Carbon Neutral Roadmap

Consultation Draft



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Minister's Introduction

The Carbon Neutral Roadmap is the product of people-powered participation and engagement. This approach – more robust than anything we've tried before in Jersey – gave us a higher level of engagement than we would normally see in public policy development. I am proud that my fellow States Members supported the brave decision to take a new approach to harness the creative energy and ideas of Islanders.

The policies in the Roadmap have been informed by ideas from all Islanders and the recommendations from the Citizens' Assembly on Climate Change, as well as technical evidence and an understanding of what is working well elsewhere.

The Roadmap is still in draft and presented here for your comments – and I encourage all Islanders to have their say. It is vital for the future of Jersey that we get this right.

This Roadmap shows how we can get to net-zero and provides a long-term plan to achieve it, with an initial programme of action for the next four years enabled by the Climate Emergency Fund. Our Government Plan 2022-24 will provide a very good start, but our Roadmap shows how future governments will need to make big decisions to speed up our journey. They will be able to assess the impacts of our initial Carbon Neutral Roadmap policies and identify opportunities of adopting new technologies as they mature and become viable.

A future States will have the opportunity to consider introducing fiscal "carrot and stick" measures targeted to encourage us all to reduce our carbon footprint and provide increased funding to support those needing help to do so. We all need to ensure that no sections of our community are disadvantaged in this mission.

We have a moral obligation to our children and the generations to come – here and across the world – to play our part in rectifying the impacts of the pollution we have created, and the damage we have caused to our planet. If successful, developed communities like Jersey don't try to limit global warming to 1.5°C what hope is there for stemming the effects of runaway climate change, which will devastate many natural environments, and destroy communities and economies across the world?

Our own Youth Parliament, youth groups and community organisations have all loudly raised their voices calling for early action. I want to thank them for their active engagement and ongoing commitment to addressing the climate emergency as one of the most important priorities for action. I also want to thank the 45 Islanders who gave up their time to join the Citizen's Assembly, my colleagues across the States Assembly that have helped steer the development of this Roadmap, and my fellow Ministers for their support in publishing this draft Roadmap for consultation.



We must all take individual responsibility to act, and future governments will need to provide strong leadership and ongoing commitment to ensure we make progress to stay on track with our Roadmap for the decades to come. It will require hard choices from us individually and collective sacrifices - but tackling the climate emergency is the most important challenge for our planet.

This is not just about what happens in Jersey. It is about Jersey's place in the world and how we take responsibility for own emissions and put things right. It is also about how our values and reputation are projected to the global community. We need to be able to hold our heads high.

There is no option. We must work towards net-zero in line with the global community and should adopt international agreements to reduce carbon emissions following science-based targets.

Our climate conversation, that we started back in October 2020, continues. All of us have an important place in that conversation. Please share your opinions, thoughts and ideas for how we can work together to address the climate emergency. That will help us finalise our proposals and put our plan to the States for a decision, setting Jersey on the path to net-zero at the earliest possible time.



Deputy John Young
Minister for the Environment
December 2021

Here are 10 reasons why Jersey should do its bit:

Climate change is affecting Jersey and will get worse

Jersey may feel protected from the worst impacts of climate change, but we already see more extreme weather and have the real threat of coastal flooding. Across the world, people are losing their homes to flooding and wildfires, and suffering food shortages. As impacts increase, mass migration grows and battles for scarce resources escalate, the effects will end up on our shores.

A low carbon Island is a fairer Island

Through our climate policies, we can create fair access to clean and affordable energy, warmer homes, new jobs and re-skilling opportunities, less congestion in town and a chance for everyone to do their bit.

A low carbon Island is a better, more beautiful Island

Decarbonising our Island means cleaner, safer, quieter roads, reduced air pollution, more space for wildlife and to play outdoors, improved public health from active travel, cleaner beaches and a greater sense of community.

There is a climate emergency

In 2019, the States Assembly declared a Climate Emergency that is likely to have a profound effect on Jersey. The emergency hasn't gone away, even if we've had something else to worry about in the meantime.

There are many small communities

There are over 100 towns in the UK with a population less than that of Jersey. If Jersey is too small, surely they are too.

The citizens of Jersey want action

The Citizens' Assembly on Climate Change met in Spring 2021. They spent over 1500 hours debating and learning together, and made recommendations. As a representative group of Jersey citizens they were ambitious and want to see action.

We have our reputation to think of

As an international finance centre, whose reputation relies on it being a responsible global citizen quick to adopt and adhere to international standards and rules, it is vital Jersey takes action and sets its climate targets in line with the rest of the world so as to tackle climate change. We don't want to be the odd one out.

We owe it to future generations

78% of young people surveyed in Jersey were 'worried' or 'very worried' about climate change. A child born today faces multiple and lifelong health harms from climate change — a warmer world with an increased risk of food shortages, infectious diseases, floods and extreme heat. If urgent action is not taken its impacts will be felt by our children and generations of their children living in Jersey.

China's emissions are (in part) our emissions

Our consumption drives emissions across the globe. While our annual on-Island emissions are 3.8 tonnes per person, an average European is responsible for almost 13 tonnes per year. As an example, about 14% of China's emissions result from consumption elsewhere which will include emissions from making things that we buy in Jersey.

Everyone has their own reasons

We're taking a people-powered approach. We'll make more progress when everyone finds their reason to take action, to get involved and make sustainable choices, about how we travel, what we eat and how we use energy. Some people have their reason now, others will find it, but everybody's reason counts.



Climate Emergency JSY

Have your say on the Carbon Neutral Roadmap

This draft of the Carbon Neutral Roadmap is published so that you can have your say on the overall approach (set out in <u>Parts A</u> and <u>B</u>), and on the proposed policies (set out in <u>Part C</u>).

The Carbon Neutral Roadmap is the fourth and final publication in a series of documents, which also includes:

- Tackling the Climate Emergency¹ (July 2019)
- Carbon Neutral Strategy² (December 2019)
- Carbon Neutral Preferred Strategy³ (November 2021)

The consultation phase runs from 17 December 2021 to 31 January 2022. During this time, you can have your say by filling out the survey (online⁴ or by collecting a printed copy from your Parish Hall or the Library) or by sending your written comments to climateemergency@gov.je or to: Carbon Neutral Roadmap, SPPP, Government of Jersey, Broad Street, St Helier, JE2 3RR.

Research will also be undertaken with Islanders via a series of focus groups, and in stakeholder consultation meetings.

This consultation phase is just one of the opportunities that have been offered. Previous engagement has included:

- Debate on the initial declaration of a climate emergency⁵
- Debate on the Carbon Neutral Strategy⁶
- The 'explore phase' of www.climateconversation.je⁷, from February-April 2021
- The opportunity to make representations to:
 - o the Citizens' Assembly on Climate Change, in April-May 2021
 - the Environment, Housing and Infrastructure Scrutiny Panel's review into the Citizens' Assembly on Climate Change
 - o the Public Accounts Committee's (PAC) review of Citizens' Panels, Assemblies and Juries

Consultation feedback will be reviewed and summarised in a report that will be published as part of the evidence base for the Carbon Neutral Roadmap. The Roadmap will be revised in light of this feedback and a final version will be produced and lodged *au Greffe* for debate by the States Assembly.

⁷ www.climateconversation.je



¹ Tackling the Climate Emergency (gov.je)

² Carbon Neutral Strategy (gov.je)

³ Carbon Neutral Preferred Strategy (gov.je)

⁴ The consultation survey can be found at www.gov.je/CarbonRoadmap

⁵ Climate Change Emergency: Actions to be Taken by The Government of Jersey (P.27/2019) (gov.ie)

⁶ Debate on the Carbon Neutral Strategy - minutes from 26/2/2019 (gov.je)

Part A The Foundations

1. Introduction: Building the Foundations

- 1.1 On the 2 May 2019, 40 elected members in the States Assembly voted to declare, "that there exists a climate emergency likely to have profound effects in Jersey"⁸.
- Organisation recorded that the past seven years are on track to be the seven warmest on record⁹. In the same year, the North America 'heatdome' is estimated to have killed 1 billion animals and caused hundreds of human fatalities; the largest single California wildfire on record started in Dixie on 13 July and had burned about 390,000 hectares by 7 October; the city of Zhengzhou, in China, received more than its annual average rainfall in a single day on 20 July; flash floods were linked to reported economic losses of US\$17.7 billion across the world; and scientific research has continued to reinforce the fact that human activity is heating the planet and that more drastic action is needed now, in order to seek to constrain global temperature rises to around 1.5°C.
- 1.2 Perhaps most significantly, and in a way not anticipated in May 2019, the Coronavirus pandemic has dominated our lives, caused wide-spread harm and suffering and given rise to global social and economic shifts that will take many years to fully understand. The pandemic was, at the same time, both a giant distraction from the issue of climate change requiring the full attention of government, business and community leaders, and the allocation of massive resources and also a full-frontal reminder of the inter-connectedness of our world, of the power of collective action and a chance for many to reassess long-established attitudes and beliefs.
- 1.3 The intervention of the coronavirus pandemic is a reminder that there will always be other issues that require immediate attention. Staying focused on tackling long-term climate change is difficult in the face of urgent challenges; recognising this validates the focus of the Carbon Neutral Strategy¹⁰ on "aim(ing) at creating the foundations for long-term social and economic change".
- 1.4 Building the foundations for long-term change may appear counter-intuitive in an 'emergency' situation, but it recognises that the emergency response will last several decades and require change in almost every aspect of how we live, that the commitment of our community to that change will be contested and progress will not be linear. Major social, economic and environmental events will occur in Jersey elsewhere and these will need to take precedence,

¹⁰ Carbon Neutral Strategy (gov.je)



⁸ Votes (gov.je)

⁹ State of Climate in 2021: Extreme events and major impacts | World Meteorological Organization (wmo.int)

- for a while. During these periods, the capacity of our government and our economy to continue to decarbonise at pace will be tested and will need to rely on the strength of its foundations.
- 1.5 Whole-Island ownership of this Roadmap is critical to its success. The climate emergency is a global challenge, but action at a global level alone will not be enough. The choices we each make on a daily basis as families; in our businesses and organisations; and together as members of local communities drive the political and economic forces that global actors respond to. In a free society, changing our personal and shared behaviour at the local level is the only reliable route to living more sustainably and slowing the rate of climate change.
- 1.6 At the same time, the Roadmap recognises the need for Government and the States Assembly to show leadership in updating Island policy to ensure that more sustainable behaviours are required, and that the responsibility to decarbonise is shared equally and fairly.
- 1.7 Islanders' views are at the heart of this Roadmap, and will remain so, ensuring that future delivery plans respond to the will and experience of people in Jersey.

A Roadmap for the future

- 1.8 Our future response to climate change will look different to our current approach. Tackling the climate emergency is the focus of a huge global research and innovation effort, and public understanding and views are continually evolving. These forces will present and require new solutions and new policies over time.
- 1.9 Setting a Roadmap recognises that the Government of Jersey and the States Assembly will need to continually update delivery plans to take account of what is working in the Island and elsewhere and what we need to do more, and less, of to reduce our carbon emissions in line with our commitments.
- 1.10 This Roadmap sets out the first of these delivery plans, with a suite of new policies put forward in Part C, for comments and feedback by Islanders.

Funding a Just Transition

1.11 Without significant and sustained increases in funding for decarbonisation policies, nothing will change. There is no free-pass to a low-carbon future – it is difficult work and will require a rebalancing of budgets for governments, businesses, and households. Too many of the things we rely on in our daily lives are cheap because the pollution they create does not affect their price. It is too easy to do the wrong thing and too hard – and often too expensive – to do the right.



- 1.12 The Climate Emergency Fund ring-fences money to help rebalance these economic realities, which means that money for climate change is protected when other pressing priorities emerge. Without this investment, at best, only the wealthy will be able to decarbonise their lifestyles and businesses; at worst our attempts to reduce our emissions will stall.
- 1.13 Funding the transition could be particularly challenging for lower-income households in Jersey. This Roadmap commits to a Just Transition, where the costs do not disproportionately fall on people on lower incomes, or on those currently employed in carbon-heavy industries. The impacts of the transition, when considered in the round, should be distributed fairly, and Carbon Neutral Roadmap delivery plans will need to continue to consider relevant socio-economic criteria, including the impact of policies on employment and how acceptable they might be to the public overall.

2. Listening to Islanders and the evidence

- 2.1 The Carbon Neutral Roadmap is based on wide-ranging expert evidence, and extensive consultation with and consideration by Islanders, as set out in Figure 1. The process of gathering this evidence has been transparent and publicly scrutinised, and the findings are published on www.gov.je/climateemergency¹¹.
- 2.2 The development of the Carbon Neutral Roadmap has not been to professional research and analysis but has sought to apply and further develop a people-powered approach. The Carbon Neutral Strategy describes this as an approach that "explore(s) 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."
- 2.3 Many engagement events have been held throughout the process led by the eco active partnership to help inspire Islanders to understand and engage with the issue of climate change, and to help build Islanders' confidence and capacity to both act as individuals and to make their voices heard in the debate about how Jersey should act collectively.
- 2.4 Work has also continued with partners and stakeholders, such as the Energy Forum, and with Parish action groups that are leading the local response to the climate emergency. Many of the policies set out in this Roadmap aim to sustain, strengthen and grow the people-power that is already on display in Jersey, and to invest in creating new opportunities for everyone to play their part.



Carbon Neutral Roadmap: timeline





Stage 1: Climate emergency announced

- The States Assembly unanimously declared a climate emergency in May 2019
- Carbon Neutral Strategy published, requesting a Citizens' Assembly on Climate Change and a Long-Term Climate Action Plan



Stage 2: Citizens' Assembly on Climate Change

- 45 randomly selected Islander's were selected to participate in the Citizens' Assembly
- > They considered the question "How should Jersey work together to become carbon neutral?" over 15 sessions between March and May



Stage 3: Preferred Strategy Report published

- The Preferred Strategy outlines the basis for the detailed plans for the Carbon Neutral Roadmap
- Based on 5 Strategic Policies



Stage 4: Carbon Neutral Roadmap consultation

- ³ The Carbon Neutral Roadmap sets out Jersey's carbon neutral pathway to net-zero by 2050
- Islanders will be consulted throughout a six-week period



Stage 5: Carbon Neutral Roadmap published

Following the consultation, the Carbon Neutral Roadmap will be revised ready for consideration by the States Assembly



Carbon Neutral Strategy published



Sustainable Transport Policy published



Citizens' Assembly produced and published their recommendations for carbon neutrality



An in-committee debate considered the Citizens' Assembly's recommendations



Preferred Strategy Report published



In-committee debate report published



Draft Carbon Neutral Roadmap published



Public consultation and scrutiny



Carbon Neutral Roadmap revised



States Assembly debate



Carbon Neutral Roadmap revised



Final Carbon Neutral Roadmap published

2019/2020

Spring 2021

Autumn 2021

Winter 2021/2022

Spring 2022





The Carbon Neutral Strategy

- The States Assembly, in February 2020, agreed the Carbon Neutral Strategy¹², which provided the preparatory work to enable the development of the Carbon Neutral Roadmap. In particular, the Carbon Neutral Strategy established:
 - The people-powered **process**, summarised in the Figure 2, that has been followed to develop the Roadmap, including the mandate for Jersey's Citizens' Assembly on Climate Change
 - A **definition** of carbon neutrality, established in five principles that are reprised in Strategic Policy 5, below, and
 - High-level analysis of **policy options** to reduce carbon emissions in Jersey's highest polluting sectors, including initial analysis of potential costs and benefits.

