

Indian Companies with a total net worth of \$87bn have committed to climate actions

Climate impact extremities happening throughout the year in the form of droughts, floods and heat waves require corporate leadership to transition from business-as-usual and bend the emissions curve. The story of 'growth decoupled from emissions' needs its poster-child and India Inc. seems to be stepping up to the call. Transport, heavy industry (cement & steel) and power as core sectors for the economy hold the key to downturn of emissions. The Indian business community in these as well as other sectors is joining the government in steering the ship as India looks set to meet targets pledged under Paris Agreement on Climate Change well ahead of the 2030 deadline.

Companies having 87 billion USD¹ of net worth (as of March 31, 2019) have committed to climate action since Paris Agreement and taken steps to start the journey. The usually harder-to-abate sectors of cement and steel are abuzz with activity in India. In the global listing of companies with science-based targets (SBTs) to reduce emissions in line with goals of Paris Agreement on Climate Change, 3 out of the top 5² cement companies in the world are Indian. The first steel-making company globally³, Mahindra Sanyo, to commit to SBT is also from India.

Since the Paris Climate Agreement in 2015, [35 Indian companies](#) have committed to reducing emissions through science-based targets, propelling India to the 5th position after the United States (121), Japan (80), United Kingdom (73), and France (46).

This is of even greater importance in India, where demand for these materials (such as iron & steel, cement and petrochemicals) are set to explode as the economy continues to grow. The Ministry of Steel, for example, expects steel demand to nearly treble by 2030, providing significant infrastructure improvements across the country.

This represents both an opportunity and a challenge – India can be the first economy to decarbonise these heavy industry sectors as it develops, providing a hub for low carbon technologies and showcasing climate leadership but it also needs to ensure that these decarbonisation efforts don't hamper economic growth.

Indian companies have been on the front foot to engage with international efforts to decarbonise, with Dalmia Cement and Tata Sons joining the [Energy Transitions Commission \(ETC\)](#), a global body to accelerate emissions reduction, which now has an [Indian chapter](#) to drive forward progress here.

5 Indian companies have joined [RE 100](#) which is a global initiative to use 100% renewable electricity and 8 Indian companies have joined [EP100](#) to enhance energy productivity.

Power & Automobiles Sectors

1. Tata Group

1A. Tata Power: Strategic Intent to Move Away from Coal

India's largest private integrated power company, Tata Power, in 2018 released their '[Strategic Intent 2025](#)' plan that calls for **40-50% of the company's generation capacity to come from non-fossil fuel sources by 2025** (up from 30% currently). Assuming 50% is achieved, this [means](#) that 70% of new capacity will come from solar, wind and hydro. This stands at the other end from the fact that thermal power at present makes up 70% of the company's total capacity though it has added only 68MW (net) thermal capacity since 2013. Over the same period, the company has added more than 2,000MW of wind and solar power and 246MW of hydropower. Therefore, 97% of all additions over this period were from non-thermal power sources.

¹ Refer Annexure on page 4

² <https://sciencebasedtargets.org/2019/04/23/india-a-breeding-ground-for-science-based-climate-action/>

³ <http://mahindrasanyo.com/corporate-responsibility/environment-responsibility/responsible-manufacturing/reducing-carbon-footprinting.html>

Furthermore, although Tata Power is intending to add some thermal capacity during the period to 2025, it is intending to do this via acquisition of existing plants at fire-sale prices rather than constructing new ones and this option itself could be reviewed under tighter emissions controls that are to be enforced and other causes of stress.

“Company has embarked on a journey of growth by focusing on renewables, distribution and transmission of power.” - TATA Power’s 2018 annual report titled [‘Renewables to Power Growth’](#).

Tata Power Energy Mix (as of April 2019)			Capacity Addition (since 2013)	
Fuel source	MW	%	Fuel source	%
Thermal	7715	70%	Thermal	3%
Hydropower	693	6%	Renewable	86%
Wind	1161	11%	Hydropower	11%
Solar	1388	13%	(non-thermal)	(97%)
Total	10,957	100%	Total	100%

1B. Tata Motors-owned Jaguar Land Rover (JLR) and BMW Group to develop EVs

Tata Motors President, Electric Mobility Business & Corporate Strategy, Shailesh Chandra:

“We are not only focusing on selling and developing EVs but focusing on how we can synchronise the efforts through partnerships and deliver the entire ecosystem. We have come together with other Tata companies like Tata Power for charging infrastructure, Tata Chemicals for component localisation, TCS for data platform among others. If I have to launch a product in Bangalore, I would ensure that three months ahead of launch, infrastructure is in place. That’s how we are targeting, that we go with an integrated plan, to give confidence to the customer.”

