

CLIMATE ASSEMBLY SESSION:

Intro to different emissions sources

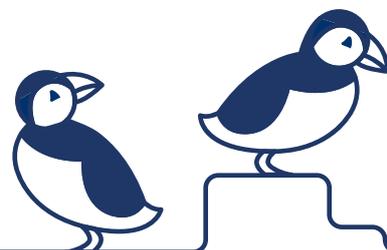
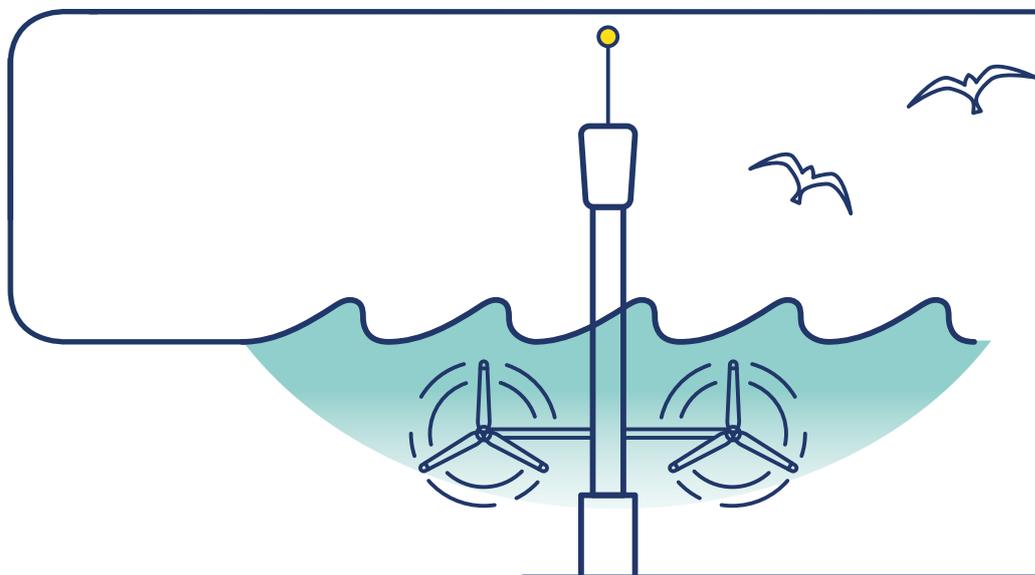
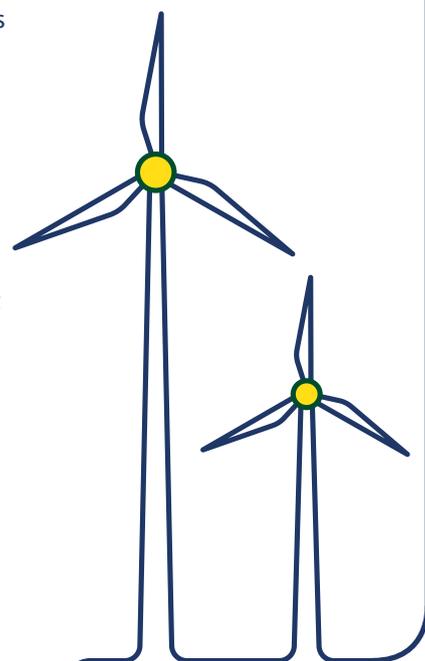
JERSEY ELECTRICITY SUBMISSION PAPER:

Just 0.8% of CO₂ is from imported power

- Of Jersey's 360,000 tonnes of Scope 1 CO₂e emissions, 90% come from three sources: transport and the heating of residential, commercial and public properties using gas and oil. **Just 3,000 tonnes of emissions are attributed to the importation of electricity. That's less than 1% (0.8%) of total Scope 1 and 2 emissions.**
- As global demand for energy increases, electricity generation in countries still using coal or gas-fired power plants is a large source of carbon emissions. **Here in Jersey, 95% of our electricity is from the two lowest carbon sources in the world: nuclear and renewable hydropower.** We know where our electricity comes from because it is certified by our supplier EDF and this means that electricity cannot also be sold to anyone else.

