Quarterly Assessment of Listed Power Sector Companies in India



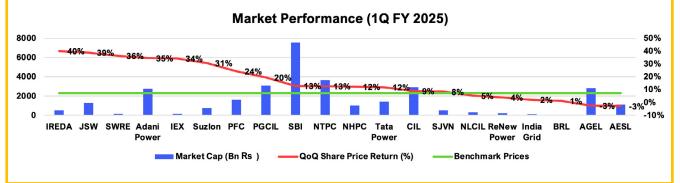
1Q FY2025

1. Key Highlights for 1Q FY2025

- AGEL reported a 23% Year-on-Year (YoY) increase in earnings before interest, taxes, depreciation and amortisation (EBITDA) from power supply, reaching Rs23.7 billion. The increase in earnings can primarily be attributed to the addition of 2.6 gigawatts (GW) capacity during the period.
- JSWEL has commenced the construction of a 1 gigwatt-hours (GWh) Battery Energy Storage System (BESS) project under SECI and initiated green hydrogen production for a 3,800 metric tonnes (MT) per annum project in collaboration with JSW Steel.
- NLCIL is setting up a pilot project to generate hydrogen using a 4MW solar power input for electrolysers. Additionally, a proposed project for lignite gasification-based methanol production with a capacity of 0.4 million metric tonnes per annum (MMTPA) is under consideration.
- NTPC is developing 26GW of thermal capacity, with 9.5GW under construction and 8GW in tendering. The remaining capacity will be tendered next year. NTPC commissioned a 1,320 megawatt (MW) thermal plant in Bangladesh and is developing solar projects in Sri Lanka, Africa, and Latin America. The company is also entering the nuclear power plant segment.
- AESL is divesting its Dahanu thermal power plant (ADTPS), aligning with its ESG philosophy.
- PGCIL has secured six projects, totalling Rs49,350 million in 1Q FY2025.
- IndiGrid has signed a Battery Energy Storage Purchase Agreement (BESPA) for a 180MW/360 megawatt-hours (MWh) BESS project awarded by Gujarat Urja Vikas Nigam Limited (GUVNL).
- Borosil's 1Q FY2025 revenue reached Rs3.7 billion, up 5% (YoY) and 31% quarter-on-quarter (QoQ) due to higher import prices, driven by a sharp rise in ocean freight, enabling a more favourable selling price for BRL.
- IEX recorded a total trading volume of 30.4 billion units (BUs) in 1Q FY2025, marking a 20.8% YoY growth.
- SWRE reported 78% YoY revenue growth in 1Q, driven by strong domestic
 engineering, procurement and construction (EPC) project execution. However,
 sequential revenue fell by 22% due to tight liquidity, which is expected to improve
 with better credit ratings.
- NHPC is exploring the development of 20GW of solar projects across India, including floating solar projects in collaboration with Norway's Ocean Sun.
- Suzlon reported its largest-ever order book at 3.8GW since inception and achieved the highest 1Q deliveries in seven years at 274MW.
- SJVN is developing a 2,400MW pumped storage project in Mizoram and has tendered 4.8GW out of a 10.8GW target for FY2024-25. The company plans to raise Rs20,000 million by diluting its stake in SJVN Green Energy Limited.
- Adani Power has initiated the development of a 1,600MW ultra-supercritical (USC) thermal power project as an expansion of an existing site in Chhattisgarh and is already developing a greenfield 1.6GW USC project in Uttar Pradesh.

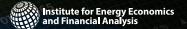
Table 1: Financial Highlights

S No.	Company	Operating Revenues (Rs Bn)	YoY Revenue Growth (%)	QoQ Revenue Growth (%)	Net Income (Rs Bn)
1	Adani Green Energy Ltd (AGEL)	28.3	31%	12%	6.3
2	JSW Energy Ltd (JSWEL)	28.8	-2%	4%	5.3
3	NLC India Ltd (NLCIL)	33.8	2%	-5%	5.7
4	NTPC Ltd	485.2	13%	2%	55.1
5	Adani Power	149.6	36%	12%	39.1
6	SJVN	8.7	29%	80%	3.6
7	Tata Power Company Ltd	172.9	14%	9%	11.9
8	Adani Energy Solutions Limited (AESL)	53.8	47%	14%	-11.9
9	Power Grid Corporation of India Ltd (PGCIL)	110.1	0%	-8%	37.2
10	India Grid Trust	8.4	33%	6%	1.4
11	Coal India Ltd (CIL)	364.6	1%	-3%	109.4
12	PFC Group	247.2	18%	2%	71.8
13	Indian Renewable Energy Development Agency Limited (IREDA)	15.1	32%	9%	3.8
14	State Bank of India (SBI)	1182.4	17%	1%	196.8
15	Borosil Renewables Ltd (BRL)	3.7	5%	31%	-0.1
16	Indian Energy Exchange (IEX)	1.2	19%	2%	1.0
17	Sterling and Wilson Renewable Energy Limited (SWRE)	9.2	78%	-22%	0.0
18	Suzlon Energy Limited	20.2	50%	-7%	3.0
19	NHPC	26.9	-2%	43%	11.1



Market capitalisation as of 30 June 2024 Benchmark taken as SENSEX





2. Key Operational Highlights for Q1 FY2025

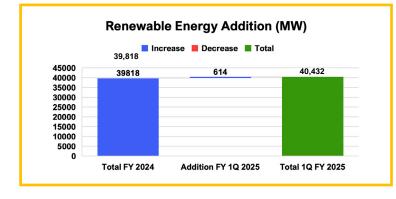
Table 2: Operational Highlights of Power Sector Companies

