India’s Path to Net Zero

Corporate Action on Emissions in the Utilities, Steel, and Cement Industries

Contact

Arun Kumar
Strategic Advisor, Energy Transition

ARE
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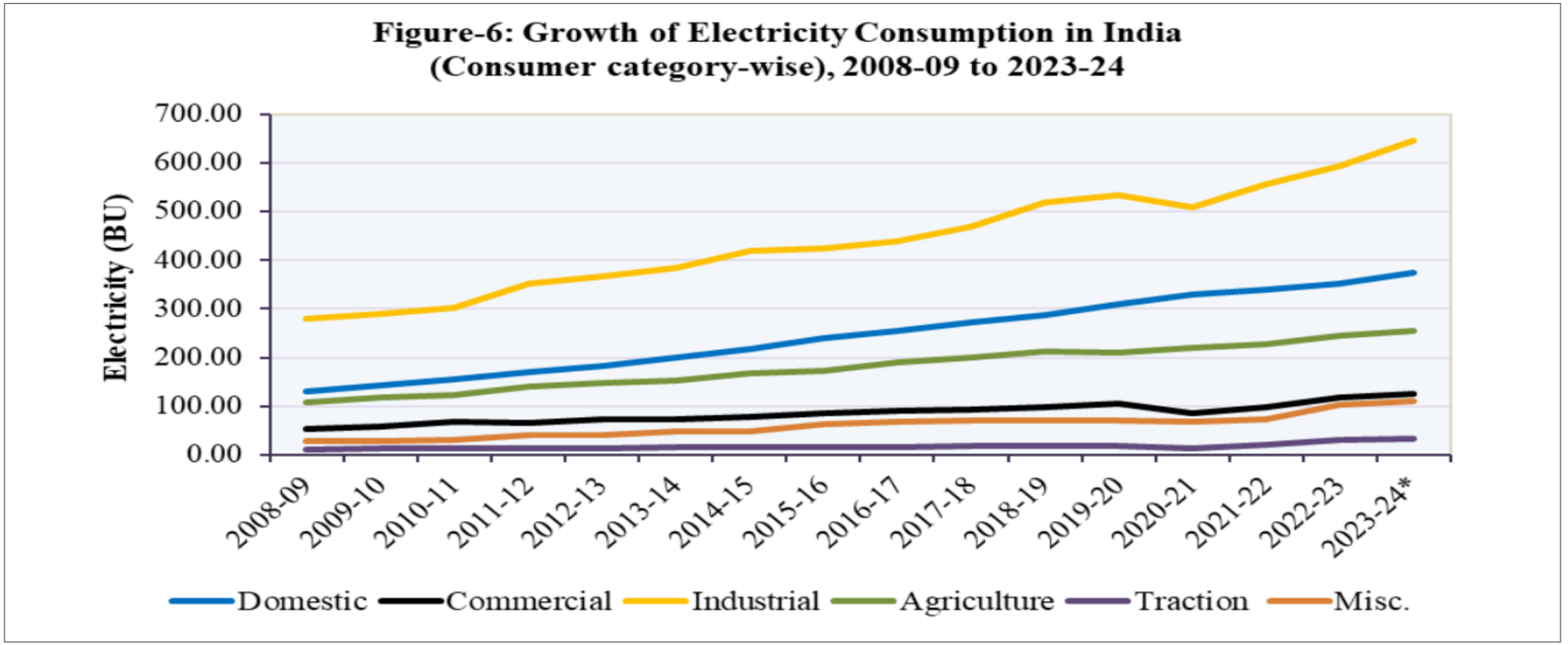
India’s Renewable Energy Landscape

Targets and Overview

India’s Electricity Demand is Growing

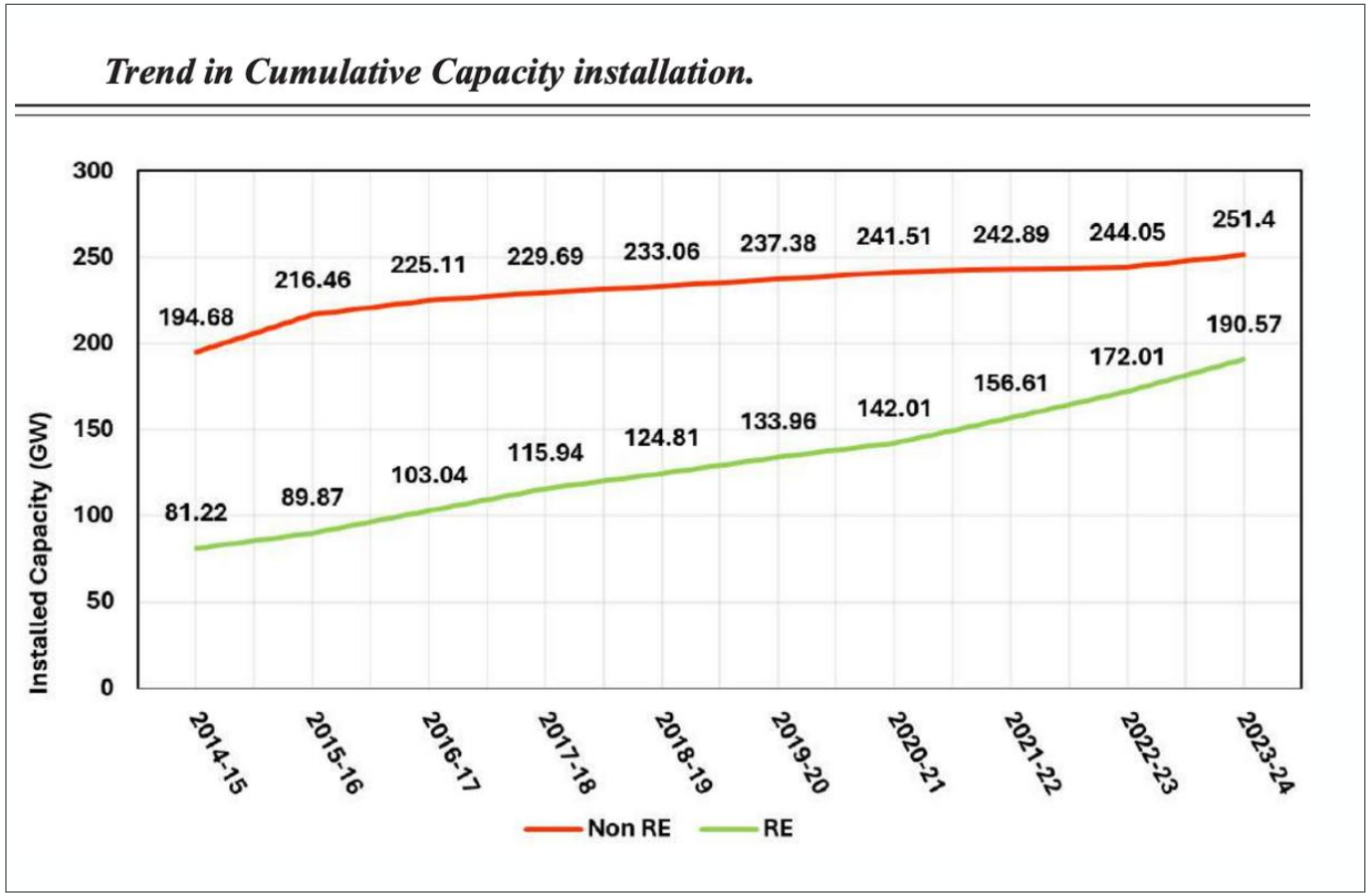
Industry & households hold the highest and fastest-growing share of electricity consumption.



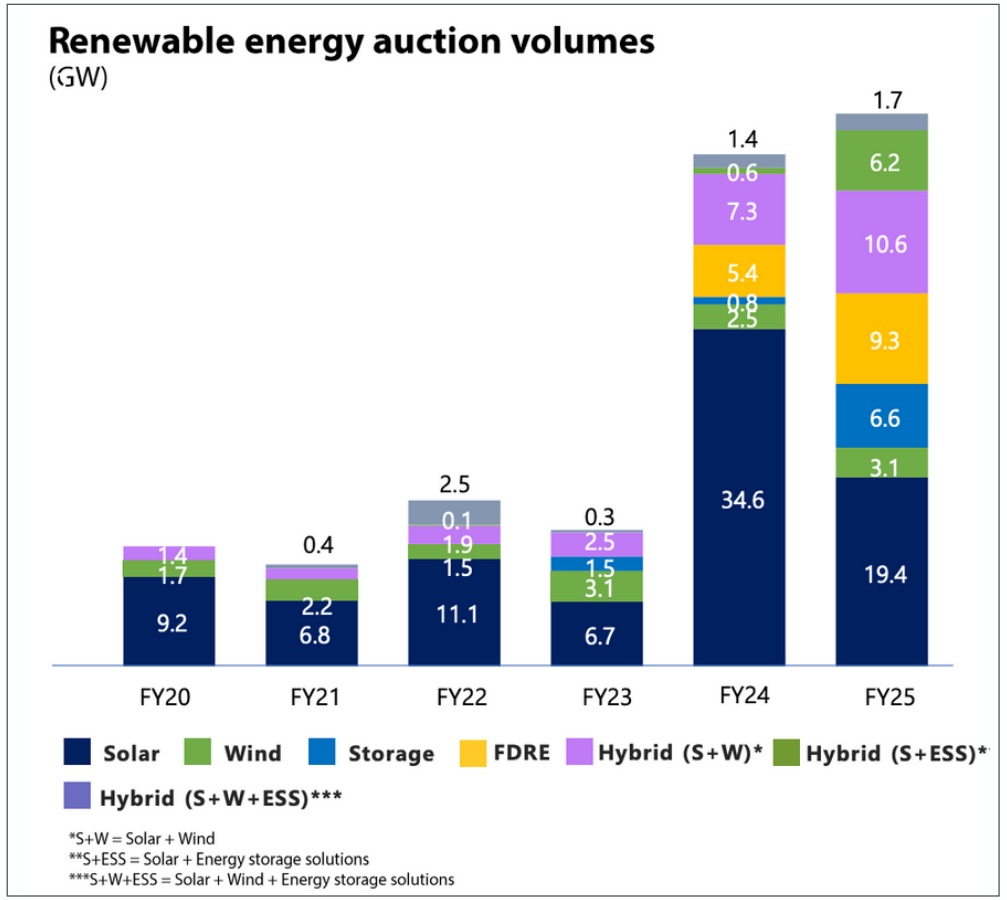
Source Central Electricity Authority – CEA & Central Electricity Regulator Commission (CERC)