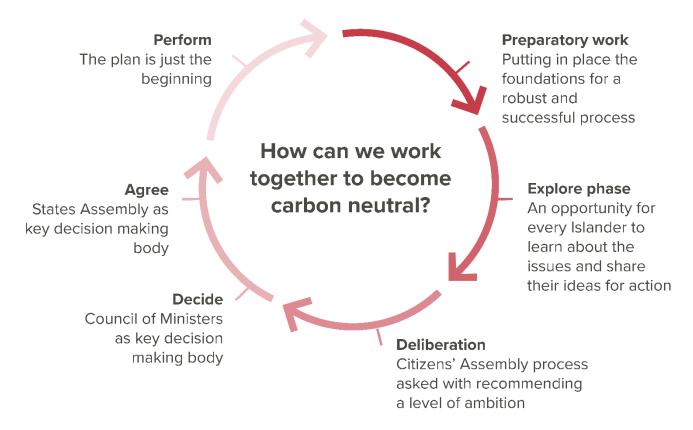


Figure 2: The people powered process to develop a Carbon Neutral Roadmap

Explore phase

In early 2021, Jersey's Climate Conversation¹³ began, involving a wide-ranging exploration of Islanders' views and suggestions about climate change. This 'explore phase' was a six-week

¹³ Jersey's Climate Conversation



¹² Carbon Neutral Strategy (gov.je)

campaign running from 1st February 2021, leading up to the first Citizens' Assembly meeting. It provided a chance for all Islanders to get involved and share their views, learn from their peers, and act.

- 2.7 Each week consisted of a number of activations to generate interest and engage the public and media on a specific topic. The Government of Jersey provided a selection of background reading and used both online and offline participatory methods to ensure people were given the opportunity to get involved and find out more about the week's themes.
- 2.8 Over the six-week period, 153 ideas and 356 comments were shared on the online platform by 110 unique contributors¹⁴.
- 2.9 A social media campaign accompanied Jersey's Climate Conversation, featuring a set of films created by Jersey's Climate Conversation Ambassadors (a range of Jersey influencers, from politicians like Deputy Jess Perchard, to the children of St Lawrence Primary School, and radio DJ Peter Mac.)¹⁵
- 2.10 Some of the most effective activations are captured in the pictures at Figure 3 below, including:
 - Wool on Wheels and members of the public knitting wool scarves and hats in the climate conversation colours, and these being placed on statues around the Island to highlight heating week
 - a 12 Parish challenge¹⁶ cycle route for transport week, complete with QR codes to provide information, and
 - a public living room set up in Royal Square with Acorn social enterprise, to encourage climate conversations and to discuss the changes we all can make to reduce our consumption emissions.
- 2.11 The comments and ideas collected via the online platform over the six weeks of the Explore phase of the Climate Conversation are summarised in the graphic at Figure 4.

¹⁶ 12 Parish Challenge (Jersey's Climate Conversation)



¹⁴ Jersey's Climate Conversation (comment.gov.je)

¹⁵ Jersey's Climate Conversation Playlist (YouTube)



Figure 3: This photo montage shows some of the events and campaigns run by Government of Jersey



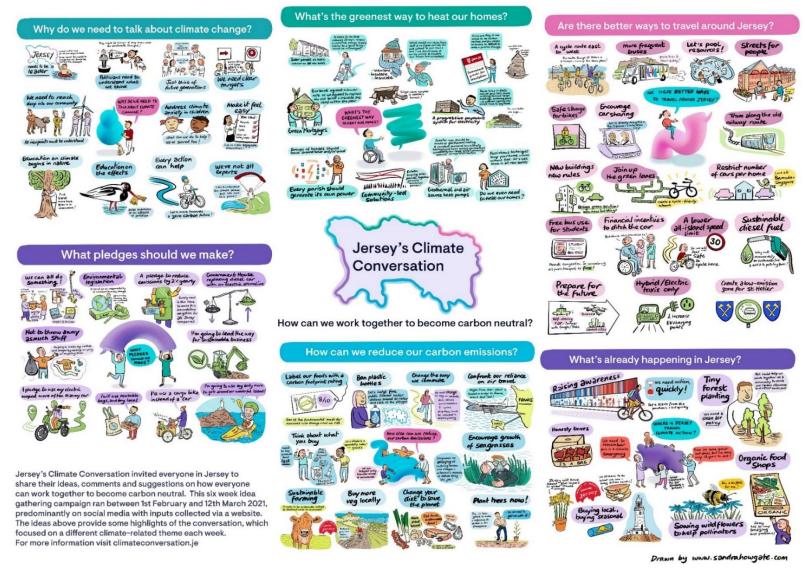


Figure 4: Encapsulates the ideas generated by Jersey's Citizens' Assembly on Climate Change



Deliberation - Citizens' Assembly on Climate Change

- 2.12 The Citizens' Assembly on Climate Change ran from mid-March to mid-May 2021, and brought together 45 randomly selected members of the public to consider the question, 'How should we work together to be carbon neutral?'
- 2.13 The 45 Participants, from all ages and backgrounds and representing the full range of views on climate change, met for 15 professionally facilitated online sessions. The content of the sessions was overseen and approved by an expert Advisory Panel. Further information on the Advisory Panel and minutes from their meetings is available on Jersey's Climate Conversation website¹⁷.
- 2.14 Assembly Participants were presented with background fact sheets and listened to 31 expert speaker presentations.¹⁸ They had the chance to pose the speakers questions and discuss what they'd heard as a group.
- 2.15 The Minister for the Environment, on behalf of Council of Ministers and all members of the States Assembly, has put on record his thanks for the remarkable contribution of over 1500 hours of collective time and effort contributed by the Participants. The high quality and diligence of the considerations clearly demonstrates the level of commitment they brought to the task. Islanders can be proud of the manner in which they were represented through this process.
- 2.16 In early June 2021 the Citizens' Assembly published a report¹⁹ of their work, including recommendations that they asked ministers and the States Assembly to consider. Accordingly, the States Assembly held an in-committee debate on the recommendations of the Citizens' Assembly, in July²⁰.
- 2.17 Ministers subsequently provided an initial response to the recommendations of the Citizens' Assembly in their Preferred Strategy²¹, published in November. A further updated response will be included as an appendix in the final proposed Carbon Neutral Roadmap when it is published.

Listening to children and young people

2.18 As part of the people-powered approach, children and young people have been involved throughout the development of the Carbon Neutral Roadmap. This engagement has been through focused sessions with the Jersey Youth Parliament and through less formal mechanisms such as practical projects, workshops, and educational opportunities.

²¹ Carbon Neutral Roadmap Preferred Strategy (gov.je)



¹⁷ Advisory Panel - Jersey Climate Conversation

¹⁸ Jersey's Climate Conversation

¹⁹ Achieving Carbon Neutrality – Report of Jersey's Citizens' Assembly on Climate Change (gov.je)

²⁰ Carbon Neutral Jersey: in-committee Debate (gov.je)

2.19 Climate change and the delivery of the Carbon Neutral Roadmap will have many direct and indirect impacts on the rights of children, and a full Children's Rights Impact Assessment²² was produced to accompany the Carbon Neutral Roadmap Preferred Strategy. It has been updated to reflect the full draft Carbon Neutral Roadmap and will be further updated at key points in the process. The Children's Rights Impact Assessment seeks to assess what impact the proposals in the Carbon Neutral Roadmap might have on children and the enjoyment of their rights as stated in the United Nations Convention on the Rights of the Child.

Listening to the evidence

- 2.20 A detailed evidence base has been developed alongside the people-powered process. This ensures that the Carbon Neutral Roadmap is based both on Islanders' views and aspirations *and* an accurate technical understanding of the opportunities and challenges that face Jersey in its transition to carbon neutrality.
- 2.21 The currently available evidence base, including reports that have informed both the development of the Carbon Neutral Strategy and the Citizens' Assembly, can be found at www.gov.je/climateemergency²³ and a list is enclosed at Appendix 1 to this report.

²³ Climate Emergency (gov.je)



²² Impact Assessment - United Nations Convention on the Rights of the Child (gov.je)

3. The context for decarbonisation

- 3.1 The Carbon Neutral Strategy²⁴ set out a comprehensive summary of the strategic context for decarbonisation. This included the scientific basis for anthropogenic climate change, key concepts such as emissions scope and reporting arrangements, and the local policy context as set out in public policy documents including the Common Strategic Policy²⁵, Government Plans²⁶, the Island Plan²⁷ and Pathway 2050 Energy Plan²⁸.
- 3.2 This section does not revisit all aspects of the strategic context, as these were understood and accepted when the States Assembly voted to adopt the Carbon Neutral Strategy in 2020. It does though provide a small number of updates in relation to the global and local strategic context where matters have progressed in recent years.

Global context

- 3.3 Jersey has always taken seriously its responsibility to tackle climate change. We have sought to demonstrate the Island's commitment as part of a global effort by aligning with international standards and agreements.
- 3.4 The United Nations Framework Convention on Climate Change²⁹ (UNFCCC) established an international environmental treaty to combat "dangerous human interference with the climate system". It was signed by 154 states, including the UK, at the United Nations Conference on Environment and Development the Earth Summit held in Rio de Janeiro in 1992. By 2020, the United Nations Framework Convention on Climate Change had 197 states parties and its supreme decision-making body, the Conference of the Parties (COP), meets annually to assess progress in dealing with climate change most recently in Glasgow in November 2021.
- 3.5 The treaty called for ongoing scientific research and regular meetings, negotiations, and future policy agreements designed to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and, to enable economic development to proceed in a sustainable manner.
- 3.6 In 1997 The Kyoto Protocol³⁰ was signed and was the first implementation of measures under the United Nations Framework Convention on Climate Change. In March 2007, the UK's ratification of the Kyoto Protocol was extended to the Bailiwick of Jersey. The protocol requires Jersey to

³⁰ Kyoto Protocol



²⁴ Carbon Neutral Strategy (gov.je)

²⁵ Common Strategic Policy 2018-22 (gov.je)

²⁶ Government Plan (gov.je)

²⁷ Island Plan (gov.je)

²⁸ Pathway 2050: An Energy Plan for Jersey (gov.je)

²⁹ United Nations Framework Convention on Climate Change

reduce its carbon emissions by 80% by 2050, relative to 1990 levels. In 2014, the States Assembly adopted Pathway 2050 – An Energy Plan for Jersey which detailed a set of actions designed to help Jersey achieve the 80% emission reduction target.

- 3.7 The Kyoto Protocol ran from 2005 to 2020 and was superseded in 2016 by the Paris Agreement³¹. The goal of the Paris Agreement on Climate Change is to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels. To achieve this long-term temperature goal, countries aim to reach global peaking of greenhouse gas emissions as soon as possible to achieve a climate neutral world by mid-century.
- 3.8 In Glasgow, 2021, Jersey was represented at a Conference of Parties for the first time. This was a pivotal conference where global ambition was focused and challenged given the scientific evidence of the increased severity of climate degradation since Paris.
- 3.9 The Minister for External Affairs Senator Ian Gorst attended and there was formal recognition of the intention of the UK to extend the Paris Agreement to the Island. This aligns Jersey with the International community. The basis on which Jersey is considered eligible is the adoption of an emissions reduction pathway that is steered by the science in order to limit warming to well below 2°C. This pathway is further explained in Strategic Policy 1. The link between the Paris Agreement and carbon neutrality is set out in Strategic Policy 5.



Figure 5: The Minister for External Relations, Senator Ian Gorst (far left), the UK's Minister of State for Energy, Clean Growth and Climate Change, Greg Hands (second from right), at the Conference of Parties in Glasgow 2021. Pictured also are External Affairs Minister for Guernsey, Jonathan Le Tocq (second from left) and Member of the House of Keys of the Isle of Man, Daphne Caine (far right).

³¹ Paris Agreement (United Nations)



Local context

3.10 Since the declaration of the Climate Emergency in 2019 there have been some significant strategic movements that impact on the way this Roadmap has been developed

Bridging Island Plan

- 3.11 The draft bridging Island Plan³² introduces new planning policies to seek to reduce emissions using development controls. It aims to ensure carbon emissions are reduced throughout the life cycle of new development (from design through to deconstruction). Policies include increased environmental design standards for new developments and support for carbon sequestration schemes and ground mounted solar arrays, where appropriate.
- 3.12 The draft Bridging Island Plan also notes that protecting and improving the natural environment is a key part of the Island's transition to net-zero and reflects the importance of biodiversity throughout the Island. It seeks to ensure that new development protects and improves green infrastructure and networks.
- 3.13 The draft Bridging Island Plan also integrates the Sustainable Transport Policy³³ and provides support for related initiatives and strengthens the requirement for contributions to support bus services and to deliver new walking, cycling and wheeling infrastructure as part of new developments.
- 3.14 The draft Bridging Island Plan will be debated by the States Assembly in early 2022, with the Carbon Neutral Roadmap in April 2022. Should the States Assembly agree the emissions policies that have implications on development, then these will need to be fully reflected back into the Island Plan, to be bought forward for the period after 2025.

Sustainable Transport Policy

3.15 Shortly after the States Assembly agreed the Carbon Neutral Strategy³⁴ in early 2019, a Sustainable Transport Policy was also agreed. The Sustainable Transport Policy outlined a programme of work to investigate a set of 'big questions' that underpin how we will transform the local transport system, guided by a set of agreed decision-making principles for a sustainable transport system. A programme of 'Strong Start' delivery projects was also agreed. A key theme of the Sustainable Transport Policy is the overlap between sustainable transport and decarbonisation, which is evident in the significant transport focus of the Carbon Neutral Roadmap.

³⁴ <u>Carbon Neutral Strategy (gov.je)</u>



³² draft Bridging Island Plan gov.je)

³³ Sustainable Transport Policy (gov.je)

- 3.16 Four rapid plans were required by the Sustainable Transport Policy:
 - 1. an Active Travel Plan
 - 2. a Bus Service Development Plan
 - 3. a Parking Plan and
 - 4. investigation into Mobility as a Service

An interim update on this work was published in November 2020³⁵, and work has progressed in each of these areas throughout 2021. A further interim update will be published by the end of 2021, and a final Sustainable Transport Roadmap will be published in 2022 as set out in policy TR8 in Part C.

Population and Migration Policy

- 3.17 Local emissions are heavily influenced by the number of people living in Jersey. Growth in the resident population above that modelled, is one of the reasons we did not achieve the emissions reduction trajectory proposed in Pathway 2050: Energy Plan³⁶, our first energy and emissions reduction plan.
- 3.18 In March 2021, the States Assembly agreed a new Migration Control Policy³⁷ to replace the current graduation system, with one that restricts the number of permits that would lead to permanent settlement in the Island. The migration policy will pave the way for the development of a population policy, which will provide more detail on the levels of migration the Island can accommodate moving forward.
- 3.19 Modelling for the Carbon Neutral Roadmap is based on the planning assumption developed for the draft Bridging Island Plan and published by ministers in October 2020³⁸. Should future population policy or new data (including the census) entail a change from this assumption, emissions models will be re-cast accordingly.

Adaptation and the Shoreline Management Plan

- 3.20 Regardless of global and local efforts to reduce emissions and to mitigate further climate change, Jersey will have to adapt to its existing inevitable effects. These include:
 - increased flood risk,
 - temperature increases resulting in overheating,
 - changes to weather patterns
 - and the arrival of new non-native or invasive species.