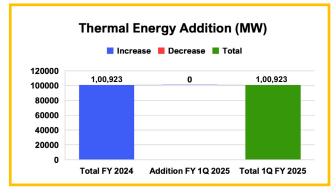
S No.	Company	Renewable Energy Capacity Added during Quarter (MW)	Total Installed Renewable Energy Capacity (MW)	Pipeline Renewable Energy Capacity (MW)	Thermal Capacity Added (MW)	Pipeline Thermal Capacity (MW)	Total Installed capacity (MW)	Power Gener- ation (BU)	Transmis- sion Lines added (ckms)	Total Transmis- sion Line (ckms)	Pipeline Trans- mission Capacity (ckms)	Trans- mission reliability (%)	Discom Custom- ers (in Million)	Coal Pro- duction (MMT)*
1	Adani Green Energy Ltd (AGEL)	0	10,934	11,019	0	0	10,934	7.3						
2	JSW Energy Ltd (JSWEL)	246	4,028	5,680	0	350	7,536	7.9						
3	NLC India Ltd (NLCIL)	0	1,431	8,679	0	5,380	6,071	7.5						9.0
4	NTPC Ltd	18	7,343	11,469	0	9,560	76,048	97.8						9.6
5	Adani Power	0	40	0	0	6,400	15,250	26						
6	SJVN	89	2,466	3,508	0	1,320	2,466	NA	0	227	217			
7	Tata Power Company Ltd	253	6,100	5,291	0	0	14,960	8.1	7	4,633	2,035		12.5	
8	NHPC	0	7,144	10,402	0	0	7,144							
9	Adani Energy Solutions Limited (AESL)								678	21,187	3,073	99.7	3.2	
10	Power Grid Corporation of India Ltd (PGCIL)								91	1,77,790	NA	99.8		
11	India Grid Trust	0	855				855	0.5	8	8,700	NA	99.4		
12	Coal India Ltd (CIL)	8	91	1,190	0	3,600	91							189.3
Tota	I	614	40,432	57,238	0	26,610	1,41,355	155.2	784	2,12,537	5,325.0		15.7	207.9

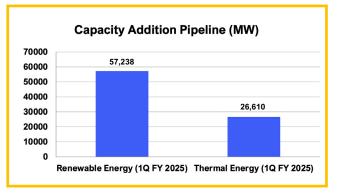
*Million Metric Tonnes

	New Orders Received (Rs Mn)	Unexecuted Order Value (UOV) (Rs Mn)
Sterling And Wilson Renewable Energy Limited (SWRE)	21,700	93,960

	Order Book (MW)	Order added during Quarter (MW)
Suzion Energy Limited	3,817	888









market

PowerPulse: India Corporate Dashboard

IREDA reported that 84% of its borrowings are domestic, compared to 75% YoY. The company has established IREDA Global Green Energy Finance IFSC Limited, a wholly owned subsidiary in GIFT City, Gandhinagar, focused on foreign currency financing.

Table 3: Operational Highlights: Financial Sector Companies

S No.	Company	Loan book growth (%YoY)	Total Loan Book (Rs Bn)	Renewable Energy Lending during the quarter (Rs Bn)	Total Renewable Energy Lending (Rs Bn)	Total Thermal Lending (Rs Bn)	Net NPA Ratio (%) ⁽³⁾	Yield of Advances (%) (4)	CRAR (%) ⁽⁵⁾
1	PFC Group (1)	10.0%	4,750	NA	598	1703	0.9%	10.1%	27.1%
2	Indian Renewable Energy Development Agency Limited (IREDA)	33.9%	632	14	382	NA	1.0%	10.0%	19.5%
3	SBI	15.4%	38,121	34	508	NA	0.6%	8.8%	13.9%

⁽¹⁾ Figures for PFC are standlone;

3. Key Developments Impacting Power Sector Companies

s. Key Developmo	ents impacting Power Sector Companies
Surge in power demand and generation	India's power demand saw an 11% YoY increase in 1Q FY2025, reaching 452BUs, driven by high temperatures leading to increased use of cooling appliances, and robust industrial activity. The peak power demand touched a record high of 250GW in May 2024. In response to this surge, overall power generation increased by 11% YoY to 484BUs. Notably, renewable power generation grew by 6% YoY, with solar generation up by 15%, while thermal generation increased by 12%, resulting in a Plant Load Factor of 76%.
Rising day-ahead market prices	Day-Ahead Market prices rose by 2% YoY, with the average tariff for 1Q FY2025 recorded at Rs5.27/kilowatt-hour (kWh) compared to Rs5.17/kWh in the same period last year.
Transmission infrastructure investment	To support the evacuation of higher electricity volumes and power from new renewable energy load centres, the Central Electricity Authority (CEA) has estimated an investment of Rs4.75 trillion in India's transmission infrastructure by 2027, with Rs3.13 trillion allocated to ISTS projects. In 1Q FY2025, 11 transmission bids were submitted, with eight reverse auctions concluded, and an estimated capital expenditure of ~Rs415 billion.
BESS developments	To enhance grid stability amid increasing renewable energy penetration, CEA estimates the need for ~8.5GW of BESS projects by FY2027 and ~47.2GW by FY2032. In 1Q FY2025, GUVNL concluded Phase III tenders for standalone BESS for 500MW/1000MWh.
Solar PV manufacturing and policy support	India's solar module manufacturing capacity stood at around 65GW as of April 2024. The country is on track to reach 110GW by 2026, driven by the addition of 45GW new capacity from existing and new players. The Approved List of Models and Manufacturers, which came into force in April 2024, is expected to boost the share of domestically produced modules. The Ministry of Finance has imposed a 10% basic customs duty on the import of solar glass, effective from October 2024, while extending exemptions on raw materials for specific solar PV components and machinery used in manufacturing solar cells and modules.
Renewable energy market growth	The Real-Time Market (RTM), Term-Ahead Market (TAM), and green markets experienced significant growth in 1Q FY2025, with YoY increases of 27%, 28% and 94%, respectively. However, the implementation of General Network Access led to a 157% YoY decline in Deviation Settlement Mechanism volumes, which dropped to 0.8BUs in 1Q FY2025.
Competitive bidding in FDRE and RTC projects	In FY2024, 5GW of FDRE and Round-The-Clock (RTC) tenders were awarded at competitive prices, ranging from Rs4.55 to Rs5.59 per unit for FDRE and Rs3.99 to Rs4.25 per unit for RTC. Additionally, the cost of battery storage has decreased significantly, with recent tenders awarded at Rs3.72 lakhs/MW/year, down from Rs10.83 lakhs/MW/month in 2023.
India's contribution to the global carbon credit	India comprises 15-20% of the global voluntary carbon credit supply. Carbon credits are primarily sold to multinationals and corporates in Europe.

