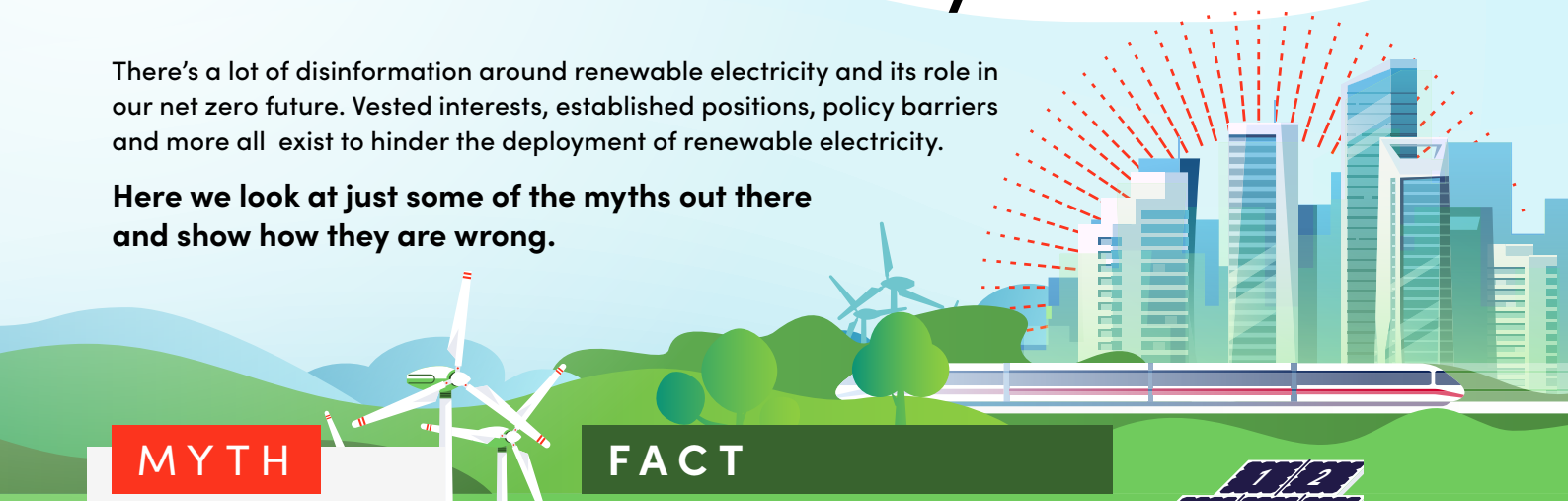
Mythbusting renewable electricity

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There's a lot of disinformation around renewable electricity and its role in our net zero future. Vested interests, established positions, policy barriers and more all exist to hinder the deployment of renewable electricity.

Here we look at just some of the myths out there and show how they are wrong.



MYTH

Renewables are too expensive to install

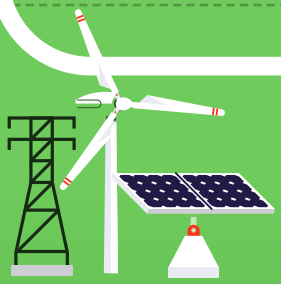
FACT

New European solar capacity is 10x cheaper than gas-fired power plants in the long-term. New US solar and wind is cheaper than operating 209 out of its 210 coal plants. The era of cheap fossil fuels is over. Renewable electricity is consistently the cheaper alternative.



MYTH

Wind and solar don't run 24/7/365



FACT

Many renewable sources are variable by nature. This variability is however predictable and many sources can be combined to ensure reliability. Diverse and distributed renewable electricity networks are a robust energy system. Renewables also don't run out, unlike fossil fuels.

MYTH

We can't store it/access when we need it

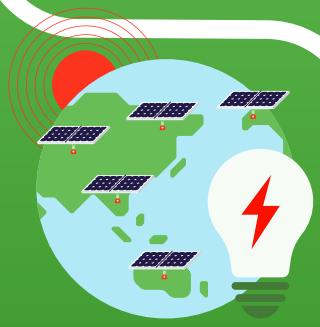
FACT

The global energy storage market is estimated to increase 15x by 2030, compared to 2021. The price of lithium-ion batteries has dropped by as much as 97% since 1991 and continues to fall. Developing battery facilities for the storage of electricity means when renewables are low, electricity can still be delivered to where it's needed.



MYTH

Many countries lack access to renewable sources



FACT

The World Bank has said that "the potential for electricity generation from solar photovoltaic sources in most countries dwarfs their current electricity demand."

Every country has access to some form of renewable energy source, unlike with fossil fuels. The challenge is in harnessing it in a cost-effective way and integrating it into the national energy mix.

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MYTH

There isn't enough land/space to be able to install renewables

FACT

8billion
square meters



Renewables like wind and solar aren't constrained by land requirements like fossil fuels. Solar panels can be installed on rooftops, floating on water, even on occupied agricultural land. The US has around 8 billion square meters of rooftop space for solar panels.

With floating wind turbines becoming cheaper, offshore wind is no longer restricted to shallow seas. South Korea has the potential for 624 gigawatts (GW) of electricity from offshore wind.

MYTH

People working in the fossil fuels industry will lose their jobs

FACT

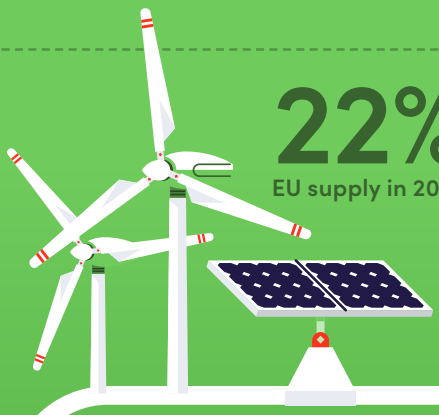
Around 14 million new clean energy jobs will need to be created by 2030. A key challenge is ensuring that job skills and expertise are transferred from fossil fuels to renewables, by reskilling workers.



14million
new clean energy jobs

MYTH

Renewables alone can't provide all our electricity needs



22%
EU supply in 2022

FACT

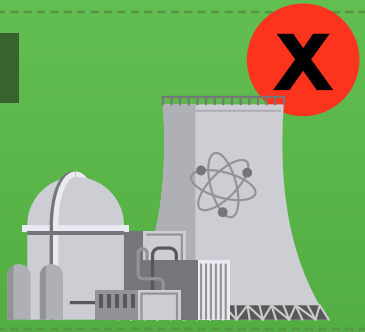
Wind and solar made up 22% of the EU's electricity generation mix in 2022 compared to 20% from gas. In 2020, the UK, ran for 67 days, 22 hours and 55 minutes without using coal.

MYTH

Nuclear power is renewable

FACT

Nuclear is not a renewable energy source. Nuclear power uses radioactive fuel, a limited source of energy. Renewable energy comes from natural sources that are replenished at a higher rate than they are consumed.



MYTH

Hydrogen will replace all our gas



Prioritise industrial process use

FACT

Hydrogen is an energy carrier, not an energy source. Only green hydrogen (created using renewable energy) can be used in a net zero future. The challenge is reaching the scale required from the generation of hydrogen using renewables. Even in the best-case scenarios, hydrogen production by 2050 will be too low and experts recommend prioritising its use for industrial processes.

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