Adani Power Ltd

Leading Private Player in Thermal Power Generation

NSE: ADANIPOWER
BSE: 533096
CMP: 138
Target: XXX
Face Value: Rs. 2
Market Cap (Crs): 268443

About the company

Adani Power is officially a part of Adani Group. Adani Power was incorporated in 1996, is involved in power generation business by coal based thermal power plant and solar energy. Adani Power Limited (APL) is India's largest private sector thermal power generation company, operating across multiple states. The company focuses on leveraging technology and innovation to make India a power surplus nation. The company is involved in business of power under Power Purchase Agreement (PPAs), medium term PPAs, on merchant basis and is also engaged in trading and other business activities. The company, together with its subsidiaries, currently has multiple power projects located at various locations with a combined installed capacity of 12450 MW. The parent company, Adani Power Limited and other subsidiaries together sell power generated from these projects under a combination of long-term PPAs, short-term PPAs, and on merchant basis. APL produces thermal power using coal-fired technology and supplies both base load and peak electricity demand. More than 74% of Adani Power's current and upcoming generation portfolio utilizes supercritical and ultra-supercritical technology.

Key highlights

- APL received LoA from Uttar Pradesh Power Corporation Limited (UPPCR) for procurement of 1500 MW of power from a new thermal power project of 1600 MW installed capacity.
- APL completed the acquisition of Vidarbha Industries Power Limited (VIPL) for an aggregate consideration of Rs. 4000 crores, adding 600 MW capacity. VIPL has two 300 MW operational domestic coal-fired power plant.
- APL received Letter of Intent from Bihar State Power Generation Company Limited (BSPGCL), long term procurement of electricity on behalf of North Bihar Power Distribution Company Limited (NBPDCL) and South Bihar Power Distribution Company Limited (SBPDCL). Adani Power to supply power from a 2400 MW thermal power project to be set up at Pirpainti village, district Bhagalpur, Bihar.
- APL received Letter of Award from MP Power Management Company Limited (MPPMCL) to supply power from 800 MW thermal power plant, to be set up in Annupur district, Madhya Pradesh.
- APL received nod from Ministry of Coal, to begin operations at the Dhirauli Mine in Singrauli district, Madhya Pradesh. The Dhirauli Mine is owned by Mahan Energen Limited, a subsidiary of APL. Peak production capacity of 6.5 MTPA, including 5 MTPA from open cast mining. The block has geological reserve of 620 MMT and net reserves of 558 MT. The Dhirauli block is expected to fulfill APL's merchant requirements and also supply to the nearby 1200 MW Mahan Energen Power Plant, undergoing 3200 MW expansion.
- APL signed shareholder agreement with Druk Green Power Corporation Limited (DGPCL), a state-owned utility of Bhutan to jointly set up a 570 MW hydroelectric power project at Wangchhu, Bhutan. Both, APL and DGPCL will jointly incorporate a public company to undertake the project in Bhutan. The Wangchhu project will oversee an investment of about INR 60 million in setting up the renewable energy project and related infrastructure. Further, Bhutan also plans to add another 15000 MW in hydropower and 5000 MW in solar energy generation capacity by 2040.
- APL has received one more Letter of Award from MPPMCL for supply of additional power from 800 MW ultra-supercritical thermal power project, to be set up at Annupur district of Madhya Pradesh on Own and Operate Model, design, build, and finance. Increasing the total capacity to 1600 MW.
- With reference to the Letter of Award received from BSPGCL for 2400 MW thermal power project, APL have now signed a Power Supply Agreement (PSA) with BSPGCL for supply of 2400 MW of power from greenfield ultra-supercritical plant.

Thermal power remains dominant in India's energy landscape

India has made significant advancements in green energy, but thermal power remains dominant backbone of India's energy supply, significant portion being of the installed capacity being thermal power. As of 2024, coal production in India has surged to 90.62 MT, highlighting sector's critical role in powering the economy. Coal accounts for approximately 46.20% of total installed capacity, which makes it the backbone of India's energy supply. Reliance on coal is necessary for stable and reliable power supply, which is essential for industrial growth and economic development. The significance of thermal power is further highlighted by the government's proactive measures to enhance production and efficiency. Recent policy reforms by government have boosted coal production significantly. Initiatives such as the Coal Mines Provisions Act have streamlined the allocation and operational processes, facilitating higher production rates and better resources management. Moreover, the sector is undergoing a transformation with a focus on integrating renewable energy sources. The Ministry of Power has been working on balancing the energy mix by promoting the use of renewable energy alongside traditional. Despite the high demand for power, India has managed to maintain a robust supply chain, ensuring continuous and uninterrupted power delivery.

India's thermal power sector is making a comeback, as Government changes policies to promote fossil-fueled coal, ignite and gas fired power plants, to meet India's growing future electricity demand. India's total capacity grew from 305 GW in 2015-2016 to 476 GW as of June 2025. Of this, 240 GW or just half is thermal, 110 GW is solar, and 51.3 GW of wind power. In the last decade, renewable energy capacity grew more than threefold to reach 232 GW from75.52 GW in March 2014. While solar capacity grew from 2.8 GW to 108 GW, wind energy capacity more than doubled from 21 GW to 51 GW. Compared to this, the thermal capacity addition was only 72 GW, from 168 GW in 2014 to 240 GW, as ongoing projects were allowed to be completed, and new projects were not encouraged.

