Management Discussion & Analysis

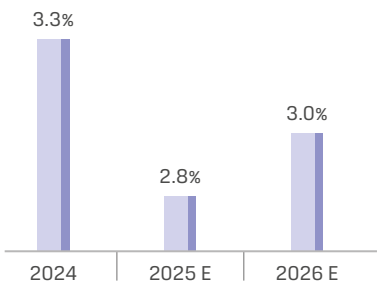
ECONOMIC REVIEW

World Economic Overview

Throughout much of 2024, signs of stabilisation in the global economy began to surface following a prolonged period marked by extraordinary disruptions. Inflation, once at multidecade highs continued its uneven but steady descent toward central bank targets. Labour markets gradually returned to normal, with unemployment and job vacancy rates approaching their pre-pandemic benchmarks. Meanwhile, global economic growth in 2024 came at 3.3%, aligning output closely with potential.

According to The International Monetary Fund's (IMF), World Economic Outlook there is an expectation of a global economic slowdown driven by escalating trade tensions and policy uncertainties. The global economy stands at a pivotal moment as policy uncertainty tests global resilience.

Projected World economic growth



Source: IMF *E = estimated*

Recent policy developments are reshaping the global trade landscape, reintroducing significant uncertainty and testing the resilience of the recovery. Since February 2025, the United States has implemented several rounds of tariffs targeting key trading partners, prompting retaliatory actions in some cases, fuelling concerns over the risk of further abrupt and disorderly market adjustments.

JSW Centre, Mumbai

As per the IMF, the global real GDP is projected to grow at 2.8% in 2025 and 3.0% in 2026, much below the historical (2000–19) average of 3.7% and below the 3.3% growth of 2024. On the upside, a de-escalation from current tariff rates and new agreements providing clarity and stability in trade policies could lift global growth.

Growth in advanced economies is projected to be 1.4% in 2025, while the IMF has revised U.S. growth projections downward to 1.8% for 2025, citing concerns over fiscal deficits and trade policy uncertainties. The Euro region is expected to grow at 0.8% while emerging markets and developing economies are likely to grow at 3.7% in 2025.

Global headline inflation is now projected to decline more gradually than previously anticipated, reaching 4.3% in 2025 and 3.6% in 2026.

The Way Forward

It is expected that going forward domestic policies to address structural imbalances towards economic stability, rebalance growth and inflation, rebuild buffers, and boost medium-term growth while reducing global imbalances will gain momentum. Central banks' monetary policies are expected to maintain price and financial stability amid complex trade-offs, using targeted interventions to manage foreign exchange volatility and activating macroprudential tools to contain vulnerabilities.

Additionally, changing demographics and migration policies may significantly impact growth prospects and external balances, especially in emerging and developing economies. The global economy is projected to remain resilient despite significant challenges growing at near 3% in 2025 and 2026.

(Source: IMF)

India Economic Overview

India has continued to showcase remarkable economic resilience despite a highly volatile and challenging global environment. In the face of ongoing global trade tensions, geopolitical uncertainties, and policy unpredictability, India has maintained its position as one of the world's fastest-growing major economies. The country's GDP (provisional) growth for the fiscal year 2025 stands at a robust 6.5%, underpinned by strong domestic demand, sustained investments in public infrastructure, and ongoing strength in the financial sector.

This growth trajectory reflects India's ability to absorb external shocks while continuing to drive internal economic expansion. The resilience is attributable to several factors, including a youthful and expanding workforce, rising consumer consumption, and significant government initiatives aimed at infrastructure development, digitalisation, and manufacturing. The Union Budget for FY 2026, lays a robust foundation for India's developmental journey by focussing on key areas such as agriculture, SMEs and employment generation. With a record allocation of ₹11.21 lakh crore for capital expenditure, the budget prioritises the development of transportation networks, rural connectivity, and urban infrastructure. Public infrastructure projects, in particular, have played a vital role by generating employment, improving connectivity, and facilitating greater economic efficiency across sectors.

The Reserve Bank of India (RBI) has also played a critical role in sustaining this momentum through its proactive monetary policy measures. The RBI has implemented

a cumulative repo rate cut of 100 bps since February 2025 lowering it from 6.5% to 5.5%. The lower repo rate is expected to gradually reduce borrowing costs for businesses and consumers, thereby enhancing credit availability. Increased access to affordable credit is essential for sustaining consumption, encouraging investment, and supporting overall economic activity. This accommodative stance demonstrates the RBI's commitment to balancing inflation control with growth promotion. Additionally, the RBI has also addressed the system-wide liquidity availability through a host of measures easing the overall financial conditions.

India's macroeconomic stability is further reinforced by prudent fiscal management. The government's efforts to maintain fiscal discipline while investing in key sectors have strengthened the economy's fundamentals. Structural reforms in areas such as labour laws, taxation, and financial regulations continue to improve the business environment, attracting both domestic and foreign investment. India's continued focus on enhancing manufacturing capacity, expanding exports, and driving infrastructure will be the key pillars of India's journey towards its USD 10 trillion economy milestone. The Make-in-India programme and Production Linked Incentives (PLI) scheme stands out as the pivotal drivers of domestic manufacturing. These efforts are designed to boost local production, attract foreign investment, and create a competitive edge in creating millions of jobs and improving India's global supply chain.

Outlook

Despite a fragile global economic backdrop characterised by uncertainties in trade and financial markets, India's combination of structural strengths, sound monetary policy, and fiscal prudence positions it as a vital engine of global growth. Looking ahead, the RBI has projected real GDP growth at 6.5% for FY 2026, maintaining the same rate witnessed for FY 2025, following a strong expansion of 9.2% in the preceding year.

Headline inflation eased between January and April 2025, largely due to a significant drop in food prices. Additionally, the decrease in crude oil prices has further reinforced expectations of continued disinflation. As a result, the RBI revised the inflation forecast for FY 2026 downward to 3.7%, from the earlier estimate of 4.0%.

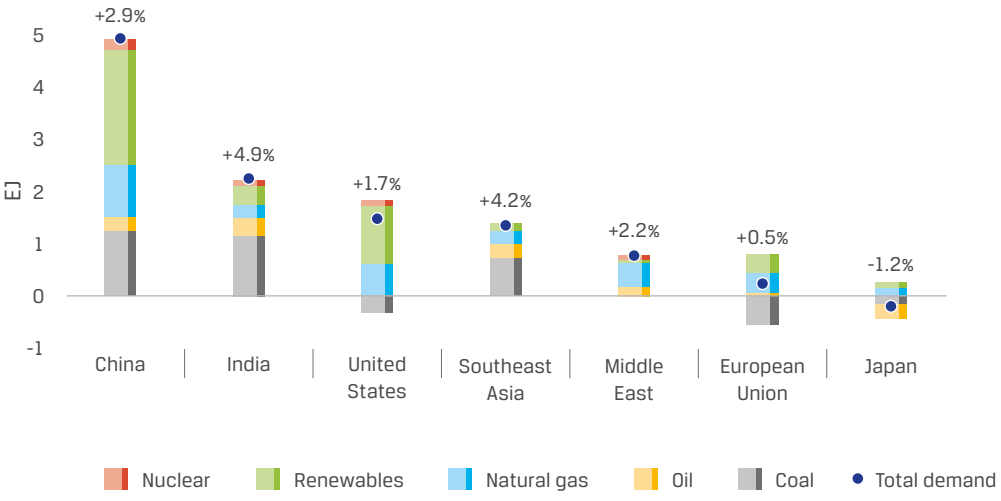
(Source: RBI, IMF)

INDUSTRY REVIEW

Global energy demand is rising more rapidly than anticipated, amid an increasingly complex geopolitical environment and the emergence of new sources of demand. In 2024, global energy consumption grew by 2.2%, surpassing the average growth rate of the past decade.

China recorded the largest increase in energy demand in absolute terms, while India followed closely, registering a rise greater than that of all advanced economies combined. The United States saw the third-highest growth, and the European Union returned to energy demand growth for the first time since 2017.

Change in energy demand, selected regions, 2023-2024

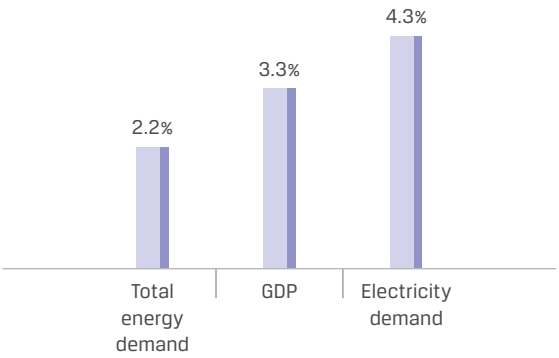


Source: International Energy Agency

A key driver of this global trend was the surge in electricity consumption, which expanded by 4.3% YoY outpacing both overall energy demand and global GDP growth of 3.3%. This acceleration was fuelled by rising demand for cooling amid extreme temperatures, increased industrial electricity usage, expanding electric transport, and the rapid growth of the data centre sector.

On the supply side, renewables accounted for the largest share of the increase in global energy supply at 38%, followed by natural gas (28%), coal (15%), oil (11%), and nuclear power (8%). The continued momentum in renewable deployment, especially solar PV and wind, reflects a broader shift toward cleaner energy sources as electricity becomes an even more central pillar of global energy consumption.

Key global growth rates, 2024



Source: IEA & IMF

In 2024, all fuels and technologies across the energy system experienced growth, though at varying rates. Among fossil fuels, natural gas saw the fastest increase, with demand rising by 2.7% to reach a record high. Global oil demand growth slowed to 0.8% in 2024, down from 1.9% in 2023. Coal demand grew by just over 1%, also hitting an all-time peak, but its growth rate has moderated in recent years following a strong post-COVID rebound.

Non-fossil fuel energy sources including nuclear, renewables, bioenergy, and waste expanded by more than 5% in 2024, accounting for nearly half of the total growth in global energy demand. Nuclear power output increased by nearly 4%, while renewables grew close to 6%, driven largely by the rapid expansion of solar photovoltaic and wind energy. Hydropower supply rebounded with a 4.4% rise, recovering from the significant decline experienced in 2023 due to droughts in key hydroelectric regions.

