

Carbon Neutral Roadmap

Preferred Strategy Report

R.170/2021



1. Introduction

- 1.1. Jersey has a good record of tackling its contribution to global climate change, although progress appears to have slowed in recent years and the Island will need to take significant action to decarbonise faster in the coming years. Steps to date have successfully reduced on-Island carbon emissions¹ by over a third since 1990. The Island continues to take its global responsibilities seriously, acting in accordance with ratified international treaties on climate change.
- 1.2. A comparison of emissions reductions for each Crown Dependency, France and the UK, relative to their 1990 baseline, as well as their projected decarbonisation pathways, is set out at Figure 1.
- 1.3. Jersey has lower per capita carbon emissions than many jurisdictions of a similar size, and the lowest of all jurisdictions in the British Isles. From this base, the States Assembly, in May 2019, voted to declare a climate emergency (P.27/2019, as amended)². In February 2020, the Assembly agreed a Carbon Neutral Strategy (P.127/2020, as amended).
- 1.4. The Carbon Neutral Strategy adopted by the States Assembly rejects the view that, because of its small size, it is not worth Jersey becoming carbon neutral when other countries have not committed to do the same. Instead, the States Assembly, in agreeing the Carbon Neutral Strategy, recognised that the strongest moral and ethical responsibility is to the generations of Islanders that will live in and look after Jersey in the future. This responsibility is not lessened because others fail to act; it still falls to the current generations of Islanders to improve Jersey's air quality, protect and enhance its natural environment, create the infrastructure to lead healthier lives and replace polluting technologies for the longer-term.
- 1.5. As required by the Carbon Neutral Strategy, representatives of all age groups – from those in their late teens to those in their early nineties – were drawn together through random selection, to form Jersey's Citizens' Assembly on Climate Change. The report of the Citizens' Assembly, published in June 2021³, is clear, and its ambition reflects and validates that which ministers, and members of the States Assembly have shown to date.

¹ Carbon emissions is used throughout to refer to the bundle of six greenhouse gases as defined in [Carbon Neutral Strategy \(gov.je\)](#)

² [Proposition – Climate Change Emergency: Actions to be taken by the Government of Jersey \(P.27/2019\) \(gov.je\)](#)

³ [Achieving Carbon Neutrality: Report of Jersey's Citizens' Assembly on Climate Change \(gov.je\)](#)



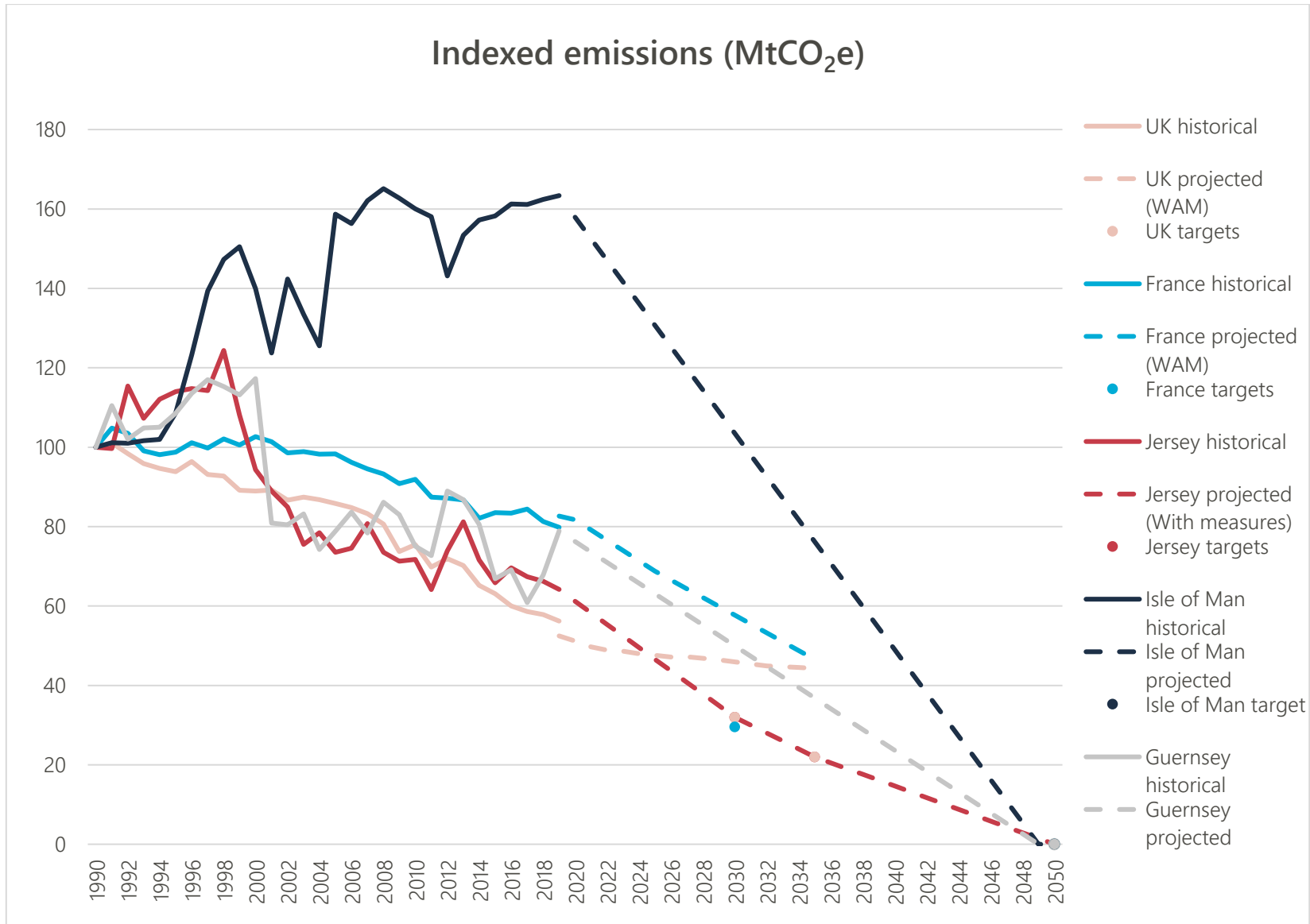


Figure 1: Indexed emissions: Crown dependencies, France, and UK.



- 1.6. The report of the Citizens' Assembly on Climate Change was considered by members of the States Assembly during an in-committee debate held in July 2021⁴. The Minister for the Environment has prepared a detailed response to the themes and issues raised by States Members, which is published alongside this strategy.
- 1.7. Building on the work to date, and a wide-ranging evidence base ([Appendix 1](#)), this Preferred Strategy sets a strategic policy framework for the preparation of the Carbon Neutral Roadmap). By publishing these policies early, Islanders can begin to consider their implications and can also see the intended direction for the Carbon Neutral Roadmap. Early development of the strategic policies also provides a framework against which the recommendations of the Citizens' Assembly can be tested and enables the development of policies based on a consistent strategic direction.
- 1.8. Each strategic policy contains an explanation of the associated issues and available evidence, together with a policy statement set out in a navy-blue box. These policy statements provide the fundamental assumptions used in planning and preparing the Carbon Neutral Roadmap.
- 1.9. The strategy has been developed by a steering group of ministers and non-executive States Assembly members, chaired by the Assistant Minister for the Environment, Deputy Gregory Guida, and is endorsed by the Council of Ministers. The membership and Terms of Reference for the group is included in [Appendix 2](#).
- 1.10. A response to the Citizens' Assembly on Climate Change Recommendations report can be found in [Appendix 3](#) to this Preferred Strategy.
- 1.11. The Preferred Strategy should be read alongside the Carbon Neutral Strategy⁵, which sets out the scientific and strategic context, people-powered approach and high-level policy analysis, which are not repeated here.
- 1.12. The strategic policies established by Preferred Strategy will be incorporated into the Carbon Neutral Roadmap. Once published, the Carbon Neutral Roadmap will undergo a final period of public consultation and will be considered by the Environment, Housing and Infrastructure Scrutiny Panel, before being debated in the States Assembly.

⁴ [Carbon Neutral Jersey \(Consideration "in-committee"\)](#), Hansard (23 July 2021)

⁵ [Carbon Neutral Strategy \(gov.je\)](#)



2. Structure and content

The Preferred Strategy is set out in several sections, as set out below.

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3. The Carbon Neutral Roadmap

- 3.1 From the start, work to develop the Carbon Neutral Roadmap has recognised that decarbonising Jersey's economy is a long-term challenge. It is important to take action now, but also to focus on increasing our capacity to decarbonise in future years.
- 3.2 The Carbon Neutral Strategy⁶, agreed by the States Assembly in February 2020, sets out to establish: *"a mature approach, aimed at creating the foundations for long-term social and economic change...[that]...will require us all to make time and space for the reasoned, long-term thinking that this issue requires."*
- 3.3 The Strategic Policies in this document are a contribution to developing these long-term foundations. They build on other foundational work, particularly the people-powered approach taken through Jersey's Climate Conversation⁷, which included the Citizens' Assembly on Climate Change, and the discussions that followed in the States Assembly in-committee debate⁸.
- 3.4 In planning for major long-term change, a balance must be struck between taking early decisions that give certainty and create the context for action, and the need to take time to get decisions right and to respond to events and new evidence and understanding. It is the job of the Carbon Neutral Roadmap to achieve this balance, by:
- establishing a staged pathway in which delivery plans are updated in each new term of government,
 - introducing a package of policies and actions for the first stage (2022-26), with supporting investment from the Climate Emergency Fund, and
 - setting milestones for future key decisions and the introduction of future policies.
- 3.5 The published Roadmap will include a visual depiction of what actions need to be taken immediately, and when other decisions must be made, and actions taken, to deliver the plan to stay on the right road to Jersey's low carbon future.

⁶ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je)

⁷ [Jersey's Climate Conversation](#)

⁸ [Carbon Neutral Jersey \(Consideration "in-committee"\)](#), Hansard (23 July 2021)



Carbon Neutral Roadmap Strategic Policies

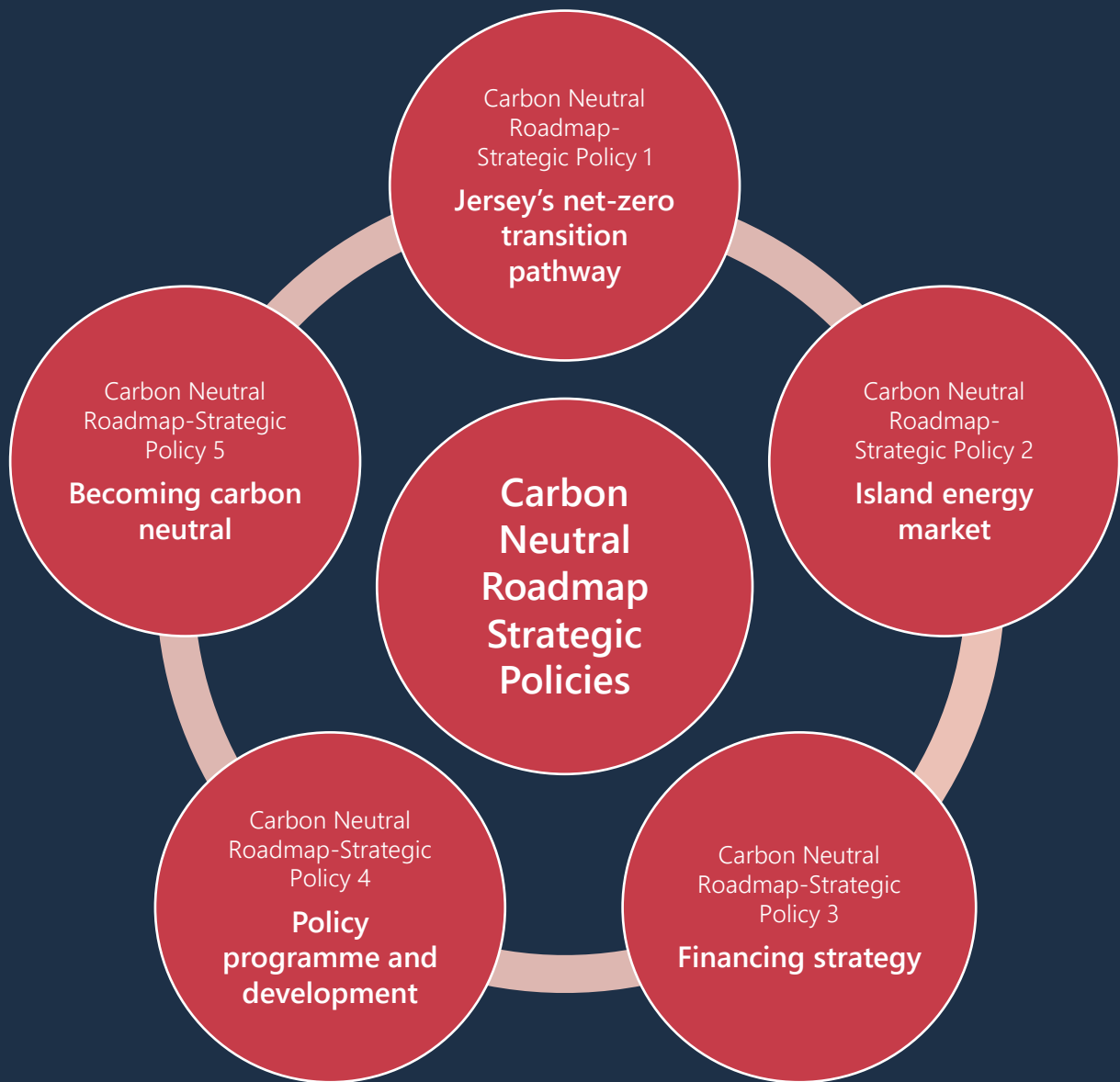


Figure 2: 5 Strategic Policies of the Carbon Neutral Roadmap.

4. Strategic Policy 1: Jersey's net-zero emissions pathway

- 4.1. In line with other jurisdictions, Jersey monitors the emission of six greenhouse gases. These are converted into 'carbon equivalents' to create a standard index of emissions that is measured in tonnes of CO₂ equivalents.
- 4.2. In simple terms, an emissions pathway is a forward projection of the anticipated level of carbon pollution in future years. The pathway is used to show how much carbon is expected to be emitted in each year and is a fundamental building block of the Carbon Neutral Roadmap.
- 4.3. This Strategic Policy establishes the intention to secure the extension of the Paris Agreement on Climate Change to Jersey. This brings several advantages, including showing global and local commitment to a science-led approach to decarbonisation; creating clear targets that help government, Parishes, businesses, and individuals all see the role they will need to play in the coming years; and leaving the door open to become carbon neutral at an early date.
- 4.4. The policy sets a minimum emissions pathway for Jersey. This will be tested alongside the development of specific policies designed to reduce carbon emissions to the levels required by the pathway. If that analysis shows that a faster transition might be accommodated, that will be set out in the Carbon Neutral Roadmap.

Our current scope 1 carbon emissions

- 4.5. Jersey's previous greenhouse gas emissions are well understood and have been independently measured since 1990⁹ (the baseline year set by the Kyoto Protocol).
- 4.6. The majority of our emissions come from on-Island road transport, fossil fuel heating systems in our homes, business and government buildings and transport to and from the Island by ferries and planes. Smaller emissions sources include agriculture, the treatment of solid waste in the energy from waste facility to produce electricity, air conditioning units and changes in land use. This is shown in Figure 3.

⁹ [Jersey's greenhouse gas emissions \(gov.je\)](https://www.gov.je/greenhouse-gas-emissions)



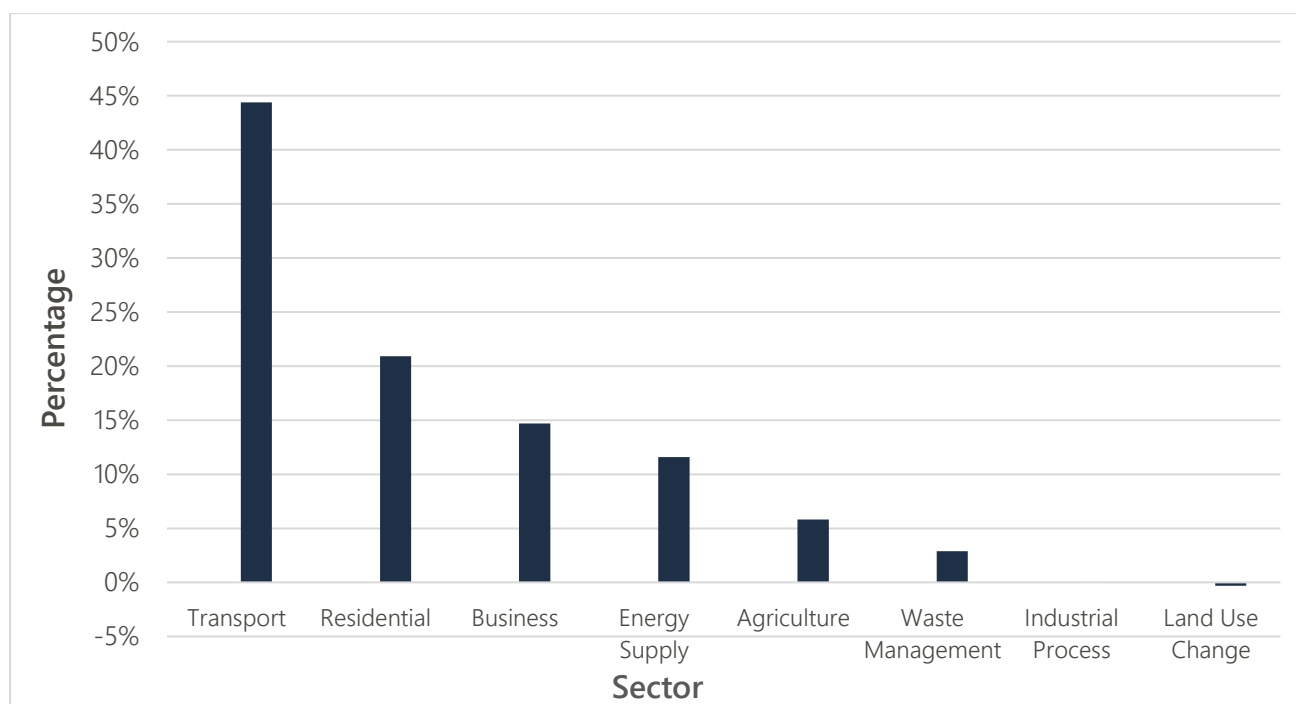


Figure 3: Scope 1 emissions by inventory reporting sector. Jersey's 2019 inventory figures. Greenhouse gas inventories are reported to the UNFCCC by countries and are used for policymaking, monitoring progress in carbon reductions and for modelling in the scientific community. An overview of the activities covered in each sector can be found in Appendix 3.

- 4.7. Emissions from on-Island activities (principally from heating and transport) are relatively low at about 3.8 tonnes of carbon per person annually compared to 6.8 tonnes per person annually in the UK. Jersey benefits from an already decarbonised electricity supply and a lack of heavy industry on the Island which explains the per capita difference. It is important to note that this per capita figure does not include scope 3 emissions generated off-Island in the production of goods and services that are consumed in Jersey (see the Carbon Neutral Strategy¹⁰ for a full description of different scope of emissions).

Progress along our previous emission reductions pathway

- 4.8. In 2014, the States Assembly agreed a carbon reduction plan, *Pathway 2050 – An Energy Plan for Jersey*¹¹. This Plan responded to the Kyoto Protocol of the United Nations Framework Convention on Climate Change (UNFCCC), adopted in 1997. Under this protocol, Jersey must reduce on-Island emissions by 80% by 2050, compared with 1990 levels.
- 4.9. In line with our Kyoto obligations, successful implementation of the policies in Pathway 2050 should deliver the projected reduction in scope 1 emissions shown by the grey line Figure 4: nearly 80% lower than 1990 levels by 2050. Without any policies to reduce emissions,

¹⁰ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

¹¹ [Pathway 2050: An Energy Plan for Jersey \(gov.je\)](https://www.gov.je/pathway-2050)



conservative projections are that emissions will follow a 'no interventions' pathway indicated by the upper orange line.

- 4.10. Figure 4 shows that emissions were expected to be 263,000 tonnes in 2030; this would be 58% of the 1990 baseline of 628,600 tonnes of carbon per year.
- 4.11. We can track our actual progress in reducing emissions as of 2019 (the most recently verified data available shown in navy-blue) against the red 'no interventions' line and the blue 'Pathway 2050 interventions' line. It is clear that actual progress, in recent years, is tracking far closer to the 'no interventions' line than the 'with interventions' line that would put us on track for an 80% reduction in emissions on 1990 levels by 2050¹².
- 4.12. This is sobering. The international scientific community has made it clear that an 80% reduction on 1990 levels is insufficient to prevent dangerous climate change hence the move under the Paris Agreement to 'net-zero' by 2050.
- 4.13. Despite having agreed Pathway 2050: An Energy Plan for Jersey (gov.je)¹³ and policies to reduce carbon emissions locally, we are already quite a long way off-track with what is now agreed to be too conservative a level of emissions reductions, let alone zero emissions by 2030 or even 2050.

¹² Note that the trajectory of the 'linear' trend line is largely driven by decarbonisation in the earlier years of this century and slower decarbonisation in more recent years (as discussed in this section).

¹³ [Pathway 2050: An Energy Plan for Jersey \(gov.je\)](https://www.gov.je/pathway2050)



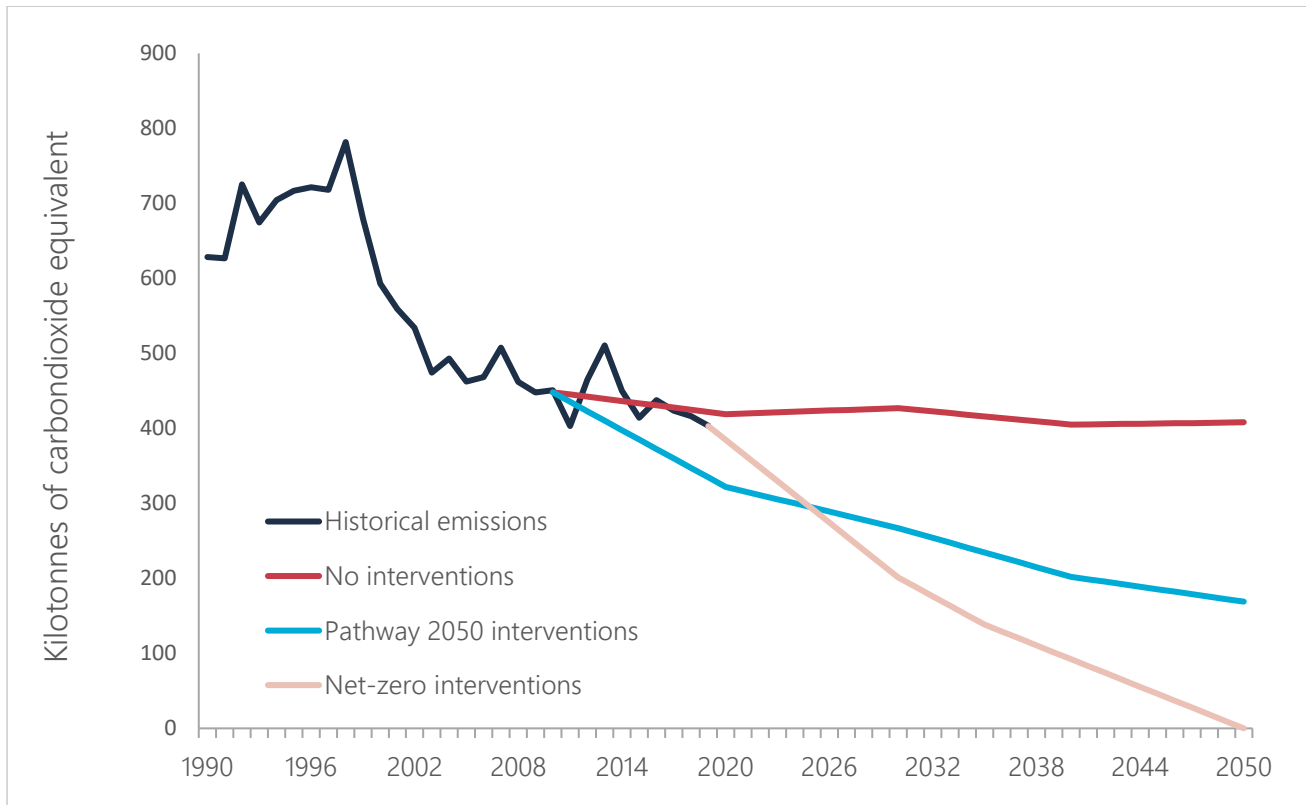


Figure 4: Jersey previous emissions reductions pathway as agreed in Pathway 2050 – An Energy Plan for Jersey. The grey dotted line shows trend line of historic emissions based on emissions from 2000 onwards after the first electricity interconnector was installed.

