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ESG::readings

Series of analyses from the Indian financial and corporate sectors

CRISIL MI&A Research, leveraging its strong sectoral research capability, rich databases, track record of scoring Indian companies, and global and domestic expertise, brings to you sharp insights on various facets of environmental, social and governance (ESG) in India.

Only 48 of India's top 100 corporate disclose sustainability spends

Overall, emissions and energy consumption have declined at ~9% CAGR*

In this capsule, we dissect the sustainability measures and initiatives of India's top 100 companies by market capitalisation.

Specifically, we ask: How much are these companies incurring on sustainability-linked capital expenditure (capex) and research and development (R&D)? How transparent are they about these spends? Which technologies or areas are they investing in? And what has been their trend in emissions and energy consumption over the past two fiscals?

Notably, while India targets to reach Net Zero by 2070, ~45% of the companies have made statements regarding intent to achieve full or partial Net Zero much earlier, i.e., in the next 10-20 years.

That would make one think this group is pushing the pedal hard on sustainability investments.

Yet, our analysis based on fiscal 2022 data shows that as many as 52 of the 100 companies are not spending on sustainable products and processes currently, or not reporting their average spend.

Only the remaining 48 were found to disclose their capex and R&D spend in specific technologies to improve the environmental and social impacts of their products and processes.

For these companies where public disclosures were available, we found emissions and energy consumption had declined on average, i.e, logged a negative compound annual growth rate (CAGR) of 9.25% and 8.91%, respectively, demonstrating they are on the right track#.

With the introduction of Business Responsibility and Sustainability Reporting (BRSR) Core, which requires the top 150 companies to disclose (and obtain reasonable assurance) on a set of key indicators from fiscal 2024, we expect disclosures on green capex and R&D spend to improve further in the foreseeable future.

**Based on public disclosures; denotes negative CAGR between fiscals 2020 and 2022*

#a) We note that while many companies may not be spending only on emissions reduction/energy-related activities through capex, tracking these provide a rough-and-ready measure based on available disclosures.

b) Sectors that have demonstrated very high emissions and energy reduction over the past two fiscals may not have incurred high capex in fiscal 2022.

c) Companies disclosing emissions/energy reduction may not always be the same as those reporting on capex, in this analysis.

Of the 48 companies making disclosures as of fiscal 2022, the average ratio of capex on sustainable practices to the total income of the companies was 2.06%.

The average ratio of R&D spend on sustainable practices to the total income was 0.67%.

Sector with highest sustainability-linked capex (% of total income)

Power (thermal)
5.47%

The electricity and heat sector has the largest share of CO_2 emissions in India. (Source: www.statista.com)

Sector with highest sustainability-linked R&D spend

Pharma
3.55%

Sector with largest reduction in emissions

Information technology (IT)
-37%

Sector with largest reduction in energy use

IT
-42%

Sector with largest reduction in emissions (excluding IT)

Pharma
-14%

Sector with largest increase in emissions

Thermal
+3.5%

Sector with largest reduction in energy use (excluding IT)

Metals
-13.3%

Sector with largest increase in energy use

Oil and gas
+1%

Analysing these 100 companies by the sectors they belong to also reveals interesting inter-sectoral differences.

How sectors* report on sustainability investments

Sector	No of companies	Total reporting on either capex or R&D	% of companies reporting	Total reporting on either energy use or emissions	% of companies reporting
Airlines	1	1	100	1	100
Auto ancillaries	1	0	0	1	100
Auto original equipment manufacturers (OEMs)	6	3	50	5	83
Banks	8	0	0	6	75
Cement	3	2	67	3	100
Chemicals - specialty	3	2	67	1	33
Consumer retail	2	0	0	2	100
Diversified	4	2	50	4	100
Durables and electricals	1	1	100	1	100
Financial services	1	0	0	0	0
Fast-moving consumer goods (FMCGs)	11	7	64	6	55
Holding	2	1	50	1	50
Industrial	4	2	50	3	75
Insurance	5	1	20	2	40
Internet	4	1	25	1	25
Information technology (IT)	9	6	67	7	78
Metals	5	3	60	5	100
Mining	1	0	0	1	100
Multi-brand retail	1	0	0	0	0
NBFC	3	1	33	3	100
Oil and gas - E&P	1	1	100	1	100
Oil and gas - gas	2	2	100	2	100
Oil and gas - OMC	2	1	50	2	100
Paints	2	1	50	2	100
Pharma	6	5	83	4	67
Power - renewable	1	1	100	1	100
Power - T&D	2	0	0	1	50
Power - thermal	3	2	67	3	100
Real estate	2	0	0	2	100
Telecom	2	1	50	1	50
Transport infrastructure (ports)	1	1	100	1	100
Healthcare	1	0	0	0	0