New Green Capacity is Dominated by Hybrid Projects

RE & Hydro Constitute 50% of National Capacity

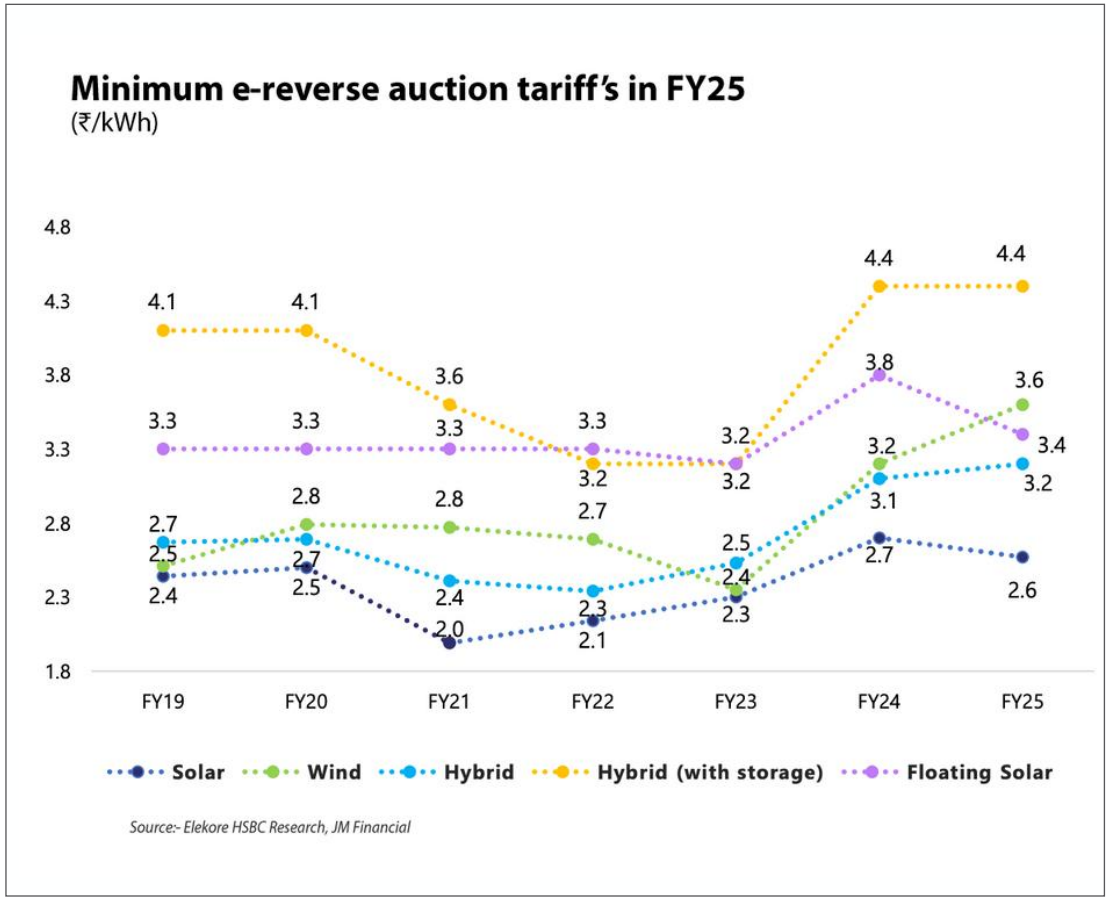


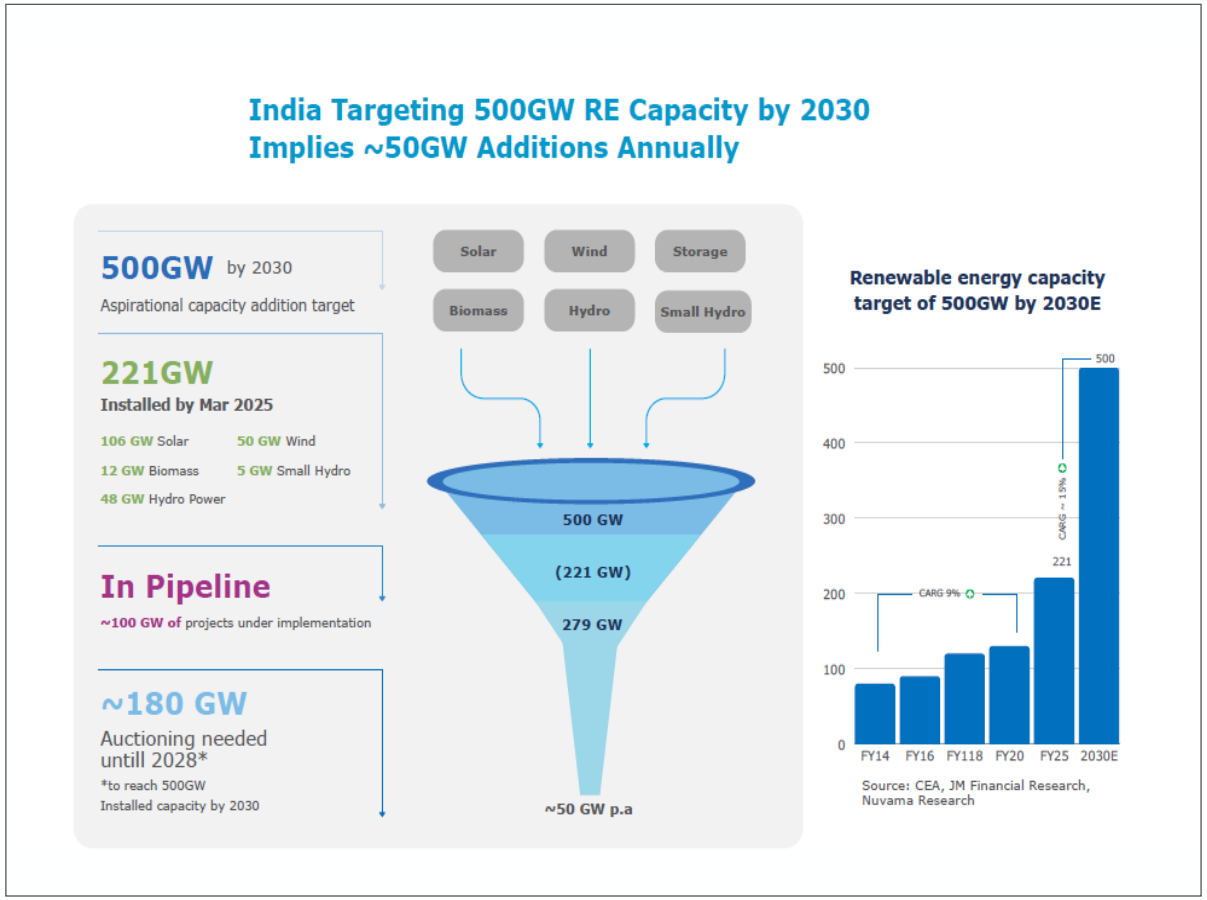
Source : Ministry of New & renewable sources, CEA and Companies



Source : JM Financials

Falling RE Auction Prices; Future Goals Become Challenging





Sources – Equity research HSBC and JM Financials

India’s Energy Objectives

	Baseline	Target	Year
Net-Zero Target	July 2025	2030	2070
Interim Target		50% Cumulative Capacity Installed Via RE-Hydro = RES	2030
Renewable Additions	242GW (RES + Hydro)	500GW	2030
Renewable Targets	50%	65%	2030
Battery Storage/PHP/ H2 Targets	50GW<	Not defined separately	2030
LNG Target	30GW	N	
Coal Phase-Out	Already significant slowdown	N (slow down)	
No New Coal	Overall slowdown & only supercritical plants	N	

Power Utilities : Company Overview and Targets

- NTPC
- Tata Power
- JSW Energy
- Adani Green
- Adani Power

Company Goals – Aligned to National Net Zero

India Intends to be Net Zero by 2070

With an Interim Goal 2030 goal - 500GW of RE, making up >50% of capacity

NTPC: Aligned to National Net Zero Goal

- No set Net Zero goal but aligned to the national 2070 net-zero target
- "Green Company" set up; capex heavily tilted towards green

Tata Power: Net Zero by 2045

Interim Goal: Aggressive 2030 goals, including 71% RE, no-coal capex and no coal by 2045

JSW Energy: Net Zero by 2050

2050 Net Zero goal taken up at the company and the group level

Adani Green: Net Zero by 2050

2050 Net Zero goal taken up at the company level and extends to most of the group companies

Adani Power: Net Zero by 2070

2050 Net Zero goal taken up at the company level and extends to most of the group companies

NTPC Ltd. | Company Overview

NSE: NTPC | MC: INR 3,34,874 Cr

- State owned, and India's largest thermal power generator **(76GW),** primarily thermal.
- 10 fully-owned subsidiaries (including NPTC Green Energy Ltd (NGEL)). 16 project-specific joint ventures.

