which requires contributions to be made to a separately administered fund.

The cost of providing benefits under the defined benefit plan is determined using the projected unit credit method.

Remeasurements, comprising of actuarial gains and losses, the effect of the asset ceiling, excluding amounts included in net interest on the net defined benefit liability and the return on plan assets (excluding amounts included in net interest on the net defined benefit liability), are recognized immediately in the balance sheet with a corresponding debit or credit to retained earnings through OCI in the period in which they occur. Remeasurements are not reclassified to the Consolidated Statement of profit and loss in subsequent periods.

Past service costs are recognized in the Consolidated Statement of profit and loss on the earlier of:

- The date of the plan amendment or curtailment, and
- The date that the Group recognizes related restructuring costs

Net interest is calculated by applying the discount rate to the net defined benefit liability or asset. The Group recognizes the following changes in the net defined benefit obligation as an expense in the Consolidated Statement of profit and loss:

- Service costs comprising current service costs, past-service costs, gains and losses on curtailments and non-routine settlements; and
- Net interest expense or income

Accumulated leave, which is expected to be utilized within the next 12 months, is treated as short-term employee

benefit. The Group measures the expected cost of such absences as the additional amount that it expects to pay as a result of the unused entitlement that has accumulated at the reporting date.

The Group treats accumulated leave expected to be carried forward beyond twelve months, as long-term employee benefit for measurement purposes. Such long-term compensated absences are provided for based on the actuarial valuation using the projected unit credit method at the year-end. The Group presents the leave as a current liability in the balance sheet as it does not have an unconditional right to defer its settlement for 12 months after the reporting date.

v. Segment Reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief operating decision maker.

The Board of Directors of the Company has identified the Managing Director and Chief Executive Officer as the chief operating decision maker of the Group.

w. Contingent liability

A disclosure for a contingent liability is made where there is a possible obligation that arises from past events and the existence of which will be confirmed only by the occurrence or non-occurrence of one or more uncertain future events not wholly within the control of the Group or a present obligation that arises from the past events where it is either not probable that an outflow of resources will be required to settle the obligation or a reliable estimate of the amount cannot be made.

x. Earnings Per Share (EPS)

The Group presents the basic and diluted EPS data for its equity shares. Basic EPS is computed by dividing the net profit for the year attributable to the equity shareholders of the Group by the weighted average number of equity shares outstanding during the year. Diluted EPS is computed by adjusting the net profit for the year attributable to the equity shareholders and the weighted average number of equity shares considered for deriving basic EPS for the effects of all the equity shares that could have been issued upon conversion of all dilutive potential equity shares (which includes the various stock options granted to employees).

y. Dividends

Dividend to equity shareholders is recognized as a liability in the period in which the dividends are approved by the equity shareholders. Interim dividends that are declared by the Board of Directors without the need for equity shareholders' approvals are recognized as a liability and deducted from shareholders' equity in the year in which the dividends are declared by the Board of directors.

3. Significant accounting judgements, estimates and assumptions

The preparation of the Group's consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of revenue, expenses, assets and liabilities, and the accompanying disclosures and including the disclosure of contingent liabilities as at the reporting date. However, uncertainty about these assumptions and estimates could result in outcomes that require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

3.1 Judgements

In the process of applying the Group's accounting policies, management has made the following judgments, which have the most significant effect on the amounts recognized in the consolidated financial statements:

i. Revenue from contracts with customers

A significant portion of the Group's business relates to EPC contracts which is accounted using cost-based input method, recognizing revenue as the performance on the contract progresses. This requires management to make judgement with respect to identifying contracts for which revenue need to be recognised over a period of time, depending upon when the customer consumes the benefit, when the

Notes to the consolidated financial statements for the year ended March 31, 2019
(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

control is passed to customer, whether the asset created has an alternative use and whether the Group has right to payment for performance completed till date, either contractually or legally. The input method requires management to make significant judgments of the extent of progress towards completion including accounting of multiple contracts which need to be combined and considered as a single contract.

ii. Consolidation

Structured Entities

The Company has an ESOP trust and various Employee Welfare Trusts for the welfare of its employees. Determination of the Group's control over these trusts for the purpose of consolidation requires judgement on the part of the Management of the Group.

The ESOP trust and various Employee Welfare Trusts, being separate legal entities, are not considered for the purpose of consolidation in the standalone financial statements. However, these trusts have been consolidated in the consolidated financial statements under Ind AS 110.

iii. Arrangements in the nature of lease

The Group has entered into certain arrangements with its customers where the Group will supply heat/steam by installing the boiler/heater at the customers' premises. The Group has determined, based on an evaluation of the terms and conditions of the arrangements, that fulfillment of these arrangement is dependent on the use of specific assets and the arrangement conveys to customers a right to use these specific assets. Accordingly, the Group has determined that these arrangements qualify as arrangements in the form of lease as specified in Appendix C to Ind-AS 17. The Group has also determined, based on evaluation of terms and conditions of these arrangements, such as the contract term constituting a major part of the economic life of the specific assets and the fair value of the asset, that it has transferred the significant risks and rewards in these assets to the customers and therefore these embedded lease arrangements have been classified as finance leases. The separation of lease and non-lease elements in these arrangements have been made at relative fair value of these elements, requiring Management judgment.

iv. Contingencies relating to Tax & legal matter

The Group has received various orders and notices from tax authorities in respect of direct taxes and indirect taxes. The outcome of these matters may have a material effect on the financial position, results of operations or cash flows. Management regularly analyzes current information about these matters and provides provisions for probable losses including the estimate of legal expense to resolve such matters. In making the decision regarding the need for loss provisions, management considers the degree of probability of an unfavorable outcome and the ability to make a sufficiently reliable estimate of the amount of loss. The filing of a suit or formal assertion of a claim against the Group or the disclosure of any such suit or assertions, does not automatically indicate that a provision of a loss may be appropriate.

v. Segment reporting

Ind AS 108 'Operating Segments' requires Management to determine the reportable segments for the purpose of disclosure in consolidated financial statements based on the internal reporting reviewed by Chief Operating Decision Maker (CODM) to assess performance and allocate resources. The Standard also requires Management to make judgments with respect to aggregation of certain operating segments into one or more reportable segment.

Operating segments used to present segment information are identified based on the internal reports used and reviewed by the Managing Director and Chief Executive Officer to assess performance and allocate resources. The management has determined that some of the segments exhibit similar economic characteristics and meet other aggregation criteria and accordingly aggregated into three reportable segments i.e. energy, environment and chemical.

3.2 Estimates and assumptions

The key assumptions concerning the future and other key sources of estimation uncertainty at the reporting date, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year, are described below. The Group based its assumptions and estimates on parameters available when the consolidated financial statements were prepared. Existing circumstances and assumptions about future developments, however, may change due to market changes or circumstances arising that are beyond the control of the Group. Such changes are reflected in the assumptions when they occur.

i. EPC contracts:

- **Provisions for liquidated damages claims (LDs):** The Group provides for LD claims to the extent that it is highly probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved. This requires an estimate of the amount of LDs payable under a claim which involves a number of management judgments and assumptions regarding the amounts to be recognized.
- **Project cost to complete estimates:** At each reporting date, the Group is required to estimate costs to complete on fixed-price contracts. Estimating costs to complete on such contracts requires the Group to make estimates of future costs to be incurred, based on work to be performed beyond the reporting date. This estimate will impact revenues, cost of sales, work-in-progress, billings in excess of costs, estimated earnings and accrued contract expenses.
- **Recognition of contract variations:** The Group recognises revenues and margins from contract variations where it is considered probable that they will be awarded by the customer and this requires management to assess the likelihood of such an award being made by reference to customer communications and other forms of documentary evidence
- **Provision for onerous contracts:** The Group provides for future losses on EPC contracts where it is considered highly probable that the contract costs are likely to exceed revenues in future years. Estimating these future losses involves a number of assumptions about the achievement of contract performance targets and the likely levels of future cost escalation over time. Refer note 19(b) for details for provision for onerous contract.

ii. Impairment of non-financial assets

Impairment exists when the carrying value of an asset or cash generating unit (CGU) exceeds its recoverable amount, which is the higher of its fair value less costs of disposal and its value in use. The fair value less costs of disposal calculation is based on available data from binding sales transactions, conducted at arm's length, for similar assets or observable market prices less incremental costs for disposing of the asset. The value in use calculation is based on a Discounted Cash Flow (DCF) model. The cash flows are derived from the budget for the next five years as approved by the Management and do not include restructuring activities that the Group is not yet committed to or significant future investments that will enhance the asset's performance of the CGU being tested. The recoverable amount is sensitive to the discount rate used for the DCF model as well as the expected future cash-inflows and the terminal growth rate used.

iii. Defined benefit plans - gratuity

The cost of the defined benefit gratuity plan and the present value of the gratuity obligation are determined using actuarial valuations. An actuarial valuation involves making various assumptions that may differ from actual developments in the future. These include the determination of the discount rate, future salary increases and mortality rates. Due to the complexities involved in the valuation and its long-term nature, a defined benefit obligation is highly sensitive to changes in these assumptions. All assumptions are reviewed at each reporting date. The parameter which is most subjected to change is the discount rate. In

Notes to the consolidated financial statements for the year ended March 31, 2019
(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

determining the appropriate discount rate for plans operated in India, the management considers the interest rates of government bonds in currencies consistent with the currencies of the post-employment benefit obligation. The mortality rate is based on Indian Assured Lives Mortality (2012-14) Ultimate. Those mortality tables tend to change only at interval in response to demographic changes. Future salary increases are based on expected future inflation rates. Further details about gratuity obligations are given in note 33.

iv. Fair value measurement of unquoted financial instruments

When the fair values of financial assets and financial liabilities recorded in the balance sheet cannot be measured based on quoted prices in active markets, their fair value is measured using valuation techniques including the DCF model. The inputs to these models are taken from observable markets where possible, but where this is not feasible, a degree of assumption is required in establishing fair values. Judgments include considerations of inputs such as liquidity risk, credit risk and volatility. Changes in assumptions about these factors could affect the reported fair value of financial instruments. Refer note 39 for further disclosures.

v. Warranty provision

The Group generally offers warranty for its various products. Warranty costs are provided based on a technical estimate of the costs required to be incurred for repairs, replacements, material costs, servicing cost and past experience in respect of warranty costs. Management estimates the related provision for future warranty claims based on historical warranty claim information, as well as recent trends that might suggest that past cost information may differ from future claims. The assumptions made in current period are consistent with those in the prior year. Factors that could impact the estimated claim information include the success of the Group's productivity and quality initiatives. Warranty provisions are discounted using a pre-tax discount rate which reflects current market assessments of time value of money and risks specific to the liability. Refer note 19 for further details.

vi. Impairment of financial assets

The impairment provisions for financial assets are based on assumptions about risk of default, expected loss rates and timing of cash flows. The Group uses judgment in making these assumptions and selecting the inputs to the impairment calculation, based on the Group's past history, existing market conditions as well as forward looking estimates at the end of each reporting period.

As a practical expedient, the Group uses a provision matrix to determine ECL impairment allowance on portfolio of its trade receivables for its Indian operations. The provision matrix is based on its historically observed default rates over the expected life of the trade receivables and is adjusted for forward-looking estimates. At every reporting date, the historical observed default rates are updated and changes in the forward-looking estimates are analysed. On that basis, the Group estimates a default rate of total revenue for trade receivables and contract revenue for contract assets. The Group follows provisioning norms based on ageing of receivables to estimate the impairment allowance under ECL. For retention receivables, the Group additionally categorizes the receivables due from Public Sector Undertakings (PSUs) and Non-PSUs and follows a wider aged bucket provisioning norms as the performance guarantee tests require certain time period after the supplies are completed. Refer note 7 and 9(b) for details of impairment allowance recognized at the reporting date.

vii. Useful lives of property, plant and equipment and intangible assets

The Group determines, based on independent technical assessment, the estimated useful lives of its property, plant and equipment and intangible assets for calculating depreciation and amortisation. This estimate is determined after considering the expected usage of the asset or physical wear and tear. Management reviews the residual value and useful lives annually and future depreciation and amortisation

charge would be adjusted where the management believes the useful lives differ from previous estimates. Refer note 2.3(f) and 2.3(g) above for further details.

viii. Deferred taxes

At each balance sheet date, the Group assesses whether the realization of future tax benefits is sufficiently probable to recognize deferred tax assets. This assessment requires the use of significant estimates with respect to assessment of future taxable income. The recorded amount of total deferred tax assets could change if estimates of projected future taxable income or if changes in current tax regulations are enacted for any of the tax jurisdictions in which the Group operates. Refer note 10 for further information on potential tax benefits for which no deferred tax asset is recognized.

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Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

4 (a) Property, Plant and Equipment

Particulars	Freehold land	Leasehold land	Buildings	Plant and equipment	Office equipment	Computer	Furniture and fixtures	Vehicle	Total	Capital work in progress
Gross carrying amount as at April 1, 2017*	**7.36**	**80.93**	**416.60**	**574.33**	**39.47**	**55.14**	**39.28**	**11.88**	**1,224.99**	**138.47**
Additions	-	0.04	85.37	94.85	3.10	2.88	1.42	3.29	**190.95**	155.85
Addition on account of acquisition	-	-	18.79	4.44	-	-	-	-	**23.23**	-
Disposals/Transfers/Adjustments	-	1.84	(0.50)	(6.44)	(0.98)	(7.21)	(3.26)	(2.70)	**(19.25)**	(190.95)
Exchange differences	-	2.17	10.81	8.76	0.89	0.04	0.19	-	**22.86**	-
Gross carrying amount as at March 31, 2018	**7.36**	**84.98**	**531.07**	**675.94**	**42.48**	**50.85**	**37.63**	**12.47**	**1,442.78**	**103.37**
Additions	-	3.64	94.50	88.06	5.51	6.40	5.74	2.84	**206.69**	143.44
Adjustment on account of acquisition	-	43.18	179.52	87.13	1.05	0.10	0.19	0.16	**311.33**	-
Disposals/Transfers/Adjustments	-	-	(0.01)	(13.64)	(1.79)	(2.54)	(1.88)	(1.46)	**(21.32)**	(206.69)
Exchange differences	-	(1.69)	(0.43)	(1.19)	(0.07)	0.11	(0.13)	0.08	**(3.32)**	-
Gross carrying amount as at March 31, 2019	**7.36**	**130.11**	**804.65**	**836.30**	**47.18**	**54.92**	**41.55**	**14.09**	**1,936.16**	**40.12**
Accumulated depreciation and impairment as at April 1, 2017*	**-**	**3.57**	**102.68**	**352.30**	**20.40**	**47.79**	**22.02**	**8.06**	**556.82**	**-**
Charge for the year	-	0.68	15.28	40.17	3.82	3.78	2.61	1.39	**67.73**	-
Impairment	-	-	-	1.99	-	-	-	-	**1.99**	-
Disposals/Transfers/Adjustments	-	0.79	(0.07)	(5.11)	(0.60)	(7.47)	(2.55)	(2.15)	**(17.16)**	-
Exchange differences	-	0.14	4.39	7.18	-	0.77	0.04	0.16	**12.68**	-
Accumulated depreciation and impairment as at March 31, 2018	**-**	**5.18**	**122.28**	**396.53**	**23.62**	**44.87**	**22.12**	**7.46**	**622.06**	**-**
Charge for the year	-	1.10	23.27	46.89	3.08	1.98	1.25	0.74	**78.31**	-
Impairment^	-	-	-	1.76	0.03	0.07	0.15	-	**2.01**	
Disposals/Transfers/Adjustments	-	-	-	(11.43)	(1.29)	(2.54)	(1.68)	(1.42)	**(18.36)**	-
Exchange differences	-	(0.09)	(0.96)	(1.68)	0.61	(0.53)	0.11	(0.30)	**(2.84)**	-
Closing Accumulated depreciation and impairment as at March 31, 2019	**-**	**6.19**	**144.59**	**432.07**	**26.05**	**43.85**	**21.95**	**6.48**	**681.18**	**-**
Net Block as at March 31, 2019	**7.36**	**123.92**	**660.06**	**404.23**	**21.13**	**11.07**	**19.60**	**7.61**	**1,254.98**	**40.12**
Net Block as at March 31, 2018	**7.36**	**79.80**	**408.79**	**279.41**	**18.86**	**5.98**	**15.51**	**5.01**	**820.72**	**103.37**

*The Group had elected to continue with the carrying value of property, plant and equipment as recognised in the financial statements as per previous GAAP and had regarded those values as the deemed cost on the date of transition (i.e. April 1, 2015). The Group has disclosed the gross cost and accumulated depreciation above, for information purpose only. The total accumulated depreciation as at April 1, 2015 was Rs. 448.39.

Capital work in progress also includes expenditure towards extension of manufacturing facilities and plant and equipment under construction pending to be deployed to customers sites.

^Considering the current market scenario and performance of Thermax (Zhejiang) Cooling & Heating Engineering Company Ltd., the Group has accounted for provision for impairment of certain property, plant and equipment.

The Group has given certain part of its office building / equipments on lease, the value of which can not be determined but would not be significant. (note 32 (iii)).

For assets given as collateral as security, refer note 16.

Details of assets held under finance lease (vehicles, plant and equipment's and office equipment's):

Particulars	March 31, 2019	March 31, 2018
Assets held under finance lease - cost	6.55	2.11
Assets held under finance lease - accumulated depreciation	(0.99)	(0.66)
Net block	**5.56**	**1.45**

Capitalisation of expenses

During the year, the Group has capitalised the following expenses of revenue nature to the cost of fixed assets (property, plant and equipment/ intangible assets). Consequently, expenses disclosed under the respective notes are net of amounts capitalised by the Group.