4.14. There are some obvious explanations why progress in recent years has not delivered the carbon reductions that were anticipated, including:

- Background population growth has been in excess of the modelled assumption.
- The funding behind Pathway 2050 was limited (£1M per annum) and was substantially reduced in later budget rounds.
- The policies and action statements were not linked into long term strategic planning, beyond the political cycle within which the Energy Plan was agreed.
- Policies do not always have the anticipated impacts. For example, an evaluation of the government's retrofit scheme showed that, in practice, many residents took the thermal improvements as comfort (i.e., heating their homes more for the same cost) rather than as energy reductions.
- The pathway model – like all policy models – is illustrative: it is based on assumptions and uses a simple linear approach when, in practice, progress will always be uneven and should be observed over a long period to truly assess the trend.

4.15. Some of these factors can be mitigated and potentially avoided in the design of the Carbon Neutral Roadmap.



The Paris Agreement on Climate Change

- 4.16. In 2015, at the Conference of Parties meeting (COP21), The Paris Agreement was reached with the aim of limiting the global average temperature increase to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. It was adopted by 196 Parties and entered into force in November 2016.
- 4.17. The Paris Agreement is the first of its kind; a legally binding agreement that brings all nations into a common cause to combat climate change. The Paris Agreement works on a 5-year cycle of increasingly ambitious climate action carried out by countries. In 2020, countries submitted their plans for climate action. These are known as Nationally Determined Contributions (NDCs).

Extending The Paris Agreement to Jersey

- 4.18. Since the drafting of Jersey's Carbon Neutral Strategy¹⁴ in 2019, international progress and dialogue on the climate emergency and climate change policy has accelerated. Coupled with this increased sense of urgency there have been significant moves by the United States (re-joining The Paris Agreement in September 2020) and China strengthening its emission reduction commitments (pledging to achieve carbon neutrality before 2060).
- 4.19. As part of the preparations for COP26 in Glasgow, Jersey is working closely with the UK government and the other Crown Dependencies, to reach agreement that The Paris Agreement commitment will be extended to cover Jersey and the other Crown Dependencies. Work is currently underway to extend The Paris Agreement to Jersey.
- 4.20. Article 4 of The Paris Agreement¹⁵ sets out that "Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognising that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century, on the basis of equity, and in the context of sustainable development and efforts to eradicate poverty."
- 4.21. Extension will require Jersey to evidence its commitment to reach net-zero emissions, and to adopt an emissions pathway of equal or greater ambition than that adopted by the UK (which in June 2019 committed to reaching net-zero emissions by 2050 with an interim target of reducing emissions by 68% by 2030). The Paris Agreement also provides for a reporting framework to ensure progress is monitored and assessed transparently. That reporting framework operates first by considering the UK's 'nationally determined contribution' (NDC) every five years, which details what it intends to achieve, and the domestic mitigation measures it will implement to achieve

¹⁴ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

¹⁵ Article 4: [Paris Agreement \(unfccc.int\)](https://unfccc.int/paris-agreement)



those targets. In negotiating the extension of The Paris Agreement, the government will seek to ensure that Jersey can play the fullest possible role in reporting, transparently, our decarbonisation plans and achievements, as part of the UK's NDC. Jersey will continue to publish an annual inventory of greenhouse emissions and the information necessary.

Achieving net-zero by 2050

- 4.22. The Intergovernmental Panel on Climate Change (IPCC) define net-zero as “when anthropogenic emissions of greenhouse gases to the atmosphere are balanced by anthropogenic removals over a specified period”¹⁶. To achieve net-zero: “an actor reduces its emissions following science-based pathways, with any remaining green-house gas emissions attributed to that actor being fully neutralised by like-for-like removals (e.g., permanent removals for fossil fuel carbon emissions) exclusively claimed by that actor, either within the value chain or through purchase of valid offset credits”.
- 4.23. There are two significant differences between the concepts of net-zero and carbon neutral: the emissions pathway that must be followed, and the type of offsets that are acceptable.

The emissions pathway

- 4.24. Carbon neutrality doesn't require emissions reductions to follow a certain pathway: one could choose to reduce emissions by 80% and offset 20%; equally, one could choose to reduce emissions by 20% and offset 80%; in both instances carbon neutrality is achieved¹⁷.
- 4.25. To be net-zero one must be follow an emissions reduction pathway in line with the science-based global emissions reduction targets that are needed to limit global warming to 1.5°C and avoid the worst impact of climate change.
- 4.26. In this case, net-zero is a stronger concept as it focuses actions on policies that cause emissions reductions on a pathway in line with the recommended science.

Offsetting residual emissions

- 4.27. Both net-zero and carbon neutral recognise that carbon offsets have a legitimate role to play in decarbonisation.
- 4.28. Carbon neutral policies can utilise offsets that create carbon reductions, efficiencies, or sinks. This could include, for example, offsets resulting from a project to increase the uptake of low energy

¹⁶ [IPCC Glossary of terms](#)

¹⁷ Note that the latter scenario was rejected in Jersey's [Carbon Neutral Strategy](#) (Principle 3 of which makes clear that offsets 'should only be used where they are accompanied by robust and ambitious emissions reduction targets).



light bulbs in Mozambique. This project would not result in any greenhouse gas emissions being removed from the atmosphere but rather would avoid new additional greenhouse gases being emitted.

- 4.29. Net-zero can only be achieved through the purchase of carbon offsets that are issued for projects that remove carbon from the atmosphere (rather than projects that avoid the further release of carbon into the atmosphere)¹⁸.
- 4.30. In this case net-zero is a stronger concept as it only allows offsets to be used that remove greenhouse gases from the atmosphere.

Summary: Jersey's net-zero emissions pathway

- 4.31. International best practice on climate change policy has clearly shifted towards net-zero, and this is reflected in the ambition set out in The Paris Agreement. The Preferred Strategy is to align to net-zero.
- 4.32. Carbon neutrality remains a legitimate position on the pathway to net-zero and is considered in Strategic Policy 5.
- 4.33. Jersey's proposed minimum emissions pathway is set out in the Strategic Policy 1. The final agreed pathway will be set out in the Carbon Neutral Roadmap.

¹⁸ This requirement is similar to <https://www.smithschool.ox.ac.uk/publications/reports/Oxford-Offsetting-Principles-2020.pdf> established by the Smith School at the University of Oxford, which are currently accepted as international best practice.



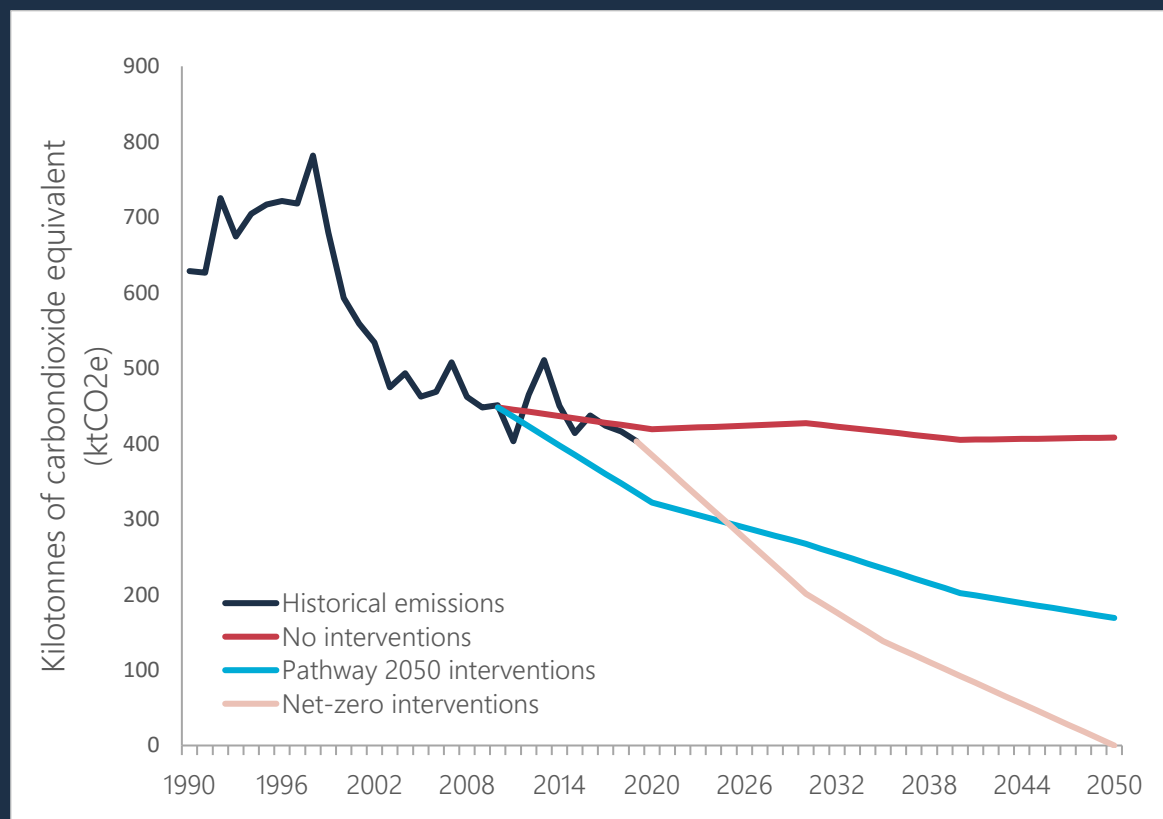
Jersey's Net-Zero Emissions Pathway

Carbon Neutral Roadmap: Strategic Policy 1

To ensure the international integrity of our environmental targets, and aspire to the highest level of ambition, Jersey will follow an emissions reduction pathway in line with our commitments under The Paris Agreement. This pathway will:

- as a minimum, reduce emissions by 68% compared to our 1990 baseline by 2030; and reduce them to 78% from baseline by 2035,
- deliver net-zero emissions by 2050, and
- stay in line with, and respond to further evidenced change in, science-based global emissions reduction targets that are needed to limit global warming to 1.5°C.

The pathway is indicated in the graph below. The final agreed pathway will be set out in the Carbon Neutral Roadmap.



5. Strategic Policy 2: Island energy market

- 5.1. Jersey's energy market is well served by a range of products, and a landscape of providers that manage some relatively complex supply chains and logistics for our small marketplace of c.45,000 homes and population of c.108,000 people.
- 5.2. Energy supply and distribution is expensive, involving multi-million-pound investment decisions in infrastructure that lasts decades. Many investments in Jersey are also linked closely to Guernsey as we share Channel Island distribution networks and suppliers for electricity, LPG, and oil products.
- 5.3. This Strategic Policy sets the framework for establishing whole-of-market transition plans over the coming years to respond to the urgent need to decarbonise our energy supply while ensuring our market is able to flex, respond and adapt over this relatively short period. The policy is structured in three parts, as suggested in Figure 5.

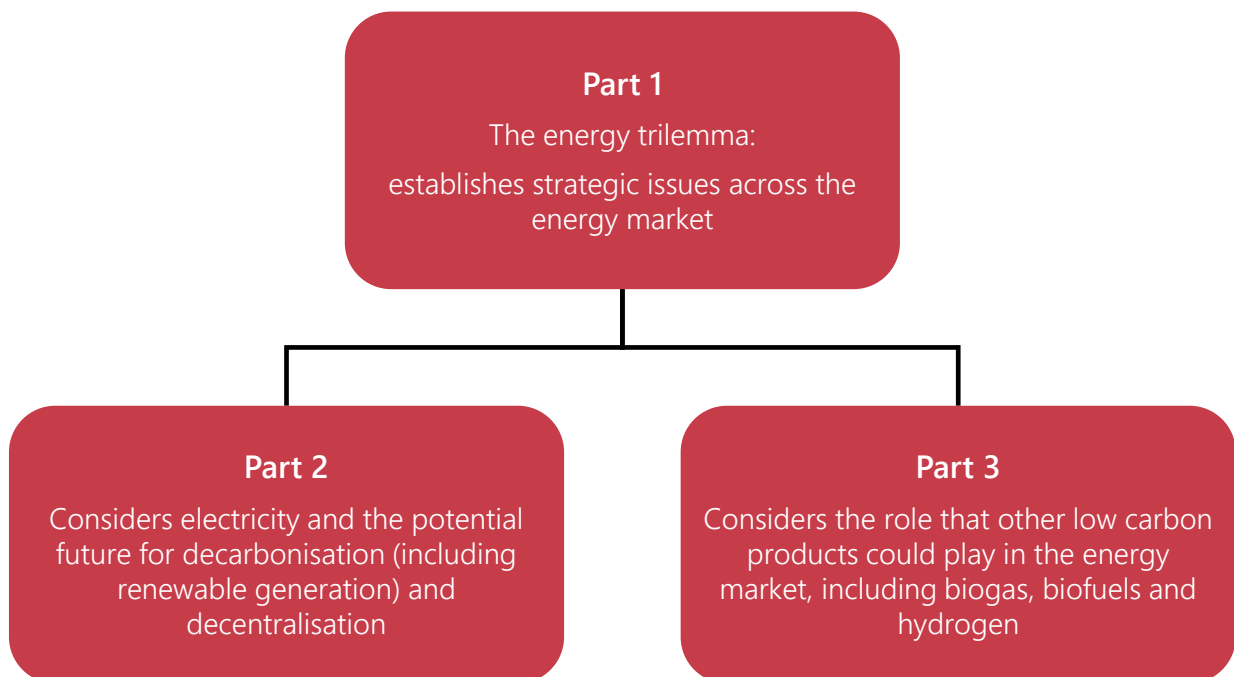


Figure 5: 3 parts of energy market transition policy.



Part 1 - The energy 'trilemma': our future energy choices and the shape of the market

5.4. The energy 'trilemma' refers to the need to balance energy affordability and security with decarbonisation, as suggested in Figure 6.

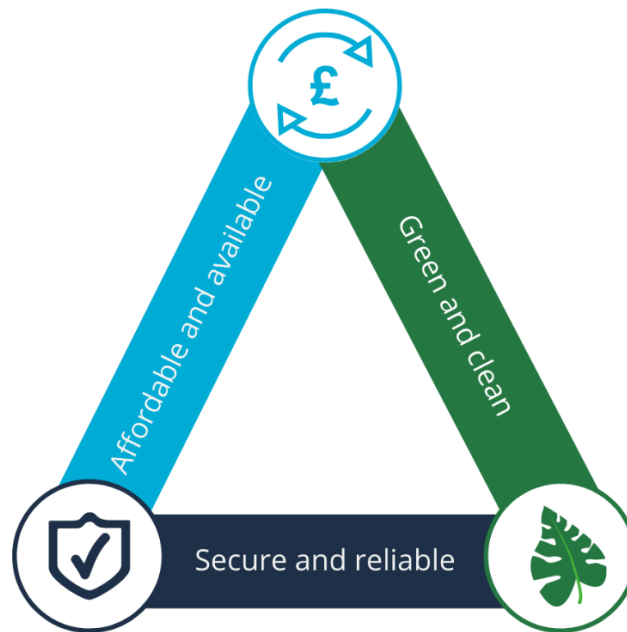


Figure 6: The energy trilemma.

5.5. The Carbon Neutral Strategy¹⁹ relies on – and did not change – the underlying policies of affordability and security of energy of supply that are set out in Pathway 2050. Further work in these areas was anticipated to be undertaken in 2020 but was delayed by the impact of the COVID-19 pandemic.

Sustainability

5.6. Jersey currently enjoys access to low-carbon electricity from France, which has proved a mature and economically viable source that makes a significant contribution to meeting decarbonisation and sustainability targets. The Carbon Neutral Strategy confirms that “any...viable route to carbon neutrality by 2030...will require the rapid electrification of a large proportion of road transport and space heating in Jersey”²⁰.

5.7. As set out below, the pathway for delivering cost-effective decarbonisation with alternative technologies is more uncertain, as it requires the technologies to mature to the point of having large-scale commercial deployment potential, and for greater levels of enabling infrastructure investment to be undertaken.

¹⁹ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

²⁰ [Carbon Neutral Strategy \(gov.je\) \(p.69\)](https://www.gov.je/carbon-neutral-strategy)



Security and resilience

- 5.8. Relying entirely on electricity imports from France (or other parts of the European energy market) does not, however, provide Jersey with energy sovereignty, and may be exposed to new risks if energy markets become more volatile in the future. To diversify its energy mix, Jersey could consider other sources of large-scale generation, and support this with increased use of smaller scale energy generation as technologies mature.
- 5.9. Security of supply concerns also arise for alternative technologies. Jersey is unlikely to produce sufficient biogases, biofuels, or hydrogen on-Island to fully decarbonise transport and heating systems, even if the technologies become commercially competitive. This is because of the limited availability of feedstock and crops necessary for biogases and biofuels respectively; and insufficient sources of green power generation necessary to meet the production needs of green hydrogen.

Affordable and available

- 5.10. It is important to recognise that our current electricity model has served the Island well, and provides an affordable, low carbon, reliable and secure product with strong investment and a good return to shareholders (the Government of Jersey is a 62% shareholder). It is recognised though that the price-premium of the decarbonised electricity supply that Jersey currently enjoys, may increase in future.
- 5.11. Diversifying the Island's energy mix is likely to create additional costs in the short- to medium-term, although could lead to lower overall costs over the longer-term. Diversification could also pose network management challenges that might manifest as increased intermittency, depending on the nature and pace of transition.

Balancing the trilemma

- 5.12. Balancing these related but at times competing interests in a small jurisdiction is a delicate challenge, but one that Jersey's energy market has successfully achieved in recent decades. Going forward, the decarbonisation policy will continue to evolve in a measured way that recognises the interplay with energy sovereignty and security, and end-user affordability.
- 5.13. Recognising the significance of energy market policy, the draft Bridging Island Plan²¹ includes a strategic proposal to undertake a review of long-term energy requirements that, amongst other things, will consider regulatory or other economic requirements, along with infrastructure and land use requirements linked to future energy use.
- 5.14. This review provides a process for progressing energy market policy in a holistic and objective way. As part of the work government will: establish new research and advisory partnerships with

²¹ [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je/draft-bridging-island-plan)



energy systems experts; explore opportunities to trial, appropriately, new and emerging energy solutions in Jersey; and will work with the Energy Forum²² to solicit decarbonisation transition plans from all current Island energy providers.

- 5.15. The review will need to consider how we might ensure that those working in the energy sector can flex and enhance their skills to accommodate new products or market structures. Similarly, those whose living relies on selling or maintaining vehicles will also need to be considered, and support offered to ensure people can gain the necessary skills to support decarbonisation and take advantage of the creation of new green jobs.

Part 2 - The future energy landscape: electricity

The role of large-scale renewable generation

- 5.16. Electricity can be thought of as a carrier of energy that is generated upstream; it is only as sustainable as the method of generation: electricity generated by solar panels, wind turbines or nuclear is a low-carbon product; electricity generated by coal-fired power stations and gas turbines is carbon heavy.
- 5.17. Locally our electricity supply is managed through a centralised transmission and distribution network that is connected by sub-sea cables to the European electricity grid. Jersey Electricity plc (JEC) operate a vertically integrated natural monopoly in the electricity supply chain that is non-competitive at some stages. This is not an unusual model for small isolated markets although the associated regulatory framework pre-dates emerging technology changes (see the section on decentralised generation).
- 5.18. JEC can form purchase contracts with suppliers of their choice in a liberalised European electricity market. Their decision to switch first to nuclear (low-carbon), and now to a nuclear: hydropower (renewable) generation mix has been the principal driver of decarbonisation in Jersey to date.
- 5.19. While access to low-carbon electricity can be maintained, switching to other forms of low-carbon generation at either the utility scale (for example wind or tidal generation) or more local sustainable generation (for example PV panels on roofs) will not provide further carbon reductions, or though it could bring other benefits for energy security and (in some use cases, in particular for those generating energy) affordability.
- 5.20. JEC's access to low-carbon electricity is currently contractually assured until 2027. Jersey is a long-standing customer in this market with good experience of securing contracts that fulfil our requirements. Continued access to well-priced decarbonised electricity in the medium- to

²² [The Energy Forum \(gov.je\)](http://gov.je)



longer-term though will depend on commercial renegotiation in a rapidly decarbonising European energy market.

- 5.21. Jersey's location and geography do provide access to renewable energy sources: St Aubin's bay could be suitable for energy generation²³; the Island has a high coastline-to-land ratio, which is relevant for offshore wind production, and more hours of sunshine than anywhere else in the British Isles.
- 5.22. There may be other reasons to generate our own electricity rather than rely on the European grid, such as sovereignty and security of supply, long-term resilience, and local economic and employment benefits. However, we will only make carbon savings if this electricity replaces fossil-hydrocarbons and not current grid electricity. (The Citizens' Assembly Renewable Energy Factsheet²⁴ discusses this in more detail).
- 5.23. Security benefits are likely though to be offset (certainly in the short- to medium-term) by increased energy prices (and other potential charges) necessary to cover the cost of infrastructure investment. Most power produced from renewable sources currently receives government subsidies which reduces the costs for the consumer. These subsidies are not currently available in Jersey so if we invested in utility scale renewable energy, we are liable for non-subsidised costs and would have to find funding.
- 5.24. As technologies become more commercially competitive costs are expected to fall, as they have recently with onshore wind. Government policy remains open to consideration of all potential business cases for renewable generation, and both officials and ministers are in regular and on-going discussions with a range of potential providers, including JEC. Accordingly, enabling policies to facilitate the uptake of renewable energy generation at the appropriate time and on a case-by-case basis are proposed in the draft Bridging Island Plan²⁵.