Energy Demand Driven by Electricity Consumption

Global electricity consumption is projected to grow at its fastest rate in recent years during 2025–2027, driven by expanding industrial activity, increased air conditioning usage, accelerating electrification trends, and the rapid proliferation of data centres worldwide. Following a 4.3% increase in 2024, global electricity demand is expected to continue rising at a robust pace of nearly 4% annually through 2027. This represents a marked acceleration compared to the 2.5% growth recorded in 2023, when strong increases in demand across China, India, and Southeast Asia were offset by declines in several advanced economies.

The adoption of renewable energy will continue to increase over the coming decades, with renewables expected to account for 45%-50% of global electricity generation by 2030 and 65%-85% by 2050. This rise in renewables share is supported by decline in cost of solar PV modules and expansion of solar PV technologies as well as rise in nuclear power generation. These advancements will contribute to a steady decline in fossil-fuel based electricity generation by 1.7% annually through 2026, as the world transitions towards a cleaner energy future.

(Source: IEA)

Clean Energy to Lead Global Power Generation by 2027

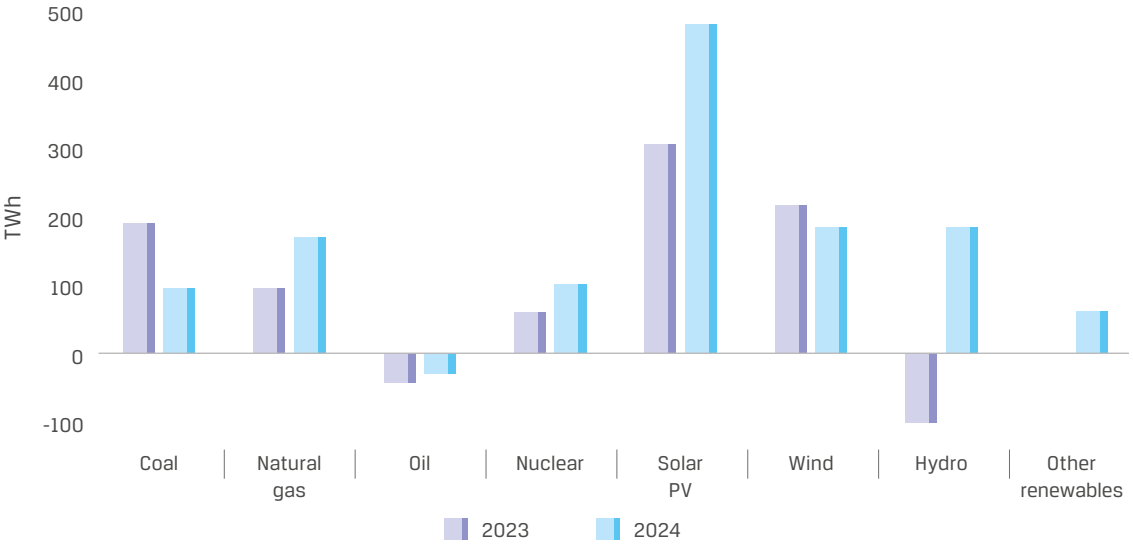
Clean energy sources are poised to set new benchmarks in global power generation over the 2025–2027 forecast period. Low-emission technologies including renewables and nuclear power are projected to meet the entirety of global electricity demand growth through 2027. The share of low-emissions sources in global electricity generation is projected to rise from 41% in 2024 to 47% by 2027, reflecting a major structural shift towards cleaner energy.

Solar power is expected to become the second-largest low-emissions source of electricity generation globally by 2027, following hydropower. Collectively, renewable energy sources are set to surpass coal-fired power generation in 2025, marking a significant milestone. For the first time in over a century, coal's share in global electricity generation is projected to fall below 33%.

In 2025, global nuclear generation is forecast to hit a record level, supported by a recovery in output from France and Japan, along with the commissioning of new reactors in countries such as China, India, and South Korea.

As renewables account for a larger share of the generation mix, managing variability due to weather-related fluctuations in wind and solar PV output becomes increasingly important. Ensuring sufficient dispatchable capacity and long-duration energy storage will be critical to maintaining reliability and grid stability during such periods.

Annual change in global electricity generation by source

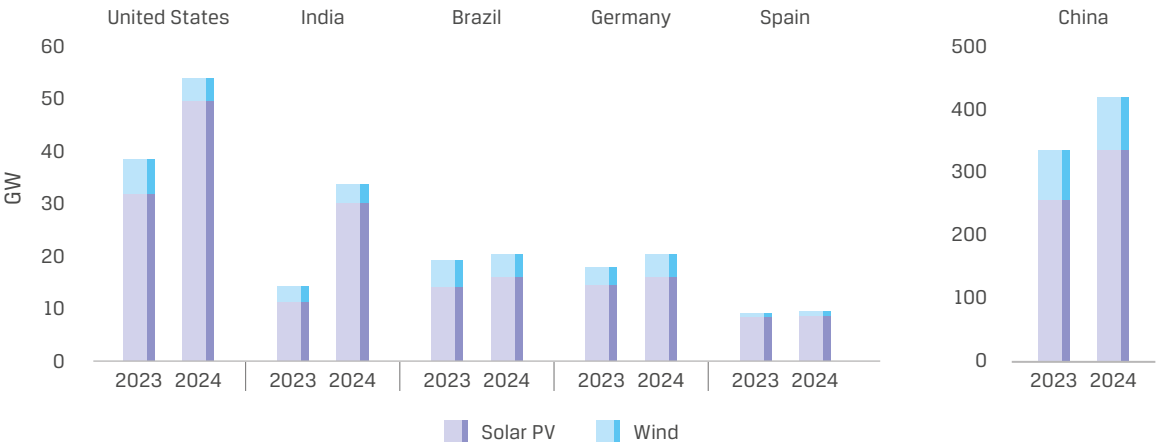


Source: International Energy Agency

Global renewable energy capacity

In 2024, global annual renewable capacity additions surged by an estimated 25% to around 700 GW – marking the 22nd consecutive year that renewables have set new records for expansion. Solar PV accounted for over three-quarters of renewable capacity additions, followed by wind (17%) and hydropower (4%), with bioenergy, geothermal, concentrating solar power and marine making up the remainder. Solar PV additions in 2024 rose by almost 30% year-over-year, totalling about 550 GW. With this growth, installed solar PV capacity worldwide reached an estimated 2.2 terawatts (TW). Annual wind additions remained stable at around 120 GW. Together, solar PV and wind accounted for 95% of overall renewable capacity growth in 2024. Hydropower installations more than doubled to over 25 GW driven by large projects commissioned in China, Africa and Southeast Asia. (IEA)

Solar PV and wind net additions in selected markets



Source: International Energy Agency

Global renewable capacity is expected to increase over 5.5 TW during 2024 to 2030, nearly 2.7 times the capacity added in the last six years (2017-2023). Utility-scale and distributed solar PV will lead the charge, tripling in capacity and making up for almost 80% of renewable electricity expansion worldwide. Solar PV adoption is experiencing rapid growth, fuelled by declining equipment costs, faster permitting process and widespread social acceptance. From modest residential size PV projects to large gigawatt scale utility scale plants, PV projects deliver affordable, zero emission energy to everyone from individuals and small businesses to large industries and power utilities.

(Source: IEA)

India's Role in Global Energy Transition

Driven by its ambition to become a developed nation by 2047, India recognises the growing opportunities and challenges posed by rising global temperatures and climate risks, and the country is actively investing in new energy sector to promote long-term sustainable development. Under the United Nations Framework Convention on Climate Change (UNFCCC), every country is responsible for defining energy transition pathways tailored to their unique needs. India has committed to this journey, ensuring its transition plan is aligned with the country's unique economic needs.

At the 26th UN Climate Change Conference (COP26), India announced its five-point climate action framework, known as the Panchamrit, or "five nectar elements":

- Achieve 500 GW of non-fossil energy capacity by 2030
- Meet 50% of its energy requirements from renewable sources by 2030
- Reduce projected carbon emissions by 1 billion tonnes by 2030
- Lower the carbon intensity of its economy by 45% from 2005 levels by 2030
- Achieve net-zero emissions by 2070

These commitments complement India's Nationally Determined Contributions (NDCs) under the Paris Agreement, which also include promoting sustainable lifestyles through the LiFE (Lifestyle for Environment) movement and expanding forest cover to create a 2.5–3 billion tonne carbon sink.

India has emerged as a pivotal force in the global energy transition landscape, balancing its development needs with climate commitments. The country added 23.8 GW of solar and 4.2 GW of wind capacity in FY 2025 alone, driven by robust policy support and domestic manufacturing of equipment.

A promising path to Net Zero

India's energy transition presents vast opportunities, driven by strong economic incentives, government commitment, technological advancements and increasing investor interest. With notable achievements in renewable energy sectors and innovative financing mechanisms, the country is well-positioned to reach net zero by 2070.

India: Balancing Energy Transition with Energy Security

India has been actively pursuing an ambitious energy transition, aiming to reduce its carbon footprint by expanding renewable energy capacity, improving energy efficiency, and promoting cleaner fuels. The country has made significant strides in solar and wind energy deployment, positioning itself as one of the leading nations in renewable energy expansion.

However, amid evolving global geopolitical dynamics, volatile energy markets, and growing concerns about supply disruptions, India is increasingly emphasising energy security alongside its energy transition which requires addition of thermal power to meet baseload as well as peaking demand. This balanced approach aims to safeguard India's economic growth and social progress while advancing global climate commitments. This shift reflects a strategic recalibration that prioritises stable, affordable, and reliable energy access to fuel economic growth and social development. It is expected that our country will install 80 GW of new thermal capacity till FY 2032 to ensure baseload demand is effectively met while continuing the integration of renewable energy and making it more dispatchable to address grid stability and intermittency.