Particulars	March 31, 2019	March 31, 2018
Salaries and wages	1.56	2.02
Raw material and components	5.86	4.03
Others	1.98	1.13
Total	**9.40**	**7.18**

4 (b) Intangible assets

Particulars	Computer Software	Technical know-how#	Goodwill	Total	Intangible assets under development
Gross carrying amount as at April 1, 2017*	**56.51**	**90.12**	**143.80**	**290.43**	**2.83**
Additions	3.94	1.52	-	**5.46**	2.63
Disposals/Transfers/Adjustments	0.58	(11.61)	(8.01)	**(19.04)**	(5.46)
Exchange difference	0.54	0.03	21.07	**21.64**	-
Gross carrying amount as at March 31, 2018	**61.57**	**80.06**	**156.86**	**298.49**	**-**
Additions	4.79	3.17	-	**7.96**	7.96
Adjustment on account of acquisition	0.05	-	-	**0.05**	(7.96)
Disposals/Transfers/Adjustments	(0.38)	-	-	**(0.38)**	-
Exchange difference	(0.05)	0.77	(6.71)	**(5.99)**	-
Gross carrying amount as at March 31, 2019	**65.98**	**84.00**	**150.15**	**300.13**	**-**
Accumulated amortisation as at April 1, 2017*	**47.26**	**62.55**	**38.06**	**147.87**	**-**
Charge for the year	3.65	9.07	-	**12.72**	-
Disposals/Transfers/Adjustments	0.29	(11.31)	(8.01)	**(19.03)**	-
Exchange difference	0.29	0.03	4.65	**4.97**	-
Accumulated amortisation as at March 31, 2018	**51.49**	**60.34**	**34.70**	**146.53**	**-**
Charge for the year	6.02	7.69	-	**13.71**	-
Impairment^	0.02	-	87.51	**87.53**	-
Disposals/Transfers/Adjustments	(0.32)	-	-	**(0.32)**	-
Exchange difference	0.22	0.71	(5.13)	**(4.20)**	-
Closing accumulated amortisation and impairment as at March 31, 2019	**57.43**	**68.74**	**117.08**	**243.25**	**-**
Net Block as at March 31, 2019	**8.55**	**15.26**	**33.07**	**56.88**	**-**
Net Block as at March 31, 2018	**10.08**	**19.72**	**122.16**	**151.96**	**-**

Net Block	March 31, 2019	March 31, 2018
Goodwill	33.07	122.16
Other intangible assets	23.81	29.80

*The Group had elected to continue with the carrying value of intangible assets and goodwill as recognised in the financial statements as per previous GAAP and had regarded those values as the deemed cost on the date of transition (i.e. April 1, 2015). The Group has disclosed the gross cost and accumulated amortisation above, for information purpose only. The total accumulated amortisation as at April 1, 2015 was Rs. 96.64.

Includes internally developed assets of net block Rs. 11.23 (March 31, 2018 : Rs. 12.37)

^ Considering the current market scenario and performance of TZL, the Group has accounted for provision for impairment of certain intangible asset, for Goodwill impairment refer note 4(c) below.

4(c) Impairment tests for goodwill

Goodwill arising out of business combinations in earlier years has been considered for impairment testing.

Carrying amount of goodwill pertaining to Danstoker A/S

Particulars	March 31, 2019	March 31, 2018
Goodwill	30.04	119.13

Goodwill pertaining to other subsidiaries has been tested for impairment, however, detailed disclosures have not been provided as the value of goodwill is not significant in comparison with the Group's total carrying amount of goodwill.

The Group performed its annual impairment test for years ended March 31, 2019 and March 31, 2018 at the respective year-end.

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Danstoker A/S

The recoverable value of Danstoker A/S (CGU) as at March 31, 2019, has been determined based on value in use calculation using cash flow projections from financial budgets approved by senior management covering a five-year period. The projected cash flows have been reassessed by the management to reflect the decreased demand for products and services and uncertainties caused by negative budget variation. It was observed that the net costs did not exceed the value in use. Hence, management has recognised an impairment charge of Rs. 87.51 in the current year against goodwill (March 31, 2018 : Nil). The impairment charge is recorded in the consolidated Statement of profit and loss.

The pre-tax discount rate applied to cash flow projections for impairment testing during the current year is 7.5% (March 31, 2018: 7.5%) and cash flows beyond the 5-year period have been extrapolated using a 2% growth rate (March 31, 2018: 3%) which is based on long-term industry average growth rate for the CGU.

Key assumptions sensitivity

The calculation of value in use is most sensitive to the following assumptions:

1 Sales Growth rate

2 Discount rate

Sales growth rate - Sales growth rate has been considered at an average annual growth rate over the five-year forecast period; based on past performance and management's expectations of market development. Prices included in revenue forecasts include long-term inflation forecasts. The Management has considered an average sales growth rate of 9% over the forecast period. Any decline in the average sales growth rate will result in further impairment of goodwill.

Discount rate - Discount rate represent the current market assessment of the risks specific to Danstoker A/S, taking into consideration the time value of money and individual risks of the underlying assets that have not been incorporated in the cash flow estimates. The discount rate calculation is based on the specific circumstances of the Group and Danstoker A/S and is derived from its weighted average cost of capital (WACC). The WACC takes into account both debt and equity. The cost of equity is derived from the expected return on investment by the Group's investors. The cost of debt is based on the interest-bearing borrowings the Group is obliged to service. CGU specific risk is incorporated by applying individual beta factors. The beta factors are evaluated annually based on publicly available market data. Adjustments to the discount rate are made to factor in the specific amount and timing of the future tax flows in order to reflect a pre-tax discount rate. Any rise in the discount rate will result in further impairment of goodwill.

5 Investments in joint ventures

Particulars	Face value per share	Number of shares		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investments in equity instruments :					
Investments accounted using the equity method (also refer note 37)					
Equity shares in Joint Venture Companies (Unquoted)					
Thermax SPX Energy Technologies Limited^	Rs. 10	-	10,200,000	-	1.03
Thermax Babcock & Wilcox Energy Solutions Private Limited*	Rs. 10	-	427,191,300	-	187.88
Investments in joint ventures				-	**188.91**

* The Holding Company has completed the acquisition process for the equity shares held by Babcock and Wilcox India Holding Inc. (B&W) in Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) on July 19, 2018. Accordingly, TBWES has become a wholly owned subsidiary of the Holding Company.

^ The Holding Company on February 25, 2019 entered into a share purchase agreement with Mutares Holding-24 AG and Balcke-Duerr GmbH to acquire the remaining 49% stake in Thermax SPX Energy Technologies Limited (SPX). All the conditions precedent to the transaction was completed before March 31, 2019 and hence SPX has become a wholly owned subsidiary of the Holding Company.

6 (a) Non-current investments

Particulars	Face value per share/ unit	Number of shares / units		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investments in equity instruments :					
Investments at Fair Value through Profit and Loss					
Quoted equity shares (fully paid up)					
Metroglobal Limited	Rs. 10	2	2	**	**
Sanghvi Movers Limited	Rs. 2	16,453	16,453	0.18	0.29
Quoted equity shares (partly paid up)					
Parasrampuria Synthetics Limited (paid up Rs. 2.50 per share)	Rs. 10	125,000	125,000	**	**
Unquoted equity shares (fully paid up)					
Cosmos Co-operative Bank Limited	Rs. 20	1,375	1,375	**	**
GSL (India) Limited	Rs. 10	17,539	17,539	**	**
Sicom Limited #	Rs. 10	10,000	10,000	-	-
Total investment in equity shares				**0.18**	**0.29**
Investment in preference shares:					
Investments at Fair Value through Profit and Loss					
Unquoted preference shares (fully paid up, redeemable)					
Indian Food Fermentation Limited (18% cumulative)#	Rs. 10	21,800	21,800	-	-
Total investment in preference shares				-	-
Investments in Mutual Funds:					
Investments at Fair Value through Profit and Loss					
Unquoted					
ABSL Fixed Term Plan Series OY (1218 Days) Direct Growth	Rs. 10	20,000,000	20,000,000	21.88	20.36
SBI Debt Fund Series C – 7 (1190 Days) - Direct - Growth	Rs. 10	15,000,000	15,000,000	16.33	15.25
SBI Debt Fund Series C – 27 (1260 Days) - Direct - Growth	Rs. 10	15,000,000	-	15.89	-
HDFC FMP 1167D January 2016 (1) - Direct - Growth- Series 35	Rs. 10		25,000,000	-	29.84
Total investments in Mutual Funds				**54.10**	**65.45**
Total value of Investments				**54.28**	**65.74**
Total Non-Current Investments				54.28	65.74
Aggregate amount of quoted investments (Book value)				0.18	0.29
Aggregate amount of quoted investments (Market value)				0.18	0.29
Aggregate amount of unquoted investments				54.10	65.45
Aggregate amount of impairment in the value of investments				-	-

** represents amount less than a lakh rupees

Deemed cost is considered to be Nil as on April 1, 2015

Investments at fair value through profit or loss reflect investment in quoted and unquoted equity and debt securities. Refer note 39 for determination of their fair values.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crores, except per share data and unless otherwise stated)

6 (b) Current Investments

Particulars	Face value per share	Number of units		Amount	
		March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Investments in Mutual Funds :					
Investments at Fair value through Profit and Loss					
Liquid/ Liquid Plus and Duration funds (Unquoted)					
Aditya Fixed Term Plan Series MY (1107 Days) - Direct	Rs. 10	-	25,000,000	-	30.30
Aditya Birla Sun Life Money Manager Fund Growth- Regular	Rs. 100	5,310,993	4,866,314	132.96	112.45
Aditya Birla Sun Life Money Market Fund-Growth-Direct Plan	Rs. 100	2,465,622	-	62.06	-
Birla SL FRF-Short Term Plan	Rs. 100	-	326,360	-	7.57
ABSL Liquid Fund Growth-Direct	Rs. 100	248,305	3,000,000	7.26	2.59
BSL Floating Rate Short term - Growth	Rs. 100	-	444,679	-	10.28
DSP Strategic Bond Fund - Regular Plan - Growth	Rs. 1,000	-	190,392	-	38.45
DSP Low Duration Fund - Regular Plan - Growth	Rs. 1,000	-	44,070,717	-	55.57
DSP Liquidity Fund- Direct Plan - Weekly Dividend	Rs. 1,000	50,028	-	5.01	-
DSP Liquidity Fund Direct Growth	Rs. 1,000	47,741	-	12.77	-
HDFC Gilt Fund Long Term - Regular Plan - Growth	Rs. 10	-	3,967,490	-	13.90
HDFC Arbitrage Fund-Wholesale Plan - Regular Plan - Growth	Rs. 10	-	12,398,949	-	25.77
HDFC Income Fund - Regular Plan - Growth	Rs. 10	-	3,610,670	-	13.83
HDFC Liquid Fund - Direct Plan- Growth Option	Rs. 1,000	12,818	-	4.71	-
HDFC Liquid Fund - Direct Plan - Dividend Weekly	Rs. 1,000	439,685	-	45.41	-
HDFC FMP 1167D January 2016 (1) - Direct - Growth - Series - 35	Rs. 10	25,000,000	-	32.06	-
ICICI Prudential Equity Arbitrage Fund - Growth	Rs. 10	-	11,225,411	-	25.82
ICICI Prudential Money Market Fund - Growth	Rs. 100	5,026,877	5,026,877	130.11	120.41
ICICI Prudential Money Market Fund - Direct Plan- Growth	Rs. 100	1,897,475	259,021	49.37	6.23
ICICI Prudential Money Market Fund - Direct Plan - Daily Dividend	Rs. 100	2,665	-	0.03	-
ICICI Prudential Liquid Fund -Direct Plan- Growth	Rs. 100	173,795	-	4.81	-
ICICI Prudential Mutual Fund	Rs. 10	-	500,000	-	0.51
IDFC Cash Fund - Growth (Regular Plan)	Rs. 1,000	-	190	-	0.04
IDFC Cash Fund - Direct Plan- Growth	Rs. 1,000	-	970,233	-	204.74
Kotak Banking and PSU Debt Fund - Direct	Rs. 10	-	5,773,522	-	22.97
Kotak Bond Short Term Fund - Growth (Regular Plan)	Rs. 10	-	11,104,474	-	36.02
Kotak Equity Arbitrage Fund -Direct Plan- Growth	Rs. 10	-	15,946,102	-	40.69
Kotak Equity Arbitrage Fund - Growth (Regular Plan)	Rs. 10	-	10,404,615	-	25.87
Kotak Liquid Fund - Direct Plan- Growth	Rs. 1,000	23,431	59,100	8.87	20.81
Kotak Liquid Regular Plan Daily Dividend	Rs. 1,000	483	-	0.06	-
Kotak Money Market Scheme - Direct Plan- Growth	Rs. 1,000	67,988	-	20.98	-
Kotak Liquid Direct Plan Weekly Dividend	Rs. 1,000	453,390	-	45.64	-
L&T Liquid Fund - Direct Plan- Growth	Rs. 1,000	11,977	-	3.06	-
L&T Liquid Fund - Direct Plan -Weekly Dividend	Rs. 1,000	151,893	-	15.22	-
Reliance Money Market Fund- Direct Growth Plan Growth Option	Rs. 1,000	23,805	23,805	6.76	6.23
SBI Debt Fund Series B – 26 (1100 Days) - Direct	Rs. 10	-	10,000,000	-	12.09
SBI Magnum Ultra Short Duration Fund Direct Growth	Rs. 1,000	6,237	33,842	2.60	13.01
SBI Liquid Fund - Regular Plan- Growth	Rs. 1,000	29,212	29,212	8.52	7.93
SBI Liquid Fund - Direct Plan- Growth	Rs. 1,000	44,776	137	13.11	0.04
SBI Liquid Fund Direct Weekly Dividend	Rs. 1,000	145,549	-	15.45	-
Tata Liquid Fund Direct Plan - Growth	Rs. 1,000	15,089	-	4.45	-
Tata Money Market Fund - Regular Plan - Growth	Rs. 1,000	-	113	-	0.03
Tata Money Market Fund - Direct Growth	Rs. 1,000	22,630	806,394	6.84	220.82
UTI Liquid Cash Plan - Regular Growth Plan	Rs. 1,000	412,558	409,836	125.83	116.27
UTI Liquid Cash Plan - Direct Growth	Rs. 1,000	36,018	-	11.02	-
UTI Liquid Cash Plan- Direct Daily Dividend Plan Reinvestment	Rs. 1,000	878	-	0.09	-
UTI-Arbitrage Fund- Regular Growth Plan	Rs. 10	-	11,032,511	-	25.84
Total Current Investments				**775.06**	**1,217.08**
Aggregate amount of quoted investments and market value thereof				-	-
Aggregate amount of unquoted investments				775.06	1,217.08
Aggregate amount of impairment in the value of investments				-	-

Investments at fair value through profit or loss reflect investment in unquoted equity and debt securities. Refer note 39 for determination of their fair values.

7 Trade receivables

(a) Non-current trade receivables

	As at March 31, 2019	As at March 31, 2018
Trade receivables from:		
i) Related parties (note 35)	-	-
ii) Others	60.40	56.03
Total	**60.40**	**56.03**
Break-up for security details		
Secured, considered good	-	-
Unsecured, considered good	92.93	79.10
Trade receivables which has a significant increase in credit risk	-	-
Trade receivables - credit impaired	-	-
	92.93	**79.10**
Less: Impairment allowance	(32.53)	(23.07)
Total	**60.40**	**56.03**

(b) Current trade receivables

	As at March 31, 2019	As at March 31, 2018
Trade receivables from:		
i) Related parties (note 35)	0.07	1.51
ii) Others	1,378.06	1,241.70
Total	**1,378.13**	**1,243.21**
Break-up for security details		
Secured, considered good	208.36	182.20
Unsecured, considered good	1,494.11	1,360.51
Trade receivables which has a significant increase in credit risk	64.62	65.27
Trade receivables - credit impaired	31.45	32.45
	1,798.54	**1,640.43**
Less: Impairment allowance	(420.41)	(397.22)
Total	**1,378.13**	**1,243.21**

No trade or other receivables are due from directors or other officers of the Group either severally or jointly with any other person. Nor any receivable from firms or private companies in which any director is a partner, a director or a member, respectively.
Provision amounting to Rs. 56.76 (March 31, 2018 : 60.62) is already taken in books for trade receivables which has a significant increase in credit risk.
For terms and conditions relating to related party receivables, refer note 35.
Trade receivables are non-interest bearing and are generally on terms of 7 to 90 days.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

8 Loans

(a) Non-current loans

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
At amortized cost		
Loans to employees	7.41	6.85
Security deposits*	11.92	13.95
Total	**19.33**	**20.80**

(b) Current loans

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
At amortized cost		
Loans to employees	2.03	1.71
Security deposits*	5.10	3.67
Total	**7.13**	**5.38**

*Includes lease deposits given to directors of Rs. 0.53 (March 31, 2018 : Rs. 0.53). The maximum amount due from directors during the year amounted to Rs. 0.53 (March 31, 2018 Rs. 0.53), refer note 35. This also includes deposits given to various other parties for rent, utilities etc.

Loans are various kinds of non-derivative financial assets which generate fixed interest income for the Group. The carrying value may be affected by the changes in the credit risk of the counterparties. The tenure of such loans have different time range based on employee eligibility.

No loans are due from directors or key managerial persons of the Group either severally or jointly with any other person or from firms or private companies in which any director is a partner, a director or a member, respectively.

For terms and conditions relating to loan given to related parties, refer note 35.

9 Other assets

(a) Other non current financial assets

	As at March 31, 2019	As at March 31, 2018
Bank deposits with maturity of more than 12 months #	54.45	0.15
Total	**54.45**	**0.15**

#Above bank deposits includes Rs. 0.15 (March 31, 2018 : Rs. 0.15) which are pledged as margin money.