Decentralisation and distributed generation

- 5.25. Smaller scale renewable generation presents a decentralised solution (see Figure 7-2) that is different to the centralised import and distribution model that exists in Jersey (see Figure 7-1).

²³ Albeit large-scale tidal generation is in limited deployment worldwide, not least because of the costs of tidal generation engineering projects

²⁴ [Factsheet - Renewable Energy \(climateconversation.je\)](https://climateconversation.je)

²⁵ [Draft Bridging Island Plan \(gov.je\)](https://gov.je) (pp.203-222)



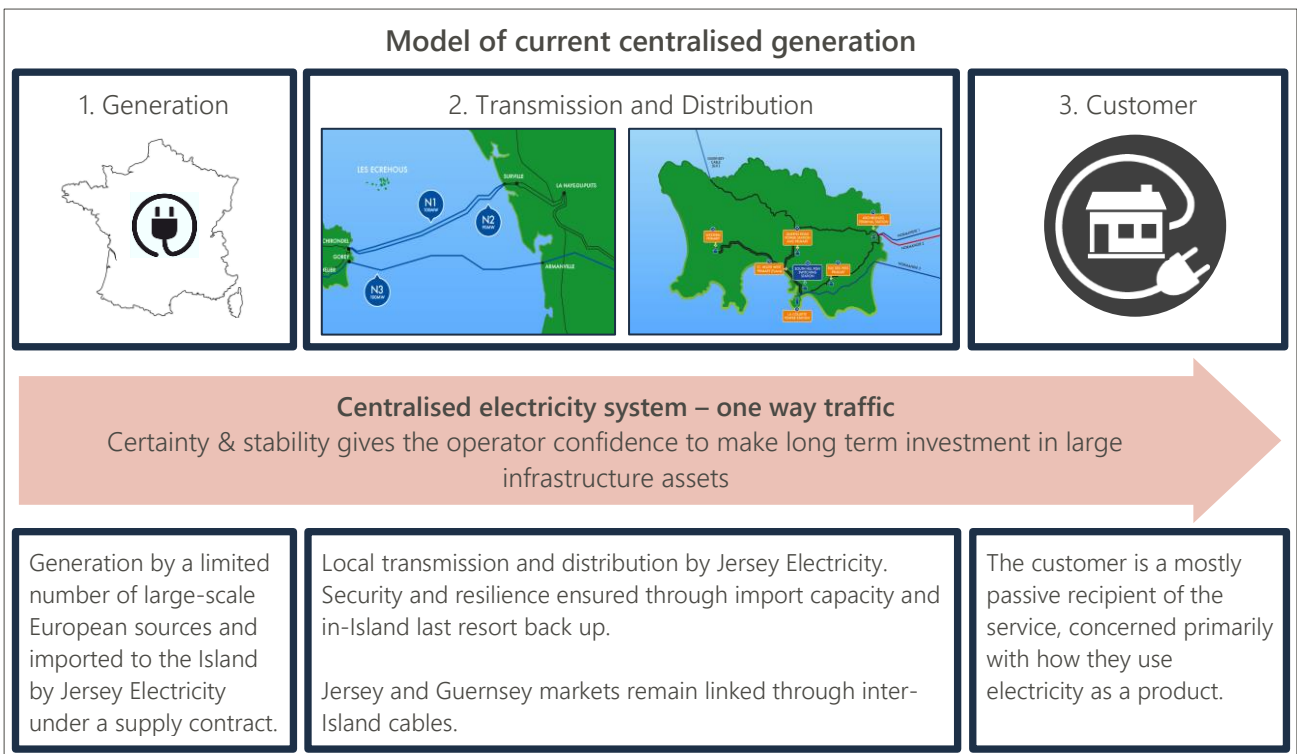


Figure 7-1: A model of centralised generation.

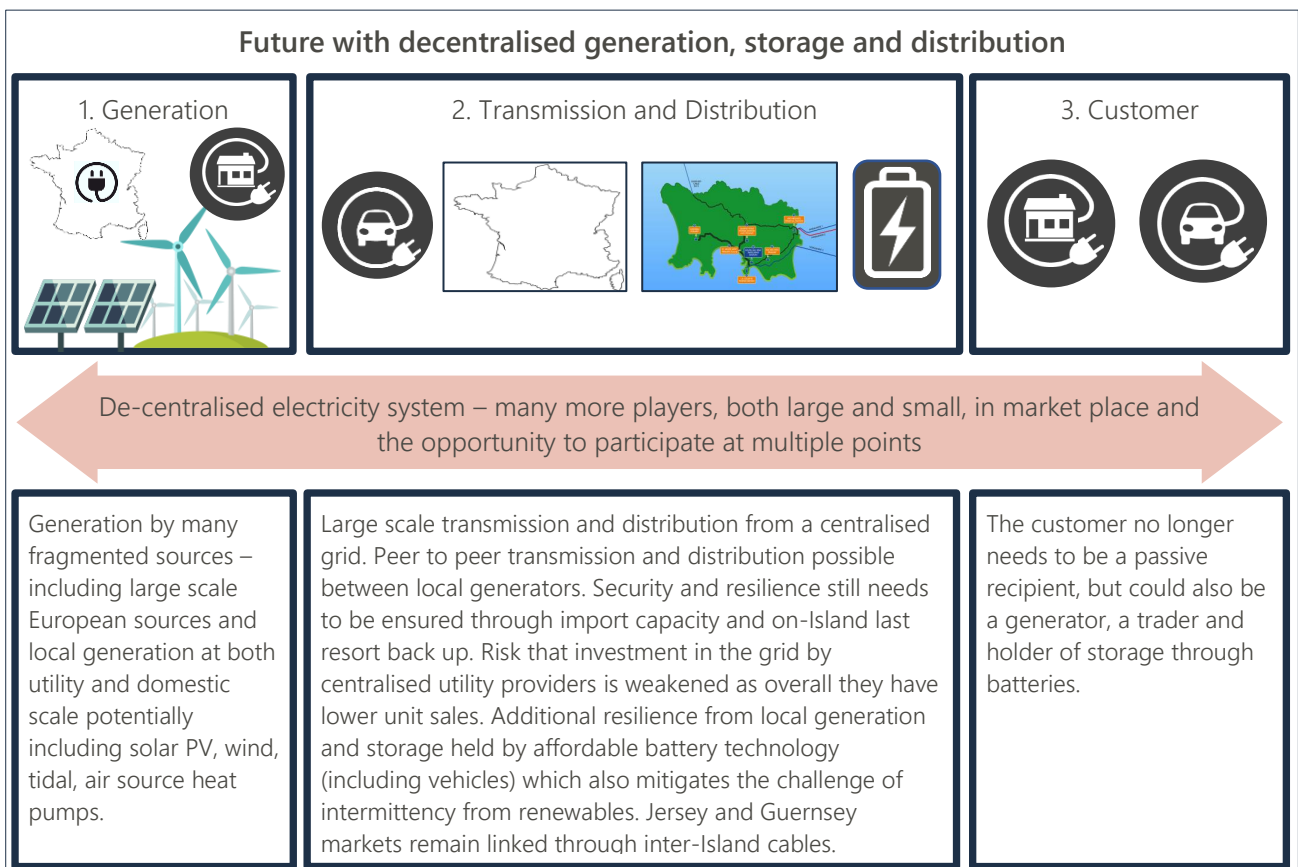


Figure 7-2: A model of decentralised generation.

5.26. The existing electricity law provides for new entrants to the electricity market, which is anticipated (particularly in the areas of generation and retail). In light of this, P.88/2017 requested ministers

to bring forward proposals to update the Electricity (Jersey) Law 1937²⁶, and in adopting P.127/2019 (the Carbon Neutral Strategy²⁷) the Assembly agreed that this work be encompassed within the wider review of long-term energy market requirements referred to above.

- 5.27. The potential transition from centralised to decentralised systems presents a significant challenge to electricity suppliers world-wide. Consumers expect a 'supplier of last resort' to be able to generate, transmit and distribute electricity when decentralised systems cannot meet demand, for example when the sun doesn't shine, or the wind doesn't blow. Yet at the same time, consumers in this scenario buy less electricity, and so the funding for central providers to invest in maintaining the grid is reduced.
- 5.28. In this context, the relationship between the main grid and distributed generation technologies at the household level needs to be carefully managed. In particular, feed-in-tariffs for electricity sold back into the grid need to take into account the cost of exporting electricity to the grid. Tariff design needs to avoid a situation that encourages wealthier households to invest in self-generation (for example solar PV installations) while leaving a higher share of grid maintenance costs to be borne by those households that do not have the money to invest in this way.
- 5.29. In the context of the energy trilemma, any transition to a more decentralised electricity system in Jersey faces similar challenges to the development of large-scale renewables. There are obvious benefits of sovereignty and security, and decarbonisation benefits where the generated electricity replaces fossil-fuels energy sources; and there are both benefits and costs in the relation to energy affordability, with structural challenges to ensure that legacy costs do not accrue to those households least able to invest in local generation and storage systems.

Part 3 - The future energy landscape: biogas, biofuels and hydrogen

- 5.30. Some fuel suppliers already provide a low-carbon product, others are beginning a transition to lower/low-carbon products whilst others have yet to define their decarbonisation pathway. In tandem, several new technologies and products are emerging at the large and small scale. These will impact the current actors in the energy marketplace as we move to a decarbonised economy.
- 5.31. To inform this Strategic Policy evidence paper, a general review of the role that the low-carbon technologies could play in the decarbonisation of transport and heating, with reference to international precedent, was commissioned²⁸. The technologies considered by the review are defined in Figure 8 and an expanded overview is included at [Appendix 5](#).

²⁶ [Electricity \(Jersey\) Law 1937 \(gov.je\)](http://gov.je/Electricity%20(Law%201937).htm)

²⁷ [Carbon Neutral Strategy \(gov.je\)](http://gov.je/Carbon%20Neutral%20Strategy.htm)

²⁸ The Oxera Future Technology report will be published on 2 November 2021 on gov.je.



Technology	Definition
Biogases	
Biogas	Gaseous fuel, especially methane, produced by the fermentation of organic matter
Biomethane	Purified biogas
Liquefied biomethane	Biomethane cooled down to a liquid state
Biofuels	
Bioethanol	Ethanol produced from plants such as sugar cane or maize, used as an alternative to petrol
Biodiesel	Diesel produced from plants or waste material, used as an alternative to diesel and heating oil
Hydrogen	
Grey hydrogen	Hydrogen produced using natural gas (without carbon capture)
Blue hydrogen	Grey hydrogen where carbon is captured
Green hydrogen	Hydrogen produced via electrolysis where electricity comes from low-carbon sources

Figure 8: Technologies considered in the low-carbon technologies commissioned report.

- 5.32. The review considered the production, transport, and distribution of each of these fuels in order to provide an evaluation of the relative market maturity and applicability to the Jersey context. This assessment considered the upstream (production), midstream (transportation and infrastructure) and downstream (consumer) futures for each energy source.
- 5.33. Figure 9 provides a visual summary of the maturity of the three groups of energy source – biogas and biomethane, biofuels, and hydrogen – in the transport and heating sectors respectively. Figure 10 sets out the factors that determine the speed of take-up for each of these.



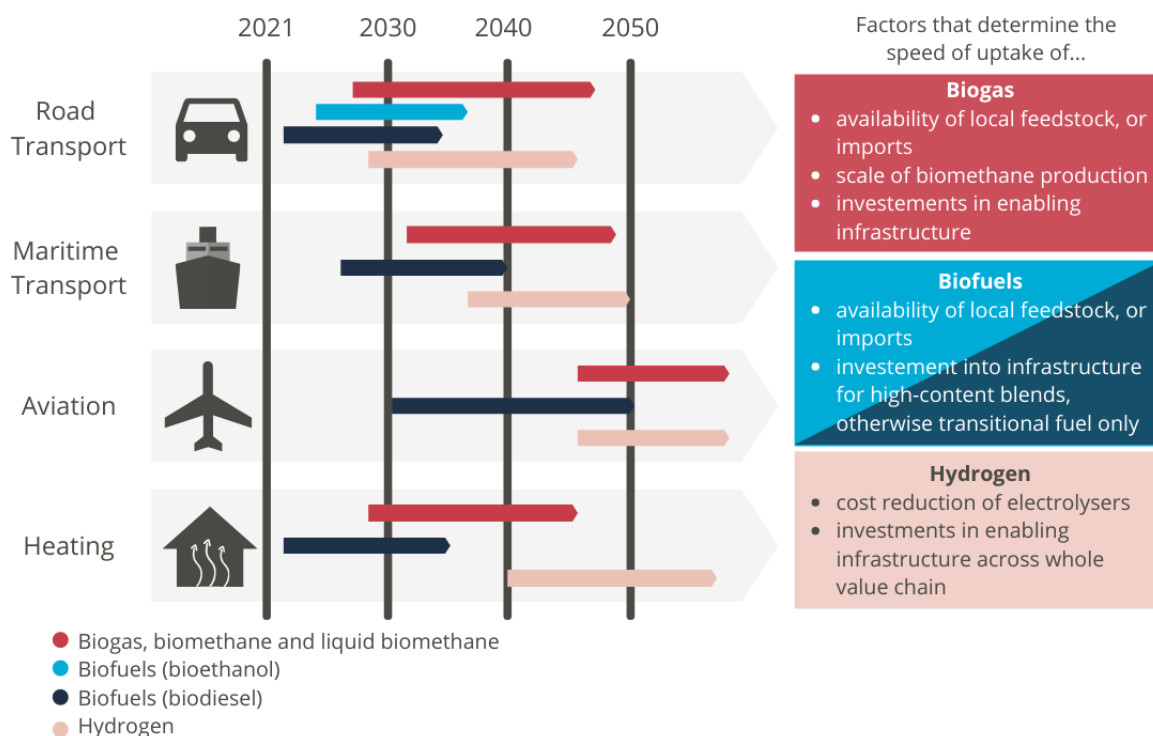


Figure 9: Timescales for prospective maturity of fossil fuel alternatives in transport and heating²⁹.

The broad timescales shown in Figure 9, above, are expanded in Figure 10 with reference to relevant technology applications that are currently feasible, and that may be feasible in the coming 15-20+ years, with reference to international precedent.

	Currently feasible, with reference to international precedent	Midterm feasible – i.e., 15-20 years and beyond
	<ul style="list-style-type: none"> • BM for LNG/CNG cars • Low-bioethanol blends for diesel cars • Hydrogen for fuel cell cars 	<ul style="list-style-type: none"> • Higher-bioethanol blends for retrofitted petrol cars
	<ul style="list-style-type: none"> • Biodiesel blends for diesel HGVs • BM for LGN/CGN HGVs 	<ul style="list-style-type: none"> • Hydrogen-fuelled HGVs (if enabling infrastructure investments happen)
	<ul style="list-style-type: none"> • Biodiesel blends for diesel ships • BM for LNG ships 	<ul style="list-style-type: none"> • Hydrogen-fuelled ships (if enabling infrastructure investments happen)
	<ul style="list-style-type: none"> • Biodiesel blends 	<ul style="list-style-type: none"> • Air transport using pure biodiesel • Air transport using hydrogen
	<ul style="list-style-type: none"> • BG/BM for gas boilers • Biodiesel blends for oil boilers • Hydrogen blends for hydrogen-compatible boilers 	<ul style="list-style-type: none"> • Transition to pure hydrogen for heating

Figure 10: Overall feasibility of technologies by use case⁷.

²⁹ In referring to maturity of technology, the focus is on when large-scale commercial deployment could be possible. The question of when a certain technology will become mature to the point of having large-scale commercial deployment potential is path-dependent and can be influenced heavily by policy decisions and subsidies. Source: Oxera analysis. The Oxera Future Technology report will be published on 1 November 2021 on gov.je.



Summary: Island energy market

- 5.34. There are a number of available and emerging non-fossil hydrocarbon products and new energy sources that are entering the marketplace in all sectors. They will reach maturity and commercial availability over the next three decades and have the potential to contribute to Jersey's decarbonisation journey. Some new products, particularly biofuels, are direct substitutes for existing fossil-hydrocarbons making transition simpler assuming supply and demand align, and prices are competitive enough to encourage uptake.
- 5.35. There will be a need to accommodate changes to our energy system in the future, as products change and with increased potential to democratise power generation, distribution, and storage.
- 5.36. There are challenges to bring new energy sources to the Island where they require new infrastructure and supply lines (for example, hydrogen).
- 5.37. We expect to see a decentralisation of electricity generation in the forthcoming decades, and we will need to consider the impact of this on our current electricity market and infrastructure.
- 5.38. As the cost of generating utility scale (offshore) renewable energy falls we might want to consider investment to provide the Island with energy sovereignty and resilience.
- 5.39. Responding to these related challenges requires a clear and long-term government led energy strategy with clear and accountable political leadership. A new ministerial portfolio for energy and climate change is recommended to oversee the planned energy market review, which will need to ensure our statutory and regulatory framework remains fit-for-purpose in a new energy future to balance security, energy affordability, sustainability, and security of supply issues.



Island Energy Market

Carbon Neutral Roadmap – Strategic Policy 2

Jersey's energy market currently supplies a variety of energy products to consumers with a reasonable level of resilience and security considering the Island's small size and logistical challenges.

Globally, energy markets are rapidly decarbonising and to some degree decentralising. The future for Jersey requires significant electrification, particularly in transport; the replacement of some fossil-hydrocarbon fuels with non-fossil hydrocarbons, and potentially hydrogen, will also be required.

The Carbon Neutral Roadmap will include policies in the first stage of delivery that:

- seek to support faster adoption of low-carbon electric solutions in key emissions sectors, and non-fossil hydrocarbons, such as second-generation renewable diesel, and
- invest in the skills needed in the future decarbonised economy.

At the same time (and as proposed in the draft Bridging Island Plan) we will undertake a strategic review of Jersey's long-term energy requirements to inform a future government-led energy strategy. This work will consider, amongst other things, economic, regulatory infrastructure and land use requirements linked to future energy use; and will provide a process – and appropriate political governance – to develop energy market policy in a joined-up and evidence-based way.

To support this work, government will establish new research and advisory partnerships with energy systems experts; explore opportunities to trial, appropriately, new and emerging energy solutions in Jersey; and work with the Energy Forum to solicit decarbonisation transition plans and market insights from all current Island energy providers. A new ministerial portfolio for energy and climate change is also recommended.



6. Strategic Policy 3: Financing strategy

- 6.1. The transition to a decarbonised economy is a major macro-economic challenge. It requires an investment by current generations in measures that will benefit future generations.
- 6.2. The Government of Jersey's Chief Economist, and economic consultants Oxera, gave evidence to the Citizens' Assembly on Climate Change who were able to question them in relation to the likely costs and funding sources for carbon neutrality. The Citizens' Assembly recommendations³⁰ show a high ambition for the nature and scale of policy interventions, but also a recognition that many of these would have significant costs.
- 6.3. This Strategic Policy describes how the first stage of the Carbon Neutral Roadmap will be supported with investments made from the Climate Emergency Fund. It also sets out the research into additional fiscal levers that ministers have endorsed and frames the longer-term financing challenge that will need to be addressed in the coming years.

The costs and benefits of carbon neutrality

- 6.4. While the decarbonisation challenge is relatively clear in Jersey – with a need to focus on transport and heating, cooking and cooling – there are many different ways that this might be approached. The Carbon Neutral Roadmap will set out an initial set of costed policies, but it will take longer to understand the right steps to take in later years because decisions will need to allow for progress to be made in, for example, energy technologies.
- 6.5. As such, it is not possible to put a single 'cost' on delivering against the net-zero pathway, or an early transition to carbon neutral. This was recognised in the report of the Citizens' Assembly, which says, *"We are aware that there is a cost implication to our recommendations...and we have allowed for exceptions where the technology is not yet available to transition."*
- 6.6. Strategic Policy 4 explains how both the costs and benefits will be analysed as part of identifying policies in the Carbon Neutral Roadmap. At this stage, the Citizens' Assembly and States Members have been able to consider the costs and benefits of different transition scenarios based on research published earlier in 2021³¹. These findings are summarised in Figure 11.

³⁰ [Achieving Carbon Neutrality: Report of Jersey's Citizens' Assembly on Climate Change \(gov.je\)](https://www.gov.je/achieving-carbon-neutrality-report-of-jersey-s-citizens-assembly-on-climate-change)

³¹ [An analysis of the advantages and disadvantages of different Net Zero targets for Jersey \(gov.je\)](https://www.gov.je/an-analysis-of-the-advantages-and-disadvantages-of-different-net-zero-targets-for-jersey)



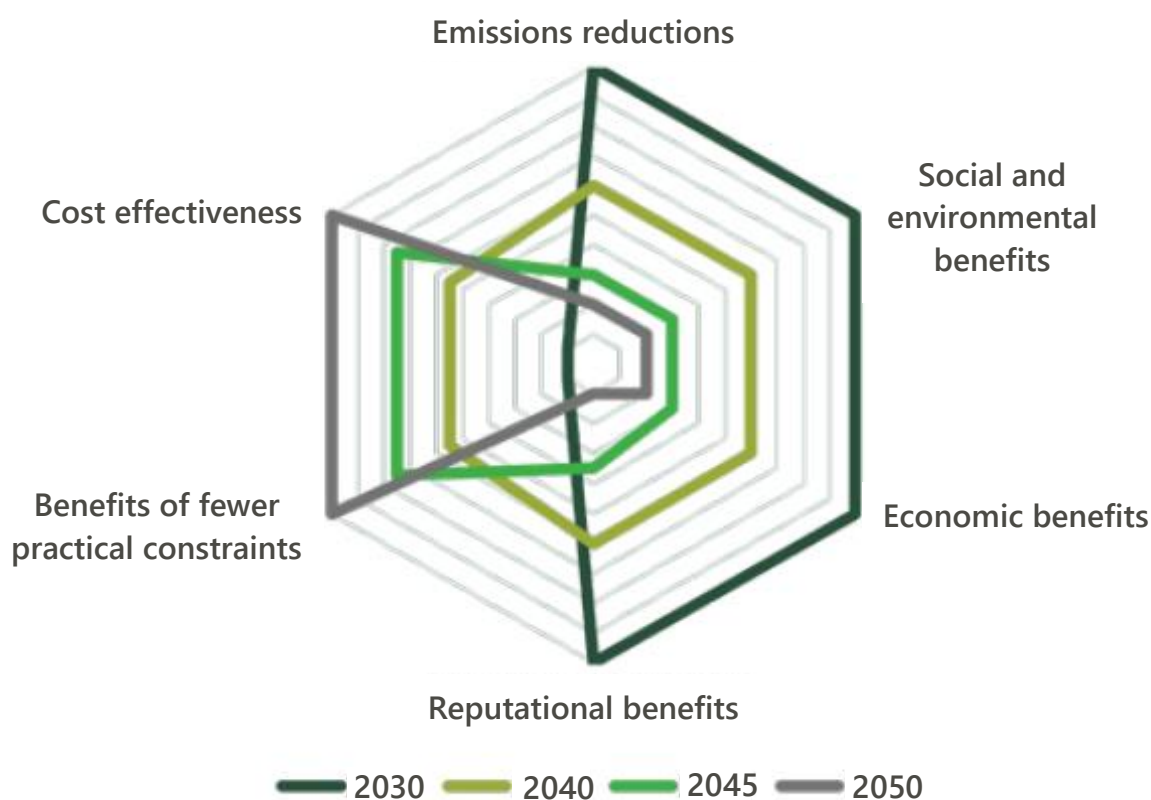


Figure 11: Summary of the relative costs and benefits of different dates of carbon neutrality.