Targets

- Aligned to India's national 2070 Net Zero target.
- Aims to reach **130GW by 2032**, of which 60GW will be renewable capacity.
- NTPC Green Energy Ltd is setting up large-scale projects. Currently adding ~6GW of renewables and some hydro each year.
- Thermal and hydro projects come under a regulated cost-plus model, while renewables being installed under a lowest-bidder-wins system.
- Company plans to add **1.5 GW/pa thermal plus 6-7GW renewables** over the next three years.

NTPC Ltd. | Targets

	Baseline	Interim Goal	Year
Net-Zero Target			2070 (aligned with India's National Goal)
Renewable Additions	7.3GW	60GW	2032
Renewable Targets	12%	46%	2032
Battery Storage/PHP/ H2 Targets	0GW	5GW/ 30 GWH	2032
LNG Target	6.5GW	0	
Coal Phase-Out	Significant slowdown	N (slow down) 24% new project	N
No New Coal	Slowdown & only Supercritical	N	

NTPC Ltd. | Road to Net-Zero

Decarbonisation Roadmap: Key Areas and Strategic Levers

- 60GW of renewable generation by 2032 through NREL (a wholly-owned subsidiary of NTPC)
  - Solar, wind, offshore wind, BESS
  - Green Hydrogen, initially for export, and potentially co-firing
  - Retrofitting coal plants with CCUS
  - Torrefied biomass for co-firing
- Coal fleet decarbonisation
  - EV charging stations
  - Vehicle to Grid (V2G)
- Carbon offset, sink creation
- Energy efficiency and digitisation
- R&D with focus on decarbonisation
- Sustainability reporting

Tata Power Co. Ltd. | Company Overview

NSE: TATA POWER | MC: INR 1,28,133 Cr

Net Zero by 2045 – among the most aggressive targets

- Tata Power is an integrated utility
  - Generation capacity: 8.9GW
  - Transmission lines: 4,633 circuit km
  - Distribution business: 12.8 million consumers
  - Rooftop solar: 3GW installed
  - Solar module manufacturing: 4.9GW
  - Some overseas assets, including coal mine in Indonesia
- Still primarily a thermal-generation company – with 89% thermal capacity.
- 25.8GW of projects under operation or construction as of 2025; thermal share down to 56%; all new projects under implementation are renewables.
- Developing 5.1GW of green projects in neighboring Bhutan.
- CDP Rating B-

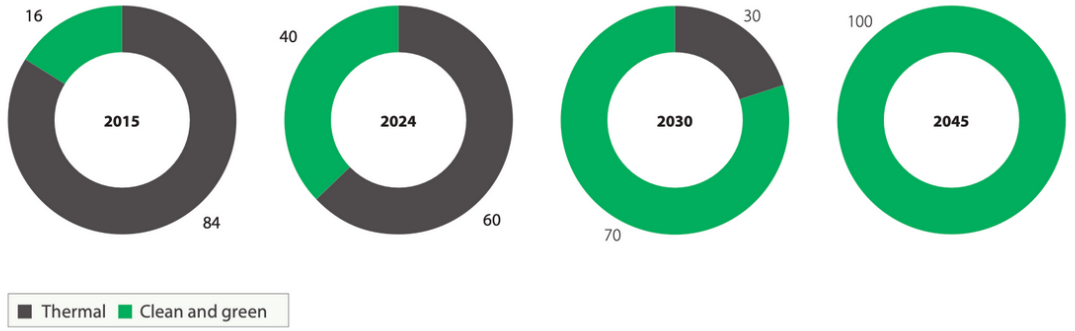
Tata Power Co. Ltd. | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025	2030	2045
Interim Target		70.5% GHG Reduction of Scope 1 & 3 on 2022 base (95% of Emission)	2030
Renewable Additions	6.9GW	60GW Operational	2030
Renewable Targets	44%	65%	2030
Battery Storage/PHP/ H2 Targets	0GW	7.5 GW PHP and RE hybrid with battery	2030
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2045
No New Coal	No greenfield	Y	2030

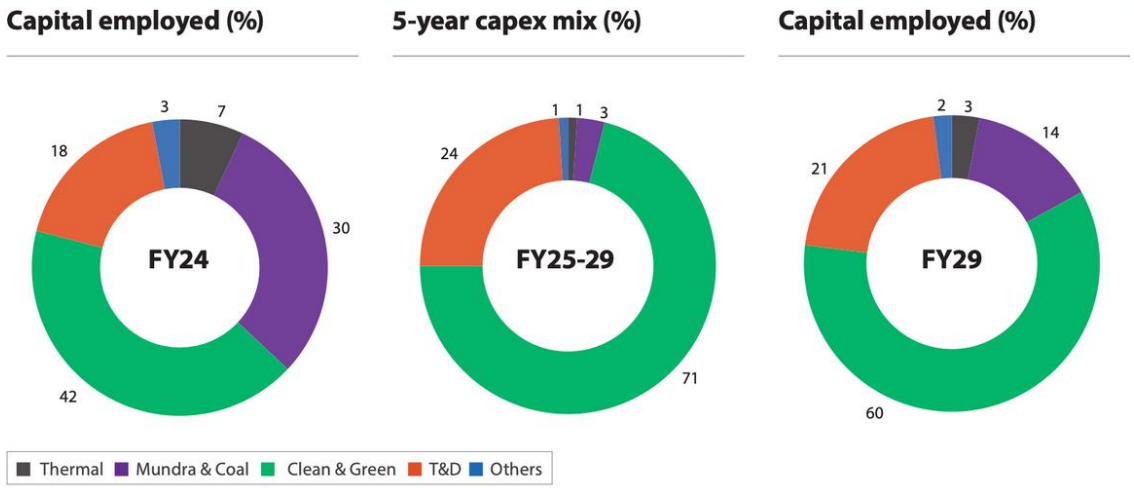
Tata Power Co. Ltd. | Road to Net Zero

- No new coal-fired projects; exit all coal before 2045.
- Ramping up renewables and other clean energy types to 100%.
- Investment in technology for improving station heat rate and reducing auxiliary consumption.
- Digitisation and automation; implementing hybrid meter technology to enhance grid intelligence.
- Increase clean and green portfolio to 70% of total by 2030.
- Creating carbon sinks.

No thermal by 2045



No capital deployment to thermal 2029 onwards



JSW Energy Limited

NSE: JSWENERGY | MC: INR 88,131 Cr

JSW Energy and JSW Group have a 2050 net-zero goal

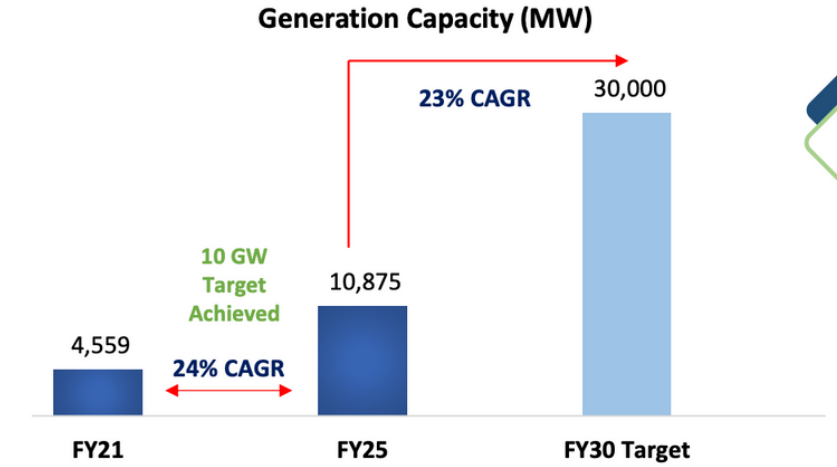
- Acquired large hydro assets in 2015 and has since set up new solar and hydro.
- Recently acquired O2 another start-up renewable company increasing their RE share.
- Current portfolio (operational & close to commissioning) is 9795MW – thermal is 4208MW and RE is 5937MW.
- Intend to grow installed capacity at CAGR 23% by FY2030.
- Has defined 2030 interim targets:
  - Wind/solar/hybrid: 30GW
  - 40 GWh Storage BESS and PHP: 40 GWh
  - Coal: 300MW

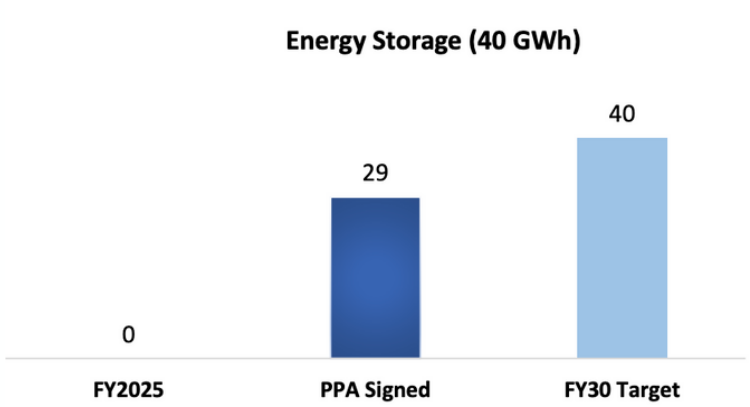
JSW Energy | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025	2030	2050
Interim Target		Achieve >50% carbon emission on 2020 baseline	2030
Renewable Additions	9.3GW	23GW Operational	2030
Renewable Targets	52%	81%	2030
Battery Storage/PHP/ H2 Targets	0GW	40GW Battery and PHP	2030
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2050
No New Coal	No greenfield	N	2030

JSW Energy | Road to Interim Goal

Strategy 3.0 – Generation 30 GW | Energy Storage 40 GWh by 2030





30 GW by 30

Generation

FY 30: Triple the capacity to 30 GW

Energy Storage

Targeting 40 GWh by 2030

EBITDA

- FY2030 run rate EBITDA to be 2.7-3.0x of FY2025 proforma EBITDA

Capital Expenditure

- Cumulative Incremental Capita Expenditure of ~₹ 130,000 C over FY2026 - FY2030

Net Debt/EBITDA

- FY2030 ND/EBITDA to be ~5x

Adani Green Energy Ltd.