(b) Other current assets

	As at March 31, 2019	As at March 31, 2018
Derivative instruments at fair value through OCI		
Cash flow hedges		
Foreign exchange forward contracts	40.40	2.69
Derivative instruments at fair value through profit or loss		
Derivative not designated as hedges		
Foreign exchange forward contracts	7.49	1.58
At amortized cost		
Export incentive receivable	49.82	51.59
Interest accrued on bank deposits and others	3.31	2.01
Unbilled revenue (contract assets)	1,120.89	539.13
Total	**1,221.91**	**597.00**

Financial assets at fair value through other comprehensive income reflect the positive change in fair value of foreign exchange forward contracts, designated as cash flow hedges to hedge highly probable forecast sales and purchases in various foreign currencies.

^ Unbilled revenue is disclosed net of impairment allowance of Rs. 19.26 (March 31, 2018: Rs. 12.41) for contract assets.

10 Income taxes

The major components of income tax expense for the year ended March 31, 2019 and March 31, 2018 are:

Statement of profit and loss

Particulars	Year Ended March 31, 2019	Year Ended March 31, 2018
Current tax		
Current income tax	194.00	158.99
Deferred tax		
Relating to origination and reversal of temporary differences	(14.93)	6.76
Relating to tax losses	(94.13)	-
Income tax expense reported in the consolidated statement of profit and loss	**84.94**	**165.75**

Deferred tax assets amounting to Rs 94.13 has been accounted on the basis of assessment of probability of deductibility of brought forward unabsorbed losses and depreciation of TBWES against future taxable profits.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Other comprehensive income

Particulars	Year Ended March 31, 2019	Year Ended March 31, 2018
Deferred tax related to items recognised in other comprehensive income during the year		
Net gain or loss on revaluation of Cash flow hedge	(11.15)	0.31
Net gain or loss on remeasurements of defined benefit plans	(0.05)	1.79
Deferred tax (credit) /charge in other comprehensive income	**(11.20)**	**2.10**

Reconciliation of tax expense and accounting profit multiplied by India's domestic tax rate for March 31, 2019 and March 31, 2018

Particulars	Year Ended March 31, 2019	Year Ended March 31, 2018
Accounting profit before tax (before exceptional items)	499.91	396.85
Share of loss of joint ventures	(1.07)	(25.19)
Accounting profit before tax (before exceptional items and share of loss of joint ventures)	500.98	422.04
At India's statutory income tax rate (as per Income Tax Act, 1961) of 34.944% (March 31, 2018: 34.608%)	175.06	146.06
Effects of income not subject to tax		
- Dividend income	(1.71)	(0.07)
- Fair value gain on FVPL investments	-	(1.87)
Weighted deduction on research and development expenses	(2.44)	(1.99)
Deferred tax recognised on unabsorbed losses of earlier years	(94.13)	-
Derecognition of deferred tax assets in absence of future taxable profit	-	3.70
Unrecognized tax benefits on tax losses	6.90	8.55
Taxes paid on repatriation of branch profits	1.45	1.52
Others (includes effect of non-deductible business expenses and tax rate difference).	(0.20)	9.85
Effective tax	84.94	165.75
Income tax expense reported in the consolidated statement of profit or loss	**84.94**	**165.75**

Deferred tax

Statement of profit and loss

Particulars	Year Ended March 31, 2019	Year Ended March 31, 2018
Deferred tax relates to the following :		
Accelerated depreciation for tax purpose	48.66	3.18
Deferred tax recognised on unabsorbed losses of earlier year	(134.77)	-
Provision for doubtful debts and liquidated damages	(14.51)	3.09
Employee benefit obligations	(1.43)	0.33
Fair value gains on investment classified as fair value through profit and loss	(14.20)	15.17
Temporary differences due to impact of Income tax standards	15.59	(14.47)
Items allowed on payment basis	(4.37)	(4.54)
Others	(4.03)	4.00
Deferred tax (income) / expense	**(109.06)**	**6.76**

Balance sheet

Particulars	As at March 31, 2019	As at March 31, 2018
Deferred tax relates to the following :		
Accelerated depreciation for tax purpose	(114.56)	(65.90)
Losses available for offsetting against future taxable income	134.77	-
Revaluation of cash flow hedges	(1.51)	(12.66)
Provision for doubtful debts and liquidated damages	174.63	160.12
Items allowed on payment basis	11.09	6.72
Employee benefit obligations	15.59	14.11
Fair value gains on investments classified as fair value through profit and loss	(11.34)	(25.54)
Temporary differences due to impact of Income tax standards	4.44	20.03
Others*	(1.09)	(5.17)
Net deferred tax assets	**212.02**	**91.71**

* Includes impact on account of deferred tax created on unrealized profit elimination from inventory.

Reconciliation of deferred tax assets (net)

	March 31, 2019	March 31, 2018
Opening Balance	**91.71**	**99.33**
Tax (expense)/ income during the period recognised in profit or loss	109.06	(6.76)
Tax (expense)/ income during the period recognised in OCI	11.20	(2.10)
Currency translation effect	0.05	1.24
Closing balance	**212.02**	**91.71**

Break up of gross deferred tax assets/liabilities

	March 31, 2019	March 31, 2018
Deferred tax assets	221.92	108.18
Deferred tax liabilities	(9.90)	(16.47)
Net deferred tax assets	**212.02**	**91.71**

The Group offsets tax assets and liabilities if and only if it has a legally enforceable right to set off current tax assets and current tax liabilities and the deferred tax assets and deferred tax liabilities relate to income taxes levied by the same tax authority.

The Group has tax losses of Rs. 105.42 (March 31, 2018: Rs. 62.47) that are available for offsetting against future taxable profits of the companies in which the losses arose. Majority of these losses will expire over a period by end of March 2027. Deferred tax assets have not been recognised in respect of these losses as they may not be used to offset taxable profits elsewhere in the Group, they have arisen in subsidiaries that have been loss-making for some time, and there are no other plans or other evidence of recoverability in the near future. If the Group were able to recognise all unrecognised deferred tax assets, the profit would increase by Rs. 26.69 (March 31, 2018: Rs. 15.36).

At March 31, 2019, there is deferred tax liability of Rs. 2.86 (March 31, 2018: Rs. 2.60) for taxes that would be payable on the unremitted earnings of the Group's branches. The Group has determined that undistributed profits of its subsidiaries will not be distributed in the foreseeable future. During the year ended March 31, 2019 and March 31, 2018, the Holding Company has paid dividend to its shareholders. This has resulted in payment of dividend distribution taxes (DDT) to the taxation authorities. The Group believes that DDT represents additional payment to taxation authority on behalf of the shareholders. Hence DDT paid is charged to equity.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

11. Other assets

(a) Other non-current assets

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
Advance to suppliers	4.59	0.12
Capital advance	2.78	13.45
Balances with government authorities	111.54	147.60
Prepayments	40.74	42.10
Total	**159.65**	**203.27**

(b) Other current assets

	As at March 31, 2019	As at March 31, 2018
Unsecured, considered good		
Advance to suppliers	186.65	106.38
Advance to employees	8.79	14.37
Advance to related parties (note 35)	-	1.30
Prepayments	10.99	8.34
Balances with government authorities	237.78	187.62
Prepaid employee benefits (note 33)	9.92	10.88
Others*	12.22	25.25
Total	**466.35**	**354.14**

*Others include interest on tax refunds, other recoveries of expenses, etc.

There were no advances due by directors or officers of the Group or any of them severally or jointly with any other persons or amounts due by firms or private companies respectively in which any director is a partner or a member.

'For terms and conditions with related parties, refer note 35.

12 Inventories (valued at lower of cost and net realisable value)

	As at March 31, 2019	As at March 31, 2018
Raw materials, components and bought-outs **	345.73	223.71
Work-in-progress	91.84	75.08
Finished goods	52.04	49.61
Stores and spares	10.12	8.26
Traded goods	8.89	9.96
Total	**508.62**	**366.62**

**Includes goods in transit Rs. 16.85 (March 31, 2018 : Rs. 10.81)

For the year ended March 31, 2019 Rs. 5.70 (March 31, 2018 : Rs. 2.51) was recognised (net of reversals) as an expense for inventories carried at net realisable value. These were recognised as an expense during the year and included in cost of raw materials and components consumed in the Consolidated Statement of profit and loss.

13 (a) Cash and cash equivalents

	As at March 31, 2019	As at March 31, 2018
Balances with banks		
- in current accounts	278.32	181.51
- in deposits with original maturity of less than three months	24.75	57.33
Cheques, drafts on hand	4.76	7.27
Cash on hand	0.40	0.24
Total	**308.23**	**246.35**

Short-term deposits are made for varying periods ranging between one day and three months, depending on the immediate cash requirements of the Group, and earn interest at the respective short-term deposit rates.

Cash and cash equivalents include Rs. 13.59 (March 31, 2018 : Rs. 10.72) held by trust controlled by the Group which is kept for specific objects as per trust deed.

There are repatriation restrictions for usage of Rs. 26.53 (March 31, 2018 : Rs. 2.71) of cash and cash equivalents as at the end of the reporting period.

13 (b) Other bank balances

	As at March 31, 2019	As at March 31, 2018
Deposits with original maturity of more than 3 months but less than 12 months	59.85	46.83
Unpaid dividend account (restricted)	0.98	0.81
Total	**60.83**	**47.64**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

13 (c) Changes in liabilities arising from financing activities

Particulars	Borrowings	Unpaid dividend
As on April 1, 2017	116.70	0.77
Cash flow	69.27	-
Other	-	0.04
As on March 31, 2018	**185.97**	**0.81**
Cash flow	25.62	-
Unrealized foreign exchange (gain)/ loss	(2.73)	-
Other	-	0.17
As on March 31, 2019	**208.86**	**0.98**

14 Share capital

	As at March 31, 2019	As at March 31, 2018
Authorized shares		
37,50,00,000 (March 31, 2018: 37,50,00,000) equity shares of Rs. 2/- each.	75.00	75.00
	75.00	**75.00**
Issued, subscribed and fully paid share capital		
11,91,56,300 (March 31, 2018: 11,91,56,300) equity shares of Rs. 2/- each.	23.83	23.83
Less: 65,41,440 (March 31, 2018: 65,41,440) equity shares held by Trusts of Rs. 2/- each.	(1.31)	(1.31)
Total issued, subscribed and fully paid-up share capital	**22.52**	**22.52**

(a) Reconciliation of the shares outstanding at the beginning and at the end of the year

	No. of shares	Rs.
Equity share of Rs. 2 each issued, subscribed and fully paid		
As at April 1, 2017	112,614,860	22.52
Changes during the year	-	-
As at March 31, 2018	112,614,860	22.52
Changes during the year	-	-
As at March 31, 2019	**112,614,860**	**22.52**

(b) Terms/ rights attached to equity shares

The Company has one class of equity shares having a par value of Rs. 2 per share. Each shareholder is eligible for one vote per share held. The dividend proposed by the Board of Directors of the Holding Company is subject to the approval of the shareholders in the ensuing Annual General Meeting, except in case of interim dividend. In the event of liquidation, the equity shareholders are eligible to receive the remaining assets of the Company after distribution of all preferential amounts, in proportion to their shareholding.

(c) Equity share capital held by Ultimate Holding Company

	As at March 31, 2019	As at March 31, 2018
Ultimate Holding company		
RDA Holding and Trading Private Limited, India	12.87	12.87
6,43,28,500 (March 31, 2018: 6,43,28,500) equity shares of Rs. 2/- each fully paid		

(d) Details of equity shares held by shareholders holding more than 5% of the aggregate shares in the Holding Company

	As at March 31, 2019	As at March 31, 2018
RDA Holding and Trading Private Limited, India		
%	53.99	53.99
No. of shares	64,328,500	64,328,500
ARA Trusteeship Company Private Limited, India		
%	7.99	7.99
No. of shares	9,520,805	9,520,805

As per records of the Company, including its register of shareholders/ members and other declarations received from shareholders regarding beneficial interest, the above shareholding represents the legal ownerships of shares.

15 (a) Other equity

	As at March 31, 2019	As at March 31, 2018
Reserves and surplus		
Capital redemption reserve	50.34	50.34
Securities premium	57.28	57.28
Capital reserve		
Opening balance	17.82	17.82
Add : Arising on account of acquisitions (note 36)	77.30	-
Closing balance	95.12	17.82
General reserve	435.31	435.31
Retained earnings		
Opening balance	2,087.26	1,933.67
Add: Profit for the year	325.43	232.11
Add: Adjustments on account of acquisition of non-controlling interest	-	0.38
Less: Dividends paid	67.57	67.84
Less: Tax on dividend	13.89	14.55
Movement during the year	243.97	150.10

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Items of other comprehensive income recognised directly in retained earnings:		
Re-measurement gain/ (loss) on defined benefit plans, net of tax Rs. 0.05 (March 31, 2018 Rs. 1.79)	(0.15)	3.49
Net surplus in the Statement of profit and loss	**2,331.08**	**2,087.26**
Total Reserves and Surplus	**2,969.13**	**2,648.01**
Other Reserves		
Cash flow hedge reserve		
Opening balance	25.34	26.34
Add: Movement during the year (net)	(32.65)	1.41
Less: Tax on movement during the year	11.15	(0.31)
Add: Share of hedge reserve of joint venture (net of tax)	(0.53)	(2.10)
Closing balance	**3.31**	**25.34**
Foreign currency translation reserve		
Opening balance	18.87	(5.67)
Add: Movement during the year (net)	0.46	24.54
Closing balance	**19.33**	**18.87**
Total	**2,991.77**	**2,692.22**

Capital redemption reserve

Pertains to reserve created towards redemption of debentures and can be utilised in accordance with the provisions of the Act.

Securities premium

Securities premium is used to record the premium on issue of shares. The reserve is utilised in accordance with the provisions of the Act.

Capital reserve

Opening balance pertains to reserves arising on amalgamations in the past, which is required to be maintained as per statute and cannot be distributed to the shareholders. The change arising during the year relates to step-up acquisition of joint ventures (refer note 36).

General reserve

Represents amounts transferred from retained earning in earlier years as per the requirements of the erstwhile Companies Act 1956 and other countries' laws.

Cash flow hedge reserve

This reserve comprises the effective portion of the cumulative net change in the fair value of the cash flow hedge instruments related to hedged transactions that have not yet occurred.

Foreign currency translation reserve

The foreign currency translation reserve pertains to exchange differences on the translation of subsidiaries and branches having a functional currency other than Indian Rupees.

15 (b) Distribution made and proposed

	March 31, 2019	March 31, 2018
Cash dividend on equity shares declared and paid by Holding company:		
Final dividend for the year ended 2017-2018: Rs. 6 per share (2016-2017: Rs.6 per share) (gross of consolidation adjustments)	71.49	71.49
Dividend Distribution Tax on the above	12.64	14.55
	84.13	**86.04**

Proposed dividends on equity shares are subject to approval at the annual general meeting and are not recognised as a liability (including Dividend Distribution Tax thereon) as at the reporting date.

Proposed dividend of Holding Company on equity shares:		
Proposed dividend for the year ended 2018-19: Rs. 7 per share (2017-18: Rs. 6 per share)	83.41	71.49
Dividend Distribution Tax on the above	17.15	14.69
Total	**100.56**	**86.18**

The Holding company has taken set off of Rs. 2.05 (March 31, 2018 : Rs. Nil) for Dividend Distribution Tax paid by one of the subsidiary of the company.

16 Borrowings

(a) Non current borrowings

	As at March 31, 2019	As at March 31, 2018
At amortized cost		
Term loans (from banks)		
Secured loans	46.31	62.38
Term loans (other than banks)		
Secured loans	4.04	5.69
Lease obligation (note 32 (ii))	4.91	1.41
Total non-current borrowings	**55.26**	**69.48**
Less: amount disclosed under the head "Other current financial liabilities" (note 18 (b))		
- Current maturities of Term Loans	(19.07)	(16.15)
- Current maturities of finance lease obligation	(1.12)	(0.32)
Total	**35.07**	**53.01**

Secured loans from banks have been availed by one of the subsidiaries. These loans are repayable on a quarterly / semi - annual / annual basis over a period of seventeen years. Building with a carrying value of Rs. 26.69 (March 31, 2018 : Rs. 28.64) has been provided as collateral for these borrowings. These loans carry an annual interest rate of 1% - 5% (March 31, 2018 : 1% -5%)

Secured loans from others include:

- loan from mortgage credit institutions are repayable on monthly basis from April 2015 over a period of five years. The loan is secured by first charge on plant and equipment and escrow of cash flow for the specific project for which such facility has been availed. The loan carries an annual interest rate of 9.90% - 11.10%. (March 31, 2018 : 9.90% -11.10%)

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

- loan from mortgage credit institutions are repayable on monthly basis from April 2018 over a period of three years. The loan is secured by first charge on plant and machinery with a carrying value of Rs. 2.64 (March 31, 2018 : Nil), present and future stock of inventories and stores and spares not related to plant and equipment, book debts and other moveable assets. The loan carries an annual interest rate of 10.90%. (March 31, 2018 : Nil).

(b) Current borrowings

	As at March 31, 2019	As at March 31, 2018
At amortized cost		
Loans (from banks)		
Secured loans	110.00	124.24
Unsecured loans	75.00	40.00
Total	**185.00**	**164.24**

Secured loans from banks includes working capital facilities viz. bank overdraft, cash credit and acceptances for bills discounted by suppliers which are repayable in 60 to 120 days. Loans are secured by hypothecation of present and future stock of inventories and stores and spares not related to plant and equipment, book debts and other moveable assets. For one of the subsidiary, plant and equipment with a carrying value of Rs. 8.14 (March 31, 2018 : Rs. Nil) has been provided as collateral for these borrowings

Unsecured loan pertains to packing credit of Rs.75 (March 31, 2018: Rs. 40) carries an interest rate of 5.5% (March 31, 2018 : 4.5%) due for repayment within 180 days (March 18, 2018: 280 days) from date of disbursement or expected shipment date whichever is earlier.