Adapting to these impacts will be addressed by a range of other strategies and policies.

³⁸ Island Plan preferred strategy announced (gov.je)



³⁵ Sustainable Transport Policy update (gov.je)

³⁶ Pathway 2050: An Energy Plan for Jersey (gov.je)

³⁷ Migration Control Policy (gov.je)

- 3.21 In January 2020, work was completed on a Shoreline Management Plan for Jersey³⁹. This plan aims to ensure that our coastal defences continue to protect the Island over the next 100 years in the light of unavoidable climate change. Rising sea levels and more rainfall will increase the risk of flooding in some areas of Jersey and this plan outlines how we intend to manage out our existing sea defences and drains to continue to protect us from flooding during storms, high tides and heavy rainfall.
- 3.22 The threat of inland flooding has also been studied in a Strategic Flood Risk Assessment⁴⁰, and new flood risk management policies introduced in the draft Bridging Island Plan⁴¹.

Energy markets and Brexit

- 3.23 Since 2019, global price insecurity, geopolitical impacts, the rise of renewables and the implementation of Brexit have put pressure on European and global energy markets affecting prices and security of supply. The local energy market has not been immune to these factors, with recent substantial increases in the price of all energy types.
- 3.24 The future development of the Island's energy market is a key backdrop to decarbonisation and is addressed by Strategic Policy 2, below. A review on energy mix options for Jersey, which informed the development of the Roadmap, was published recently⁴².

⁴²Review of energy mix options (gov.je)



³⁹Jersey Shoreline Management Plan (gov.je)

⁴⁰ Core evidence base documents for the Island Plan Review 2021 bridging plan (gov.je)

⁴¹ draft Bridging Island Plan gov.je)

4. Strategic policies

- The strategic policies set out in this section provide a framework for the rest of the Carbon 4.1 Neutral Roadmap. The five policies, described in Figure 6, set out ministers' position on what the Roadmap is seeking to achieve (Strategic Policy 1 and Strategic Policy 5), implications for our energy market (Strategic Policy 2), how action will be funded (Strategic Policy 3) and how investment will be prioritised (Strategic Policy 4).
- 4.2 Because of significance, ministers published the strategic policies in advance of the Carbon Neutral Roadmap, and in greater detail than they are set out here. This information can be found in the Carbon Neutral Roadmap Preferred Strategy⁴³. Early development of the strategic policies also provided a framework against which the recommendations of the Citizens' Assembly on Climate Change could be tested and enabled the development of policies based on a consistent strategic direction.

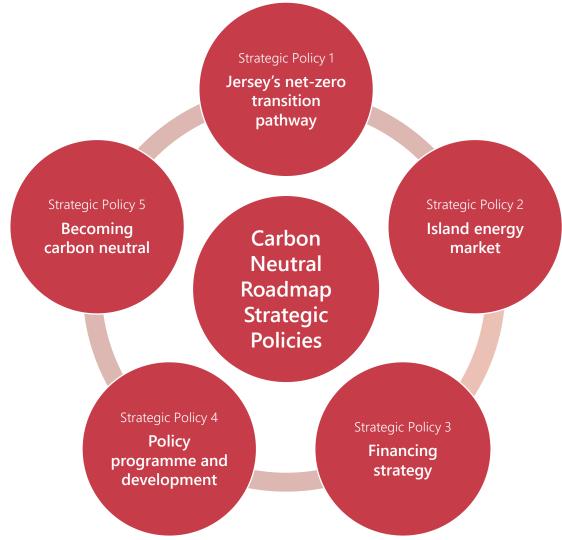


Figure 6: 5 Strategic Policies set out in the Carbon Neutral Roadmap Preferred Strategy

⁴³ Carbon Neutral Roadmap Preferred Strategy (gov.je)



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

- 4.3 In simple terms, an emissions pathway is a forward projection of the anticipated level of carbon emissions 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.
- 4.4 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"⁴⁴. 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".
- 4.5 If carbon emissions are above the agreed emissions pathway, net-zero can be achieved through the purchase of carbon offsets but only if these offsets arise from projects that remove carbon from the atmosphere (rather than projects that avoid the further release of carbon into the atmosphere)⁴⁵.
- 4.6 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 (as considered in Strategic Policy 5).

⁴⁵ 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.



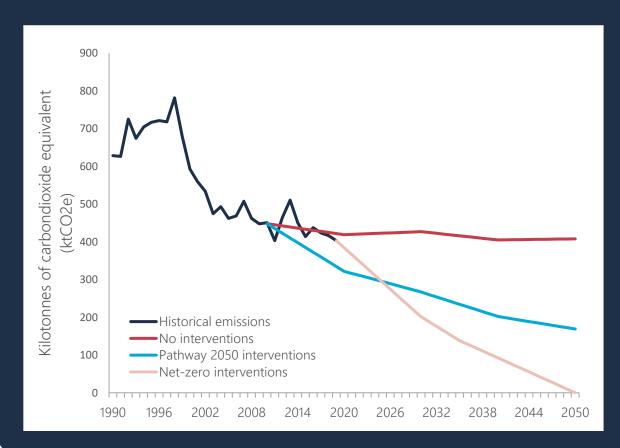
⁴⁴ IPCC Glossary of terms

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.



Strategic Policy 2: Island energy market

- 4.7 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.
- 4.8 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, liquid petroleum gas (LPG), and oil products.
- 4.9 The Carbon Neutral Roadmap Preferred Strategy sets out a more comprehensive energy policy statement, that considers in some detail: electricity and the potential future for decarbonisation (including renewable generation) and decentralisation; and the role that other low-carbon products could play in the energy market, including biogas, biofuels and hydrogen.⁴⁶
- 4.10 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 energy 'trilemma'

4.11 This framework is informed by the need to balance energy affordability and security with decarbonisation, as recognised in the 'energy trilemma' diagram at Figure 7 and expanded on in Figure 8.



Figure 7: The energy trilemma.

⁴⁶ Carbon Neutral Roadmap Preferred Strategy (gov.je)



Energy Market consideration	Summary of the Jersey context
Sustainability	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 "anyviable route to carbon neutrality by 2030will require the rapid electrification of a large proportion of road transport and space heating in Jersey." 47.
	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.
Security and resilience	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. 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	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. 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.

Figure 8: Energy Market considerations in the Jersey context

4.12 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.

⁴⁷ Carbon Neutral Strategy (gov.je) (p.69)



- 4.13 Recognising the significance of energy market policy, the draft Bridging Island Plan⁴⁸ 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.
- 4.14 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.

Energy market summary

- 4.15 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.
- 4.16 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.
- 4.17 There are challenges to bring new energy sources to the Island where they require new infrastructure and supply lines (for example, hydrogen).
- 4.18 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.
- 4.19 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.
- 4.20 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.

⁴⁸ draft Bridging Island Plan (gov.je)



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.



Strategic Policy 3: Financing strategy

- 4.21 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.
- 4.22 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. This Roadmap sets 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.
- 4.23 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 (although those aspects of cost and benefit that can be considered are explored in Part B). This was recognised in the report of the Citizens' Assembly⁴⁹, 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."
- 4.24 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.

⁴⁹ <u>Achieving Carbon Neutrality – Report of Jersey's Citizens' Assembly on Climate Change</u>



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 (2022-2026),
- **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:
 - o Road user charges
 - o Reinvestigation of commercial solid waste charges
 - o Car parking charges
 - o 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.



Strategic Policy 4: Policy programme and development

- 4.25 This Strategic Policy establishes a robust, staged approach to policy development and prioritisation, building on the people-powered approach established in the Carbon Neutral Strategy⁵⁰. This helps 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.
- 4.26 The policy also requires steps to seek to ensure a Just Transition, in which the interests of both future generations, and those currently reliant on polluting industries for employment, are considered. Neither group should be actively disadvantaged by being 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.

Policy Programme and Development Carbon Neutral Roadmap: Strategic Policy 4

The Carbon Neutral Roadmap will include carbon reduction policies for the period 2022-2026

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.



Strategic Policy 5: Becoming carbon neutral

- 4.27 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.
- 4.28 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

4.29 The Carbon Neutral Strategy⁵¹ sets five defining principles of Jersey's approach to achieving carbon neutrality and tackling the climate emergency. These are set out in Figure 9 and are incorporated into the Carbon Neutral Roadmap in this policy.

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.

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.

⁵¹ Carbon Neutral Strategy (gov.je)



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 9: the defining principles of the Carbon Neutral Strategy.

- 4.30 The definition of carbon neutral set out in the Carbon Neutral Strategy⁵² 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.
- 4.31 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. These issues are further explored in policy EN6.

⁵² Carbon Neutral Strategy (gov.je)



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.

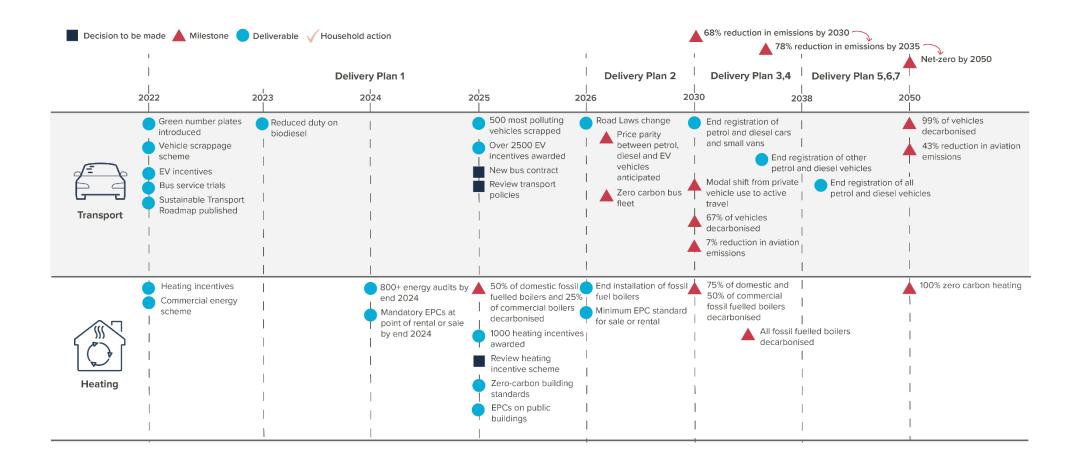


Part B The Roadmap

5. Carbon Neutral Roadmap

- 5.1 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. A Roadmap approach has been used to provide the right balance between the competing objectives of certainty and responsiveness.
- 5.2 Jersey's Carbon Neutral Roadmap is summarised in the diagram at Figure 10 below. It establishes a staged pathway, sets milestones for future key decisions and the introduction of future policies and requires that an updated delivery plan be set out at the start of each new term of government. Part C of this document provides the first Introducing delivery plan, for the period (2022-25), with supporting investment from the Climate Emergency Fund.
- 5.3 The Roadmap will only be effective if action continues to be taken to stick to it in the coming years. To help achieve this, a framework of 'commitment devices' is proposed, as set out in Figure 11. These proposed actions create the context in which the Carbon Neutral Roadmap can evolve in order to remain relevant, and in which up to date delivery plans will be developed following each general election.







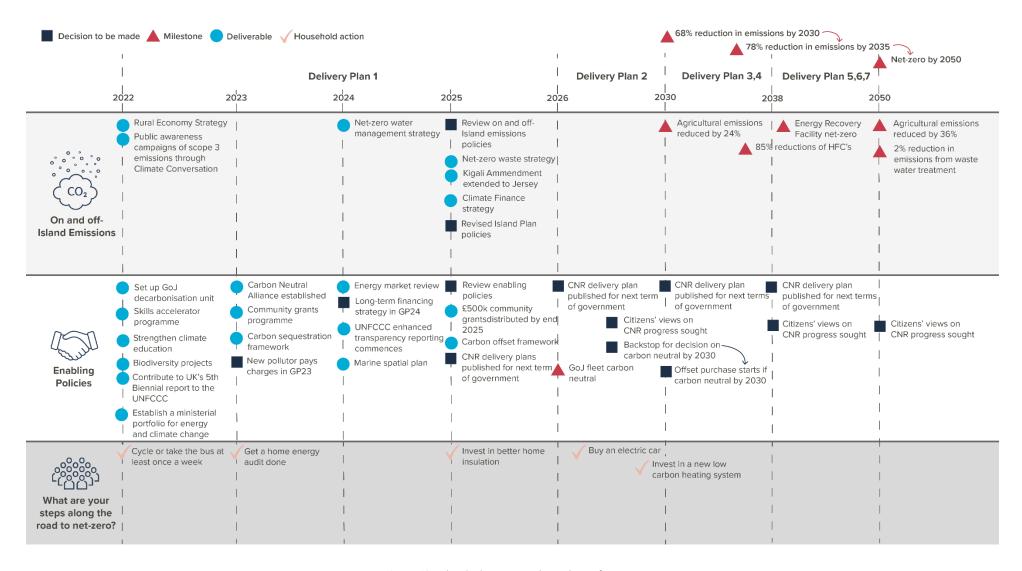


Figure 10: The Carbon Neutral Roadmap for Jersey



Committing to the Carbon Neutral Roadmap			
Transparent Reporting	International commitment	Leadership from Government	Strengthening civic voice
Greenhouse gas emissions published	Extension of the UK's ratification of	Establish a Ministerial portfolio with	Establish a mechanism to take a
annually with commentary on	the Paris Agreement on Climate	responsibility for Energy and Climate	representative snapshot of citizens'
progress against trajectory	Change to Jersey	Change	views about progress in delivering the
			Roadmap, no later than 2028 and at
			least once a decade until 2050
Improved sustainability reporting for	Continued compliance with existing	Commitment to meet the identified	Invest in building civic and business
Government and public sector	international agreements	milestones and take the preparatory	capacity and leadership on
agencies		steps needed to meet future	decarbonisation
		milestones, and to publish a	
		projection of progress	
Commitment to high quality	Extension of other relevant treaties	Commitment to publish an updated	Introduction of a small grants scheme
Environmental Social and Governance	(including Kigali amendment to	delivery plan after each general	to invest in grassroots action to tackle
reporting by Jersey businesses	Montreal Protocol)	election	climate change
Underpinned by a new Standing Scrutiny Review Panel on Energy and Climate Change			

Figure 11: Summary of proposed commitment devices required for the Carbon Neutral Roadmap



6. Understanding our emissions pathway

- 6.1 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 emissions⁵³ by over a third since 1990 and the Island continues to take its global responsibilities seriously, acting in accordance with ratified international treaties on climate change.
- 6.2 To provide context, 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 12.

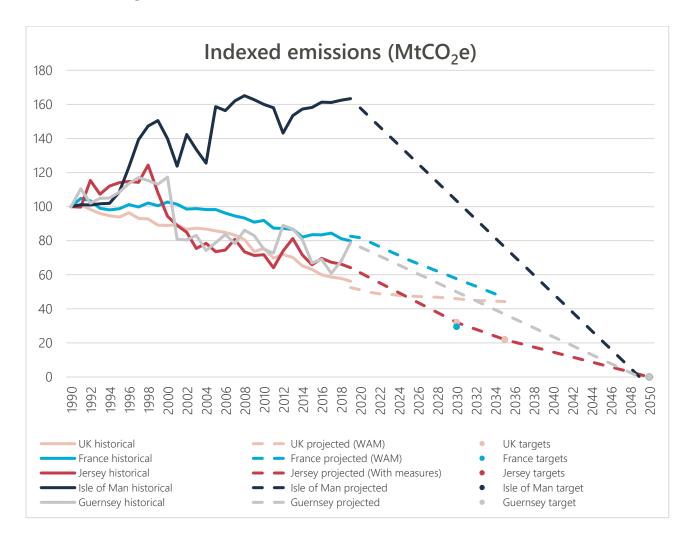


Figure 12: Indexed emissions: Crown dependencies, France, and UK.