India's Power Sector

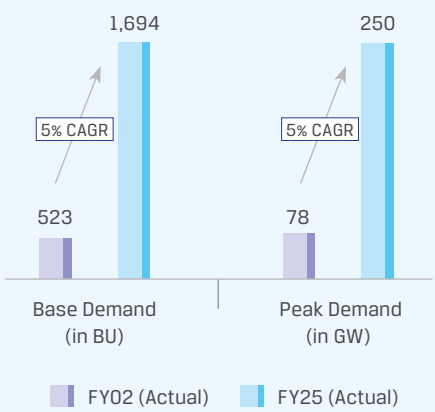
As per the IEA's Global Energy Review 2025, India recorded the second-largest increase in energy demand globally — exceeding the combined growth of all advanced economies. The country stands at a pivotal moment in its energy journey, shaped by rapid economic expansion, accelerating electrification, and growing developmental needs. Despite significant progress, India's per capita electricity consumption remains well below the global average, highlighting substantial headroom for demand growth. As industrialisation intensifies, urban populations swell, and electricity reaches deeper into rural and underserved regions, the

Hydro Power Plant, Sholtu

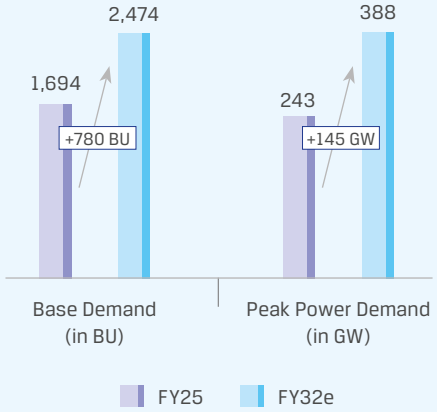
demand for reliable, affordable, and sustainable power is set to rise sharply in the coming years.

India's power demand maintained its growth momentum in FY 2025, registering 4.2% YoY growth to reach 1,694 billion units (BUs). Although this growth came on the back of a high base of previous years, the underlying trend remains resilient – with a four-year CAGR of 7.4%, reflecting consistently strong demand supported by steady economic growth, increasing residential usage, expanded rural electrification, and extreme weather conditions like extended heatwaves. Peak power demand also reached new highs of 250 GW, underscoring the urgent need for robust and resilient energy infrastructure. The demand-supply gap narrowed significantly, with the energy deficit reducing to just 0.1% in FY 2025 from 4.2% in FY 2014, reflecting improved system efficiency and better load management.

Historical Power Demand Growth



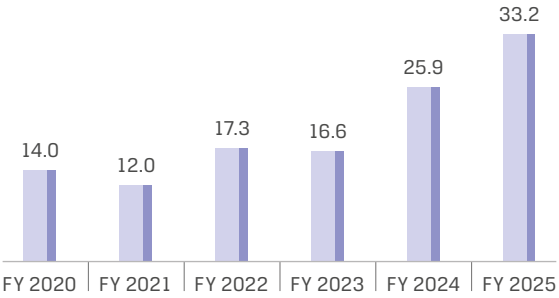
Similar growth expected in power demand over next decade



Source: National Electricity Plan (Transmission) October 2024

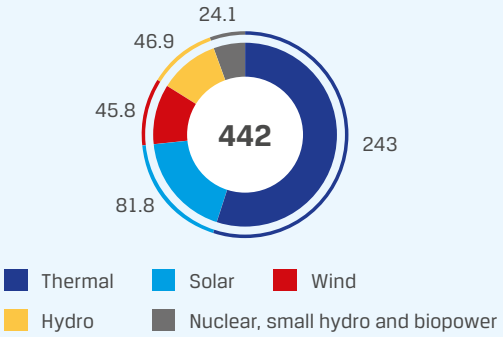
India's installed power generation capacity reached 475 GW by the end of FY 2025, marking a record annual addition of 33.2 GW – the highest ever in a single fiscal year. This robust expansion reflects the government's focussed push towards energy security and decarbonisation, driven by sustained policy momentum, rapidly rising demand, and ongoing reforms to ease infrastructure development. Renewable energy accounted for the lion's share of the capacity addition, with solar alone contributing 23.8 GW – boosted by large-scale utility projects, rooftop initiatives like PM Surya Ghar Muft Bijli Yojana, and improved domestic manufacturing under the PLI scheme. Wind energy also saw healthy growth, especially in resource-rich states like Gujarat and Tamil Nadu. Thermal power additions stood at 3.7 GW, primarily from under-construction plants nearing commissioning, and selective new capacity added to address peak load requirements and ensure grid reliability. The growing role of hybrid projects and energy storage also signals India's shift toward a more flexible and sustainable power mix.

Annual Capacity Addition in India (GW)

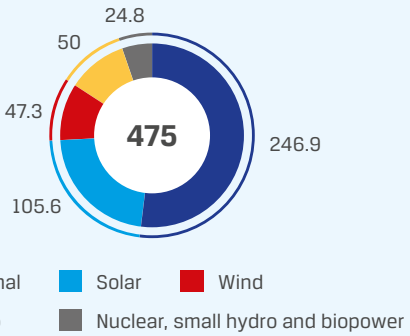


Source: Central Electricity Authority

Total installed capacity in GW (as of 31st March, 2024)



Total Installed capacity in GW (as of 31st March, 2025)

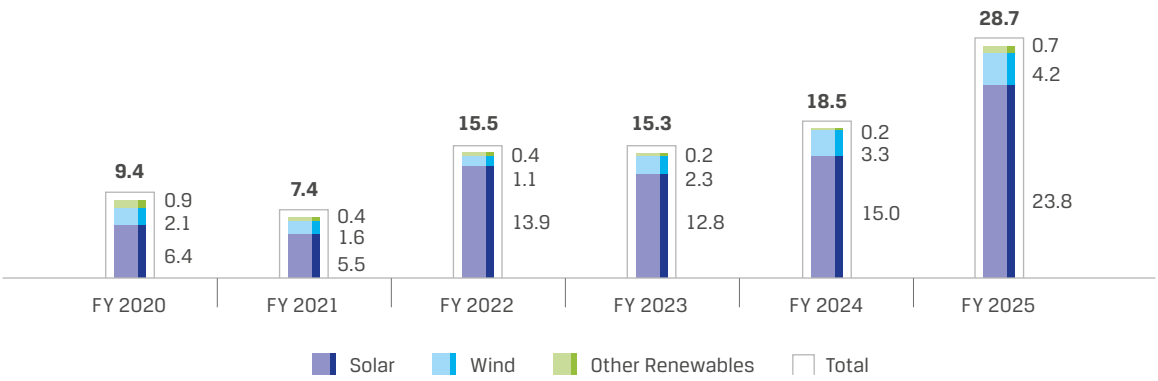


Source: Central Electricity Authority

Record Renewable Energy Capacity Additions

India achieved a significant milestone by adding 28.7 GW of renewable energy capacity in FY 2025, marking a significant rise of over 50% from 18.5 GW addition in FY 2024. This growth was primarily driven by solar capacity additions, which saw a capacity addition of 23.8 GW, bringing the total installed solar capacity to over 105.6 GW. This surge was driven by both utility-scale solar parks and a remarkable rise in rooftop solar installations.

Renewable Capacity Addition (GW)



Source: Central Electricity Authority

Thermal Power Plant, Barmer

As the global shift towards clean and renewable energy accelerates, wind power continues to play a pivotal role in India's energy transition. In FY 2025, the country's installed wind power capacity reached the 50 GW mark, with states like Gujarat, Tamil Nadu, and Karnataka leading the way. These states have not only harnessed wind energy potential effectively but have also adopted strategic policies to accelerate deployment. This growth has been underpinned by supportive policy frameworks, enhanced grid integration, and increased private sector involvement. On the manufacturing front, India has taken decisive steps to strengthen its domestic ecosystem for solar panels and wind turbines – reducing import dependency, boosting local value creation, and creating employment opportunities.

With these developments, India's total non-fossil fuel-based energy capacity reached 228 GW in FY 2025, keeping the country firmly on track to meet its ambitious target of 500 GW renewable capacity by 2030.

On the policy front, the Government of India continued its proactive efforts to achieve universal electricity access and strengthen the distribution network. Flagship schemes such as the Deen Dayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and the Pradhan Mantri Sahaj Bijli Har Ghar Yojana (SAUBHAGYA) have played a vital role in this journey. DDUGJY focussed on reinforcing sub-transmission and distribution infrastructure in rural areas and successfully facilitated the electrification of over 18,000 villages. SAUBHAGYA, launched in 2017, aimed to provide electricity connections to all un-electrified households across rural and urban regions. These initiatives significantly improved electricity access across the country, driving socio-economic progress by enabling better educational and healthcare outcomes, encouraging rural entrepreneurship, and enhancing overall quality of life. The increased penetration of electricity has laid a strong foundation for a more inclusive and resilient power ecosystem.

Between FY 2022 and FY 2026, a total investment outlay of ₹ 3.0 lakh crore – with ₹ 97,631 crore in gross budgetary support – has been earmarked to modernise power distribution and promote smart metering. At the end of FY 2025, projects worth ₹ 2.8 lakh crore have been approved for distribution infrastructure upgrades and smart metering solutions.

These investments have yielded tangible outcomes: According to the Economic Survey of FY 2025, the average daily power supply has improved across the board, with urban areas receiving 23.4 hours and rural areas 22.6 hours of electricity per day — up from 22.1 and 12.5 hours respectively in FY 2014. Collectively, these developments mark a significant step forward in strengthening India's power ecosystem and ensuring energy access for all.

Power Demand and Generation

According to the National Electricity Plan (NEP) released by the Central Electricity Authority (CEA) in October 2024, India's peak electricity demand is projected to reach 296 GW by FY 2027 and surge to 388 GW by FY 2032. This sharp rise is primarily driven by growing commercial and industrial activity, particularly in the manufacturing and IT sectors. The rapid expansion of data centres — fuelled by digital transformation and increasing adoption of AI, IoT, and 5G — is expected to significantly elevate power consumption. Meanwhile, as India continues its shift towards a more urban and digitally connected society, residential electricity demand is also set to rise, reflecting the expansion of the middle class and urban population. In parallel, the accelerated adoption of electric vehicles, especially in transport and logistics, will further contribute to demand growth. To meet this evolving energy landscape, India is actively expanding its power infrastructure, with a target of achieving 500 GW of clean energy capacity by 2030.