NSE: ADANIGREEN | MC: INR 1,56,407 Cr

Part of the larger Adani conglomerate

- Adani Group has created separate specialised companies.
- Adani Power only runs thermal projects (30.5MW), while Adani Green Energy only runs renewables.
- 2050 net-zero commitment for all Adani Group Companies, including Adani Ports, Adani Green Energy, Adani Energy Solutions, ACC, and Ambuja.
- No specific plan for achieving net-zero target.
- 2030 target is to reach 50GW renewable capacity.
- CDP Rating A-

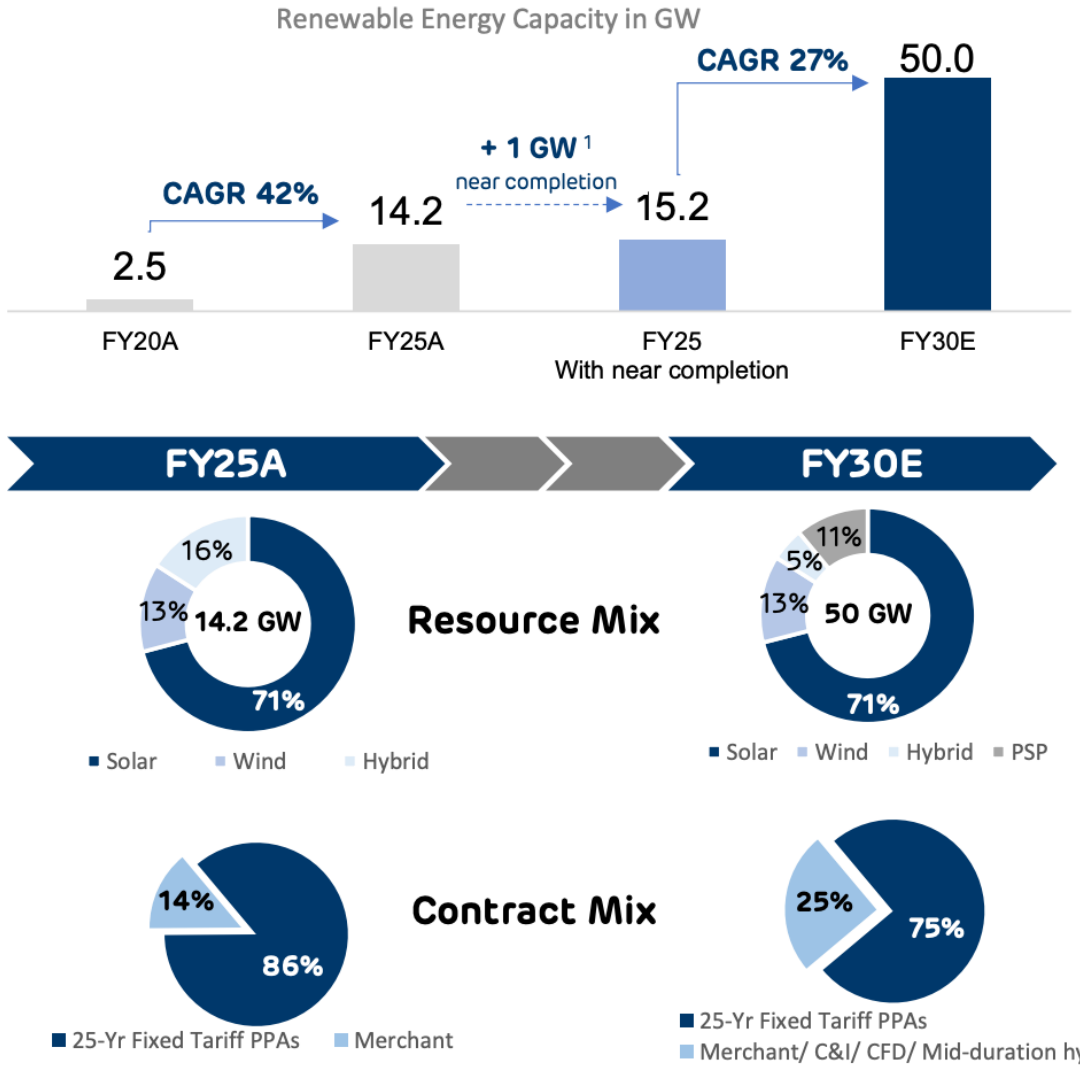
Adani Green | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025	N	2050
Adani Power (Parent) company	30.5 GW Thermal	N	
Renewable Additions	14.2GW	50GW Operational	2030
Renewable Targets	100% GW (Percentage)	100% GW (Percentage)	2030
Battery Storage/PHP/ H2 Targets	0GW	16% of 50GW	2030
LNG Target	0	N	
Coal Phase-Out	No coal	Y	
No New Coal	No coal	Y	

Adani Green | Road to Net Zero

USD100 billion investment has been earmarked for green transition and transport by 2030

- Building integrated Green Hydrogen ecosystem.
- Three factories to develop 10GW solar panels.
- 5GW wind turbines.
- 5GW hydrogen electrolysers.
- Expanding portfolio of Adani renewables to 50GW by 2030, led by solar projects (70%).
- Pledge made at WEF's 1t.org to plant 100 million trees by 2030.



Steel Sector: Decarbonisation Targets and Roadmaps

Iron & Steel Sector: Green Steel Taxonomy

Government of India defined green taxonomy in Dec. 2024; reviewed every three years

- The greenness of the steel shall be expressed as a percentage, based on how much the steel plant's emission intensity is lower compared with the 2.2 t-CO,e/tfs threshold.
- Five-star green-rated steel: Steel with emission intensity lower than 1.6 t-CO,e/tfs.
- Four-star green-rated steel: Steel with emission intensity between 1.6 and 2.0 t-CO,e/tfs.
- Three-star green-rated steel: Steel with emission intensity between 2.0 and 2.2 t-CO,e/tfs.
- Scope of emissions shall include Scope 1, Scope 2, and limited Scope 3 (excluding upstream & downstream emissions outside the plant gates).

