

Energy Institute Report (2025)

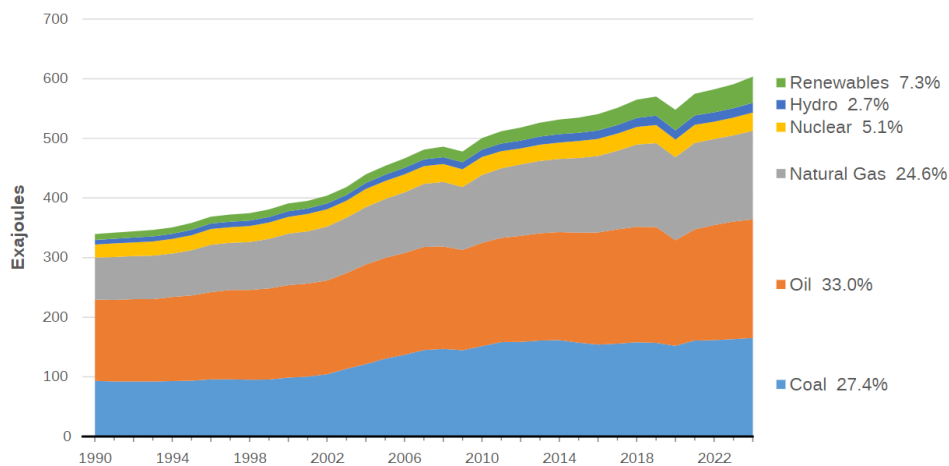
Prelims: Sustainable development | Current events of national and international importance

Why in news?

Recently, the Energy Institute (EI) released the 74th edition of the Statistical Review of World Energy which shows data on global energy.

Global Energy Consumption Breakdown

- **Increase in energy supply** - Total energy supply rose by 2% in 2024, with all energy sources—oil, gas, coal, nuclear, hydro, and renewables registering increase since 2006.
- **Fossil fuel growth** - Natural gas generation saw the largest increase among fossil fuels, growing by 2.5%.
- **Oil & Liquid fuels** - Largest global energy source largest global total primary energy in 2024 with 33% contribution.
- **Coal** - Remained the largest single source of global electricity generation, growing by 1.2% in 2024 to reach 10,613 TWh, despite record investments in renewables.
- **Surplus coal production in Asia Pacific** - For 3 years, coal production exceeded demand with 2024 surplus was a record.
- **Natural gas** - Meets 25% of total global energy demand and top producers are USA, Russia, Iran, China (53% of global production).
- **Renewable energy expansion** - Wind and solar energy expanded by 16%, growing nine times faster than total energy demand.
- Wind & Solar are fastest-growing energy sources with China contributed 57% of new capacity globally.
- Renewables (including hydro) met 32% of total electricity supply
- **Rare Earth metals** - Grew by 3.2%, reaching 0.4 million tonnes of total production and China accounts for 71% of global production and 48% of global reserves.



Global primary energy consumption, 1990-2024
 Renewables include renewable power (solar, wind, geothermal, biomass, waste; excluding hydro) and biofuels

Other Key Findings related to global warming

- **Record high CO2 emissions** - Global carbon dioxide emissions from the energy sector reached a record high for the fourth consecutive year in 2024, increasing by around 1% to 40.8 gigatonnes of CO2 equivalent.
- **Global warming milestone** - 2024 was the hottest year on record, with global temperatures exceeding 1.5°C above pre-industrial levels for the first time.
- **Challenges in renewable energy goals** - Despite record growth in renewables, the world is not on track to meet the COP28 goal of tripling renewable energy capacity by 2030.

Reference

[The Hindu | Global energy CO2 emissions reached record high last year](#)