In FY 2025, India's total electricity generation reached 1,830 billion units (BU), marking a 5.2% YoY increase from 1,739 BU in FY 2024. While conventional thermal power continues to meet the majority of demand, the share of renewable sources — particularly solar and wind has been steadily rising, supported by enabling policy frameworks and growing investments. These efforts have played a crucial role in ensuring consistent electricity supply across both urban and rural regions, supporting industrial expansion and increased access to electricity. Notably, India's grid modernisation initiatives have led to a sharp decline in power shortages, down from 4.2% in FY 2014 to just 0.1% in FY 2025, underscoring significant progress in improving the country's power delivery systems.

Generation in BUs	FY 2025	FY 2024	FY 2023
Thermal	1,364	1,326	1,206
Hydro	149	134	163
Renewables	255	226	204
Others (Nuclear + Imports)	62	53	53
All-India	1,830	1,739	1,625

Source: Central Electricity Authority

The focus on infrastructure development such as green energy corridors and high-voltage transmission lines has enabled better integration of renewable sources into the national grid, minimising curtailment and ensuring round-the-clock power supply. Furthermore, per capita electricity consumption in India has surged to 1,395 kWh in FY 2024, up from 957 kWh in FY 2014 — an increase of 46%.

According to the National Electricity Plan, India's installed capacity is expected to increase to 997 GW by FY 2032, out of which carbon-free capacity is expected to be 690 GW. In addition, a battery energy storage system (BESS) with a capacity of 47.2 GW/236 GWh is also expected to be installed.

A. Thermal Energy – Coal

India's installed thermal power capacity stood at approximately 247 GW as of 31st March, 2025, with coal-based power contributing the lion's share. Despite the accelerating growth of renewable energy, thermal power remains the backbone of India's electricity system accounting for around 52% of total installed capacity and generating approximately 75% of the country's electricity. This reliance on thermal power continues due to its critical role in delivering reliable, uninterrupted base-load supply, particularly important during peak demand periods and seasonal fluctuations that challenge the intermittency of renewables. It is estimated that about 80 GW of additional thermal capacity will be needed by FY 2032.

In FY 2025, India added 3.7 GW of net thermal capacity, reinforcing the system's ability to meet growing demand from industrial, commercial, and residential consumers. While this represented a decline from the 5.9 GW capacity addition in FY 2024, it was accompanied by strong policy action. The government awarded 19.2 GW of new coal-based power projects during CY 2024, reflecting a strategic effort to secure long-term power availability while the country simultaneously accelerates its transition to clean energy. These investments in thermal generation are seen as complementary to India's broader energy roadmap, balancing short-term reliability with long-term sustainability.

Coal production remained a cornerstone of this strategy, with output crossing 1 billion tonnes during FY 2025 — a milestone that demonstrates the sector's continued importance in meeting national energy needs. Efficient fuel supply and improved mining logistics played a crucial role in ensuring consistent power plant operations.

Plant Load Factor (PLF) for thermal power plants stood at healthy level of 69.8% in FY 2025. This indicates higher utilisation of existing assets and reflects tighter supply-demand dynamics.

Looking ahead, while thermal energy will continue to play a significant role in India's power landscape, its share in the generation mix is projected to gradually decline. As renewable capacity scales up and the grid becomes more resilient and adaptive, the country remains firmly committed to a future of cleaner, more sustainable energy while ensuring energy security remains uncompromised.

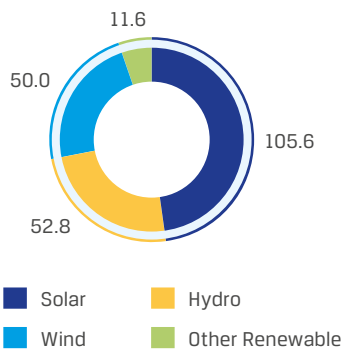
B. Renewable Energy: An Overview

According to the Renewable Capacity Statistics 2025 report by the International Renewable Energy Agency (IRENA), India ranks 4th globally in total renewable energy installed capacity, including large hydro. As of 31st March, 2025, India's total installed renewable energy capacity stood at approximately 220 GW, this includes solar, wind, hydro, and bioenergy. Driven by strong policy support and investor interest, India continues to emerge as a global hub for clean energy investments.

In FY 2025, India added a record 28.7 GW of renewable capacity – substantially higher than the 18.5 GW added in FY 2024. Solar power remained the dominant contributor, accounting for over 80% of the renewable capacity installation. The key milestone reflects the result of years of dedicated efforts to harness India's natural resources. Renewable energy now accounts for approximately 48% of India's total installed power capacity.

India's diverse and rapidly growing clean energy portfolio spanning solar parks, wind farms, hydro stations, and bioenergy has strengthened clean energy penetration while reducing carbon intensity. The country's consistent strides in this space positions it as a key global player in the energy transition and climate action landscape.

India's Installed Renewable Capacity as of 31st March, 2025 of 220 GW



Source: Central Electricity Authority

Solar Energy

India has further cemented its position as the world's fourth-largest solar power market, with total installed solar capacity reaching 105.6 GW as of 31st March, 2025. This represents a nearly fourfold increase since FY 2018, when capacity stood at just 21.7 GW. Solar energy now accounts for approximately 22% of the country's total installed power capacity, reflecting its pivotal role in India's clean energy transition.

The sharp rise in solar capacity was driven by a record 23.8 GW of new installations in FY 2025, which dominated renewable capacity additions in the country, accounting for more than 80% of RE capacity during the year. According to the NEP, India's solar capacity is expected to reach 208 GW by FY 2027 and further to 385 GW by FY 2032.

The Solar Park Scheme, which aims to establish solar parks across the country to generate electricity on a large scale, continues to be a major driver of large-scale solar projects. These parks provide infrastructure like land, transmission systems, and connectivity for grid-connected solar power projects. As of 31st March, 2025, aggregate capacity of 41.1 GW has been envisaged for development in the country under the scheme out of which 13.1 GW has already been commissioned, 15.2 GW of capacity is under-construction and 12.9 GW of capacity is under tendering process.

Government-backed initiatives such as the Production-Linked Incentive (PLI) scheme and the Approved List of Models and Manufacturers (ALMM) have accelerated domestic module manufacturing, reducing import dependence and strengthening India's solar manufacturing ecosystem. According to the Ministry of New and Renewable Energy (MNRE), India's solar module manufacturing capacity reached 74 GW, while operational solar cell capacity stood at 38 GW. Rural-focussed programmes like PM-KUSUM and the PM Surya Ghar Muft Bijli Yojana are expanding solar access across agricultural and residential sectors.

Wind Energy

India continues to rank as the world's fourth-largest wind energy market, driven by strong policy support and growing private sector participation. As of 31st March, 2025, the country's total installed wind power capacity stood at 50 GW, up 9% YoY from 45.9 GW in FY 2024. This is driven by 4.2 GW capacity addition during FY 2025, which is the highest annual wind capacity addition in India.

Wind resource-rich states such as Gujarat (12.6 GW of cumulative installed capacity), Tamil Nadu (11.7 GW),

Solar Plant, JSW Neo

and Karnataka (7.3 GW) continue to drive wind energy installations, collectively accounting for over 60% of the country's total capacity. This expansion is supported by a robust domestic manufacturing ecosystem, with an estimated annual wind turbine production capacity of about 18 GW.

Looking ahead, the NEP projects wind capacity in India to reach 111 GW by FY 2027 and 165 GW by FY 2032. To support this growth, the government has set an annual onshore wind bidding target of 10 GW between 2023 and 2027 and introduced wind-specific Renewable Purchase Obligations (RPOs) to encourage procurement.

In the offshore segment, India is advancing its first offshore wind projects under a Viability Gap Funding (VGF) scheme approved in 2024. This includes 1 GW of capacity – 500 MW each off the coasts of Gujarat and Tamil Nadu – supported by ₹ 7,453 crore for project development and port infrastructure. A national target of 30 GW of offshore wind installations by 2030 has been set to tap into the country's vast 70 GW offshore wind potential. With strong policy momentum and infrastructure support, India's wind energy sector is poised to be a key contributor to its clean energy future under the "Panchamrit" commitments.

Hydro Energy

Hydropower remains a strategic pillar in India's energy mix, offering critical grid stability, peak load management, and long-term energy security. As of 31st March, 2025, India's total installed hydroelectric capacity stood at 52.8 GW, comprising 47.7 GW from large hydro projects and 5.1 GW from small hydro installations.

During FY 2025, hydro generation at 149 BUs increased by 11% YoY, driven by better hydrology following 18% YoY decline in FY 2024 due to low rainfall and extreme weather events.

To meet rising demand and enhance flexibility, the capacity from large hydro projects is expected to increase to 62.8 GW by FY 2032. With the government's continued focus on hydro as part of renewable energy focus, hydropower is set to play a vital role in achieving India's energy transition goals.

Hydro Pumped Storage

Hydro pumped storage (PSP) sector is gaining momentum as a critical enabler of grid flexibility and dispatchability of infirm renewable power in the clean energy transition landscape. PSPs act as large-scale energy reservoirs, storing surplus electricity during off-peak hours and supplying it during peak demand, thereby stabilising the grid and complementing intermittent renewable sources.

During FY 2025, the CEA concurred a record number of Detailed Project Reports (DPRs) for PSPs with cumulative capacity of 7.5 GW, reflecting accelerated project preparation. For FY 2026, the CEA has set an ambitious target to concur at least 13 PSPs with a combined capacity of 22 GW. As per CEA, currently about 10 GW of PSPs are under implementation.

Green Hydrogen Plant, Vijayanagar

India has identified over 103 GW of on-river PSP potential, with total PSP potential (including off-river) estimated at 133 GW. More than 60 GW of PSP projects are currently under various stages of investigation and planning.

To accelerate PSP development, the government has introduced tariff-based competitive bidding guidelines and approved budgetary support of ₹ 12,461 crore for associated infrastructure like transmission corridors and road access. A single-window clearance mechanism has also been set up to fast-track project approvals and DPR processing.

