

Nuclear in National Energy Strategy

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Electricity generation is currently dominated by fossil fuels with coal and gas responsible for 63% of total production. These fossil fuels contribute about 40% to the world's CO₂ emissions.

Nuclear power is a low carbon energy source, with greenhouse gas emissions lower than most renewable sources, and comparable to wind sources.

Since 1970, nuclear power has prevented the emission of 64 Gt CO₂ equivalent. However in order to meet the Paris agreement of limiting rise in global temperatures to below 2 degrees, nuclear power capacity needs to increase.

The world is facing an energy crisis. Prices are soaring and many countries are striving to have net zero carbon. So how do we get clean energy to everyone sustainably?

A balanced green energy system that utilises low carbon technology is critical. Renewables like wind and solar are part of the solution but we also need nuclear. It's a proven technology which is safe, reliable and not weather dependent. It's also ready to rise to the challenge.

Supporters of nuclear energy say it can help us wean our economies off polluting fossil fuels. No surprise, it's a heated issue. But what about the facts? Can nuclear power really help save the climate?

In the four most important scenarios of the IPCC to limit global warming to 1.5 degrees Celsius, the use of nuclear energy increases.

Is nuclear power part of the climate solution?

Nuclear power can play an important role in clean energy transitions. A doubling in annual capacity additions is needed to be on track with the IEA's Net Zero Scenario

After a bitter political battle, the European Commission has opted to include nuclear in its sustainable taxonomy as transition activities. Supporters of nuclear power, including 12 EU member states who publicly backed its inclusion, say that nuclear is a low-carbon power source that must be part of any energy mix to tackle climate change, and does not cause more significant harm than other industries included in the taxonomy. They say that the science, and evidence-based policy support its inclusion. Opponents say that it should not be included because radioactive waste means it is not sustainable.

Apart from public opinion, one of the biggest barriers to nuclear energy is financing. It is needed to create better preconditions for nuclear energy, provide financial support where necessary and keep the nuclear power plant

Some questions:

- What might a balanced energy eco system look like, and what would be the role of nuclear?
- Small Modular Reactors: The next generation of nuclear power stations: making nuclear affordable and investable.
- Hydrogen: Synergies with nuclear that increase energy system resilience and efficiency.
- Is nuclear energy good for the climate?

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