⁵³ Carbon emissions is used throughout to refer to the bundle of six greenhouse gasses as defined in <u>Carbon Neutral Strategy</u> (gov.je)



6.3 Jersey's planned emissions trajectory is established by Strategic Policy 1 (set out in <u>Part A</u>) and is shown in Figure 13 below. It requires, as a minimum, a 68% reduction in emissions compared to our 1990 baseline by 2030: a further reduction to 78% from baseline by 2035, and net-zero emissions by 2050.

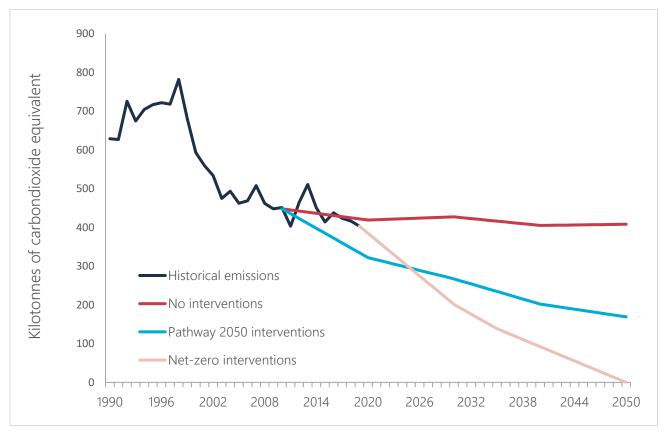


Figure 13: Jersey emissions reductions pathway

- 6.4 The majority of scope 1 emissions in Jersey 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. The most recent emissions estimate for each source of emissions are shown in Figure 14.
- 6.5 The policies set out in Part C have been designed to make rapid progress towards achieving the required emissions trajectory. At this stage though, as recognised by the financing strategy set out in Strategic Policy 3, there is insufficient funding available to apply all policies to their fullest extent. There are also significant learning points about the administration and impact of some policies, and about market transitions, that may impact on the manner and extend to which these policies need to be applied in future years.

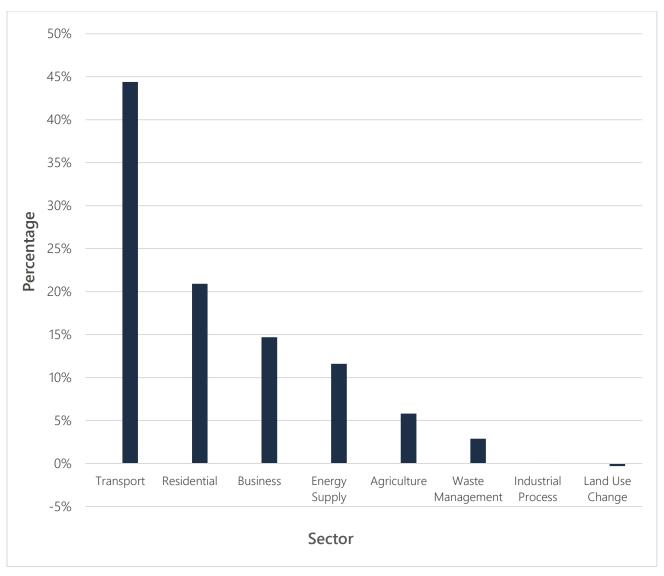


Figure 14: Scope 1 emissions by inventory reporting sector.

Figure 15 provides a comparison of emissions forecasts under four different situations:

- Business as usual (red line)
- Identified policies using current Climate Emergency Fund funding 2022-2025 (bars)
- Identified policies fully funded and implemented (blue line)
- Paris emission reduction targets (red X)

Note that the minimum direct costs to the government for fully implementing the identified policies (the red line) is £215M. Note that if a decision is taken to purchase carbon offsets in order to become carbon neutral this would be an additional annually reoccurring cost.

The shape of scenario pathway is a product of modelled assumptions about impact dates and, in practice, progress along the pathway would follow a similar trend line but the exact shape would be different.

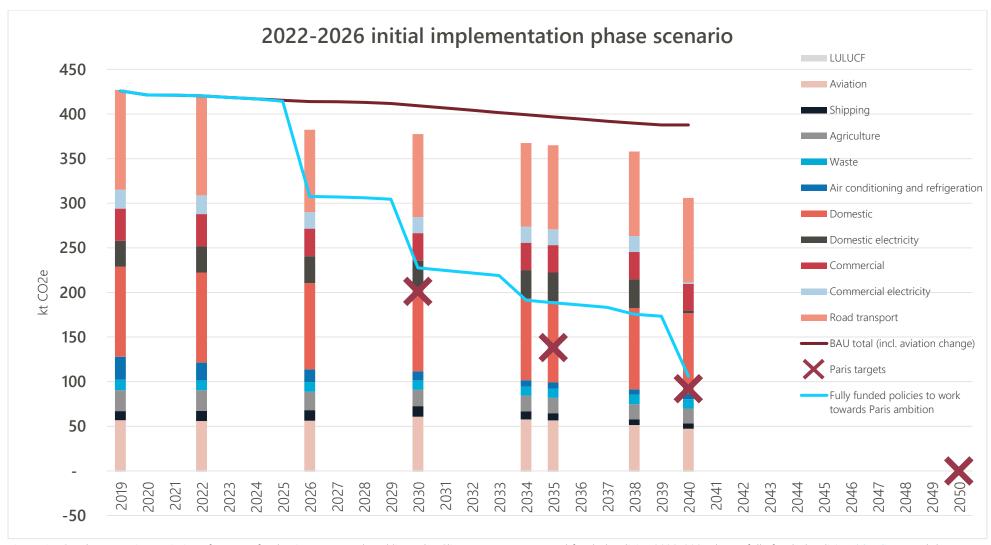


Figure 15: Graph comparing emissions forecasts for: business as usual (red line); the Climate Emergency Fund funded policies 2022-2025 (bars); fully funded policies (blue line); and the Paris Agreement emission reduction targets (red X). Emissions not modelled after 2040 due to uncertainties around future technology.



7. Understanding our sources of emissions

7.1 This section provides an overview of what is causing carbon emissions in Jersey and imagines what the future might bring in these areas over the coming 30 years.

Emissions from travel and transport

- 7.2 The transport sector is the largest source of on-Island greenhouse gas emissions in Jersey. It produces 44% of emissions at a time when vehicle ownership levels are increasing and there are more cars on the Island than people. As a result, transport is a priority area for action. The good news is that solutions already exist for a large proportion of transport emissions and transitioning to more sustainable modes of transport can reduce congestion, improve air quality and help us all live healthier lifestyles.
- 7.3 The transport sector includes emissions from road transport, domestic aviation and domestic shipping. Domestic aviation and navigation refer to activities that occur within Jersey and between Jersey and the UK. This includes, for example, take off, landing and internal, recreational flights and shipping activity that occurs within Jersey waters.
- 7.4 Figure 16 shows that between 1990 and 2019, emissions in the transport sector have decreased by 11% from 201,449 to 179,078 tCO₂eq. The overall trend is dominated by emissions from passenger cars and domestic aviation. Passenger car emissions have decreased by 36% between 1990 and 2019 and by 2% between 2018 and 2019. Between 1990 and 2019, all sources of transport emissions decrease except for domestic aviation and heavy-duty trucks and buses.



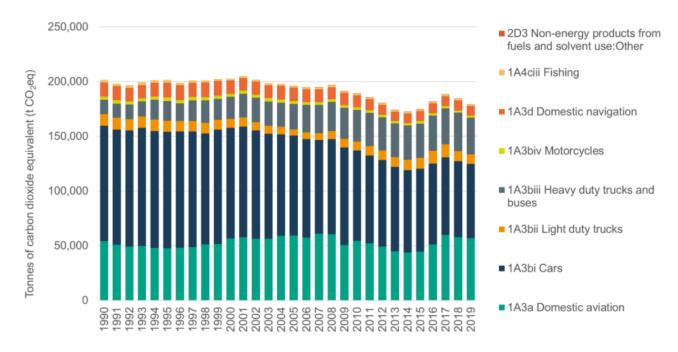


Figure 16: Transport sector emissions by sub-sector 1990-2019⁵⁴

7.5 There are three broad ways to reduce the greenhouse gas emissions associated with transport, which are considered below.

Reduce the need to travel

- 7.6 This approach focuses on the essential journeys that we all make every day, which we would happily choose not to undertake if there was a suitable alternative, such as the school run or the daily commute. There is potential to reduce the need to travel at minimal cost, building on new ways of working and new distribution services adopted during the Coronavirus pandemic.
- 7.7 Services might be provided closer to our homes, for example by:
 - locating more day-to-day facilities (such as shops, hairdressers, medical facilities etc.) in local centres that are accessible by walking and cycling
 - Continuing to accommodate the majority of new homes close to services within existing urban areas
 - Supporting people to work closer to home by providing hot-desk work hubs in different locations and continuing to promote working from home
- 7.8 Supporting working from home, or close to home, could play a key role in reducing travel and associated peak hour congestion, and future business engagement will include a focus on looking to the Island's employers to support this transition through flexible working policies and

⁵⁴ Guide to the Jersey Greenhouse Gas Inventory (gov.je)



Climate Emergency JSY

- the promotion of sustainable workplace travel plans. Continued investment in the Island's digital infrastructure will also be required in the coming decades.
- 7.9 Increasingly, services may also be able to come to you. Intelligent delivery services, which allow journeys to be geographically managed, can provide a significant reduction in vehicle mileage.

Shift journeys to less carbon intensive forms of travel

- 7.10 Even with improvements in the areas identified above, the need for many everyday journeys will remain. As many of these journeys as possible should be made by sustainable modes of transport, including active travel and public transport.
- 7.11 As set out in Part A, the Sustainable Transport Policy 2020-2030 was adopted by the States Assembly in 2020. Implementing the Sustainable Transport Policy will take many years and require increased investment to deliver the wide range of benefits it can offer. In adopting the principles set out in the Sustainable Transport Policy framework though, the States Assembly recognised that future Sustainable Transport Policy delivery plans will need to:
 - make active travel and public transport easier, safer, cheaper, and more convenient to use, and
 - reflect the true environmental and social cost of private car journeys through increasing the relative cost of car ownership and usage

Improve the emissions performance of the vehicles we use

- 7.12 Even having reduced the need to travel and increased the number of journeys via sustainable modes of transport, there will still be a need for many journeys to be by private vehicle. These journeys will need to be in low emissions vehicles.
- 7.13 Presently, electric vehicles (EVs) are the only widely commercially available alternative to petrol or diesel engine vehicles, with all global automotive manufacturers now selling passenger electric vehicles. Electric vehicles are classed as low-carbon emission vehicles, but it is important to remember that the carbon emissions associated with these vehicles depends on the carbon intensity of the electricity supply. In Jersey, where we have a low-carbon electricity supply, replacing petrol and diesel vehicles with electric vehicles results in lower carbon emissions. Hybrid electric vehicles also exist. These vehicles combine petrol engines with battery technology to reduce carbon emissions, but their emissions are higher than electric vehicles.
- 7.14 The transition to electric vehicles will take time, as vehicles are replaced as they come to the end of their lives. In order to achieve the required level of emissions reductions at the pace needed to limit the worst impacts of climate change, lower carbon petrol and diesel alternatives are likely to have a significant role to play.



- 7.15 There are a number of different low-carbon alternatives to traditional petrol and diesel now available on the market. Second generation renewable diesel (SGRD) is a high-quality fuel made from hydrotreated vegetable oils, waste food and meat processing by-products. Second generation renewable diesel can be used as a direct replacement for fossil diesel. Three aspects of renewable diesel need to be carefully considered when purchasing, to ensure:
 - it is made 100% from renewable non fossil fuel materials
 - it isn't made from crops that would otherwise be used as a food source, and
 - the broader sustainability credentials of the product and its supply chain can be validated
- 7.16 The table (Figure 17) paints a picture of how the journey towards decarbonised travel in Jersey might unfold. These are imagined scenarios, not predictions; some may happen, others may not.

2020-2030	2030-2040	2040-2050
People will begin to make their journeys more sustainable, and to travel less. New technology will support low-carbon, higher occupancy travel such as car sharing/pooling. 50% of our journeys will be replaced with low-carbon options – electric vehicles, public transport, increased walking and cycling. It will become increasingly expensive to buy and run a petrol or diesel car. People will be using second-generation renewable diesel where they still have old cars.	You will no longer be able to import a petrol or diesel vehicle into the Island and most of the major car manufacturers will have stopped producing them. Electric vehicles cost the same or less than petrol or diesel alternatives. We will have a demand responsive public transport system and Mobility as a Service technology will be the default decision making tool when considering how to make a journey. Legislation and regulation will mean micro-mobility and shared transport will become the norm.	There will be virtually no residual carbon emitting transport on the Island. Use of petrol and diesel will be very expensive. We will have adopted new forms of energy to power our largest transport modes which include hydrogen alongside electric power not just for road transport but also aviation and maritime operations. We will have reduced the number of everyday journeys we make by car and several of St Helier's car parks will have been turned into parks with extensive tree planting.

Figure 17: Vision for transport in Jersey 2020-2050

Emissions from heating, cooling and cooking

7.17 When fossil fuels, such as gas or oil, are burnt in boilers and ovens to heat water for our radiators or showers, or to cook our dinner, greenhouse gas emissions are produced. Heating, cooling and cooking in homes and businesses is the second largest emissions source in Jersey. It is a priority

- area for the Carbon Neutral Roadmap. It represented 35% of our total greenhouse gas emissions in 2018⁵⁵.
- 7.18 There are currently 2,350 commercial properties relying on oil and 1,126 on gas for heating. The estimated total figure for boilers in residential properties running on fossil fuels is approximately 20,000 (~45% of all residential properties).
- 7.19 There are two main ways in which the greenhouse gas emissions associated with our buildings can be reduced – we can reduce our demand for the energy by improving the energy efficiency of our buildings and appliances, or switch to a low-carbon energy source for the energy that we use. We will need to do both to meet our carbon emissions reduction targets.

Reduce demand for energy

- 7.20 Energy efficient buildings require less energy to heat and cool them. New buildings need to be designed and built to the very highest standards of energy efficiency to ensure that heating and cooling demand is minimised. However, the existing building stock will continue to be the biggest source of emissions and is where the real challenge lies. Existing properties can have energy efficiency improvements made to them, such as improved loft and wall insulation and high-efficiency glazing.
- 7.21 The more energy-efficient a building is the cheaper it is to heat. For Islanders that cannot currently afford to heat their homes properly, making their properties more energy efficient will also make them more comfortable.
- 7.22 More energy efficient appliances also use less energy and have lower running costs. For example, the more efficient your oil boiler or your gas oven the less fossil fuel will be burnt to do the task you want it to do.
- 7.23 The way in which people use energy also has a large impact on emissions, for example, having the heating thermostat on high rather than putting on additional clothing or not adjusting the timing of the hot water so that you only have it when you need it. As well as improving the energy efficiency of our buildings and appliances we need to learn to be smarter in our use of energy. New technology can help us do this.
- 7.24 Reducing demand for energy in buildings can be driven forward in a number of different ways, for example:
 - **New buildings** increasing the strength of the energy efficiency and carbon emission requirements of buildings standards for all new domestic and non-domestic buildings

⁵⁵ <u>Jersey's greenhouse gas emissions (Aether)</u> (Note - 58% from residential properties and 42% from businesses).