Battery Energy Storage System (BESS)

India's clean energy transition requires robust energy storage infrastructure, with BESS playing a central role in balancing variable renewable energy (VRE), enhancing grid stability, and improving peak load management. As of March 2025, India's installed BESS capacity stands at approximately 500 MWh, with strong momentum building through policy and market support. It is expected that by FY 2032, India will have 47.2 GW or 236.2 GWh of installed battery energy storage systems.

India's BESS ecosystem is witnessing a gradual transformation, driven by falling global battery prices, policy support, and early-stage supply chain developments. This trend has directly improved the commercial viability of large-scale BESS projects, especially when coupled with Viability Gap Funding (VGF) support.

To support this momentum, the government approved VGF scheme with an outlay of ₹ 9,400 crore, including ₹ 3,760 crore as budgetary support, to develop 4,000 MWh of BESS projects by FY 2031.

To ensure long-term storage readiness, the Energy Storage Obligation (ESO) mandates entities to procure a rising share of energy from storage, growing from 1% in FY 2024 to 4% by FY 2030, with 85% sourced from renewables. These initiatives, alongside PLI-backed manufacturing, position BESS as a key enabler of India's net-zero ambitions by 2070.

Green Hydrogen

Produced through electrolysis powered by renewable energy, green hydrogen offers a low-emission alternative to fossil fuels in hard-to-abate sectors like steel, cement, shipping, and aviation. The Ministry of New and Renewable Energy defines green hydrogen as having a well-to-gate emission (i.e., including water treatment, electrolysis, gas purification, drying, and compression of hydrogen) of not more than 2 kg CO_2 equivalent per kg H_2. Its derivatives like green ammonia and green methanol are also emerging as sustainable inputs for fertilizers, chemicals, and alternative fuels.

Realising the importance of green hydrogen, the Indian government has embarked on the Green Hydrogen Mission with the aim of making India the global hub for the production, usage, and export of green hydrogen and its derivatives, serving as an inspiration for the global clean energy transition. India has set an ambitious target of producing 5 million metric tonnes (MMT) of green hydrogen annually by 2030, which will require an additional 125 GW of renewable energy capacity. The National Green Hydrogen Mission, with a total outlay of ₹ 19,744 crore, is expected to catalyse over ₹ 8 lakh crore in investments and create 6,00,000 jobs. India is actively pursuing strategic partnerships with various countries, including Japan, South Korea, and the EU, to promote green hydrogen exports. These partnerships are aimed at fostering collaboration in green hydrogen production, infrastructure development, and trade.

Company Overview

About JSW Energy Limited

JSW Energy, the energy arm of the USD 23 billion JSW Group, has grown into one of India's largest and most diversified Independent Power Producers (IPPs) since commencing commercial operations in 2000. With assets strategically spread across the country, the Company has evolved from a conventional power generator into a comprehensive provider of advanced and reliable energy products and services.

JSW Energy's portfolio includes thermal, renewable, and hydroelectric power generation, with an increasing focus on delivering reliable and dispatchable next-generation energy solutions such as battery energy storage and pumped hydro storage projects. The Company is also entering into wind equipment manufacturing for captive use to de-risk its supply chain and is also leading the development of green hydrogen and its derivatives business, including India's largest commercial-scale green hydrogen project (3,800 TPA) for green steel production. By integrating these innovations into its business model, JSW Energy is not only accelerating the decarbonisation of India's power sector but also supporting the nation's energy security needs. With the 1.6 GW ultra-supercritical greenfield thermal power project at Salboni in West Bengal, the Company's re-entry into greenfield thermal development after more than a decade, reflects its dual focus on clean energy transition and reliable baseload capacity.

In FY 2025, the Company achieved a key milestone by crossing 10 GW of installed capacity, adding 3.6 GW during the year to reach 10.9 GW capacity as of 31st March, 2025. Subsequently, JSW Energy has completed the acquisition of 02 Power's 4.7 GW RE platform on 9th April, 2025, including 1.3 GW of operational assets, taking the installed capacity to 12.2 GW. With another 12.5 GW of projects under construction (where offtake contracts have been signed) and a robust pipeline where LoA (Letter of Award) / LoI (Letter of Intent) has been received, the Company's locked-in generation capacity now stands at 29.9 GW. The Company has also made rapid progress in energy storage, with a portfolio of 29.3 GWh of storage projects - consisting of both and hydro pumped storage (26.4 GWh) and battery energy storage (2.9 GWh). These include 12 GWh pumped hydro project in Maharashtra under PPA with MSEDCL and another 12 GWh pumped hydro project in Uttar Pradesh with PPA signed with UPPCL — underscoring JSW Energy's commitment to delivering reliable and flexible energy solutions.

Building on this momentum, the Company has revised its 2030 targets under Strategy 3.0, now aiming for 30 GW of generation capacity and 40 GWh of energy storage by then.

In FY 2025, the Company achieved a key milestone by crossing 10 GW of installed capacity, adding 3.6 GW during the year to reach 10.9 GW capacity as of 31st March, 2025

Solar Power Plant, Vijayanagar

With strong execution capabilities, disciplined capital allocation, and a robust financial foundation, JSW Energy is building a future-ready, low-carbon energy platform aligned with India's long-term clean energy goals. JSW Energy has committed to become carbon-neutral by 2050. This ambitious goal aligns with India's broader targets for net-zero emission and renewable energy development. This is reflected in the Leadership Band 'A' score in the CDP Climate Change rating as well as 77/100 score in the Dow Jones Sustainability Index Rating. The company is placed amongst the highest-rated power generation companies in India by various independent ESG rating agencies.

FY 2025: A Landmark Year of Record Performance and Strategic Progress

The fiscal year 2025 was a milestone year for JSW Energy, marked by exceptional progress on both financial and strategic fronts. The Company delivered industry-leading growth, strengthened its share of long-term contracts giving strong visibility of earnings and cash flows, and continued to advance on sustainability and organisational excellence.

Record Financial Performance: Reported highest-ever annual EBITDA of ₹ 6,115 crore and record PAT of ₹ 1,951 crore. On a proforma basis, including the full-year impact of acquisitions, EBITDA for FY 2025 stood at ₹ 8,858 crore and cash PAT stood at ₹ 4,679 crore, up 45% YoY.

Sector Leading Capacity Addition: Added 3.6 GW of capacity during FY 2025, achieving a total installed capacity of 10.9 GW as of 31st March, 2025. This was supported by sector-leading organic wind capacity addition of 1.3 GW during the year, accounting for one-third of India's total wind capacity addition in FY 2025. The company also completed acquisition of the KSK Mahanadi Power Plant, which consists of 1,800 MW of operational capacity.

Sustainability & ESG Leadership: In FY 2025, the Company achieved a sector-leading ESG rating of 'A' from MSCI, reflecting its commitment to responsible and sustainable operations. JSW Energy continued to build out its renewable and storage platforms, underscoring its role in India's clean energy transition.

People and Culture: JSW Energy was certified a Great Place to Work® for the third consecutive year and was ranked among the Top 25 Best Workplaces in the Manufacturing Sector in India. These recognitions reaffirm the Company's focus on fostering an inclusive, high-performance culture as it scales new heights.

JSW Energy has committed to become carbon-neutral by 2050. This ambitious goal aligns with India's broader targets for net-zero emission and renewable energy development.

Solar Power Plant, Vijayanagar

Successful Completion of ₹ 5,000 Crore QIP

The Company successfully raised ₹ 5,000 crore through a Qualified Institutional Placement (QIP) in April 2024. This strategic capital raise, our first since our listing in 2010, helped build a strong liquidity buffer to accelerate growth across renewables, energy storage, and new energy solutions. The QIP saw an overwhelming participation from marquee global long-only investors, domestic mutual funds, and insurance companies. This success reinforces our track record of disciplined capital allocation, execution excellence, and a strong pipeline of value-accretive projects. It further strengthened our robust balance sheet and enhanced our financial flexibility to fast-track growth aligned with our ambitious Strategy 3.0 roadmap.

Strategy 3.0: Revised Growth Roadmap for 2030

Having meaningfully surpassed the 10 GW operational capacity target by FY 2025, JSW Energy is now entering an accelerated phase of growth with Strategy 3.0. This next chapter outlines our bold ambition to triple generation capacity to 30 GW and target 40 GWh of energy storage capacity by FY 2030. This reinforces our long-standing commitment to India's energy transition and national energy security.

To realise this vision, we plan to invest ₹ 1,30,000 crore in cumulative capital expenditure over FY 2026 to FY 2030. This investment is expected to deliver FY 2030 EBITDA run-rate of 2.7x - 3.0x of FY 2025 proforma EBITDA. Further, we will continue to remain selective and conservative and will keep adopting a mindful approach while tapping new opportunities.

JSW Energy will continue to pursue a balanced energy mix of two-thirds green and one-third conventional capacity by FY 2030, while gradually evolving into a full-spectrum energy solutions provider. With disciplined capital allocation, strong execution, and a de-risked business model, we are building a resilient, sustainable, and future-ready energy platform.

Value-Accretive Acquisitions Across Thermal and Renewables

Thermal

During the year, JSW Energy has completed the acquisition of 74% stake (balance 26% is with the erstwhile lenders constituting the Committee of Creditors) in the KSK Mahanadi plant through the IBC (Insolvency and Bankruptcy Code) route, adding a strategically located 1,800 MW (3 x 600 MW) operational asset, with an optionality to expand by another 1,800 MW at the same location. 95% of this operational capacity is tied up under PPA with UPPCL and TANGENDCO. The plant benefits from long-term fuel supply agreements with nearby coal mines in Chhattisgarh and Odisha, ensuring fuel security. The transaction values the asset for the resolution amount of ₹ 16,084 crore. This acquisition not only enhances our operational capacity but also strengthens our ability to deliver a reliable power supply, further solidifying our position as a leader in India's energy sector.