17 Trade payables

(a) Non current trade payables

	As at March 31, 2019	As at March 31, 2018
Trade payables	28.76	21.88
Total	**28.76**	**21.88**

(b) Current trade payables

	As at March 31, 2019	As at March 31, 2018
Trade payables to		
i) Related parties (note 35)	-	1.31
ii) Others	1,370.65	1,037.29
Total	**1,370.65**	**1,038.60**

For terms and conditions with related parties, refer note 35.

Trade payables are non-interest bearing and are generally on terms of 7 to 90 days.

18 Financial liabilities

(a) Other non current liabilities

	As at March 31, 2019	As at March 31, 2018
Trade deposits	6.10	4.76
Total	**6.10**	**4.76**

(b) Other current liabilities

	As at March 31, 2019	As at March 31, 2018
Derivative instruments at fair value through OCI		
Cash flow hedges		
Foreign exchange forward contracts	28.77	2.26
Derivative instruments at fair value through profit or loss		
Derivative not designated as hedges		
Foreign exchange forward contracts	1.10	1.27
At amortized cost		
Current maturities of long-term borrowings (note 16 (a))	19.07	16.15
Current maturities of finance lease obligation (note 16 (a))	1.12	0.32
Employee related payables	66.59	59.67
Payables for PPE and intangible assets	10.23	28.89
Book overdraft	13.89	37.90
Unpaid dividend	0.98	0.81
Other payables *	6.42	6.36
Total	**148.17**	**153.63**

* includes dealer deposits, security deposits, etc.

19 Provisions

(a) Non-current provisions

	As at March 31, 2019	As at March 31, 2018
Provision for warranties	7.44	3.67
Provision for decommissioning liability	8.62	6.34
Total	**16.06**	**10.01**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

(b) Current provisions

	As at March 31, 2019	As at March 31, 2018
Provision for employee benefits		
Provision for gratuity (note 33)	0.59	0.49
Provision for leave encashment	65.17	61.84
	65.76	**62.33**
Other provisions		
Provision for onerous contracts	7.38	19.78
Provision for warranties	70.13	92.35
	77.51	**112.13**
Total	**143.27**	**174.46**

Provision for decommissioning liability

A provision has been recognised for decommissioning costs associated with the property taken on lease by the Group. The Group is committed to decommission the site as a result of construction of the manufacturing facility. The timing of cash outflows in respect of such provision cannot be reasonably determined.

Provision for warranties

Warranty costs are provided based on a technical estimate of the costs required to be incurred for repairs, replacements, material costs, servicing cost and past experience in respect of such costs. It is expected that this expenditure will be incurred over the contracted warranty period ranging up to 2 years. If warranty claim costs vary by 10% from management's estimate, the warranty provisions would be an estimated Rs. 7.76 higher or lower (March 31, 2018 : Rs. 9.60).

Provision for onerous contracts

A provision is made when the unavoidable costs of meeting the obligation under the contract exceed the currently estimated economic benefits. The timing of cash outflows in respect of such provision is over the contract period.

Movement in provisions

	Provision for onerous contracts	Provision for warranties	Provision for decommissioning liability
As at April 1, 2018	**19.78**	**96.02**	**6.34**
Arising on account of acquisitions	31.87	13.07	1.43
Additional provision recognised	6.39	22.32	0.48
Unused amounts reversed	(1.76)	(51.99)	-
Unwinding of discount	-	4.25	0.37
Utilised during the year	(48.90)	(6.10)	-
As at March 31, 2019	**7.38**	**77.57**	**8.62**
Breakup of provisions:			
Current	7.38	70.13	-
Non-current	-	7.44	8.62
Total	**7.38**	**77.57**	**8.62**

20 Other liabilities

(a) Other non-current liabilities

	As at March 31, 2019	As at March 31, 2018
Contract Liabilities		
Unearned revenue	9.96	8.15
Customer advances	25.99	37.27
Total	**35.95**	**45.42**

(b) Other current liabilities

	As at March 31, 2019	As at March 31, 2018
Contract liabilities		
Unearned revenue	303.42	289.33
Customer advances	1,458.44	1,205.13
Statutory dues and other liabilities*	32.01	40.40
Total	**1,793.87**	**1,534.86**

*includes tax deducted at source, GST, ESIC, provident fund, etc.

21 Revenue from operations

(a) Revenue from contracts with customers:

	March 31, 2019	March 31, 2018
Revenue from projects and products	5,113.70	3,793.13
Revenue from services	772.61	598.12
Total revenue from contracts with customers	**5,886.31**	**4,391.25**

Revenue from operations includes excise duty collected from customers of Rs. Nil (March 31, 2018 : Rs. 20.76). Post applicability of Goods and Services Tax (GST) with effect from July 1, 2017, the revenue from operations is disclosed net of GST. Accordingly, the revenue from operations is inclusive of excise duty invoiced till June 30, 2017 and are not comparable with revenue for year ended March 31, 2019 to that extent.

Refer note 2.2 in significant accounting policies related to 'Adoption of Ind AS 115'.

(b) Other operating income

	March 31, 2019	March 31, 2018
Export incentives	57.68	34.66
Sale of scrap	16.63	15.02
Interest income from finance lease	7.04	6.49
Commission income	2.96	1.54
Exchange fluctuation gain / (loss) (net) *	(0.93)	33.52
Royalty income	3.48	3.16
	86.86	**94.39**

* Includes mark to market gain on forward contracts not subjected to hedge accounting Rs. 6.39 (March 31, 2018 : Rs. 0.30)

Total revenue from operations	**5,973.17**	**4,485.64**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

21 (c) Disclosure pursuant to Ind AS 115: Revenue from Contract with Customers

i) By category of contracts

	March 31, 2019
Over a period of time basis	3,930.67
At a point-in-time basis	1,955.64
Total revenue from contracts with customers	**5,886.31**

Revenue by geographical market

	March 31, 2019
Within India	3,337.12
Outside India	2,636.05
Total revenue from operations	**5,973.17**

Revenue by segment

	March 31, 2019			
	Energy	**Environment**	**Chemical**	**Total**
Revenue from contracts with customers				
External revenue	4,721.37	824.37	410.28	5,956.02
Inter segment	(1.09)	(62.83)	(5.79)	(69.71)
Total revenue from contracts with customers	**4,720.28**	**761.54**	**404.49**	**5,886.31**
Other operating income	78.10	3.93	4.83	86.86
Total revenue from operations	**4,798.38**	**765.47**	**409.32**	**5,973.17**

ii) Contract balances

The following table provides information about contract balances from contracts with customers as at the reporting date:

	March 31, 2019
Trade receivables (note 7)	1438.53
Unbilled revenue (Contract asset) (note 9(b))	1,120.89
Unearned revenue (Contract liability) (note 20)	313.38
Customer advances (Contract liability) (note 20)	1,484.43

Contract assets primarily relate to the Group's rights to consideration for work completed but not billed at the reporting date from projects and customised contracts. Contract assets are transferred to Trade receivables on completion of milestones and related invoicing.

The Contract liabilities relate to unearned revenue and customer advances where performance obligations are yet to be fulfilled as per the contracts. The fulfilment of the performance obligations will extinguish these liabilities and revenue will be recognised, with no impact on the Group's cash positions on specific projects.

iii) Revenue recognised in the reporting year that was included in the contract

	March 31, 2019
Unearned revenue	225.46
Customer advance	668.88

iv) Changes in unbilled revenue and unearned revenue for the year

The explanation of the significant changes in the contract asset and the contract liability balances during the reporting period is presented in the table below

	March 31, 2019	March 31, 2019
Opening unbilled revenue (note 9(b))	**539.13**	
Opening unearned revenue (note 20)	**297.48**	**241.65**
- Arising on account of acquisitions	(37.09)	
- Transfer of contract assets to receivable from opening unbilled revenue	(487.20)	
- Increase in revenue as a result of changes in the measure of progress from the opening unearned revenue	225.46	
- Transfer of contract assets to receivable	(2,840.52)	
- Increase in revenue as a result of changes in the measure of progress	3,725.67	
'- Others*	(20.46)	**565.86**
Closing unbilled revenue (note 9(b))	**1,120.89**	
Closing unearned revenue (note 20)	**313.38**	**807.51**

* includes adjustments on account of onerous contracts, impairment allowance for the year etc.

v) Performance obligations

Performance obligation in project or a group of projects which are contracted at or near same time and negotiated simultaneously, are combined for the purpose of evaluation. The Group has estimated that multiple commitments pertaining to engineering procurement and commissioning of such projects is as single performance obligation which is spread over different accounting periods.

Performance obligation for products are evaluated on standalone basis, recognised at point in time. Generally, performance obligations for such contracts have an original expected duration of one year or less.

There are no major contracts with customers which have significant financing component included within them and therefore there is no difference between the timing of satisfaction of performance obligation vis a vis the timing of the payment.

Remaining performance obligations

The following table includes revenue expected to be recognised in the future related to performance obligations that are unsatisfied (or partially unsatisfied) at the reporting date.

The Group applies practical expedient included in para 121 of Ind AS 115 and does not disclose information about its remaining performance obligations for contracts that have an original expected duration of one year or less.

	March 31, 2019
Amount of revenue yet to be recognised for contracts having original expected duration of more than one year in progress as on March 31, 2019	3,300.07

The Group expects that a significant portion of the remaining performance obligation will be completed within next 2 years.

Notes to the consolidated financial statements for the year ended March 31, 2019
(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

(d) Revenue from construction contracts (disclosure pursuant to erstwhile Ind AS 11)

	March 31, 2018
Contract Revenue recognised during the year	2,742.80
In respect of contracts in progress as at March 31, 2018 :	
Aggregate amount of contract costs incurred and recognised profits (less recognised losses)	10,946.17

	March 31, 2018
Customer advance outstanding for contracts in progress	991.33
Retention money due from customers for contracts in progress	425.61
Gross amount due from customers (disclosed as unbilled revenue (Refer note 9 (b))	539.13
Gross amount due to customers (disclosed as unearned revenue (Refer note 20)	289.33

22 Other income

	March 31, 2019	March 31, 2018
Interest income from financial assets at amortised cost		
Bank deposits	7.21	4.15
Other interest income	9.50	10.15
Dividend income from equity investments designated at fair value through profit and loss	4.59	0.06
Liabilities no longer required written back	28.81	14.72
Fair value gain on financial instruments at fair value through profit and loss (net)	77.51	72.24
Miscellaneous income ^^	22.26	15.07
Total	**149.88**	**116.39**

^^ Includes rent income of Rs. 1.84 (March 31, 2018: Rs. 2.03); refer note 32(iii)

23 Cost of raw material and components consumed

	March 31, 2019	March 31, 2018
Inventories at the beginning of the year	223.71	172.76
Add: Purchases	3,367.57	2,356.33
	3,591.28	**2,529.09**
Inventories at the end of the year	(345.73)	(223.71)
	3,245.55	**2,305.38**
Less: capitalised during the year (note 4 (a))	(5.86)	(4.03)
Total	**3,239.69**	**2,301.35**

24 (Increase) in inventories of finished goods, work-in-progress and traded goods

	March 31, 2019	March 31, 2018
Inventories at the beginning of the year		
Work-in-progress	75.08	50.11
Finished goods	49.61	46.56
Traded goods	9.96	10.54
	134.65	**107.21**
Less: inventories at the end of the year		
Work-in-progress	91.84	75.08
Finished goods	52.04	49.61
Traded goods	8.89	9.96
	152.77	**134.65**
Total	**(18.12)**	**(27.44)**

25 Employee benefits expense

	March 31, 2019	March 31, 2018
Salaries and wages	688.41	608.40
Contribution to provident and other funds	37.58	34.07
Gratuity expense (note 33)	7.15	7.37
Staff welfare expenses	35.87	32.68
	769.01	682.52
Less: capitalised during the year (note 4(a))	(1.56)	(2.02)
Total	**767.45**	**680.50**

26 Finance costs

	March 31, 2019	March 31, 2018
Interest expense	9.70	7.19
Unwinding of discount	4.62	5.66
Total	**14.32**	**12.85**

27 Depreciation and amortisation expense

	March 31, 2019	March 31, 2018
Depreciation / impairment on property, plant and equipment (note 4(a))	78.31	69.72
Amortisation of intangible assets (note 4(b))	13.71	12.72
Total	**92.02**	**82.44**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

28 Other expenses

	March 31, 2019	March 31, 2018
Consumption of stores and spare parts	84.21	60.23
Power and fuel	51.02	40.11
Freight and forwarding charges (net)	142.94	88.69
Site expenses and contract labour charges	643.41	420.13
Drawing, design and technical service charges	29.16	24.98
Sales commission	28.54	27.18
Advertisement and sales promotion	16.33	11.80
Rent (note 32 (iv))	32.59	21.90
Rates and taxes	14.78	17.58
Insurance	11.21	7.14
Repairs and maintenance:		
Plant and machinery	23.94	19.44
Buildings	7.91	7.38
Others	34.08	25.45
Travelling and conveyance	92.86	78.81
Legal and professional fees (includes payment to auditors)	69.07	63.61
Director sitting fees	0.50	0.67
Bad debts/ advances written off	11.50	34.24
Provision for impairment allowance of financial assets (net)	39.50	(13.57)
Warranty expenses (net)	1.20	25.35
Loss on sale/ discard of assets (net)	0.55	1.35
CSR expenditure	8.33	9.19
Miscellaneous expenses (includes printing, communication, postage, security expense, etc.)	69.97	63.57
	1,413.60	**1,035.23**
Less: capitalised during the year (note 4(a))	(1.98)	(1.13)
Total	**1,411.62**	**1,034.10**

29 Earnings Per Share

	March 31, 2019	March 31, 2018
Net profit attributable to the Equity shareholders of the Company	325.43	232.11
Weighted average number of Equity shares of Rs. 2/- each (number in crores)	11.26	11.26
Basic and diluted Earning per share	28.90	20.61

30 Components of Other Comprehensive Income (OCI)

The disaggregation of changes to OCI by each type of reserve and surplus in equity is shown below:

During the year ended March 31, 2019

Particulars	Cash flow hedge reserve	Foreign Currency translation reserve	Retained earnings	Total
Foreign currency translation differences	-	0.46	-	**0.46**
Interest rate swap	0.17	-	-	**0.17**
Currency forward contract	(40.33)	-	-	**(40.33)**
Reclassified to Statement of profit or loss (Net)	18.66	-	-	**18.66**
Re-measurement gains (losses) on defined benefit plans	-	-	(0.15)	**(0.15)**
Share of OCI [cash flow hedge (net of tax)] of JV	(0.53)	-	-	**(0.53)**
Total	**(22.03)**	**0.46**	**(0.15)**	**(21.72)**

For the year ended March 31, 2018

Particulars	Cash flow hedge reserve	Foreign Currency translation reserve	Retained earnings	Total
Foreign currency translation differences	-	24.54	-	24.54
Interest rate swap	0.40	-	-	0.40
Currency forward contract	1.01	-	-	1.01
Reclassified to Statement of profit or loss (Net)	(0.31)	-	-	(0.31)
Re-measurement gains (losses) on defined benefit plans	-	-	3.49	3.49
Share of OCI [cash flow hedge (net of tax)] of JV	(2.10)	-	-	(2.10)
Total	**(1.00)**	**24.54**	**3.49**	**27.03**

31 Contingent liabilities and commitments

A Contingent liabilities

a) During earlier years and in the current period, the Holding Company has received demand notices/show cause-cum-demand notices from the Excise department covering period from June 2000 till June 2017 for Rs. 1,383.51 (March 31, 2018 Rs. 1376.92) (including penalty but excluding interest and further penalty thereon). These demands are of excise duty payable on inclusion of the cost of bought out items in the assessable value of certain products manufactured by the Holding Company, though such duty paid bought out items are directly dispatched by the manufacturers thereof to the ultimate customer, without being received in the Holding Company's factory. The Company has filed an appeal against the said orders received before CESTAT, Mumbai. Based on independent legal advice, the Holding Company is confident of the issue being ultimately decided in its favour and accordingly no provision has been considered necessary.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

b) **Taxes ***

	March 31, 2019	March 31, 2018
Excise, Customs Duty and Service tax	30.49	31.33
Sales tax	73.46	65.52
Income tax demands disputed in appellate proceedings#	125.30	24.84
References/appeals preferred by the Income tax department in respect of which, should the ultimate decision be unfavourable to the Group	44.15	47.48
Others	0.10	0.09

* Excluding interest and penalty thereon.

Including foreign subsidiaries

c) **Guarantees**

The Group has issued various guarantees for performance, deposits, tender money, advances etc. The management has considered the probability for outflow of the same to be remote and accordingly no amount has been disclosed here.

d) **Others**

	March 31, 2019	March 31, 2018
Liability for export obligations	78.82	87.65
Claims against the Group not acknowledged as debt	3.02	5.64

The timing and amount of the cash flow which will arise from these matters, will be determined by the relevant authorities on settlement of the cases or on receipt of claims from customers.

e) There are numerous interpretative issues relating to the Supreme Court judgement dated 28th February, 2019 on Provident Fund. Pending clarity on this issue, the Group has not recorded any impact of the same in the accounts.

f) There are certain law suits, disputes, warranty claims, etc., including commercial matters that arise from time to time in the ordinary course of business. The amounts involved in such matters are currently not quantifiable. Based on managements assessment under Ind AS 37 "Provisions, Contingent Liabilities and Contingent Assets", the claims against the group of companies are not tenable / probability of final outcome against the group companies is low and therefore not disclosed as contingent liabilities.

g) The Group has received a claim for avoidance from the liquidator of former subsidiary Omnical Kessel-und Apparatebau GmbH (Germany) which is under bankruptcy. The management, based on best estimates, expects no impact for such claim on the Group.

h) One of the subsidiary of Holding Company has received various assessment orders u/s 143(3) r.w.s. 144C(3) of Income Tax Act, 1961 for AY 2011-12 to AY 2015-16 adding back various adjustments amounting to Rs.52.46. Subsidiary has carried forward accumulated losses as per income tax act and additions has resulted in reduction in accumulated losses by Rs. 52.46. The Group has filed an appeal at various levels against the order. Based on the advice obtained from tax consultant, the Group does not expect any outflow in respect of these orders.

i) For contingent liability with respect to joint ventures, refer note 37.

