

**SNS COLLEGE OF ENGINEERING** 



(Autonomous) DEPARTMENT OF CSE - IoT

## COURSE NAME:190E701 / SUSTAINABLE ENERGY FOR SMART CITIES IV YEAR/VII SEMESTER

**UNIT:1- CLASSIFICATION OF ENERGY** 

**TOPIC: World's Energy Status** 





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The recent update states that in September 2021, the world's energy status is subject to ongoing changes due to factors such as technological advancements, policy shifts, economic trends, and environmental concerns.

**Fossil Fuels:** Oil, coal, and natural gas have historically been the dominant sources of energy globally, powering transportation, electricity generation, and industrial processes. However, there has been increasing awareness of their environmental impact, including greenhouse gas emissions and air pollution.

**Renewable Energy:** The adoption of renewable energy sources like solar, wind, hydroelectric, and geothermal power has been growing steadily. These sources offer cleaner alternatives to fossil fuels and are becoming <sup>12/08/23</sup> more cost-competitive.





**Nuclear Energy:** Nuclear power is a low-carbon energy source that has been used for electricity generation. However, concerns about nuclear accidents, radioactive waste management, and proliferation have influenced its growth in various regions.

**Energy Transition:** Many countries have been working to transition their energy systems towards greater sustainability and reduced carbon emissions. This often involves implementing policies and incentives to encourage the use of renewable energy and improve energy efficiency.





**Electric Vehicles:** The transportation sector has seen a rise in electric vehicles (EVs) as a way to reduce dependence on oil and lower emissions. Advances in battery technology have contributed to the growth of EV adoption.

**Energy Efficiency:** Improving energy efficiency in buildings, transportation, and industries has been a key focus for many countries. This involves using technology and practices that use less energy to perform the same tasks.





**Energy Access:** Access to reliable and affordable energy remains a challenge in many parts of the world. Efforts to expand access to electricity and clean cooking technologies are ongoing.

**Climate Concerns:** The global shift towards cleaner energy sources is closely linked to addressing climate change. The Paris Agreement, adopted in 2015, is a significant international effort to limit global warming by reducing greenhouse gas emissions