Renewables

In another strategic and bold move, JSW Energy signed a share purchase agreement in FY 2025 and completed the acquisition of 02 Power, a 4.7 GW RE platform on 9th April, 2025. This platform portfolio consists of 1,903 MW of solar, 750 MW of wind and 2,056 MW of hybrid/RTC solutions, and was acquired at an enterprise valuation of approximately ₹ 12,468 crore. The portfolio is predominantly tied to high-quality offtakers, such as SECI, SJVN, and NTPC, ensuring long-term stability and revenue visibility. As of FY 2025, 02 Power's installed capacity stands at 1,343 MW. Additionally, we estimate another ~₹ 13,500 crore of capital expenditure will be incurred to reach 4,709 MW of capacity by June 2027.

The Company also acquired 125 MW of renewable energy assets from the Hetero Group, comprising wind projects in Andhra Pradesh and Maharashtra, at an enterprise value of approximately ₹ 684 crore. These assets have a blended tariff of ₹ 5.22/unit and an average residual life of 15 years.

Additionally, the Company acquired a 45 MW operational wind project in Vashpet, Maharashtra, further strengthening its renewable portfolio. Both these acquisitions are fully operational, revenue-generating from day one, and aligned with JSW Energy's strategy of value-accretive growth.

Business Segments

Power Generation

The Company is primarily engaged in power generation business, with a well-diversified portfolio of thermal and renewable assets spread across multiple geographies in India. The total locked-in generation capacity stands at ~30 GW.

Portfolio as of FY 2025

Installed
10,875 MW

Under-construction – PPA signed
12,479 MW

Total locked-in
29,863 MW

02 Power Installed Capacity Acquired on 9th April, 2025
1,343 MW

Pipeline – LoA/LoI received, PPA yet to be signed
5,166 MW

Installed Projects

Installed	Capacity (MW)
Barmer	1,080
Ratnagiri	1,200
Vijayanagar	860
Nandyal	18
Utkal	700
KSK Mahanadi	1,800
Total Thermal	**5,658**

Hydro Power Plants

Installed	Capacity (MW)
Baspa II	300
Karcham Wangtoo	1,091
Total Hydro	**1,391**

Solar Plants

Installed	Capacity (MW)
Vijayanagar	225
Rooftop and captives	28
Mytrah Solar	422
Barmer - Captive for TPP	5
Total Solar	**680**

Wind

Installed	Capacity (MW)
Mytrah Wind	1,331
SECI X (Renew Two)	454
SECI IX (Renew Energy)	670
JSW Steel (Sandur)	415
JSW Steel - Dolvi 1	69
JSW Steel - Salem 1 (TN)	38
Vashpet	45
Hetero Group	125
Total Wind	**3,146**

Total **10,875 MW**

Under construction I PPA Signed - 12,479 MW

Under Construction	Contracted	Installed
Salboni	1,600	1,600
Thermal	**1,600**	**1,600**
Kutehr	240	240
Total Hydro	**240**	**240**
SECI IX	140	140
Group Captive	216	216
SECI XII	300	300
SECI XVI	1,025	1,025
C&I	182	182
02 Power	480	480
Total Wind	**2,343**	**2,343**
SJVN (Tranche I)	700	700
SECI XIII	700	700
GUVNL (Khavda)	300	300
NTPC Solar II	700	700
Pavagada (Karnataka)	300	300
Group Captive Solar	98	98
C&I	130	130
02 Power	830	830
Total Solar	**3,758**	**3,758**
Group Captive	965	1,285
GUVNL (Phase 2)	192	234
MSEDCL (Hybrid III &IV)	1,200	1,600
C&I	259	339
02 Power	658	1,080
Total Hybrid	**3,274**	**4,538**
Total	**11,215**	**12,479**

Pipeline Projects

Letter of Award/Intent Received - Pipeline 5,166 MW

Pipeline	Contracted	Installed
NTPC Solar III	400	400
SECI XV (Solar +ESS)	500	500
Total Solar	**900**	**900**
Adani Energy - Wind I	250	250
Total Wind	**250**	**250**
SECI (Hybrid VIII)	300	330
SJVN (Hybrid - II)	300	330
NTPC (Hybrid VI)	300	330
Group Captive	250	250
02 Power	770	976
Total Hybrid	1,920	2,216
Total Pipeline	**3,070**	**3,366**

KSK Thermal Growth Optionality	1,800	1,800

Power Transmission

Jaigad Power Transco Limited (JPTL) a 74:26 joint venture between the Company and Maharashtra State Electricity Transmission Company Limited (MSETCL) owns and operate two 400 kV transmission lines in Maharashtra supporting a stable electricity supply in the region.

Power Trading

Nearly two decades ago, JSW Energy established JSW Power Trading Company Limited (JSWPTC) as a strategic step toward its vision of becoming a full-spectrum energy company. Today, JSWPTC is recognised as one of India's leading power trading entities. It holds a Category "IV" licence from the Central Electricity Regulatory Commission (CERC), enabling it to trade electricity across the country. The company is an active member of all major power exchanges, including the Indian Energy Exchange (IEX), Power Exchange India Limited (PXIL), and Hindustan Power Exchange Limited (HPX).

Operational Review

The Company's net generation increased by 16% at 32.4 BUs in FY 2025, driven by higher thermal and hydro generation, and organic wind capacity additions. Total RE generation increased by 24% to 11.6 BUs in FY 2025 driven by contribution from both acquired and greenfield RE capacity additions. Total thermal generation is up 12% YoY at 20.8 BUs. The Company reported a total income of ₹ 12,639 crore in FY 2025 as compared to ₹ 11,941 crore in FY 2024.

Thermal power plants

Vijayanagar

Capacity: 860 MW

PLF: The plant comprises two Strategic Business Units:

(SBUs) – SBU 1 and SBU 2. In FY 2025, the plant achieved an average actual PLF of 59% as against 58% in FY 2024.

Total Gross Power Generated: 4,420 MUs

Net Generation: 4,085 MUs

Power Sales: The capacity is 100% tied up in Group Captive from Q1 FY 2026

Key Strengths of the Plant:

- Fully tied-up under group captive arrangement
- Operationally strong plant leading to high fuel efficiency, lower O&M cost and higher PLF efficiency
- Provision to blend up to 50% of domestic coal with imported coal increases operational flexibility

Ratnagiri

Capacity: 1,200 MW

PLF: In FY 2025, the plant operated at an average deemed PLF of 94% as against 98% in FY 2024

Total Gross Power Generated: 8,589 MUs

Net Power Generated: 7,880 MUs

Power Sales: Long-term sales to Group captive consumers, Maharashtra State Electricity Distribution Company Limited (MSEDCL) and other third-party industrial consumers under PPA. Short-term/merchant sales to distribution companies and on power exchanges in India.

Key Strengths of the Plant

- Strategic location near the Jaigad port lowering cost of coal transportation
- High recovery and robust ROE as 92% capacity is tied up under long-term PPAs
- Provision to blend up to 50% of domestic coal with imported coal increases operational flexibility

Barmer

Capacity: 1,080 MW

PLF: In FY 2025, the plant achieved an average deemed PLF of 77% as against 78% achieved in FY 2024

Total Gross Power Generated: 6,761 MUs

Net Power Generated: 6,000 MUs

Power Sales: To Rajasthan DISCOMs

Key Strengths of the Plant:

- Assured fuel (lignite) availability sourced from pit-head captive lignite mines under a Long-Term Fuel Supply Agreement
- Full recovery of fuel cost and fixed cost, including ROE ensured by the long-term PPA with DISCOMs for full capacity

KSK Mahanadi (6th March, 2025 onwards)

Capacity: 1,800 MW

PLF: In FY 2025, for the period under consolidation, the plant achieved an average deemed PLF of 99%.

Total Gross Power Generation: 849 MUs

Net Generation: 790 MUs

Power Sales: 95% of the total capacity is tied up under long-term PPA with UPPCL and TANGENCO.

Key strengths of the Plant:

- The assets is located near the coal blocks of Chhattisgarh
- The Plant has fuel security in terms of Long-term fuel supply agreements with nearby coal mines in states of Chhattisgarh and Odisha

JSW Energy (Utkal) Limited

Capacity: 700 MW

PLF: In FY 2025, the plant achieved an actual PLF of 65% as against 63% in FY 2024. Unit-2 became fully operational towards end of FY 2025

Total Gross Power Generated: 2,092 MUs

Net Power Generated: 1,935 MUs

Power Sales: Currently selling in short-term market

Key Strengths of the Plant:

- Low fixed cost and located near key resources

Nandyal

Capacity: 18 MW

PLF: In FY 2025, the plant achieved an average deemed PLF of 100% same as in FY 2024

Total Gross Power Generated: 92 MUs

Net Power Generated: 82 MUs

Power Sales: Long-term sales to Group company under captive mechanism.

Key Strengths of the Plant:

- 100% LT PPA under Group Captive scheme

Hydro power plants

Baspa-II

PLF: The plant achieved an average PLF of 52% for FY 2025 as against 44% in FY 2024

Total net power generated after auxillary consumption: 1,351 MUs

Power sales: To Himachal Pradesh State Electricity Board (HPSEB)

Key Strengths of the Plant:

- 100% LT PPA with HPSEB ensuring full recovery of fixed cost

Karcham Wangtoo

PLF: The plant achieved an average PLF of 50% for FY 2025 as against 41% in FY 2024

Total net power generated after auxillary consumption: 4,511 MUs.

Power sales: Uttar Pradesh, Rajasthan, Haryana, and Punjab DISCOMs through long-term PPA with PTC India Limited

Key strengths of the plant:

- 100% LT PPA with PTC India Limited, which in turn has PSA with various discoms ensuring full recovery of fixed cost, including ROE under the Central Electricity Regulatory Commission (CERC) regulations

Kutehr Hydroelectric Project

JSW Energy (Kutehr) Limited, is a wholly-owned subsidiary of JSW Neo Energy.

Kutehr Hydroelectric Project (3x80 MW Kutehr HEP) with 240 MW capacity is located in the upper reaches of Ravi Basin in district Chamba of Himachal Pradesh. Signed 35-year PPA with Haryana Power Purchase Center. Commissioning of the plant is expected in June 2025.