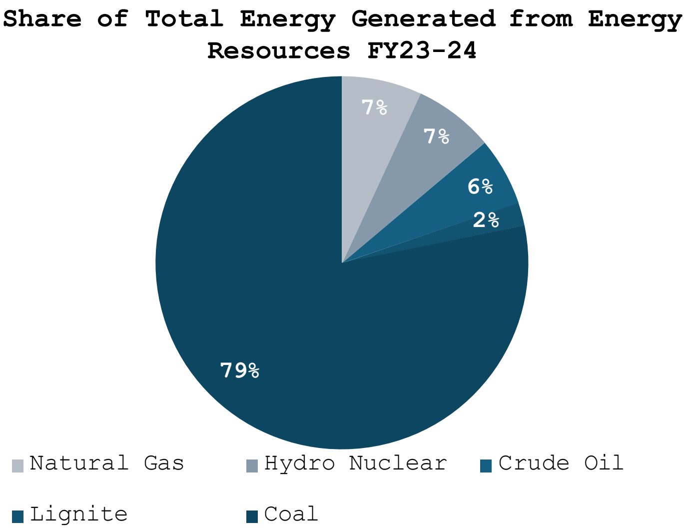
Returning of New Coal Plants

Central Electricity Authority carried out a generation planning study for electricity demand by 2031-32, which estimates base load requirement, India will need 283 GW of coal and ignite based installed capacity to meet the demand. Keeping this in mind, Government suggested setting up an additional minimum of 80 GW coal-based capacity, calculated at an estimated capital cost of Rs. 8.34 crores per MW for new coal-based thermal capacity. Capacity addition is already happening. Coal-based power capacity recorded a net increase of 2843 MW out of 13495 MW added during Q1 2025, driven by project completion across multiple states. These includes projects like Khurja super Thermal Power Plant Unit 1 (660 MW) of THDC India in Uttar Pradesh, Panki Thermal Powe Station Unit (660 MW) in Uttar Pradesh, Yadadri Thermal Power Station Unit 2 (800 MW) in Telangana and Bhusawal Thermal Powe Station Unit 6 (660 MW) in Maharashtra. Investments to set up thermal electricity generation capacities which will double to Rs. 2.3 lakh crore over three fiscal years. Distribution utilities of four states have rolled out 25-year thermal power purchase agreements (PPAs) to private sector generators. Of the 19 GW of private projects under implementation, PPAs have been tied up for 6.1 GW, and for the larger portion of the balance, these are in various stages of finalization. 15 GW out of the 19 GW of private projects are brownfield. Considering the demand, APL is planning to add 24 GW of thermal power capacity by FY32, taking its total to 41.87 GW, up from 18.15 GW – 30% of what country is looking to add. Only state owned NTPC is ahead of APL in thermal capacity addition target. APL has managed to get the lion's share of thermal power purchase agreements (PPAs) signed by state power discoms. Cumulative coal allocations to state discoms for fresh PPA bids under the SHAKTI policy stood at 30 GW as of September 2025. PPAs awarded by state discoms with pre-indicated discoms with pre-indicated coal linkages was 17.7 GW of which 12.3 GW went to APL. The company has a locked-in capacity of 23.72 GW of 13 projects which it plans to do by FY32 and tied up 12.35 GW of PPAs for that.

(Source: Invest India, Fortune India, Financial Express)

Dependence on thermal power to continue

Investments in renewable energy sources will continue to achieve net-zero targets, thermal power will remain the bulwark for meeting the base load requirements and ensuring grid stability. Though thermal power accounts for just over half the installed capacity in India, nearly 75% of the power production is still met through fossil fuel. Energy demand is expected to log a compound annual growth rate of 5.5% to 2000 billion units by fiscal year 2028. As per Deputy Chief Ratings Officer of Crisil – solar is available only in the day time, wind is concentrated from May to September – thermal power is crucial for meeting base load demand consistently. As per experts, thermal power generation will continue to be above 60% even by 2032, despite of large capacities in renewable power. According to ICRA, electricity demand is expected to grow by 6.0%-6.5% over next five years. In 2018, base load power generation demand was 223 GW, in FY25, the base load peak power generation demand reached 247 GW, and it is expected to grow further to reach 388 GW by FY32. This ensures that base load supply is critical for meeting growing peak demand. Additional 80 GW coal capacity is also required by FY32 to meet the demand. This shows that to meet the base load demand, dependence on thermal power will remain.



India's total installed power capacity reached 476 GW as of June 2025. India's energy demand is expected at fastest rate driven by infrastructure and industrial development. To meet the base load demand, thermal power is critical. According to PIB, Coal remains the dominant contributor with a capacity of 219 GW, gas-based power contributes 20 GW, and diesel-based power contributes 589 MW. India's energy sector is heavily dependent on non-renewable sources like thermal power, which together account for the largest share of the country's electricity generation capacity. These sources collectively make up a total thermal capacity of 240 GW, where coal alone contributes 91% of the total thermal energy, highlighting the critical role in powering the nation. India needs 80000 MW of additional thermal capacity to meet the base load and peak demand by 2032, considering this reliance on thermal power plant will continue.

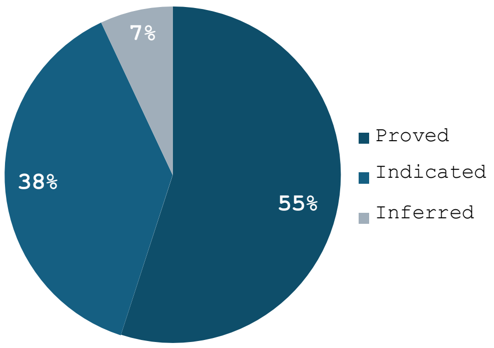
(Source: Energy Statistics India, PIB)

Fossil fuels, a critical component for thermal power generation

Over the last decade, India's coal sector has witnessed significant transformation. With focus on self-reliance, sustainability, and efficiency. Coal production increased to 1047.68 MT in 2024-2025 from 609.18 million MT in 2024-2015, a rise of 72%. To meet the rising domestic demand for power generation, coal supply grew from 603.77 MT to 1025.25 MT. Import dependency declined since 2014-2015, decreasing from 26% to about 21% in 2023-2024. In FY2024-2025, the import dependency has further decreased to 19.60%. Coal imports for domestic power plants also fell 34.24% during 2024-2025 compared too last year. This resulted in import reduction, which will help in saving import cost.

India has one of the highest reserves of coal in the world. As of 2024, the total estimated coal reserves were 389.42 billion tonnes. The distribution of coal reserves is concentrated in a few states like Odisha, Jharkhand, and Chhattisgarh. These three states accounts for 70% of the total coal reserves in India. The focus of the Government is on increasing the domestic production of coal, which is necessary to meet the base load power generation demand.

Estimated Coal Reserves (%)



State Wise Estimated Reserves of Coal

Table 1.1: Statewise Estimated Reserves of Coal (As on 1st April)

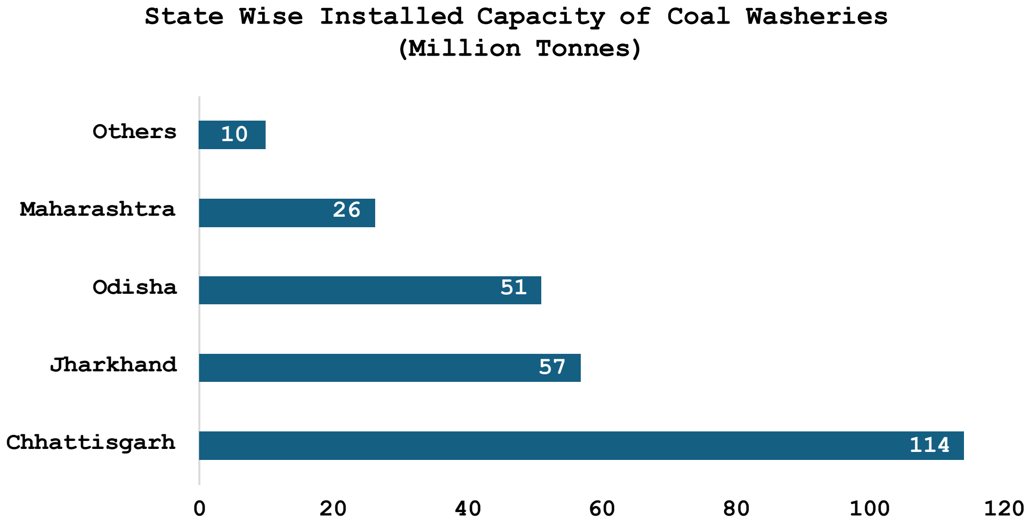
(in Million Tonnes)