**by which the top 100 companies could be grouped*
Source: CRISIL MI&A Research

Sustainability thrust of key sectors among the top 100 cos

Auto OEMs

Average capex spend ratio
(% of total income): 0.74%
R&D spend ratio: 1.04%
Average reduction in emissions: - 9.55%
Average reduction in energy use: - 2.5%

Investment areas
- Electric vehicle (EV) development and deployment of hybrid electric technologies
- Reducing tailpipe emissions
- Reducing environmental impact in their manufacturing operations through adoption of renewable energy
- Carbon offsetting
- Exploring biofuels
- Developing hydrogen fuel cell vehicles
- Reducing harmful chemicals used in sheet metal painting
- Enhancing customer experience in terms of safety and quality

Auto OEMs aim to achieve carbon neutrality in the next 10-15 years.

Companies in this sector are also spending on mergers and acquisitions to synergise EV development, increase their EV products footprint and adopt battery-related technologies.

Financial institutions (banks, NBFCs and insurance companies)

Average capex spend ratio
(% of total income): 0.21%
R&D spend ratio: Not applicable
Average reduction in emissions: - 9%
Average reduction in energy use: - 12%

Investment areas
- Increasing focus on energy-efficient buildings
- Adopting energy efficient practices (such as using LED lights)
- Moving to digital platforms
- Responsible resource utilisation in terms of efficient water management and reduced paper consumption and wastage

No adequate disclosures are available on the amounts spent in this sector though many banks have made commitments to reducing their carbon footprint in the next 10-15 years.

Many banks are offering EV financing to auto company dealers and retail buyers to increase the ESG quotient of their loan books.

Cement

Average capex spend ratio
(% of total income): 2.01%
Average R&D spend ratio: 0.04%
Average reduction in emissions: - 3%
Average reduction in energy use: - 4%

Investment areas
- Achieving Net Zero concrete and Net Zero carbon
- Turning water positive
- Lowering clinker factor
- Reducing thermal and electrical energy intensity by implementing waste heat recovery systems
- Using renewable energy

Chemicals

Average capex spend ratio
(% of total income): 0.04%
Average R&D spend ratio: Not disclosed (ND)
Average reduction in emissions: - 7%
Average reduction in energy use: - 7%

Investment areas
- Energy efficiency (energy efficient motors, compressors, transformers)
- Reducing of carbon emissions
- Upgradation/retrofitting of plants
- Usage of renewable energy in warehouses
- Reduction in use of brine chiller

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FMCG

Average capex spend ratio
(% of total income): 0.05%
R&D spend ratio: 0.12%
Average reduction in emissions: - 12%
Average reduction in energy use: - 12.8%

Investment areas

- Adopting measures to reduce their greenhouse emissions and energy consumption in their operations
- Reducing greenhouse gas impact of products across the lifecycle
- Sustainable packaging and other circular economy related steps related to the post-consumer use phase,
- sustainable logistics, becoming water positive (and reduce groundwater usage)
- Zero liquid discharge

On the social front, FMCG companies are working towards:

- Sustainable livelihoods of farmers
- Safe products for consumers
- Sourcing raw materials from regenerative agriculture

Globally, FMCG companies are incorporating sustainable practices across the supply chain from sourcing eco-friendly (plant-based) ingredients, adopting sustainable packaging (using reusable, recyclable and compostable materials) and efficient energy use.