Solar power plants

Operational solar capacity: 680 MW

Net Power Generated: 1,286 MUs

The solar plants operated at a blended CUF of 22% during FY 2025

Power Sales: Captive tie-up within JSW Group and various state DISCOMs

Wind power

Operational Wind capacity: 3,146 MW

Net Power Generated: 4,462 MUs

The wind assets operated at a blended CUF of 21% during FY 2025

Power Sales: Sales to SECI, Captive tie-up within JSW Group and various state DISCOMs

Financial Review including Financial Ratios

Standalone Financial Performance

Revenue from Operations

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
Sale of Power	3,780.03	2,535.24	-33%
Interest Income on Assets under Finance Lease	59.91	56.54	-6%
Sale of Goods	118.80	0.02	-100%
Sale of Services	1,151.41	1,302.31	13%
Other Operating Revenue	18.94	45.20	139%
Total	**5,129.09**	**3,939.31**	**-23%**

In FY 2025, revenue from operations stood at ₹ 3,939.31 crore as compared to ₹ 5,129.09 crore in the previous year. The fall in operating revenue is primarily due to lower short-term sales, lower fuel cost (which is pass-through in nature under PPA) and increased job work arrangements in the current year for power generation.

Other Income

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
Interest Income	93.22	201.75	116%
Dividend Income from Long-term Investments	74.69	348.34	366%
Net Gain on Sale of Investments	15.46	67.18	335%
Other Non-Operating Income	27.03	63.27	134%
Total	**210.40**	**680.54**	**223%**

Other income increased in the current fiscal, primarily on account of higher dividend income from investments and higher treasury income.

Cost of Fuel

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
Cost of Fuel	2,730.82	1,987.02	-27%

The cost of fuel decreased primarily due to lower short-term sales and increase in quantum of power sold under the job work. Under job work agreements, the coal is provided by the customer while the Company converts this coal into power and supplies to the customer. In addition, this year, we have witnessed a declining trend in coal prices, resulting into fuel cost of ₹ 1,987.02 crore, a decline of 27% as compared to previous year.

Expenses

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
Employee Benefit Expense	153.23	203.26	33%
Finance Costs	477.87	365.06	-24%
Depreciation and Amortisation Expenses	269.54	243.26	-10%
Other Expenses	409.56	513.11	25%

Employee Benefit Expenses increased by 33% primarily due to increase in headcount and normal salary increments while Finance Cost declined by 24% primarily due to decrease in working capital loans and loans from related parties.

EBITDA and Profit After Tax

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
EBITDA before Exceptional Items	1,928.72	1,887.14	-2%
Profit/(Loss) After Tax	950.22	1,221.00	28%

EBITDA declined to ₹ 1,887.14 crore in FY 2025 from ₹ 1,928.72 crore in the previous year. The Company's standalone PAT increased to ₹ 1,221.00 crore in FY 2025, as compared to ₹ 950.22 crore in FY 2024.

Ratio

Parameters	FY2024	FY2025	Change (%)	Reason
Debtors Turnover (Number of days)	49	62	27%	The absolute average trade receivables are almost in line with previous year. However, revenue from operations has reduced due to lower short-term sales and increased job work arrangements which has led to an increase in number of days.
Inventory Turnover (Number of days)	78	60	-23%	Decrease was primarily on account of decrease in inventory.
Interest Service Coverage Ratio	6.22	6.40	3%	Increase is due to increase in earnings
Current Ratio	0.58	0.55	-4%	Decrease was primarily on account of Increase in current liabilities (mainly increase in current borrowings)
Debt Equity Ratio	0.46	0.44	-5%	Decrease due to increase in Net Worth
Operating EBITDA Margin (%)	33.50	30.63	-9%	Decrease is due to decrease in short-term sales
Net Profit Margin (%)	17.80	26.43	49%	Increase is due to increase in Profitability

Consolidated Financial Performance

The Company's Total Income increased by 6% to ₹ 12,639.49 crore from ₹ 11,941.34 crore in FY 2024, while EBITDA for the year grew by 5% YoY to ₹ 6,114.92 crore from ₹ 5,837.21 crore driven by Renewable Energy capacity additions, contributions from JSW Energy (Utkal) Limited and KSK Mahanadi Power Company Limited, thermal power plants. Consolidated Profit After Tax increased by 13% YoY to ₹ 1,950.89 crore, as compared to ₹ 1,722.71 crore in FY 2024. Consolidated Net Worth and Net Debt as on 31st March, 2025 were ₹ 27,361.43 crore and ₹ 43,961.71 crore, respectively, resulting in Net Debt to Equity ratio of 1.6x. Net Debt to EBITDA[1] stood at 5x, with Net Debt to EBITDA[1] (excl. CWIP) at a healthy 3.9x.

[1] Proforma TTM EBITDA including full year EBITDA of KSK Mahanadi Power Company Limited and Hetero Group company assets.

Income & Expenses (Consolidated)

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
Revenue from Operations	11,485.91	11,745.39	2%
Other Income	455.43	894.10	96%
Fuel Cost	4,581.60	4,456.03	-3%
Purchase of Stock-in-Trade	124.79	140.39	13%
Employee Benefit Expenses	364.47	464.29	27%
Finance Costs	2,053.40	2,269.13	11%
Depreciation and Amortisation Expenses	1,633.41	1,654.64	1%
Other Expenses	1,032.64	1,463.86	42%

EBITDA and Profit After Tax

(₹ crore)

Parameters	FY 2024	FY 2025	Change (%)
EBITDA before Exceptional Items	5,837.21	6,114.92	5%
Profit for the Year	1,722.71	1,950.89	13%
Other Comprehensive Income	775.34	1,338.46	73%
Total Comprehensive Income	2,498.05	3,289.35	32%

Risk Management and Mitigation

JSW Energy follows the globally recognised 'COSO' framework of Enterprise Risk Management (ERM). ERM brings together the understanding of the potential upside and downside of all those factors which can affect the organisation with an objective to add maximum sustainable value to all the activities of the organisation and to various stakeholders.

The Company recognises that the emerging and identified risks need to be managed and mitigated to:

- Protect its shareholders and other stakeholder's interest,
- Achieve its business objective, and
- Enable sustainable growth.

Pursuant to the requirement of Regulation 21 of the Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations, 2015 and the Companies Act, 2013, the company has a Risk Management framework in place. It has constituted a committee of Directors to oversee Enterprise Risk Management framework to ensure:

- Execution of decided strategies with focus on action, and
- Monitoring risks arising out of unintended consequences of decisions or actions related to performance, operations, compliance, incidents, processes, systems and the same are managed appropriately.
- The Risk management process and structure is given below:
  - **Department Heads at Plants:** Identification, assessment, response and tracking of risks is done by the Risk Owners (Department Heads) at respective locations.
  - **Plant Heads:** Risk identified by the Risk Owners at the plant level is reviewed by the respective Plant Heads. Plant level integration across the Plants is done to ensure consistency in risk identification and benchmarking.
  - **Senior Management at Corporate:** Risks at all the plants, contingency planning and organisational risks requiring review of macro environment, policies,processes are discussed at the corporate level.
  - **Board of Directors:** Oversee the Risk strategy and Risk Management framework, reviews the key risks and mitigation plans.
  - All these activities are coordinated by the Chief Risk Officer.

Risks and their mitigation plans:

Type of Risk / Opportunity	Risk Movement	Impact	Risk Response Strategies
Demand fluctuations - Offtake risk	« »	Demand-supply dynamics impacting power demand and tariff rates	• The Company has already tied up 91% of its capacity through PPAs and long-term contracts • Power demand has grown at 4.2%, in FY 2025 creating a good opportunity in merchant power sector • The untied power is being sold on exchanges/ short-term contracts and under Section 11 • Untied power of Vijayanagar has now been tied up based on expansion plans of Group companies
Raw material availability and cost	»	During the year, thermal coal prices saw downward movement resulting in lower fuel cost.	• The imported coal prices have softened to USD 100-105 per ton in FY 2025 vs USD 110 per ton in FY 2024. Prices are expected to remain in this range The Company has moved to job work arrangement with group companies and for the balance capacity continues to manage this risk through: • Broadening sourcing options - different geographies, multiple vendors • Buying cheaper coal irrespective of the geography • Prudent hedging strategies to mitigate the foreign exchange fluctuations risk. Various contract options like long-term contracts and monthly / quarterly / spot contracts for cost effectiveness
Regulatory changes	« »	Ministry of Environment and Forests (MoEF) notified regulations for 100% utilisation of ash and legacy ash in an eco-friendly and time-bound manner. Any noncompliance would attract financial penalty.	• The Company's plants have been disposing most of their fly ash to cement manufacturers and brick manufacturers • The legacy ash is being used/would be used in highway expansion projects, land filling during Group companies' expansions; which are permissible eco-friendly ways defined in the MoEF notification • The legacy ash would fully be put to use much before the defined timeframe
Recovery of dues from DISCOMs	»	Due to poor financial health, payments from the DISCOMs against our power supply are delayed. This impacts the working capital cash flow	• DSO is generally healthy and regular follow-ups are done for the overdue payments
Interest rates	»	RBI reduced Repo rate by 1% to 5.5% p.a. as inflation has remained within target range of 4% to 6% p.a. US Fed has slashed its key interest rate by 100 bps since August 2024 to 4.5%	• Evaluation of growth projects are done on conservative basis over life of PPA. Hence, underlying cash flows and return metrics over a long-term have adequate protection from short-term volatility • The Company has followed a balanced approach in structuring its finances by having mix of fixed and floating rate of interest and mix of rupee and foreign currency loans • The Company has been renegotiating credit spreads and refinancing to arrest the impact of rate increase