- through changes to the Building Regulations;
- **Existing buildings** increasing the strength of the energy efficiency and carbon emission requirements as part of consequential improvement or notifiable work on existing buildings;
- Introducing new legislation to make energy efficiency and carbon emissions assessments and minimum standards mandatory at the point of sale and rental of all buildings

Switch to low-carbon energy sources

- 7.25 Even in the most energy efficient buildings, with the most energy-efficient appliances, we will continue to use some energy. If this energy is generated through the burning of fossil fuels it will continue to generate greenhouse gas emissions.
- 7.26 If we are to meet our target of having no on-Island emissions from domestic or commercial buildings by 2050 we need to establish a plan to phase out traditional fossil fuel use. With expected life spans of over 15 years, this means that we need to stop the installation of any new fossil fuel boilers by 2030 at the latest.
- 7.27 There are a number of currently available heating technologies that are energy efficient and compatible with net-zero with a decarbonised electricity supply. These includes biomass and liquid biofuels, heat pumps and hybrid heat pumps, electric flow boilers and solar technologies.
- 7.28 It should be noted that this is a rapidly evolving field which will need to be closely monitored and evaluated over the coming years to ensure that the right solutions are found for the Island and no future options are discounted before they become viable.
- 7.29 Heat pumps offer perhaps the best potential to get the majority of buildings off the gas grid. However, not all properties will be suitable for a heat pump due to high heat losses that cannot be brought down cost-effectively through energy efficiency improvements. For other properties other electric heating options, such as electric radiators or electric flow boilers may be preferable.
- 7.30 For hard-to-treat properties, there are other heating systems that may be considered including biomass boilers. Consideration must be given to the sustainability of the supply chain. Hybrid systems where a heat pump is accompanied by a biofuel boiler provide another option. Liquid biofuels are starting to enter the market. They may have a role as a transition fuel, and the opportunities and costs to modify existing fossil fuel boilers to run on them or for new specifically designed biofuel boilers to come into the market are likely to develop over coming years. Consideration needs to be given to the sustainability of their supply chains and their market availability and whether liquid biofuel supplies need to be reserved for sectors in which there is no low-carbon alternative.
- 7.31 For a number of the low-carbon heating systems mentioned, the upfront costs of installation are



- currently higher than reinstalling a fossil fuel system. This may particularly be the case if extensive building work is required to modify the plumbing system or upgrade the electricity supply.
- 7.32 Running costs also need to be carefully considered to ensure that we are meeting the principle of a Just Transition and that the least well off in society are not driven further into fuel poverty by the Island's decarbonisation plans. Fuel costs globally are constantly changing and therefore it is difficult to predict the relative running costs of different fuel types in the future. A key part of ensuring a Just Transition will be ensuring that properties are as energy efficient as possible at the time that they switch to a low-carbon heating type.
- 7.33 Switching to a zero-carbon heating source in buildings can be driven forward in a number of different ways, for example:
 - Changes to the building regulations to prevent fossil fuel boilers being installed in new properties;
 - Changes to the building regulations to prevent fossil fuel boilers being replaced in existing properties; and
 - Financial incentive to cover the difference in upfront costs between fossil fuel and lowcarbon heating system replacement as part of the transition
- 7.34 Figure 18 paints a picture of how the journey towards decarbonised heating, cooling and cooking systems might unfold in Jersey. These are imagined scenarios, not predictions; some may happen, others may not.

2020-2030	2030-2040	2040-2050
All new buildings are built to energy efficient designs, with zero carbon heating systems. First affordable homes built to Passsivhaus standard.	All new buildings will have renewable energy generation capability. All existing commercial properties switched to zero carbon energy	All buildings will have zero carbon heating systems and the use of fossil fuels will be completely phased out.
All properties getting sold or rented have Energy Performance Certificates. Significant number of existing properties are upgraded to be more energy efficient.	systems. The small number of remaining domestic fossil fuel boilers will have switched to using replacement renewable fuels.	
When needing to replace fossil fuel boilers Islanders move to zero carbon heating systems.		
Some Islanders start using replacement renewable fuels for heating in their existing boilers.		

Figure 18: Vision for heating in Jersey 2020-2050

Other emissions

- 7.35 There are a series of policy statements set out in <u>Part C</u> of the Carbon Neutral Roadmap that describe the current position and suggested ways forward on other sources of emissions in Jersey.
- 7.36 Figure 19 paints a picture of how the journey towards decarbonisation in these other sectors might unfold in Jersey. These are imagined scenarios, not predictions; some may happen, others may not.

	2020-2030	2030-2040	2040-2050
Aviation and marine transport	Consider developing market for sustainable aviation fuel and identify potential operational and infrastructure improvements to reduce carbon emissions within aviation delivery service. Widespread market use of high-quality carbon offsets for flight emissions. Align with international developments on reduced carbon marine fuel.	Infrastructure and operational improvements to increase efficiencies. Increase deployment of sustainable aviation fuel (both synthetic and bio). Continued requirement for high quality carbon offsets for flight emissions. Zero carbon renewable/synthetic marine fuel use widespread.	Air travel will be transformed, and the fuel used will be decarbonised. Use of future technologies such as electric and hydrogen will be starting to embed within the market. Reduction in use of high-quality offsets for flight emissions. All marine transport now zero carbon.
Blue carbon	Continue exploring the potential for blue carbon sequestration in Jersey's waters.	Projects to protect, enhance and expand marine sequestration and biodiversity in the Island's territorial waters start.	Continued support for existing projects and expansion of marine sequestration projects to realise the full carbon potential of our territorial waters.
Trees	Increase protection for existing trees within the Island. New areas suitable for tree planting identified and planting projects initiated.	Continued protection, maintenance and care for all existing trees in the Island. All potential areas for tree planting in the Island identified and planting projects completed.	Continued protection, maintenance and care for all existing trees in the Island. Replacement planting ongoing as needed.

Carbon capture from waste	Continue to generate greenhouse gas emissions from the burning of waste for the rest of the viable life of the Energy from Waste plant.	New waste facility commissioned with carbon capture capability or equivalent.	Zero carbon emissions from waste disposal on the Island.
Agriculture	Continue research into agricultural practices that result in reduced greenhouse gas generation or their capture and storage.	Implementation of new agricultural practices to reduce/capture greenhouse gas emissions. Consider the use of high-quality offsets for residual emissions in this sector.	Agricultural practices modified to become very low-carbon. Minimal use of high-quality offsets for residual emissions.
Construction	Sector starts to measure the carbon footprint of construction materials and to actively select low-carbon options.	Information on life-cycle carbon of construction materials widely available and carbon assessments required as part of planning process.	First cradle-to-grave zero carbon building built in the Island.
Scope 3 emissions	Increased information and awareness of the life-cycle carbon of the products and services we buy. Consumers increasingly considering the carbon footprint of food when making purchasing decisions.	Increasing carbon labelling of products. Significant number of Islanders switched to low-carbon diet.	Full transparency on the carbon intensity of all products and services we buy. Consumers increasingly choosing low-carbon options. Low-carbon diet the norm.
Large scale renewables	Agree scope and funding of a utility scale renewables project.	Work starts on the Island's offshore wind farm/tidal system.	50% of Jersey's electricity comes from renewable energy generated in the Island/the Island's territorial waters.
Offsets	Start buying high-quality verified offsets.	Very few offsets need to be purchased as on-Island emissions low.	No longer need to purchase offsets as on-Island emissions matched by local sequestration.

Figure 19. Vision for other sources of emissions in Jersey 2020-2050

8. Costs and benefits

- 8.1 The costs and benefits of the Carbon Neutral Roadmap depend on what policies are put in place and when and how this is done; what new challenges and opportunities present themselves in the coming years; and how global markets and actors respond to these.
- 8.2 The Carbon Neutral Strategy⁵⁶ considered the direct cost to government of paying for emissions reduction policies, and recurrent costs arising from offsetting residual emissions. That analysis, which formed part of P.127/2020, as adopted by the States Assembly, suggested an indicative cost to government of up to £300M, based on a specific set of policy options, plus an estimated recurring cost of £2-5M per annum for offsets⁵⁷.
- 8.3 As noted in section 6, *Understanding our Emissions Pathway*, work to develop a policy programme that could secure necessary emissions reductions has validated this figure, suggesting a potential cost to fully implement these policies of £215M over the period 2022-25 [subject to final validation].
- 8.4 These costs need to be weighed against the global and local benefits that come from reducing carbon emissions. In line with Strategic Policy 4, the carbon abatement potential and the opportunity for wider co-benefits has been assessed for each policy in the first delivery plan 2022-25. This analysis is set out in the multi-criteria analysis report and has been used to inform both the Children's Rights' Impact Assessment.
- 8.5 As well as the local co-benefits of the proposed policies set out in the Carbon Neutral Roadmap, the Carbon Neutral Strategy also considered the social cost of carbon, which is a proxy for the negative impacts of carbon emissions that would be avoided. This was assessed to be as high as £600M if no steps were taken to reduce emissions in the areas of transport and heating.

Funding the Carbon Neutral Roadmap

- 8.6 Strategic Policy 3 sets out the agreed approach to funding the Carbon Neutral Roadmap. This will require consideration, in future Government Plans, of the likely significant costs of future delivery plans.
- 8.7 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

⁵⁸ The reports can be found at www.gov.je/climateemergency



⁵⁶ Carbon Neutral Strategy (gov.je)

⁵⁷ This assessment is set out in detail in <u>Quantitative Analysis of Carbon Neutrality by 2030 (gov.je)</u>

being explored globally. The report⁵⁹ sets out a range of funding routes that are used in other jurisdictions, as listed in Figure 20 and includes case studies of the more innovative approaches being taken.

Taxation and charges	Monetising assets
General taxation	Privatisation
Hypothecated taxes	Equity issuance of government-owned entities
User fees and charges, including carbon fee and	Reserves
dividend models	'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 20: 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.

8.8 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.

Key considerations

- 8.9 An analysis of different costs and benefits that was undertaken to support the development of the Carbon Neutral Roadmap⁶⁰ identified key considerations in six categories:
 - 1. emissions reductions
 - 2. social and environmental considerations
 - 3. economic considerations
 - 4. reputational considerations
 - 5. practical considerations
 - 6. cost considerations

⁶⁰ An analysis of the advantages and disadvantages of different Net-zero targets for Jersey (Oxera)



Climate Emergency JSY

⁵⁹ Funding the transition to carbon neutrality (gov.je)

8.10 The relevance and magnitude of these considerations will change depending on the choices set out in future Roadmap delivery plans, but all will play a part in assessing the future costs, benefits and funding of the Carbon Neutral Roadmap.

Emissions Reductions



Reductions in emissions. Any emissions, no matter how minor, contribute to climate change. A net-zero target will allow Jersey to reduce its own emissions and end its contribution to climate change, while possibly encouraging other countries to take action. If more countries contribute to climate action, greater global warming can be avoided.

Social and environmental considerations



Improvements in natural and human environments. Policies to reduce emissions can improve the quality of human and natural environments and can improve biodiversity. For example, increased tree cover in Jersey can improve air quality, increase biodiversity, provide natural flood protection, and provide recreational benefits for citizens.



Health and well-being benefits. Policies to reduce emissions can lead to health and well-being benefits for citizens. These include direct health benefits, for example from improved air quality, and indirect benefits such as more comfortable, liveable buildings from insulation improvements. Climate-related policies and improved physical health can have knock-on impacts on mental health and can contribute to alleviating the growing phenomenon of 'climate anxiety'.

Reputational considerations



Reputational benefits and opportunities. The choice of net-zero target will establish Jersey's position on climate action to the international community. An accelerated target may give Jersey a status as a frontrunner in climate action and may help to unlock economic, social, reputational, and diplomatic opportunities. On the other hand, a net-zero targe that is too ambitious to be credibly delivered through emissions reductions where possible could undermine reputational benefits.



Economic considerations



Economic benefits and opportunities. Achieving net-zero will require investment which can stimulate economic activity and employment. For example, climate action could create jobs in Jersey in the deployment of lowemission technologies.



Operating cost savings. Many low-carbon investments and technologies can bring operating costs savings. Households and businesses can benefit from lower energy bills due to improvements in heating systems and the energy efficiency of buildings. Motorists could see cuts in the ongoing costs of driving as they shift to electric vehicles, which have lower operating costs than fossil fuel vehicles



Stimulation of innovation. The transition to net-zero may stimulate innovation and the development of new ideas in Jersey as businesses and households are encouraged to undertake low-carbon investment. This could decrease the cost of achieving net-zero and could lead to economic opportunities.

Practical considerations



Reskilling of workers. Labour markets must adapt to ensure that workers are qualified to deliver the transition to net-zero and allow workers to benefit from the economic and job opportunities arising from it. For example, workers will require re-training for the successful deployment of low-emission heating technologies.



Development of supply chains. The transition to net-zero will require significant changes to existing supply chains. It will take time to develop new supply chains, construct the required capacity, and develop new business models for the deployment of low-carbon technologies and the transition to net-zero. It will be challenging to achieve this and will require significant changes to 'business as usual'.



Practical considerations



Development of infrastructure. The transition to net-zero will require significant changes to existing infrastructure and the development of new infrastructure. The uptake of low-carbon technologies, for example electric vehicles, will be limited or non-existent until the necessary charging infrastructure is in place.



Opportunities to learn what works. It is helpful for policymakers to have the opportunity to trial solutions and policies before committing to them, as well as to learn from what works and what does not in Jersey and other jurisdictions. This can help to identify the most cost-effective and appropriate approaches to achieve net-zero.



Administrative constraints and coordination issues. Coordinating climate policy across different layers of government and across the private and public sectors will be challenging. For example, different groups may not consider each other's interests or may wait for each other unnecessarily, potentially disrupting the transition to net-zero. It will be important to ensure that the transition is well coordinated and that there is a joined-up approach across government and all sectors and levels of society.



Societal changes needed. The transition to net-zero may require considerable lifestyle changes and polices may require significant commitments from citizens in order to be effective. These changes generally take time and can be difficult to achieve.



Public support for the net-zero target. Public and business support will be a vital component in achieving the net-zero target as it will require significant commitments and investments from businesses and households.



Part C The Delivery Plan

9. Introduction

- 9.1 This section sets out a prioritised delivery plan for the period 2022-25. The policies set out here are informed by a wide range of inputs, including:
 - ideas generated as part of Jersey's Climate Conversation, 61
 - the recommendations of the Citizens' Assembly on Climate Change, 62
 - recommendations of the Jersey Youth Parliament⁶³ and from on-going youth engagement,
 - practical experience from the delivery of Pathway 2050: An Energy Plan for Jersey⁶⁴
 - 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 Strategy⁶⁵,
 - the quantitative analysis of transport and heating, cooling and cooking options published alongside the Carbon Neutral Strategy⁶⁶, and
 - a range of other published reports that form the evidence base for the Carbon Neutral Roadmap (<u>Appendix 1</u>).

Assessing and prioritising policies

9.2 As required by Strategic Policy 4, the policies in this delivery plan have been assessed against a series of criteria, including the potential for policies to lead to carbon abatement and a consideration of other potential costs and benefits. These assessments were considered by the Carbon Neutral Steering Group and Council of Ministers when preparing and reviewing the delivery plan.