Scope of collaboration	To develop next generation EVs by building on the respective expertise in research and production planning as well as economies of scale from joint procurement across the supply chain. While a joint team of JLR and BMW Group experts will engineer the EVs, both partners will produce respective range of products in their respective manufacturing facilities.
EV launch plans	<ul style="list-style-type: none"> • 2019 – JLR will launch hybrid vehicle from Land Rover portfolio in end of 2019 • 2020 – JLR will launch battery electric vehicle, Jaguar i-PACE in India • 2020 – BMW i3 hatchback could be launched while undergoing tests

1C. Tata Power & Indraprastha Gas

Decision: [Pact](#) to set up EV charging and battery swapping stations

Scope of MoU	“The MoU will explore possibilities of co-operation in setting up of commercial scale charging and battery swapping stations for electric vehicles with the allied power management solutions,” the companies said in a statement.
Building on past initiatives	<ul style="list-style-type: none"> • Last year Tata Power and Hindustan Petroleum Corporation (HPCL) signed a Memorandum of Understanding (MoU) for setting up commercial-scale charging stations for electric vehicles (EVs) at the HPCL retail outlets and other locations across India; • IGL had also signed MoU with Dutch firm WeCharge to set up EV charging facilities.

2. Maruti Suzuki: Sale of Diesel Cars to Cease from 2020

Maruti Suzuki Motors India Ltd has [announced](#) they will stop selling diesel-powered vehicles from April 2020, because of the cost to meet new emission rules. Eight of Maruti Suzuki’s popular models are currently available with diesel engines. In recent years, developments like restriction on diesel vehicles in the Delhi area have also affected demand. Maruti is launching WagonR in electric version from 2020.

Total unit sales	1,753,700 units (domestic market)
Cars impacted by decision	403,350 units (diesel cars, 23% of total sales volume)
Carbon emissions avoided	9.6 million tonnes ⁴ CO ₂ over their lifecycle after production
Rationale	Conversion cost from BS IV (BS4) to BS VI (BS6) emission norms is prohibitive
Reserved decision	1.5 litre diesel engine might be brought back after April 2020 if demand is favourable and price is reasonable after upgrade to BS VI
Implementation timeline	Production of BS IV compliant diesel engines will stop by end of 2019 and sales in India will stop from April 1, 2020

Hard-to-Abate Sectors: Cement & Steel

⁴ With 24 tonnes CO₂ over the lifetime of one diesel car after production: [Low Carbon Vehicle Partnership](#)

Energy represents 20% to 40% of the total cost of cement production and India's energy demand for cement will increase threefold by 2040. Indian cement industry has [committed](#) to reduce its carbon footprint 45% by 2050 and has achieved the following already -

- Conserved 1 million tonnes of coal through energy efficiency measures;
- CO₂ emissions have been [reduced](#) by 36% from 1.12tCO₂/tonne of cement in 1996 to 0.719tCO₂/tonne of cement while the Indian target is 0.35tCO₂/tonne and [IEA suggests](#) 0.49tCO₂/tonne of cement;
- The sector has already [surpassed](#) the targets of the [Perform Achieve and Trade \(PAT\) Scheme](#) by 80% as part of Cement Sustainability Initiative (CSI) with WBCSD and IEA;
- India's consumption of energy is [82KW/tonne](#) of cement against world average of 110KW/tonne.

1. Dalmia Cement: Lowest Carbon Footprint Cement

Decision: has established science-based target to be [carbon negative by 2040](#), [double energy productivity](#) and [increase use of renewable energy](#) fourfold as part of RE100 initiative.

Dalmia Cement (Bharat) Limited (DCBL) produces one of the [lowest carbon footprint](#) cement globally (330 kg/ton of cement material) from their eastern plants. DCBL is the first cement company across the globe to join RE100 and EP100 campaigns setting up captive solar PV, waste heat recovery (WHR) projects that helped DCBL to cut its carbon footprint by 36% from 1990 levels with over two-fold increase in its energy productivity.

2. Mahindra Sanyo Steel: 1st to set Science Based Target for 2030

Mahindra Sanyo Special Steel Pvt Ltd became the [first company](#) in India and globally in 2017 to set its science-based target of reducing emissions per ton of steel produced by 35% in 2030, against a 2016 base-year.

Carbon Neutral Plans Producing Results

1. Hindustan Unilever (HUL): No Coal by 2020

In 2018, HUL reduced CO₂ emissions per ton of production by 59% compared to 2008 through a reduction in energy footprint across factories and increase in share of renewable energy to 43%. HUL has committed to source all the electricity purchased from the grid from renewable sources by 2020. As part of the [Unilever Sustainable Living Plan](#) (USLP), HUL has also committed to [eliminating coal from the energy mix](#) by 2020.

The CO₂ emissions from HUL's logistics network reduced by over 12% through 'Load More Travel Less' strategy. Freezer cabinets use hydrocarbon (HC) refrigerants instead of Hydrofluorocarbons refrigerants. Their offices have energy efficient AC units and air handling units, motion sensor lighting, and LED lights. 200 of their conference rooms have been enabled with audio and video for Skype group meetings.

