

FAST FACTS



On renewable energy

1. Derived from natural resources that are abundant and continuously replenished, **renewable energy is key to a safer, cleaner, and sustainable world**. Sunlight, wind and water, for example, are such sources that are constantly being replenished.
2. Fossil fuels - coal, oil and gas - on the other hand, are non-renewable resources that take hundreds of millions of years to form. **Fossil fuels, when burned to produce energy, cause harmful greenhouse gas emissions, such as carbon dioxide**.
3. **Renewable energy is gaining ground**. Nearly 30 per cent of the world's electricity currently comes from renewable sources of energy today, compared to 20 per cent in 2011 (IEA and REN21). The biggest share is hydropower, followed by solar and wind, bioenergy and geothermal power (REN21).
4. **Renewable electricity generation grew by about 8 per cent in 2021**, reaching 8,300 TWh (about twice the amount of electricity consumed by the United States in a year) - the fastest year-on-year growth since the 1970s (IEA).
5. **Renewable energy dominated investment in new power generation**, accounting for an estimated 70 per cent of the US\$530 billion spent on all new generation capacity in 2021. (IEA)
6. **Almost half of all renewable energy capacity is in Asia** (48 per cent), followed by Europe with 21 per cent, North America with 15 per cent, and South America with 8 per cent of the global capacity. (IRENA)
7. **In 2021, 12.7 million people were employed in the renewable energy sector**, up from 12 million in 2020. Close to two-thirds of all jobs are in Asia. China alone accounts for 42 per cent of the global total. (IRENA)

8. **The photovoltaic energy sector has the biggest share of employment** in the renewable energy sector, providing 4.3 million jobs, followed by 2.4 million each in hydropower and biofuels, and 1.3 million in wind energy. (IRENA)

9. **Every dollar of investment in renewables creates three times more jobs than in the fossil fuel industry.** The transition towards net-zero emissions will lead to an overall increase in energy sector jobs - while about 5 million jobs in fossil fuel production could be lost by 2030, an estimated 14 million new jobs would be created in clean energy, resulting in a net gain of 9 million jobs. (IEA)

10. **Prices for renewable energy technologies are dropping rapidly.** Renewables-based electricity is now the cheapest power option in most regions. The cost of electricity from solar power fell by 85 percent between 2010 and 2020. Costs of onshore and offshore wind energy fell by 56 percent and 48 percent respectively. (IRENA)

11. Investments in renewable energy need to triple by 2050, and the supply of electricity from clean energy sources must double within the next eight years, to put the world on a net-zero emissions trajectory by 2050 (WMO).

An estimated \$4 trillion a year needs to be invested in renewable energy by 2030 – including investments in technology and infrastructure (IEA). In comparison, **the reduction of pollution and climate impacts alone could save the world up to \$4.2 trillion per year** (IRENA) and **a global shift to a low-carbon economy can deliver at least \$26 trillion in economic benefits through 2030** (UNFCCC).

12. **It is estimated that 90 per cent of the world's electricity can and should come from renewable energy by 2050** (IRENA). In a few countries, such as Iceland, nearly 100% of electricity already comes from renewable sources today (UNEP).

