Centre for Alternative Technology
Canolfan y Dechnoleg Amgen

Energy Trumps

Nuclear Energy

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Nuclear power stations generate about 18% of Britain's electricity. Most stations are due to close by 2023 but there are plans to build more. Nuclear power currently relies on supplies of Uranium.

Climate change CO_2e per kWh	**20 grams**	Very little CO_2 is emitted in operation, but some is emitted during construction, mining, fuel processing decommissioning and waste storage.
Impact on nature	**Low**	Uranium mining is often opencast. Power stations use a lot of water. There is debate about the harm to nature from radioactive releases.
Risks	**Very high/ Terrible**	Accidents are rare but can be disastrous. Possible radiation risk from accidents, attack, sabotage, obtaining nuclear material and nuclear waste. Risk of radiation over very long time.
Visual impact	**Low**	Low visual Impact for kWh electricity produced. Power stations have few fuel deliveries. Uranium mines usually opencast.
Cost now	**Low**	Nuclear generation costs are disputed. Costs may not cover full decommissioning of the power station, waste storage over very long time period and the impact of major accidents.
Cost 20 years	**Moderate**	Likely to be increasing competition for declining stocks of uranium. Processing of lower quality stocks increases cost.
The UK resource	**Very poor**	No UK uranium mining resources. Small amounts in weapons and spent fuel.
Reliability/ flexibility	**Very Good**	While fuel stocks available can provide reliable electricity output but not very flexible.