Roadmap to Net Zero for Indian Steel Sector

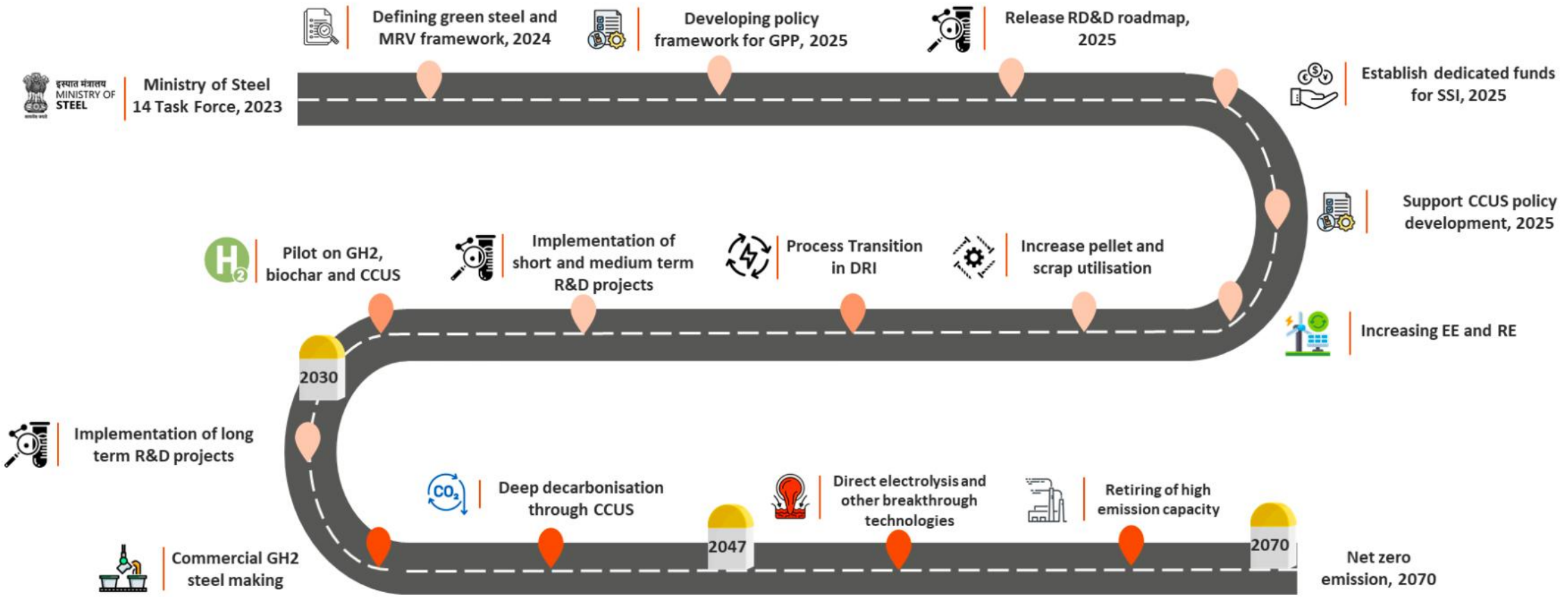


Figure ES15: *Roadmap for net zero transition in India*

Key Levers to Decarbonise India's Steel Industry

- Energy efficiency
  - Blast furnace–basic oxygen furnace (BF-BOF) route in India is 6.0-6.5 Gcal/tcs.
  - Direct Reduced Iron (DRI), Electric Arc Furnace (EAF)/induction furnace (IF) plants are 7.0 Gcal/tcs vis-à-vis the theoretical SEC of 5.3 Gcal/tcs for the average DRI-EAF plant.
- Material efficiency: Beneficiation, palletisation, and scrap utilisation.
- Renewable energy by 2030: Steel sector, 184TWh (target RE share 35%-43.3%), from current 94TWh (7.2%).
- Process transition: Beneficiation, pelletisation, and scrap utilisation.
- Green hydrogen: Replacing fossil fuels in blast furnaces & gas-based shaft furnaces; Tata Steel and JSW Steel have tested; industry could potentially use 3.5 MTPA by 2030.
- Carbon capture utilisation and storage (CCUS).
- Biomass.

Steel Sector: Company Overview and Targets

- JSW Steel
- Tata Steel
- Jindal Steel
- Jindal Stainless

JSW Steel Ltd. | Company Overview

NSE:JSWSTEEL | MC: INR 2,94,946 Cr

Net-Zero 2050 Goal, Interim 2030 Goal

- Largest steel company by market capitalisation in India
- Consolidated steel production of 27.79mt[3] in FY25
- Number of manufacturing units: 16 domestic (28.2 MTPA), three international (US & Italy, 1.5 MTPA).
  - Downstream capacity 13.5MTPA: GI, GL, tin plates, colour-coated plates.
  - Captive Power Plant: 2,000MW
  - Captive iron ore and coal mines
- Exports to 100 countries: 14% share in mostly high-value CRM and Coated Product.
- CO_2 emissions intensity (Scope 1&2): 2.44tCO_2 /tcs (53,167.64 ('000) tCO2)

JSW Steel Ltd. | Targets

	Baseline	**Interim Target**	**Year**
Net-Zero Target	2025		2050
Interim Target	2.44tCO₂ / tcs	Achieve 42% reduction in Energy Intensity from 2005- 1.95tCO2/tcs	2030
Renewable Additions	782MW	10GW	2030
Renewable Targets	18%	100%	2030
Battery Storage/PHP/ H2 Targets	NA	Planned (320MWh already approved)	2030
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2050
No New Coal	No greenfield	y	2030

JSW Steel Ltd. | Road to Net-Zero (and Interim)

Targeting Net Neutral by 2050: Decarbonization Agenda

Phase-I 2030 — **Two Phases, Two Milestones** — **Phase-II 2050**

1.95tCO$_2$/tcs
↓ 42% from base year
Strategic Levers

- Energy Efficiency
- Process efficiency - SEED
- Energy transition - Renewable power
- Improve material quality - Beneficiation
- Alternative fuel sources - Biomass
- Material circularity - increased scrap use
- Piloting breakthrough technologies

Net Neutral in Carbon emissions
Strategic Levers

- Use of syngas and TGR[1] in BF (Carbon Circularity)
- Commercial deployment of green hydrogen for steel-making
- Scrap-based electric arc furnaces
- Large scale implementation of CCUS[2]
- Carbon offset and sequestration
- Nature-based solutions
- Increasing demand side material efficiency
- Alternate steel-making technologies, e.g. Electrolysis

Progress Update

- **Energy Transition:** 2.5GW RE and 320MWh Battery Storage approved; 782MW currently operational and reaching 1GW by Q1 FY26
- **SEED Progress:** Reduction of ~1.87 mn tonnes CO$_2$ achieved through SEED[3] projects in FY25
- **Material Circularity:** Supply Chain for post-consumer scrap established and 200kt scrap procured in FY25 for use in steel-making
- **Digital Flare Monitoring** system incorporated to reduce flaring and enhance gas utilisation
- **Digital Gas Network Optimisation:** Targeting 50% gas flaring reduction (4,00,000 Gcal/year) by optimal distribution of gases
- **Polymer Injection Technology:** Collaborated with University of New South Wales to explore feasibility of patented Polymer Injection Technology in EAF

Tata Steel | Company Overview

NSE: TATASTEEL | MC: INR 2,28,249 Cr

Net-zero 2045 goal; Interim 2030 goal

- Total production capacity of 21.68 MTPA in India with >90% India production via Responsible Steel-certified sites; also operates downstream manufacturing facilities.
- International steel production of 8.7 MTPA (existing & new tech under implementation): Netherlands (DRI-EAF by 2030 from BF), UK (3.2MTPA moving from BF to EAF), and Thailand (scrap-based).
- Vision to achieve 40 MTPA capacity in India.
- Cover key raw material, steelmaking and downstream facilities across the Tata Steel Group under Biodiversity Management Plans by FY2026-27.
- Invest in at least one Nature-based Solutions project by FY2026-27.
- Disclose environment performance of 100% of products in India by 2030.
- Launched India's first Carbon Bank after DNV verification, achieving more than 50,000 tCO_2 savings via energy recovery and renewable fuel initiatives.

Tata Steel | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025		2045
Interim Target	2.46 tCO_2/tcs (International plants 1.69-2.22tCO_2/tcs)	Higher RE share Higher scrap in BOF Reducing coal usage Modular EAF one plant UK target 0.41.69-2.22tCO_2/tcs by 2027-28 Netherlands 1.69 to further 40% reduction	2030
Renewable Additions	7%	100%	2045
Renewable Targets			
Battery Storage/PHP/ H2 Targets			
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2045
No New Coal	No greenfield	y	2030

Tata Steel | Road to Net Zero

Initiatives planned

Up to 2030

- The installation and commissioning of a modular scrap-based EAF plant in Ludhiana, Punjab
- Increasing the proportion of renewable energy
- Incorporating higher scrap in basic oxygen furnace (BOF)
- Reducing coal usage by switching to biochar and natural gas
- Collaborating with academic institutions and original equipment manufacturers (OEMs) to pilot new low Technology Readiness Level (TRL) technologies
- Continuously optimising the energy and carbon intensity of existing operations
- Scaling up breakthrough technologies like HIsarna and EASyMelt

Up to 2045

- Completely replacing fossil-based grid power with renewable energy sources
- Introducing alternative iron-making technology such as hydrogen and gas-based direct reduced iron (DRI)
- Enhancing gas injection into blast furnaces to significantly reduce coal and coke consumption
- Ensuring the sustainable production, storage, and utilisation of green hydrogen
- Expanding pilot projects for Carbon Capture, Utilisation and Storage (CCUS)
- Developing value-added products from captured carbon

B Strategy

The strategic approach towards climate and nature varies by operating geography, considering the unique regulatory requirements, policy environment, market scenario and technological capabilities.

India

Tata Steel has adopted low-emission steelmaking practices such as EAF-based steelmaking and use of non-fossil fuel alternatives in iron making. We plan to increase renewable energy in our power mix. The regulatory environment in India is changing with the introduction of the Carbon Credit Trading Scheme (CCTS) and Taxonomy of Green Steel, aimed to incentivise decarbonisation. The Company is actively engaging with regulatory authorities and the Ministry of Steel to shape the above policies. Additionally, we have launched India's first Carbon Bank to offer low-emission products to our customers.

The UK

Tata Steel UK is building a 3.2 MTPA EAF-based steelmaking facility to reduce its direct emissions by ~90%. The project will also bolster steel security and leverage domestically available scrap steel, promoting value addition and achieving benchmark levels of circularity for high quality steel.

The Netherlands

Tata Steel Nederland (TSN) is continuously working with the Dutch government to facilitate its transition under the Groen Staal Plan (Green Steel Plan). This will be an integrated decarbonisation and environmental measures project with specific KPIs on CO_2, particulate matter, other emissions and factors considered important to the quality of life of the local community. TSN also supports the decarbonisation journey of its customers through product innovations such as Zeremis® Carbon Lite and Zeremis® Recycled.

Source: Tata Steel Annual Report 2025

Jindal Steel Ltd. | Company Overview

NSE: JINDALSTEL | MC: INR 95,373 Cr

Net-Zero 2047 goal; Interim 2030 goal

- Leading Indian conglomerate with a global footprint.
- Aspiration to reach net-zero target by 2035.
- Company aims to reduce its carbon footprint by adding green power through long-term arrangements for procuring renewable energy.
- Company operates a vertically integrated steel manufacturing process, from captive iron ore and coal mining to finished steel production, with a total capacity of 9.6 MTPA.
- 100% crude steelmaking to be covered under Life Cycle Assessment (LCA) by 2030.
- The total GHG emissions for FY2023–24 amounted to 18.24 million tonnes CO_2e from Scope 1 and 1.48 million tonnes CO_2e from Scope 2 emissions.
- Additional ~85 MWp solar capacity planned.

