

Factsheet – an overview of Jersey's energy market

The consumption of energy influences the global economy, our quality of life and social equity. Today's population, particularly in the developed world, is dependent on hydrocarbon fossil fuels to support our industrialised economies and food production.

In this factsheet an overview of the energy we use in Jersey to support our everyday lives is provided. It does not cover the energy needed to produce the products that we import into the Island, which also need to be considered when thinking about our overall carbon footprint.

Where does our heating oil, petrol and diesel come from?

Oil is predominantly imported to Jersey by oil tankers via the La Collette Fuel Farm Storage facility run by the Fuel Consortium owned by Esso UK and La Collette Terminal Limited. This includes kerosene, road fuel, gas oil and aviation and Jet A1 Fuel.

This is distributed by fuel tankers to the industrial and agricultural consumers, retail petrol providers and domestic and commercial consumers.

In addition, some oil products enter the island via containers.

Where does our gas come from?

Jersey uses Liquid Petroleum Gas (LPG) to supply the gas distribution network and not natural gas.

LPG is shipped to the island and stored at the gas storage facility at the harbour. Mains gas is manufactured at the gas production plant which creates an LPG air mixture. This is then distributed via the underground distribution network for domestic, industrial and commercial use. Those not connected to the main distribution network are supplied with bottled LPG.

Where does our electricity come from?

Around 95% of the electricity supplied is imported from low carbon, hydro (34%) and nuclear (66%), sources in France through undersea supply cables connected to the French grid.

The Channel Islands Electricity Grid which is a joint venture between Jersey Electricity and Guernsey Electricity owns and operates the interconnectors with France and Guernsey.

The remainder of electricity comes from the Government-owned Energy from Waste Plant which was commissioned in 2011 and generates electricity from the burning of waste.

As a back-up, the power stations at La Collette and Queens road can generate electricity from heavy fuel oil and gas oil.

Solid fuels

These primarily include coal and wood, which are imported or sourced locally and distributed by independent retailers.

Biodiesel

First generation biofuels are a blend of fossil diesel and a small bio-component (FAME).

Second generation biodiesel (advanced biofuels / renewable biodiesel) does not contain any fossil fuel and can be used as a direct replacement for fossil diesel. It was first commercially imported into Jersey in 2020.

The Government of Jersey carried out a six-month trial using a second-generation renewable biodiesel in its fleet. Analysis of the trial results is currently underway.

It is also available at a number of retail forecourts as a direct replacement for fossil diesel but comes at a premium price.

Commercial renewable energy

With the exception of two wind turbines and a small number of solar photo-voltaic projects (for example at Woodside Farm and at Queens Road) there is currently no large-scale renewable energy generation on the Island.

Further information on renewable energy will be available in a later factsheet.

Energy trends

Statistics Jersey annually publishes the Energy Trends Report, the most recent edition of this is for 2019 data. A summary of the key findings is given below:

Supply

- Almost all of Jersey's energy supply was imported; about 2% was produced on Island as electricity generated by the Energy Recovery Facility and solar panels
- Petroleum products accounted for almost two thirds (62%) of Jersey's energy supply; electricity (imported and on-Island generated) accounted for the remainder (38%)
- Jersey's total primary energy supply was 2% less than in 2018

Use

- Total final energy consumption was 2% lower than in 2018
- Energy consumption per head of resident population was 1.4 tonnes of oil equivalent (toe) and was below that of the UK at 2.1 toe

- Of total energy used, more than a third (38%) was by households, a similar proportion (33%) for transportation (predominantly road) and over a quarter (29%) by industry and government

Security and vulnerability of energy supply

Jersey imports nearly all of its energy. At the present state of technology and the present prices for fossil fuels this has benefits in that it gives the Island access to sources of energy, which are cheaper and more secure and reliable than would be available if Jersey had to be self-sufficient in energy production.

This approach also has disadvantages as the supply of energy may be susceptible to interruptions in global energy supplies, international price volatility, and disruptions to local supply lines.

Fuel poverty and affordability of energy

Sufficient, affordable energy is an issue of social equity. Where households cannot afford to heat their home, they are described as being in fuel poverty. A simple definition of fuel poverty is spending more than 10% of household income on energy.

Fuel poverty can arise through a combination of factors including low household income, poor heating and thermal insulation standards, high fuel costs, a split responsibility for a property with landlord / tenant and under-occupation of a property. The latter is common amongst the elderly.

Whatever the combination of factors, the impact is cold, damp, homes. This can lead to ill health and even early deaths amongst the most vulnerable.

Although fuel poverty and climate action are separate issues, a joint solution is energy efficiency. By increasing the efficiency of homes, the quantity of energy required to achieve a particular standard of living is reduced. This helps reduce both greenhouse gas emissions and reduces the cost of achieving that standard.

Any climate change policy that leads to an increase in the cost of heating homes must take fuel poverty into consideration and seek to minimise its impact on the most vulnerable.

Read more about Jersey's Energy Market:

- **Energy Trends Report 2019** - <https://www.gov.je/News/2021/Pages/Energy-Trends-report-2019-published.aspx>
- **Carbon Neutral Strategy**
www.gov.je/Government/Pages/StatesReports.aspx?ReportID=5138.
- **Pathway 2050: An Energy Plan for Jersey**
<https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=1039>