B) Capital and other commitments

a) Liability in respect of partly paid shares Rs. 0.19 (March 31, 2018 Rs. 0.19).

b) Estimated amount of contracts remaining to be executed on capital account (net of advances) and not provided for is Rs. 20.98 (March 31, 2018 Rs. 49.60).

c) For lease commitments, refer note 32.

32 Leasing arrangements

i) Amounts receivable under Finance lease - where the Group is lessor

The Group has entered into certain arrangements with its customers where it will supply heat/steam by installing boiler/heater at the customers' premises. The Group has determined that fulfilment of these arrangements is dependent on the use of specific assets and the arrangement conveys to customers a right to use these specific assets. Accordingly, these arrangements qualify as arrangements in the form of a lease as specified in Appendix C to Ind-AS 17. Based on the evaluation of the terms and conditions of these arrangements such as the contract term constituting a major part of the economic life of the specific assets and the fair value of the asset, that it has transferred the significant risks and rewards in these assets to the customers and therefore these embedded lease arrangements have been classified as finance leases.

	Gross Investment in lease		Present value of minimum lease payments	
Particulars	**March 31, 2019**	**March 31, 2018**	**March 31, 2019**	**March 31, 2018**
Within one year	13.42	11.38	5.63	4.30
After one year but not more than five years	50.02	41.13	33.43	25.66
More than five years	18.73	18.52	14.09	15.96
	82.17	**71.03**	**53.15**	**45.92**
Less: Unearned finance income	29.02	25.11	-	-
Present value of minimum lease payments receivable	53.15	45.92		
Allowance for uncollectible lease payments	-	-	-	-
	53.15	**45.92**		

Current portion of finance lease receivables	5.63	4.30
Non-current portion of finance lease receivables	47.52	41.62

Particulars	**March 31, 2019**	**March 31, 2018**
Estimated unguaranteed residual value of assets under finance lease	-	-
Contingent rent recognised as income during the year	-	-
Interest rate inherent in the lease	12.40% - 17.05%	12.40% - 17.05%

ii) Amounts payable under Finance lease - where the group is lessee

	Minimum lease payments		Present value of minimum lease payments	
Particulars	**March 31, 2019**	**March 31, 2018**	**March 31, 2019**	**March 31, 2018**
Within one year	1.12	0.32	1.12	0.32
After one year but not more than five years	3.94	1.14	3.79	1.09
More than five years	-	-	-	-
Total	**5.06**	**1.46**	**4.91**	**1.41**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

iii) Operating lease: Group as lessor

The Group has leased certain parts of its surplus office, buildings and equipment's. The tenure of such lease agreements ranges from 1 to 5 years. All leases include a clause to enable upward revision of the rental charge on an annual basis according to prevailing market conditions. For nature of assets, refer note 4 (a).

	March 31, 2019	March 31, 2018
Lease Rent received for the year	1.84	2.03

	March 31, 2019	March 31, 2018
Future minimum lease rental receivables under non-cancellable operating leases are as follows:		
Within one year	-	-
After one year but not more than five years	-	-
More than five years	-	-

iv) Operating lease: Group as lessee

The Group has taken office buildings and factory shed on operating lease for a tenure of 1 to 5 years. Lease rentals are charged to the Consolidated Statement of profit and loss for the year. There are no sub-leases. The leases are renewable on mutually agreeable terms. At the expiry of the lease term, either party has an option to terminate the agreement or extend the term by giving notice in writing.

	March 31, 2019	March 31, 2018
Lease payments for the year	32.59	21.90

	March 31, 2019	March 31, 2018
Future minimum lease rental payables under non-cancellable operating leases are as follows:		
Within one year	2.94	6.80
After one year but not more than five years	2.62	5.36
More than five years	0.39	0.41

33 Gratuity

The Holding Company and its Indian subsidiaries operate a defined benefit plan of gratuity for its employees. Under the gratuity plan, every employee who has completed at least specified years of service gets a gratuity on departure at 15 days (minimum) of the last drawn salary for each completed year of service. The scheme is funded with an insurance Company in the form of qualifying insurance policy. The funds have formed a trust and it is governed by the Board of Trustees. Overseas subsidiaries do not operate any defined benefit plans for employees.

The fund is subject to risks like changes in asset yields. In managing the plan assets, Board of Trustees reviews and manages these risks associated with the funded plan. Each year, the Board of Trustees reviews the level of funding in the gratuity plan. The Board of Trustees aim to keep annual contributions relatively stable at a level such that no plan deficits (based on valuation performed) will arise.

Particulars	March 31, 2019	March 31, 2018
Current asset	9.92	10.88
Current liability	(0.59)	(0.49)
	9.33	**10.39**

I **Changes in the net benefit obligation and fair value of plan assets are as follows :**

Particulars	Present value of obligation	Fair value of plan assets	Net amount
April 1, 2017	**89.33**	**(94.69)**	**(5.36)**
Current service cost	8.22	-	8.22
Interest expense/(income)	5.87	(6.72)	(0.85)
Total amount recognised in Profit or Loss	**14.09**	**(6.72)**	**7.37**
Experience adjustments	(1.52)	-	(1.52)
Return on plan assets (income)	-	(0.03)	(0.03)
Arising on account of acquisition	-	(0.61)	(0.61)
Actuarial loss from change in financial assumptions	(3.12)	-	(3.12)
Total amount recognised in Other Comprehensive Income	**(4.64)**	**(0.64)**	**(5.28)**
Employer contributions	-	(7.12)	(7.12)
Benefits paid	(11.01)	11.01	-
March 31, 2018	**87.77**	**(98.16)**	**(10.39)**
Current service cost	8.66	-	8.66
Interest expense/(income)	6.06	(7.57)	(1.51)
Total amount recognised in Profit or Loss	**14.72**	**(7.57)**	**7.15**
Experience adjustments	(0.56)	-	(0.56)
Asset ceiling adjustment	0.67	-	0.67
Return on plan assets expense	-	0.09	0.09
Actuarial loss from change in demographic assumptions	(0.03)	-	(0.03)
Actuarial loss from change in financial assumptions	0.03	-	0.03
Total amount recognised in Other Comprehensive Income	**0.11**	**0.09**	**0.20**
Employer contributions	-	(5.42)	(5.42)
Benefits paid	(12.36)	12.36	-
Arising on account of acquisition	1.12	(1.99)	(0.87)
March 31, 2019	**91.36**	**(100.69)**	**(9.33)**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

II The net liability disclosed above relates to funded plans which are as follows :

Particulars	March 31, 2019	March 31, 2018
Present value of funded obligation	91.36	87.77
Fair value of plan assets	(100.69)	(98.16)
Surplus of funded plan	**(9.33)**	**(10.39)**

III Significant asumptions

The principal actuarial assumptions were as follows :

Particulars	March 31, 2019	March 31, 2018
Discount rate	7.64%	7.65%
Salary growth rate	5 % to 7 %	5 % to 7 %
Normal retirement age	60 years	60 years
Mortality table	Indian Assured Lives Mortality (2012-14) Ultimate	Indian Assured Lives Mortality (2006-08) Ultimate
Employee turnover	5% to 15%	5% to 15%

IV Sensitivity analysis

The sensitivity of defined obligation to changes in the weighted principal assumptions is:

Assumption	March 31, 2019		March 31, 2018	
	Impact of 1% increase	Impact of 1% decrease	Impact of 1% increase	Impact of 1% decrease
Discount rate	Decrease by 5.21	Increase by 5.87	Decrease by 4.59	Increase by 5.12
Future salary increase	Increase by 5.39	Decrease by 4.88	Increase by 4.68	Decrease by 4.26
Attrition Rate	Increase by 0.17	Decrease by 0.19	Increase by 0.14	Decrease by 0.16

The above sensitivity analysis is based on a change in assumption while holding all other assumptions constant. In practice, this is unlikely to occur and changes in some of the assumptions may be correlated. When calculating the sensitivity of the defined benefit obligation to significant actuarial assumptions the same method (present value of defined benefit obligation calculated with the Projected Unit Credit Method at the end of the reporting period) has been applied as when calculating the defined benefit liability recognised in the balance sheet.

The method and types of assumptions used in preparing the sensitivity analysis did not change compared to the previous periods.

The following are the expected cash outflows to the defined benefit plan in future years:

Particulars	March 31, 2019	March 31, 2018
Within next 12 months	10.94	13.07
Between 2-5 years	39.63	38.81
Between 6-10 years	31.11	28.39

The average duration of the defined benefit plan obligation at the end of the reporting period is 9 years (March 31, 2018: 8 years)

V The major categories of plan assets are as follows:

Particulars	March 31, 2019	March 31, 2018
Investments with insurer (LIC of India)	100.00%	100.00%

34 Interests in other entities

Group information

A Subsidiaries

The consolidated financial statements of the Group includes subsidiaries listed in the table below. Unless otherwise stated, they have share capital consisting solely of equity shares that are held directly by the Group, and the proportion of ownership interests held equals the voting rights held by the group. The country of incorporation or registration is also their principal place of business for all companies

Sr. No.	Name of the Entity	Place of business/ Country of Incorporation	Ownership interest held by the group		Principal activities
			March 31, 2019	March 31, 2018	
1	Thermax Onsite Energy Solutions Ltd	India	100%	100%	Supply of steam and heat on build, own and operate basis
2	Thermax Instrumentation Ltd.	India	100%	100%	Civil, Erection & Commissioning and Operation and Maintenance of power plants
3	Thermax Engineering Construction Company Ltd.	India	100%	100%	Installation of industrial machinery and equipment
4	Thermax Sustainable Energy Solutions Ltd.	India	100%	100%	Carbon Advisory Services
5	Thermax International Ltd.	Mauritius	100%	100%	Acts as an investment company
6	Thermax Europe Ltd.	United Kingdom	100%	100%	Sale and service of vapour absorption chillers
7	Thermax Inc.	USA	100%	100%	Sale and service of vapour absorption chillers and sale of chemicals
8	Thermax do Brasil Energia e Equipamentos Ltda	Brazil	100%	100%	Rendering services including technical assistance
9	Thermax (Zhejiang) Cooling & Heating Engineering Company Ltd.	China	100%	100%	Products and services in heating, cooling, waste heat recovery, captive power, water treatment and recycling, waste management and performance chemicals
10	Thermax Netherlands BV.	Netherlands	100%	100%	Acts as an investment company
11	Thermax Denmark ApS	Denmark	100%	100%	Acts as an investment company
12	Danstoker A/S	Denmark	100%	100%	Produces and sells boilers to the energy market
13	Ejendomsanp artsselskabet Industrivej Nord 13	Denmark	100%	100%	Own and lease out property within group
14	Boilerworks A/S	Denmark	100%	100%	Produces and supplies high-pressure boilers and components, Operation and Maintenance of power plants
15	Boilerworks Properties ApS	Denmark	100%	100%	Own and lease out the property within group
16	Danstoker Poland S.p.Z.o.o.	Poland	100%	100%	Produces and supplies high-pressure boilers and components
17	Rifox-Hans Richter GmbH Spezialarmaturen	Germany	100%	100%	Manufacturing steam trap systems
18	Thermax Sdn.Bhd	Malaysia	100%	100%	Turnkey solutions provider
19	Thermax Engineering Singapore Pte. Ltd.	Singapore	100%	100%	Acts as an investment company
20	PT Thermax International Indonesia	Indonesia	100%	100%	Manufacturing of industrial products/boilers
21	Thermax Senegal S.A.R.L	Senegal	100%	100%	Plant management services
22	First Energy Private Limited	India	76%	76%	Alternative energy solution company
23	Thermax Energy & Environment Philippines Corporation	Philippines	100%	100%	Marketing and sales of component parts of boilers
24	Thermax Energy & Environment Lanka (Private) Limited	Sri Lanka	100%	100%	Marketing and sales of component parts of boilers
25	Thermax Nigeria Limited	Nigeria	100%	100%	Marketing and sales of component parts of boilers
26	Thermax Babcock & Wilcox Energy Solutions Pvt Ltd ##	India	100%	51%	Manufacture of steam or other vapour generating boilers and hot water boilers other than central heating boilers
27	Thermax SPX Energy Technologies Ltd ^	India	100%	51%	Supply & erection commissioning of Air cooled condenser (ACC), Rotary air Pre-Heater (RAPH), electrostatic precipitator (ESP), Bag Houses
28	Thermax Engineering Construction FZE^^	Nigeria	100%	NA	Operation and Maintenance of power plants
29	"Thermax Employee ESOP and Welfare Trust (72 nos.)**"	India	100%	100%	Employee welfare

**The above percentage of shareholding is before elimination of Trust's holding.

1 Thermax Hong Kong Ltd. (wholly owned subsidiary) has not been considered for consolidation as the same has become 'Dormant' company during the year 2009-10.

2 The non-controlling interest held in First Energy Private Limited is not material to the Group. Hence, the disclosures required under Para 12 of Ind AS 112 Disclosure of Interests in other entities are not considered necessary.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

B Parent Entity

Sr. No.	Name of the entity	Place of business/ Country of incorporation	Ownership interest held by the group		Type
			March 31, 2019	March 31, 2018	
1	RDA Holdings Pvt Ltd	India	53.99%	53.99%	Holding company

C Joint Ventures

Sr. No.	Name of the entity	Place of business/ Country of incorporation	Ownership interest held by the group		Principal activities
			March 31, 2019	March 31, 2018	
1	Thermax Babcock & Wilcox Energy Solutions Pvt Ltd##	India	-	51%	Manufacture of steam or other vapour generating boilers and hot water boilers other than central heating boilers
2	Thermax SPX Energy Technologies Ltd^	India	-	51%	Supply & erection commissioning of Air cooled condenser (ACC), Rotary air Pre-Heater (RAPH),electrostatic precipitator (ESP), Bag Houses

The investments listed above were accounted by equity method.

On July 19, 2018 ,Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) became a wholly owned subsidiary of the Company. For detail, refer note 6(a)

^ On February 25, 2019, Thermax SPX Energy Technologies Limited (SPX) , has become a wholly owned subsidiary of the Company. For detail, refer note 6(a)

** The Group has an ESOP trust and Employee Welfare Trusts for the welfare of the employees. Pursuant to the arrangement between the Trusts and the Company, the Company has determined that it has power to direct the relevant activities of the trust while being exposed to variable returns from its involvement with these entities. As a result, these entities have been consolidated in these financial statements.

^^ Date of incorporation August 31, 2018.

35 Related party disclosures

A For details of Holding company and Joint ventures, refer note 34.

B Individuals having significant influence over the Group by reason of voting power, and their relatives

1 Mrs. Meher Pudumjee - Chairperson

2 Mrs. Anu Aga - Director (Retired on August 8, 2018)

3 Mr. Pheroz Pudumjee - Director

4 Mr. Zahaan Pudumjee - Relative of Chairperson / Director

C Key Management Personnel:

1 Mr. M S Unnikrishnan - Managing Director and Chief Executive Officer
2 Dr. Raghunath A. Mashelkar - Independent Director (Retired on August 8, 2018)
3 Dr. Valentin A. H. von Massow - Independent Director
4 Dr. Jairam Varadaraj - Independent Director
5 Mr. Nawshir Mirza - Independent Director
6 Mr. Harsh Mariwala - Independent Director
7 Mr. Sashishekhar (Ravi) Balakrishna Pandit - Independent Director
8 Mrs. Rajani Kesari - Independent Director (w.e.f. November 14, 2018)
9 Mr. Amitabha Mukhopadhyay - Chief Financial Officer
10 Mr. Kedar Phadke - Company Secretary

D Enterprises with whom transactions have taken place during the year, over which control is exercised by individuals listed in 'B' and 'C' above:

1 Thermax Foundation, India
2 ARA Trusteeship Company Private Limited, India
3 Marico Limited, India
4 Aster DM Healthcare Limited, India
5 Elgi Ultra Industries Limited, India

E. Transactions with related parties:

Particulars	Joint Ventures		Enterprises over which control is exercised by Individuals having Significant influence over the company and Key Management Personnel		Key Management Personnel and Individuals having significant influence over the company mentioned in C above		Total	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
a. Transactions during the year								
Revenue from contracts with customers	-	0.07	1.07	-	-	-	**1.07**	**0.07**
Miscellaneous income	0.36	4.26	-	-	-	-	**0.36**	**4.26**
Recovery of expenses	-	0.01	-	-	-	-	**-**	**0.01**
Purchase of raw material and components	15.16	9.55	-	-	-	-	**15.16**	**9.55**
Purchase of property plant and equipment	-	0.60	-	-	-	-	**-**	**0.60**
Remuneration to key management personnel*	-	-	-	-	6.17	5.65	**6.17**	**5.65**
Donation	-	-	8.33	9.14	-	-	**8.33**	**9.14**
Director's sitting fees	-	-	-	-	0.50	0.40	**0.50**	**0.40**
Commission paid	-	-	-	-	3.46	2.79	**3.46**	**2.79**
Rent paid	-	-	-	-	0.44	0.39	**0.44**	**0.39**

* Does not include gratuity and leave encashment since the same is calculated for all employees of the Holding Company as a whole.

Dividend paid to RDA Holdings Pvt. Ltd., India is Rs. 38.60 (March 31, 2018: Rs. 38.60).