⁽²⁾ Loan Book Growth is for full year;

⁽³⁾Net NPA% denotes the proportion of advances which turned into non-performing assets after adjusting for the provisions already made for NPA by the financial institution. A low Net NPA ratio indicates that the bank has made adequate provisions against non-performing loans;

⁽⁴⁾ Yield of Advances: Yield on Advances is calculated as Interest Income/Avg. Advances The ratio gives the average lending rate of a financial institutions;

⁽⁵⁾ CRAR: Capital to Risk (weighted) Assets Ratio (CRAR) is an estimation of a bank's available capital expressed as a percentage of a bank's risk-weighted credit exposures.



4. Advancement on Energy Transition

In this newsletter, we have analysed the corporate decarbonisation strategies of listed power companies, as well as their financiers. We have reviewed the Business Responsibility & Sustainability Reporting and other company disclosures for FY2024. Our focus areas are:

Strategic ambition: Understanding each company's decarbonisation goals, and short- and medium-term targets, along with reviewing third-party validation and verification of these targets.

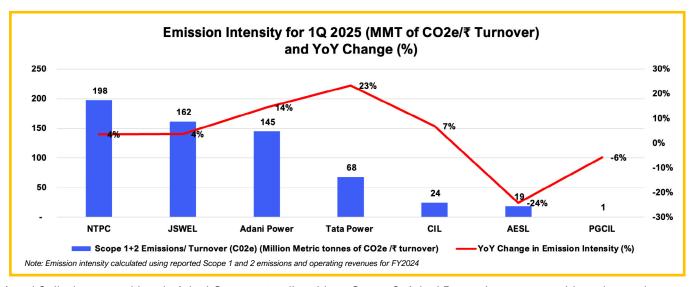
Transition levers: Identifying the strategies and mechanism deployed by companies to support their decarbonisation goals. We have categorised these strategies into various transition levers such as growing the renewable energy portfolio, diversification of business model, greening the supply chain, and greening own operations, among others. The categories of transition levers are based on the type of company and the strategies adopted by them. These categories may differ from one company to another, and comparability can vary depending on the extent of disclosures provided by each company.

Metrics & targets, and performance evaluation: Assessing the metrics, targets and performance for tracking progress across identified transition levers.

Linkage of environment, social and governance (ESG) strategy with corporate strategy: Evaluating the alignment of financing, investing and operational metrics with transition strategies, alongside governance structures and the quality and coherence of related disclosures.

Some key trends observed as part of our analysis include:

- Most companies in our BRSR analysis lack either
 a long-term net zero target, short- and mediumterm targets, or both. The scope and type (absolute
 vs. intensity) of these targets vary, and reported
 performance is often not comparable across
 companies. Tata Power, JSWEL and AESL have
 the most detailed disclosures on this front. Among
 financiers, SBI has a robust long-term target, but lacks
 short- and medium-term targets.
- Only Tata Power has a Science Based Targets Initiative (SBTi) validated net zero target while AESL is awaiting SBTi validation. A validation from SBTi means that the company's decarbonisation trajectory is aligned to a 1.5-degree or other decarbonisation trajectory.



- Most companies have reasonable assurance for Scope 1 and 2 disclosures, with only Adani Green extending this to Scope 3. Adani Power, however, provides a less stringent verification for its Scope 3 emissions.
- Companies have identified several transition levers; however, most companies do not have specific metrics and targets aligned to them and performance reported on the achievement of those transition levers. Tata Power has the most detailed disclosures on this front with objectively defined metrics and targets, and performance reporting. Among lenders, SBI stands out.
- Only JSWEL links its transition strategy to future earnings impact and provides a low-carbon financing plan.
- There is also a need for more detailed instructions and context for BRSR disclosures. For instance, in assessing board training on ESG, companies report on different metrics that are not comparable. Similarly, R&D and capex spent are reported in different metrics and often unclear, and linkage of target, performance, and material risks and opportunities is not present.