- 6.7. A high-level assessment of the costs of potential policies³² was also carried out as part of the evidence for the Carbon Neutral Strategy. The Carbon Neutral Strategy³³ considered the direct cost to government of paying for cost emissions reduction policies, and recurrent costs arising from offsetting residual emissions. The analysis suggested an indicative cost to government of up to £300M by 2030, based on a specific set of policy options plus an estimated recurring cost of £2-5M per annum for offsets. This was compared the social cost of carbon, which is proxy for the negative impacts of carbon emissions that would be avoided, that was assessed to be as high as £600M if no abatements were made in the areas of transport and heating³⁴.
- 6.8. The Carbon Neutral Strategy was not able to assess the wider societal costs – such as the cost to a household of buying a new electric vehicle – or the distributional impacts of such costs. Infrastructure costs associated with a shift to forms of active and other low-carbon forms of travel were also not included. This work will be completed alongside the development of detailed policies in the Carbon Neutral Roadmap.

³² [Quantitative analysis of carbon neutrality by 2030 \(gov.je\)](#)

³³ [Carbon Neutral Strategy \(gov.je\)](#)

³⁴ [Valuation of energy use and greenhouse gas \(gov.uk\)](#)



The Climate Emergency Fund

6.9. The Climate Emergency Fund was established in the Government Plan 2020-2023³⁵. It is a 'States Fund' and provides a route for the hypothecation of income to provide a defined source of expenditure for initiatives that tackle the climate emergency and reduce carbon emissions. In setting up the Climate Emergency Fund it was accepted that:

- While some early policies were supported from the Climate Emergency Fund, the majority of the funding would be allocated to the detailed policies outlined in the Carbon Neutral Roadmap, which would be developed following the people-powered process set out in the Carbon Neutral Strategy.³⁶
- The initial funding allocated to the Climate Emergency Fund was insufficient to meet the estimated costs of transition, and that a financing strategy would be developed to respond to Part b of P.27/2019 (as amended)³⁷, which accepts the need for new fiscal levers to be introduced in Jersey.

6.10. The Climate Emergency Fund was first established with £5M from the consolidated fund. The Climate Emergency Fund can also receive further income from any other sources as agreed in a Government Plan and has received income from an escalating above RPI increase in fuel duty, of 4ppl in 2019, 2ppl in 2020 and a proposed 3ppl in 2022. The Government Plan 2022-25 also proposes increases in Vehicle Emissions Duty that would be ringfenced to the Climate Emergency Fund.

6.11. The income and expenditure estimates set out in the proposed Government Plan 2022-25 are described in Figure 12. Around £23M of investment is available to support policies in the first stage of the Carbon Neutral Roadmap.

Climate Emergency Fund	2022 Estimate (£000)	2023 Estimate (£000)	2024 Estimate (£000)	2025 Estimate (£000)
Opening Balance	5,570	5,535	3,435	835
Income	4,400	4,400	4,400	4,400
Expenditure	4,500	6,500	7,000	5,000
Closing Balance	5,470	3,435	835	235

Figure 12: The Income and expenditure table for the Climate Emergency Fund from Government Plan 2022-2025. Note the income figures have been adjusted to account for recent actual fuel sales which have been lower than projected when the Fund was set up in 2019.

³⁵ [Tackling the climate emergency \(gov.je\)](https://www.gov.je/tackling-the-climate-emergency)

³⁶ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

³⁷ [Proposition – Climate Change Emergency: Actions to be taken by the Government of Jersey \(gov.je\)](https://www.gov.je/proposition-climate-change-emergency-actions-to-be-taken-by-the-government-of-jersey)



6.12. In line with the delivery plans set out in the Carbon Neutral Strategy³⁸ and Sustainable Transport Policy³⁹, the Climate Emergency Fund is already supporting:

- **decarbonisation policies**, including due diligence trials of the use of Hydrotreated Vegetable Oil ('green diesel') in the public service and Liberty Bus fleets; and infrastructure improvements including new bus and cycle shelters, improvements to the western cycle route in St Helier and a new bus priority gate at Liberation Station,
- **development work** including delivery of the Citizens' Assembly, the Island wide 'Climate Conversation'⁴⁰ and the Sustainable Transport Policy's Rapid Plans, and
- **projects to tackle the biodiversity crisis**, such as work to address invasive non-native species and to improve tree protection.

6.13. Policy development and biodiversity work will continue to be funded from the Climate Emergency Fund, but most of the expenditure will support the first stage of policies set out in the Carbon Neutral Roadmap. As the expenditure table at Figure 13 indicates, this provides additional ringfenced funding, in the short-term, of between £3.7M and £6.3M per annum.

Expenditure from Climate Emergency Fund	2022 Estimate (£000)	2023 Estimate (£000)	2024 Estimate (£000)	2025 Estimate (£000)
Policy Development on Carbon Neutral and Sustainable Transport	300	300	300	300
Carbon Neutral Roadmap Initiatives (inc. Sustainable Transport Initiatives)	3,785	5,775	6,315	4,700
Biodiversity Crisis Initiatives (including Environmental protection and Tree strategy work)	415	425	385	0
Total expenditure	4,500	6,500	7,000	5,000

Figure 13: The expenditure table for the Climate Emergency Fund from Government Plan 2022-2025.

The line labelled Carbon Neutral Initiatives will include expenditure on the agreed policies in the Carbon Neutral Roadmap including sustainable transport initiatives.

³⁸ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

³⁹ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/sustainable-transport-policy-2019)

⁴⁰ [Jersey's Climate Conversation \(www.climateconversation.je\)](https://www.climateconversation.je)



Medium and longer-term financing strategy

6.14. The Carbon Neutral Strategy⁴¹ recognised that the identified funds would be insufficient to decarbonise our economy over the medium and longer-terms. Work has continued, therefore, to frame a financing strategy that can address these challenges in the context of the opportunities and challenges of wider government fiscal strategy.

Medium-term

6.15. The Revenue Policy Development Board, comprising ministers, States Members and independent experts, established an 'environmental taxes' sub-group, chaired by the Assistant Minister for the Environment, Deputy Gregory Guida.

6.16. The Board agreed a work programme to bring forward proposals for new economic instruments in the following areas for consultation:

- **road user charges** – to replace revenue lost from diminishing returns from fuel import duty as the fleet moves away from internal combustion engines,
- **reinvestigation of commercial solid waste charges** – to fairly charge commercial users for the waste they create; to drive behaviour change that minimises waste generation and increases recycling; and to raise revenue to maintain and invest in infrastructure,
- **car parking charges** – a strategic review of the public parking system as required by the Sustainable Transport Policy⁴² (P.128/2019), and
- **travel duty** – investigations into a very modest travel duty to signal the impact of carbon-based off-Island travel, recognising the requirement for some off-Island travel to support the economy.

6.17. The distributional impacts of any new measure on individuals, businesses and the whole economy would be considered as part of this work, in line with Principle 5 of the Carbon Neutral Strategy, which states that *"We will make sure that carbon neutrality policies do not overall increase income inequality."*⁴³

6.18. The medium-term work programme is planned to conclude in 2023, and associated measures will be incorporated in the Government Plan 2024-27.

Longer-term

6.19. Alongside the medium-term work programme, an on-going assessment is required of whole-economy fiscal implications of decarbonisation. In order to support the long-term sustainability of the public finances, this work will have to address the expected drop in government revenues, and particularly a drop in fuel import returns, as people switch away from polluting behaviours.

⁴¹ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/Carbon-Neutral-Strategy)

⁴² [Sustainable Transport Policy \(gov.je\)](https://www.gov.je/Sustainable-Transport-Policy)

⁴³ [Carbon Neutral Strategy 2019 \(P.127/2019\) \(gov.je\)](https://www.gov.je/Carbon-Neutral-Strategy-2019)



6.20. Jersey is not alone in facing this challenge and there are several avenues to explore. A review was commissioned to ensure Jersey is appraised of the full range of potential funding mechanisms being explored globally. The report⁴⁴ sets out a range of funding routes that are used in other jurisdictions, as listed in Figure 14, and includes case studies of the more innovative approaches being taken.

Taxation & charges	Monetising assets
General taxation	Privatisation
Hypothecated taxes	Equity issuance of government-owned entities
User fees and charges, including carbon fee and dividend models	Reserves
	'Printing' money
Borrowing	Encouraging private investment
Issuing general bonds	Guarantees and government insurance
Investment-specific bonds	Subsidised loans
Savings schemes	Grants
International financial institutions	Match-funding
Commercial bank loans	Public-private finance
Performance improvement	Crowd and community-based funding
Public services	Regulations and standards
Commercialised services	Carbon offset markets

Figure 14: An analysis of the typology of funding options – these are not presented in any priority and it is recognised that not all options apply to Jersey.

6.21. The development of a longer-term financing strategy is planned to conclude in 2024, with associated measures incorporated into the Government Plan 2025-28, recognising that any significant shift in the use of major economic instruments, may require legislative change.

⁴⁴ The 'Funding the transition to carbon neutrality' report will be published on 1 November 2021 on gov.je.



Financing Strategy

Carbon Neutral Roadmap – Strategic Policy 3

The Climate Emergency Fund will maintain a hypothecated revenue stream to fund Jersey's decarbonisation.

Additional funding will be required to fully decarbonise Jersey's economy. Three stages are proposed to identify this funding:

- **Short-term:** the Carbon Neutral Roadmap will fully allocate the resources currently available in the Climate Emergency Fund to support policies in the first stage (2022-26),
- **Medium-term:** government will bring forward in 2022, in time for potential inclusion in the Government Plan 2023, proposals for new economic instruments that generate income ring-fenced to the Climate Emergency Fund (in whole or in part) in the following areas:
 - Road user charges
 - Reinvestigation of commercial solid waste charges
 - Car parking charges
 - Travel duty, and
- **Longer-term:** bring forward in 2023, in time for potential inclusion in the Government Plan 2024, a long-term financing strategy that considers all available options to continue to fund the decarbonisation of the economy at the pace required to achieve the emissions trajectory established in Carbon Neutral Roadmap – Strategic Policy 1.

At each stage, work to develop the financing strategy will:

- accord with Principle 5 of the Carbon Neutral Strategy, so that carbon neutrality policies do not overall increase income inequality,
- ensure that those most affected by the transition are included in the process, and that the impacts of all carbon neutral policy options are assessed to ensure a just transition, and
- proceed within established governance and Treasury and Exchequer systems and processes.



7. Strategic Policy 4: Policy programme and development

7.1. A full suite of carbon reduction policies for the first stage of transition to net-zero (2022-26) will be included in the Carbon Neutral Roadmap. This Strategic Policy sets the approach to policy development and prioritisation, building on the people-powered approach established in the Carbon Neutral Strategy⁴⁵.

Choosing and prioritising policies

7.2. The Climate Emergency Fund currently provides around £23M of resources to invest in decarbonisation policies through to 2026. A wide range of work exists to inform the development of these policies, including:

- ideas generated as parts of Jersey's Climate Conversation ([Appendix 6](#)),
- the recommendations of the Citizens' Assembly on Climate Change,
- recommendations of the Jersey Youth Parliament and from on-going youth engagement,
- practical experience from the delivery of Pathway 2050,
- priorities established in community, Parish, and youth climate action plans,
- the analysis of policy options and choices in other jurisdictions, including that set out in the Carbon Neutral Strategy,
- the quantitative analysis of transport and heating, cooling and cooking options published alongside the Carbon Neutral Strategy⁴⁶, and
- a range of other published reports that form the evidence base for the Carbon Neutral Roadmap ([Appendix 1](#)).

7.3. A robust, staged approach is being followed to ensure that policy prioritisation makes best use of available resources, is informed by evidence and experience, and establishes a foundation that can scale up in coming years as the decarbonisation process gathers pace.

7.4. As part of the first stage, this Preferred Strategy sets a Strategic Policy framework for the preparation of the Carbon Neutral Roadmap, which enables the development of policies based on a consistent strategic direction and helps set expectations. At the same time, a long list of potential policies that align with the strategic direction has been prepared. A policy appraisal methodology has been designed, which brings together an assessment of carbon abatement potential and a multi-criteria analysis of potential costs and co-benefits.

⁴⁵ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)

⁴⁶ [Quantitative analysis of carbon neutrality by 2030 \(Oxera\)](#)



- 7.5. The second stage requires an initial application of the policy appraisal tools, along with a range of stakeholder engagement discussions. This process is overseen and supported by the political steering group, members of which will recommend a prioritised short list of policies to the Council of Ministers.
- 7.6. Finally, draft policies are updated and tested against the policy appraisal tools for a second time, incorporating feedback from stakeholders to produce the impact assessment.

Tackling pollution, building capacity and capability

- 7.7. The Carbon Neutral Roadmap is intended both to increase the pace of decarbonisation, and to build the capacity and capability of all parts of the economy (including government) to understand and adapt to the changes required over the long-term. Accordingly, both pollution reduction policies and supporting policies will be set out in the Carbon Neutral Roadmap.
- 7.8. Figure 15 summarises the clusters of policies that are currently being developed to feature in the Carbon Neutral Roadmap.

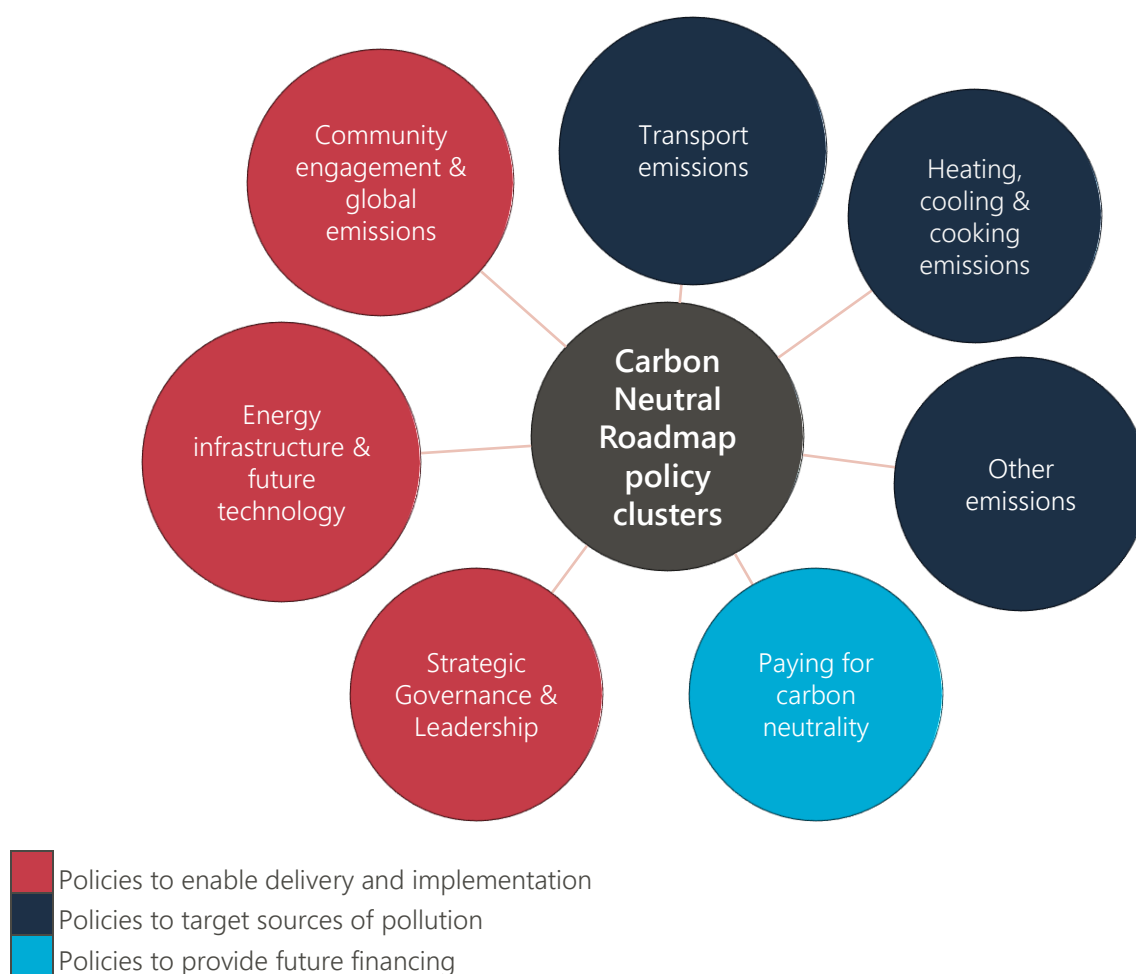


Figure 15: clusters of policies expected to feature in the Carbon Neutral Roadmap.



Delivering together

- 7.9. The Carbon Neutral Strategy establishes a people-powered approach to tackling the climate emergency. It requires that the policy development process should: *“explore opportunities to put individual citizen and community action at the heart of our response, creating the conditions in which bottom-up initiatives flourish and Islanders support each other to change their behaviours and adapt to lower carbon lifestyles.”*⁴⁷
- 7.10. This approach directly informed Jersey’s Climate Conversation and the use of the Citizens’ Assembly on Climate Change, which together have helped shape the policies under consideration. It requires a policy response that supports people in Jersey to respond as citizens – with shared agency in the transition to a net-zero response to climate change – not just as consumers.
- 7.11. The people-powered approach also directly informs consideration of how, in line with Principle 5 of the Carbon Neutral Strategy, Jersey can affect a Just Transition, and ensure policies do not, overall, have an adverse impact on income inequality.
- 7.12. The extent to which future policies facilitate community, youth, Parish, and business engagement will be assessed as part of the policy appraisal process set out above. In addition, it is intended to:
- Explore the role that an appropriately constituted community impact fund might play in supporting the development and delivery of grass roots climate action through the provision of small grants, and
 - Scope out the creation of a business-led alliance of organisations to support the delivery of the Carbon Neutral Roadmap, promote understanding of Jersey’s transition at home and abroad, and take forward defined projects.

Ensuring a Just Transition

- 7.13. Principle 5 of the Carbon Neutral Strategy states that: *“We will make sure that carbon neutrality policies do not overall increase income inequality. The impacts of all carbon neutral policy options will be assessed to ensure a Just Transition to carbon neutrality.”*
- 7.14. In meeting this requirement, it is particularly important to consider the impact of decarbonisation on workers currently employed in the energy sector and those in low-income households, as well as the wider Island community. The impacts of the transition, when considered in the round, should be distributed fairly, and those most affected by the changes should be involved in the process.

⁴⁷ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/carbon-neutral-strategy)



- 7.15. The development work of the Carbon Neutral Roadmap is closely aligned to the Future Economy Programme (FEP) which provides a mechanism for creating good green jobs and new opportunities for those whose jobs will no longer exist in a decarbonised economy.
- 7.16. The multi-criteria analysis used to prioritise policies for the Carbon Neutral Roadmap considers relevant socio-economic and political criteria, including the impact of policies on employment and how acceptable they might be to the public overall. That analysis plays a key role in identifying areas where policies might have more unjust impacts in order that, where such policies are supported, other steps might be taken to seek to mitigate those effects.
- 7.17. A Just Transition also requires that the interests of future generations are considered, and that they are not left either to live with the impacts of inaction now, or to bear a disproportionate burden of the costs to mitigate and adapt to climate change. Amongst other steps, the Carbon Neutral Strategy⁴⁸ will be subject to a full Childrens' Rights Impact Assessment.

Summary: Policy programme and development

- 7.18. This Strategic Policy sets the approach to policy development and prioritisation, building on the people-powered approach established in the Carbon Neutral Strategy.

⁴⁸ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/Carbon-Neutral-Strategy)



Policy Programme and Development

Carbon Neutral Roadmap: Strategic Policy 4

The Carbon Neutral Roadmap will include carbon reduction policies for the period 2022-26.

Policies funded from the Climate Emergency Fund will be developed and prioritised in a staged process, drawing on:

- the ideas generated in Jersey's Climate Conversation,
- the recommendations of the Citizens' Assembly on Climate Change and other available evidence and advice,
- an understanding of carbon abatement potential,
- an analysis of potential costs and co-benefits,
- a distributional analysis of the impacts of policies on different sectors of the Island's community,
- input from stakeholders, and
- appropriate political guidance.

The Policy Programme set out in the Carbon Neutral Roadmap and subsequent associated delivery plans will:

- take a people-powered approach, supporting people in Jersey to respond as citizens – with an active part to play in the transition to net-zero – not just as consumers,
- ensure a Just Transition, and
- not, overall, increase income inequality.



8. Strategic Policy 5: Becoming carbon neutral

- 8.1. Having established an ambitious pathway to net-zero in Strategic Policy 1, the question about whether Jersey should seek to become carbon neutral, by 2030 or at any other date, remains open.
- 8.2. This Strategic Policy explores the relationship between carbon neutral and net-zero – and specifically the role that offsets play in becoming carbon neutral. It ensures that the option to become carbon neutral remains available to Jersey while work continues to fully understand the associated costs and benefits, ahead of a future decision being taken in the next term of government.

Defining carbon neutral

- 8.3. The terms carbon neutral and net-zero both work on the overarching principle that there should be no overall global contribution of greenhouse gas emissions that result from a product, business, or jurisdiction. However, as noted in Strategic Policy 1, net-zero requires adherence to a science-led emissions pathway, and the use of offsets that remove carbon from the atmosphere (rather than avoid carbon being emitted).
- 8.4. The Carbon Neutral Strategy⁴⁹ (2019) sets five defining principles of Jersey's approach to achieving carbon neutrality and tackling the climate emergency. These are set out in Figure 16 and – as by forming this Strategic Policy – are incorporated into the policy framework for the Carbon Neutral Roadmap.

3.1 Principle 1

We will adopt a strategic focus on all emissions

This carbon neutral strategy, and the long-term climate action plan that we will develop together in 2020, will recognise and have a strategic focus on Jersey's scope 1, 2 and 3 emissions.

It is important that we understand the impact our local choices have across the world, including recognising the impact that Jersey based businesses can have.

⁴⁹ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/CarbonNeutralStrategy)



3.2 Principle 2

We will work within a definition of carbon neutrality

Carbon neutral is defined as balancing the scope 1 and 2 emissions we produce against any activity that captures, absorbs or reduces global emissions so that they are equal. By including scope 2 emissions we are exceeding our international legal obligations.

Scope 3 emissions are recognised, and the long-term climate action plan will include policies and programmes to support people, businesses and government to make more sustainable choices that reduce Scope 3 emissions created on our behalf across the world, but Scope 3 emissions do not form part of the baseline for carbon neutrality.

