

M&A Hotline

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FROM AMBITION TO ACTION: INDIA'S BLUEPRINT FOR A GREEN FUTURE

- The 2025-26 Budget focuses on expanding renewable energy through nuclear power, rooftop solar, and incentives for domestic manufacturing of green technologies.
- Significant challenges, including regulatory delays and an investment shortfall, need to be addressed, with private sector involvement being key.
- Successful implementation could position India as a global renewable energy leader, driving economic growth and job creation, but requires overcoming financial and regulatory hurdles.

Coming into 2025, expectations for India's renewable energy budget were sky-high. After a year of mixed progress in 2024, where solar and wind capacity saw steady growth but challenges like funding gaps and policy hurdles hindered the momentum, stakeholders were looking for bold allocations to supercharge the green transition.¹ In 2024, the country added 28.64 gigawatts ("GW") of renewable capacity, more than doubling the 13.05 GW added in 2023. As of December 2024, India's installed non-fossil fuel-based capacity stood at 225.8 GW, comprising 97.9 GW solar, 48.2 GW wind, and 46.9 GW hydro.²

With India's ambitious goal of 500 GW of non-fossil fuel capacity by 2030, out of which 200 GW has already been achieved³, the Union Budget for 2025-26 introduced on February 1, 2025⁴ (the "Budget") was anticipated to provide the financial push needed to accelerate investments, strengthen infrastructure, and drive innovation.⁵ The Budget attempted to address these expectations through key initiatives which emphasize financial support, infrastructure development, and innovation to accelerate India's renewable energy transition.

KEY INITIATIVES INTRODUCED BY THE BUDGET

The Budget signals a powerful push towards a sustainable, clean energy future. With several initiatives aimed at expanding renewable energy capacity, reducing emissions, and fostering green manufacturing and clean technologies, the country is positioning itself to meet ambitious energy goals and play a central role in global decarbonization efforts and the supply chain. The Indian government ("Government") has notably focused on a new participant in the energy mix, i.e., nuclear energy, as a part of India's long term energy transition strategy, whereas before there was more focus on traditional sectors such as solar energy, as witnessed by the budget announcements of the past.

Some of the key initiatives for renewable energy growth are as follows:

- **Nuclear Energy Mission for Viksit Bharat:** The Government has set an ambitious target of 100 GW nuclear power capacity by 2047,⁶ and to meet this it has launched a Nuclear Energy Mission with an allocation of INR 200 billion (approx. USD 2.3 billion). This initiative focuses on the research and development of Small Modular Reactors ("SMRs"). India aims to develop and deploy 5 operational SMRs by 2033, contributing an additional 1-2 GW of clean energy to the grid. Given nuclear energy's high-capacity factor (typically above 90%), SMRs will provide stable, reliable energy, complementing intermittent renewable sources like solar and wind. This effort will help reduce dependency on fossil fuels, and the expected clean energy generation will offset millions of tons of CO2 emissions, aiding India's long-term carbon neutrality goals.⁷

The Nuclear Energy Mission for Viksit Bharat marks a shift in India's energy strategy, giving a push to nuclear power alongside traditional renewables and emphasizing on indigenous nuclear technology and public-private collaborations. While the Union Budget 2024-25 mainly funded research in nuclear energy, the Budget is now pushing for real-world deployment, especially through SMRs.

To facilitate private sector participation in nuclear projects, the Government also plans to amend the Atomic Energy Act and the Civil Liability for Nuclear Damage Act. These amendments are expected to encourage private sector investments in nuclear power projects.⁸ However, given that foreign investment is not permitted in the sector, the avenues for expansion may be limited.