States/ UTs	Proved		Indicated		Inferred		Total		Distribution (%)	
	2023	2024	2023	2024	2023	2024	2023	2024	2023	2024
Andhra Pradesh	1,025	1,025	2,369	2,369	778	778	4,172	4,172	1.10	1.07
Arunachal Pradesh	31	31	40	40	19	19	90	90	0.02	0.02
Assam	465	465	57	57	3	3	525	525	0.14	0.13
Bihar	310	2,346	5,040	3,015	48	37	5,398	5,398	1.43	1.39
Chhattisgarh	37,236	40,078	42,294	41,093	1,244	1,495	80,774	82,666	21.36	21.23
Jharkhand	55,749	59,877	26,994	27,135	5,095	4,799	87,838	91,812	23.22	23.58
Madhya Pradesh	15,279	15,425	12,457	12,379	4,482	5,011	32,219	32,815	8.52	8.43
Maharashtra	8,065	8,163	3,425	3,372	1,847	1,817	13,336	13,352	3.53	3.43
Meghalaya	89	96	17	17	471	471	576	583	0.15	0.15
Nagaland	9	9	22	22	448	448	478	478	0.13	0.12
Odisha	52,046	53,799	37,536	39,053	4,936	6,351	94,519	99,204	24.99	25.47
Sikkim	0	0	58	58	43	43	101	101	0.03	0.03
Telangana	11,257	11,257	8,497	8,497	3,433	3,452	23,186	23,206	6.13	5.96
Uttar Pradesh	884	884	178	178	0	0	1,062	1,062	0.28	0.27
West Bengal	17,459	18,752	12,699	11,433	3,775	3,773	33,933	33,958	8.97	8.72
All India Total	**199,904**	**212,207**	**151,682**	**148,717**	**26,621**	**28,498**	**378,207**	**389,421**	**100**	**100**
Distribution (%)	**52.86**	**54.49**	**40.11**	**38.19**	**7.04**	**7.32**	**100**	**100**		

Total may not tally due to rounding off

Source: Ministry of Coal

As of 2024, total installed capacity of coal washeries in India stood at 257.9 million tonnes per year. This capacity plays a vital role in quality of coal, ensuring its efficient use in power generation.



In 2024, India's estimated crude oil reserves stood at 671.4 million tonnes, compared to 669.47 million tonnes in the previous year. As of 2024, India has 23 refineries, out of which 19 in public sector and 4 in private sector. India's total oil refining capacity reached 256816K MTPA, an increase of 2900 TMTPA from the previous year. Public sector refineries leads with 61% of the refining capacity, with major players like IOC, HPCL, BPCL, and ONGC at the forefront. Crude throughput increased from 255233 TMT in 2022-2023 to 261545 in 2023-2025, rise of 2.47%. With surge in power demand, fossils fuels remains a key component to meet the power generation demand.

(Source: Energy Statistics India)

Solar power alone not enough for surging power demand

According to a new analysis by Climate Action Tracker, renewable energy accounted for only 37% of India's total generation capacity, with only 18% towards actual power mix. Solar power capacity has crossed 120 GW in capacity and is growing rapidly. The day time power generation is displacing thermal power output, pushing coal plants to run at reduced factors or at technical minimum levels. India's renewable energy installations grew, but actual power generation from these sources remains low, due to mismatch driven by soaring electricity demand, climate change, and storage limitations. According to Mercom, India added 6.7 GW of solar capacity in the first quarter of 2025, numbers reflect a 25% compared to the 9 GW added in the Q1 of 2024, solar installations were also down by 14% from the nearly 7.8 GW added in Q4 2024. In Q3 2025, India added 2.2 GW of solar open access capacity, a 20% decline from 2.8 GW in the previous quarter. Capacity addition was affected due to delays in grid connectivity approvals, restricted substation access, and limited transmission capacity in states with weak grid infrastructure.

Factors affecting energy generation from solar and wind

Solar power is dependent on sunlight for efficient power generation. During day time, solar efficiently generates power, but lags during night time. Also, solar power lags during stormy weather and gloomy weather, where there's large cloud coverings. During monsoon, solar power generation is hampered due to high cloud coverings, which affects the efficiency.

Wind and solar power operates at low-capacity utilization factor. Capacity factor is low for solar and wind energy, capacity factor for solar is around 15%-25% and wind around 25%-40%. Whereas, capacity factor for coal is at 60%-80% and nuclear at 85%-95%. As of 2025, India's installed non-fossil fuel capacity was 50% of 484 GW, but the actual electricity supplied from clean sources was only 28%.

Solar is only available during day-time, and wind is seasonal. Despite reaching 50% installed capacity, clean energy contributed only 28% in generation. Lack of energy storage and grid flexibility acts as a challenge. India lacks sufficient battery storage and smart grid infrastructure to store and distribute excess renewable energy. During the day-time hours in summer, solar plants reduce dependency on coal, but in the evening and night, coal still supplies 75% of the energy mix, due to absence of stored solar power. To ensure the base load demand is met, thermal power is critical.

Coal dominates India's energy mix

Coal is highly reliable, suitable for base load supply. Coal provides consistent, round-the-clock electricity, making it ideal for meeting base load demand, which is necessary to met on continuous basis. Also, thermal power is required in industrial areas for industrial requirement, to provide power supply 24*7.

India has well established infrastructure. India has well established vast network of power plants based on coal, widespread railway network for transport of coal and supply chains, which makes coal a readily usable resource. Singrauli region in Madhya Pradesh has integrated coal mines and thermal power plants, which powers multiple states.

Coal-based power has lower power generation cost. Coal-based plants are already well built and operational, allowing them to generate electricity at a lower short-term marginal cost than new renewables like solar and wind.

(Source: civilsdaily, carboncopy)

Adani Power Ltd

Coal to remain a key ingredient to meet the surging power demand

APL is one of the leading player in India's thermal power producers, well placed to meet the surging power demand. APL has well established and dominant coal network with total operation capacity of 18150 MW and 23720 MW of locked-in capacity across states. With significant expansions in pipeline, capacity addition, competitive cost structure, proven execution records, and high-efficiency super critical plants for sustained base load operations, APL is well positioned to perform well and generate good returns.