Jindal Steel | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025		2047
Interim Target	2.58 tCO_2/tcs	2.00 tCO_2/tcs Electric Arc Furnace (EAF) Plate Mill Reheating Furnaces (RHF)	2030
Renewable Additions	7%	Higher share	2047
Renewable Targets			
Battery Storage/PHP/ H2 Targets			
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2047
No New Coal	No greenfield	y	2030

Jindal Stainless | Company Overview

NSE: JSL | MC: INR 58,664.75 Cr

Net-Zero 2050 goal; Interim 2035 goal

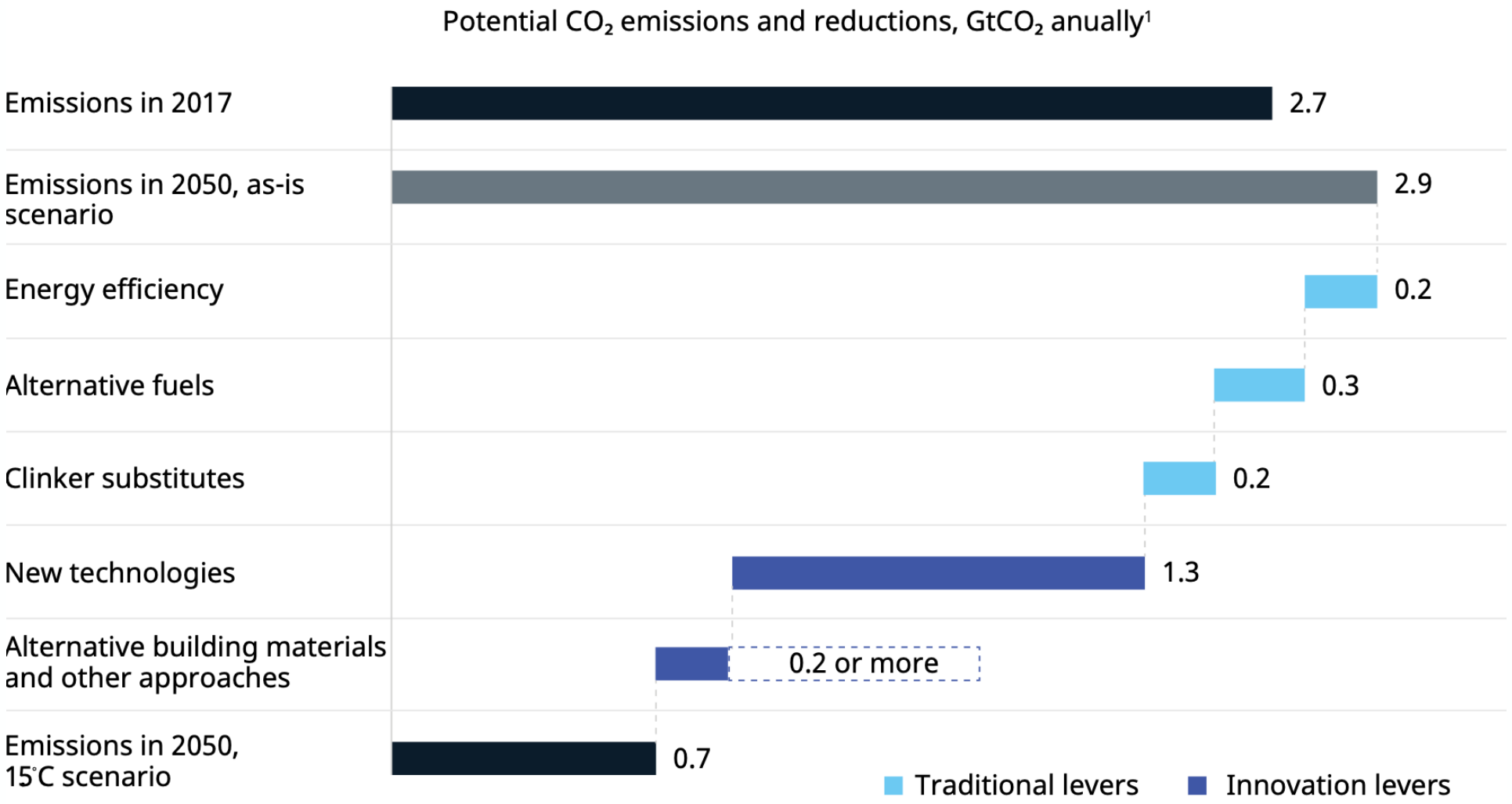
- 5th among top global producers (ex-China).
- ~3 MTPA stainless steel capacity, ramping up to achieve melt capacity of 4.2MTPA
- Exports to 50+ countries.
- >120 grades with a diversified high-end product mix.
- 16 manufacturing and processing facilities; presence across 12 countries.
- 9% of manufacturing exported.
- Aligned to Science-Based Targets Initiative for near-term emission reductions and net-zero.
- INR700 crore (USD79.8 million) committed to sustainability projects aimed at cutting 1.5 million tonnes of CO_2 annually.

Jindal Stainless | Targets

	Baseline	Interim Target	Year
Net-Zero Target	2025		2050
Interim Target (Include scope if there are information)			2035
Renewable Additions	11%	35%	2050
Renewable Targets	35MW	300MW	
Battery Storage/PHP/ H2 Targets			
LNG Target	0	0	
Coal Phase-Out	No greenfield	Y	2050
No New Coal	No greenfield	y	2035

Cement Sector: Decarbonisation Targets and Roadmaps

Areas of CO_2 Emission Reduction Potential



Cement Sector: Company Overview and Targets

- Ultra Tech
- Ambuja
- ACC
- Dalmia

Company Targets & Commitments

UltraTech Cement: Net Zero by 2050

- 25% reduction in CO_2 intensity by 2030.
- 100% renewable electricity by 2050.
- Carbon-neutral concrete by 2050.

Source: UltraTech joins RE100, GCCA Net Zero Roadmap Press Release

Ambuja Cements: Net Zero 2050

- Science-Based Targets (SBTi) aligned with Net-Zero ambition.
- 2030 Commitment:
  - Cut Scope 1 & 2 GHG emissions by 21% per tonne of cementitious materials (from 2020 baseline).
  - Reduce CO_2 intensity from 531 kg CO_2/ton (2020) to 453 kg CO_2/ton (2030) (excluding Captive Power Plant emissions).

Source: Ambuja Cement SBTi Net Zero Plan

Dalmia Cement (Bharat): Net Zero by 2040

- Carbon negative by 2040.
- Committed to EP100 (Energy Productivity) and RE100 (100% renewable electricity) by 2030

Source: UNESCAP Keynote by Mr. Singhi

ACC: Ney Zero by 2050

- Net Zero Target: 2050
- 2030 Target:
  - Scope 1 emissions to be reduced by 21.3% per tonne of cementitious material (from 2018 baseline).
  - Scope 2 emissions to be reduced by 48.4% over the same period

Source: ACC Net Zero Pathway Report

Reporting Framework & Net-Zero Goals Adopted by Companies

Company	Net Zero Target Year	Target Description
UltraTech Cement	2050	Net Zero by 2050; aligned with GCCA roadmap; RE100 and EP100 signatory
Ambuja Cements	2050	Net Zero by 2050; SBTi-validated; reduction of CO_2 intensity by 15% by 2030
ACC	2050	Net Zero by 2050; SBTi-validated; interim goals for Scope 1, 2 by 2030
Dalmia Cement	2040	Carbon negative by 2040 – earliest in the cement sector; backed by RE100, EP100, EV100

Reporting Framework	ACC	Ambuja	Dalmia	Ultra Tech
GRI (Global Reporting Initiative)	✅	✅	✅	✅
SASB (Sustainability Accounting Standards Board)	✅	❌	✅	✅
TCFD (Task Force on Climate-related Financial Disclosures)	✅	✅	❌	✅
TNFD (Taskforce on Nature-related Financial Disclosures)	✅	❌	❌	❌
SBTi (Science-Based Targets initiative)	✅	✅	✅	✅
CDP (Carbon Disclosure Project)	✅	✅	✅	✅
SDG Mapping (UN Sustainable Development Goals)	✅	✅	✅	✅

UltraTech | Company Overview

NSE: ULTRACEMCO | MC: INR 3,51,404.91 Cr

Net-zero 2050 goal, Interim 2030 goal (Not mentioned explicitly)

- No. 1 manufacturer of grey cement and ready-mix concrete in India.
- 3rd-largest cement manufacturer by capacity in the world (ex-China).
- Operations spanning India, UAE, Bahrain, Sri Lanka.
- Grey cement total capacity 152.7 million tonnes per annum (MTPA).
- Roadmap inspired by GCCA's 'Concrete Future' plan, focuses on a systematic reduction of Scope 1 CO_2 emissions, aiming for a 27% reduction by 2032 from 2017 baseline, validated by Science-Based Targets initiative (SBTi).
- Green power mix of 35.7%; reached 1.02GW of renewable power capacity and 342MW of WHRS power.
- Incremental investment plans in Waste Heat Recovery System (WHRS) (24.3MW) and renewable energy (80MW).