- **Pradhan Mantri Surya Ghar Muft Bijli Yojana:** A flagship rooftop solar initiative, this scheme has been allocated INR 200 billion (approx. USD 2.3 billion). It aims to empower 10 million residential households to get their own electricity, providing 300 units of free electricity every month. This program is expected to add 3,600 MW of solar power capacity to India's grid, furthering India's solar energy target of 280 GW by 2030⁹. In addition to reducing dependence on grid power, the scheme will enable households to save on electricity costs and promote energy independence. It will also significantly contribute to decarbonization by reducing the consumption of fossil fuel-

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based power. As residential solar adoption grows, it will alleviate grid pressure and contribute to India's overall renewable energy generation.

In the Union Budget 2024-25, the allocation for solar projects was INR 73.27 billion (USD 843.6 million). The Budget significantly increases this allocation, reflecting the Government's intensified focus on expanding rooftop solar capacity.¹⁰ The scheme has been gaining traction, with about 1.4 crore registrations so far and approximately 2.6 million application submissions. Over 8,00,000 houses have been solarized under the scheme in just one year, nearly surpassing the total solar growth achieved in the previous decade.¹¹

- **Production-Linked Incentive ("PLI") Scheme Extension:** The PLI scheme is a Government initiative designed to boost domestic manufacturing by providing financial incentives to companies based on their incremental sales of products made in India. Initially launched to strengthen sectors like electronics and pharmaceuticals, the scheme has been extended to the renewable energy sector to enhance India's renewable energy infrastructure. This extension emphasizes India's commitment to enhancing its renewable energy infrastructure domestically. By focusing on local production, India can reduce its dependency on imports and further drive down the cost of renewable energy technologies.¹²

In the Union Budget 2024-25, the PLI scheme had a smaller allocation for renewable energy, with INR 15.4 billion (approx. USD 177.1 million) for advanced battery storage and INR 195 billion (approx. USD 2.24 billion) under Tranche-II for high-efficiency solar PV modules. In contrast, the Budget significantly expands the scheme with an additional INR 240 billion (approx. USD 2.76 billion), focusing on domestic manufacturing of solar photovoltaic cells, wind turbines, batteries, and electrolysis. The increased investment reflects the Government's shift from early-stage incentives to large-scale industrialization, aiming to enhance domestic capacity, reduce import dependence, and accelerate India's transition toward 500 GW of renewable energy by 2030.

- **Tax Relief and Incentives:** The budget includes tax relief for promotion of electric vehicle production, and incentives for renewable energy. The following measures aim to stimulate economic growth and support the transition to a greener economy.
- **Tax Holidays for Solar Power Projects:** The Government has extended tax holidays for solar power projects by an additional five years. This extension aims to incentivize investments in the solar sector, encouraging the development of renewable energy infrastructure.¹³ Solar energy remains the dominant contributor to India's renewable energy growth, accounting for 47% of the total installed renewable energy capacity.¹⁴ In contrast, other renewable sectors such as wind energy, green hydrogen, and bioenergy have not received similar tax holiday extensions, highlighting the Government's strategic focus on solar energy as the primary driver of India's renewable energy expansion.
- **Tax Relief for Electric Vehicle Production:** The budget includes tax relief measures to promote the production of electric vehicles which include elimination of basic custom duty on lithium-ion batteries used in electric vehicles and exemption of custom duty on 35 capital goods essential for battery production.¹⁵ This aims to stimulate economic growth and support the transition to a greener economy. The Indian electric vehicles market is experiencing rapid growth, with a valuation of approximately USD 14.18 billion in 2024 and an expected expansion at a compound annual growth rate (CAGR) of 38.8% from 2025 to 2030. Industry leaders have welcomed these budgetary measures, anticipating that the tax exemptions will reduce costs, boost sustainability, and advance India's green economy transition.¹⁶
- **Energy Transition Policy and Green Hydrogen Mission:** A detailed energy transition policy is being developed to chart a strategic course for reducing emissions in traditionally high-carbon sectors. Additionally, the National Green Hydrogen Mission is receiving increased funding to establish India as a key player in the global green hydrogen market. Green hydrogen could replace fossil fuels in these sectors, reducing emissions by up to 10-15% in the long term.¹⁷ Furthermore, hydrogen production will help reduce India's reliance on imported energy sources, promoting energy security while contributing to global emission reduction efforts.