Electricity consumption per capita across states (kWh)

Electricity Consumption per capita across states (kWh)

State	Population (Mn)	Per capita GDP (USD)	Per capita power consumption (kWh)
Uttar Pradesh	241	1,257	617
Bihar	131	776	317
Maharashtra	129	3,715	1,610
West Bengal	100	1,933	674
Madhya Pradesh	89	1,806	1,116
Rajasthan	83	2,170	1,293
Tamil Nadu	77	4,110	1,630
Gujarat	74	3,917	1,983
Karnataka	69	4,377	1,370
Andhra Pradesh	54	3,105	1,497
Assam	32	1,545	383

India average ▶ **1,395** kWh per person

Base load power critical for renewables

India's Renewable Energy Target by 2030	500 GW
Additional Coal based capacity required by FY32	80 GW
of which Adani Power's current Project Pipeline	23.7 GW c. 30% of India's requirement

India's average per capita electricity consumption is 1395 kWh per person. ICRA states electricity demand over medium term to grow at 6.0%-6.5% over next five years. ICRA expects the energy generation capacity to reach an all-time high of around 44 GW in 2026, a sharp step up from the previous high of 34 GW in 2025. The growth is driven by increased and expanding use cases, like adaption of electricity vehicle, emerging data centres, growth in manufacturing activities, and industrialization. The growth is also fueled by growing urbanization and adaption of new age electrical appliances. All these drivers are well placed to sustain robust electricity consumption.

Peak electricity demand is expected to reach 366 GW to 388 GW by FY32. This signifies the rising electricity consumption. Additional coal-based capacity of 80 GW is required to meet the base load demand, of which 23.7 GW of current Adani Power's project is under pipeline. APL is well positioned to meet the base load power demand. Given the increasing capacity and advancements in renewables, coal remains critical foe base load stability because of certain challenges in renewables like weather dependency, storage, transmission, and grid stability requires significant level of investments. I believe coal is the key for fulfilling the base load power demand. Nuclear energy being a long-term energy, it has still a long way to go. In the early years, PLF have seen a sharp drop, but now it is quite stable around 60%. During covid, coal thermal PLF has fallen to around 55%, post covid it improved significantly. In 2024-2025, target capacity addition was 15 GW out of which only 4.5 GW was added. This led to higher demand, pushing PLF upwards.

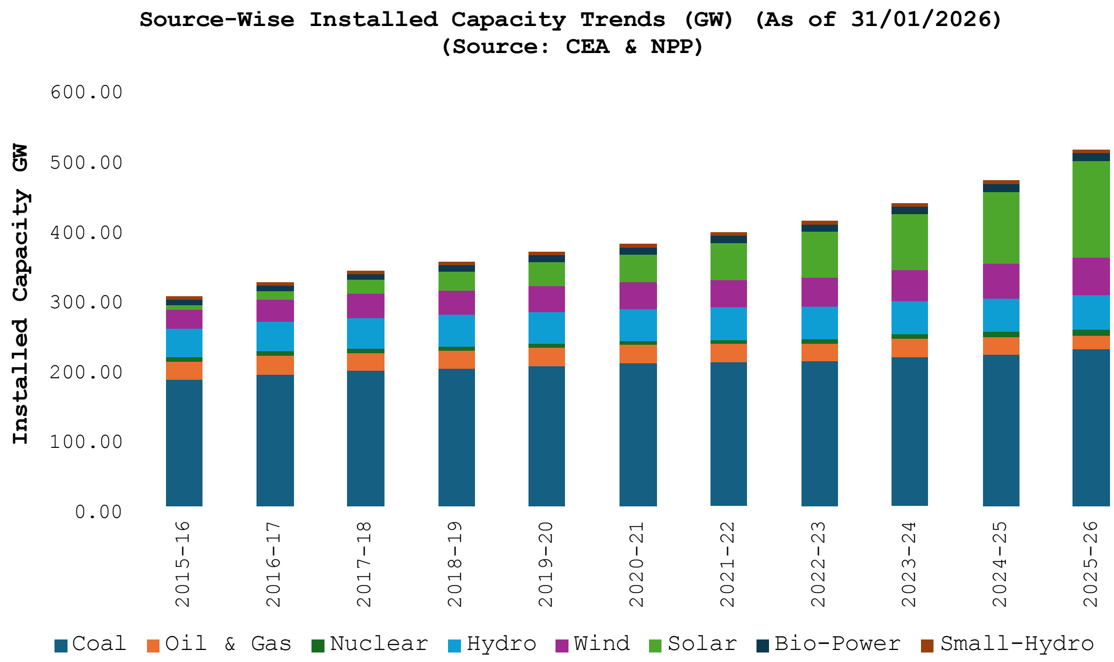
Battery energy storage system (BESS) installation in India have historically been minimal less than 1 GW, but the sector is experiencing transition from planning to construction, over 60 GWh of BESS and pumped-hydro projects are under pipeline. But, commercial viability at massive grid scale will tale around 3-4 years. Till then, thermal power plants are the best economic solution for base load requirement and stability. Given the expansion in solar capacity in India, battery storage, pumped-hydro storage, and grid stability still remain key structural challenges. Out of 80 GW of thermal capacity addition, 40 GW is already construction. In the nuclear power segment, India has 8.8 GW of operational capacity, contributing 3% of electricity generation need. India's pipeline shows significant capacity expansion, 17 reactors of around 13100 MW under construction, with medium term goals at 22.5 GW and long-term goals at 100 GW. Expansion is significant, but gestation period is long (8-10Y). Future looks promising, but for now not a substitute to dominance of coal in India's energy landscape. *(Source: Company, ICRA, and some data from ChatGPT)*

India’s thermal power landscape

As of 2025, India’s installed thermal power capacity (coal, lignite, gas, diesel) was around 240-242 GW, out of which coal forms majority (215 GW). Industrial operations, infrastructure development, ad rural electrification rely on base load, that thermal power provides.

Thermal power capacity has witnessed mixed trends in terms of capacity addition. In 2024-2025, 3.8 GW thermal capacity was added out of planned 15.3 GW, compared to 6.1 GW of capacity added in 2023-2024. India’s peak electricity demand is rising sharply. In FY2025, India consumed 1694 billion units of power, 33% higher than FY2021, with a CAGR of 7.4%. Peak power demand is expected to reach 277 GW in FY2026, and overall energy is projected to grow at 6%-6.5% annually over the next five years. Thermal power continues to play a dominant role in India’s energy landscape, supported by record coal production of 1047 MT. Power shortages fell sharply in 2025.