Type of Risk / Opportunity	Risk Movement	Impact	Risk Response Strategies
Cyber security	⇈	Cyber security risk could result in substantial reputation and financial loss arising from: 1. Theft of corporate information 2. Theft of financial information (for E.g., Financial results, bank details, etc.) 3. Ransom ware – cyber extortion 4. Disruption to business	• Implementation of multi factor authentication for remote VPN access • Alternate disaster recovery secure VPN created for resiliency • Strengthening Incident Response process • On-boarding of an Incident Response Retainer services • Google Advanced phishing and malware protections features • Periodic critical security updates of Operating System (OS) for all the remote endpoints • Information security awareness campaigns • Controlling system vulnerability through Vulnerability Assessment and Penetration testing for all public facing assets • Implementation of Firewall hardening Rule Sets • ISO 27001:2013 certified for IT and OT function • Firewall remediation tool deployed and improvements done in identified areas • Subscribed to cyber insurance policy
Forex risk	Unchanged	Recent geo-political events have led to volatility in USD-INR rate ranging from 83 to 87	• The Company's robust hedging policy is reviewed by the Board and hedging is done accordingly • The Company hedges outstanding liability on Capital Expenditure • The Company has also hedged liability of USD Denominated Green Bonds as per scheduled repayment dates
Poor monsoon - Due to subnormal rainfall in the Karnataka state this year, the reservoir levels are very low as compared to last year.	⇊	Water availability and generation	• Developing adequate water storage facilities / water conservation (RO plant) • Changing chemical regime to increase COC (Cycle of concentration) • Promoting and enforcing strict water conservation measures across the plant • Exploring the feasibility to convert existing water-cooled condenser to air cooled condenser to conserve water as a long-term measure
Risk of operation interruption and loss of reputation due to unsafe working practices	New		• Review of Safety Governance by monitoring the progress of Various Safety Committees at both Renewable Energy and Thermal Power plants • External Safety Audits & closure of observations being done at all plants as per the legal & functional requirements • Safety Alerts to all plants to avoid repetitive incidents of a similar kind across different units • Monthly monitoring of Safety performance, closure of CAPA (corrective actions preventive actions) of incidents at all plants

Business Continuity Plan

The Company has a Business Continuity Policy duly approved by the Board. All the major generation plants have formulated Business Continuity Plans (BCP). The main objective of BCP is to maintain business continuity during / post disruptive incidents with an aim to minimise impact on:

- Human life and other living beings
- Environment and related eco systems
- Economic losses
- All stakeholders (such as employees, vendors, local communities, etc.)

The Company has been conducting awareness and training sessions and mock drills across the Plants on BCP.

Human Resource Management

Human capital is critical for strategic business growth at JSW Energy. The Company's HR policies play a crucial role to achieve the organisational objectives of growth, agility and increased productivity. Several new HR initiatives were undertaken during the year to enhance business efficiency and keep employee morale high. To provide a holistic growth environment and a superior employee experience, CARE (Communication, Agility, Responsibility and Elevation) continued to be at the centre stage of HR policies, and is an important aspect of being an engaging workplace and fostering a supportive work environment.

The CARE Model of JSW Energy

Working on the principle that "a well-Communicated employee who is Agile, becomes Responsible and is Elevated", CARE is a unique model implemented at JSW Energy, and its implementation has resulted in improved employee engagement. We recognise the importance of employee's health and wellness and are committed to fostering a culture of overall well-being and vitality within the JSW Energy family.

- **Communication:** A multi-level communication structure with multiple channels enables employee engagement at various levels. In addition to employee engagement, the structure also enables grievance redressal through two-way communication between employees and leadership. This is achieved through Quarterly townhall named as Samwaad, Business Review Meetings, Candid Conversations, Skip Level Meetings, Peer Group Meetings, Family Get-together etc. enabling dissemination of information and transparency in communication.
- **Agility:** To equip our employees with enhanced skills and to keep in pace with fast-paced developments happening in the business environment our capability building practices ensures higher level of employee engagement. A few initiatives launched are Annual Talent Review, Energy Leaders for Tomorrow and My Development plan which ensures grooming of internal high potential employees to take up higher roles.

Get Together for JSW Energy Family at Mumbai

- **Responsibility:** To foster employee safety and feedback, there are multiple avenues to ensure that the organisation empowers employees to share their voice through Great Places to Work Survey, improved infrastructure for female employees and safety trainings.
- **Elevation:** All improvements in the organisation are evaluated and duly rewarded. Multi-level Rewards & Recognition like Talent Konnect LAMHE (Long Service Awards), Safety Hero, Special Contribution Awards and Women of Energy ensures employees are recognised and rewarded for their contributions.

Employee Safety

JSW Energy is committed towards the health and safety of our employees and workmen and is certified with "Occupational Health and Safety Management System", and also aligned with ISO 45001:2018 standards that are applicable to all its operations. It has implemented the Safety Governance System, i.e., various safety committees are implemented at all operational and project sites to monitor and enhance the safety culture of the respective plant and every project site.

The JSW Energy Safety Management System is committed to preventing all injuries and work-related illnesses. The Company integrates health and safety as a core aspect of its operations, promoting a "Zero Harm" culture. Aspiring to exceed statutory health and safety requirements, it sets the highest safety standards and provides comprehensive training to employees, associates, contractors and suppliers on safe working practices.

The Company prioritises a safe and healthy workplace for all the employees, workers, and third-party stakeholders. The leadership team is conscious about the safety and health of the employees and workmen. It conducts a 'Safety Culture Survey' by an international third-party agency at project sites to understand the level of safety and areas of improvement. In FY 2025, about 25 instances of high-risk scenarios were identified collectively across various plants through the Barrier Health Management tool and these risks were mitigated with new safety systems to reduce their risk rating to below 8.

Total Quality Management

Total Quality Management, 'TQM', is an integral part of JSW Energy's sustainable journey enabling accomplishment of stated objectives. TQM is a part of the business culture DNA and it promotes our motto of "Better Every day".

TQM strengthens the capabilities of frontline employees, thereby encouraging them to participate in several regional, national and international quality competitions. The Company has been able to adopt a culture of continuous improvement with the help of TQM, furthering sustainable growth for the Company.

Across all plants, "Daily-Sunrise Meeting", a layered communication structure for daily work management, has helped in increasing employee engagement and involvement in the business improvement process.

TQM includes several practices like:

- organising business plans
- assisting for performance assessments
- reviewing in the TQM way
- visiting quality benchmark industries
- inter-plant quality cross learning
- implementing quality management tools for the business
- Kaizen competition
- 5S implementation

Corporate Social Responsibility (CSR)

The Company's CSR Policy is aimed at solving several considerations of the society through the process of social inclusion. Through the policy, its key objective remains to empower the communities we operate within, with a special focus on empowering women by engaging in special interventions and helping them become a strong and positive force for change.

CSR Vision

To empower communities with sustainable livelihoods.

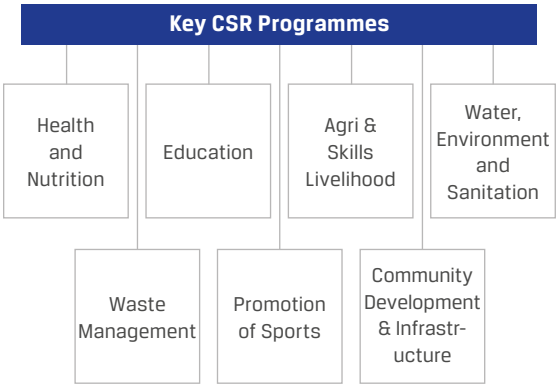
CSR Framework

Through JSW Foundation, our CSR interventions are aimed at achieving better outcomes by adopting the SAMMS approach, which is explained in the table below:

The SAMMS Approach

Aligned with Outcomes

Strategic	Shared Value
Aligned	Linked to Business Case
Multi-Stakeholder	Company not acting alone
Measurable	Demonstrable
Sustainable	Avoiding dependency



Please refer to the Social & Relationship capital section of this Integrated Annual Report on Page Number 192

Internal Control Systems

In keeping with the size and nature of its business and complexity of its operations, the Company has in place a well-designed and strong internal control system with features that include:

- Preparation of annual budgets and its regular monitoring
- Control over transaction processing and ensuring integrity of accounting system by deployment of an integrated ERP system
- Well documented authorisation matrix, policies, procedures and guidelines covering all important operations
- Deployment of a compliance tool to ensure compliance with laws, regulations and standards
- Testing of internal financial controls over reporting by internal auditors and statutory auditors to ensure reliability of financial information
- Protection of Company's assets/resources against any loss through adequate insurance
- A comprehensive Information Security Policy and continuous updation of IT systems
- Review by the Board appointed Audit Committee, comprising of Independent Directors who are experts in their respective fields

All audit plans are regularly monitored by the Audit Committee which is responsible for ensuring adequate internal control measures are in place. It reviews significant audit findings and ensures audit recommendations are effectively implemented.

Internal Audit

JSW Energy has an integral Internal Audit function that inculcates best global standards and practices of international majors into its operations. The Company has a strong Internal Audit Department that reports to the Audit Committee comprising of Independent Directors who are experts in their respective fields.

The Company successfully integrated the COSO framework with its audit process to enhance the quality of its financial reporting compatible with business ethics, effective controls and governance. The

Pooling Station, Dharapuram

Company extensively practices delegation of authority across its team, which creates effective checks and balances within the system to identify and correct all possible gaps. The Internal Audit team has access to all information in the organisation facilitated by the ERP implementation across the organisation.

The Internal Audit Department prepares risk-based audit plans, whereby the frequency of audit is decided based on the risk ratings of the respective areas/ functions. The audit plan is approved by the Audit Committee and executed by the Internal Audit team. It is reviewed periodically to include areas that have assumed significance in line with emerging industry trends and growth of the Company.

In addition, the Audit Committee also places reliance on internal customer feedback and other external events for the inclusion of additional areas into the audit plan besides regularly reviewing significant Internal Audit findings.

Internal Financial Control

As per Section 134(5)(e) of the Companies Act 2013, the Directors have an overall responsibility for ensuring that the Company has implemented a robust system and framework of Internal Financial Controls. The Company has already developed and implemented a framework for ensuring Internal Controls over Financial Reporting. This framework includes entity-level policies, processes controls, IT General Controls and Standard Operating Procedures (SOP).

The entity-level policies include anti-fraud policies (such as code of conduct, conflict of interest, confidentiality and whistleblower policy) and other policies (such as Organisation structure, Insider Trading policy, HR policy, IT security policy, Treasury policy and Business continuity and disaster recovery plan).

The Company has also prepared a risk control matrix for each of its processes such as procure to pay, order to cash, hire to retire, treasury, fixed assets, inventory and manufacturing operations. These Internal Controls are reviewed by the Internal and Statutory Auditors every year.