



What is Earth Day?

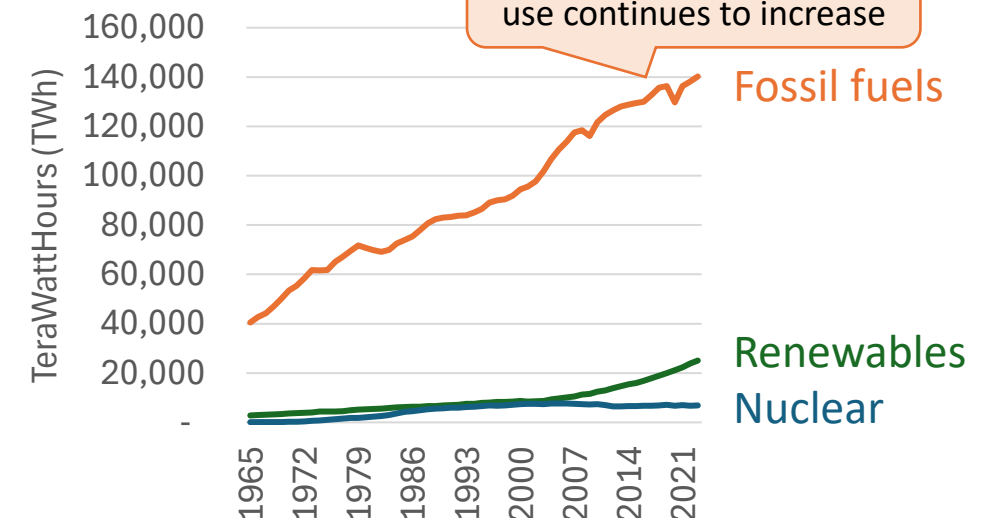
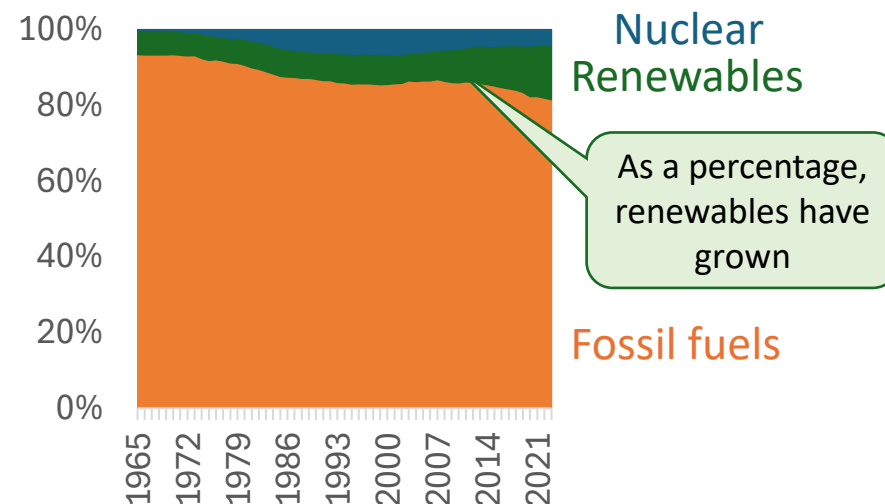
Sparked by an historic oil spill in California, and inspired by the Vietnam anti-war movement, the first annual Earth Day in 1970 saw demonstrations across the USA against the environmental damage of industrial development. The theme for 2025 is *Our Power, Our Planet*, inviting us to support renewable energy.¹

How has renewable energy grown?

Globally, energy production from renewable sources has increased dramatically over the past few decades, more than doubling in the last fifteen years. Wind and solar, in particular, have seen an acceleration. Around a sixth of global energy now comes from low-carbon sources.²

Global primary energy consumption²

“Global energy consumption is not stagnant, but growing. And in the past years, it has been growing too quickly for renewables and nuclear to keep up.”²



What has happened to fossil fuel use?

The benefits of renewables have mostly been felt in electricity production, with transport and heating harder to replace. More importantly, global energy demand has increased faster than new renewables capacity. This means that fossil fuel use, and the carbon emissions that drive climate change, continue to increase year-on-year.³

What is the future of renewable energy?

Falling costs and better energy storage solutions should accelerate the deployment of renewables.⁴ However, if global energy demand continues to increase even faster, this capacity will remain an add-on to the use of fossil fuels rather than a replacement. The rise of energy-intensive AI models over the past few years is a reminder that it may be naive to expect a natural limit to our energy demands.

References

1. Our Power, Our Planet - Earth Day [Internet]. [cited 2025 Apr 11]. Available from: <https://www.earthday.org/our-power-our-planet/>
2. Ritchie H, Rosado P. Energy Mix. Our World in Data [Internet]. 2020 Jul 10 [cited 2025 Apr 11]; Available from: <https://ourworldindata.org/energy-mix>
3. Annual CO₂ emissions [Internet]. Our World in Data. [cited 2025 Apr 11]. Available from: https://ourworldindata.org/grapher/annual-co2-emissions-per-country?country=~OWID_WRL
4. IRENA. Renewable power generation costs in 2023: Executive summary. 2024; Available from: https://www.irena.org/-/media/Files/IRENA/Agency/Publication/2024/Sep/IRENA_Renewable_power_generation_costs_in_2023_executive_summary.pdf