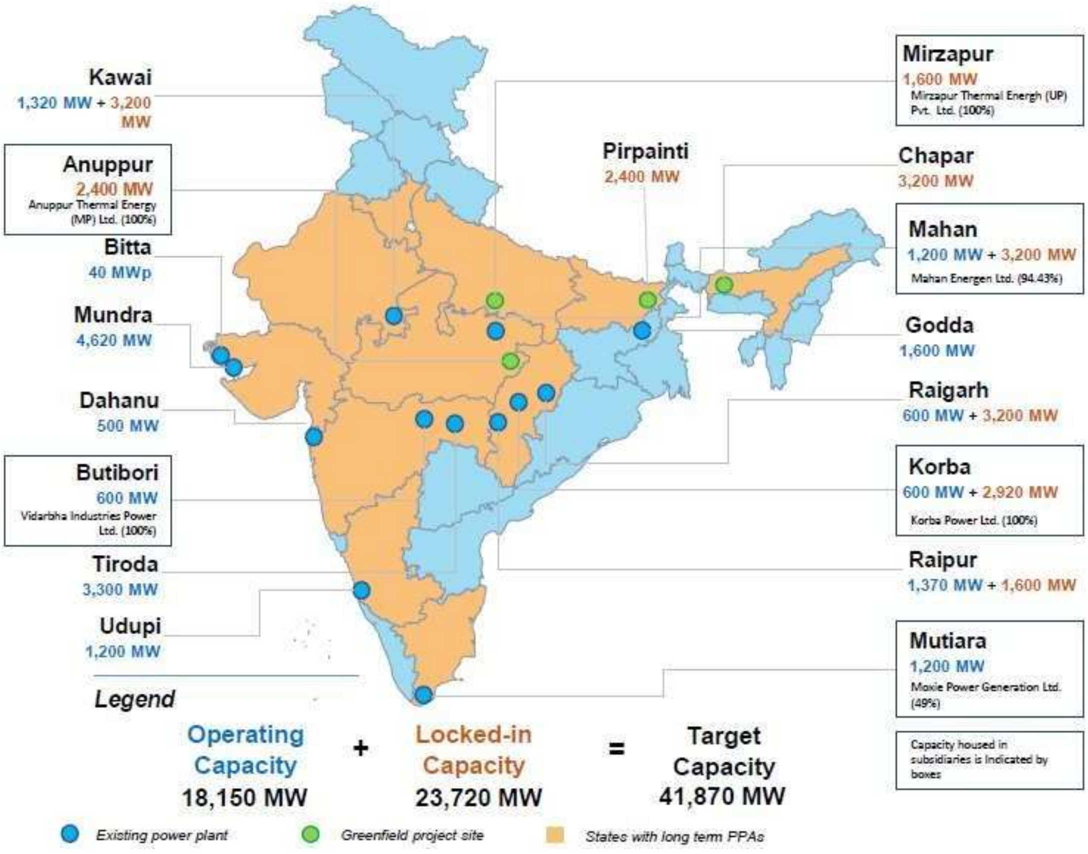
In 2025, the Cabinet Committee on Economic Affairs approved the revised SHAKTI policy for granting fresh coal linkages to thermal power plants. The revised policy highlights two key elements- 1: coal linkages for central/state power generating stations; and 2: coal linkages for all power generating stations at premium above the notified price. The amended price aims to streamline the coal linkages process, enable independent power producers and private entities to expand thermal capacity.



APL's expansion, capEx, and competitive landscape

APL is moving aggressively on thermal power expansion, executing huge capacity expansion, with 23.7 GW under construction, taking the capacity to 41.87 GW by FY32. Currently, APL has 18.1 GW of installed capacity across multiple thermal power plants in India. APL is planning to add additional capacity of 23.7 GW, taking the total thermal power capacity, with a total capEx of INR 2 lac crore. The capEx will be utilized for greenfield thermal plants, brownfield expansion at existing plants, developing ultra-supercritical technology plants, and transmission infrastructure upgrade. APL has six brownfield expansion projects and five-six greenfield expansion projects under pipeline, across multiple locations in India. The expansion projects are spanned across high growth states, strategically located near load centres. Major brownfield expansions projects are expected to get commissioned between 2027-2039. Greenfield expansion projects are expected to get commissioned in coming 5-7 years.

Expansion spanned across multiple states gaining competitive advantage



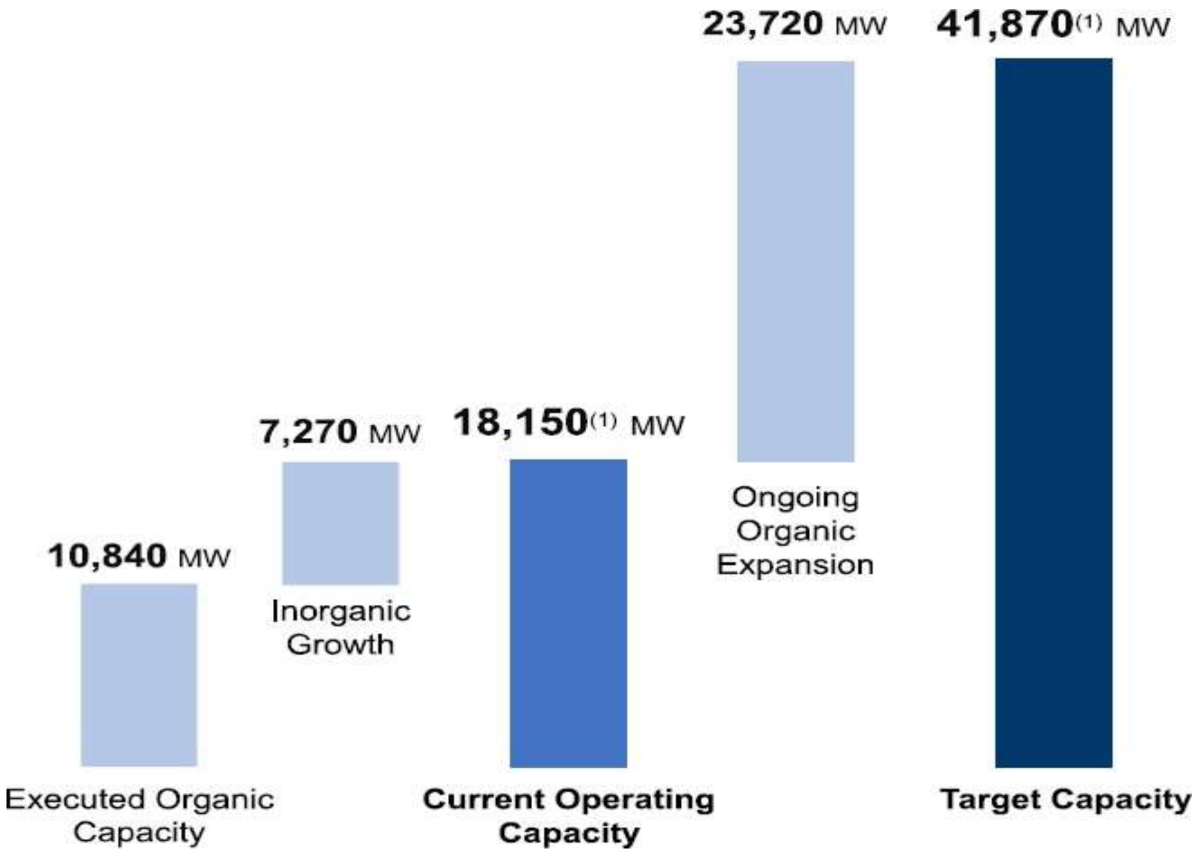
(Source: Company)