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Particulars	Joint Ventures		Enterprises over which control is exercised by Individuals having Significant influence over the company and key management Personnel		Key Management Personnel and Individuals having significant influence over the company mentioned in C above		Total	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
b. Balances as at the year end								
Trade receivables	-	1.51	0.07	-	-	-	0.07	1.51
Advances given	-	1.30	-	-	-	-	-	1.30
Loans given (security deposit)	-	-	-	-	0.53	0.53	0.53	0.53
Trade payables and other liabilities	-	1.31	-	-	-	-	-	1.31

F Related party transactions include transactions pertaining to the following parties with whom the percentage of the transactions are 10 % or more of the total of the above:

Particulars	March 31, 2019	March 31, 2018
Transactions during the year		
Sale of product and services		
Aster DM Healthcare Limited	0.21	-
Marico Limited	0.85	-
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	-	0.07
Miscellaneous income		
Thermax SPX Energy Technologies Limited, India	0.36	4.26
Recovery of expenses		
Thermax SPX Energy Technologies Limited, India	-	0.01
Purchase of raw material and components		
Thermax SPX Energy Technologies Limited, India	15.16	8.46
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	-	1.09
Purchase of property plant and equipment		
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	-	0.60
Remuneration to key management personnel		
Mr. M. S. Unnikrishnan	3.63	3.47
Mr. Amitabha Mukhopadhyay	2.23	2.01
Donation		
Thermax Foundation, India	8.33	9.14

Particulars	March 31, 2019	March 31, 2018
Directors sitting fees		
Mrs. Meher Pudumjee	0.07	0.06
Mrs. Anu Aga	0.02	0.04
Mr. Pheroz Pudumjee	0.09	0.07
Dr. Valentin A. H. von Massow	0.07	0.07
Dr. Jairam Varadaraj	0.08	0.06
Mr. Nawshir Mirza	0.06	0.05
Mr. Ravi Pandit	0.05	0.02
Commission paid		
Mrs. Meher Pudumjee	0.45	0.35
Mrs. Anu Aga	-	0.14
Mr. Pheroz Pudumjee	0.20	0.15
Dr. Valentin A. H. von Massow	0.30	0.30
Dr. Jairam Varadaraj	0.15	0.11
Mr. Nawshir Mirza	0.35	0.30
Mr. Harsh Mariwala	0.20	0.17
Mr. Ravi Pandit	0.15	0.07
Mrs. Rajani Kesari	0.06	-
Dr. Raghunath A. Mashelkar	-	0.10
Mr. M. S. Unnikrishnan	1.60	1.10
Rent paid		
Mrs. Meher Pudumjee	0.13	0.12
Mrs. Anu Aga	0.18	0.15
Mr. Pheroz Pudumjee	0.13	0.12

Particulars	March 31, 2019	March 31, 2018
Trade receivables		
Marico Limited	0.07	-
Thermax SPX Energy Technologies Limited, India	-	1.43
Advances given		
Thermax SPX Energy Technologies Limited, India	-	1.30
Trade payables		
Thermax Babcock & Wilcox Energy Solutions Private Limited, India	-	1.19
Thermax SPX Energy Technologies Limited, India	-	0.12
Loans given (security deposits)		
Mrs. Anu Aga	0.35	0.35
Mr. Pheroz Pudumjee	0.18	0.18

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

G. Terms and conditions of related party transactions:

The sales to and purchases from related parties are assessed to be at arm's length by the management. Outstanding balances at the year-end are unsecured and interest free and settlement occurs in cash. There have been no guarantees provided or received for any related party receivables or payables. For the year ended March 31, 2019, the Group has not recorded any impairment of receivables relating to amounts owed by related parties (March 31, 2018: Rs. Nil). This assessment is undertaken each financial year through examining the financial position of the related party and the market in which the related party operates.All outstanding balances are unsecured and repayable in cash.

36 (A) Acquisition of Thermax Babcock & Wilcox Energy Solutions Private Limited

I Summary of acquisition

The Group, has completed the acquisition process for the equity shares held by Babcock and Wilcox India Holding Inc. (B&W) in Thermax Babcock & Wilcox Energy Solutions Private Limited (TBWES) on July 19, 2018. Accordingly, TBWES has become a wholly owned subsidiary of the Company. TBWES is engaged in production activities related to Supercritical boiler manufacturing. The acquisition related costs amounted to Rs. 0.87, which have been debited to the Consolidated statement of profit and loss under legal and professional fees.

The details of purchase consideration, identifiable assets and liabilities assumed, computation of capital reserve and other details of acquisition have been summarised below.

II Details of acquisition

a) The details of purchase consideration, the net assets acquired and capital reserve are as follows:

Purchase consideration	Amount
Cash paid	50.34

b) The net assets and liabilities recognised as a result of the acquisition are as follows:

Assets and Liabilities	Amount
Property, plant and equipment and intangible assets	311.32
Other current and non-current assets	138.15
Other current and non-current liabilities	(134.43)
Net identifiable assets	**315.04**

c) Calculation of Capital Reserve

Acquisition date fair value of previously held equity interest	187.47
Purchase consideration paid	50.34
Less: Net identifiable assets	(315.04)
Capital Reserve	**(77.23)**

d) Revenue and profit contribution

The acquisition contributed revenues and profit to the group for the period March 31, 2019 as follows:

Revenue from operations of Rs. 36.50 and profit of Rs. 12.61 for the period July 19, 2018 to March 31, 2019.

If the acquisition had occurred on April 1, 2018, consolidated revenue and profit for the year ended March 31, 2019 would have been higher by Rs. 11.67 and Rs. 0.09 respectively.

36 (B) Acquisition of Thermax SPX Energy Technologies Limited

I. Summary of acquisition

The Group on February 25, 2019 entered into a share purchase agreement with Mutares Holding-24 AG and Balcke-Duerr GmbH to acquire the remaining 49% stake in Thermax SPX Energy Technologies Limited (SPX) at a consideration of 2 Euro. All the conditions precedent to the transaction was completed before March 31, 2019 and hence SPX has become a wholly owned subsidiary of the Company. SPX is engaged in business of supply & erection commissioning activity of Air cooled condenser (ACC), Rotary air Pre-Heater (RAPH), electrostatic precipitator (ESP), Bag houses. The acquisition related costs amounted to Rs. 0.04, which have been debited to the Consolidated statement of profit and loss under legal and professional fees

The details of purchase consideration, identifiable assets and liabilities assumed, computation of capital reserve and other details of acquisition have been summarised below.

II. Details of acquisition

a) The details of purchase consideration, the net assets acquired and capital reserve are as follows:

Purchase consideration	Amount
Cash payable (absolute amount)	2 EURO

b) The net assets and liabilities recognised as a result of the acquisition are as follows:

Assets and Liabilities	Amount
Property, plant and equipment	0.06
Other current and non-current assets	33.40
Other current and non-current liabilities	(33.32)
Net identifiable assets	**0.14**

c) Calculation of Capital Reserve

Acquisition date fair value of previously held equity interest	0.07
Purchase consideration payable*	-
Less: Net identifiable assets	(0.14)
Capital Reserve	**(0.07)**

* less than Rs. 1 lakh

d) Revenue and profit contribution

The control is transferred on March 31, 2019. If the acquisition had occurred on April 1, 2018, consolidated revenue and profit for the year ended March 31, 2019 would have been higher and lower by Rs.53.28 and Rs. 0.92 respectively.

36 (C) Acquisition of Danstoker Poland Spółka Z Ograniczona Odpowiedzialnoscia

I. Summary of acquisition

During the year 2017-18, the Group, through its step-down subsidiary in Denmark, acquired 100% stake in Barite Investments Sp. z.o.o., Poland ("Barite") during the previous year. With this, Barite became a step-down subsidiary of the Company. As part of a definitive agreement entered into with Weiss Sp. z.o.o. in Poland, Thermax acquired the assets and production activities related to boiler manufacturing. The transaction was completed on May 4, 2017, on which date the control has been transferred to the Company for a total consideration of Rs 21.90 and was paid in cash. The acquisition related costs amounted to Rs. 1.24, which have been debited to the Consolidated statement of profit and loss under legal and professional fees.

Post acquisition the name of the company was changed to Danstoker Poland Spółka Z Ograniczona Odpowiedzialnoscia. ("Danstoker Poland Sp. z.o.o.")

The group acquired Danstoker Poland Sp. z.o.o. to gain competitive cost advantage.

The details of purchase consideration, identifiable assets and liabilities assumed, computation of goodwill and other details of acquisition have been summarised in Note II below.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

II. Details of acquisition

a) The details of purchase consideration, the net assets acquired and goodwill are as follows:

Purchase consideration	Amount
Cash paid	21.90

b) The net assets and liabilities recognised as a result of the acquisition are as follows:

Assets and Liabilities	Amount
Property, plant and equipment	23.23
Other current and non-current assets	0.47
Employee related and finance lease liabilities	(1.80)
Net identifiable assets	**21.90**

c) Calculation of Goodwill

Purchase consideration paid	21.90
Less: Net identifiable assets	21.90
Goodwill	-

There were no other acquisitions in the year ended March 31, 2018.

d) Revenue and profit contribution

The acquisition contributed revenues and loss to the group for the period March 31, 2018 as follows:

Revenue from operations of Rs. 14.15 and loss of Rs. 5.00 for the period May 04, 2017 to March 31, 2018.

If the acquisition had occurred on April 1, 2017, consolidated revenue and profit for the year ended March 31, 2018 would have been higher by Rs. 2.08 and Rs. 0.52 respectively.

37 Interest in Joint Venture

The interest in Thermax Babcock & Wilcox Energy Solutions Pvt Ltd and Thermax SPX Energy Technologies Ltd are accounted for using equity method of accounting upto their respective acquisition (note 36).

The summarised financial information of the joint venture, based on its Ind AS financial statements, and reconciliation with the carrying amount of investment in consolidated financial statements are set out below:

Summarised balance sheet	Thermax Babcock & Wilcox Energy Solutions Pvt Ltd		Thermax SPX Energy Technologies Ltd	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
Current assets				
Cash and cash equivalents	-	3.98	-	8.63
Other Current assets	-	128.98	-	22.09
Total current assets	**-**	**132.96**	**-**	**30.72**
Total Non-current assets	**-**	**350.75**	**-**	**0.71**
Non-current liabilities				
Financial liabilities	-	-	-	-
Other Non-current liabilities	-	13.82	-	-
Total Non-current liabilities	**-**	**13.82**	**-**	**-**
Current liabilities				
Financial liabilities	-	0.32	-	8.54
Other Current liabilities	-	101.18	-	20.86
Total Current liabilities	**-**	**101.50**	**-**	**29.40**
Net assets	**-**	**368.39**	**-**	**2.02**
Group's share in %	-	51.00%	-	51.00%
Carrying amount	**-**	**187.88**	**-**	**1.03**

The information disclosed reflects the amounts presented in the financial statements of the relevant joint ventures and not Thermax Limited's share of those amounts. They have been amended to reflect adjustments made by the entity when using the equity method.

Reconciliation of investment in joint ventures

Particulars	March 31, 2019	March 31, 2018
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd	-	187.88
Thermax SPX Energy Technologies Ltd	-	1.03
Total	-	188.91
Investments in joint ventures	-	188.91

Summarised statement of Profit and loss	Thermax Babcock & Wilcox Energy Solutions Pvt Ltd		Thermax SPX Energy Technologies Ltd	
	April 1, 2018 to July 19, 2018	April 1, 2017 to March 31, 2018	April 1, 2018 to March 31, 2019	April 1, 2017 to March 31, 2018
Total income (including interest income Rs. 1.32 (March 31, 2018: Rs. 2.72))	17.60	147.99	69.56	14.44
Cost of raw materials and components consumed	4.30	84.56	64.48	17.52
Depreciation and amortisation expense	3.59	70.16	0.03	0.03
Finance costs	0.24	1.02	0.01	-
Employee benefits expense	3.43	20.24	2.95	3.10
Other expenses	5.85	13.64	3.97	1.55
Profit/ (loss) before tax	**0.19**	**(41.63)**	**(1.88)**	**(7.76)**
Tax Expense	-	-	-	-
Profit/ (loss) for the period/year	**0.19**	**(41.63)**	**(1.88)**	**(7.76)**
Other comprehensive income	**(1.04)**	**(3.92)**	**-**	**-**
Total comprehensive income	**(0.85)**	**(45.55)**	**(1.88)**	**(7.76)**
Group's share of (loss)	**(0.43)**	**(23.23)**	**(0.96)**	**(3.96)**

Reconciliation of share of loss on joint ventures

Particulars	March 31, 2019	March 31, 2018
Thermax share of (loss) of joint ventures		
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd	(0.43)	(23.23)
Thermax SPX Energy Technologies Ltd	(0.96)	(3.96)
Total	**(1.39)**	**(27.19)**
Consolidation level adjustments*	(0.21)	(0.10)
Share in Total comprehensive income	**(1.60)**	**(27.29)**
Share in Other comprehensive income	**(0.53)**	**(2.10)**
Share of loss of joint ventures	**(1.07)**	**(25.19)**

* Includes elimination of unrealised profit/ (loss) on combination of contracts.

Contingent Liabilities

Particulars	March 31, 2019	March 31, 2018
Share of joint venture's contingent liabilities Liability for export obligations (pertains to Thermax Babcock & Wilcox Energy Solutions Pvt Ltd)	-	1.03

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

38 Segment reporting

The Company's portfolio includes boilers and heaters, absorption chillers/heat pumps, power plants, solar equipment, related services, air pollution control equipment/system, water and waste recycle plant, ion exchange resins and performance chemicals and related services. The CEO and Managing Director (CMD) of the Company, Mr. M.S. Unnikrishnan has been identified as the chief operating decision maker ('CODM'). Management has determined the operating segments based on the reports reviewed by the CMD; that are used to make strategic decisions, allocation of resources and assessing the performance of the segments. The CMD evaluates the segments based on their revenue and operating results.

The CODM evaluates performance based on the revenues and operating profit for the three segments- Energy, Environment and Chemical. The composition of these segments is given below:

Segment	Products Covered
a) Energy	Boilers and heaters, Absorption Chillers/Heat Pumps, Power Plants, Solar equipment's and related services
b) Environment	Air Pollution Control equipment/systems, Water & Waste Recycle Plants and related services
c) Chemical	Ion Exchange Resins & Performance Chemicals

Segment Revenue, Segment Results, Segment Assets and Segment Liabilities include the respective amounts identifiable to each of the segments and amounts allocated on a reasonable basis.

Inter-segment transfer price is calculated as cost plus reasonable mark-up.

I Information about Business Segments:

Sr.No.	Particulars	March 31, 2019	March 31, 2018
i	**Segment Revenue**		
	a. Energy	4,799.47	3,497.05
	b. Environment	828.30	693.75
	c. Chemical	415.11	360.98
	Total	**6,042.88**	**4,551.78**
	Less: Inter segment revenue	69.71	66.14
	Income From operations	**5,973.17**	**4,485.64**
ii	**Depreciation and amortization**		
	a. Energy	61.81	53.03
	b. Environment	6.27	5.99
	c. Chemical	16.07	12.11
	d. Unallocated	7.87	11.31
		92.02	**82.44**
iii	**Segment Results**		
	Profit before tax and interest from each segment		
	a. Energy	321.77	283.42
	b. Environment	56.72	28.98
	c. Chemical	61.73	54.21
	Total	**440.22**	**366.61**
	Less : i) Interest	14.32	12.85
	ii) Other unallocable expenditure net of unallocable (income)	(75.08)	(68.28)
	iii) Share of loss of joint ventures (relating to Energy segment)	1.07	25.19
	iv) Exceptional items (relating to Energy segment)	89.54	-
	Total profit before tax	**410.37**	**396.85**

Sr.No.	Particulars	March 31, 2019	March 31, 2018
iv	**Segment Assets**		
	a. Energy	3,992.36	2,893.15
	b. Environment	497.51	493.66
	c. Chemical	364.70	354.12
	d. Unallocated	1,945.37	2,204.10
	Total Assets	**6,799.94**	**5,945.03**
v	**Segment Liabilities**		
	a. Energy	3,113.26	2,518.04
	b. Environment	383.43	388.50
	c. Chemical	54.03	63.20
	d. Unallocated	234.93	260.55
	Total Liabilities	**3,785.65**	**3,230.29**

Reconciliations to amounts Consolidated in financial statements

Reconciliation of profit

Particulars	March 31, 2019	March 31, 2018
Segment profit	440.22	366.61
Other income	149.88	116.39
Exceptional items	(89.54)	-
Finance cost	(14.32)	(12.85)
Other corporate costs*	(75.87)	(73.30)
Profit before tax	**410.37**	**396.85**

* Mainly includes employee cost, legal and professional expenses, depreciation on unallocable assets

Reconciliation of assets

Particulars	March 31, 2019	March 31, 2018
Segment operating assets	4,854.57	3,740.93
Investments (including investment in joint ventures)	829.34	1,405.99
Cash and bank balances	369.06	293.99
Balances with government authorities	264.40	335.22
Income tax assets	98.52	102.56
Other unallocated assets	384.05	66.34
Total assets	**6,799.94**	**5,945.03**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Reconciliation of liabilities

Particulars	March 31, 2019	March 31, 2018
Segment operating liabilities	3,550.72	2,969.74
Borrowings	220.07	217.25
Income tax liabilities	12.85	12.95
Other unallocable liabilities	2.01	30.35
Total liabilities	**3,785.65**	**3,230.29**

II **Information about geographic segment**

Revenue from external customers

Particulars	March 31, 2019	March 31, 2018
India	3,337.12	2,691.62
Outside India	2,636.05	1,794.02
Total	**5,973.17**	**4,485.64**

Revenue of Rs. 735.04 are derived from a single external customer for the year ended March 31, 2019. No individual customer contributed more than 10% of total revenue in the previous year.

