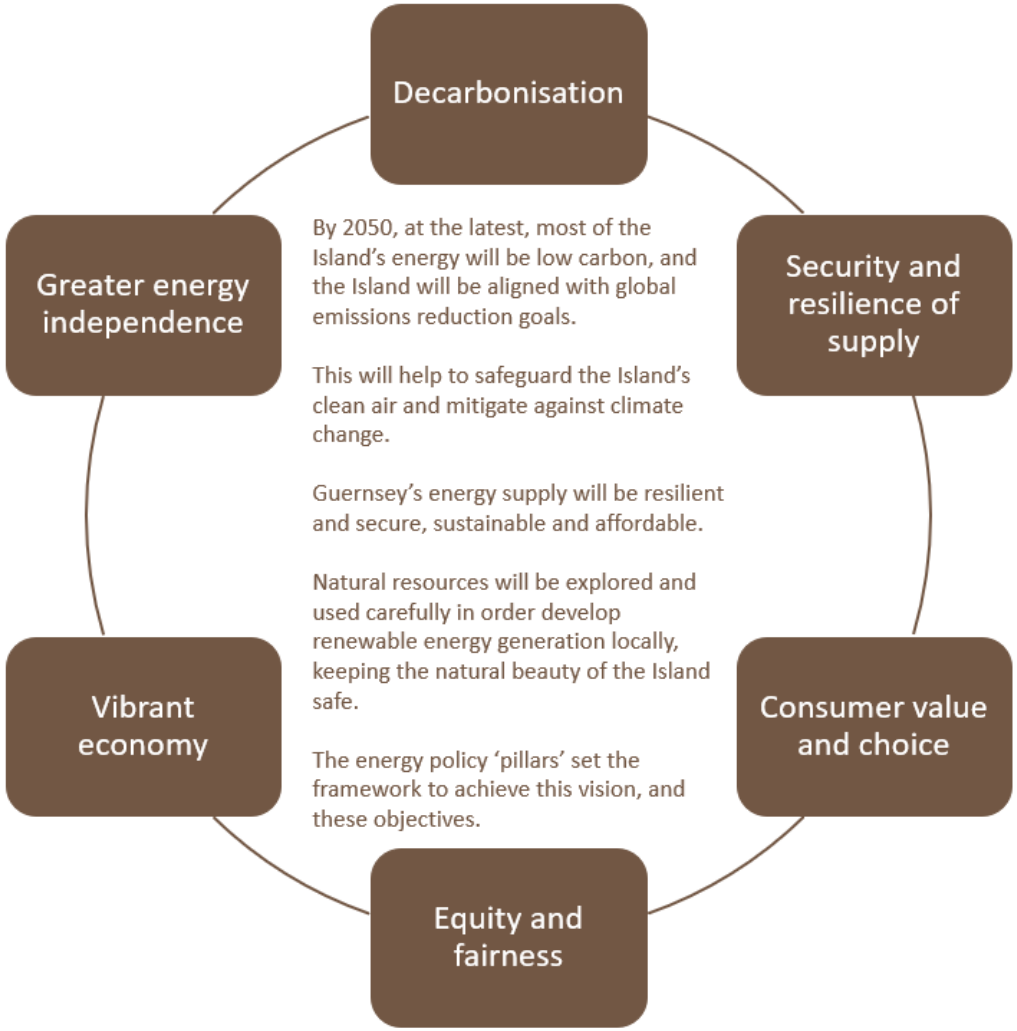
Committee *for the* Environment & Infrastructure

Energy Policy 2020 – 2050

Vision

The Committee have put together next steps to create the conditions to achieve the vision for future energy for the Island – see the 'Energy Policy Timeline.'



Rationale for Energy Policy

Energy is a requirement for everyday life - it powers the vehicles we use to transport ourselves and goods, it provides us with the heat in our homes, it allows us to light our homes, cook our food and enables the connected society we now enjoy. It is important to ensure we have secure energy supplies whilst supporting an energy market that can deliver affordable and sustainable energy during a period of change. Energy is undergoing a transition to low carbon, so the energy fuels and technology we are using today will be changing. The policy aims to continue to work collaboratively with the Island's energy providers, who operate in Guernsey now and in the future, allowing them to meet the Island's energy needs and invest in infrastructure appropriately. Changes to the market structure and the way that Guernsey is powered will be happening, it's an opportunity for the Island to develop local renewable sources, and for the existing energy market to innovate and transition, working with government collaboratively.

