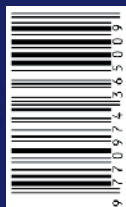


SPECIAL REPORT: SUSTAINABILITY

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THE BIG START-UP PLUNGE

WITH FUNDING DRYING UP AND
GOVERNANCE ISSUES SPIRALLING,
**INDIA'S ZOOMING START-UP
MACHINE HAS BEGUN TO NOSEDIVE**



**JOBS IN
DEMAND**
SKILLSETS FOR
THE FUTURE

**THE
ECONOMY**
GATHERING
STORM

**IPL MEDIA
RIGHTS**
BIG MONEY, HIGH
STAKES

TATA POWER: SPEARHEADING THE GREEN ENERGY TRANSITION

In a world shaped by geopolitical conflict and environmental crises, the buzz around sustainability and renewable energy is only getting louder. Energy and the environment are closely linked and thus put the power sector in a very unique position. Firstly, Power generation and distribution companies have the chance to make the required change and experiment with sustainability and embrace renewables, and Secondly: make suitable disruptions in R&D and future technologies for others to follow.



The COP26 climate change summit in Glasgow stressed the importance of achieving net-zero emissions while encouraging investment in clean technology. India is aiming to achieve its target of Net Zero emissions by 2070, with a vision to meet 50% of energy requirements from renewable energy by 2030.

In alignment with India's plan to combat climate change, and adhere to the UN Sustainable Development Goals, Tata Power is committed to its sustainability vision, while emphasizing responsible growth, driven by decarbonization, renewable energy, and innovation.

Transition to Green Energy

As one of India's largest integrated power companies, Tata Power aspires to be the 'Most preferred Green Energy Company' by proactively investing in the green portfolio and innovating with smart technologies for a future-ready business. With its 'Do Green' message, the company believes that small efforts taken today will lead to a greener tomorrow. With more than 100 years of legacy, Tata Power has a business footprint spread across 19 states and UTs. In 2015, 16% of the energy it produced was clean energy, with the remaining 84% met by coal-based sources. By 2021, it significantly expanded its green-field solar capacity, resulting in the clean energy output of 34%. Going by this trend, by

2030, 2 GW per annum renewable growth plans plus M&As, will result in 80% of Tata Power's energy output coming from clean sources, with the eventual phase-out of all coal-based generation and is one of the few companies aspiring to achieve its carbon neutrality targets by 2045 in addition. The Company has also committed to set emission reduction targets in alignment with the Science-Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets. Additionally, the company is also aspiring to be zero waste to the landfill before by 2030.

All along, the company has involved stakeholders, including employees and customers, in its sustainability journey. As a business, Tata Power is focusing on carbon capture/mitigation, while it has envisioned a zero-emission campus, where only EVs are used for in-campus travel. To push e-mobility, the company is bullish on charging infrastructure and has installed 2200+ public EV charging points in 350+ cities. Meanwhile, the opportunity for the sector to expedite its renewables roadmap is tremendous, thanks to the abundance of renewable resources for power generation in India. With an intent to get customers on board the sustainability bandwagon, Tata Power has already developed almost 1 GW of rooftop solar solutions in the residential & MSME segment, installed 65000+ solar pump-sets for the agriculture sector,

and has an installed wind energy capacity of 932 MW, with plants spread across seven states. Additionally, the company also has over 1.1 GW of manufacturing capacity for solar cells and modules. The gradual adoption of such solutions must encourage power companies to set out more in this di-





The power sector is banking on digitalization, which will bring in accuracy and precision, and make the entire power generation process more accountable while checking wastage. Big data, virtual power plants, demand response technologies, smart grids, IoT, AI, blockchain, use of drones can create a more flexible and efficient electricity system that delivers energy seamlessly across various consumer segments in the future.

Tata Power is enabling customers to be a part of its digital drive. As part of its smart grid technologies which promote energy savings, the company has initiated smart metering for customers in Mumbai and Delhi, where over 65,000 smart meters have already been installed. As a joint initiative between Tata Power, Tata Trusts, and the Government of India, the country's first-of-its-kind clean energy lab has also been established for startups, entrepreneurs and innovators, offering complete 'lab to market' incubation support to clean energy enterprises. The Company and Social Alpha have joined hands to build a unique innovation curation and venture development program 'Net-Zero Industry Accelerator' focused on industrial use cases of clean energy transition and industrial decarbonization contributing towards India's net-zero targets.

The Company is committed to leveraging technology in new-age businesses like EV Charging, Solar Rooftop, Home automation, and creating innovative low-carbon solutions for customers.

All-round mission

One of the fundamental aims of sustainability is to create a circular economy, by preventing wastage of resources and promoting recycling. Efficient waste management must be a norm across the value chain, to make the entire process sustainable, thus resulting in circularity. Setting up the blocks to contribute to a circular economy, Tata Power has taken significant strides in proactive waste management practices across its value chain, including maximization of fly-ash utilization and progressing to zero waste to landfill (in cases of PV panel disposal). Besides, it is adopting practices that will make it 100% water neutral before 2030.

Meanwhile, Tata Power strongly believes in resource conservation, energy efficiency, habitat protection, and the enrichment and development of local communities in and around areas of operations. For instance, Tata Power's hydro sites in Maharashtra have been in continuous harmony with nature for over 100 years in the Western Ghats, with the region surrounding the sites housing rich biodiversity. Also, with support from its employees, Tata Power is running a volunteering program (Arpan) which oversees multiple biodiversity conservation efforts, including Tree Mittra (to conserve native species) and Club Energi (to develop young conservation champions). The Company is also undertaking a GIS mapping in our hydropower plant areas which will help in assessing efforts toward carbon mitigation.

As part of its long-term efforts, the Mahseer conservation program, which was taken up in 1970 for ecological enrichment of the hydel lakes and to rehabilitate the Deccan Mahseer in Maharashtra, has helped the fish be declared as 'least concern' species in the IUCN red list. Besides, in Odisha, awareness is being created around elephant conservation, with 427 DTR fencing being constructed for public safety and the elephant corridor.

The larger premise of sustainability is to improve people's lives in tandem with the conservation of nature. Tata Power is constantly striving to strengthen ecosystems for inclusive education, digital and financial literacy, skilling, and livelihood of people within the community, through a variety of schemes such as Anokha Dhaaga, Abha, and Adhikaar, among others.

Through a range of varied initiatives to foster sustainability, and with industry doing its bit, India is poised for a green future, but the 'power' to change the world rests with us, the people.

rection, with lesser dependency on non-renewable sources, with the eventual goal of achieving decarbonization.

Future Ready Transition

With sustainability as the goal, companies must adopt the right technologies and digital tools that will ensure that they achieve it in time.