APL executed 10840 MW of organic generation capacity

Mundra Gujarat	**Tiroda** Maharashtra	**Kawai** Rajasthan	**Godda** Jharkhand
4,620 MW 4x330 MW + 5x660 MW Supercritical	**3,300 MW** 5x660 MW Supercritical	**1,320 MW** 2x660 MW Supercritical	**1,600 MW** 2x800 MW Ultra-Supercritical
PPA tie-ups: 95% Gujarat, Haryana, MUL	PPA tie-ups: 100% Maharashtra	PPA tie-ups: 96% Rajasthan	PPA tie-ups: 100% Bangladesh
Import fuel-based	FSAs(2): 17.71 MTPA	FSAs: 4.12 MTPA	Imported + Blended Fuel
COD Unit 1: **Aug 2009** Unit 9: May 2012	COD Unit 1: Sep 2012 Unit 5: Oct 2014	COD Unit 1: May 2013 Unit 2: Dec 2013	COD Unit 1: Apr 2023 Unit 2: **Jun 2023**

+

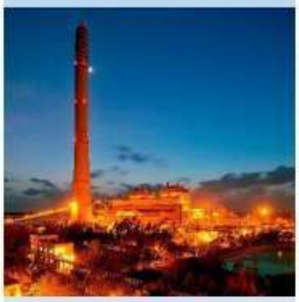
3,200 MW
Under development



(Source: Company)

APL executed 7270 MW of inorganic generation capacity

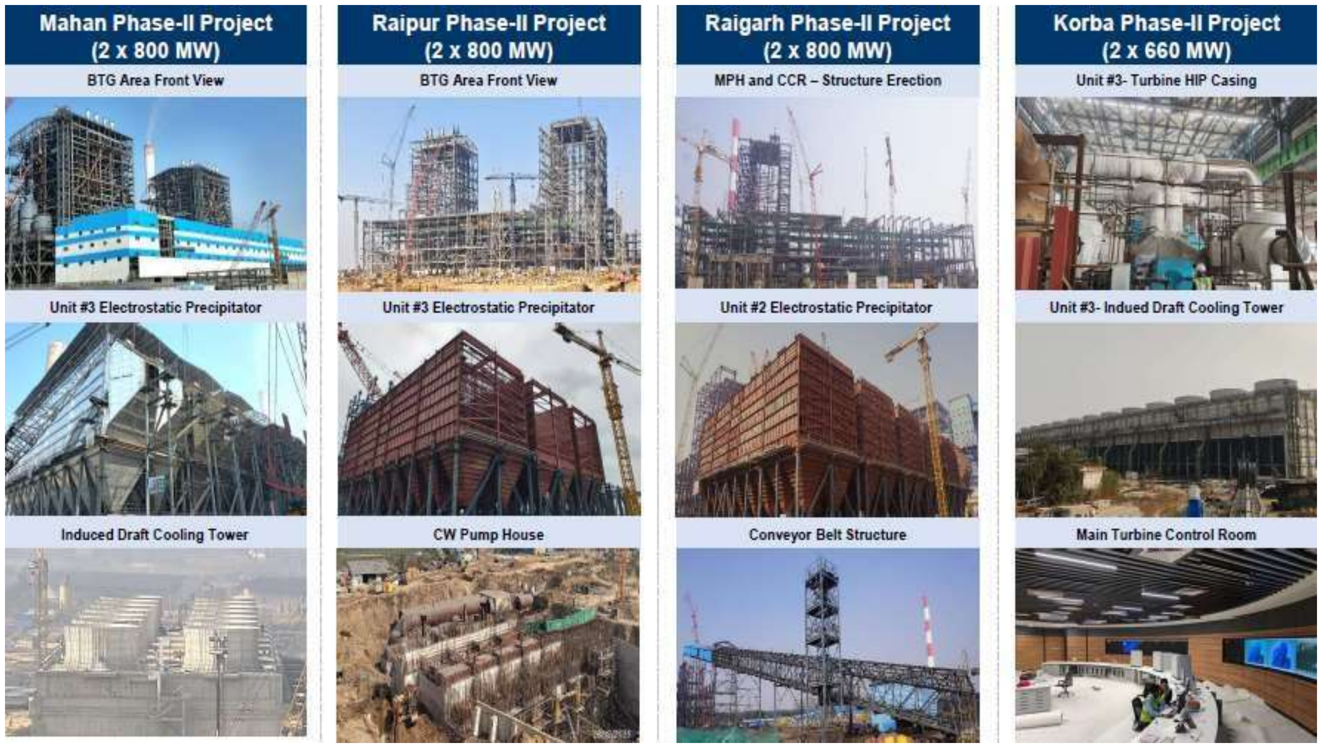
Udupi Karnataka	**Raipur** Chhattisgarh	**Raigarh** Chhattisgarh	**Mahan** Madhya Pradesh
			
1,200 MW 2x600 MW	**1,370 MW** 2x685 MW Supercritical	**600 MW** 1x600 MW	**1,200 MW** 2x600 MW
PPA tie-ups: 91% Karnataka, MUL	PPA tie-ups: 100% MUL, Chhattisgarh, Karnataka	PPA tie-ups: 5% Chhattisgarh	PPA tie-ups: 76% Madhya Pradesh, MUL, Group Captive
Import fuel-based	FSAs: 3.83 MTPA	FSAs: 3.13 MTPA	FSAs: 0.52 MTPA
COD Unit 1: Nov 2010 Unit 2: Aug 2012	COD Unit 1: Jun 2015 Unit 2: Apr 2016	COD Unit 1: Apr 2014	COD Unit 1: Apr 2013 Unit 2: Oct 2018
	+ **1,600** MW Under development	+ **3,200** MW Under development	+ **3,200** MW Under development

Korba Chhattisgarh	**Mutiara** (1) Tamil Nadu	**Dahanu** Maharashtra	**Butibori** Maharashtra
			
600 MW 2x300 MW	**1,200 MW** 2x600 MW	**500 MW** 2x250 MW	**600 MW** 2x300 MW
PPA tie-ups: 100% Madhya Pradesh, Haryana, Chhattisgarh	PPA tie-ups: 50% Tamil Nadu	PPA tie-ups: 100% Adani Electricity Mumbai	PPA tie-ups: 100% Maharashtra
FSAs: 2.59 MTPA	FSA : 1.85 MTPA	FSAs: 2.45 MTPA	FSA: 2.77 MTPA
COD Unit 1: Apr 2010 Unit 2: May 2011	COD Unit 1: Dec 2014 Unit 2: Jan 2016	COD Unit 1: Jul 1995 Unit 2: Jan 1996	COD Unit 1: Apr 2013 Unit 2: Mar 2014
+ **2,920** MW Under development			

(Source: Company)