Analysis of Company Transition Strategies

		Tata Power	
		Short-term metrics and target	FY2024 performance
	Short- and long-	Carbon net zero before 2045	
Strategic ambition	Short- and long- term target/ energy	Achieve a 70.5% reduction in Scope 1 and 3 absolute greenhouse gas (GHG) emissions by FY2037.	-
Stra amb	transition 📜	Decrease absolute Scope 2 GHG emissions by 12.5% by FY2027 compared to FY2022 baseline.	-
	ambition 🗀	Reduce Scope 1 GHG emissions intensity by 70.5% by FY2037 from a FY2022 baseline.	-
	Growing the	Enhance clean and green portfolio to 70% by 2030; 15GW green energy portfolio in the next five years (starting from FY2025)	Clean and green portfolio was 40% as of FY2024.
	renewable energy	Annual sourcing of 100% renewable electricity from FY2030 for the distribution business.	22% power generation from clean and green sources.
	portfolio 'T'	Focus on flexible dispatchability through complex solutions.	120MWh storage capacity and locked in 2.8GW of pumped hydro storage.
any		Reduce specific fuel consumption by improving operational efficiency.	26MMT coal consumption in FY2024.
by the company	Improvement in energy	Aggregated Technical and Commercial (AT&C) loss reduction in Odisha Discoms.	2.7% reduction at overall level - AT&C loss reduction in Odisha Discoms.
the	efficiency 1	Achieving benchmark performance in various operational parameters in thermal and hydro plants.	-
d by		Operating renewable energy portfolio at benchmark, and above design parameters to increase the yield.	-
oyed		7.5+ lakh home chargers in the next five years (starting FY2025).	86,000+ home chargers installed.
Fransition levers employed		10,000+ EV charging points to be installed in the next five years.	6,300+ public and bus charging points energised across 530 cities and towns.
levers	Diversification	Market share of rooftop solar to be increased to 20%.	2,045+ MW third-party solar rooftop project executed till FY2024.
ısition	of business model	13% market share in solar EPC business.	13.8+ GWp EPC of solar rooftop large projects executed and in the pipeline.
Trar		Continued offerings of microgrids, ESCO solutions and floating solar.	-
		Adopt green hydrogen and small modular reactors.	-
		Participation in Green Term Ahead Market (TAM) alongside the standard power markets.	-
	Greening the supply chain	Mandating ESG disclosure and conducting comprehensive evaluations aligned with ESG criteria	100% key/critical business associates screened, including suppliers and service providers in FY2023-24
Δ = Ι= : =	not zoro boforo 201E	Short, and madium term targets are well defined with short term targets verified by SDT. Coops 1 and 2	h

- •Achieve net zero before 2045. Short- and medium-term targets are well defined with short-term targets verified by SBTi. Scope 1 and 2 have reasonable assurance.
- •65% capex is spent on renewable energy. However, virtually no R&D has been done on low carbon initiatives. The company also provides some linkage of transition plan with future revenues.
- •All board members received ESG training in FY2024.
- Medium-term metrics and targets defined, and performance reported for growing the renewable energy portfolio and for most identified diversification levers.





		Coal India Lin	nited
		Short-term metrics and target	FY2024 performance
gic on	Short- and long-term	Plans to bec	ome a net zero energy company
Strategic ambition	target/ energy transition ambition	CO2 reduction target of 62,902 tonnes/ year.	Achieved a reduction of 1,05,319 tonnes in FY2024.
	Growing the renewable energy	Develop 3GW renewable energy capacity by FY2026 for both captive and non-captive use. Add another 2GW renewable energy by FY2028-29.	Secured a 300MW solar project with GUVNL.
۲u	portfolio	Repurpose abandoned/closed mines for pumped storage projects (PSPs).	-
by the company	Improvement in energy efficiency	-	7.6% reduction in electricity usage.
oloyed by th	Producing lower carbon	-	Three coal gasification projects taken up. Coal-to-SNG (Synthetic Natural Gas), Coal-to-ammonium nitrate project, Surface Coal Gasification (SCG) plant construction with capacity of 1.27MMTPA.
Transition levers employed	alternatives of coal	-	Developed technologies for harnessing Coal Bed Methane and Coal Mine Methane as alternative energy sources.
Transition	Diversification of business model	Diversify into critical mineral production, with a long-term goal of expanding to the global minerals sector. Focus on mining, processing and manufacturing.	Participated in the first tranche of the e-auction of critical mineral blocks offered by the Ministry of Mines.
	model	Diversify into the reconstruction of degraded land under the Green Credit Programme.	Undertaken extensive plantation projects on degraded forest land across various states.
	Greening own operations	3GW solar power to offset the current fossil fuel-based power requirement.	83MW installed solar power capacity and 195MW under implementation.

- •Net zero target year not specified, and emission reduction goals need more details. Aims to achieve net zero but overlooks Scope 3 emissions, the largest part of its GHG footprint. No third-party verification of GHG emissions, and board incentives are not aligned with transition goals.
- •Only 14% of capex and 50% of R&D are focused on diversification, limited to the development of low-carbon coal alternatives.
- •Transition levers do not have clear metrics and targets identified for planned low carbon activities.
- •Reliance on low carbon coal alternatives, along with expansion of coal washeries, may reduce Scope 3 emissions in the short-term, but risks locking in coal assets.





	JSW Energy Limited (JSWEL)							
		Short-term metrics and target	FY2024 performance					
٠	Object and to	Net zero by 2050						
Strategic ambition	Short- and long-term target/ energy	Reduce carbon emissions by more than 50% (baseline 2020) by 2030.	25.7% GHG emissions target achieved.					
Str	transition ambition	Reduce energy intensity and auxiliary power consumption by more than 50% by 2030.	30.15MUs energy savings.					
	Growing the renewable energy portfolio	 20GW renewable energy generation and 40GWh energy storage company before 2030. Achieving 50% cumulative installed capacity from non-fossil fuel-based energy resources by 2030. 	1) 9.3GW renewable energy, 3.4GWh storage capacity locked in as of 4Q FY2024. 2) 52% installed capacity from non-fossil fuel sources.					
company	Diversification of business model	1) Foraying into green hydrogen and its derivatives, and downstream chemicals like green methanol, ethanol and sustainable aviation fuel. 2) 3,800TPA green hydrogen production plant to be set up by 2025.	Signed a seven-year hydrogen supply agreement for offtake of 3.8KTPA with JSW Steel. Allotted 6,500 tonnes per annum by SECI under Strategic Interventions for Green Hydrogen Transition (SIGHT) programme					
/ the	•	Exploring carbon circularity.	-					
yed by		Transitioning from coal-based boilers to utilising waste gases in thermal plants.	200,000MT of coal displaced by firing waste gases in boiler at Vijayanagar.					
Transition levers employed by the	Greening own operations	Integrating backward by setting up PV modules for solar projects for captive usage 1GW/annum of solar module manufacturing under the PLI scheme by 2025.	-					
on le		Utilising carbon capture and storage technologies.	-					
Transitio	Greening of supply chain	Develop a comprehensive supply chain assessment programme targeted at critical suppliers. Identify and collaborate with preferred partners who demonstrate strong ESG practices.	Digital supply chain module implemented to assess ESG performance of Tier 1 suppliers. Introduced ESG questionnaire for some supply chain vendors. 54 critical suppliers being assessed on sustainability parameters.					
		Plan to conduct ESG workshops and awareness sessions in FY2025 to elevate the ESG commitment of vendors and contractors.	-					