Non-current asset

Particulars	March 31, 2019	March 31, 2018
India	1,397.41	1,262.72
Outside India	207.51	291.79
Total	**1,604.92**	**1,554.51**

39 Fair value measurements

a) Category of financial instruments and valuation techniques

Details of financial assets carried at amortised cost

	As at March 31, 2019	As at March 31, 2018
Trade receivables	1,438.53	1,299.24
Loans	26.46	26.18
Finance lease receivables	53.15	45.92
Other assets	1,228.47	592.88
Cash and cash equivalents	308.23	246.35
Bank balances other than cash and cash equivalents	60.83	47.64
Total	**3,115.67**	**2,258.21**
Current assets	2,933.97	2,139.61
Non-current assets	181.70	118.60
Total	**3,115.67**	**2,258.21**

The management has assessed that the carrying amounts of the above financial instruments approximate their fair values.

Details of financial assets carried at fair value through profit and loss

	As at March 31, 2019	As at March 31, 2018
Investments	829.34	1,282.82
Total	**829.34**	**1,282.82**
Current assets	775.06	1,217.08
Non-current assets	54.28	65.74
Total	**829.34**	**1,282.82**

The fair values of the quoted shares are based on price quotations at the reporting date.

Details of derivative assets

	As at March 31, 2019	As at March 31, 2018
Derivative instruments		
Cash flow hedges		
Foreign exchange forward contracts	40.40	2.69
Derivative not designated as hedges		
Foreign exchange forward contracts	7.49	1.58
Total	**47.89**	**4.27**
Current assets	47.89	4.27
Non-current assets	-	-
Total	**47.89**	**4.27**

Details of financial liabilities carried at amortised cost

	As at March 31, 2019	As at March 31, 2018
Borrowings	220.07	217.25
Trade payables	1,399.41	1,060.48
Employee related payables	66.59	59.67
Other liabilities	57.81	95.19
Total	**1,743.88**	**1,432.59**
Current liabilities	1,673.95	1,352.94
Non-current liabilities	69.93	79.65
Total	**1,743.88**	**1,432.59**

The management has assessed that the carrying amounts of the above financial instruments approximate their fair values.

The Group enters into derivative financial instruments with banks. Foreign exchange forward contracts are valued using valuation techniques, which employs the use of market observable inputs which captures credit quality of counterparties, foreign exchange spot and forward rates, yield curves of the respective currencies and currency basis spreads between the respective currencies. All derivative contracts are fully cash collateralised, thereby eliminating both counterparty and the Group's own non-performance risk. The changes in counterparty credit risk had no material effect on the hedge effectiveness assessment for derivatives designated in hedge relationships and other financial instruments recognised at fair value.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Details of derivative liabilities

	As at March 31, 2019	As at March 31, 2018
Derivative instruments		
Cash flow hedges		
Foreign exchange forward contracts	28.77	2.26
Derivative not designated as hedges		
Foreign exchange forward contracts	1.10	1.27
Total	**29.87**	**3.53**
Current liabilities	29.87	3.53
Non-current liabilities	-	-
Total	**29.87**	**3.53**

b) Fair value hierarchy

The following table provides the fair value measurement hierarchy of the Group's assets and liabilities.

Quantitative disclosures of fair value measurement hierarchy for assets and liabilities as at March 31, 2019

	Date of valuation	Level 1	Level 2	Level 3	Total
Financial assets					
Investments					
Equity instruments	March 31, 2019	0.18	-	-	0.18
Mutual funds	March 31, 2019	-	829.16	-	829.16
Derivative financial assets	March 31, 2019	-	47.89	-	47.89
Financial liabilities					
Derivative financial liabilities	March 31, 2019	-	29.87	-	29.87

Quantitative disclosures of fair value measurement hierarchy for assets and liabilities as at March 31, 2018

	Date of valuation	Level 1	Level 2	Level 3	Total
Financial assets					
Investments					
Equity instruments	March 31, 2018	0.29	-	-	0.29
Mutual funds	March 31, 2018	-	1,282.53	-	1,282.53
Derivative financial assets	March 31, 2018	-	4.27	-	4.27
Financial liabilities					
Derivative financial liabilities	March 31, 2018	-	3.53	-	3.53

There has been no transfer between level 1 and level 2 during the year.

The fair value of forward contracts is determined using observable inputs, such as currency exchange rates applied to notional amounts stated in the applicable contracts.

40 (a) Financial risk management

The Group's principal financial liabilities, other than derivatives, comprise trade and other payables and loans and borrowings. The main purpose of these financial liabilities is to finance the Group's operations. The Group's principal financial assets include loans, trade and other receivables and cash and cash equivalents that derive directly from its operations. The Group also holds FVTPL investments and enters into derivative transactions.

Risk is inherent in the Group's activities but it is managed through a process of ongoing identification, measurement and monitoring, subject to risk limits and other controls. This process of risk management is critical to the Group's continuing profitability and each individual within the Group is accountable for the risk exposures relating to his or her responsibilities. The Group is exposed to market risk, credit risk and liquidity risk.

The Company's Board of Directors is ultimately responsible for the overall risk management approach and for approving the risk strategies and principles. No significant changes were made in the risk management objectives and policies during the years ended March 31, 2019 and March 31, 2018. The management of the Company reviews and agrees policies for managing each of these risks which are summarised below:

I Market risk

Market risk is the risk that the value of an asset will fluctuate as a result of changes in market variables such as interest rates, foreign exchange rates, and equity prices, whether those changes are caused by factors specific to the individual investment or its issuer or factors affecting all investments traded in the market.

Market risk is managed on the basis of pre-determined asset allocations across various asset categories, diversification of assets in terms of geographical distribution and industry concentration, a continuous appraisal of market conditions and trends and management's estimate of long and short term changes in fair value.

a Interest rate risk

Interest rate risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in market interest rates. The Group is not currently exposed significantly to such risk as most of the the borrowings are on fixed interest terms.

b Foreign currency risk

Foreign exchange risk arises when future commercial transactions and relevant assets and liabilities are denominated in a currency that is not the Group's functional currency. Foreign exchange risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates.

Foreign exchange risk is managed on the basis of limits determined by management and a continuous assessment of current and expected exchange rate movements and entering into derivative contracts that hedge the maximum period of exposure of underlying transactions (i.e. highly probable forecast sales and purchases).

When a derivative is entered into for the purpose of being a hedge, the Group negotiates the terms of those derivatives to match the terms of the hedged exposure. For hedges of forecast transactions the derivatives cover the period of exposure from the point the cash flows of the transactions are forecasted up to the point of settlement of the resulting receivable or payable that is denominated in the foreign currency.

Foreign currency sensitivity

The following tables demonstrate the sensitivity to a reasonably possible change in USD, SEK, JPY and EUR exchange rates, with all other variables held constant. The impact on the Group's profit before tax is due to changes in the fair value of monetary assets and liabilities including foreign currency derivatives not designated as cash flow hedge and foreign currency derivatives with underlying foreign currency monetary assets/liabilities designated as cash flow hedge. The impact on the Group's pre-tax equity is due to changes in the fair value of forward exchange contracts designated as cash flow hedges.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

	Impact on profit before tax		Impact on other components of equity	
	March 31, 2019	March 31, 2018	March 31, 2019	March 31, 2018
USD Sensitivity				
INR/ USD - Increase by 1%	3.09	0.26	(0.68)	(6.45)
INR/ USD - Decrease by 1%	(3.09)	(0.26)	0.68	6.45
SEK Sensitivity				
INR/ SEK - Increase by 1%	0.10	0.25	0.14	-
INR/ SEK - Decrease by 1%	(0.10)	(0.25)	(0.14)	-
JPY Sensitivity				
INR/ JPY - Increase by 1%	(0.06)	0.12	-	-
INR/ JPY - Decrease by 1%	0.06	(0.12)	-	-
EURO Sensitivity				
INR/ EUR - Increase by 1%	0.67	1.22	0.51	1.81
INR/ EUR - Decrease by 1%	(0.67)	(1.22)	(0.51)	(1.81)

Favourable impact shown as positive and adverse impact as negative.

The exposure to other foreign currencies is not significant to the Group's financial statements.

c Price risk

The Group's equity securities are susceptible to market price risk arising from uncertainties about future values of the investment securities. These securities are unquoted. The Group manages the equity price risk through diversification and by placing limits on individual and total equity instruments. Reports on the equity portfolio are submitted to the Group's senior management on a regular basis. The Holding Company's Board of Directors reviews and approves all equity investment decisions.

As at balance sheet, the exposure to equity shares at fair value was Rs. 0.18 (March 31, 2018: Rs 0.29). At the reporting date, an increase / decrease of 10% market index would have a impact of approx. gain / loss of Rs. 0.02 (March 31, 2018: Rs 0.03) respectively on statement of profit and loss.

II Credit risk

Credit risk is the risk that counterparty will not meet its obligations under a financial instrument or customer contract, leading to a financial loss. The Group is exposed to credit risk from its operating activities (primarily trade receivables, lease assets and contract assets) and from its financing activities, including deposits with banks, foreign exchange transactions and other financial instruments.

Trade receivables

Customer credit risk is managed by each business unit. An impairment analysis is performed at each reporting date on an individual basis for major clients. In addition, a large number of minor receivables are grouped into homogenous group and assessed for impairment collectively. The calculation is based on losses as per historical data. The maximum exposure to credit risk at the reporting date is the carrying value of each class of financial assets disclosed in notes 7 and 9(b) above. The charge of impairment to Statement of profit and loss is disclosed in note 28 above. The Group evaluates the concentration of risk with respect to trade receivables as low, as its customers are located in several jurisdictions and industries and operate in largely independent markets.

Financial instruments and cash deposits

Credit risk from balances with banks, mutual funds, loans and other financial assets are managed by the Group's treasury department in accordance with the Group's policy. Investments of surplus funds are made only with approved counterparties having a good market reputation and within credit limits assigned to each counterparty. The limits are set to minimise the concentration of risks and therefore mitigate financial loss through counterparty's potential failure to make payments. The Group's maximum exposure to credit risk for bank balances and deposits as at March 31, 2019 and March 31, 2018 is the carrying amounts as disclosed in Note 9(a) and 13, maximum exposure relating to financial derivative instruments disclosed in notes 9(b) and 18(b) to the financial statements.

III Liquidity risk

Prudent liquidity risk management implies maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities to meet obligations when due and to close out market positions. Due to the dynamic nature of the underlying businesses, company treasury maintains flexibility in funding by maintaining availability under committed credit lines.

The management monitors rolling forecasts of the Group's liquidity position (comprising the undrawn borrowing facilities) and cash and cash equivalents on the basis of expected cash flows. This is generally carried out at operating segments level in the Group in accordance with practice and limits set by the Group. In addition, the Group's liquidity management policy involves projecting future cash flows and considering the level of liquid assets necessary to meet these and monitoring balance sheet liquidity ratios against internal requirements.

(i) Maturities of financial liabilities

The tables below summarises the Group's financial liabilities into relevant maturity profile based on contractual undiscounted payments:

March 31, 2019	< 1 year	1 to 3 years	> 3 years	Total
Non- derivative				
Borrowings	185.00	24.59	10.48	**220.07**
Trade Payables	1,370.65	28.76	-	**1,399.41**
Other financial liabilities				
Current maturities of long-tem borrowings	19.07	-	-	**19.07**
Unpaid dividend	0.98	-	-	**0.98**
Other payables	98.25	5.77	0.33	**104.35**
Derivatives (net settled)				
Foreign exchange forward contracts	29.87	-	-	**29.87**

March 31, 2018	< 1 year	1 to 3 years	> 3 years	Total
Non- derivative				
Borrowings	164.24	16.90	36.11	**217.25**
Trade Payables	1,038.60	21.88	-	**1,060.48**
Other financial liabilities				
Current maturities of long-tem borrowings	16.15	-	-	**16.15**
Unpaid dividend	0.81	-	-	**0.81**
Other payables	133.14	1.42	3.34	**137.90**
Derivatives (net settled)				
Foreign exchange forward contracts	3.53	-	-	**3.53**

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

40 (b) Hedging activities and derivatives

Cash flow hedges

Foreign currency risk

Foreign exchange forward contracts measured at fair value through OCI are designated as hedging instruments in cash flow hedges of forecast sales in EUR, USD, SEK, and forecast purchases in USD, JPY and SEK . These forecast transactions are highly probable, and fully cover the Group's expected future sales and future purchases based on the orders received.

While the Group also enters into other foreign exchange forward contracts with the intention to reduce the foreign exchange risk of expected sales and purchases, these other contracts are not designated in hedge relationships and are measured at fair value through profit or loss.

The foreign exchange forward contract balances vary with the level of expected foreign currency sales and purchases and changes in foreign exchange forward rates.

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Fair Value of Foreign exchange forward contracts designated as hedging instruments	47.89	(28.18)	4.27	(3.53)

The terms of the foreign currency forward contracts match the terms of the expected highly probable forecast transactions. As a result, no hedge ineffectiveness arise requiring recognition through profit or loss. Notional amounts are as mentioned below:

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Cash flow hedge				
Foreign exchange forward contracts	1,030.84	(298.26)	995.53	(9.30)
Derivatives not designated as hedges				
Foreign exchange forward contracts	302.42	(37.80)	334.48	(82.44)

All the derivative contracts expire in next 12 months.

The cash flow hedges of the expected future sales during the year ended March 31, 2019 were assessed to be highly effective and a net unrealised gain of Rs. 18.56 (March 31, 2018: Rs. 0.26), with a deferred tax liability of Rs. 6.58 (March 31, 2018: Rs. 0.09) relating to the hedging instruments, is included in OCI. The cash flow hedges of the expected future purchases during the year ended March 31, 2019 were assessed to be highly effective, and as at March 31, 2019, a net unrealised loss of Rs. 16.17 (March 31, 2018: Rs. Nil) with a related deferred tax asset of Rs. 5.65 (March 31, 2018: Rs. Nil) was included in OCI in respect of these contracts.

The amounts retained in OCI at March 31, 2019 are expected to mature and affect the statement of profit and loss with in next 12 months.

Reclassifications to profit or loss during the year gains or losses included in OCI are shown in Note 30.

Interest rate swap (cash flow hedge)

The Group manages its cash flow interest rate risk by using floating-to-fixed interest rate swaps. Under these swaps, the Group agrees with other parties to exchange, at specified intervals (mainly quarterly), the difference between fixed contract rates and floating rate interest amounts calculated by reference to the agreed notional principal amounts. Generally, the Group raises long-term borrowings at floating rates and swaps them into fixed rates that are lower than those available if the Group borrowed at fixed rates directly.

The carrying value of interest rate swap at the end of the reporting period are as follows:

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Interest rate swap	-	(1.69)	-	(1.92)

The nominal value of interest rate swap are:

Particulars	March 31, 2019		March 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Interest rate swap	-	(9.14)	-	(10.21)

41 Capital Management

The Group's objective for capital management is to maximise shareholder value, safeguard business continuity and support the growth of the Group. The Group determines the capital requirement based on annual operating plans and long-term and other strategic investment plans. The funding requirements are met through equity and operating cash flows generated. No changes were made in the objectives, policies or processes during the years ended March 31, 2019 and March 31, 2018. Capital represents equity attributable to equity holders of the Parent Company.

	March 31, 2019	March 31, 2018
Borrowings	220.07	217.25
Trade payables	1,399.41	1,060.48
Book overdraft	13.89	37.90
Less: Cash and cash equivalents	308.23	246.35
Net debt	**1,325.14**	**1,069.28**
Equity	3,014.29	2,714.74
Capital and net debt	**4,339.43**	**3,784.02**
Gearing ratio	**1 : 3.27**	**1 : 3.54**

42. Exceptional Items

Particulars	Note	March 31, 2019	March 31, 2018
Impairment of Goodwill related to Thermax Netherlands B.V.	4(c)	87.51	-
Impairment of property, plant and equipment's and intangible assets of Thermax (Zhejiang) Cooling & Heating Engineering Company Ltd. (TZL)	4 (a) & (b)	2.03	-
		89.54	-

43 (a) Standards issued but not yet effective

Ind AS 116, Leases:

Ind AS 116 Leases was notified on March 30, 2019 and it replaces Ind AS 17 Leases, including appendices thereto. Ind AS 116 is effective for period beginning on or after April 1, 2019. It sets out the principles for the recognition, measurement, presentation and disclosure of leases and requires lessees to account for all leases under a single on-balance sheet model similar to the accounting for finance leases under Ind AS 17. The Standard includes two recognition exemptions for lessees – leases of 'low-value' assets and short-term leases. At the commencement date of a lease, a lessee will recognise a liability to make lease payments and an asset representing the right to use the underlying asset during the lease term. Lessees will be required to separately recognise the interest expense on the lease liability and the depreciation expense on the right-of-use asset.

Lessor accounting under Ind AS 116 is substantially unchanged from current accounting under Ind AS 17. Lessors will continue to classify all leases using the same classification principle as in Ind AS 17 and distinguish between two types of leases: operating and finance leases.

The Group continues to evaluate the available transition methods and its contractual arrangements. The ultimate impact on lease accounting from the application of Ind AS 116 will be subject to assessments that are dependent on many variable including, but not limited to, composition of the lease portfolio and the relevant discount rates at the date of adoption. The Group is in the process to evaluate the changes to accounting system and processes, and additional disclosure requirements that may be necessary.