Step 1 – Policies and criteria

The policies to be assessed were selected – note the approach was not appropriate for some The 4 key criteria were identified – these formed the basis on which each policy was assessed:

- 1. Carbon abatement
- 2. Wider impacts
- 3. Costs
- 4. Feasibility

⁶⁶ Quantitative analysis of carbon neutrality by 2030 (Oxera)



⁶¹ Jersey's Climate Conversation

⁶² Achieving Carbon Neutrality – Report of Jersey's Citizens' Assembly on Climate Change (gov.je)

⁶³ Appendix 1 in Carbon Neutral Jersey Response to in-committee debate report (gov.je)

⁶⁴ Pathway 2050: An Energy Plan for Jersey (gov.je)

⁶⁵ Carbon Neutral Strategy (gov.je)

Step 2 – Deciding principles

- Each of the criteria was assigned a weighting, based on their importance to the decision-making.
- Various principles of the scoring methodology were established.
- The scores varied between qualitative and quantitative values, depending on data availability.
- The analysis was normalised across the qualitative and quantitative metrics to a 1 to 5 range to allow comparison.

Step 3 - Scoring

- Workshops were held with experts from across the Government of Jersey who were selected to score the policies against their relevant sub-criteria
- The weighted score for each criteria at the initiative level was aggregated, to analyse overall performance and allow for comparison across initiatives
- 9.3 The impacts of the proposed policies on children's rights has also been considered in a Children's Right Impact Assessment; and wider impacts on different groups have been scoped in an initial distributional analysis framework.
- 9.4 These assessments will be updated and refined with further information following the consultation period, in order that more detailed appraisals can be set out alongside the final Carbon Neutral Roadmap.

10. Delivery Plan 2022-25

- 10.1 The table below sets out the carbon neutral delivery plan for the period 2022-25. The Plan is a mixture of:
 - new policy interventions, including new incentive schemes to support Islanders to transition to lower carbon technologies
 - commitments to introduce or amend regulations, such as to require greater energy efficiency in our buildings and heating systems
 - new targets, to focus action across the Island, such as the ambition to make Jersey a centre of excellence for Blue Carbon research and industries, and
 - confirmation of futures milestones, such as the requirement to decide, by 2028, if having made substantial reductions in its emissions Jersey wishes to adopt an early Carbon Neutral position.
- 10.2 These policies were developed by a Carbon Neutral Steering Group established by the Minister for the Environment, Deputy Young, and Chaired by Deputy Guida, as Assistant Minister for the Environment. The group also included the Minister for Infrastructure (Deputy Lewis) Assistant Minister for Economic Development (Deputy Morel) and Assistant Minister for Treasury and Resources (Deputy Ash) and, reflecting the inclusive approach taken throughout this work, two non-executive States Members: Deputy Johnson and the Connétable of St Lawrence, Deirdre Mezbourian.
- 10.3 As set out in Figure 21, the policies in the delivery plan are ordered by the source of emissions they seek to address, with a further grouping that includes policies to build our capacity and capability to continue to decarbonise at greater breadth and pace in future years.
- 10.4 Each policy is supported by a range of detailed analysis and impact assessments, which are summarised in the full policy package at Appendix 2. This includes a summary of the policy context and intent, identified SMART objectives, assumptions and dependencies, and relevant financial information.

Initials	Category	Explanation	
TR0	Transport policies	Transport emission reduction policies	
HT0	Heating policies	Heating emissions reduction policies	
OE0	Other on and off-Island emissions policies	Policies that tackle other on and off-Island emissions	
EN0	Enabling policies	Policies that enable delivery and implementation and support the systemic change needed to make a just transition to a low-carbon economy	

Figure 21: Summary of the 4 policies categories



	Transport Policies			
#	Policy title	The Government of Jersey will		
TR1	Speeding up adoption of electric vehicles	 Subsidise the cost of an electric vehicle at the point that it is first registered on the Island (for both new and imported second-hand vehicles) Continue to offer subsidised public parking until a new parking plan is in place (as required by the Sustainable Transport Policy) Exempt electric vehicles from planned increases in vehicle emissions duty Work with Jersey Electricity to agree a scale-up plan for electric vehicle charging infrastructure that: subsidises the cost of domestic electric charging infrastructure continues to deliver off-street electric vehicle charging points across the Island trials on-street charging infrastructure to identify the right solution for Jersey, including exploring consequential amendments to planning regulation where appropriate improves the visibility of charger availability across the Island 		
TR2	Vehicle scrappage incentive	Introduce a vehicle scrappage scheme to target the most polluting vehicles. Petrol or diesel cars or small vans that are over 10 years old (manufacture date 2012 or earlier) will receive a £500 green living credit if they are scrapped.		
TR3	Supporting transition fuels	Bring forward a proposal in the Government Plan 2022 to subsidise the rate of fuel duty charged on second generation renewable diesel, by 32ppl until 2026.		
TR4	VED incentive	Apply no level of Vehicle Emissions Duty on zero carbon vehicles and increase Vehicle Emissions Duty on all domestic petrol and diesel vehicles each year until at least 2030.		
TR5	End the importation and registration of petrol and diesel vehicles that are new to the Island from 2030	Bring into force legislation that prohibits the importation and registration of petrol and diesel cars and small vans that are new Island in 2030 at the latest and will seek to extend this to other categories of vehicle at subsequent dates between 2030 and 2040.		
TR6	Review Roads Law	Review the legal framework for Jersey's highways to ensure they are fit to safely enable low-carbon, sustainable and modern travel and transport.		
TR7	"Green" number plates for electric vehicles	Ensure that, from the 1 January 2023, owners of electric vehicles will have the option to display a number plate that features a green marker as a visible signifier of their contribution tackling the climate emergency.		



TR8	Sustainable Transport Roadmap	Complete the rapid plans required by the Sustainable Transport Policy and, drawing on these, publish a Sustainable Transport Roadmap in 2022.	
TR9	Bus service development trials	Implement a programme of bus service development trials 2022-2024.	
TR10	Active Travel	Implement further active travel initiatives in 2022, ahead of development of the full Sustainable Transport Policy.	
TR11	Emissions from aviation and maritime transport	Work with the Ports of Jersey to reduce emissions from aviation and marine transport, in line with the Jet Zero scenario 2 emissions targets and obligations under the MARPOL treaty	
		Heating Policies	
#	Policy title	The Government of Jersey will	
HT1	Supporting low- carbon heating systems and home insulation	Provide a subsidy to enable both householders and commercial businesses to transition to low-carbon heating systems. The scheme will run from 2022 until 2025.	
HT2	Update building bye- laws	Bring into force legislation that updates current building regulations and sets increased energy efficiency and carbon emission standards of new and existing domestic and commercial buildings and prohibits new fossil fuel boilers being installed in any property after 1st January 2026.	
НТ3	Energy Performance Certificates	Develop and introduce legislation to make both domestic and commercial Energy Performance Certificates mandatory at the point of sale and rental by the end of 2024, with minimum standards being brought in sequentially from 2026. Government will also ensure that Energy Performance Certificates are displayed on public buildings by 2025.	
		Other Emissions Policies	
#	Policy title	The Government of Jersey will	
OE1	Promoting low-carbon lifestyles	Develop and deliver an education and engagement programme to help Islanders to reduce their off-Island (scope 3) emissions.	
OE2	Construction sector emissions	Work closely with the Jersey Construction Council, Association of Jersey Architects, and others in the industry to drive-down the whole life carbon impact of the Island's construction sector, including considering the use of all available policy levers. Government will also adopt higher construction standards for all public construction projects.	



OE3	Agricultural sector emissions	Working with key stakeholders from the agricultural sector, develop and implement a new net-zero Rural Economy Strategy, in 2022, that aims to support the agricultural sector to continue to reduce emissions from their activities, and to adapt to the effects of climate change. The Rural Economy Strategy will address both agriculture and aquaculture.	
OE4	Emissions from waste and water management	Make on-Island solid waste disposal net-zero by 2040. To achieve this, a net-zero waste strategy will be developed by 2025. Work to explore opportunities for carbon capture from the existing electricity from waste plant will begin in 2022. Work with Jersey Water to prepare a net-zero water management strategy by 2024, which incorporates existing planned work, in order to inform the next Island Plan.	
OE5	F-Gas emissions	Seek extension of the UK's compliance with the Kigali amendment to Jersey by 2025	
OE6	Delivering a sustainable finance framework	Continue to develop a sustainable finance framework that supports decarbonisation initiatives in Jersey and around the world, recognising that the way in which Jersey can deliver the biggest impact to global climate change is through its finance sector.	
Enabling Policies			
#	Policy title	The Government of Jersey will	
# EN1	Policy title Decarbonising government	The Government of Jersey will Reduce its operational emissions in line with the Paris Agreement trajectory established by Strategic Policy 1. A new decarbonisation unit will be established in 2022 to develop a comprehensive action plan, which will set quantified emissions reduction targets in Departmental Operational Business Plans from 2023. Second Generation Renewal Diesel will be phased into the government of Jersey fleet from 2022, and a range of exemplar projects undertaken.	
	Decarbonising	Reduce its operational emissions in line with the Paris Agreement trajectory established by Strategic Policy 1. A new decarbonisation unit will be established in 2022 to develop a comprehensive action plan, which will set quantified emissions reduction targets in Departmental Operational Business Plans from 2023. Second Generation Renewal Diesel will be phased into the government of Jersey	



EN4	Delivering the COP26 education pledge	Deliver the COP26 education pledge by embedding high quality climate education into education and learning.
EN5	Blue carbon, biodiversity and sequestration	Promote Jersey as a centre of excellence for blue carbon sequestration, with an ambition to double the extent of sea grass beds and recognise that tackling the climate emergency by using nature-based solutions that also address the biodiversity crisis provides multiple benefits for our land, air and sea.
EN6	Carbon offsets	Undertake the necessary work to ensure Jersey can become carbon neutral by 2030, through the delivery of ambitious carbon reductions policies, balanced with purchased offsets. A decision on becoming carbon neutral will be taken no later than 2028.

10.5 Funding for the 2022-25 delivery plan comes from a range of existing government budgets (as identified in the <u>Appendix 2</u> papers), as well as the full allocation of the available Climate Emergency, as set out in Strategic Policy 3 and detailed in the table at Figure 22 below.

#	Policy name	CEF Total	Deliverables
TR1	Speeding up adoption of electric vehicles	£6,122,393	1606 electric vehicle incentives 1031 electric vehicle charger incentives
TR2	Vehicle scrappage incentive	£410,000	500 vehicle scrappage incentives
TR3	Supporting transition fuels	£2,981,380	9,269,939 litres of subsidised biodiesel
TR4	Vehicle Emissions Duty incentive	Business as Usual (BAU)+	Disincentivising registration of high emission vehicles
TR5	End the importation and registration of petrol and diesel vehicles that are new to the Island from 2030	BAU+	Ban effective 1st January 2030
TR6	Roads Law Review	BAU+	Provide framework for safe and legal use of personal light electric vehicles, shared transport services etc.
TR7	"Green" number plates for electric vehicles	BAU+	Green registration number plates for all electric vehicle registrations from 2022
TR8	Sustainable Transport Roadmap	BAU+	Delivery of Active Travel, Bus Development Plan, Parking Plan and Mobility as a Service framework
TR9	Bus service development trials	£1,500,000	Increased bus frequency and subsidised fares
TR10	Active travel	£300,000	Total cost TBC in Sustainable Transport Policy



TR11	Emissions from aviation and marine transport	BAU+	
HT1	Supporting low-carbon heating systems and home insulation	£5,706,227	998 domestic fuel switches
HT2	Update building bye-laws	BAU+	Replacement fossil fuelled heating systems stopped from 1.1.2026
HT3	Energy Performance Certificates	£285,000	825 Energy audit incentives completed by end of 2024
OE1	Promoting low-carbon lifestyles	£200,000	Sector specific campaigns such as those for agriculture, hospitality and construction
OE2	Construction sector emissions	BAU+	
OE3	Agricultural Sector Emissions	BAU+	Emission reductions to be set out in Rural Economy Strategy revision, published 2022
OE4	Emissions from waste and water management	BAU+	
OE5	F-gas emissions	BAU+	
OE6	Delivering a sustainable finance framework	£60,000	
EN1	Decarbonising Government of Jersey	£1,260,000	Set up of decarbonisation unit, initial projects and deliver Action Plan
EN2	Create a Carbon Neutral Alliance	£500,000	Community grants for decarbonisation projects
EN3	Developing supply chains and on-Island skills for a sustainable economy	BAU+	Delivery of sector specific training
EN4	Delivering the COP26 education pledge	£200,000	By 2025 climate integrated into curriculum, resources, materials, teacher training delivered
EN5	Blue Carbon, biodiversity and sequestration	£1,325,000	Delivery of environmental protection projects agreed in Government Plan and blue carbon development
ENIC	Carbon offsets	BAU+	
EN6	Strategic Policies	£1,200,000	
	Regulatory and Enabling	£950,000	Series of regulatory and enabling action as set out in Part C
	TOTAL	£23,000,000	

Figure 22: Summary of policies funded under 4-year Climate Emergency Fund budget 2022-2025.

11. Governance and next steps

Developing the implementation programme

- 10.6 Figure 23 below seeks to show how the policies set out in the delivery plan will be developed into an implementation programme through a high-level programme design phase and subsequent operational design and delivery.
- 10.7 Given the need to move quickly into delivery, high level programme design for the current package of carbon reduction policies (2022-2026) will run in parallel with the Carbon Neutral Roadmap public consultation, while ensuring that actual implementation remains contingent on final consideration by the States Assembly in Spring 2022.
- 10.8 The programme design phase will need to address series of governance issues, including:
 - designing incentive payment schemes to high standards and in order that they ensure a Just Transition and are compliant with the Public Finance Manual;
 - exploring whether Government should commission or directly deliver many of the policies, particularly the provision of incentives;
 - and how the proposed small grants scheme might be effectively implemented.

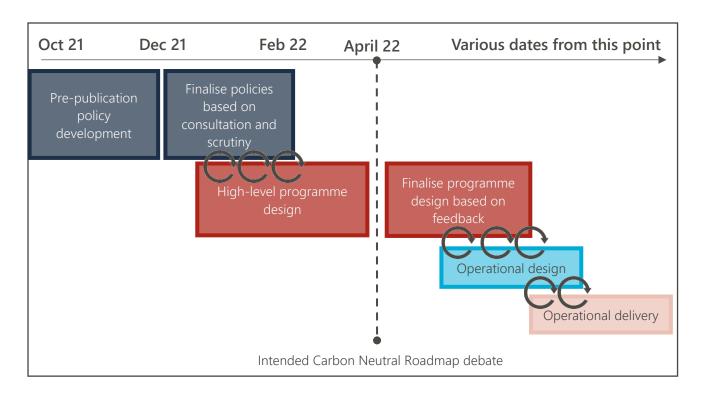


Figure 23: Policy design and implementation process.