2. Godrej Industries: 51% Reduction in GHG Emissions

Godrej Industries set its [goal to be carbon neutral](#) as part of which achievements so far include -

- 51% reduction in specific greenhouse gas emissions;
- 32% reduction in specific energy consumption;
- 55% of energy consumption from renewable sources.

3. Infosys: First Net-Zero IT Campus in Country

Infosys as a leading IT company has reported following achievements over the years -

- First IT campus in Hyderabad, India to be at [net zero emissions](#);
- [55% reduction](#) in per capita energy consumption from 2008 to 2019;
- [Reduced load on grid](#) by 33MW through retrofits across its campuses since 2008;
- Only [18% increase in energy consumption](#) despite 130% increase in employee base from 2008 to 2016.

Group-wide Commitment

1. Mahindra Group: Carbon Neutral 10 years before Paris Agreement Timeline

In 2017, Mahindra & Mahindra became the first company in India to announce its [internal carbon price of \\$10](#) and to join EP100, a global energy commitment to double the energy productivity by 2030. 13 of Mahindra Group companies have committed to SBTs.

Mahindra Group's Chairman Anand Mahindra at World Economic Forum, January 2019:

"The entire Mahindra Group and all its companies would be carbon neutral 10 years before the Paris Agreement deadline by 2040."

Annexure

Company	Net worth (INR)	Net Worth (USD)	Net Sales (INR)	Net Sales (USD)
Tata Power	141.90 billion	2.04 billion	79.33 billion	1.14 billion
Tata Motors	221.63 billion	3.19 billion	692.03 billion	9.94 billion
Tata Chemicals	117.96 billion	1.7 billion	40.81 billion	0.59 billion
Tata Consultancy Services	788.98 billion	11.34 billion	1231.7 billion	17.7 billion
Tata Global Beverages	44.44 billion	0.64 billion	34.3 billion	0.49 billion
Mahindra Sanyo Steel ⁵	1.79 billion	0.03 billion	9.18 billion	0.13 billion
M&M Financial Services	109.08 billion	1.57 billion	87.23 billion	1.25 billion
Mahindra & Mahindra	342.09 billion	4.92 billion	536.14 billion	7.7 billion
Mahindra Holidays & Resorts	2.97 billion	0.04 billion	9.18 billion	0.13 billion
Mahindra Lifespace Developers	17.51 billion	0.25 billion	4.86 billion	0.07 billion
Mahindra Logistics	4.99 billion	0.07 billion	36.66 billion	0.53 billion
Tech Mahindra	206.45 billion	2.97 billion	272.2 billion	3.91 billion
Dalmia Cement (Bharat)	75.8 billion	1.09 billion	1.64 billion	0.02 billion
Ambuja Cements	210.13 billion	3.02 billion	113.57 billion	1.63 billion
UltraTech Cement	279.47 billion	4.02 billion	357.04 billion	5.13 billion
Shree Cements	95.97 billion	1.38 billion	117.22 billion	1.68 billion
Hindustan Zinc	336.05 billion	4.83 billion	211.18 billion	3.03 billion
Godrej Industries	16.32 billion	0.24 billion	21.44 billion	0.31 billion
Gujarat Fluorochemicals	47.09 billion	0.68 billion	27.31 billion	0.39 billion
Maruti Suzuki	461.42 billion	6.63 billion	860.2 billion	12.36 billion
Swaraj Engines	2.38 billion	0.03 billion	8.72 billion	0.13 billion
Havells India	42.43 billion	0.61 billion	100.58 billion	1.45 billion
Wipro	493.92 billion	7.1 billion	481.24 billion	6.92 billion
Infosys	627.11 billion	9.01 billion	731.07 billion	10.51 billion
Marico	35.08 billion	0.5 billion	59.71 billion	0.86 billion
Hindustan Unilever	76.59 billion	1.1 billion	382.24 billion	5.49 billion
Bharti Airtel	983.59 billion	14.13 billion	496.08 billion	7.13 billion
YES Bank	269.04 billion	3.87 billion	342.15 billion	4.92 billion
JK Tyre & Industries	19.95 billion	0.29 billion	76.13 billion	1.09 billion
Banka BioLoo	0.22 billion	0.003 billion	0.35 billion	0.01 billion
Polygenta Technologies	2 billion	0.03 billion	0.95 billion	0.01 billion
Hatsun Agro Products	8.05 billion	0.12 billion	47.6 billion	0.68 billion
TOTAL	6082.4 billion	87.44 billion	7470.04 billion	107.34 billion

Calculations

Total Standalone Company net worth & net sales – as of March 31, 2019

Current conversion exchange rate INR to USD – as of March 31, 2019 (www.oanda.com)

⁵ Available as of March 31, 2017