IT

Average capex spend ratio
(% of total income) : 0.76%
R&D spend ratio: 0.97%
Average reduction in emissions: - 37%
Average reduction in energy use: - 42%

Investment areas

- Green buildings and campuses
- Efficient operations at data centres (use of more efficient cloud servers, more energy efficient hardware)
- Renewable energy
- Replacement of old equipment with more energy-efficient ones

Indian IT companies target to achieve Net Zero by 2030-40.

Some companies in this sector have also invested in acquiring renewable energy companies to boost their clean energy consumption.

Metals

Average capex spend ratio
(% of total income): 0.56%
R&D spend ratio: 0.18%
Average reduction in emissions: - 7.6%
Average reduction in energy use: - 13.33%

Investment areas

- Moving from traditional blast furnaces (BFs) towards the electric arc furnaces (EAFs)
- Optimisation of resource utilisation (material circularity through increased usage of scrap)
- Recycling and reuse of process waste like slag
- New process technology development (such as turbine revamping) for process efficiencies
- Curbing fugitive emissions
- Tailing dam strengthening

Apart from capex, several companies have earmarked investments towards renewable energy and battery-powered vehicles.

Oil and gas

Average capex spend ratio
(% of total income): 1.37%
R&D spend ratio: 0.05%
Average reduction in emissions: - 4%
Average increase in energy use: 1%

Investment areas

- Emerging technologies such as green hydrogen
- Battery technology
- CO_2 utilisation
- Waste valorisation

Apart from capex, several companies in this sector have earmarked significant investments (over Rs 3 lakh crore) to switch to renewable energy, and produce carbon-free hydrogen and green ammonia.

Pharma

Average capex spend ratio
(% of total income): 0.39%
R&D spend ratio: 3.55%
Average reduction in emissions: - 14%
Average reduction in energy use: - 9%

Investment areas
- Zero liquid discharge
- Hazardous waste management through co-processing
- Reduction in carbon footprint and energy optimisation
- Water conservation
- Installation of green-fuel-based boilers and renewable energy for manufacturing facilities
- Patient-centric R&D

Power (thermal)

Average capex spend ratio
(% of total income): 5.47%
R&D spend ratio: 0.03%
Average increase in emissions: 3.52%
Average reduction in energy use: - 0.5%

Investment areas
- Increasing their renewable energy portfolio
- Flue-gas desulfurisation (FGD) installations (driven by regulatory push)
- Semi-automation of solar module cleaning
- Optimisation of energy and water consumption in the generation business
- Internet of Things (IoT)-based feeders in the transmission business
- Improved weather forecasting tools in the solar business
- Venturing into low-carbon business offerings for customers like creating smart homes through switches converters, investing in charging stations, and installing digitally enabled smart meters

Real estate

Average capex spend ratio
(% of total income): ND
R&D spend ratio: ND
Average reduction in emissions: - 6.9%
Average reduction in energy use: - 6%

Investment areas
- Adopting sustainable developments by ensuring circularity considerations (by use of recycled materials)
- Being operationally efficient by installing renewable energy, recycled steel, and energy-efficient heating, ventilation and air-conditioning

However, globally, companies are using green building materials, upgrading to energy-efficient lighting and appliances, investing in onsite renewable energy systems (such as solar photovoltaic, wind, micro-hydropower and hybrid systems) and IoT sensors to measure the energy consumption of buildings and optimise maintenance and repairs.

Overall, regulatory measures and Production-Linked Incentive schemes appear to be the primary drivers for the adoption of sustainable practices among the top 100 companies analysed. That said, there is a gradual but conscious shift towards voluntarily investing in green initiatives.

For India to achieve its Net Zero goals and position itself as an export leader, a huge push is required to catalyse green investments. CRISIL MI&A Research estimates Rs 5.7 lakh crore of green investments have been made between fiscal 2015 and 2022 and this is estimated to grow 4x by fiscal 2030.

With more and more companies committing to environmental and social targets, tracking their spends and investments would enable a better understanding of whether their goals are on track to be met.

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