



The Energy Headlines

THE ENERGY NEWSLETTER OF MNIT JAIPUR



“If you want to find the secrets of the universe,
think in terms of energy, frequency and vibration”
-Nikola Tesla

How quickly does the climate recover?

It took the climate 20,000 to 50,000 years to stabilize after the rise in global temperatures of five to eight degrees Celsius 56 million years ago. Climate change today is causing temperatures to rise and is also increasing the likelihood of storms, heavy rain, and flooding -- the recent flood disaster in the Ahr valley in Germany is just one such example. What we need to ask ourselves in this connection is how quickly the climate can recover from the warming caused by an increase in carbon dioxide in the atmosphere

The Covid-19 pandemic resulted in the largest-ever decline in global emissions

The Covid-19 pandemic and resulting economic crisis had an impact on almost every aspect of how energy is produced, supplied, and consumed around the world. The pandemic defined energy and emissions trends in 2020 – it drove down fossil fuel consumption for much of the year, whereas renewables and electric vehicles, two of the main building blocks of clean energy transitions, were largely immune.

As primary energy demand dropped nearly 4% in 2020, global energy-related CO₂ emissions fell by 5.8% according to the latest statistical data, the largest annual percentage decline since World War II. In absolute terms, the decline in emissions of almost 2 000 million tonnes of CO₂ is without precedent in human history – broadly speaking, this is the equivalent of removing all of the European Union’s emissions from the global total. Demand for fossil fuels was hardest hit in 2020 – especially oil, which plunged 8.6%, and coal, which dropped by 4%. Oil’s annual decline was its largest ever, accounting for more than half of the drop in global emissions. Global emissions from oil use plummeted by well over 1 100 Mt CO₂, down from around 11 400 Mt in 2019. The drop in road transport activity accounted for 50% of the decline in global oil demand, and the slump in the aviation sector for around 35%. Meanwhile, low-carbon fuels and technologies, in particular, solar PV and wind, reached their highest ever annual share of the global energy mix, increasing it by more than one percentage point to over 20%.

Source: <https://www.iea.org/articles/global-energy-review-co2-emissions-in-2020>

Transport sees the biggest decline



A common theme across all economies is the scale of the impact of the pandemic and lockdown measures on transport activity. The decline in CO₂ emissions from oil use in the **transport** sector accounted for well over 50% of the total global drop in CO₂ emissions in 2020, with restrictions on movement at local and international levels leading to a near 1 100 Mt drop in emissions from the sector, down almost 14% from 2019 levels.

With various travel advisories and border restrictions, international aviation was the sector hardest hit in 2020, with global flight activity reaching a low in April 2020 of 70% below the level in the same month a year earlier. In contrast to pre-crisis levels, emissions from international aviation fell by almost 45% or 265 Mt CO₂ across the year to a level last seen in 1999. This decline is equivalent to taking around 100 million conventional cars off the road.

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