APL's brownfield expansion, creating cost and execution advantage

APL is undertaking four major expansion projects of supercritical and ultra-supercritical units at existing thermal power plants. APL's brownfield expansion is different from other expansion as it comes with cost and execution advantage. Brownfield expansion are done at existing facility. APL's brownfield power plant sites has built-in structure, land, rail connectivity, access to water, coal linkages, coal handling, ash handling, and cooling system. This reduces the capEx cost, reduce execution risk, faster execution, and better utilization. Which helps in reducing the gestation to below four years. The brownfield expansion is primarily done through 800 MW ultra-supercritical units. APL is undertaking four major brownfield expansion projects, three projects with 2x800 MW (1600 MW) of capacity expansion, and another one with 2x660 (1320 MW) of capacity expansion. Additionally, APL is also undertaking two more brownfield capacity expansion with proposed capacity of 3.2 GW at Kawai, Rajasthan. This expansion plan is part of their broader expansion pipeline. Another one with proposed capacity of 2x660 MW (1320 MW) at Lanco, Amarkantak/Korba. Four major brownfield expansion will add 6.1 GW of thermal power capacity. In APL's brownfield expansion, built-in structural advantage comes with cost efficiency, with brownfield project cost around INR 8-9CR per MW. The brownfield projects are expected to be commissioned between FY2027-2029, with work started at the plant in FY2024-2025.



(Source: Company)

As part of broader long term expansion plans, APL also has four major greenfield projects, which will add 7.2 GW of thermal power capacity at a cost of INR 12-13CR per MW. The greenfield expansion project are expected to get commissioned between 2029-2032.

Major greenfield projects:
1. Assam thermal power project – 2400 MW
2. Bihar thermal power project – 3200 MW
3. Uttar Pradesh thermal power project – 1600 MW
4. Godda, Jharkhand – 1600 MW

These greenfield projects are being developed under DBFOO model (Design, Built, Finance, Own, Operate) with long term PPAs (Power Purchase Agreement)
(Source: Company)

APL holds dominant position in PPAs

APL generates electricity through coal-based thermal power plants with long term PPAs. APL operates at ultra-supercritical thermal power plants having capacity of 660-800 MW with high plat load factor. APL's revenue comes from two type of power sales: 1) long term PPAs and 2) merchant power sales. Long term PPAs accounts for 80%-90% in revenue and merchant power sales accounts for 10%-20% in revenue. In long term PPAs, power is sold to state distribution companies under 25 years contract. In long term PPAs model, thermal power tariffs charged on fixed capacity basis and per unit of electricity produced. In merchant power sales, power is sold in open market. APL's fuel procurement forms the largest part of cost around 60%-70% for its thermal power plants. APL has diversified strategy for fuel procurement which helps in reducing logistics cost. APL has mix of domestic coal and imported coal, domestic coal linkage is under SHAKTI policy scheme. For imported coal, APL's large coal supplier is Indonesia and Australia. In Australia, there's a coal mine owned by Carmichael mining company, which is owned by Adani Group's subsidiary Bravus Mining and Resources. Being part of Adani Group Companies, APL has logistic advantage, which helps in reducing logistics costs significantly.

APL has total 15.3 GW capacity tied under long term PPAs, with main buyers like Gujarat, Maharashtra, Rajasthan, Haryana, and Bangladesh utilities. Over 95% of operational capacity is contracted through medium or long term PPAs. In 2024-2025, APL has signed several new long term PPAs with state DISCOMS. Recently, APL has signed four major PPAs: 1) 3200 MW capacity with Assam DISCOM 2) 2400 MW capacity with Bihar DISCOM 3) 1600 MW capacity with Uttar Pradesh DISCOM 4) 800 MW capacity with Madhya Pradesh DISCOM.

New PPAs in Q3 FY2025-2026

New PPAs

3,200 MW (Gross Capacity)

- *Awarded single 3,200 MW PPA of **25 Years** with **Assam Power Distribution Company Limited** (APDCL)*
- *To be supplied from a new **4x800 MW greenfield** Ultra-Supercritical Thermal Power Project at **Chapar** in Dubri district, Assam*

370 MW (Gross Capacity)

- *Signed Medium Term PPA for **4 Years** for supply of power to Uttarakhand DISCOM,*
- *To be supplied from existing **600 MW** Sub-critical Thermal Power Project at **Raigarh**, Chhattisgarh*

PPAs bids upcoming for long term PPAs (November 2025)

State	MW	Coal Allocation	Bid Invitation
Uttar Pradesh	4,000 MW	✓	Issued
Gujarat	4,000 MW	✓	Issued
Rajasthan	3,200 MW	✓	Issued
West Bengal	2,260 MW	✓	Issued
Maharashtra	1,600 MW	✓	Issued
Uttarakhand	1,320 MW	✓	Issued
Total	16,380 MW	Ongoing bids for long term PPAs	

PPA's awarded to APL (February 2026)

States	PPAs Awarded (MW)	PPAs Awarded to APL (MW)
Madhya Pradesh	5,320	2,920
Bihar	2,400	2,400
Uttar Pradesh	1,600	1,600
Maharashtra	1,600	1,600
West Bengal	3,200	-
Karnataka (2)	2,000	625
Assam (2)	3,200	3,200
Total	19,320	12,345

Ongoing Long-term thermal PPAs bids of ~15,000 MW among various States to meet projected demand.

(Source: Company)

Locked-in growth projects in advanced stages

Project	MW	Land	Equipment Ordering	Environ-mental Clearance	PPA
Korba Ph-II	1,320 MW	✓	✓	✓	Bids ongoing
Mahan Ph-II	1,600 MW	✓	✓	✓	1,320 MW
Raipur Ph-II	1,600 MW	✓	✓	✓	1,600 MW
Raigarh Ph-II	1,600 MW	✓	✓	✓	Bids ongoing
Mirzapur	1,600 MW	✓	✓	✓	1,600 MW
Mahan Ph-III	1,600 MW	✓	✓	✓	Bids ongoing
Kawai Ph-II	1,600 MW	✓	✓	✓	Bids ongoing
Korba Ph-III	1,600 MW	✓	✓	In progress	Bids ongoing
Pirpainti	2,400 MW	✓	✓	In progress	2,400 MW
Kawai Ph-III	1,600 MW	✓	✓	✓	Bids ongoing
Anuppur	2,400 MW	✓	✓	✓	1,600 MW
Raigarh Ph-III	1,600 MW	✓	✓	In progress	Bids ongoing
Chapar (1)	3,200 MW	✓	✓	In progress	3,200 MW
Organic Total	23,720 MW	100%	100%	63%	11,720 MW

(Source: Company)