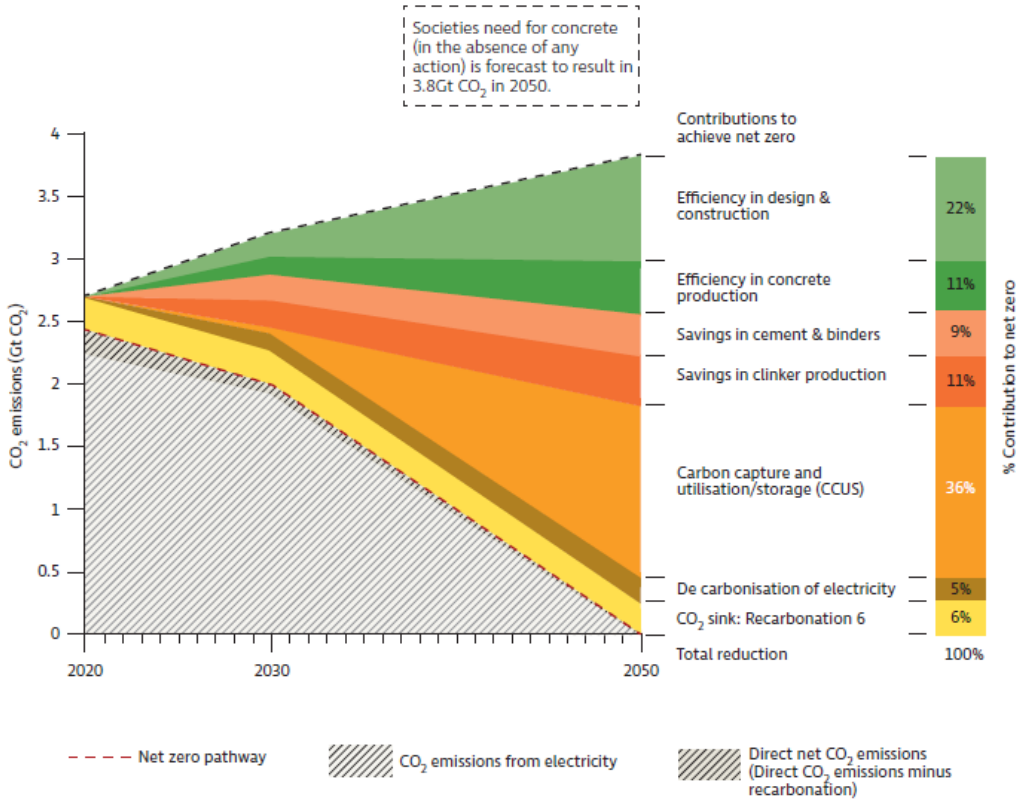
UltraTech | Targets (2)

	Baseline	Interim Target	Year
Net- Zero Target		2030	2050
Interim Target	618.17 kg CO_2 / tonne of Cement- scope 1 & 2 emission	Green energy mix to 85% 27% Scope 1 reduction & 69% Scope 2 Reduction by 2032 from 2017 base 557 kg CO_2/t cémentations Materials	2030
TSR	5.7%	15%	2030
Renewable Additions	1371MW	1600MW	2030
Renewable Targets	31.5%	18%	2030
Battery Storage/PHP/ H2 Targets	351MW	NA	2030
Coal Phase-Out		Y	2050
No New Coal		Y	2050

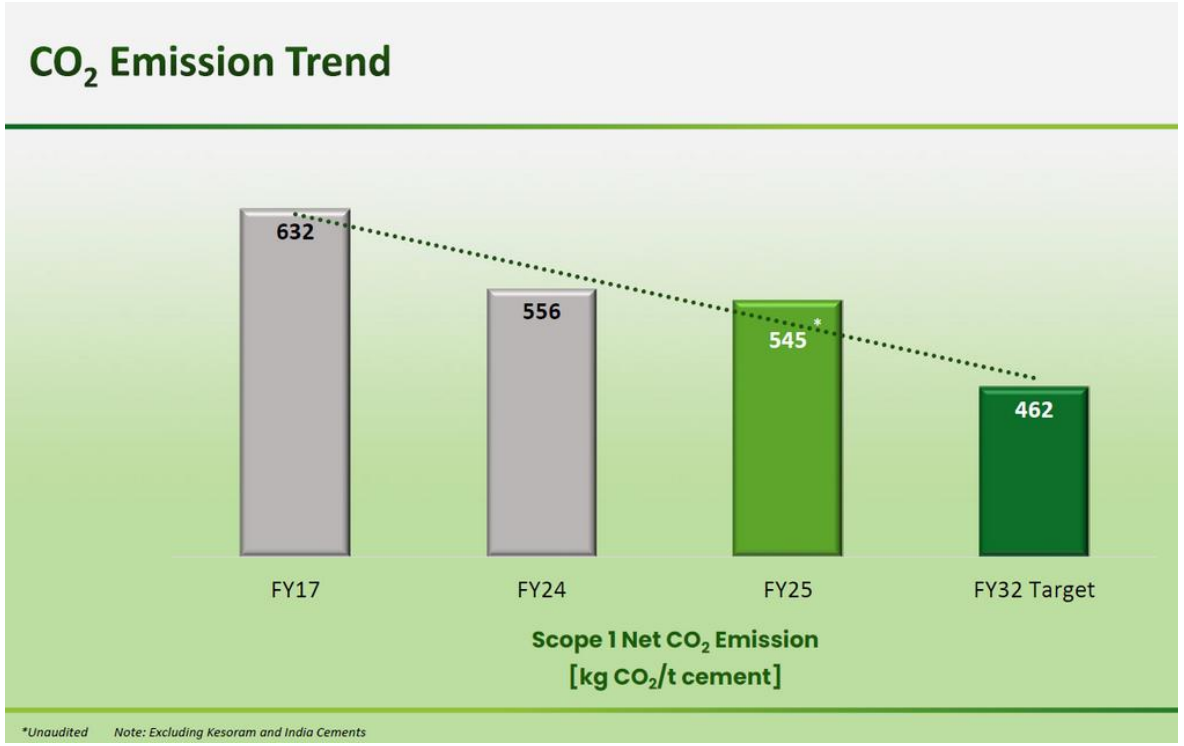
UltraTech | Road to Net Zero

Net Zero Concrete Roadmap

We are at the forefront of the industry's journey towards net zero emissions, as affirmed by our commitment to the GCCA 2050 Cement and Concrete Industry Roadmap for Net Zero Concrete. As a committed member of the Global Cement and Concrete Association (GCCA), we are among global leaders striving to produce carbon-neutral concrete by 2050.



CO_2 Emission Trend



Ambuja Cements | Company Overview

NSE: AMBUJACEM | MC: INR1,32,602 Cr

Net-Zero 2050 goal; Interim 2030 goal

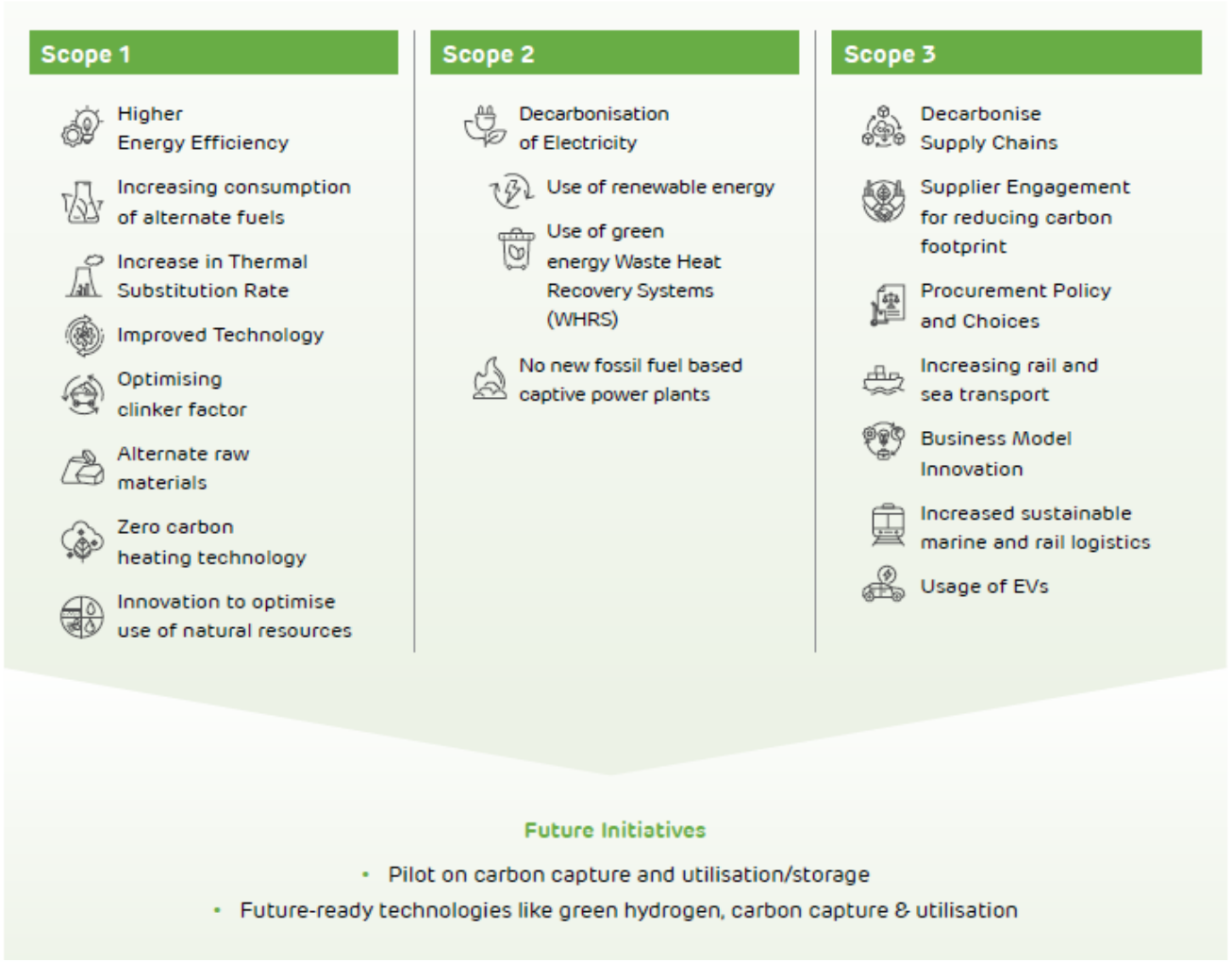
- Part of the diversified Adani Group.
- 2nd-largest cement producer in the world.
- Net-Zero commitment with 2050 targets validated by SBTi and in alignment with the Paris Agreement.
- Presence in 31 states and UTs across India.
- Cement capacity of 100+ MTPA achieved and targeted capacity of 140 MTPA by FY28.
- Invested INR100 billion in renewable and green-energy projects, including 1GW in renewable energy project capacity and 376MW from WHRS.