Energy on-island today – key points

- Renewable electricity is generated off-island and imported to Guernsey via 'GJ1' a subsea cable link to France, via Jersey.
- Heating buildings is the greatest energy demand in Guernsey.
- The top three energy market segments are heating (non-electricity), electricity and road fuel.
- Light and heavy liquid and gas fuel supplies are all imported by sea.
- The States purchased specialist vessels in 2008 to ensure security of supply of light liquid fuels and these vessels are approaching end of life. Shipments of heavy fuel oil and liquid petroleum gas are made by privately-owned vessels; the vessels that ship liquid petroleum are also approaching end of life.
- These fuels are known as "hydrocarbons" and they emit carbon into the atmosphere.
- Channel Islands fuels Ltd and Rubis currently maintain supplies of liquid fuel to safeguard against shortages. All hydrocarbon suppliers are not, at present, subject to licensing or regulation.
- There is some on-island domestic and small-scale commercial renewable energy generated at present.
- Guernsey Electricity Ltd (GEL) is the main electricity provider. In 2017 the International Energy Group (IEG) were granted a generation license and supply exemption.
- GEL is regulated and required to operate to a security of supply criterion "N-2" and this could be reviewed pending the outcome of a business case for a second interconnector, 'GF1.'

Future energy demand research & findings

The States of Guernsey and Guernsey Electricity Ltd (GEL) commissioned a report on future energy demand up until 2050. This report was undertaken by Price Waterhouse Cooper (PwC). The results show a local decline in total energy demand over time and in increase in electricity demand. Technological efficiencies, fuel efficiencies and the uptake of energy reduction measures such as loft insulation, hybrid vehicles, or newer more efficient gas boilers, make up for a decline in energy and fuel demand. The Island will transition to a low carbon Island, with increased use of electricity to power homes and on-island travel. During the transition time there will be new developments and technologies to support these changes too.

The PwC report highlighted a risk to energy security due to increased electrification – if the interconnector failed there was a risk that not enough hydrocarbons would be shipped to the Island due to declining trends in overall demand. GEL will be tasked to put together a Business Case for a second interconnector and this will enable the Island to develop on-Island renewables due to the increased security this provides and connect to the European grid for export opportunities.

Renewable energy is intermittent, and we know that there are 'peak' times where the demand for energy increases, e.g. in the early evening. With a secure, stable supply, provided by GF1 and GJ1, the Island could always enjoy 100% renewable energy, and this could lessen the need to keep many diesel generators commissioned and maintained, and reduce the reliance upon hydrocarbon fuels. This creates opportunity to develop renewable energy locally, to export into the European grid.

Emissions reduction – key points

- There are global emissions reduction targets and commitments in place, to reduce greenhouse gas emissions by 1990 levels to avoid global temperature rises that could lead to extreme and adverse conditions.
- Guernsey, by extension of the UK's ratification of the Kyoto Protocol, is committed to reducing its greenhouse gas emissions.
- The Energy Policy sets out a target of net zero by no later than 2050 in order to keep global temperature rise to below 2°C above pre-industrial levels. The Climate Change Policy and Action Plan will explore how the Island can achieve this target and if it would be possible to aim to achieve net zero before 2050.
- In Guernsey there was a 37.5% decrease on greenhouse gas emissions in 2017 on 1990 levels.
- An interim target is set by the Energy Policy for Guernsey to achieve a 57% decrease on 1990 levels by 2030, to align with the UK.
- More information about the Island's plans on climate change mitigation can be found at www.gov.gg/climateaction

Engagement with stakeholders

The Committee has undertaken extensive stakeholder engagement within the energy sector, across relevant States Committees, and with business organisations. There a four 'pillars' to the policy that underpin each action and every outcome.

The pillars are about making sure that the Island reduces emissions, to make sure that the energy market can transition to decarbonisation without risking security of supply for Islanders, keeping energy costs affordable; and to grow on-island renewable energy.
Whilst there are no recommendations for any environmental or energy related taxes in the energy policy, the States are recommended to review this by May 2023.

The need to rebalance fuel duty will increase, with more efficient vehicles on Island and with more electric vehicle ownership. There has been a study on several different tax policy options but there are no plans to make any changes or introduce any new taxes at this stage. Engagement with stakeholders will play an important part in how any changes may be made in the future.

Benefits second interconnector – key points

- A full business case will be published and delivered to the States in 2020 at a cost of £6 – 9 million that will be recovered by GEL.
- The known benefits of a second interconnector ('GF1') include; affordable prices for consumers, security and resilience, helping to support renewable energy growth, and to reduce carbon emissions.

Renewables and Low Carbon energy

Next steps will be to develop the on-island renewable energy sector to support decarbonisation and to support energy security and resilience. Guernsey has abundant resources of wind, wave, tidal and solar that can be utilised to produce power. Technologies are maturing in wave and tidal to reach commercial levels. Onshore wind and solar are both cost competitive and are now the cheapest forms of new build bulk power.
More information can be found at www.gov.gg/renewables

Managing the decline of hydrocarbons – key points

- The demand for hydrocarbon fuels will reduce over time and the way that fuels are shipped has been changing; hydrocarbon fuels will be needed in smaller volumes to power the Island in future.

- The full report can be found here: www.gov.gg/fuels and sets out a series of options to ensure security of supply and to meet future declining volumes balanced with our continued need to import these fuels now and beyond 2050.
- This work will become part of the States Trading Supervisory Board Ports Programme, who are looking at all aspects of import into the Island ports, for the Island's future needs.
- The Committee *for* Environment & Infrastructure will continue to work with suppliers to deliver interim solutions.

Actions

See the 'Energy Policy Timeline' for a summary of the policy's actions.