In the Budget, the National Green Hydrogen Mission received an allocation of INR 6 billion (approx. USD 69 million), doubling the previous year's revised estimate of INR 3 billion (approx. USD 34.5 million).¹⁸ In contrast, the initial outlay for the mission, approved in January 2023, was INR 197.44 billion (approx. USD 2.27 billion), indicating a phased funding approach over multiple years.¹⁹

EFFECTIVENESS OF THE INITIATIVES PROPOSED IN THE BUDGET

The Budget's renewable energy initiatives have sparked both optimism and concern among industry stakeholders, reflecting the potential for significant progress alongside substantial challenges.²⁰

The INR 200 billion (approx. USD 2.3 billion) investment in SMRs has been welcomed as a promising addition to India's clean energy mix, offering reliable power to complement intermittent renewables like solar and wind. However, the nuclear energy sector remains cautious about long development timelines, high upfront costs, and public resistance to nuclear projects, which could delay their scalability. The challenges of regulatory approval and political acceptance also persist as roadblocks.

Similarly, the rooftop solar initiative has been hailed as a game-changer for increasing solar adoption in India's residential sector. While the scheme is a crucial step toward meeting India's solar energy targets and contributing to the overall goal of 280 GW of solar energy by 2030, the success of the initiative will depend on overcoming significant execution barriers such as regulatory delays, grid integration challenges etc. Without adequate infrastructure improvements and streamlined processes, the scheme could face substantial hurdles in its implementation.

However, in order to meet India's ambitious renewable energy targets, an estimated INR 450 trillion (approx. USD 5,175 trillion) investment will be required, which is not reflected in the Budget allocations. To meet this, it would be integral to rely on and encourage investment from private players, raising concerns about whether the current policy

environment is stable and attractive enough to sustain large-scale private participation.²¹

Beyond budgetary allocations, Indian banks and financial institutions have pledged major credit lines for renewable projects. The State Bank of India (SBI) has committed INR 3 lakh crore (approx. USD 34.5 billion) in green financing by 2030, and other public and private banks are expected to follow suit.²² However, even with public and institutional funding, a substantial gap remains, requiring approximately INR 250 trillion (approx. USD 5.175 trillion) from private investors to meet the renewable energy targets.²³

Private sector participation in India's power sector has shown significant momentum, with the third quarter of 2024 showcasing several high value investments in energy projects. A notable transaction is JSW Energy's acquisition of O2 Power's renewable energy platform. JSW Neo Energy, a subsidiary of JSW Energy, has entered into a definitive agreement to acquire a 4,696 MW renewable energy platform from O2 Power Pooling, a joint venture between EQT Infrastructure and Temasek, for an enterprise valuation of approximately USD 1.47 billion.²⁴

However, sustained investment depends on a predictable regulatory framework, simplified land acquisition, and financial incentives that de-risk long-term capital commitments. Challenges such as delayed payments by power distribution companies (DISCOMs), uncertainties in grid infrastructure, and policy shifts remain hurdles for private investors. While the Government's push for energy transition policies and increased research and development funding in the Union Budget 2024-25 helped lay the groundwork, the Budget shifts focus to operational expansion, particularly in green hydrogen, offshore wind, and nuclear energy.

CONCLUSION

The Budget takes a balanced approach, combining public investment with incentives to attract private capital. However, the success of India's energy transition hinges on ensuring policy stability, improving infrastructure, and addressing financial risks. While initiatives like PLI provide a strong base, private investment will flow only if regulatory challenges are addressed. If executed effectively, India's clean energy transition can drive long-term economic growth, create millions of jobs, and solidify the country's position as a global leader in renewable energy.

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⁴Available at https://www.indiabudget.gov.in/doc/budget_speech.pdf.

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