- •2050 net zero target with short-term absolute and intensity targets for all three emission scopes, with performance reported. Double materiality and TCFD risk assessment of sites conducted in FY2024. Reasonable assurance for Scope 1 and 2.
- •While 15% of capex is allocated to renewable energy projects, there is 0% R&D on low-carbon initiatives, though low-carbon capex guidance is provided.
- •Medium-term metrics and targets for renewable energy growth and diversification are defined, with performance reported and long-term impact on net debt/EBITDA disclosed. However, specific metrics and targets for greening operations are lacking.
- •95% of employees trained in low-carbon technologies, and three of 11 board members have ESG expertise. Its supply chain programme is advanced compared to its peers, with targets and metrics identified.





	Adani Power						
		Short-term metrics and target	FY2024 performance				
Strategic ambition	Short- and long-term target/ energy transition ambition	Reduction in GHG emission intensity to 0.84MTCO2e/MWh by FY2025.	Average emission intensity of 0.85MTCO2e/MWh.				
	Growing the renewable energy portfolio	Installing solar rooftops and other green energy projects.	40MW installed solar power capacity.				
pany	Improvement	78% targeted ultra-supercritical / supercritical capacity by FY2029.	Addition of 1,600MW Godda ultra-supercritical thermal power plants. Ultra-supercritical/supercritical technology used in 72% of thermal fleet.				
e com	efficiency	Using digitisation to improve monitoring and reduce losses.	Seven plants have been onboarded in Energy Network Operations Centre (ENOC) for digitisation.				
Transition levers employed by the company		Pursuing green hydrogen-derived ammonia as an alternative fuel at the Mundra plant, aiming for a 5% portfolio decarbonisation through biomass technology integration.	-				
(oldme	Greening	Liquid ammonia co-firing ratio plans for 100% mono-firing at the Mundra power plant.	-				
ers (own operations	Replacing fossil fuel-based vehicles with electric vehicles.	-				
ion lev		Implementing carbon capture, usage, and storage technology across operational fleets.	-				
ınsit		-	Installation of 10KW rooftop solar and solar streetlights.				
Tra	Greening of the supply chain	Building a green supply chain by integrating associates for 100% of critical supplies by FY2025.	505 new suppliers (100%) onboarded using environmental and social criteria.				

- •No net zero target and only a short-term GHG intensity target (scope unclear). Reasonable assurance provided for Scope 1 and 2, with assessment for Scope 3.
- •Capex and R&D figures given, but percentages missing, with R&D focused on greening operations.
- •The executive directors pay is tied to sustainability metrics, and the board and key management are trained in ESG.
- •Low-carbon portfolio growth is minimal, and there are no metrics or performance reporting for identified levers. There is a plan for thermal asset additions. However, the supply chain ESG engagement programme is robust.