Leadership overview

Name	Designation
Mr. Gautam Adani	Chairman (Non-Executive and Non-Independent)
Mr. Anil Kumar Sardana	MD and CEO
Mr. Rajesh Adani	Non-Executive Director
Mr. Shersingh Khyalia	Director
Ms. Sangeeta Singh	Independent Non-Executive Director)
Mr. Shailesh Vishnubhai Haribhakt	Independent Director
Mr. Narendra Sheth Misra	Independent Director
Mr. Manmohan Srivastava	Independent Director

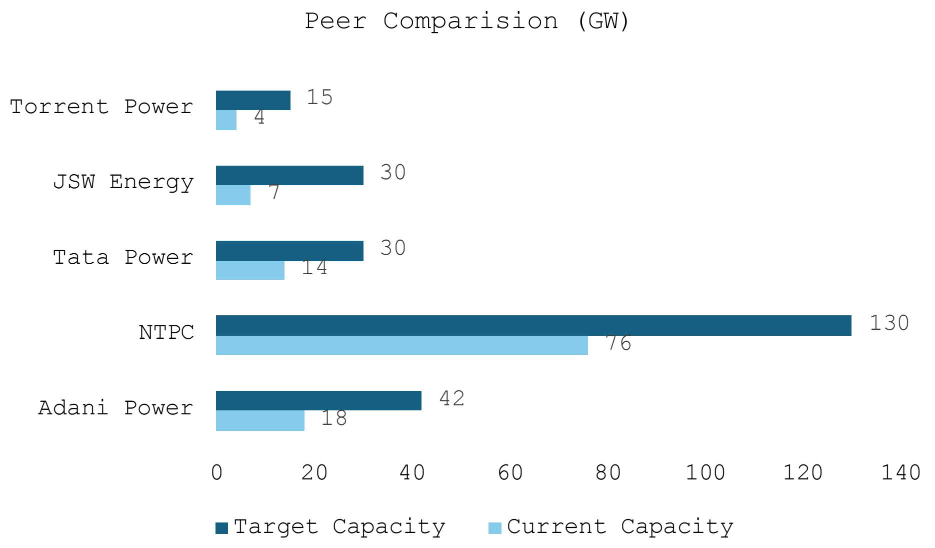
Key management personnel

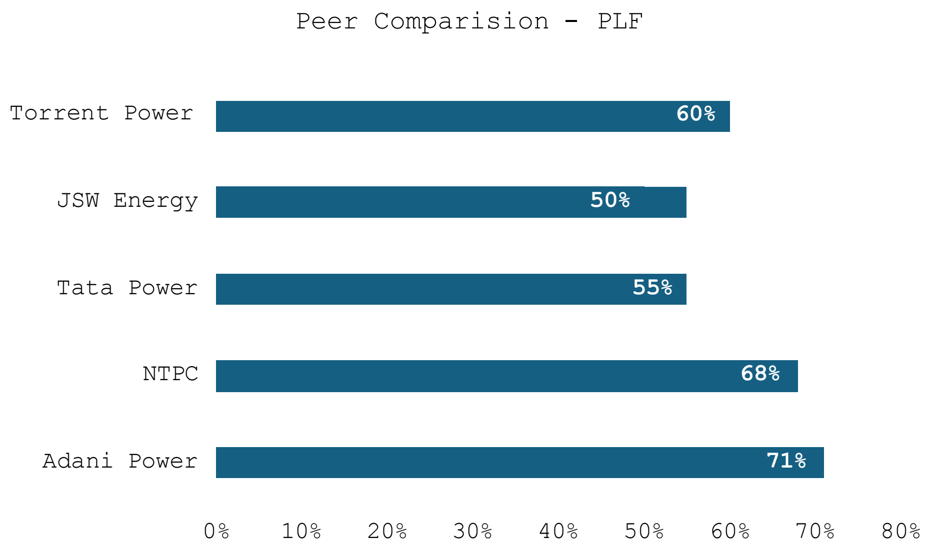
Mr. Anil Kumar Sardana	MD and CEO
Mr. Dilip Kumar Jha	Chief Financial Officer
Mr. Rajesh Sehgal	Chief Legal Officer (Energy)
Mr. Deepak Pandya	Company Secretary

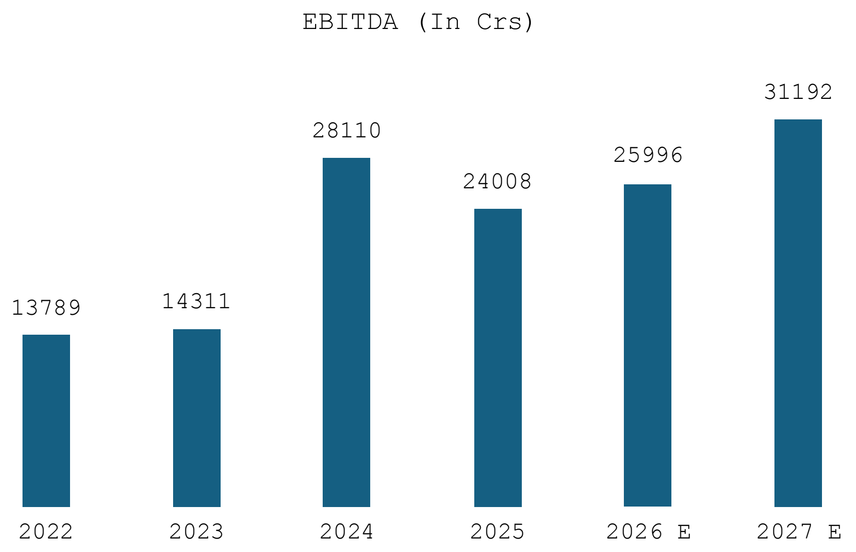
(Source: Company)

Adani Power Ltd

Story in charts







(Source: Company, ChatGPT)

Adani Power Ltd

Financial summary

Income statement

(Crs.)	2021	2022	2023	2024	2025	2026 E	2027 E
Revenue	**26221.48**	**27711.18**	**38773.3**	**50351.25**	**56203.09**	**63453.29**	**72590.56**
		5.68%	*39.92%*	*29.86%*	*11.62%*	*12.90%*	*14.40%*
EBITDA	**10596.72**	**13789.45**	**14311.88**	**28110.93**	**24008.18**	**25996.81**	**31192.16**
	40.41%	*49.76%*	*36.91%*	*55.83%*	*42.72%*	*40.97%*	*42.97%*
PAT/Net Income	**1269.98**	**4911.58**	**10726.64**	**20828.79**	**12938.77**	**15886.59**	**19626.07**
	4.84%	*17.72%*	*27.67%*	*41.37%*	*23.02%*	*25.04%*	*27.04%*
EPS	**0.66**	**2.55**	**5.56**	**10.80**	**6.71**	**8.24**	**10.18**

Valuation outlook

Enterprise Value	288,095
Less: Debt	38,335
Add: Cash & Investments	6120
Equity Value	255,880
O/S	1,928.00
Value Per Share	**133**
CMP	138

The implied value of stock comes at 133, which means the stock is fairly valued.

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