3.3 Principle 3

We will require high standards in the use of carbon offsetting

It is appropriate to use carbon offsetting where emissions cannot be abated, but offsets on their own are not a route to carbon neutral and should only be used where they are accompanied by a robust and ambitious measures to reduce emissions.

As a responsible and ambitious jurisdiction any offset arrangements that Jersey enters into will be of the highest recognised standards.

3.4 Principle 4

We will make sure that everyone can play their part

Whole Island ownership of the climate challenge is critical to its success. Government will use all available options to deliver the long-term climate action plan, but government action must form part of a wider, collaborative approach.

3.5 Principle 5

We will make sure that carbon neutrality policies do not overall increase income inequality.

The impacts of all carbon neutral policy options will be assessed to ensure a just transition to carbon neutrality. A quantification of the economic impact assessment of the policy proposals will be carried out as part of the process of developing the long-term climate action plan.

Figure 16: the defining principles of the Carbon Neutral Strategy.



- 8.5. The definition of carbon neutral set out in the Carbon Neutral Strategy⁵⁰ remains robust. The principles it establishes are well considered and evidence-led; they are stricter than many situations in which the term 'carbon neutral' is used. Based on this definition becoming carbon neutral could function as a legitimate milestone on the pathway to net-zero.

The role of offsets in an early transition to carbon neutrality

- 8.6. The Carbon Neutral Strategy recognises that carbon offsets will be necessary as part of any early transition to carbon neutrality:

"the adoption and implementation of an ambitious set of carbon abatement policies will significantly reduce Jersey's carbon emissions but will not be sufficient to eliminate them completely. Regardless of how well these policies perform, there will remain some unavoidable activities for which carbon-free solutions have not yet been developed. To achieve its carbon neutral objective, Jersey will have to acquire emission allowances against its unavoidable emissions."

- 8.7. Figure 17 seeks to show the interplay between the net-zero transition pathway established in Strategic Policy 1 (the navy-blue bars), and an aligned transition to carbon neutral (as provided for in Strategic Policy 5) which, in this case, takes place in 2030. In simple terms, provided ambitious carbon reductions policies are in place and having the required impact, carbon neutrality can be achieved at the point that equivalent offsets are acquired on a recurring annual basis.
- 8.8. At present, the global offset market is both volatile and uncertain. This was recognised in the Carbon Neutral Strategy and no greater certainty has emerged since. Current analysis suggests that offsetting 200,000 tonnes of carbon on the voluntary carbon market would be expected to cost between £2.9M per annum (at c£15 per metric tonne) and £7.3M per annum (at c£37 per metric tonne). For the official carbon market, the price is likely to be higher. A plausible EU Emissions Trading Scheme price of c.£60 per tonne in 2030 would take the cost up to around £12M per annum. Costs would also be influenced by the associated investment strategy, and particularly any decisions to hedge against future price increases.

⁵⁰ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/CarbonNeutralStrategy)



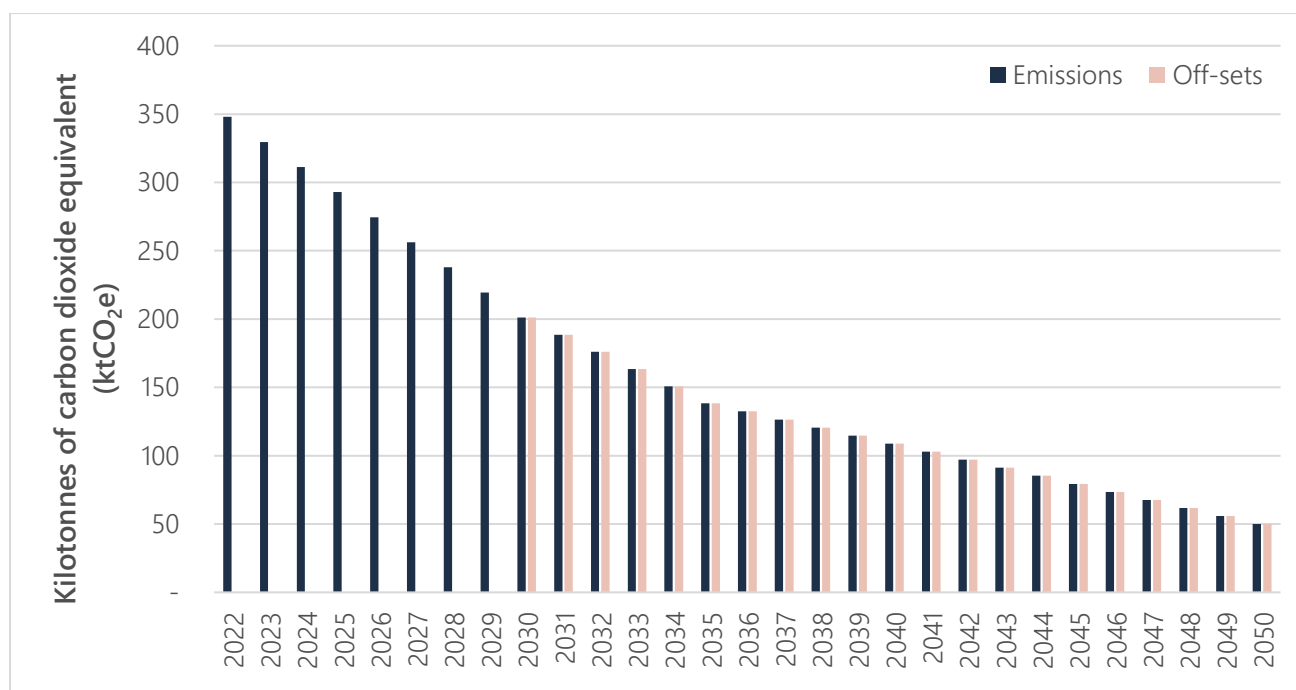


Figure 17: Illustration of how offsets are paid annually after a decision is made to become carbon neutral. The quantum of offsets diminishes as residual emissions also decrease.

8.9. At the same time, the scale and nature of any potential economic or environmental benefits that might accrue locally remains unclear. Benefits might, for example, be derived from such expenditure acting as a stimulus to innovation in the Island’s financial services sector; a driver of greater global connectivity and influence; or an opportunity to leverage associated research or technology opportunities.

The potential for sequestration

8.10. Drawing down carbon into Jersey’s land and/or marine environments is also a way to balance out unavoidable emissions and can bring co-benefits like improvements in biodiversity.

8.11. Carbon sequestration⁵¹ is the act of capturing carbon dioxide from the atmosphere, storing it, and preventing it from being re-released. This typically includes a range of artificial and natural processes that capture carbon as part of industrial, agricultural, and land-use activities. It is important to note that carbon sequestered could be released back into the atmosphere. For example, carbon could be temporarily released by a forest fire and re-captured by re-growth or permanently released through the conversion of a forest to a settlement.

8.12. Natural carbon sequestration is a cycle that's been happening on the planet for billions of years. In Jersey, on-Island sequestration includes activities like tree and hedgerow planting and

⁵¹ [Carbon sequestration and the role of soil and crops \(gov.je\)](https://www.gov.je/carbon-sequestration). This report covers the calculation methodologies, scale and potential of carbon sequestration in Jersey, and explains the role of carbon storage and management in the context of Jersey’s greenhouse gas emissions inventory.



changing land-use to increase the amount of carbon our natural environment can absorb. These activities also have positive impacts on biodiversity and help support both nature's recovery and wider social and economic objectives. Natural sequestration can be enhanced in a number of ways:

- large scale reforestation in Jersey would achieve a net reduction of around 1% of our current scope 1 emissions. Nevertheless, it remains important to protect what we have,
- healthy soils play an important role in sequestering carbon and improving soil organic matter through changes in land use practices can increase the drawdown of carbon into soils, and
- blue carbon⁵² is the carbon dioxide that is captured and stored in coastal and marine ecosystems such as mangroves, marshes, and seagrass meadows. Although currently marine carbon isn't accounted for in international greenhouse inventories, this is an active area of investigation globally, and the potential of Jersey's offshore and onshore blue carbon resources are currently being studied (with results suggesting that Jersey has some habitats that are important carbon sinks).

8.13. Artificial carbon sequestration is the capture and storage of carbon dioxide produced, generally by large factories and power plants. This technology, while operational in limited scale, is expensive and currently unproven at the levels necessary to make a significant impact on global climate change. It will remain important though to track the development of carbon capture and storage technology in the coming years.

The views of the Citizens' Assembly and members of the States Assembly

8.14. Following wide-ranging deliberations, the Citizens' Assembly on Climate Change chose 2030 as the date Jersey should be carbon neutral, recognising this is the date when we would start purchasing carbon offsets (of the highest recognised standards).

8.15. Although 53% of the Citizens' Assembly participants voted for 2030, there was a great deal of discussion around purchasing offsets at this time and not everyone felt they were legitimate or represented best value. Some participants expressed concern that the government would need to spend large amounts of money on offsets that could otherwise be spent on reducing our emissions.

⁵² [National Ocean Service: What is Blue Carbon?](#)



8.16. Comments from the Citizens' Assembly include the following:

"Use of offsets feels like a cop-out, kicking the can down the road. A minefield".

*"What's the point of spending money on offsets just so we can say we are 'carbon neutral'?
Better to spend the money at home, on driving down our own emissions."*

8.17. Other Citizens' Assembly participants did recognise the reality that the Island was:

*"not able to avoid carbon offsets. Some things cannot be reduced by 2050. All depends on
the timing that will shape what we do with our money at that point."*

8.18. Concerns were also raised by States Members in the in-committee debate held in the States Assembly:

*"I am firmly on the side of reducing carbon emissions as opposed to buying offsets. There
are 2 reasons for this: reducing carbon emissions is the long-term solution to this crisis;
and the second thing is offsets allow a mindset that we can carry on as we are and just
plant a few trees or buy those carbon offsets somewhere else. I do not think that is the way
forward." (Deputy Rob Ward).*

*"this is something we can keep up our sleeve but only for the 11th minute of the 11th hour.
What we have to do as a community is try and achieve what we have set out to achieve."
(Deputy Carolyn Labey).*

Summary: Becoming carbon neutral

8.19. Offsets would be required as part of an early transition to carbon neutrality and are likely to play a role – at some point – as part of Jersey's pathway to net-zero. They remain a contentious issue and are likely to impose significant costs for currently uncertain local benefits.



8.20. A sequential approach is apparent in which the first stage of the Carbon Neutral Roadmap should focus on:

- driving down carbon emissions through the application of new policies, in line with the adopted net-zero transition pathway,
- increase support for local sequestration projects, and
- continue to explore the costs and benefits of offsetting, ensuring that the option to become carbon neutral remains available to Jersey.

Becoming Carbon Neutral

Carbon Neutral Roadmap – Strategic Policy 5

International markets in offsets are still evolving, and the costs, potential benefits and availability of offsets that would fulfil local aspirations are currently uncertain. Having committed to a science-led emissions trajectory (Carbon Neutral Roadmap – Strategic Policy 1), becoming carbon neutral in 2030 (or at a different date) remains a legitimate step on the pathway to net-zero.

The Carbon Neutral Roadmap will:

1. set out the steps that government will take to ensure that Jersey can become carbon neutral
2. provide support for sequestration projects that use local carbon sinks in the terrestrial or marine environment (blue carbon), before the purchase of off-Island offsets; and require funded sequestration projects to contribute to improvements in biodiversity.



9. Conclusion and next steps

- 9.1. The analysis set out here shows that Jersey needs to do more to speed up the decarbonisation of its economy and get back on the track towards net-zero.
- 9.2. Along this pathway lie some obvious challenges, and the conclusions of the Carbon Neutral Strategy⁵³, that “*whole Island ownership of the climate challenge is critical to its success*”, clearly remains true.
- 9.3. There are also opportunities along the way: to re-skill and modernise on-Island industries, creating new green jobs; to support local youth and community action on biodiversity, environmental protection, and other matters; to become healthier and reduce congestion, air pollution and other social and environmental harms; and to contribute to the global challenge of preserving our planet for future generations.
- 9.4. The Carbon Neutral Roadmap, to be published in December 2021, will seek to respond to these challenges and embrace the opportunities. It will strike a balance between taking early decisions that give certainty and create the context for action, and the need to take time to get decisions right and to respond to events and new evidence and understanding.
- 9.5. The Carbon Neutral Roadmap will introduce a package of policies and actions for the period 2022-26, with supporting investment from the Climate Emergency Fund, and set milestones for future key decisions and the introduction of future policies.
- 9.6. For now, this the Preferred Strategy sets out a Strategic Policy framework that supports the preparation of, and will be incorporated into, the Carbon Neutral Roadmap. Once published, the Carbon Neutral Roadmap will undergo a final period of public consultation and will be considered by the Environment, Housing and Infrastructure scrutiny panel, before being debated in the States Assembly, as set out in Figure 18.

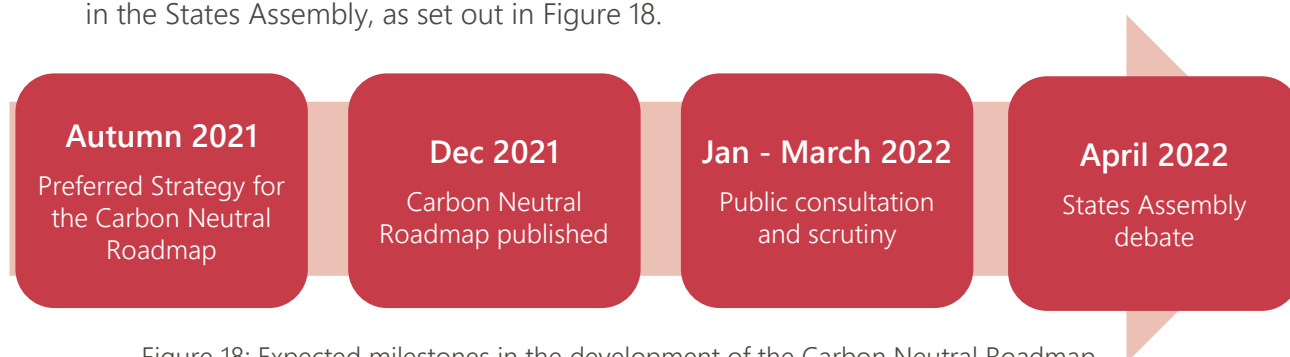


Figure 18: Expected milestones in the development of the Carbon Neutral Roadmap.

⁵³ [Carbon Neutral Strategy \(gov.je\)](https://www.gov.je/CarbonNeutralStrategy)



10. Appendices

Appendix 1 – List of published evidence base

These are the main evidence-based documents that were used to inform the Carbon Neutral Roadmap.

Evidence Base Documents	Date Published
Explore Phase	
Climate Conversations - explore phase ideas and comments submitted through dialogue	March 2021
Citizens' Assembly on Climate Change (Minutes from and reports referring to the Citizens' Assembly on Climate Change)	
Block 1 Citizens' Assembly on Climate Changes Minutes	March 2021
Block 2 Citizens' Assembly on Climate Changes Minutes	March 2021
Block 3 Citizens' Assembly on Climate Changes Minutes	April 2021
Block 4 Citizens' Assembly on Climate Changes Minutes	May 2021
Achieving Carbon Neutrality – Report of Jersey's Citizens' Assembly on Climate Change	June 2021
Climate Change Citizens' Assembly process: observers' interim report by Environment, Housing and Infrastructure Scrutiny Panel	June 2021
In-Committee Debate	
Carbon Neutral Jersey (Consideration "in-committee") [Note this includes a read statement from Jersey Youth Parliament on the recommendations made by the Citizens' Assembly on Climate Change]	Hansard 23rd July 2021
Recording of States Assembly (Morning Session)	23 July 2021 at 10:00am
Core Evidence	
Aether - Analysis of Future Jersey indicators that are at high risk from climate change	March 2018
Carbon Neutral Strategy	December 2019
Developing an approach to Domestic Energy Efficiency Retrofit in Jersey	October 2015
Pathway 2050: An Energy Plan for Jersey	March 2014
Shoreline Management Plan	January 2020
Tackling the climate emergency	July 2019
Review of future energy mix options	November 2021
Young people and the climate emergency	April 2020
Greenhouse Gas Emissions	
Aether - Carbon sequestration and the role of soil and crops	October 2020
Aether - Considering the Channel Islands' indirect greenhouse gas emissions	April 2020
Aether - Development of an emission factor for imported electricity	April 2020



Aether - Greenhouse gas emissions from Waste – A guide for Jersey	April 2020
Aether - Greenhouse gas inventory	January 2020
Aether - National emissions of fluorinated gases in Jersey	March 2017
Aether - Technical guide to Jersey's Greenhouse gas inventory	December 2020
Sustainable Transport	
Sustainable Transport Policy	December 2019
Costs and Benefits of Carbon Neutrality	
Revenue Policy Development Board	October 2019
Oxera - Analysis of trade offs of different dates for carbon neutrality	March 2021
Oxera - Carbon Neutrality by 2030 – policy identification	April 2020
Oxera - Quantitative analysis of carbon neutrality by 2030	April 2020
Impact Assessments	
Social, economic and environmental Impact Assessment	December 2021
Impact Assessment: United Nations Convention of the Rights of the Child	November 2021
Additional Government of Jersey Documents	
Draft Bridging Island Plan	April 2021
Government Plans	December 2020
Public Realm and Movement Strategy	April 2021
Creating better homes: an action plan for housing in Jersey	June 2021
Housing Strategy	March 2016
Water management plan for Jersey 2017 to 2021	July 2016
Biodiversity Strategy	Year 2020
Integrated Coastal Zone Management Strategy	July 2008
Jersey Integrated Landscape and Seascape Character Assessment	October 2020
Marine research (Climate Emergency Fund funded)	Q4 2021
Rural Economy Strategy 2017 to 2021; Towards Sustainable Farming	February 17
Multilateral Agreements	
Bern Convention on the Conservation of European Wildlife and Natural Habitats	N/A
Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)	N/A
Convention on Biological Diversity	N/A
Ramsar agreement	N/A
The Convention for the Protection of the Marine Environment of the North-East Atlantic (the 'OSPAR Convention')	N/A
Evidence Presented to the Citizens' Assembly on Climate Change	



Citizens' Assembly business written submissions	July 2021
Presentations	
Welcome. Presentation by Deputy Jess Perchard, Assistant Minister for Environment	18 March 2021
Introduction to the science of climate change and why it's important for us to tackle it in Jersey. Presentation by Professor Liz Bentley, Royal Meteorological Society and Chair of Advisory Panel	18 March 2021
Jersey's changing climate. Presentation by Paul Aked, Jersey Meteorological Department and Sophia Bird (Channel ITV)	18 March 2021
The impact of Jersey's changing climate. Presentation by Willie Peggie, Director, Natural Environment, Government of Jersey	18 March 2021
Overview of how the way we travel; use energy in our homes; consume products contribute to carbon emissions. Presentation by Jonathan Renouf	18 March 2021
Overview of a Just Transition. Presentation by Rebekah Diski, New Economics Foundation and member of Advisory Panel	18 March 2021
Overview of Jersey's Energy Market. Presentation by Dr Louise Magris, Head of Sustainability and Foresight, Government of Jersey	18 March 2021
Jersey's Scope 3 emissions. Presentation by Kathryn Hampshire and Katie King, Aether	18 March 2021
How do we change behaviour to reduce emissions in the Island? Presentation by Toby Park, Behavioural Insights and member of the Advisory Panel	18 March 2021
Paying for carbon neutrality. The different ways of paying for actions that will take us towards becoming carbon neutral. Presentation by Nick Vaughan, Chief Economic Advisor, Government of Jersey	18 March 2021
Scenarios for Carbon Neutrality. Presentation by Matt Shephard, Principal Economist, Oxera	18 March 2021
Jersey's transport sector emissions. Presentation by Kathryn Hampshire, Aether	1 April 2021
Transport in Jersey. Presentation by Rob Hayward, Government of Jersey	1 April 2021
Options for decarbonising transport. Presentation by Chris Sibthorpe, PGA	1 April 2021
Scenarios, costs and trade offs for decarbonising transport in Jersey. Presentation by Matt Shepherd, Oxera	1 April 2021
Fair decarbonisation of transport. Presentation by Rebekah Diski, New Economics Foundation	1 April 2021
Young people's perspectives on transport. Presentation by Abbie Syvret and Hautlieu School	1 April 2021
Disability and transport. Presentation by Jim Hopley, Honorary Chairman Jersey Disability Partnership	1 April 2021
What is a carbon offset? Presentation by Hilary Jeune, Valuematrix	1 April 2021
Costs of offsetting. Presentation by Matt Shepherd, Oxera	1 April 2021



Context of the Citizens' Assembly on Climate Change. Presentation by Steve Skelton, Government of Jersey	1 April 2021
Emissions from heating, cooking and cooling sector. Presentation by Katie King, Aether	22 April 2021
Opportunities to reduce emissions from buildings. Presentation by Alison Horton and Ian Alder, Association of Jersey Architects	22 April 2021
Current Government of Jersey initiatives to reduce building emissions. Presentation by Dr Louise Magris, Government of Jersey	22 April 2021
Opportunities and impacts for the gas sector. Presentation by David Cruddace, Jersey Gas	22 April 2021
Opportunities and impacts for the oil sector. Presentation by Nigel Blandin, Jersey Construction Council	22 April 2021
Opportunities and impacts for the electricity sector. Presentation by Chris Ambler, Jersey Electricity	22 April 2021
Scenarios, costs and trade offs of decarbonising heating, cooking and cooling*. Presentation by Matt Shepherd, Oxera <i>*The Advisory Panel were asked to consider the accuracy of the statement made around the relative costs of different fuel types. They concluded that there are many different factors that affect the costs of heating a house and that it was not possible to make a blanket statement on the relative overall costs.</i>	22 April 2021
Introduction to Sustainable Finance. Presentation by Emiko Caerlewy-Smith and Amy King, KIT consulting	22 April 2021
Wrapping up the Citizens' Assembly. Presentation by Rob Hopkins, Author and Transition Network	22 April 2021
Concluding and prioritising recommendations. Presentation by Steve Skelton, Group Director, Strategy and Innovation, Government of Jersey	22 April 2021
Factsheets	
Introduction to climate change	18 March 2021
Climate change, the local context	18 March 2021
International response to climate change	18 March 2021
Sources of greenhouse gas emissions	18 March 2021
Jersey's greenhouse gas emissions reporting	18 March 2021
Carbon Neutral Strategy	18 March 2021
An overview of Jersey's energy market	18 March 2021
Biodiversity and climate change	18 March 2021
How do we make decarbonisation fair?	18 March 2021
How do we change behaviour?	1 April 2021
Carbon offsetting	1 April 2021
Carbon sequestration	1 April 2021



Key emissions sector: transport	1 April 2021
Key emissions sector: heating, cooling and cooking	22 April 2021
Renewable energy	22 April 2021
Sustainable finance	22 April 2021



Appendix 2 - Carbon Neutral Steering Group: membership and terms of reference

Membership

- Minister for the Environment, Deputy John Young
- Assistant Minister for the Environment, Deputy Gregory Guida
- Minister for Infrastructure, Deputy Kevin Lewis
- Assistant Minister for Economic Development, Tourism, Sport and Culture, Deputy Kirsten Morel
- Assistant Minister for Treasury and Resources, Deputy Lindsay Ash
- Chair of the Comité des Connétables, Connétable Deidre Mezbourian.
- Chair of the Economic and International Affairs Scrutiny Panel, Deputy David Johnson.