			NTPC											
			Short-term metrics and target	FY2024 performance										
			Reduce energy intensity by 12% by FY2032.	10.7% YoY increase in energy savings	 Lacks a net zero tal 									
ambition	Short- and long- term target/ energy transition ambition		-	8.6% YoY increase in avoided GHG emissions. 18.4MMT CO2 emissions avoided in FY2024.	and has a short-teri energy intensity go- without benchmark against a transition									
	Growing the renewable	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Achieve 60GW renewble energy capacity by FY2032.	1) Growth of 4.7% YoY in non-fossil portfolio capacity. 2) Established a land bank with ISTS connectivity for 6GW future renewable projects. 3) Ultra Mega Renewable Energy Power Plant at Gujarat (4.8GW), DVC (0.7GW), and Madhya Pradesh (0.6GW) are being developed.	pathway. Aims to reduce CO2 emissi through renewable energy diversification									
	energy portfolio	- Ø (-	PSPs of 11.5GW have been indicated for development from the government.	Issued tenders for 4GW/24GWh capacity energy storage solutions.	but lacks specific metrics. Reasonable									
			Exploring offshore wind opportunities.	Pursued collaborations with global partners for developing offshore wind energy projects.	assurance for Scor									
	Improvement in energy efficiency	①	Efficient utilisation of resources and use of technological advancements for improving energy efficiency.	5.2% reduction in net energy intensity. Retrofitting, upgrading thermal assets to fulfil the ramping rate requirements. Conducted mandatory energy audits in six stations per BEE regulations.	and 2.									
			Enhance presence in consultancy services, power trading and ancillary services. Target of 25% market share in ancillary services and storage by 2032.	Cumulative capacity of PMC assignments at 6620MW. Awarded 100MW solar project in Republic of Guinea and demonstration for solarisation projects in 10 countries.	• 100% of R&D focus on low-carbon area									
	Diversification of business model		Exploring hydrogen as a substitute for fossil fuel.	1) Pilot projects to produce green chemicals like methanol and green hydrogen have been undertaken. 2) A green hydrogen hub being developed for production of green hydrogen and chemicals like methanol and ammonia, and setting up allied manufacturing facilities. 3) Hydrogen as an energy storage system is being developed in off-grid remote areas to provide renewable energy round-the-clock. 4) Green hydrogen mobility projects (Greater Noida -260 kg/day) under Article 6.2 of the Paris Agreement.	like green hydroger and CCUS.									
			Venture into green mobility	Ventured into e-mobility, providing vehicles and turnkey solutions across various vehicle segments, particularly public transport.	Only two of 11 boar members have									
ρ	Implementing government schemes on transition	(1)	-	1) Designated as "Expert PSU" for providing consultancy services for the implementation of rooftop solar PV projects. 2.5MW solar capacity has been successfully implemented. 2) Designated renewable energy implementing agency (REIA). In FY2024, renewable energy capacity of 15GW has been tendered.	ESG experience and independent board members are government-appoin									
												Blending biomass pellets in thermal plants. 837,200MT of biomass ordered under short-term contracts. 2) Procurement underway for eight western region stations. Long-term (four years) contract for 408,800MT at Dadri awarded. NIT published for long-term procurement for all 25 stations.	172 kilo MT of biomass consumption. Awarded contracts for 5.3MMT of biomass pellets for 20 stations and one joint venture, with a total receipt of 256,801MT of biomass pellets at 13 NTPC stations and JV till date.	
			100% ash utilisation by thermal plants.	~92 % i.e., ~88MMT of ash utilised in various areas in FY2024. Seventeen stations have achieved 100% ash utilisation.	Diversification into carbon assets lack									
	Greening		-	Developing internal mechanisms for coal plants to operate at minimum technical load and integrate with renewable energy and battery storage for round-the-clock supply.	specific metrics an targets; however, h									
	operations		Leading initiatives in carbon capture utilisation.	Implemented carbon capture and utilisation projects (20 tonnes per day (TPD)- NTPC Vindhyachal and 25 TPD-NTPC Lara).	significant details of performance. Support									
			-	Regulatory approval from PNGRB received for 8% green hydrogen-PNG blending.	chain ESG prograr is progressing with									
			-	Completed 600TPD waste-to-charcoal projects in Varanasi.	clear targets and carbon sinks are u									
			-	Awarded energy, procurement, and construction (EPC) contracts for waste-to-energy (WTE) plants in municipal solid waste to torrefied charcoal plant at Bhopal (400TPD), Hubballi, Dharwad (200TPD), Noida-Greater Noida (900TPD) and Gorakhpur (500TPD). Demonstrated co-firing of 20% torrefied biomass at a plant.	for emission mitiga with identified targ Among several lev									
	Greening of supply chain		-	Organised 26 capacity-building workshops on ESG topics for approximately 1300 suppliers through Vendor Development Programmes (VDPs) Captured ESG data of suppliers and mapped vulnerability.	identified to green operations, only biomass co-firing h									
	Decommissioning of old thermal plan	nts 🚯	-	Permanently discontinued operation of the outdated Barauni thermal power station.	defined targets and metrics.									
	Mitigating emissio through carbon si	ons (CO ₂)	Committed to building carbon sinks through tree plantations. Plant 47 million saplings by FY2032 from the FY2012 baseline.	1) Planted over 39 million trees till date. 2) Participated in Gol's Green Credit Programme: Working to enhance India's forest and tree cover on degraded forest lands with the help of the forest departments.										





	Indian Renewable Energy Development Agency (IREDA)						
		Short-term metrics and target	FY2024 performance				
Strategic ambition	Short- and long-term target/ energy transition ambition	-	-				
			Renewable energy gross term loan portfolio growth of 27% in FY2024.				
	Growing the ☐ CO₂	-	Sanctioned loans across three new sectors in FY2024, including smart meters, green hydrogen and its derivatives, and PM KUSUM.				
any	low carbon portfolio	-	Ventured into the retail business to support projects in rooftop solar, PM KUSUM and other B2C segments.				
comp		-	Increase in maximum loan tenor for the electric mobility segment from eight years to 10 years.				
the		-	Debt coverage for greenfield and brownfield hydropower projects enhanced to 80%.				
ployed by	Screening of borrowers on environmental metrics	Screening of all borrowers in accordance with the environment and social management system	Environmental and social (E&S) screening and categorisation of about 120 projects carried out across all technologies funded.				
Transition levers employed by the company	Implementing government schemes on transition	-	Served as the implementing agency for MNRE schemes: Central Public Sector Undertaking- Phase-II for setting up grid-connected solar PV projects National Bio-energy Programme National Programme on High Efficiency Solar PV Modules Generation Based Incentive (GBI)				
Transi	Innovate financial products	-	Product launch for commercial bus or passenger vehicle fleet with B2B contracts				
	Diversifying sources of funding	-	 Strong relationships with international financing institutions (World Bank, ADB, AfD, KFW, JICA, EIB, etc.) and domestic lenders. Opened an office at GIFT City in Gandhinagar that specialises in providing debt options denominated in foreign currencies. 				

- Lacks a net zero target but finances only low-carbon assets.
 Limited performance details are available for growing low-carbon assets, with no specific transition levers, metrics or targets identified.
- Projects are screened on environmental criteria, but no percentage of total projects is provided.
- •Diversification of funding sources is detailed, but no associated levers, metrics, or targets are identified.

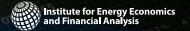




	Adani Green Energy Limited (AGEL)				
		Short-term metrics and target	FY2024 performance		
Strategic ambition	Short- and	Net zero by 2050			
	long-term target/ energy transition ambition	80MMT CO2 emissions to be avoided by 2030.	15.6MMT CO2 avoided in FY2024.		
	portfolio	Renewable energy target of 50GW by 2030.	Renewable energy portfolio at 21,953MW.		
ompany		Building an integrated green hydrogen ecosystem encompassing three giga factories to develop 10GW solar panels, 5GW wind turbines and 5GW hydrogen electrolysers.	-		
/ the c		Addition of 500MW PSP capacity by 2027 and 5GW+ by 2030.	Initiated construction of first hydro PSP of 500MW in Andhra Pradesh and PSP pipeline across several states.		
ployed by	Improvement in energy efficiency	Using ENOC for digitisation to enhance the monitoring and management of renewable energy assets.	~100% plant availability in solar in the last five years.		
Transition levers employed by the company	Greening the supply chain	Engage all critical and manufacturing suppliers through the GHG supplier engagement programme to decarbonise the value chain.	91% of critical and manufacturing suppliers engaged.		
Transitic		To complete the ESG evaluation of all critical and important manufacturing suppliers by FY2025-26.	100% critical and important manufacturing suppliers assessed.		
	Greening (ਨ)	65% EV adoption in its own operations by FY2030.	12% EV adoption in its own fleet of vehicles.		
	operations	-	87% green power used in operating plants.		

