

CLIMATE ASSEMBLY SESSION:

## Key emissions source – heating, cooling, cooking

JERSEY ELECTRICITY SUBMISSION PAPER:

## Our role fuel switching homes and businesses

- **37% of Jersey's emissions are attributable to residential and business heating, cooling and cooking using fossil fuels** such as oil and gas.
- To have any chance of achieving carbon neutrality all these applications need to be converted to low-carbon electricity, which is readily available in large volumes, and we need to do it quickly to have any chance of achieving Jersey's 2030 carbon neutrality ambition.

### Electricity offers 90% carbon savings

- **The carbon savings are staggering**, with the emissions from electricity in Jersey 90% less than those of oil and gas emissions.
- **Around 95% of electricity consumed in Jersey is either imported renewable hydropower at just 6g CO<sub>2</sub>e/kWh or nuclear at 4g CO<sub>2</sub>e/kWh.** When combined with 5% from the Energy from Waste Plant and the fraction from on-island generation used during testing, our electricity was just 24g CO<sub>2</sub>e/kWh in 2019/20.
- When compared with local LPG gas at 241g CO<sub>2</sub>e/kWh and heating oil at 298g CO<sub>2</sub>e/kWh, you can really see how much cleaner electricity is than fossil fuels. **This has helped Jersey dramatically reduce its carbon emissions already.** Think how much lower we could go with more fuel switches from fossil fuels.

### Imported power supports intermittent local renewables

- **Local renewables are unlikely to lower carbon emissions** as they will simply displace decarbonised grid power with decarbonised local renewable energy. As battery storage is hugely expensive, grid electricity capacity needs to remain in place anyway to meet daily gaps in production due to the intermittency of renewables as well as shortfalls during winter.
- Jersey Electricity is working hard to play its part but more needs to be done. Jersey has an estimated 25,000 fossil fuel boilers heating domestic and commercial properties, and we also estimate that there are several thousand gas cookers and hobs in Jersey.
- In recent years we have doubled our rate of fuel switching from oil and LPG gas to electricity, with over 20,000 domestic customers now on lower-cost heating tariffs using clean, low-carbon electricity to heat their homes. We are helping customers to switch to low-carbon electric options every week but **at a current rate of 350 a year it would take over 70 years to complete the change.**



## Measures to speed the transition

- **It is clear we need to dramatically increase the rate of fuel switching.** Measures that could help support and accelerate this include:
  - Incentivising the switch to low carbon electric in the form of grants, GST free schemes and boiler scrappage arrangements.
  - Banning fossil fuel boilers in all new homes (as the UK is doing).
  - Establishing better carbon measurement and updating the Building Bye-Laws to properly reflect the actual carbon emissions of the various fuels in use in Jersey.
  - Developing future homes guidance and buildings standards (both retrofit market support and new build, including carbon neutral and passive homes).
  - Establishing working groups to help identify energy efficient technology solutions for heating and cooling in period or heritage properties (for example, visually acceptable but efficient windows and fabric upgrades).
  - Mandating all new buildings to reach net-zero energy standard by 2030.
  - Establishing an energy certification and widen energy audit process on existing buildings to guide prospective purchasers as well as help homeowners themselves better understand where improvements can be made.
- **Energy efficiency and energy saving technologies have a vital role to play** and for the most part these technologies are already available. Jersey Electricity is well positioned to assist but we need stronger and clearer policies to help accelerate the transition to electricity if we are to achieve carbon neutrality quickly.



Jersey Electricity

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