Governance

- 10.9 The Carbon Neutral Roadmap will have wide-ranging implications across Jersey. Strong governance will be required to oversee the delivery of policies and to continue to anchor and strategically align the many networks and groups that will need to work together.
- 10.10 The Minister for the Environment, on behalf of the Council of Ministers, has overall policy responsibility for the Climate Emergency Fund. High level Climate Emergency Fund spend is agreed by the States Assembly via the Government Plan or a carbon neutral delivery plan.
- 10.11 The Minister for Treasury and Resources has ministerial responsibility for setting an appropriate investment strategy for the Climate Emergency Fund, and the Revenue Policy Development Board⁶⁷ oversee the review of fiscal levers work to further fund the Climate Emergency Fund and provide recommendations.
- 10.12 Three Project Boards are in place, on behalf of Accountable Officers, to review and agree the detail of individual projects:
 - Carbon Neutral Roadmap Project Board provides governance and oversight of all Climate Emergency Fund funded policy development projects as well as the development and delivery of the Carbon Neutral Roadmap and resource plan.
 - Sustainable Transport Implementation Board provides governance and oversight of the Sustainable Transport Plan, ensuring both the policy and engineering programme are delivered as planned.
 - **Biodiversity Crisis Project Board** provides governance and oversight of delivery for all environmental protection projects funded by the Climate Emergency Fund.
- 10.13 All Climate Emergency Fund funded projects abide by the requirements of the Government of Jersey Project Delivery Framework defined by the Corporate Project Management Office.

⁶⁷ Revenue Policy Development Board (gov.je)



Climate Emergency JSY

Appendices

Appendix 1 – List of published evidence base

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

Explore Phase	
Climate Conversations - explore phase ideas and comments submitted through dialogue	
Citizens' Assembly on Climate Change	<u>-</u>
(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	July 2021
In-Committee Debate	
Carbon Neutral Jersey (Consideration "in-committee")	July 2021
[Note this includes a read statement from Jersey Youth Parliament on the recommendations made by the Citizens' Assembly on Climate Change]	July 2021
Recording of States Assembly (Morning Session)	July 2021
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 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	·
Impact Assessment: United Nations Convention of the Rights of the Child	
Additional Government of Jersey Docume	nts
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
Rural Economy Strategy 2017 to 2021; Towards Sustainable Farming	February 2017
Multilateral Agreements	
Bern Convention on the Conservation of European Wildlife and Natural Habitat	ts_
Convention on International Trade in Endangered Species of Wild Fauna and Fl	lora (CITES)
Convention on Biological Diversity	
Ramsar agreement	
Oslo and Paris Convention for the Protection of the Marine Environment of the	North-East Atlantic (OSPAR)
Evidence Presented to the Citizens' Assembly on Clir	mate Change
Citizens' Assembly business written submissions	
Presentations	
Welcome. Presentation by Deputy Jess Perchard, Assistant Minister for Environi	ment 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
<u>Jersey's changing climate.</u> 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
<u>Jersey's transport sector emissions.</u> Presentation by Kathryn Hampshire, Aether	1 April 2021
<u>Transport in Jersey.</u> 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
<u>Fair decarbonisation of transport.</u> 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
<u>Disability and transport</u> . Presentation by Jim Hopley, Honorary Chairman Jersey Disability Partnership	1 April 2021
What is a carbon offset? Presentation by Hilary Jeune, Valuemetrix	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



<u>Current Government of Jersey initiatives to reduce building emissions.</u> 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 *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.	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	May 2021
Concluding and prioritising recommendations. Presentation by Steve Skelton, Group Director, Strategy and Innovation, Government of Jersey	May 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
Jersey's greenhouse gas emissions reporting Carbon Neutral Strategy	
	18 March 2021
Carbon Neutral Strategy	18 March 2021 18 March 2021
Carbon Neutral Strategy An overview of Jersey's energy market	18 March 2021 18 March 2021 18 March 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change	18 March 2021 18 March 2021 18 March 2021 18 March 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change How do we make decarbonisation fair?	18 March 2021 18 March 2021 18 March 2021 18 March 2021 18 March 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change How do we make decarbonisation fair? How do we change behaviour?	18 March 2021 1 April 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change How do we make decarbonisation fair? How do we change behaviour? Carbon offsetting	18 March 2021 1 April 2021 1 April 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change How do we make decarbonisation fair? How do we change behaviour? Carbon offsetting Carbon sequestration	18 March 2021 1 April 2021 1 April 2021 1 April 2021
Carbon Neutral Strategy An overview of Jersey's energy market Biodiversity and climate change How do we make decarbonisation fair? How do we change behaviour? Carbon offsetting Carbon sequestration Key emissions sector: transport	18 March 2021 1 April 2021



Appendix 2 – Policy Pack

Structure

1.1 As set out in the table below, the policies in the delivery plan are ordered by the source of emissions they seek to address, with a further grouping that includes policies to build our capacity and capability to continue to decarbonise at greater breadth and pace in future years.

Initials	Category	Explanation
TR0	Transport policies	Transport emission reduction policies
НТ0	Heating policies	Heating emissions reduction policies
OE0	Other on and off-Island emissions policies	Policies that tackle other on and off-Island emissions
EN0	Enabling policies	Policies that enable delivery and implementation and support the systemic change needed to make a just transition to a low-carbon economy

Figure 24: Summary of policy categories

- 1.2 Each policy is supported by a range of detailed analysis and impact assessments, which is provided here. This includes a summary of the policy context and intent, identified SMART objectives, assumptions and dependencies, and relevant financial information.
- 1.3 All policies remain subject to change following public consultation.

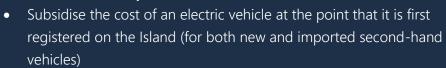
TR - Transport policies

#	Policy	Summary Deliverables		4-Year Budget	Carbon	MCA
TR1	Speeding up adoption of electric vehicles	 Up to £3.5k purchase incentive on electric vehicles under £30k Incentive reduces as cost of electric vehicles reduces 	1606 electric vehicles subsidised	£5,613,692	4.2	3.4
		£350 incentive for chargersRegister of approved installers	1031 chargers subsidised	£508,701	n/a	n/a
TR2	Vehicle scrappage incentive	 £500 'green living credit' to incentivise scrapping the most polluting vehicles Credit can be used on public transport, shared mobility or to buy/access bikes etc. 	500 old vehicles removed from the Island	£410,000	4.2	3.45
TR3	Supporting transition fuels	32ppl subsidy for second generation renewable diesel	9,269,939 litres of subsidised biodiesel	£2,981,380	4	3.42
TR4	Vehicle emissions duty incentive	Legislation for a phased approach of increasing the level of vehicle emissions duty on all petrol and diesel vehicles	n/a	BAU+	4	2.93
TR5	End the importation and registration of petrol and diesel vehicles that are new to the Island from 2030	End the importation/ registration /sale of petrol and diesel vehicles that are new to the Island from 2030	n/a	BAU+	4.2	3.34
TR6	Review Roads Law	To provide a framework for safe and legal use of personal light electric vehicles, shared transport services, autonomous vehicles and other sustainable transport solutions		BAU+	n/a	n/a
TR7	Green number plates for electric vehicles	Visible recognition of switch to low-carbon transport	n/a	BAU+	n/a	n/a
TR8	Sustainable Transport Roadmap	 Active Travel – costed and prioritised plan Bus service development plan – Bus contact 	n/a	GP 23	n/a	n/a

		 Parking plan – Revenue Policy Development Board company commuter parking levers Mobility as a Service - framework 				
TR9	Bus service development trials	 Incentivise behaviour change and modal shift Trial projects to inform revised bus contract development in 2024 	n/a	£1,500,000	n/a	n/a
TR10	Active Travel	 Active Travel infrastructure improvements Trial projects to inform delivery of Sustainable Transport Policy rapid plan 	n/a	£300,000	n/a	n/a
TR11	Emissions from aviation and marine transport	 Describes the emissions trajectory for aviation and marine transport and expectations about future technology improvements Jointly developed with Ports of Jersey 	n/a	BAU+	n/a	n/a

TR1 – Speeding up adoption of electric vehicles

The Government of Jersey will:





- Continue to offer subsidised public parking until a new parking plan is in place (as required by the Sustainable Transport Policy)
- Exempt electric vehicles from planned increases in vehicle emissions duty
- Work with Jersey Electricity to agree a scale-up plan for electric vehicle charging infrastructure that:
 - o subsidises the cost of domestic electric charging infrastructure
 - o continues to deliver off-street electric vehicle charging points across the Island
 - trials on-street charging infrastructure to identify the right solution for Jersey, including exploring consequential amendments to planning regulation where appropriate
 - o improves the visibility of charger availability across the Island

The key aim of this policy is to facilitate and accelerate the shift from petrol and diesel vehicles to electric vehicles. In order to achieve a 68% reduction in the Island's total carbon emissions by 2030 the target is to shift 67% of the Island's fleet away from fossil-fuels by 2030, recognising that the majority of this shift will be achieved through an increase in use of electric vehicles, alongside investment in sustainable transport to support Islanders to travel in other ways.

Transition to electric vehicles in Jersey should be rapid. In Jersey, distances travelled are small and range anxiety will be less than in other jurisdictions, and the Island already benefits from around 100 publicly available charging points in public car parks, Parish Halls and some retail locations.

Electric vehicle purchase subsidy

Electric vehicles currently cost more to purchase than petrol or diesel equivalents. This policy proposes the provision of a subsidy of 35% of the purchase costs of the electric vehicle, or £3,500 (whichever is lower) at the point that it is first registered on the Island (for both new and imported second-hand vehicles, and for both domestic and commercial vehicles). The subsidy will only be available for vehicles with a purchase price under £30,000. For every electric vehicle subsidised, a petrol or diesel vehicle must be deregistered from the Island.

The subsidy is expected to run from 2022 to the end of 2027. The maximum value of the subsidy will be reduced periodically starting at £3,500 in 2022 and expected to reduce to £2,000 by 2027.



Reductions will be informed by evidence of policy impact and market conditions and will be removed before this date if price parity between electric vehicles and petrol/diesel equivalents is reached earlier. The subsidy will be removed no later than the date at which legislation comes into force prohibiting the importation, registration and/or sale of petrol and diesel vehicles new into the Island.

Further details, to be confirmed in the programme design phase following consultation with Islanders, motor industry and others. These include vehicle and other eligibility criteria, application and deregistration processes, and how the scheme will be administered.

Charging infrastructure scale-up plan

One of the cited barriers to the uptake of electric vehicles is range anxiety and lack of charging infrastructure. The barrier is not just the costs of the chargers and their installation but a lack of information/understanding of chargers, how they are installed and operated and who can install them.

Most drivers will be looking to charge where they are parked overnight. For around 65% of the Island this could be in off-street parking areas at private domestic or commercial properties. However, this will not be an option for all Islanders or for those visiting the Island, and the network of public charging points will need to be increased to support this.

The scale-up plan, which Government will develop in partnership with Jersey Electricity, will seek to address the cost by offering £350 towards an electric charger and its installation in existing domestic properties. The incentive will be able to be used to access a Competent Person's Scheme from a register of those suitably qualified to install them in the Island.

It will also address the information gap and the 'hassle factor' of organising a charger installation and of locating and accessing public charging points, and trial on-street charging infrastructure to identify the right solution for Jersey, including exploring consequential amendments to planning regulation where appropriate.

Other incentives

The Government will also:

- Exempt electric vehicles from planned increases in vehicle emissions duty (policy TR5)
- Continue to offer subsidised public parking for electric vehicles until a new parking plan is in place as required by the Sustainable Transport Policy⁶⁸

SMART objectives

1. Establish and commence a subsidy for battery electric vehicle sales in Jersey in 2022

⁶⁸ Sustainable Transport Policy (gov.je)



- 2. Stimulate the accelerated turnover of the Island's fleet from approximately 900 electric vehicles registered in 2021 to approximately 59,000 by 2030
- 3. Develop a scale-up plan for electric vehicle charging infrastructure in 2022
- 4. In 2022, establish a register of Competent Person's Scheme for electric charger installers and/or a register of suitably qualified installers locally
- 5. In 2022, introduce an incentive scheme offering £350 to householders towards the cost of chargers and their installation in their homes

Assumptions

- The Jersey Mobility Hierarchy (set out in the Sustainable Transport Policy⁶⁹) seeks to switch many journeys to public transport/active travel but does acknowledge the ongoing role that private vehicles will play
- Any incentive for electric vehicles would be discontinued at the point of price parity to petrol/diesel vehicles and/or when the ban on the new registration of petrol/diesel vehicles comes in
- Price parity between standard electric vehicles and petrol and diesel equivalents anticipated by 2027

Dependencies

- That sufficient vehicle charging points will be in place in the Island to service the car fleet
- The motor industry will be able to ensure the supply for electric vehicles meets demand
- The vehicle maintenance industry will pivot to ensure availability of electric vehicle servicing
- Appropriate level of skilled workforce to install chargers.

CEF 4-Year budget	Total 2022-2025	Deliverables
Electric vehicle purchase incentive scheme	£5,613,692	1606 electric vehicles subsidised
Charger incentive scheme	£508,701	1301 chargers subsidised

⁶⁹ Sustainable Transport Policy (gov.je)



TR2 - Vehicle scrappage incentive

The Government of Jersey will:

Introduce a vehicle scrappage scheme to target the most polluting vehicles. Petrol or diesel cars or small vans that are over 10 years old (manufacture date 2012 or earlier) will receive a £500 green living credit if they are scrapped.



This policy will facilitate the modal shift from petrol and diesel vehicles to active travel and public transport and electric vehicles across domestic, commuting and commercial fleets by encouraging Islanders to get rid of the oldest, most polluting and most expensive cars to run. It also supports green travel initiatives locally and support new green businesses as the develop. Petrol or diesel cars or small vans that are over 10 years old (manufacture date 2012 or earlier) will receive a £500 green living credit if they are scrapped. A control mechanism will be established to ensure the vehicle cannot be replaced with a petrol or diesel vehicle.

The green living credit can be spent at registered retailers/installers for the following types equipment (list not exhaustive):

- public transport credit/season tickets
- electric/pedal bikes
- electric cars
- mopeds or other vehicles
- low/zero carbon heating systems
- energy efficiency measures
- renewable energy
- battery storage and electric vehicle charge points

Credits can only be used in accredited/registered retailers in Jersey. The individual will pay the retailer the total amount minus the voucher and provide the validated voucher for the balance of payment. The retailer will then claim the voucher amount back from the Government of Jersey.

SMART objectives

- 1. Get 500 of the worst performing petrol and diesel cars off the Island between 2022-2025
- 2. Increase the number of people choosing not to replace their vehicle but opting for public transport and active travel as an alternative

Assumptions

• The introduction of periodic testing of vehicles will increase costs associated with vehicle maintenance for some vehicle owners



• Providing this incentive encourages them to replace their petrol/diesel vehicle with an alternative form of transport.

Dependencies

• A comprehensive information campaign will need to accompany the initiative clearly explaining the lifetime/running costs of different types of vehicle and providing a comparison to active travel/public transport.

CEF 4-Year budget	Total 2022-2025	Deliverables
Vehicle scrappage incentive	£410,000	500 old vehicles removed from Island

TR3 - Supporting transition fuels

The Government of Jersey will:

Bring forward a proposal in the Government Plan 2022 to subsidise the rate of fuel duty charged on second generation renewable diesel, by 32ppl from 2023 until 2026.



To encourage Islanders to replace traditional fossil-fuel diesel with second-generation renewable diesel (SGRD) in road transport.