- •Net zero target by 2050. Only company among those covered to have reasonable assurance for all three scopes.
- •All board members upskilled on ESG and seven out of 10 board members have ESG expertise.
- •Specific target and metrics identified and performance reported on for growing the low carbon portfolio. Robust supply chain ESG programme.





	NHPC		
		Short-term metrics and target	FY2024 performance
Strategic ambition	Short- and long-term target/ energy transition	-	-
		Incremental installation of 3,000MW hydropower projects by 2030.	Construction of three hydropower projects, accounting for a total of 5,680MW.
pany	Growing the renewable energy portfolio	Installation of 1200MW capacity in other renewable energy generation projects by FY2030.	Started construction of 1,200MW Ultra Mega Renewable Energy Power Park. Under-construction solar projects accounting for 1,000MW.
шоэ		Diversifying PSPs	Pursued the development of 11,375MW capacity PSPs.
Transition levers employed by the company	Nodal agency for implementing government schemes	_	REIA with 10GW capacity allotted for auctioning.
	Diversification of business model	Leverage green hydrogen in the power sector to fulfil grid balancing and to explore the end demand for hydrogen in other sectors.	 Procurement of three hydrogen fuel cell electric buses in tendering process for pilot projects to venture on larger-scale hydrogen projects. Pilot green hydrogen-based fuel-cell micro grid (25kWe) construction work in progress to be commissioned in FY2025. Pilot green hydrogen mobility station contract awarded to be completed in FY2025. Another pilot green hydrogen mobility station under the tendering process. Ventured into power trading business.
	Greening of value chain	-	Sustainable procurement policy to encourage suppliers to abide by ESG directives.

- •No net zero target or short-term decarbonisation target. Reasonable assurance for Scope 1 and 2 while Scope 3 inventory is underway.
- Provides details of financing lines for financing portfolio expansion.
- •100% of board of directors and key management trained on BRSR Principles and ESG topics.
- Provides detailed performance on low carbon transition into green hydrogen and growing of renewable energy portfolio with metrics and targets identified for the latter.

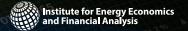




	Power Finance Corporation (PFC)			
		Short-term metrics and target	FY2024 performance	
Strategic ambition	Short- and long-term target/ energy transition ambition	-	-	
	Growing the low carbon portfolio	Supporting renewable energy	1) 25% YoY growth in renewable energy loan book with Rs602 billion as of FY2024. 2) Sanctioned loan of Rs6 billion for e-vehicles, Rs1.7 billion for 14MW WTE plants. 3) Financed Rs350 million worth public street lighting project as part of energy efficiency measures.	
any			 Offered lower interest rates (1.0-1.5% lower) for renewable energy compared to conventional generation projects. Reduced prepayment premium for clean energy projects. Specialised divisions for financing renewable energy and energy efficiency projects. Standard loan documents for solar projects to reduce documentation time. 	
y the comp		Supporting energy storage, e-mobility, WTE, biofuels, desalination and green hydrogen.	-	
employed k	Implementing government schemes on transition	-	 Nodal agency for the Revamped Distribution Sector Scheme (RDSS). Tenders floated for 96% of sanctioned works and awards placed for 79% of these works. For smart metering, awarded works for 51 million meters, 57% of the total sanctioned meters. 	
Transition levers employed by the company	Strengthening green partnerships	-	First Indian member of the Asia Transition Finance Study Group, representing India's perspective and promoting efficient energy transition financing in Asia. Collaborated with Japan's New Energy and Industrial Technology Development Organisation to promote environment-friendly power supplies.	
	Innovate financial -	-	1)Letter of Undertaking to renewable energy project developers that can be used in lieu of Performance Bank Guarantee. 2)To facilitate quick financial closure, option for sole lending for debt up to Rs20 billion for clean energy projects. 3) Introduced financial products for meeting capital expenditure required to set up manufacturing facilities for renewable energy project equipment.	
	Diversifying sources of tunding		Established a foreign subsidiary in Gift City to mobilise competitive funding by lending in foreign currency.	

- •No net zero target, especially for financed emissions, and is still assessing Scope 3 emissions methodology.
- All seven directors have environmental expertise, and ESG workshops were held for the key management and employees.
- •While sectors for low-carbon growth have been identified, there are no metrics or targets despite detailed performance reporting. The company is coming up with innovative financial products and diversifying funding options for low-carbon sectors.