Notes:

- *Other ministers will be invited to attend and discuss specific topics as and when required.*
- *The Minister for the Environment will chair the meeting in the absence of the Chair.*

Purpose

The purpose of the Steering Group ('the Group') is to approve the strategic principles presented by officers. This will include, amongst other items, consideration of strategic financing options, policy impact heatmaps and impact assessments.

The strategic principles approved by the Group will inform the development of policies for the Carbon Neutral Roadmap and the Preferred Strategy Report ('the Report') by the Strategic Policy, Planning and Performance team.

The Report will be presented to the Executive Leadership Team and the Council of Ministers



Appendix 3 – Minister for the Environment’s Response to the recommendations made by the Citizens’ Assembly on Climate Change

The Minister for the Environment, on behalf of Council of Ministers and all members of the States Assembly has put on record his thanks to the participants in the Citizens’ Assembly for their remarkable contribution of over 1500 hours of their collective time and effort. The high quality and diligence of the considerations clearly demonstrates the level of commitment they brought to the task, and Islanders can be proud of the manner in which they were represented through this process.

In early June 2021 the Citizens’ Assembly published a report, including their recommendations, which they asked the States Assembly to consider. This report is available to read in full on the States Assembly website.⁵⁴ As requested, on 23 July 2021, the States Assembly held an in-committee debate that considered the recommendations from the Citizens’ Assembly⁵⁵.

The Minister for the Environment has set out below a detailed response to the Citizens’ Assembly, whose recommendations are presented in their own words. This response is based on initial analysis of the recommendations.

The recommendations from the Citizens’ Assembly have been a key input into the development of the Preferred Strategy⁵⁶. The recommendations have also been tested against the strategic policies set out in the Preferred Strategy in order to inform the response.

The Citizens’ Assembly recommendations will continue to feed into the development of the detailed policies that will be published in the full Carbon Neutral Roadmap in December 2021.

A response to the Sustainable Finance recommendations will be provided in the Carbon Neutral Roadmap published in December as part of our Scope 3 emissions proposals, which will include specific policy or policies aimed at developing, encouraging and promoting Sustainable Finance within the local finance sector. We will work through this with Jersey Finance, who have put in place a strategy for scaling up sustainable finance in Jersey ‘Jersey for Good – A Sustainable Future’⁵⁷ and the Sustainable Finance Steering Committee and other key industry stakeholders.

⁵⁴ [Achieving Carbon Neutrality: Report of Jersey’s Citizens’ Assembly on Climate Change](#)

⁵⁵ [Carbon Neutral Jersey \(Consideration “in-committee”\) Hansard \(23 July 2021\)](#)

⁵⁶ The Carbon Neutral Roadmap: Preferred Strategy will be published on gov.je on 19 October 2021

⁵⁷ [Jersey for Good - A Sustainable Future, Jersey Finance and Equilibrium Futures](#)



Summary of responses

The categories of response, and number of responses in each category, are set out in the table below. Ministers have accepted the majority of the recommendations and hope to accept more once further work has been undertaken.

Response	Explanation	Number of responses in this category
Accept	Ministers broadly accept the recommended action. The accompanying comments may indicate if some minor variation from the specified wording is required to accommodate the action. Not all recommendations that are accepted will be actioned immediately; some will be actioned in the first stage of the Carbon Neutral Roadmap and others may be planned to take place in later stages.	56
Reject	Ministers reject the recommendation. Where this is the case a reasoned justification is offered as required by the Mandate for the Citizens' Assembly on Climate Change. Rejecting a recommendation at this stage does not mean the idea might not be considered in future if new evidence or other changes emerge.	5
Under active consideration – Carbon Neutral Roadmap	Some actions relate to policies that are still under active consideration for inclusion in the Carbon Neutral Roadmap, published in December 2021. There are still being developed, refined, and assessed in line with the detailed policy development process established by Strategic Policy 4 of the Carbon Neutral Roadmap.	36
Under consideration – medium/long term plans	Some actions relate to policies that require consideration over a longer time period, in order to be assessed in line with Strategic Policy 4. This might require further evaluation or the completion of other foundation work first.	9
Not for government	A small number of recommendations were made in respect of the actions of non-government organisation.	2

Detailed responses

There were 14 high-level recommendations made by the Citizens' Assembly on Climate Change. Seven recommendations on transport and seven recommendations on heating, cooking and cooling. Each recommendation was supported by supplementary recommendations. The Citizens' Assembly also made a statement on Sustainable Finance.

The response to each recommendation is outlined below. Firstly, at the high level, and then the response to each supplementary recommendation.



Each high-level recommendation is responded to in the order presented by the Citizens' Assembly. The supplementary recommendations are ordered by the Minister for the Environment's response to the recommendation, so it is easier to see those that have been accepted, are under consideration or rejected.



Detailed Responses to the Transport Recommendations

Transport Recommendation from the Citizens' Assembly on Climate Change (T1):

The Government should introduce and financially support currently available new carbon reduction technologies for all modes of transport immediately. All Jersey appropriate future transport carbon reduction technologies should also be introduced immediately as they become viable.

Response:

Accept

Comments / Justification:

In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low carbon technologies. The nature of these incentives will be set out in the Carbon Neutral Roadmap. A review of the Roads Law is underway, informed by the Sustainable Transport Policy¹, that will include ensuring that appropriate legal provision is made for future low carbon forms of transport.

Recommendation Number	Recommendation	Response	Comments / Justification
T1: a	Government should provide funding to subsidise and facilitate the new technologies and investigate carbon reduction systems for fossil fuel vehicles.	Accept	In line with the financing strategy, (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low carbon technologies. The nature of these incentives will be set out in the Carbon Neutral Roadmap.
T1: d	Reintroduce car tax (yearly) for certain types of vehicles based on emissions and size.	Accept	In line with the financing strategy (Strategic Policy 3), Ministers are developing proposals for road user charging, which is likely to be levied on an annual basis.
T1: c	Introduce green fuel vouchers.	Under active consideration – Carbon Neutral Roadmap	The role that vouchers might play in incentivising uptake of low-carbon technologies is under active consideration as part of the development of a programme of incentives (see T1a).



Recommendation Number	Recommendation	Response	Comments / Justification
55T1: e	Source electric minibuses and introduce a bus mobility app.	Under active consideration - Carbon Neutral Roadmap	These suggestions are being actively considered as part of the bus service development plan and the Mobility as a Service (MaaS) framework plan, both of which are required by the Sustainable Transport Policy ⁵⁸ agreed by the States Assembly in 2020 (P.128/2019). Funding for the proposals would be accessed on a prioritised basis. in line with Strategic Policy 4.
T1: g	Investigate introduction of hydrogen powered vehicles.	Under active consideration - Carbon Neutral Roadmap	Hydrogen technologies, including vehicles, are being investigated, as set out in the energy market policy (Strategic Policy 2).
T1: b	No General Sales Tax or import duty on electric vehicles including bikes.	Reject	In line with the financing strategy (Strategic Policy 3) ministers are pursuing a Just Transition. Removing Goods and Services Tax and import duty uses the limited available funds to provide an untargeted and marginal incentive that would primarily benefit households with the existing means to invest in new technologies. This is likely to have a negative effect on the distributional impact of carbon neutral policies. Administrative costs for such variations are also likely to be high relative to their impact on peoples' behaviour.
T1: f	Investigate glass/solar roads (roads that generate renewable energy, as used in Denmark) for the main arterial roads.	Reject	Solar roads are very specific nascent technology. Early trails are mixed but suggest the technology is difficult to commercialise in an efficient and effective way yet, so this is unlikely to be a priority for Jersey. Nevertheless, we remain open to all forms of emerging technology. The new research and advisory partnership with energy systems experts proposed in the energy market policy (Strategic Policy 2) will be well placed to help assess Jersey's suitability for new technologies.

⁵⁸ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/SustainableTransportPolicy2019)



Recommendation Number	Recommendation	Response	Comments / Justification
			Utility scale renewable energy options will be considered as part of the strategic review of Jersey's long-term energy requirements, as set out in the energy market policy (Strategic Policy 2). Current evidence suggests that, should investment in utility scale renewables become a priority, other technologies (including wind and tidal) are likely to prove the most effective for us in the medium-term.

Transport Recommendation from the Citizens' Assembly on Climate Change (T2):

An immediate and just transition to low-carbon transport by 2030 that ensures financial support for both low-income households and small businesses.

Response:

Accept

Comments / Justification:

The vision established by the Sustainable Transport Policy¹ is that, by 2030, our transport system will make our everyday lives better, support businesses, encourage us and our children to be healthier and make our Island greener. In line with the financing strategy (Strategic Policy 3), ministers will ensure a Just Transition.

Recommendation Number	Recommendation	Response	Comments / Justification
T2: c	Ensure an extensive Island-wide network of electric vehicle charging points by 2023.	Accept	Currently, electric vehicle chargers are in all public car parks and the network is being expanded across the Island each year. In line with Strategic Policy 4. It is expected that the Carbon Neutral Roadmap will include policies to further enhance the roll out of infrastructure to support future technologies.
T2: e	Implement means-tested grant and/or tax	Accept	In line with the financing strategy (Strategic Policy 3), the Climate



Recommendation Number	Recommendation	Response	Comments / Justification
	relief system for low-income families and small businesses to purchase electric vehicles or other low carbon transport from 2022/3.		Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The nature of these incentives will be set out in the Carbon Neutral Roadmap. A mechanism will be used to proportionally target greater investment towards low-income families in order to support a Just Transition as required by Strategic Policies 3 and 4.
T2: a	Ban registration of new petrol/diesel vehicles (all personal and commercial vehicles) from 2025 that includes a scrappage scheme for diesel/petrol vehicles with particular emphasis on higher polluting vehicles. Introduce a special licence fee for "collector" vehicles that funds carbon-free future projects.	Under active consideration - Carbon Neutral Roadmap	The role that a registration ban might play in incentivising uptake of low-carbon technologies is under active consideration as part of the development of a programme of incentives (see T1: a).
T2: b	Ban all petrol/diesel vehicles (all personal and commercial vehicles) on the road by 2050 and build a secondary market of electric vehicles to support availability and affordability from now.	Under active consideration - Carbon Neutral Roadmap	The role that a registration ban might play in incentivising uptake of low-carbon technologies is under active consideration as part of the development of a programme of incentives (see T1: a). Incentives in themselves are likely to support the development of the secondary electric vehicle market on-Island.
T2: f	Mandate the most fuel-efficient alternative for heavy goods vehicles where there is no electric vehicle alternative by 2025.	Under active consideration – Carbon Neutral Roadmap	Policies to incentivise the turn-over of the Island's Heavy Goods Vehicle fleet are under active consideration as part of the development of the policy programme required by Strategic Policy 4.



Recommendation Number	Recommendation	Response	Comments / Justification
T2: d	Remove import taxes and other applicable taxes for electric vehicles in 2022. Introduce punitive import taxes on second hand petrol and diesel vehicles.	Reject	In line with the financing strategy (Strategic Policy 3), Ministers are pursuing a Just Transition. Removing Goods and Services Tax and import duty uses the limited available funds to provide to provide an untargeted and marginal incentive that would primarily benefit households with the existing means to invest in new technologies. This is likely to have a negative effect on the distributional impact of carbon neutral policies. Administrative costs for such variations are also likely to be high relative to their impact on peoples' behaviour.

Transport Recommendation from the Citizens' Assembly on Climate Change (T3):

Decarbonise the current public transport in Jersey by 2025, as well as making it more accessible and affordable, so that more people use public transport as their primary mode of transportation on the Island.

Response:

Accept

Comments / Justification:

This recommendation is accepted and will be incorporated into the bus service development plan required by the Sustainable Transport Policy. A decarbonised service will feature as a requirement in the re-contracting of the public bus service due to be undertaken by 2025.

Recommendation Number	Recommendation	Response	Comments / Justification
T3: a	Working with public transport contractors to decarbonise their fleets by 2025, with contracts making sure that low-	Accept	These suggestions are being actively considered as part of the bus service development plan required by the Sustainable Transport Policy ⁵⁹ agreed by the States Assembly in 2020 (P.128/2019).

⁵⁹ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/SustainableTransportPolicy2019)



	emission technologies are mandatory and that all vehicles are updated to cleaner technologies.		The principle of a decarbonised public transport system is accepted and will feature as a requirement in the re-contracting of the public bus service.
T3: b	Government to subsidise public transport fares so that there's an affordable rate for all passengers (e.g., £1 or incentivisation) and that young people and students can travel for free (and making sure that people know about it through effective promotion).	Accept	These suggestions are being actively considered as part of the bus service development plan required by the Sustainable Transport Policy agreed by the States Assembly in 2020 (P.128/2019). The role of increased subsidy for the public transport system is recognised, and will feature in future policy development. Funding for specific levels of subsidy would be accessed on a prioritised basis in line with Strategic Policy 4 in the Carbon Neutral Roadmap. It will be important assess the different benefits and disbenefits of 'free' travel compared to very low-cost travel.
T3: c	Serving all communities with the help of new accessible electric minibuses which provide more bus routes and more frequent services, especially in rural parishes, regardless of the immediate viability of each individual route.	Accept	These suggestions are being actively considered as part of the bus service development plan required by the Sustainable Transport Policy agreed by the States Assembly in 2020 (P.128/2019). The principle of an Island-wide decarbonised public transport system is accepted and will feature as a requirement in the re-contracting of the public bus service, although other energy options and technologies might in practice provide an earlier means to achieve this. Funding would be accessed on a prioritised basis in line with Strategic Policy 4.
T3: e	Bus and minibus services to be designed around Islanders' needs such as connecting to ferry, school times, church services, night shifts,	Accept	These suggestions are accepted and are reflected in the design principles for the bus service development plan required by the Sustainable Transport Policy ⁶⁰ agreed by the States Assembly in 2020 (P.128/2019).

⁶⁰ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/SustainableTransportPolicy2019)



	hospital visits, flights, hospitality, etc.		
T3: f	Making information about public transport (as well as other sustainable transport options such as walking/cycling) available to everyone through public promotion, an integrated mobility app, and working with schools and others.	Accept	The value of making information available in this way is accepted. Each of the rapid plans required by the Sustainable Transport Policy agreed by the States Assembly in 2020 (P.128/2019) will consider this issue. The Mobility as a Service (MaaS) framework plan will specifically consider the potential for an integrated mobility app. Funding would be accessed on a prioritised basis in line with Strategic Policy 4.
T3: d	Commit to an investigation into the viability of introducing trams.	Under consideration-medium/long term	In line with the mobility hierarchy established in the Sustainable Transport Policy agreed by the States Assembly in 2020 (P.128/2019), the priority for fixed infrastructure investment is walking and cycling. Nevertheless, the role that mass transit systems could play in Jersey may prove to be a part of the long-term redesign of our public transport system and will remain under consideration.

Transport Recommendation from the Citizens' Assembly on Climate Change (T4):

A change in mindset and culture causing a reduction in the demand for travel particularly commuting, car usage, air travel and freight.

Response:

Accept

Comments / Justification:

Each of the plans required by the Sustainable Transport Policy, as well as associated projects and actions will seek to support this change in mindset. The Jersey mobility hierarchy establishes that single-occupancy car travel is the least sustainable form of transport, and the draft Bridging Island Plan includes policies to support reduced demand for travel and increased provision of safe walking and cycling infrastructure.



Recommendation Number	Recommendation	Response	Comments / Justification
T4: c	Increase the self-sustainability of the Island to reduce the need for air and sea freight of goods.	Accept	The principle of increased self-sustainability is accepted and as set out in Strategic Policy 4. The Carbon Neutral Roadmap will include policies to support a reduction in the Island's global emissions. Applying the principle in practice requires redesign of major public service and economic systems that will be given effect through a wide range of strategies and plans. These plans will need to recognise that, as an Island, Jersey will always make use of off-Island supply chains and as such the decarbonisation of these supply chains is a policy objective; and that are sometimes competing policy objectives that mean importation can, overall, be preferable to local production in some circumstances.
T4: d	Education that emphasises wider benefits of a reduction in travel to achieve a change in mindset and culture.	Accept	As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include policies to support community engagement and a reduction in the Island's global emissions.
T4: e	Ensure that all essential services are within safe walking distance to reduce the need for travel. This could include shops, gyms, nurseries, and social opportunities at a parish level.	Accept	The current Island Plan ⁶¹ and draft Bridging Island Plan ⁶² have strategic policies that seek to locate new development and the provision of public and local services near to existing areas population clusters (although the range of local services that can be economically supported varies across different population centres). The draft Bridging Island Plan proposes policies to increase the provision of services in the Les Quennevais area for a range of reasons, including reducing the need for travel from the west of the Island to town.

⁶¹ [Revised 2011 Island Plan \(gov.je\)](https://www.gov.je/Revised-2011-Island-Plan)

⁶² [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je/Draft-Bridging-Island-Plan)



Recommendation Number	Recommendation	Response	Comments / Justification
T4: a	Business to allow and support their workforce to work from home with consideration for wellbeing, practicality, and expenses.	Not for government	This is a recommendation to Jersey businesses, rather than the Government of Jersey, however the benefit of business-led activity in this area is entirely supported by government. Strategic Policy 4 includes a commitment to scope out the creation of a business-led alliance of organisations to support the delivery of the Carbon Neutral Roadmap. Such an alliance would be intended to promote this sort of sustainable practice.
T4: b	Reduce the number of personal air travel trips targeting frequent flyers using a quota system that gets more expensive the more you do it. This applies to fossil-fuelled aircraft.	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3), ministers are developing proposals for a modest travel duty. The principle of an increased charge for more frequent flyers will be considered as part of this.

Transport Recommendation from the Citizens' Assembly on Climate Change (T5):

Encourage walking and cycling by making Jersey a safe and enjoyable environment for cyclists and pedestrians through investment in infrastructure and education. We want legislation to ensure a walking and cycling first transport model.

Response:

Accept

Comments / Justification:

The Jersey mobility hierarchy – which promotes safe walking and cycling ahead of motor vehicle use – is already established as a non-statutory policy principle adopted by the States Assembly in the Sustainable Transport Policy. The Climate Emergency Fund is already investing in new cycling and public transport infrastructure. As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include further policies to support increased use of sustainable transport.



Recommendation Number	Recommendation	Response	Comments / Justification
T5: a	Immediately invest in our infrastructure - fix roads and create cycle lanes and pavements, ensuring an extensive connected network of walking and cycling routes across the Island (including connected green lanes in all parishes) and free safe, secure storage for bikes. Where appropriate, introduce separate cycle lanes and safe crossings, creating signage and a map (like the London tube map) and an app of all the walking and cycling routes across the Island.	Accept	The Climate Emergency Fund is already investing in new cycling and public transport infrastructure. As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include further policies to support increased use of sustainable transport, and work is underway in each of the suggested areas as part of the Bus Development Plan, Active Travel Plan and Mobility as a Service Framework Plan.
T5: e	By 2027, introduce monthly car free Sundays across the Island - designed to change the mindset of the population to establish Jersey as a walking and cycling Island. To be enforced by the police but with exceptions e.g., for emergencies, workers, and people with disabilities.	Accept	The value of car free events is accepted and the Sustainable Transport Policy Strong Start ⁶³ already provides for a programme of traffic-free events in the town centre. The frequency and occasion of these events will need to respond to feedback from Islanders. An Island-wide ban on car use with state enforcement is not considered proportionate or necessary to secure the benefits of the proposal and might potentially be counter-productive in helping change peoples' behaviours.
T5: b	By 2025, implement cycling education and training for all road users, starting within	Under active consideration – Carbon Neutral Roadmap	The value of cycling education is recognised, and the Climate Emergency Fund already makes funding available for <i>Bikeability</i> ⁶⁴ projects in all schools, and for

⁶³ [Sustainable Transport Strong Start Delivery Plan 2020 \(gov.je\)](https://www.gov.je/SustainableTransportStrongStartDeliveryPlan2020)

⁶⁴ [Bikeability.org](https://www.bikeability.org)



Recommendation Number	Recommendation	Response	Comments / Justification
	schools accompanied by courses for people of all ages and abilities. On completion of training participants receive free registration and cycle insurance.		a dedicated cycling officer in government. The further value of universal training and free cycling insurance will be considered on a prioritised basis as set out in Strategic Policy 4.
T5: d	By 2025, provide free access to bikes, including e-bikes, to incentivise use.	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The nature of these incentives will be set out in the Carbon Neutral Roadmap and may include support to reduce the cost to cycle; universal free access to bikes is not expected to be provided.
T5: f	By 2027, Government to restrict the size of cars in Jersey and the number of cars allowed.	Under active consideration – Carbon Neutral Roadmap	The principle of disincentivising larger and more polluting cars is accepted, and the Government Plan 2022-25 ⁶⁵ proposes an increase in vehicle emissions duty of over 70% for vehicles with CO ₂ mass emissions of over 201 grams. Further steps to disincentivise car use are being considered alongside the development of incentive schemes as set out above. Consideration may be given to alternative mechanisms to limit the number of cars on the road with further consideration to be given to the principles of a Just Transition and the potential impact on social inequality (see T6: e).
T5: c	By 2025, legislate for a walking and cycling first transport model (aligned with the education programme). Ambition	Reject	The Jersey mobility hierarchy ⁶⁶ – which promotes safe walking and cycling ahead of motor vehicle use – is already established as a non-statutory policy principle in the Sustainable Transport Policy ⁶⁷ . While the draft Bridging Island

⁶⁵ [Proposed Government Plan 2022-25 \(gov.je\)](#)

⁶⁶ [Sustainable Transport Policy 2019 \(gov.je\) \(Appendix 3\)](#)

⁶⁷ [Sustainable Transport Policy 2019 \(gov.je\)](#)



Recommendation Number	Recommendation	Response	Comments / Justification
	for St Helier to be car free by 2035.		Plan ⁶⁸ proposes significant reuse of road space for cycling and walking in town, as set out in the Public Realm and Movement Strategy ⁶⁹ , the objective of an entirely 'car free' St Helier is not supported and would have unworkable aspects for Islanders (particularly the mobility impaired), town residents and businesses.

Transport Recommendation from the Citizens' Assembly on Climate Change (T6):

Phase out fossil-fuelled private cars and reduce overall car use through the provision of safe, convenient, and affordable alternative modes of transport for all.

Response:

Accept

Comments / Justification:

The need to phase out fossil-fuelled private cars is recognised and as set out in Strategic Policy 4; the Carbon Neutral Roadmap will include further policies to support increased use of sustainable transport. In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives to increase the uptake of low-carbon transport technologies.

