

<u>INDIA</u>

India Energy Stack: Power Ministry Charts Digital Future of Energy Sector

Press Information Bureau June 28, 2025

The Ministry of Power has launched a task force to develop the **India Energy Stack** (**IES**), a groundbreaking digital public infrastructure aimed at creating a unified, secure, and interoperable backbone for the power sector. As India advances toward a \$5 trillion economy and its Net Zero goals, the IES will address existing digital fragmentation by enabling seamless data sharing, system integration, and innovation.

Key features of IES include:

- Unique IDs for consumers, assets, and transactions
- Real-time, consent-based data exchange
- Open APIs for system interoperability
- Tools to enhance consumer participation and energy market innovation

To demonstrate its real-world applicability, a 12-month **Proof of Concept (PoC)** will be carried out with selected utilities. This includes piloting the **Utility Intelligence Platform (UIP)**, a data-driven tool offering real-time insights for smarter energy management.

A multi-disciplinary **Task Force** of experts from technology, energy, and regulatory fields will oversee the development, implementation, and scale-up of IES, ensuring it becomes the digital foundation of India's evolving energy ecosystem.

Union Minister Highlights Wind Energy as Key Pillar of India's Renewable Future on Global Wind Day

Press Information Bureau June 15, 2025

Speaking at the Global Wind Day 2025 Conference in Bengaluru, Union Minister for New and Renewable Energy, Shri Pralhad Joshi, reaffirmed India's strong

commitment to wind energy, calling it central to the country's renewable energy roadmap.

He highlighted that India now manufactures wind turbines ranging from 225 kW to 5.2 MW, with 33 models developed by 14 companies, meeting both domestic and international market demands at competitive costs.

To fully harness India's wind energy potential, the Minister outlined five key priorities:

- Expanding wind power into new states like Madhya Pradesh, Telangana, and Odisha
- Launching offshore wind projects, with 4 GW of leasing areas identified in Gujarat and Tamil Nadu
- Integrating wind power into round-the-clock green energy supply through storage-linked models
- Upgrading grid infrastructure and using Al-based forecasting to manage variability
- Strengthening local manufacturing across the entire wind energy value chain.

These steps aim to create a coordinated national effort to scale up wind energy and solidify India's leadership in the global renewable sector.

Indian Oil to Build India's Largest Green Hydrogen Plant at Panipat by 2027

Economic Times June 01, 2025

Indian Oil Corporation Ltd. (IOCL) has announced plans to set up **India's largest green hydrogen plant** at its Panipat Refinery in Haryana, marking a major step in the country's clean energy transition.

The upcoming facility will produce **10,000 tonnes of green hydrogen annually**, replacing fossil-based hydrogen currently used in refinery operations. This move aligns with IOCL's broader **decarbonization strategy** and supports the goals of **India's National Green Hydrogen Mission**.

Key aspects of the project include:

- Replacement of grey hydrogen with renewable-powered green hydrogen
- Levelized Cost of Hydrogen (LCoH) calculations completed
- Significant potential to reduce carbon emissions in industrial processes
- Commissioning expected by December 2027

This milestone project positions IOCL as a front-runner in India's **industrial green hydrogen** sector, reinforcing its commitment to sustainable energy and climate goals.

WORLD

Germany Shifts Gears: Automakers Move from Hydrogen to All-Electric Vehicles

Eco News June 04, 2025

German automakers, particularly **Audi**, are moving away from hydrogen fuel cell technology and prioritizing **battery-electric vehicles (BEVs)** as the core of their future strategy. Audi plans to **phase out all combustion-engine models by early 2026**, replacing them with electric versions of key models like the **A3**, **A4**, and **Q-series SUVs**.

This shift is driven by several factors:

- **High infrastructure and production costs** of hydrogen technology
- Lower efficiency of hydrogen fuel cells compared to BEVs
- Better scalability and faster deployment of electric vehicles using existing power grids

Hydrogen is now being confined to **niche or long-term applications**, while BEVs are emerging as the practical choice for mass adoption.

In essence, Germany's leading carmakers are betting on electrification as the **most viable and efficient** route to decarbonize transportation and lead the future of mobility.

India Strengthens Energy Security Amid Gulf Crisis with Russian and U.S. Oil Imports

Tribune India June 23, 2025

With tensions rising between **Iran and Israel** and fears of disruption at the **Strait of Hormuz**, a key passage for 20% of global oil trade, India **has diversified its crude import strategy** to reduce reliance on Gulf suppliers.

Key developments include:

- Russian oil imports surged to 2.0–2.2 million barrels per day in June 2025, surpassing Gulf volumes
- U.S. shale oil imports increased, providing added flexibility and supply security
- Russia now meets over one-third of India's oil demand, offering discounted rates and bypassing Hormuz-related risks
- The move helps avoid freight and insurance cost spikes tied to Middle East instability

This strategic shift ensures greater **energy resilience** for India and supports **supply chain diversification** in the face of geopolitical volatility in the Gulf region.





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