State Bank of India (SBI)				
		Short-term metrics and target	FY2024 performance	
Strategic ambition	Short- and long- term target/ energy transition	Commitment to be carbon neutral by 2030 (Scope 1 and 2). Vision to be net zero by 2055 (Scope 1, 2 and 3)		
		80MMT CO2 emissions to be avoided by 2030.	53,394MTCO2e GHG emissions avoided up to FY2024.	
	Growing the low carbon portfolio	1) Attain green portfolio ratio of 7.5% in gross domestic advances by 2030 and 25% of these green advances to be funded by a	1) Rs474 billion renewable energy projects financed as of FY2024. 2) Limits sanctioned for sustainable projects of Rs101 billion. 3) Sustainable transportation loans of Rs72 billion.	
pany		green line of credit. 2) Green car loans for purchasing electric vehicles. 3) Explore opportunities for lending in sectors identified under the PLI scheme and sustainable agricultural practices. 4) Loans for installation of a solar rooftop system.	 Interest rate concession of 25bps provided for implementing water management, waste management and solar photovoltaic as a part of the building design. Price concession of 5bps allowed to home loan borrowers for energy-efficient housing projects. 	
com		-	Credit for corporates for smart meters manufacturing, data centres, power storage and battery, etc.	
d by the	Innovate financial products	-	Product launched to extend credit to biofuels with tenor of up to 15 years. Term loan/regular working capital facility also provided.	
ploye		-	SBI Surya Ghar loan for the installation of solar rooftops up to 10KW.	
s en		-	PM KUSUM scheme launched.	
Transition levers employed by the company	Screening of borrowers based on ESG criteria	-	Existing/prospective borrowers with exposure above Rs1 billion for listed borrowers and above Rs2.5 billion for unlisted borrowers rated mandatorily on ESG criteria.	
	Diversifying sources of funding	Partnering with international agencies, multilateral development banks and development financial institutions to make available affordable credit for emerging sustainable commercial activities.	Existing/prospective borrowers with exposure above Rs1 billion for listed borrowers and above Rs2.5 billion for unlisted borrowers rated mandatorily on ESG criteria and at the time of credit risk assessment.	
		Increased emphasis on participating in green loans, social loans and sustainability linked loans.	Raised US\$250 million through green bonds in FY2024.	
		-	Green rupee term deposit launched. Rs224 million raised under scheme as of FY2024.	

- •Carbon neutral by 2030 (Scope 1 and 2) and net zero by 2055 (Scope 1, 2 and 3) but lacks short- and medium-term emission reduction targets.
- Specific targets for low-carbon portfolio growth, with performance reported, though in a different metric.
- Several low-carbon products developed, but without defined metrics and targets.
- •Borrowers mandatorily screened on ESG metrics. Diversified green financing lines to support low-carbon initiatives.

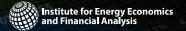




	Adani Energy Solution Limited (AESL)			
		Short-term metrics and target	FY2024 performance	
Strategic ambition		Commitment to achieving net zero by 2050		
	Short- and long-term	72.7% reduction in GHG Scope 1 and 2, and 27.5% reduction in GHG Scope 3 emission by FY2031.	23.8% reduction in GHG emissions (Scope 1 and 2).	
	target/ energy transition ambition	Reduce distribution business GHG emission intensity (Scope 1+2) by 40% by FY2025, 50% by FY2027, and 70% by FY2030.	42% reduction in GHG emission intensity (Scope 1+2) for the distribution business.	
	Growing the renewable energy mix in the distribution business	Enhance the share of renewable energy to 60% by FY2027 and 70% by FY2030 in the distribution business.	Renewable energy mix at 34% in distribution business. Commissioned two transmission lines for green energy evacuation.	
company	Improvement in energy efficiency	50% reduction in energy intensity by FY2027 and 70% by FY2030.	59% reduction in FY2024 compared to baseline.	
by the con		Facilitating rooftop solar installations.	-	
oyed	Diversification of	Commissioning EV charging stations.	-	
s empl	business model	Venture into energy-efficient and sustainable cooling solutions.	Commenced the implementation of ~7,000 tonnes of refrigeration cooling solutions in Ahmedabad.	
Transition levers employed by the		Capitalise on the Perform, Achieve, and Trade (PAT) scheme for generating e-certificates to trade.	-	
	No new thermal power plants	Carving out Dahanu TPS by FY2025 from portfolio and committed to having no new thermal power assets.	-	
	Greening of Supply chain	100% for critical suppliers.	100% new critical suppliers screened.	

- •Committed to net zero emissions by 2050 (pending SBTi validation) with defined short- and medium-term targets for all scopes, and reasonable assurance for Scope 1 and 2.
- •Climate performance-linked remuneration for key management specific ESG metrics are detailed. All directors have ESG expertise and have undergone ESG training.
- •Metrics, targets and performance are defined and reported for the low-carbon portfolio though diversification levers lack specific metrics, targets and performance reporting. The company also has a robust supplier ESG programme.





	PowerGrid			
			Short-term metrics and target	FY2024 performance
Strategic ambition				Net zero emission company by 2047
	Short- and long-term target/ energy transition ambition		50% of electricity consumption from renewable sources by 2025.	17% YoY increase in renewable energy consumption.
			-	Total emissions fell by 5%. 41% reduction in Scope 1 emissions and 13% increase in Scope 2 emissions. Scope 1 emissions and 13% increase in Scope 2 emissions. Scope 1 emissions and 13% increase in Scope 2 emissions.
S				Offset 5% of total emissions through enhanced green cover, registering an increase of 21% YoY.
	E&S screening of transmission projects	r Ø	-	Conducted E&S assessments for all upcoming transmission projects to identify the most optimal option with minimal E&S impact for construction.
>	Greening own operations	Ö	Reducing carbon intensity across operations and value chain.	Harnessing induced power in transmission line earth wires, eliminating the need for DG sets.
company			Rooftop solar plants are installed / being installed in substations.	80MW of dedicated solar plants are in the planning stage.
employed by the company			Replacing diesel vehicles with electric vehicles for business operations.	Replacement of 155 diesel vehicles with electric alternatives.
yoldu		K	Venturing into green hydrogen.	-
Transition levers em	Diversification of business model		Actively explore new and emerging business areas viz. energy management, electric vehicle charging infrastructure, smart grid etc.	-
			Development of solar power plants and rooftop solar systems.	-
			Explore BESS as another key solution.	-
	Greening of supply chain	پې	-	1) 100% of potential supplier, both domestic and international, undergoes an E&S screening process. 2) Contractors required to develop and implement an environmental management plan.

- •Net zero emission target of 2047 with short-term Scope 2 target. However, detailed performance reporting provided across all scope of emissions. Reasonable assurance done for Scope 1 and 2.
- •Six out of eight directors have skills/expertise in environment and BoD, and key management training on BRSR and ESG.
- Several levers identified for diversification of the business model but no associated metrics, targets and performance reported.