Recommendation Number	Recommendation	Response	Comments / Justification
T6: c	Work towards pedestrianisation of the centre of St. Helier by 2025 (with access for disabled, business deliveries etc.).	Accept	The draft Bridging Island Plan ⁷⁰ proposes policies around space and place making which support the Carbon Neutral Strategy ⁷¹ and Roadmap. These are informed by the Public Realm and Movement strategy which proposes a

⁶⁸ [Draft Bridging Island Plan \(gov.je\)](#)

⁶⁹ [Public Realm and Movement Strategy \(gov.je\)](#)

⁷⁰ [Draft Bridging Island Plan \(gov.je\)](#)

⁷¹ [Carbon Neutral Strategy \(gov.je\)](#)



Recommendation Number	Recommendation	Response	Comments / Justification
			significant increase in pedestrianised areas in the town centre, as well investment in cycle routes.
T6 a	Phase out fossil fuel cars. Ban registration of new petrol and diesel cars by 2025. Bring in emission-based MOTs and phase out the worst polluters. Replace fossil fuel diesel with biodiesel (HVO). Introduce appropriate financial support/incentives for low-income households to make their next car an electric vehicle. Hire car fleet to transition to electric vehicles by 2022.	Under active consideration – Carbon Neutral Roadmap	The principle of disincentivising larger and more polluting cars is accepted, and the Government Plan 2022-25 ⁷² proposes an increase in vehicle emissions duty of over 70% for vehicles with CO ₂ mass emissions of over 201 grams. Further steps to disincentivise car use are being considered alongside the development of incentive schemes as set out above. Periodic inspections are in the process of being introduced. In line with Strategic Policy 2, the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel. A transition plan for the hire car fleet will be developed but it is not considered practical to transition this fleet by 2022.
T6: b	Provide safe, convenient, and affordable alternatives. Trial and then introduce on-demand transport services to reduce car dependence. Support car-sharing to support reduction in single-passenger car journeys (e.g., through car sharing app, businesses incentivising employees to car share). Invest in the best possible public transport service we can provide (in terms of	Under active consideration – Carbon Neutral Roadmap	These suggestions are being actively considered as part of the bus service development plan and the Mobility as a Service (MaaS) framework plan, both of which are required by the Sustainable Transport Policy ⁷³ agreed by the States Assembly in 2020 (P.128/2019). Funding for the proposals would be accessed on a prioritised basis in line with Strategic Policy 4.

⁷² [Proposed Government Plan 2022-25 \(gov.je\)](https://gov.je/proposed-government-plan-2022-25)

⁷³ [Sustainable Transport Policy 2019 \(gov.je\)](https://gov.je/sustainable-transport-policy-2019)



Recommendation Number	Recommendation	Response	Comments / Justification
	routes, frequency, cost, clean technology).		
T6: d	Decarbonise school transport by 2022. Provide free shared transport to and from school for children from all parishes, coupled with car-free zones outside schools during drop-off and pick-up times. Provide free Evie bike and scooter hubs at secondary schools and parish halls.	Under active consideration – Carbon Neutral Roadmap	These suggestions are being actively considered as part of the bus service development plan required by the Sustainable Transport Policy ⁷⁴ agreed by the States Assembly in 2020 (P.128/2019). Funding for the proposals would be accessed on a prioritised basis in line with Strategic Policy 4. A transition plan for the school bus fleet will be developed but it is not considered practical to fully transition this fleet by 2022.
T6: e	Introduce a limit on the total number of private cars (including electric cars) on the Island and cars per household (as population increases.) This measure to be used if other policies fail to deliver a significant reduction in car use by 2025.	Under consideration – medium/long term	The principle of disincentivising the use of fossil fuel cars is accepted and further steps to disincentivise car use are being considered alongside the development of incentive schemes as set out above. However, a cap on the number of private cars on the Island is not supported at this time. Such a step would require new primary law as well as significant investment in tracking and enforcement of the vehicle fleet and it is thought that other more proportionate policy levers can currently be used to achieve a reduction of the overall number of cars on the road.

⁷⁴ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/SustainableTransportPolicy2019)



Transport Recommendation from the Citizens' Assembly on Climate Change (T7):

Jersey will achieve a phased transition to (all) green transport, with no new registration of fossil fuel vehicles after 2025.

Response:

Under active consideration – Carbon Neutral Roadmap

Comments / Justification:

The vision established by the Sustainable Transport Policy is that, by 2030, our transport system will make our everyday lives better, support businesses, encourage us and our children to be healthier and make our Island greener. The role that a registration ban might play in incentivising uptake of low-carbon technologies is under active consideration as part of the development of a programme of incentives (see T1: a).

Recommendation Number	Recommendation	Response	Comments / Justification
T7: a	No longer buy or lease fossil fuel vehicles after 2024, technology permitting. A Government budget for green transport agreed by 2022. All diesel vehicles transition to lowest carbon alternative, where a no carbon alternative is not yet available. Have appropriately sized vehicles for purpose. Apply logistics to reduce unnecessary journeys. Limit number of cars within fleet.	Accept	A Government of Jersey fleet review has been undertaken as part of the Sustainable Transport Policy ⁷⁵ and will inform future fleet contract reviews, including transitioning away from fossil fuels and fossil fuel vehicles. Regarding green transport budget measures: in line with Strategic Policy 2, the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel. In line with Strategic Policy 3, government will bring forward proposals for road user charges, car parking charges and a modest travel duty in 2022 (as part of the Government Plan 2023-26).
T7: c	No longer buy or lease fossil fuel vehicles after 2024.	Accept	See T7: a (this is assumed to refer to the Government of Jersey fleet).

⁷⁵ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/SustainableTransportPolicy2019)



Recommendation Number	Recommendation	Response	Comments / Justification
T7: d	All diesel vehicles transition to lowest-carbon alternative, where a no-carbon alternative is not yet available.	Accept	See T7: a (this is assumed to refer to the Government of Jersey fleet).
T7: e	Encourage flexible working hours to reduce congestion and high carbon emissions at peak times.	Accept	The value of flexible working hours is recognised, is promoted as part of the eco active programme and is informing Government of Jersey decarbonisation plans and relevant policies. In line with Strategic Policy 4, a business-led alliance of organisations will be explored in order to support the update of this sort of practice across employers in consultation with trade unions or other employee organisations.
T7: f	Commercial building bye-laws to provide for green fuelling needs.	Accept	The draft Bridging Island Plan ⁷⁶ proposes new policies to support the Carbon Neutral Strategy ⁷⁷ and Roadmap. Necessary steps can be taken in both building-bye laws and supplementary Planning Guidance.
T7: g	No longer buy or lease new fossil fuel vehicles after 2025.	Accept	See T7: a. This is assumed to refer to the Government of Jersey fleet.
T7: i	Residential building byelaws to provide for green fuelling needs for new builds	Accept	The draft Bridging Island Plan proposes new policies to support the Carbon Neutral Strategy and Roadmap. Necessary steps can be taken in both building-bye laws and supplementary Planning Guidance.
T7: j	Government facilitating a viable second hand electric vehicles market.	Accept	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon

⁷⁶ [Draft Bridging Island Plan \(gov.je\)](http://gov.je)

⁷⁷ [Carbon Neutral Strategy \(gov.je\)](http://gov.je)



Recommendation Number	Recommendation	Response	Comments / Justification
			technologies, that will help to enhance both primary and secondary markets.
T7: l	Encourage community car ownership or sharing.	Accept	The Jersey mobility hierarchy ⁷⁸ , established in the Sustainable Transport Policy, encourages car sharing. Government support (in the form of redesignated public parking spaces) has also been provided for car share services.
T7: m	Provide an Island-wide network of designated routes for walking and cycling.	Accept	This will be set out as part of the Active Travel plan, required by the Sustainable Transport Policy ⁷⁹ .
T7: n	Encourage flexible working to enable greener transport choices to be made.	Accept	The value of flexible working hours is recognised, is promoted as part of the eco active programme, and is informing Government of Jersey decarbonisation plans and relevant policies. In line with Strategic Policy 4, a business-led alliance of organisations will be explored in order to support the update of this sort of practice across employers.
T7: p	Island-wide network of charging points for commercial vehicles.	Accept	In line with Strategic Policy 4, the Carbon Neutral; Roadmap will include policies to support improved energy infrastructure and future technology, including electric vehicle charging. When considering the specific needs of electric commercial vehicles, their charging patterns and requirement to charge at appropriate locations will need to be taken into account.
T7: q	Government to facilitate the conversion of fossil fuel stations to green fuelling stations.	Accept	Where such conversion required changes to planning or other regulatory policies, these would be positively considered.

⁷⁸ [Sustainable Transport Policy 2019 \(gov.je\) \(Appendix 3\)](#)

⁷⁹ [Sustainable Transport Policy 2019 \(gov.je\)](#)



Recommendation Number	Recommendation	Response	Comments / Justification
T7: r	Government must develop legislation and regulation to support the development and maintenance of a green transport infrastructure.	Accept	The draft Bridging Island Plan ⁸⁰ provides policies to support the development of green infrastructure and proposes the development of a long-term infrastructure roadmap that will identify any areas that require changes to law and regulation. A review of the Roads Law is underway, informed by the Sustainable Transport Policy ⁸¹ .
T7: s	Review of bus routes and timetables to provide a comprehensive network fit for purpose.	Accept	This work is underway as part of the bus service development plan required by the Sustainable Transport Policy.
T7: k	'Emissions' tax for visitors bringing fossil-fuelled cars to the Island from 2024.	Accept	In line with Strategic Policy 3, government will bring forward proposals for road user charges, car parking charges and a modest travel duty in 2022 (as part of the Government Plan 2023-26).
T7: b	No longer buy or lease bus or coach fossil fuel vehicles after 2024, technology permitting. Company owned and privately owned taxis to transition by 2025. All diesel vehicles transition to lowest-carbon alternative, where a no-carbon alternative is not yet available. Look at and learn from other successful electric bus services. Encourage regulated ride sharing schemes. Introduce bike taxis.	Under active consideration - Carbon Neutral Roadmap	These suggestions are being actively considered as part of the bus service development and Mobility as a Service Framework plans required by the Sustainable Transport Policy agreed by the States Assembly in 2020 (P.128/2019). Funding for the proposals would be accessed on a prioritised basis in line with Strategic Policy 4.

⁸⁰ [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je/Draft-Bridging-Island-Plan)

⁸¹ [Sustainable Transport Policy 2019 \(gov.je\)](https://www.gov.je/Sustainable-Transport-Policy-2019)



Recommendation Number	Recommendation	Response	Comments / Justification
T7: h	Free installation of domestic charge points where necessary by the Government to encourage a transition to electric vehicles.	Under active consideration - Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low carbon technologies. The nature of these incentives will be set out in the Carbon Neutral Roadmap. Additionally, the installation of private charge points will be required by building regulations.
T7: o	Every other Government, Parish, and commercial parking space to have an electric charging point.	Under active consideration – Carbon Neutral Roadmap	In line with Strategic Policy 4, the Carbon Neutral Roadmap will include policies to support improved energy infrastructure and future technology, including electric vehicle charging. The optimum distribution of electric charging infrastructure is informed by a number of factors, including evolution of charging technology and changes in travel patterns over time. Given the expected use of 'charge at home' solutions it is not considered likely that half of all available public parking spaces will require a charging point.



Detailed Responses to the Heating, Cooling and Cooking Recommendations

Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H1):

Ensure Building Standards and Planning Law specify carbon neutral standards for all buildings by 2023.

Response:

Under active consideration – Carbon Neutral Roadmap.

Comments / Justification:

The need to ensure planning policy and building bye-laws require enhanced energy efficiency standards is recognised. A review of building bye-laws is being scoped currently, this includes exploring how long such a review might take.

Recommendation Number	Recommendation	Response	Comments / Justification
H1: b	Amend planning restrictions to promote the early adoption of renewable energy (e.g., solar panels) and carbon reduction measures (e.g., new windows).	Accept	Installation of domestic solar and wind technologies can already be undertaken without planning permission. The draft Bridging Island Plan ⁸² proposes new policies to support larger solar installations, installation of thermally efficient windows, and off-shore utility scale renewables. Building regulations will be reviewed to enhance this area.
H1: d	Monitor and update standards continually to reflect technological developments.	Accept	Relevant planning policy and building byelaws are reviewed periodically to ensure they reflect technological developments.
H1: c	Introduce by January 2023 a mandatory Energy Performance Certificate Scheme for all buildings which must be completed by 2025, or on the sale or rental of the property, if earlier.	Accept	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is recognised. Consideration

⁸² [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je)



Recommendation Number	Recommendation	Response	Comments / Justification
	Use the scheme to ensure carbon neutrality across all buildings by 2030.		will need to be given to up-skilling operatives able to deliver Energy Performance Certificates at scale to enact this policy as part of the work in developing skills. .
H1: e	Immediately revise Planning Law to encourage the redevelopment of property that is no longer fit for purpose. Ensure existing properties are used and not allowed to stand empty for want of investment to make them carbon neutral, with the Government of Jersey leading by example.	Under active consideration – Carbon Neutral Roadmap	The Island Plan ⁸³ proposes policies to support redevelopment of buildings where that is more carbon efficient with regard to the embodied energy of an existing building. Work on vacant homes is underway as part of delivering the Creating Better Homes action plan, published by the Minister for Housing and Communities. This includes an assessment of the number homes currently empty, and work to gather up to date data on the locations of these homes and the reason they are vacant. Planning law does not directly affect the use of buildings, other than as the legal foundation for relevant planning policies.
H1: a	Immediately revise the Jersey Building Standards to ensure that all new builds are carbon neutral by 2023.	Under active consideration – Carbon Neutral Roadmap	A review of building bye-laws is being scoped currently, this includes exploring how long such a review might take with an aim of completing it for implementation by 2023. The review will need to work with stakeholders and industry operatives to ensure that any changes to established practice are introduced with enough time for skill sets and supply chains to adjust.
H1f	Immediately revise residential tenancy law to ensure that costs of energy efficiency measures may not be passed on to the tenant and to ensure that the tenant does not have	Under active consideration – Carbon Neutral Roadmap	The Minister for Housing and Communities is considering issues related to the Residential Tenancy (Jersey) Law 2011 ⁸⁴ and will consider whether any steps are needed to protect tenants from unreasonable transfer of costs associated with improving energy efficiency of residential buildings. It is noted that

⁸³ [Revised 2011 Island Plan \(gov.je\)](https://www.gov.je/Revised-2011-Island-Plan)

⁸⁴ [Residential Tenancy \(Jersey\) Law 2011](#)



Recommendation Number	Recommendation	Response	Comments / Justification
	legal powers to oppose energy efficient refurbishment.		tenants will also derive a benefit from improved energy efficiency.

Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H2):

Reduce carbon emissions from rental properties, both residential and commercial, by implementing a system of Energy Performance Certificates by the 1st of January 2025.

Response:

Under active consideration – Carbon Neutral Roadmap

Comments / Justification:

In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low carbon technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is under active consideration.

Recommendation Number	Recommendation	Response	Comments / Justification
H2: d	Government buildings should be the example for landlords to follow, by setting the standard and conducting surveys of their own buildings.	Accept	As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include policies on strategic governance and leadership, which will include the steps the Government of Jersey will take to decarbonise its operations. A Government of Jersey estates review will form part of this.
H2: e	Educate landlords to help them understand the aim and what can be achieved.	Accept	The eco active programme already provides advice on residential energy efficiency. As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include policies to support community and business engagement.
H2: a	The Government of Jersey to devise an asset	Under active consideration –	The value of securing data on the energy use and efficiency of residential properties



Recommendation Number	Recommendation	Response	Comments / Justification
	<p>survey to be included within the annual rates return. The survey should include: Is it a rental property, what fuels are used for heating/cooking and the type of glazing/ insulation etc. To be distributed with the next parish rates return and collated by June of 2022. To provide the Government of Jersey with a comprehensive database.</p>	<p>medium/long term</p>	<p>is recognised, and options to improve the data available to plan and administer retrofit schemes are being considered. It is not certain that acquiring this data as an extension of the annual rates return is the best approach, and it is not expected that this will be done in 2022. At the same time, the role that energy certification will play in providing evidence of need as part of an incentive programme is under active consideration.</p>
<p>H2: b</p>	<p>Legislation for rental properties to include Energy Performance Certificate (EPC's) with properties required to meet a minimum grade before being leased. EPC's to be implemented for both commercial and residential properties. All rental properties to have this in place by 2025. Penalties for non-conformity to the legislation. Penalties to be ring-fenced for use to upgrade/ retrofit Island owned heritage/ historic buildings. Legislation to ensure costs are not passed on to tenants, as well as legislation to ensure tenants are not unduly prejudiced.</p>	<p>Under active consideration – Carbon Neutral Roadmap</p>	<p>In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is under active consideration. However, proposals for legislative intervention in the rental market have so far been unsuccessful and new primary legislation is required to fulfil this objective, given that, is considered challenging to meet this change by 2025.</p>



Recommendation Number	Recommendation	Response	Comments / Justification
H2: c	The Government provides subsidies and incentives (e.g., grants, low-cost loans, tax breaks) to be implemented on a time sensitive sliding scale, to help pay for attaining at least the minimum standard required for the Energy Performance Certificate (EPC). Once the EPC is completed the incentive value starts high then decreases as time passes.	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low carbon technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is under active consideration.

Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H3):

To educate and support Jersey consumers and Island suppliers to transition to carbon neutral ways of studying, living and working so Jersey and its environment are protected and improved by 2030.

Response:

Accept

Comments / Justification:

The importance of education is recognised and as set out in the Strategic Policy 4, the Carbon Neutral Roadmap will include policies to support community and business engagement.

Recommendation Number	Recommendation	Response	Comments / Justification
H3: a	Educate the residents in 2022, or sooner, on the costs and benefits of studying, living, and working in a carbon	Accept	The eco active programme already provides advice on low carbon living for Islanders and businesses. As set out in the Strategic Policy, the Carbon Neutral



	neutral community, starting with young people. Organise accessible multi-generational events on different platforms to reduce fear and increase understanding.		Roadmap will include policies to support community and business engagement.
H3: b	<p>a) Immediately incentivise those with limited funds to speed up change.</p> <p>b) Publicise carbon-neutral approved changes that are tax-deductible for property owners and for rental investments: projects such as solar panels/electric boilers and setting up a pioneering Jersey Carbon Neutral Fund. Eliminate Goods and Services Tax on eco-friendly improvements.</p>	Accept	<p>a) In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies.</p> <p>b) The first part of this recommendations mentions incentives for 'those with limited funds' which suggests a recognition of the need to best target available funding However, as noted in response to T1: b, ministers are pursuing a Just Transition and removing Goods and Services Tax is not supported as it uses the limited available funds for an untargeted incentive that would primarily benefit households with the existing means to invest in new technologies.</p>
H3: e	Immediately identify the gap in key skills and stay up to date with new technologies to enable a carbon neutral Jersey. Government to provide funding for apprenticeships and upskilling existing work force on a continuing basis for any age during the transition period and beyond. Partner apprentices from Highlands College with	Accept	-Strategic Policy 2 sets out that the Carbon Neutral Roadmap will include policies in the first stage of delivery that invest in the skills needed in the future decarbonised economy.



	existing and new contractors.		
H3: g	Introduce regulations that eliminate old, outdated building practices by 2025.	Accept	The need to encourage the market to transition to lower impact construction methods is recognised. Planning policy and building bye-laws are the tools that can be used to do this. A review of building bye-laws is being scoped currently, this includes exploring how long such a review might take.
H3: c	Give fuel suppliers until 2025 to change to a renewable energy supply. Current oil customers have to change to Hydrotreated Vegetable Oil (HVO) fuel by 2025 as an interim measure until their heating/cooking/boiler needs replacing.	Under active consideration - medium/long term	As set out in the Strategic Policy, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy. This work will include soliciting decarbonisation transition plans and market insights from all current Island energy providers. Strategic Policy 2 also establishes that the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel. It is very challenging to achieve this transition at full scale by 2025.
H3: d	Immediately set up a rental scheme, interest free loans or partial grants for all types of solar/thermal panels for old and new buildings. New builds have to generate an agreed percentage of their own energy needs.	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The draft Bridging Island Plan ⁸⁵ includes policies (ME1, ME2 and ME3) that require enhanced energy efficiency from new development. As noted in response to H1: a, a review of

⁸⁵ [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je)



			building bye-laws is being scoped currently.
H3: f	Establish, by 2022, a Goods and Services Tax-exempt building works framework for contractors - existing and new - to support refurbishment and to take on apprentices with additional incentives. Partial tax break on carbon neutral refurbishments.	Reject	As noted in response to T1: b, Ministers are pursuing a Just Transition and removing Goods and Services Tax is not supported as it uses the limited available funds for an untargeted incentive that would primarily benefit households with the existing means to invest in new technologies. Furthermore, it is considered prohibitively difficult to assess and enforce such a scheme.

Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H4):

Government to enable and empower communities to become carbon neutral by creating policy and funding frameworks for communal power generation and energy efficiency measures related to heating, cooling and cooking. This will be underpinned by an Island-wide feasibility study and energy audits.

Response:

Accept

Comments / Justification:

The value of greater community energy generation is recognised, and Government currently offer a subsidy towards the home energy audit. In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies, including energy efficiency measures related to heating, cooking and cooling. As set out in Strategic Policy 2, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy, and the value of providing funding for communal power generation will be considered as part of this.

Recommendation Number	Recommendation	Response	Comments / Justification
H4: a	Government to immediately fund	Accept	The Government already offer a subsidy towards the home energy audit and this is



Recommendation Number	Recommendation	Response	Comments / Justification
	energy audits to determine options for shared measures and economies of scale.		expected to continue as part of the package of incentives set out in the Carbon Neutral Roadmap.
H4: b	Government to commission a feasibility study to explore the potential for shared community micro-renewables across Jersey (including a survey of willingness to participate in community schemes) - to be complete by end of 2022.	Under active consideration – medium/long term	As set out in Strategic Policy 2, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy. This will include consideration of community micro-renewables schemes, but this is unlikely to complete by 2022.
H4: c	Immediately require all new developments to have community renewables built in through updates to building regulations.	Under consideration – medium/long term	Installation of domestic solar and wind technologies can already be undertaken without planning permission. The draft Bridging Island Plan ⁸⁶ proposes new policies to support larger solar installations, installation of thermally efficient windows, and off-shore utility scale renewables; as well as policies (ME1, ME2 and ME3) that require enhanced energy efficiency from new development. However, policies to immediately mandate the installation of community renewable generation schemes are not supported as these systems can add cost to development and in many instances will not contribute directly to carbon abatement.
H4: e	Require all community Government/Parish-owned buildings to include renewables.	Under consideration – medium/long term	Installation of domestic solar and wind technologies can already be undertaken without planning permission. The draft Bridging Island Plan proposes new policies to support larger solar installations, installation of thermally efficient windows, and off-shore utility scale renewables; as well as policies (ME1,

⁸⁶ [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je/draft-bridging-island-plan)



Recommendation Number	Recommendation	Response	Comments / Justification
			ME2 and ME3) that require enhanced energy efficiency from new development.
H4: f	Government to appoint paid Community liaison officers (one per Parish) to lead implementation, building trust, supporting communities, education and promoting opportunities. They should act as a bridge between community and technical experts.	Under consideration – medium/long term	This will be considered and prioritised based on the process established by Strategic Policy 4.
H4: d	Parishes to incentivise community energy generation through a link to residential rates and by supporting community initiatives, with Parish Halls acting as an information hub to showcase what's possible to motivate others.	Not for government	This is a recommendation to Parishes rather than the Government of Jersey, however the benefit of Parish-led activity in this area is entirely supported by government. Strategic Policy 4 includes a commitment to explore the role that an appropriately constituted community impact fund might play in supporting the development and delivery of grass roots climate action through the provision of small grants.



Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H5):

Appointing a Minister for Energy as soon as possible but no later than 2022 (when a new Government is installed), advised by an independent expert panel, to take overall responsibility for the transition to becoming zero-carbon by 2045 or sooner and with biofuels having a temporary role until we can achieve this with the help of a variety of local renewable energy sources.

Response:

Accept

Comments / Justification:

Strategic Policy 2 recommends that the incoming Council of Ministers in 2022 allocate a new ministerial portfolio for energy and climate change. Strategic Policy establishes a minimum net-zero transition pathway for Jersey, which provides for a transition to net-zero by 2050 but with very minimal emissions in the final years of this period. Strategic Policy 2 establishes that the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel.

Recommendation Number	Recommendation	Response	Comments / Justification
H5: b	Immediately ensuring the availability of domestic and other building infrastructure that has been adapted to work with Hydrotreated Vegetable Oil instead of high-carbon fuels and that it's affordable to people (e.g., subsidy to encourage uptake).	Accept	Strategic Policy 2 establishes that the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel.
H5: c	Government using its powers (e.g., taxation and incentives) to enable the transition to sustainable biofuels such	Accept	As set out in Strategic Policy 2, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy. Strategic Policy 2 also establishes that the



	as Hydrotreated Vegetable Oils in as short a time as possible and no later than by 2025 (e.g., upgrading systems when they are serviced and supporting the industry to be ready for this).		Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel.
H5: a	An end to importing high-carbon diesel by 2030 or sooner and ensuring that there is sufficient Hydrotreated Vegetable Oil for the Island's energy needs.	Under consideration – Carbon Neutral Roadmap	As set out in Strategic Policy, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy. Strategic Policy 2 also establishes that the Carbon Neutral Roadmap will include policies to support the faster adoption of non-fossil hydrocarbons such as second-generation renewable diesel.
H5: d	Government must seriously and regularly explore the prospect of Jersey-based renewable energy generation infrastructure (including tidal energy infrastructure) and work with energy companies to invest in it - cost should not be an excuse.	Under active consideration – Carbon Neutral Roadmap	As set out in Strategic Policy 2, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy.
H5: f	Plan for diversification of energy sources through competition and collaboration.	Under active consideration – Carbon Neutral Roadmap	As set out in Strategic Policy, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy.
H5: e	Promoting self-sustainability from renewable energy sources to reduce dependency on French grid - becoming a world leader (perhaps together with other Channel Islands).	Under consideration – medium/long term	As set out in Strategic Policy, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy.



Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H6):

All new and existing government and commercial properties to become carbon neutral by 2030, with the Government leading the way immediately through the introduction of legislation, standards, and practical assistance.

Response:

Under active consideration – Carbon Neutral Roadmap

Comments / Justification:

The Carbon Neutral Roadmap will recognise the objective of retrofitting commercial properties, and in line with the financing strategy (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The principle of government leading the way is accepted, and the draft Bridging Island Plan¹ includes policies that require enhanced energy standards in all government back new developments. Significant additional market capacity would need to be created to provide the hardware, skills and labour to fully retrofit all commercial properties by 2030, and as such the suggested target date remains under active consideration.

Recommendation Number	Recommendation	Response	Comments / Justification
H6: a	Government to immediately adopt globally recognised best practice and standards for all new and existing government and commercial buildings to achieve carbon neutrality.	Accept	The draft Bridging Island Plan ⁸⁷ includes policies (ME1, ME2 and ME3) that require enhanced energy efficiency from new development that are based on a review of international best practice. In most cases existing buildings can be effectively retrofitted to improve their thermal efficiency, but often not to the highest modern energy efficiency standards.
H6: d	The Government to provide means-tested incentives as soon as possible to encourage and support people to make their properties	Accept	In line with the financing strategy (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies.

⁸⁷ [Draft Bridging Island Plan \(gov.je\)](https://www.gov.je)



Recommendation Number	Recommendation	Response	Comments / Justification
	carbon neutral. The Government to consider a full range of options such as grants, loans, subsidies, taxation measures, stamp duty and private finance such as green bonds.		
H6: b	All existing commercial properties to be retrofitted to be carbon neutral by 2030, with offsets where this is not possible, and with grants provided for small business owners on a means-tested basis to enable retrofitting.	Under consideration – medium/long term	The Carbon Neutral Roadmap will recognise the objective of retrofitting commercial properties, and in line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. Significant additional market capacity would need to be created to provide the hardware, skills, and labour to fully retrofit all commercial properties by 2030, and as such the suggested target date remains under active consideration.
H6: c	The Government to introduce legislation banning new carbon heavy heating systems with the ban to come into force by 2025. Ensure the transition to less heavy heating systems is efficient and sustainable by the use of Hydrotreated Vegetable Oils, green gas or similar fuels as an alternative until the end of the life of the current heating system.	Under active consideration – Carbon Neutral Roadmap	As set out in Strategic Policy 2, a strategic review of Jersey's long-term energy requirements will be undertaken to inform a future government-led energy strategy.
H6: e	Make compulsory energy certificates that include both energy performance and carbon	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon



Recommendation Number	Recommendation	Response	Comments / Justification
	footprint by 2025 on all buildings.		technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is under active consideration.

Heating, Cooling and Cooking Recommendation from the Citizens' Assembly on Climate Change (H7):

Government to develop a strategy for retrofitting of residential buildings to ensure optimal energy efficiency and share their recommendations with Islanders by the end of 2022. This will include financial options, education programmes and incentive schemes, prior to enforcement commencing in 2030.

Response:

Under active consideration – Carbon Neutral Roadmap

Comments / Justification:

It is recognised that significant government support for a scaled up retrofit programme will be required, and in line with Strategic Policy 4, the Carbon Neutral Roadmap will set out policies to decarbonise heating and cooling. The recommendation to develop a retrofit strategy is under active consideration but to have this in place by the end of 2022 is challenging.

Recommendation Number	Recommendation	Response	Comments / Justification
H7: c	Government of Jersey to provide a range of different financial options and incentives which are means tested based on income, such as grants and loans (regulated lenders). Packages in place to help vulnerable people. Government of Jersey approved lenders for retrofit projects,	Accept	In line with the financing strategy (Strategic Policy 3) the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The Government currently offer a subsidy towards the home energy audit and this is expected to continue.



Recommendation Number	Recommendation	Response	Comments / Justification
	targeted loan products for retrofit projects. Tax breaks for retrofit projects to incentivise builders and owners to prioritise this work. Contribution towards home energy audit, free for those on low incomes.		
H7: e	Government Trading Standards and Building Control to promote, educate and enforce on quality of products and workmanship to avoid inferior retrofitting.	Accept	The eco active programme already provides advice on residential energy efficiency. As set out in Strategic Policy 4, the Carbon Neutral Roadmap will include policies to support community and business engagement.
H7: d	Employers to pay for continued professional development. Government of Jersey to lead training of professionals, like Highlands College and other providers (such as Jersey Gas, Jersey Electricity) to offer courses. Leading to registration of approved trade persons.	Under active consideration – Carbon Neutral Roadmap	Strategic Policy 2 sets out that the Carbon Neutral Roadmap will include policies in the first stage of delivery that invest in the skills needed in the future decarbonised economy.
H7: a	All residential houses to have an Energy Performance Certificate from an approved supplier, together with a costed action plan by 2025 to achieve carbon neutrality. Clear guidance to be provided for all types of construction materials,	Under active consideration – Carbon Neutral Roadmap	In line with the financing strategy (Strategic Policy 3), the Climate Emergency Fund will be used to provide a programme of incentives for low-carbon technologies. The role that energy certification will play in providing evidence of need as part of that incentive programme is under active consideration.



Recommendation Number	Recommendation	Response	Comments / Justification
	including listed buildings.		
H7: b	Government of Jersey to manage the roll-out of the retrofit programme of residential properties (including allocation of a budget and employing experts), leveraging the successful model used for the roll-out of fibre-optic cabling.	Under active consideration – Carbon Neutral Roadmap	It is recognised that significant government support for a scaled up retrofit programme will be required, and in line with Strategic Policy 4, the Carbon Neutral Roadmap will set out policies to decarbonise heating and cooling. The role of government in the direct delivery of such a programme remains under active consideration, recognising that there are significant skills and experience in the commercial market that may be better placed to make progress in this area.



Appendix 4 – Overview of key activities covered in each greenhouse gas inventory sector⁸⁸

Agriculture – This includes emissions from livestock, crop production and fertiliser application. In 2019, this sector contributed 6% to total greenhouse gas emissions in Jersey.

Business – This includes emissions from fuel use in the commercial and industrial sector as well as some specific industrial processes relating to the use of aerosols in air conditioning and refrigeration. In 2019, this sector contributed 15% to total greenhouse gas emissions in Jersey.

Energy supply – This sector includes emissions from fuel combustion for the generation of energy, predominantly the production of public electricity. For Jersey, this includes emissions from the Energy Recovery Facility where energy is generated from burning solid, non-biogenic waste and on-island energy generation. In 2019, this sector contributed 12% to total greenhouse gas emissions in Jersey.

Land use change – This sector consists of emissions or removals from the conversion of land from one use to another, for example the conversion of cropland to settlements. In 2019, this sector contributed -0.3% to total greenhouse gas emissions in Jersey. The negative value means that overall, this sector was a sink for emissions rather than a source.

Residential – This sector includes emissions from combustion of fuels in homes, for heating and cooking, as well as some smaller sources such as metered dose inhalers and other aerosols used in a domestic setting. In 2019, this sector contributed 21% to total greenhouse gas emissions in Jersey.

Transport – This sector includes emissions from road transport, domestic aviation and domestic shipping. The largest source in this sector is passenger cars. This sector is the largest emissions source in Jersey in 2019, contributing 44% to total greenhouse gas emissions.

Waste management – This sector includes emissions from the treatment of domestic wastewater. In 2019, this sector contributed 3% to total greenhouse gas emissions in Jersey.

Industrial processes – This sector includes emissions from the use of N₂O as a propellant in squirty cream. In 2019, this sector contributed 0.02% to total greenhouse gas emissions.

Not included - CO₂ emissions from the burning of biofuels are not included in the Jersey inventory, in accordance with Intergovernmental Panel on Climate Change (IPCC) Guidelines and are therefore not included in national total emission estimates. Biogenic emissions are excluded in greenhouse gas inventories as biocarbon is renewable and naturally circulates in the environment.

⁸⁸ [Guide to the Jersey Greenhouse Gas Inventory \(Aether\)](#)



Appendix 5 - Overview of energy technologies considered (extract from commissioned research⁸⁹)

Biofuels

Biofuels are fuels that are produced from organic matter, including corn, starch and vegetable oils, or waste and debris. Made from plants which take in carbon as they grow, they are associated with reduced carbon emissions relative to the fossil fuels that they replace. They can be used in both transport and heating, either in pure form or blended with fossil fuels. In general, the more highly concentrated blends are able to reduce greenhouse gas emissions to a greater extent: the higher the concentration of biofuel, the higher the reduction in greenhouse gas emissions.

The two most mature and commonly used biofuels are as follows.

Short-term opportunity:

- **Bioethanol** can be used in petrol-fuelled vehicles. Most commonly used in the blended forms at 5% or 10%, bioethanol and is particularly well suited to fuelling road vehicles in the short term. Bioethanol blends cannot deliver zero emissions but can help reduce emissions from road transport at a relatively low cost. Higher bioethanol blends, particularly E85 and pure bioethanol, have the potential to further reduce carbon emissions, but come require the widespread replacement of engines and vehicles. Bioethanol has limited relevance at present for other areas of transport and heating.

Short and medium-term opportunity – biodiesel in road transport:

- **Biodiesel** can be used in diesel-fuelled vehicles and appliances. There are two types of biodiesel that are produced commercially on a large scale: Hydrotreated Vegetable Oil and Fatty Acid Methyl Ester. This is commonly used as a generic term for biodiesel derived from renewable sources. When used neat, the reduction in carbon emissions relative to fossil diesel ranges from 41% to 90%, depending on the oils from which the biodiesel is made, and the upstream processes involved. It is already mature for use in road transport and heating, with the potential to be scaled up in aviation and shipping in the near future.

Long-term opportunity – biodiesel in maritime and aviation:

Recently the take-up of high-biodiesel blends and pure biodiesel has increased significantly and could play an important role in decarbonising heavy goods and maritime transport. In aviation, sustainable aviation fuels have great potential in significantly reducing carbon emissions. Heavy goods, maritime and air transport vehicles cannot currently be electrified to a significant extent and are likely to continue to depend on low-carbon liquid or gaseous fuels into the medium and long-term.

⁸⁹ The Oxera Future Technology report will be published on 1 November 2021 on gov.je.



We are observing a transition in the road transport fuel sector with non-fossil replacement fuels. For example, some distributors now sell 'green' second generation biodiesel which is a non-fossil hydrocarbon diesel that can directly replace fossil hydrocarbon diesel without the negative climate impacts that fossil hydrocarbons cause. Currently this product has a price premium. Similar progress has also occurred in the local petrol market where a non-fossil hydrocarbon component is blended with fossil hydrocarbon, immediately reducing tail pipe emissions by 10% (E10) with no additional purchase cost.

Liquid Petroleum Gas/Biogas, biomethane and liquefied biomethane for use in transport and heating

Biogas and biomethane are different products with different applications, but they both originate from organic feedstocks whose potential is underutilised today. In the production process, organic waste materials such as crop residues, animal manure, municipal forest waste and forestry residues, and wastewater are converted into biogas and biomethane via a process called anaerobic digestion. As biogas and biomethane are produced from renewable sources that capture carbon dioxide when growing, these sustainable fuels do not produce any net emissions over their lifecycle.

- **Biogas** is a gaseous mixture of methane, carbon dioxide and other gases which can be used to meet heating demand. Biogas offers a sustainable solution where access to the grid does not exist or where heating demand cannot be met by carbon-neutral electricity.
- Biogas can be upgraded to **biomethane** by removing the carbon dioxide and other impurities. Biomethane has similar properties to natural gas and can therefore be transported and used in the same way. Use cases include cooking, heating, transport, and electricity generation. Biomethane can be taken directly off pipelines or local production facilities for usage in cars that run on compressed natural gas.
- Biomethane can also be liquefied, producing **liquefied biomethane (LBM)**, also known as Bio-LNG. The advantages are that it can be transported relatively easily by trucks and dispensed directly to vehicles that run on liquefied natural gas or compressed natural gas. The main disadvantage is that liquid biomethane needs to be cooled down to -160°C , which uses a lot of energy and makes it more expensive than biomethane. Liquefied biomethane can be stored in, and used by, the same infrastructure as liquefied natural gas.

Biogas (or biomethane) can help to cut emissions from heating in buildings with natural gas. However, the limited gas grid in Jersey—and the distribution of liquefied petroleum gas rather than natural gas—reduces the immediacy and cost-effectiveness with which biogas or biomethane could be substituted for gas on the Island.

Biogas, biomethane and LBM could play a role in decarbonising transport and heating in the medium term. The big advantage of this technology is that it can generally be used with the existing natural gas infrastructure upstream, midstream, and downstream. If this infrastructure is in place, BG, BM, and LBM can therefore be a low-cost way of decarbonising sectors that are hard to electrify, such as HGVs and maritime transport.



Hydrogen

Hydrogen is a non-toxic, odourless, and highly combustible gas. Its molecular properties mean that it can be used in a variety of industry sectors and—crucially—it produces zero carbon emissions when burned. It is the most abundant chemical substance in the universe, but in order to use it as a fuel or heat source, it usually needs to be produced using a chemical reaction.

The most established methods to produce hydrogen are colour-coded as follows.

- **Grey hydrogen:** most hydrogen today comes from natural gas, which is bonded with carbon and can be separated from it via a process called steam methane reforming (SMR). However, the excess carbon generates CO₂. This hydrogen is called 'grey' whenever the excess CO₂ is not captured.
- **Blue hydrogen:** hydrogen is considered 'blue' whenever the emissions generated from steam methane reforming are captured and stored underground via industrial carbon capture and storage (CCS), so that these are not dispersed in the atmosphere. Because of the carbon capture and storage technology involved, blue hydrogen is currently more expensive to produce than grey hydrogen. To deliver against decarbonisation objectives, the use of blue (rather than grey) hydrogen is required.
- **Green hydrogen:** hydrogen can also be produced via a process called water electrolysis—i.e., using electricity to decompose water into hydrogen gas and oxygen. If the electricity used is generated from renewables, it is carbon-free and therefore is categorised as 'green'. Today, less than 0.1% of global dedicated hydrogen production comes from water electrolysis.
- **Pink hydrogen:** pink hydrogen is hydrogen produced via electrolysis using nuclear power instead of renewables.

Most of the hydrogen today is used either in the petrochemicals industry, where it is used to split heavier oils into lighter petroleum products, or to produce ammonia for fertilisers. Similar to biogas and biofuels, its largest potential, however, is believed to lie in to hard-to-decarbonise sectors such as heavy goods vehicles (HGVs), aviation, shipping and heating applications. In addition to being used directly in fuel cells and boilers, hydrogen could in future serve as the main input for synthetic fuels.

Hydrogen, too, might be an alternative for Heavy Good Vehicles, aviation and shipping in the long term. Indeed, a high level of investment and experimentation in the use of hydrogen for transport is being undertaken. Both hydrogen and biogas could become the long-term steady-state solution for heavy goods transport, depending on cost developments (in production and supply chains) and the availability of each. The role of hydrogen in the long run is likely to be focused on hard-to-electrify sectors because of the lower energy efficiency (i.e., high conversion losses) of hydrogen use.

One of the greatest challenges with hydrogen remains transporting it to where it is needed. Storing and transporting the highly combustible gas is not easy: it takes up large amounts of space and requires a converted pipe network as its transport tends to make steel pipes and welds prone to failure.



The bulk of hydrogen transport will require dedicated pipeline networks—which would be costly to build—pressurising the gas or cooling it to a liquid for transport via ships.

Hydrogen might be a solution to heating in the long term, but the technology has not yet been proven to be commercially viable on a large scale. Significant investments in the infrastructure at all levels of the supply chain would be necessary to switch to hydrogen as a main heating source.

In summary, zero-carbon hydrogen has been identified as critical for meeting net-zero, particularly in 'hard to electrify' UK industrial sectors. However, the production, distribution and downstream appliances that enable the use of hydrogen in heating and transport are largely immature today. At all levels of the supply chain, hydrogen still needs to be developed for commercial use at large scale.

Hydrogen has significant potential to decarbonise our economies in the long run. In particular, hydrogen can play an important role in decarbonising sectors which are otherwise hard to decarbonise, such as heavy goods transport, shipping and aviation. In other sectors of our economy—such as private transport and heating—more cost-effective technologies such as electrification are available.

Hydrogen is particularly useful if the enabling infrastructure is already in place i.e., if gas-fired power plants allow the attachment of carbon capture and storage and steam methane reforming, or if green surplus power enables electrolysis, and a well-developed natural gas network allows for efficient transport. Neither of these conditions hold in Jersey and that makes the transition towards hydrogen less attractive. Using hydrogen for heating and private passenger cars is also less efficient than electrification, as large amounts of energy are lost during the conversion process.

Using hydrogen in heating and transport requires significant investments in the upstream, midstream and downstream market segments.



Appendix 6 – Ideas generated as part of Jersey’s Climate Conversation

Why do we need to talk about climate change?

JERSEY needs to be a leader
It's time to show the world we're serious about climate change.

Politicians need to understand what we think
We need to hear from the people.

Just think of future generations
We need to leave a better world for them.

We need to reach deep into our community
Everyone has a role to play.

Why do we need to talk about climate change?
It's the only way to make sure we're all on the same page.

Address climate anxiety in children
We need to help them understand and cope with the future.

Make it feel easy
We need to make it simple for everyone to get involved.

All viewpoints must be understood
We need to listen to everyone's ideas.

Education on climate change begins in nature
We need to teach children about the environment from a young age.

Education on the effects
We need to show people how climate change is affecting us.

Every action can help
Small changes can make a big difference.

We're not all experts
Everyone has something to contribute.

What's the greenest way to heat our homes?

Solar panels on roofs
We need to use renewable energy.

Green Mortgages
We need to encourage people to invest in green buildings.

WHAT'S THE BEST WAY TO HEAT OUR HOMES?
We need to find the most sustainable option.

Community-led solutions
We need to work together to find solutions.

Do we even need to heat our homes?
We need to think about how we can reduce the need for heating.

Are there better ways to travel around Jersey?

A cycle route east to west
We need to make it easier to cycle.

more frequent buses
We need to improve public transport.

Let's pool resources!
We need to share what we have.

Streets for people
We need to make our streets safer and more pleasant.

Safe storage for bikes
We need to provide secure places to leave bikes.

Encourage car sharing
We need to encourage people to share cars.

Tram along the old railway route
We need to use existing infrastructure.

New buildings new rules
We need to set higher standards for new buildings.

Join up the green lanes
We need to connect our green spaces.

Restrict number of cars per home
We need to limit the number of cars in each area.

Free bus use for students
We need to make it easier for students to get to school.

Financial incentives to ditch the car
We need to encourage people to leave their cars at home.

A lower all-island speed limit
We need to make our roads safer.

Sustainable diesel fuel
We need to find better ways to produce diesel.

Prepare for the future
We need to be ready for what's ahead.

Hybrid/Electric taxis only
We need to encourage greener taxis.

Create a low-emission zone for St Helier
We need to reduce emissions in the town center.

What pledges should we make?

We can all do something!
Everyone has a role to play.

Environmental legislation
We need stronger laws to protect the environment.

A pledge to reduce emissions by 2x yearly
We need to cut our carbon footprint.

Government House replacing diesel car with an electric alternative
We need to lead by example.

Not to throw away as much stuff
We need to reduce waste.

I'm going to lead the way for sustainable business
We need to encourage green businesses.

I pledge to use my electric moped more often than my car
We need to use greener transport.

I will use reusable bags and buy local
We need to support local businesses and reduce waste.

I'll use a cargo bike instead of a car
We need to use greener transport.

I'm going to use my body more to get around our wonderful island!
We need to encourage walking and cycling.

Jersey's Climate Conversation

How can we work together to become carbon neutral?

What's already happening in Jersey?

Raising awareness
We need to tell everyone about climate change.

Honesty boxes
We need to encourage people to be honest about their carbon footprint.

Tiny forest planting
We need to plant more trees.

Organic food shops
We need to encourage people to buy organic food.

Buying local, buying seasonal
We need to support local businesses.

Sowing wildflowers to help pollinators
We need to help our bees and butterflies.

Jersey's Climate Conversation invited everyone in Jersey to share their ideas, comments and suggestions on how everyone can work together to become carbon neutral. This six week idea gathering campaign ran between 1st February and 12th March 2021, predominantly on social media with inputs collected via a website. The ideas above provide some highlights of the conversation, which focused on a different climate-related theme each week. For more information visit climateconversation.je

Drawn by www.sandrahowgate.com