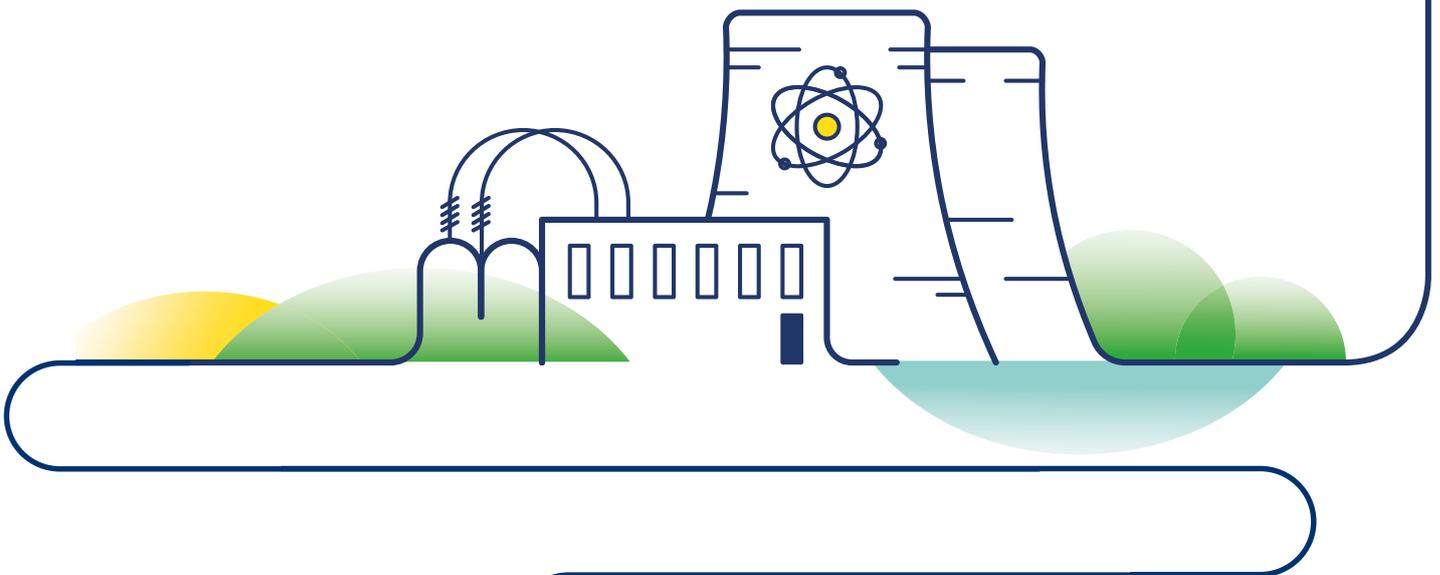
We have one of the cleanest electricity supplies in Europe

- **In fact, Jersey's electricity supply is one of the cleanest in Europe.** The amount of carbon dioxide emitted when energy is produced is measured by its carbon intensity or the 'carbon dioxide equivalent per unit of energy' - CO₂e/kWh.
- Hydropower is just 6g CO₂e/kWh and nuclear is just 4g CO₂e/kWh. **In fact, nuclear power is cleaner than solar PV when total lifecycle emissions are taken into account.** When combined with 5% of our electricity that comes from the GoJ's Energy from Waste Plant and the tiny fraction from on-Island generation produced during test running, our electricity was just 24g CO₂e/kWh in 2019/20. That's one tenth the emissions of the UK electricity supply at 233g CO₂e/kWh.
- When compared with local LPG gas at 241g CO₂e/kWh and heating oil at 298g CO₂e/kWh, you can really see how much cleaner electricity is than fossil fuels.



Imported nuclear and hydropower has already saved Jersey 11 million tonnes of CO2 emissions

- Since Jersey Electricity first began importing low-carbon nuclear and hydro power from France in favour of on-Island generation using heavy gas oil in 1985, **we have helped Jersey avoid emitting around 11 million tonnes of carbon.**
- This strategy has helped Jersey dramatically reduce its overall emissions by a third since 1990 despite a 60% increase in electricity consumption.
- **For all practical purposes, Jersey's electricity supply is now decarbonised,** something the UK is unlikely to accomplish before the 2040s. Given this, the only way Jersey is likely to further decarbonise is by switching out of fossil fuels to electricity.
- **Without nuclear as part of the energy mix, the world has little hope of limiting global warming to 1.50C** above pre-industrial levels deemed essential by the UN's Intergovernmental Panel on Climate Change (IPCC). We therefore believe it has been, and will continue to be a force for good for Jersey having already been central to our CO2 reduction programme.
- As well as helping us avoid damaging carbon emissions, this high volume of imported nuclear and hydropower has also helped us keep electricity prices lower, by driving scale across the network, and it has reduced air pollution that is damaging to our health.



Jersey Electricity

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