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**(Autonomous)**  
**DEPARTMENT OF CSE - IoT**



**COURSE NAME:19OE701 / SUSTAINABLE ENERGY FOR SMART CITIES**  
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**UNIT:1- CLASSIFICATION OF ENERGY**

**TOPIC:ENERGY SCENARIO IN INDIA**



# Energy Scenario in India

As of my last knowledge update in September 2021, India's energy status was characterized by a mix of different energy sources to meet its growing demand for electricity and fuel.

**Coal:** Coal has traditionally been the dominant source of energy in India, powering a significant portion of its electricity generation. However, there were efforts to reduce coal dependence due to environmental concerns and to transition toward cleaner energy sources.

**Renewable Energy:** India had been making substantial strides in expanding its renewable energy capacity, particularly in solar and wind energy. The country had set ambitious targets to increase its renewable energy capacity to reduce greenhouse gas emissions and diversify its energy mix.



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**Solar Energy:** India has one of the world's largest solar power capacities. It had been actively promoting solar energy through initiatives like the International Solar Alliance and various domestic policies and incentives.

**Wind Energy:** Wind power had also been a significant contributor to India's renewable energy portfolio. The country has favorable geographical conditions for wind energy production, particularly in states like Tamil Nadu, Gujarat, and Maharashtra.

**Hydropower:** Hydropower has been a traditional source of renewable energy in India, with various hydroelectric projects across the country. However, concerns about environmental impacts and displacement of local communities have led to more cautious development in recent years.



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**Nuclear Energy:** Nuclear power has a smaller share in India's energy mix, but it plays a vital role in providing a low-carbon and consistent energy source. India had been working on expanding its nuclear power capacity while addressing safety and regulatory concerns.

**Natural Gas:** Natural gas had been growing in importance as a cleaner alternative to coal for electricity generation and industrial use. India has been working to enhance its natural gas infrastructure, including liquefied natural gas (LNG) terminals and pipelines.

**Energy Efficiency:** India had been focusing on improving energy efficiency in various sectors to reduce energy consumption and mitigate environmental impacts. This included efforts in industries, transportation, and buildings.



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**Electricity Access:** India had been working to improve access to electricity for its population, especially in rural and remote areas. Initiatives like the "Saubhagya" scheme aimed to provide electricity connections to all households.

Please keep in mind that the energy landscape can change rapidly due to policy shifts, technological advancements, and global trends.



*Thank  
you*