



India Energy Outlook 2021: IEA

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Why in News

Recently, the **International Energy Agency (IEA)** has released the **India Energy Outlook 2021 Report** which explores the opportunities and challenges ahead for India as it seeks to ensure reliable, affordable and sustainable energy for a growing population.

The India Energy Outlook 2021 is a **new special report from the IEA's World Energy Outlook series**.

Key Points

- **Third Largest Energy Consumer by 2030:**
 - India will **make up the biggest share of energy demand growth at 25%** over the next two decades, as it **overtakes the European Union as the world's third-biggest energy consumer by 2030**.
Presently, **India is the fourth-largest** global energy consumer **behind China, the United States** and the **European Union**.
 - India's **energy consumption is expected to nearly double** as the nation's **Gross Domestic Product (GDP)** expands to an estimated USD 8.6 trillion by 2040 under its current national policy scenario.
 - **Prior to the global pandemic**, India's energy demand was **projected to increase** by almost **50% between 2019 and 2030**, but growth over this period is **now closer to 35%**.
- **Industrialisation is a Major Driving Force:**
 - Over the last three decades, India accounted for about **10% of World Growth** in **Industrial Value-added** [in **Purchasing Power Parity (PPP)** terms].
 - **By 2040**, India is set to account for almost **20% of Global Growth** in **Industrial value-added**, and to lead global growth in industrial final energy consumption, especially in steelmaking.

- **Reliance on Imports:**
 - India's growing energy needs will make it **more reliant on fossil fuel imports** as its **domestic oil and gas production has been stagnant** for years despite government policies to promote petroleum exploration and production and renewable energy.
 - Rising oil demand **could double India's oil import bill** to about USD 181 billion by 2030 and nearly treble it to USD 255 billion by 2040 compared with 2019.
- **Oil Demand:**
 - India's **oil demand** is seen **rising by 74% to 8.7 million** barrels per day **by 2040** under the existing policies scenario.
 - A **five-fold increase in per capita car ownership** will result in India leading the oil demand growth in the world.
 - Its **net dependence on oil imports** - taking into account both the import of crude oil and the export of oil products - **increases to more than 90% by 2040 from the current 75%** as domestic consumption rises much more than production.
- **Gas Demand:**
 - India will become the **fastest-growing market for Natural gas**, with demand **more than tripling by 2040**.
 - Natural gas **import dependency** increased from **20% in 2010** to almost **50% in 2019** and is set to grow further to **more than 60% in 2040**.
- **Coal Demand:**
 - **Coal currently dominates India's electricity sector**, accounting for over 70% of overall generation.
 - **Coal demand** is seen **rising to 772 million tonnes in 2040** from the **current 590**.
- **Renewables Energy Resources Demand:**

India's share in the **growth in renewable energy** is the **second-largest** in the world, **after China**.

International Energy Agency

- The International Energy Agency is an **autonomous Intergovernmental Organisation** established in 1974 in Paris, France.
- IEA mainly focuses on its energy policies which include **economic development, energy security and environmental protection**. These policies are also known as the 3 E's of IEA.
- India became an **Associate member of IEA in March 2017** but it was in engagement with IEA long before its association with the organization.
 - Recently, India has **inked a Strategic Partnership Agreement with the IEA** to strengthen cooperation in global energy security, stability and sustainability.
- **The World Energy Outlook Report** is released by the IEA annually.

- **IEA Clean Coal Centre** is dedicated to providing independent information and analysis on how coal can become a cleaner source of energy, compatible with the UN Sustainable Development Goals.

Way Forward

- As the world seeks ways to accelerate the pace of transformation in the energy sector, **India is in a unique position to pioneer a new model for low-carbon, inclusive growth**. If this can be done, it will show the way for a whole group of energy-hungry developing economies, by demonstrating that **robust economic expansion is fully compatible with an increasing pace of emissions reductions** and the achievement of other development goals.
- India is already a global leader in solar power, and **solar combined with batteries will play a massive part in India's energy future**. But India will need a whole host of technologies and policies to chart this new path.
- As new industrial sectors emerge and clean energy jobs grow, India will also need to ensure that **no one is left behind, including in those regions that are heavily dependent on coal today**.

Source:IE