Ambuja Cement | Targets

	Baseline	Interim Target	Year
Net-Zero Target		2030	2050
Interim Target	554 kg CO_2 / tonne of Cement-scope 1 & 2 emission 76 Kwh/Mt	Green energy mix to 85%; 450 kg CO_2/t cémentations material 63 KWh/ MT	2030
TSR	28%	68%	
Renewable Additions	--		2030
Renewable Targets	NA	82%	2030
Battery Storage/PHP/ H2 Targets	WHR	WHR	2030
Coal Phase-Out		Y	2050
No New Coal		Y	2050

Ambuja Cement | Road to Net Zero

Decarbonisation Levers at Ambuja Cements



ACC Ltd. | Company Overview

NSE: ACC | MC: INR 12,05,710 Cr

Net-Zero 2050 goal; Interim 2030 goal

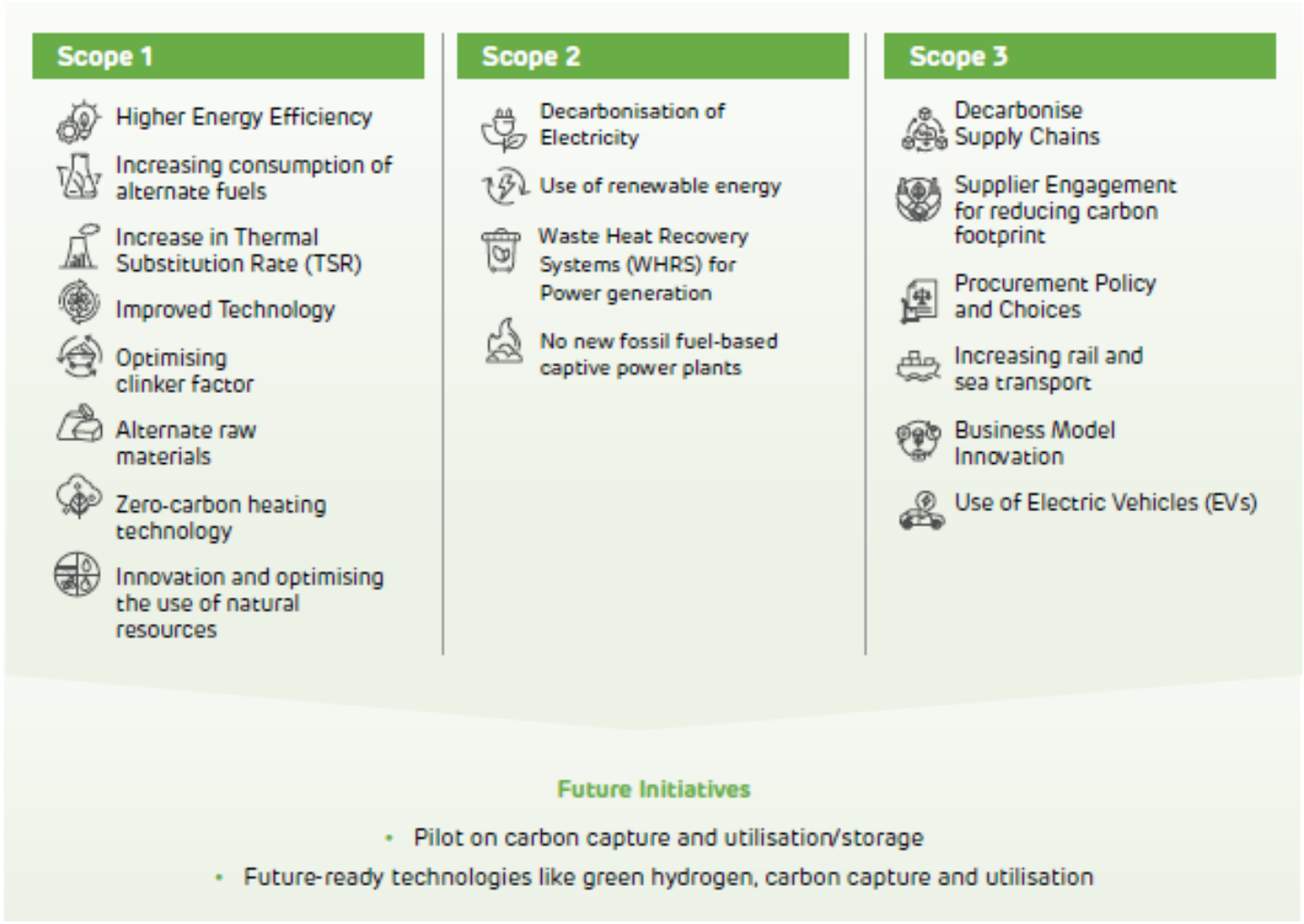
- Subsidiary of Ambuja Cements Ltd.
- 1st cement company established in India; formerly 2nd-largest producer in the world with 686 MT installed capacity.
- 19 cement manufacturing units, 102 ready-mix concrete plants.
- Broad product portfolio spanning ready-mix, dry mix, and green building blocks.
- Guided by its Sustainable Development 2030 Plan.
- 16.4 MT clinker production and 29.5 MT cement production.
- Aims to increase its share of green power to 60% by 2028.

ACC | Targets

	Baseline	Interim Target	Year
Net-Zero Target		2030	2050
Interim Target (Include scope if there are information)	456 kg CO_2 / tonne of Cement-scope 1 & 2 emission 75 Kwh/Mt	431 kg CO_2/t cementitious material 62 KWh/ MT	2030
TSR	734 Kcal/Kg of clinker	710Kcal/Kg of clinker	
Renewable Additions	--		2030
Renewable Targets	NA	>60% (2028 Target)	2030
Battery Storage/PHP/ H2 Targets	WHR	WHR	2030
Coal Phase-Out		Y	2050
No New Coal		Y	2050

ACC | Road to Net Zero

Decarbonisation Levers at ACC Limited Cements



ACC | Road to Net Zero (2)

ESG Ambition						
Net Zero	Waste to Resources	Water Positive	Bio-diversity Positive	Zero Harm Positive	Engaged Communities	Zero Non-compliance

Climate and Energy

Objectives

The Company aims to reduce its CO_2 emissions.

Lead Metrics	2030 Target	Performance in FY 2024-25	SDGs Impacted
Scope 1 CO_2 Emitted	421 kg/tonne of Cementitious Material	484 kg/tonne of Cementitious Material	
Scope 2 CO_2 Emissions	10 kg/tonne of Cementitious Material	22 kg/tonne of Cementitious Material	
Specific Thermal Energy Consumption	710 kCal/kg of Clinker	734 kCal/kg of Clinker	
Specific Electrical Energy Consumption	62 KWh/tonne Cement	75 KWh/tonne Cement	
Renewable and Green Energy Consumed	60%	18%	

Dalmiya Bharat Cement

NSE: DALBHARAT | MC: INR41,025 Cr

- Sales of 29.4 million tonnes in FY25 with 63% capacity utilisation.
- 456kg CO_2/tonne of cementitious material (among lowest globally).
- Scope 1 & 2 GHG reduced by 15% from SBTi approved baseline.
- Net-Zero by 2040.

Dalmiya Bharat Cement | Targets

	Baseline	**Interim Target**	**Year**
Net -Zero Target		2030	2040
Interim Target (Include scope if there are information)	470 MT CO2/MT of Cement (scope 1& 2 emission)	373 MT CO_2/ MT of Cement -ve 30 MT CO_2 by 2040)- Scope 1	2030
Renewable Additions	267MW	595MW (WHR is part of this)	2026
Renewable Targets	36%	100%	2035
Battery Storage/PHP/ H2 Targets	72MW WHR	89 WHR	2030
Coal Phase-Out		Y	2035
No New Coal		Y	2035

Dalmiya Bharat Cement | Targets (2)

Focus Area	Current (FY25)	2030 Target
Net-Zero Commitment		Carbon Negative by 2040 (earliest in cement sector globally)
Renewable Energy Share	36% achieved in FY25 (267MW RE capacity)	Reach 100% renewable electricity – *RE100 commitment*
Clinker Factor	Clinker factor = 59.7% in FY25	Further reduction through material substitution
Blended Cement Share	84% blended cement as disclosed	Expand PSC/PPC/PCC mix
Thermal Substitution Rate	TSR 5.7%	Increase TSR through waste & biomass
Afforestation/Tree Plantation	Confirmed through annual sustainability disclosures	Continue ecological restoration in plant zones

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