

It's time to REboot the World with Renewables!

The transition to renewable energy is not just possible – it's already happening.

The transition to renewable energy is a powerful driver of economic growth, job creation, and energy security. As the global energy landscape shifts, renewables are proving to be a resilient and cost-effective solution, offering millions of new jobs and boosting local economies. At the same time, renewable energy reduces reliance on volatile fossil fuel markets, providing stability and affordability for communities worldwide. Beyond economic benefits, renewables play a critical role in improving public health, expanding energy access, protecting the environment and promoting social equality.

This document outlines the key advantages of embracing renewable energy, demonstrating why the shift is essential for a more prosperous, sustainable and equitable future.

Renewables for health

Phasing out fossil fuels and transitioning to renewables like solar, wind and hydropower improves air and water quality and associated health problems

- Fossil fuel combustion and use in industry, power generation and transport are responsible for 82% deaths from air pollution globally, according to this recent study
- Air pollution continues to be a leading health risk causing annual deaths almost equivalent to the cumulative COVID-19 deaths to date, <u>according to the World Health</u> Organisation
- Over 5 million deaths per year are attributable to air pollution from fossil fuel use and can be easily avoided by phasing out coal, oil and gas and transitioning to renewables
- Extraction and production of fossil fuels can contaminate land and water and cause grave diseases like cancer



Renewables develop the economy and create jobs

Renewable energy is a labor-intensive sector and creates jobs across the value and supply chain including logistics, manufacturing, installation, management, operations, policy development, maintenance of renewable energy facilities etc.

- Renewable energy jobs have almost doubled in 10 years to 16.2 million jobs globally in 2023, according to the <u>International Renewable Energy Agency (IRENA)</u>
- It is estimated that jobs offered by the renewables sector will far exceed those lost in the process of fossil fuel phaseout
- By 2050, the energy transformation would provide a 2.5% improvement in GDP and 0.2% increase in in global employment compared to business as usual (IRENA)
- Renewable energy projects can drive local development, providing communities with reliable power sources and contributing to local economies through job creation and infrastructure development

Renewables support energy security and affordability

Renewables are decentralised in nature and allow for local energy production and resilient energy supply.

- Renewables shield countries and communities from fluctuating energy prices
- Countries with a high reliance on renewable energy sources face minimal to no energy disruptions during crises and supply chain interruptions caused by geopolitical tensions and conflicts
- Renewable energy systems, once installed, have minimal operating and maintenance costs compared to fossil fuels
- The cost of renewable energy technologies, particularly solar and wind power, has fallen dramatically over the past decade. The cost of solar photovoltaic (PV) panels has dropped by more than 80% since 2010, and wind turbine costs have decreased by around 40% during the same period (GlobalABC) (ISES)

Renewables accelerate energy access and alleviate energy poverty

Renewables can be distributed in remote areas to provide access to millions suffering from energy poverty.

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- Globally, 685 million people lacked access to electricity in 2022 undermining their basic rights to health, education, economic development, communication, decent quality of life and equality
- The transition to renewable energy sources is crucial in providing sustainable and reliable electricity access to underserved communities
- Renewables improve resilience during emergency situations, such as extreme weather events or wars. This drastically improves the social and economic conditions for vulnerable communities and groups
- Renewables can reduce conflicts linked to energy and competition for water and food resources

Renewables help protect the environment and combat climate change Renewables are the most sustainable energy source.

- Unlike fossil fuels, renewable energy resources are widely available and emit zero to few greenhouse gases during operation. They are therefore the most recognised and affordable solution to the climate crisis
- Shifting to renewables significantly reduces greenhouse gas emissions that are warming the planet and causing climate impacts and extreme weather events like sea level rise, heatwaves, floods and wildfires
- The shift to renewables encourages sustainable practices across various sectors, including transportation and urban planning. This not only addresses climate change but also improves air quality and public health
- As dececentralised and non-polluting energy sources, renewables can co-exist with other activities such as biodiversity conservation and agriculture

Renewables contribute to social and gender equality

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- The renewable energy sector employs more women than the traditional energy industry.
- Women represent 32% of the workforce in the renewable energy industry and only 22% in the oil and gas sector (RESR)

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• Women and girls often bear the brunt of collecting fuel and water, tasks that can be alleviated with electricity, giving them more time for education and economic activities.

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