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Others

Standards	Impacts
• Appendix C to Ind AS 12 Uncertainty over Income Tax Treatment • Ind AS 19 Employee Benefits • Ind AS 23 Borrowing Costs • Ind AS 28 Investments in Associates and Joint Ventures • Ind AS 109 Financial Instruments • Ind AS 111 Joint Arrangements	These amendments are unlikely to affect materially the Group's financial statements

43 (b) Event after reporting date

There are no significant events that occurred after reporting date

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

44 Additional information required by Schedule III

Disclosure of additional information pertaining to the parent company, and its subsidiaries:

For the year ended March 31, 2019

Name of the Entity	Net Assets (Total assets-total liabilities)		Share in Profit and loss (PAT)		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As a % of consolidated net assets	Amount	As a % of consolidated Profit & Loss	Amount	As a % of consolidated other comprehensive Income	Amount	As a % of consolidated Total comprehensive Income	Amount
Parent Company								
Thermax Limited	90.76%	2,735.90	84.58%	275.25	95.81%	(20.81)	83.78%	254.44
Indian subsidiaries								
Thermax Engineering Construction Co. Ltd.	1.10%	33.27	0.10%	0.34	0.00%	-	0.11%	0.34
Thermax Instrumentation Limited	1.14%	34.28	2.63%	8.57	1.29%	(0.28)	2.73%	8.29
Thermax Onsite Energy Solutions Limited	1.97%	59.25	3.51%	11.41	0.00%	-	3.76%	11.41
Thermax Sustainable Energy Solutions Limited	(0.13%)	(3.83)	0.02%	0.08	0.00%	-	0.03%	0.08
First Energy Private Limited	(0.27%)	(8.00)	(1.67%)	(5.43)	0.09%	(0.02)	(1.79%)	(5.45)
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd*	14.06%	423.74	33.58%	109.29	5.11%	(1.11)	35.62%	108.18
Thermax SPX Energy Technologies Ltd^	0.00%	0.14	0.00%	-	0.00%	-	0.00%	-
Foreign subsidiaries								-
Thermax International Limited	0.34%	10.35	(0.04%)	(0.13)	0.00%	-	-0.04%	(0.13)
Thermax Europe Limited	1.74%	52.54	1.50%	4.87	0.00%	-	1.60%	4.87
Thermax Inc.	1.59%	47.93	2.97%	9.65	0.00%	-	3.18%	9.65
Thermax do Brasil-Energia e Equipamentos Ltda.	0.01%	0.44	0.02%	0.05	0.00%	-	0.02%	0.05
Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd.	(0.01%)	(0.16)	(2.95%)	(9.61)	0.00%	-	(3.16%)	(9.61)
Thermax Netherlands B.V.	1.28%	38.64	(47.89%)	(155.86)	0.00%	-	(51.32%)	(155.86)
Thermax Denmark ApS (Consol.)	1.96%	58.94	(34.57%)	(112.50)	1.86%	(0.40)	(37.18%)	(112.90)
Rifox-Hans Richter GmbH Spezialarmaturen	0.13%	4.04	0.35%	1.13	0.00%	-	0.37%	1.13
Thermax Sdn.Bhd	0.04%	1.19	0.02%	0.06	0.00%	-	0.02%	0.06
PT Thermax International Indonesia	2.61%	78.76	(4.18%)	(13.61)	0.00%	-	(4.48%)	(13.61)
Thermax Engineering Singapore Pte. Ltd.	4.79%	144.50	(0.05%)	(0.17)	0.00%	-	(0.06%)	(0.17)
Thermax Senegal S.A.R.L	0.09%	2.69	(0.24%)	(0.79)	0.00%	-	(0.26%)	(0.79)
Thermax Energy & Environment Philippines Corporation	0.14%	4.17	0.06%	0.21	0.00%	-	0.07%	0.21
Thermax Nigeria Limited	0.01%	0.16	(0.03%)	(0.10)	0.00%	-	(0.03%)	(0.10)
Thermax Energy and Environment Lanka (Pvt) Limited	0.20%	6.11	0.10%	0.34	0.00%	-	0.11%	0.34
Controlled Trusts								
ESOP Trust and Employee Welfare Trusts (72 nos.)	3.44%	103.82	2.98%	9.69	0.00%	-	3.19%	9.69
Joint Ventures (investment as per the equity method)								
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd*	0.00%	-	0.04%	0.12	2.40%	(0.52)	(0.13%)	(0.40)
Thermax SPX Energy Technologies Ltd^	0.00%	-	(0.29%)	(0.96)	0.00%	-	(0.32%)	(0.96)
Non controlling interest in all subsidiaries	0.00%	-	0.00%	-	0.00%	-	0.00%	-
Consolidation Adjustments	(27.02%)	(814.59)	59.47%	193.53	(6.56%)	1.42	64.19%	194.95
Total	**100.00%**	**3,014.29**	**100.00%**	**325.43**	**100.00%**	**(21.72)**	**100.00%**	**303.71**

* The entity became a wholly owned subsidiary pursuant to acquisition of additional stake on July 19, 2018

^ The entity became a wholly owned subsidiary pursuant to acquisition of additional stake on February 25, 2019

Notes to the consolidated financial statements for the year ended March 31, 2019

(All amounts are in Rupees Crore, except per share data and unless stated otherwise)

Additional information required by Schedule III

Disclosure of additional information pertaining to the parent company, and its subsidiaries: For the year ended March 31, 2018

Name of the Entity	Net Assets (Total assets-total liabilities)		Share in Profit and loss (PAT)		Share in Other Comprehensive Income		Share in Total Comprehensive Income	
	As a % of consolidated net assets	Amount	As a % of consolidated profit or loss	Amount	As a % of consolidated Other Comprehensive Income	Amount	As a % of consolidated Total Comprehensive Income	Amount
Parent Company								
Thermax Limited	94.50%	2,565.56	102.65%	238.25	13.28%	3.59	93.32%	241.84
Indian subsidiaries								
Thermax Engineering Construction Co. Ltd.	1.66%	44.98	3.14%	7.30	1.23%	0.33	2.94%	7.63
Thermax Instrumentation Limited	0.96%	25.99	5.33%	12.37	2.63%	0.71	5.05%	13.08
Thermax Onsite Energy Solutions Limited	1.76%	47.83	4.34%	10.08	0.02%	0.01	3.89%	10.09
Thermax Sustainable Energy Solutions Limited	0.00%	0.09	0.01%	0.02	0.00%	-	0.01%	0.02
First Energy Private Limited	(0.09%)	(2.54)	(3.48%)	(8.08)	0.20%	0.05	(3.10%)	(8.03)
Foreign subsidiaries								
Thermax International Limited	0.38%	10.34	0.81%	1.88	0.00%	-	0.73%	1.88
Thermax Europe Limited	1.78%	48.42	1.28%	2.97	0.00%	-	1.15%	2.97
Thermax Inc.	1.33%	36.17	2.30%	5.35	0.00%	-	2.06%	5.35
Thermax do Brasil-Energia e Equipamentos Ltda.	0.02%	0.44	0.00%	(0.01)	0.00%	-	0.00%	(0.01)
Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd.	0.08%	2.25	(7.61%)	(17.66)	0.00%	-	(6.82%)	(17.66)
Thermax Netherlands B.V.	6.58%	178.54	(0.12%)	(0.27)	0.00%	-	(0.10%)	(0.27)
Thermax Denmark ApS	4.79%	130.03	(4.15%)	(9.63)	0.00%	-	(3.72%)	(9.63)
Rifox-Hans Richter GmbH Spezialarmaturen	0.11%	3.07	0.13%	0.31	0.00%	-	0.12%	0.31
Thermax Sdn.Bhd	0.05%	1.23	0.05%	0.11	0.00%	-	0.04%	0.11
PT Thermax International Indonesia	2.72%	73.89	(5.46%)	(12.68)	(0.08%)	(0.02)	(4.90%)	(12.70)
Thermax Engineering Singapore Pte. Ltd.	4.26%	115.76	(0.15%)	(0.35)	0.00%	-	(0.14%)	(0.35)
Thermax Senegal S.A.R.L	0.13%	3.56	0.39%	0.91	0.00%	-	0.35%	0.91
Thermax Energy & Environment Philippines Corporation	0.04%	1.00	(0.64%)	(1.49)	0.00%	-	(0.57%)	(1.49)
Thermax Nigeria Limited	0.00%	(0.06)	(0.01%)	(0.03)		-		(0.03)
Thermax Energy and Environment Lanka (Pvt) Limited	0.23%	6.16	(0.11%)	(0.26)		-		(0.26)
Controlled Trusts								
ESOP Trust and Employee Welfare Trusts (72 nos.)	3.28%	88.98	3.84%	8.92	0.00%	-	3.44%	8.92
Joint Ventures (investment as per the equity method)								
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd	13.57%	368.39	(17.94%)	(41.63)	(14.46%)	(3.91)	(17.57%)	(45.54)
Thermax SPX Energy Technologies Ltd	0.07%	2.02	(3.34%)	(7.76)	0.01%	0.00	(3.00%)	(7.76)
Non controlling interest in all subsidiaries	0.00%	-	(0.44%)	(1.01)	0.00%		(0.39%)	(1.01)
Consolidation Adjustments	(38.21%)	(1,037.36)	19.17%	44.51	97.18%	26.27	27.20%	70.48
Total	**100.00%**	**2,714.74**	**100.00%**	**232.11**	**100.00%**	**27.03**	**100.00%**	**259.14**

For S R B C & CO LLP
Chartered Accountants
ICAI Firm Reg No. 324982E/E300003

per Tridevlal Khandelwal
Partner
Membership No. 501160

Place : Pune
Date : May 22, 2019

For and on behalf of the Board of Directors of Thermax Limited

Meher Pudumjee
Chairperson
DIN: 00019581

M. S. Unnikrishnan
Managing Director and CEO
DIN: 01460245

Amitabha Mukhopadhyay
Executive Vice President
and Group Chief Financial Officer

Kedar Phadke
Company Secretary

Place : Pune
Date : May 22, 2019

FORM AOC- I

Statement containing salient features of the financial statement of subsidiaries or associate companies or joint ventures

Pursuant to firts proviso to sub-section (3) of section 129 read with rule 5 of Companies (Accounts) Rules, 2014.

Part "A" : Subsidiaries

Rs. in Crore

Particulars	Reporting Period	Date of acquisition	Capital	Reserves	Total Assets	Total Liabilities	Investments	Turnover	Profit Before Tax	Provision for Tax	Profit after Tax	Proposed Dividend	% of Share Holding	Reporting Currency	Exchange Rate as on 31st March 2019
Thermax Sustainable Energy Solutions Ltd.	2018-19		4.75	(8.58)	4.11	7.94	-	0.00	0.08	0.00	0.08	-	100.00	INR	
Thermax Engineering Construction Co. Ltd.	2018-19		4.50	28.77	65.95	32.67	-	47.11	3.11	2.78	0.34	10.00	100.00	INR	
Thermax Instrumentation Ltd.	2018-19		9.00	25.28	146.44	112.16	25.95	176.30	15.56	6.98	8.57	-	100.00	INR	
Thermax Onsite Energy Solutions Ltd.	2018-19		18.65	40.60	97.18	37.93	17.63	80.29	15.92	4.50	11.41	-	100.00	INR	
First Energy Private Limited	2018-19	31-Aug-16	13.47	(21.46)	18.88	26.88	1.02	20.91	(5.43)	0.00	(5.43)	-	76.00	INR	
Thermax International Ltd. (Mauritius)	2018-19		8.22	(5.68)	10.39	0.04	4.60	0.00	(0.13)	0.00	(0.13)	-	100.00	USD	69.15
Thermax Europe Ltd. (U.K.)	2018-19		1.17	51.37	70.53	17.99	-	56.86	5.68	0.81	4.87	-	100.00	GBP	90.11
Thermax Inc. (U.S.A.)	2018-19		3.12	44.81	71.26	23.32	-	128.24	12.68	3.03	9.65	-	100.00	USD	69.15
Thermax do Brasil Energia e Equipamentos Ltda. (Brazil)	2018-19		1.88	(1.44)	0.47	0.02	-	0.20	0.05	0.00	0.05	-	100.00	Brazilian Real	18.02
Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd. (China)#	2018		103.40	(94.78)	54.29	45.66	-	49.39	(8.11)	0.00	(8.11)	-	100.00	Yuan	10.15
Thermax Denmark ApS.	2018-19		135.09	(76.17)	108.38	49.46	102.15	0.00	(89.56)	(0.22)	(89.34)	-	100.00	DKK	10.39
Thermax Netherlands BV.	2018-19		148.69	(110.05)	38.74	0.10	37.32	0.00	(155.86)	0.00	(155.86)	-	100.00	EUR	77.57
Danstoker A/S	2018-19	1-Oct-10	10.39	41.36	140.08	88.33	-	156.24	(29.49)	(2.28)	(27.21)	-	100.00	DKK	10.39
Ejendomsanp-artsselskabet Industrivej Nord 13	2018-19	1-Oct-10	0.21	21.72	44.48	22.55	8.11	0.00	4.77	0.65	4.12	-	100.00	DKK	10.39
Boilerworks A/S	2018-19		0.52	(14.34)	39.59	53.41	-	151.57	(19.19)	(4.23)	(14.96)	-	100.00	DKK	10.39
Boilerworks Properties ApS	2018-19		0.10	8.00	11.01	2.91	-	0.00	2.28	0.54	1.73	-	100.00	DKK	10.39
Rifox-Hans Richter GmbH Spezialarmaturen	2018-19	1-Apr-12	4.94	(0.90)	10.23	6.19	-	26.86	1.13	0.00	1.13	-	100.00	EUR	77.57
Thermax SDN.BHD	2018-19		0.87	0.31	1.40	0.21	-	2.91	0.20	0.14	0.06	-	100.00	Malaysian Ringet	16.95
Thermax Engineering Singapore Pte. Ltd	2018-19		153.71	(9.21)	144.56	0.06	124.04	0.00	(0.17)	0.00	(0.17)	-	100.00	USD	69.15
PT Thermax International Indonesia	2018-19		111.03	(32.27)	100.17	21.42	-	37.67	(13.59)	0.02	(13.61)	-	100.00	Indonesian Rupiah	0.0049
Thermax Senegal S.A.R.L#	2018		1.13	1.56	3.26	0.57	-	0.00	(0.78)	0.01	(0.79)	-	100.00	West African Franc	51.01
Thermax Energy and Environment Philippines Corporation	2018-19		6.53	(2.36)	4.95	0.78	-	2.74	0.13	(0.08)	0.21	-	100.00	PHP	1.31
Thermax Nigeria Limited	2018-19		0.34	(0.18)	0.24	0.07	-	0.00	(0.10)	0.00	(0.10)	-	100.00	NGN	0.23
Thermax Energy and Environment Lanka (pvt) Limited	2018-19		6.47	(0.36)	6.20	0.09	-	0.91	0.40	0.07	0.34	-	100.00	LKR	0.39
Thermax Babcock & Wilcox Energy Solutions Pvt Ltd	2018-19		628.22	(74.75)	639.96	86.48	48.40	48.99	142.54	(96.68)	239.22	-	100.00	INR	-
Thermax SPX Energy Technologies Ltd	2018-19		20.00	(19.86)	33.46	33.32	0.21	68.43	(1.88)	0.00	(1.88)	-	100.00	INR	-
Danstoker Poland Spółka Z Ograniczona Odpowiedzialnoscia	2018-19	4-May-17	0.01	(8.85)	54.74	63.58	-	54.37	(8.58)	(1.64)	(6.95)	-	100.00	PLN	18.02

Notes :

i) The reporting period of Thermax (Zhejiang) Cooling & Heating Engineering Co. Ltd. (China) and Thermax Senegal S.A.R.L is 2018, whereas the same for all other subsidiaries is 2018-19

ii) The annual accounts of the Subsidiary Companies are open for inspection by any investor at the Company's Corporate Office and the Registered Office of the respective subsidiary companies.

iii) Thermax HongKong Ltd. has been registered for domancy as per law of Hong Kong, hence not included in above statement.

iv) Danstoker Polard Spolka Z Organiczona, Odpowiedzialnoscia has changed its reporting period from 2018 to 2018-19. Hence, the annual accounts are for 15 months i.e. from January 1, 2018 to March 31, 2019.

v) Balance sheet figures of foreign subsidiaries are converted at an exchange rate prevailing on closing day of the financial year of the subsidiary for the purpose of this statement

vi) Statement of Profit and Loss figures of foreign subsidiaries are converted at an average exchange rate of the subsidiary for the purpose of this statement

For the year ended December 31, 2018

Exchange rates as on December 31, 2018

^^ Thermax Engineering Construction FZE Nigeria has been incorporated on August 31, 2018. Hence, not included in above statement.

Part "B" : Associates and Joint Ventures

Statement pursuant to section 129(3) of the companies Act 2013 related to Associate companies and joint ventures

Rs. in Crore

	Particulars	
1	Latest Audited Balance Sheet Date	
2	Date of acquisition*	
3	Shares of Joint Ventures held by the Company on the year end	
	i) Number	
	ii) Amount of Investment in Joint Venture	
	iii) Extent of Holding %	
4	Description of how there is significant influence	N.A.
5	Reason why the joint venture is not consolidated	
6	Net Worth attributable to shareholding as per latest Balance Sheet	
7	Profit/(Loss) for the year#	
	i) Considered in Consolidation	
	ii) Not considered in Consolidation	

1) During the current year, Thermax Babcock & Wilcox Energy Solutions Pvt. Ltd. and Thermax SPX Energy Technologies Ltd. has became wholly owned subsidiaries of Thermax Limited, hence included in Part-A of AOC-I.

For and on behalf of the Board of Directors of Thermax Limited

Meher Pudumjee	**M. S. Unnikrishnan**	**Amitabha Mukhopadhyay**	**Kedar Phadke**
Chairperson	Managing Director and CEO	Executive Vice President	Company Secretary
DIN: 00019581	DIN: 01460245	and Group Chief Financial Officer	

Place: Pune
Date: May 22, 2019

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Sustainable Solutions
in Energy & Environment