- In Government Plan 2023-2026, include proposal to subsidise fuel duty on second generation renewable diesel and replace lost revenue through the Climate Emergency Fund
- Subsidy to be reviewed by 2025
- To establish a market for low-carbon transition fuels that will also serve heavier vehicles, and to reduce carbon emissions in the near term without compromising the embedded carbon in existing diesel vehicles

SMART objectives

- 1. By 2030, or before, all remaining diesel vehicles assumed to be using second generation renewable diesel
- 2. By 2022, to agree a subsidy level to increase affordability of the product to be applied through fuel duty
- 3. By 1 January 2023, implement changes to fuel duty
- 4. Ahead of Government Plan 2026-2029, review efficacy of the subsidy considering evidence; individual and market behaviour; and progress with related technologies and sustainable transport options

Assumptions

- Cost of SGRD remains stable
- Based on subsidy of 32ppl
- Additional annual cost per vehicle of using SGRD anticipated to be £96
- Cost of using SGRD will be 10% more than diesel
- Currently cost of using SGRD is 36% more than diesel
- Based on total of 15M litres of diesel per annum and increase in SGRD take up over 7 years:
 - o 20% in 2023,
 - o 25% in 2024,
 - o 35% in 2025;
 - o 50% in 2026 to 2030
- Market availability



Dependencies

- The cost of SGRD doesn't significantly increase to a point where any incentive price provided becomes ineffective
- As the use of SGRD grows, the level of revenue generated from fossil fuels reduces

CEF 4-Year budget	Total 2022-2025	Deliverables
Second generation renewable diesel subsidy	£2,981,380	9,269,939 litres of subsidised biodiesel

TR4 - Vehicle Emissions Duty incentive

The Government of Jersey will:

Apply no level of Vehicle Emissions Duty (VED) on zero carbon vehicles and increase VED on all domestic petrol and diesel vehicles each year until at least 2030.



In order to incentivise the purchase of electric vehicles, they will continue to attract no Vehicle Emissions Duty (VED).

The level of VED applied to the importation of petrol and diesel vehicles will continue to increase each year in order to become a significant factor in purchasing decisions. Petrol and diesel vehicles will continue to attract VED regardless of how they are fueled once in the Island. Commercial petrol and diesel vehicles will continue to receive the current relevant dispensations from VED. However, as and when low-carbon alternatives for commercial vehicles are available, their uptake will be incentivised through differential rates of VED. Until price parity is achieved between low-carbon commercial petrol and diesel commercial vehicles, consideration of the impact on the economy will be made in applying this policy.

VED bands will be increased at different rates, with larger proportionate increases for more polluting private vehicles. Increases will be set out in the Government Plan and will be based on achieving a range of policy objectives, including:

- Incentivising the uptake of low-carbon vehicles by closing the price gap sooner
- Providing a 'backstop' policy to ensure very minimal importation of petrol and diesel vehicles
 once market alternatives are available but ahead of the date after which new registrations are
 not allowed

The excess revenue would be deposited in the Climate Emergency Fund.

SMART objectives

Substantial annual increases in VED to be set out in each Government Plan

Assumptions

• The Jersey Mobility Hierarchy (set out in the Sustainable Transport Policy⁷⁰) seeks to switch many journeys to public transport/active travel but does acknowledge the on-going role that private vehicles will play.

⁷⁰ Sustainable Transport Policy (gov.je)



• A rate of VED sufficient to dissuade purchasers from petrol and diesel engines can be achieved

Dependencies

- Tax Policy
- Government Plan process

Support for this work will be required from SPPP, IHE and Treasury departments.

TR5 – End the importation and registration of petrol and diesel vehicles that are new to the Island from 2030



The Government of Jersey will:

Bring into force legislation that prohibits the importation and registration of petrol and diesel cars and small vans that are new Island in 2030 at the latest and will seek to extend this to other categories of vehicle at subsequent dates between 2030 and 2040.

Transport is the largest source of on-Island greenhouse gas emissions. In order to meet Jersey's ambition to have net-zero greenhouse gas emissions by 2050 we need to phase out the use of all petrol and diesel vehicles from the Island's roads by 2050.

To do this we need to stop vehicles that are new to the Island coming in well in advance of this date, bearing in mind that a car may have a useful life of over 15 years in the Island. The UK has announced a ban on the manufacture and sale of petrol and diesel vehicles from 2030 (with hybrids from 2035) and the EU an effective ban from 2035. At COP26 the Glasgow breakthrough statement on road transport agreed by participating nations was that 'Zero emission vehicles are the new normal and accessible, affordable, and sustainable in all regions by 2030. 77 The legislation change is supported by financial incentives and disincentives set out in other policies that will accelerate the natural transition away from petrol and diesel cars.

SMART objectives

- 1. To prevent the new importation, sale and registration of petrol and diesel cars and small vans that are new to Jersey from 1 January 2030 at the latest
- 2. Legislation to be expanded between 2030 and 2040 to cover the additional vehicle types (including hybrids)
- 3. Target is for petrol and diesel vehicles to make up just:
 - 66% of the fleet by 2025
 - 33% by 2030
 - 22% by 2035
 - 11% by 2040
 - 1% by 2045
- 4. To ensure that Jersey does not become a dumping group for new petrol and diesel cars that cannot be sold in the UK or EU due to the bans brought in there

⁷¹ Zero Emission Vehicle Pledges Made at COP26 (UNFCCC)



Assumptions

- The Jersey Mobility Hierarchy (set out in the Sustainable Transport Policy⁷²) seeks to switch many journeys to public transport/active travel but does acknowledge the ongoing role that private vehicles will play
- Cars and small vans make up approximately 80% of the Island's current fleet

Dependencies

- Availability of alternative vehicles
- Availability of public charging infrastructure
- Incentive scheme to cover the cost differential between petrol and diesel and electric vehicles to the point of price parity

Support for this work will be required from SPPP, IHE and law drafting departments.

^{72 &}lt;u>Sustainable Transport Policy (gov.je)</u>



TR6 - Roads Law Review

The Government of Jersey will:

Review the legal framework for Jersey's highways to ensure they are fit to safely enable low-carbon, sustainable and modern travel and transport.



Dependencies

• Road user charging, as set out in the Strategic Policy 3

Delivery targets	2022	2023	2024	2025	2026-2029
Policy development	Х	Х	Х		
Draft, finalise and approve legislation			Х	X	
New legislation in place					2026-27

Support for this work will be required from SPPP, IHE and law drafting departments.

TR7 - "Green" number plates for electric vehicles

The Government of Jersey will:

Ensure that, from the 1 January 2023, owners of electric vehicles have the option to display a number plate that features a green marker as a visible signifier of their contribution to tackling the climate emergency.



The green signifier may be extended to number plates for other types of zero emission vehicle in future.

SMART objectives

1. To provide the option of number plate with a green signifier for every newly registered electric vehicle from 2023

Assumptions

• Law drafting resource is available to make required changes to Orders

Dependencies

• Change to legislation to ensure the green plates could only be used for electric vehicles

Delivery targets	2022	2023	2024	2025
Necessary changes to secondary legislation	×			
"Green" number plates available		Х		

Support for this work will be required from SPPP and IHE departments.



TR8 – Sustainable Transport Roadmap

The Government of Jersey will:

Complete the rapid plans required by the Sustainable Transport Policy and, drawing on these, publish a Sustainable Transport Roadmap in 2022 that:



- Pulls together available evidence and views from Islanders and stakeholders
- Describes the long-term shifts needed to achieve the States Assembly's vision 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"
- Identifies new funding streams to support investment in new sustainable transport infrastructure
- Provides a clear programme of delivery

A Second Interim Report on the Sustainable Transport Policy⁷³ (STP) is published alongside the Carbon Neutral Roadmap in December 2021. It provides an update on progress in each area of the STP since the first interim report, issued in November 2020.

Delivery targets	2021	2022	2024	2025
Sustainable Transport Policy Update published	Dec 2021			
Sustainable Transport Roadmap published		X		

Support for this work will be required from SPPP and IHE departments.

^{73 &}lt;u>Second Interim Report on the Sustainable Transport Policy (gov.je)</u>



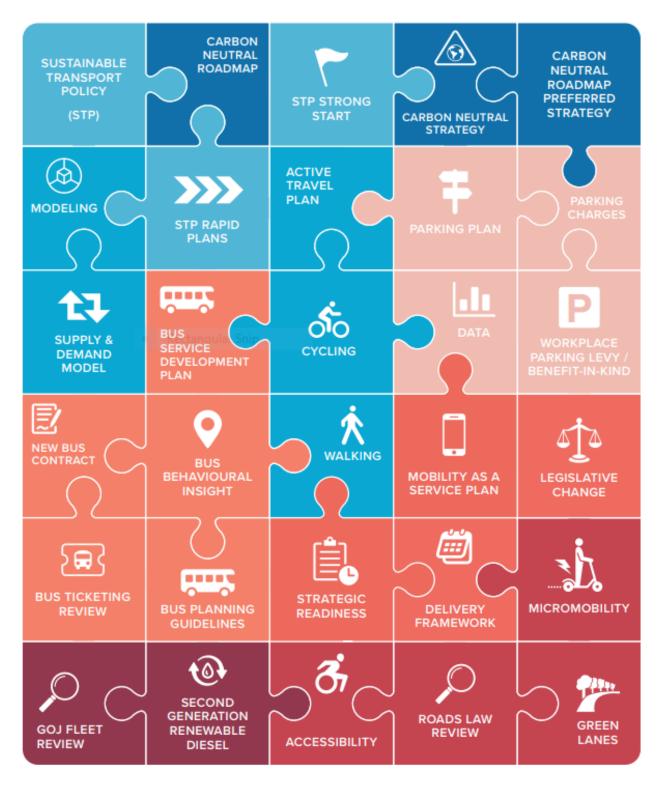


Figure 26: Illustration of different elements of Sustainable Transport work stream

TR9 – Bus service development trials

The Government of Jersey will: Implement a programme of bus service development trials 2022-2024.



The trials will be informed by work on the Bus Service Development Plan, which is required by the Sustainable Transport Policy⁷⁴ (STP) and will be published in 2022.

That Plan will provide a blueprint for a more comprehensive, accessible and decarbonised public transport system for the Island, which will be reflected in the re-commissioning of the Public Bus Service in 2024.

The programme of trials will be designed in conjunction with Liberty Bus and based on existing insights into why people in Jersey do and do not choose to take the bus. Where necessary, trials will be given effect as contract variations, and may include:

- Increased frequency services on some routes
- Changes to pricing and/or ticketing
- Promotion of bus use within workplace travel plans
- Exploration of demand responsive service options
- Use of low-carbon energy solutions

SMART objectives

1. A programme of bus service development trials that provides evidenced insights as to what will best increase use of the bus service in Jersey – designed in 2022 and delivered by 2024

Assumptions

• Trials can be accommodated within the existing bus contract and, where necessary, driver and vehicle resources.

Dependencies

Availability of appropriate vehicles and drivers

Delivery targets	2022	2023	2024	2025
Programme of trials designed	Х			
Programme of trials implemented	X	Х	Х	
CEF 4-Year budget	Total 2022-2025			
	£1,500,000			

⁷⁴ Sustainable Transport Policy (gov.je)



TR10 - Active travel

The Government of Jersey will: Implement further active travel initiatives in 2022, ahead of development of the full Sustainable Transport Roadmap.



The Sustainable Transport Strong Start delivery plan⁷⁵ has delivered a range of active travel improvements; including covered cycle parking, extensions to and adjustments to existing cycle lanes; provision of new cycle lanes; and *safe routes to school* enhancements.

An Active Travel Plan is being developed as required by the Sustainable Transport Policy⁷⁶ (STP) and will be published in 2022. That Plan will provide a blueprint for the Island's future active travel network and associated policies and investment. In advance of this, interim funding is provided to continue the delivery of key projects.

Funded projects will be confirmed subject to capital programme governance. They will be informed by the STP interim update (2021) and will complement new public realm investment of £1M per year set out in the Government Plan 2022-2025.

SMART objectives

1. Implement further active travel initiatives in 2022, ahead of development of the full Sustainable Transport Policy.

Assumptions

• Initiatives can be accommodated within capital programme

Delivery targets	2022	2023	2024	2025
Active Travel initiatives designed	Х			
Active Travel initiatives delivered	Х			
CEF 4-Year budget	Total 2022-2025			
	£300,000			

⁷⁶ Sustainable Transport Policy (gov.je)



⁷⁵ The Sustainable Transport Policy Strong Start delivery plan (gov.je)

TR11– Emissions from aviation and maritime transport

The Government of Jersey will:

Work with the Ports of Jersey to reduce emissions from aviation and marine transport, in line with the Jet Zero scenario 2 emissions targets and obligations under the MARPOL treaty.

Decarbonising air travel requires global coordination and action.

Our ambition to decarbonise every sector of our economy includes aviation. Despite aviation being one of the most challenging sectors to decarbonise, it is important that it plays its part to ensure Jersey reaches net-zero.

For the aviation industry to become net-zero by 2050, the commitment of all parts of the supply chain is needed, to collaborate, invest and innovate to decarbonise air travel. This will include aircraft manufacturers, fuel suppliers, airlines, airports, governments, and others working together to reduce emissions; be that from the aircraft that are flown, the infrastructure that supports the industry or the policy framework that they require suppliers and customers to adhere to.

We recognise that aviation emissions are a global issue, and that Jersey cannot act in isolation. We will coordinate closely with the UK Aviation industry and government, to support its leading role in the work of the International Civil Aviation Organisation (ICAO) to reduce emissions from international aviation.

As an Island, we rely on air connectivity both economically and as a community

Air connectivity is critical to Jersey's economy and the quality of life for Islanders. The tourism sector alone contributes £372 million per year in economic benefit Gross Value Added (GVA) and provides nearly 5,000 jobs (11.5% of all employment)⁷⁷. Jersey Finance has also highlighted air connectivity as a key source of competitive advantage for the finance sector.

Islanders depend on air connectivity to visit friends and relatives in the UK, to access specialist as well as emergency medical care, university education, travel on holiday and, in many cases, fulfil job roles.

It is essential that measures to deliver the requirement to decarbonise aviation, also allow us to maintain and ideally enhance connectivity. It is important that Islanders have access to affordable flights allowing them to enjoy holidays, visit friends and family and to travel for business. Being a leader

⁷⁷ The Economic Contribution of Tourism to Jersey: The Productivity Opportunity - A Report For Visit Jersey (Tourism Economics)



in the development of sustainable aviation will not just support our net-zero ambitions but also creates opportunities to open our economy to innovation in emerging sustainability industries.

Working together to find a solution

A coordinated, holistic and multi-faceted Government policy framework will play a key role to enable the transition to net-zero aviation by 2050. Working closely with Ports of Jersey and others, the key areas of focus will include:

- Improving operational efficiency across the aviation supply chain
- Providing appropriate infrastructure to facilitate the move to sustainable aviation fuels
- Encouraging airlines to transition to sustainable aviation technologies
- Managing residual emissions through carbon removals
- Promoting Jersey as a centre for sustainable innovation and development
- Encouraging Islanders and visitors to make sustainable air transport choices
- Safeguarding and enhancing Island connectivity while promoting sustainability

The development of sustainable aviation technologies is vital to decarbonise air travel, with a combination of sustainable aviation fuels, electric, hybrid and hydrogen-based technologies. The pace of innovation in this area is increasing exponentially. Jersey is well-positioned to be at the forefront of the development and testing of sustainable aviation technologies due to:

- Its regulatory framework with oversight from both the Civil Aviation Authority (CAA) and the European Union Aviation Safety Agency (EASA)
- A very close relationship with our locally based carrier airline Blue Islands
- Ports of Jersey is the controlling authority for Air Navigation Service Provision for 8,500km sq of airspace between the UK and France
- An electricity supply that is already 95% decarbonised

To realise the potential benefits, both for the Island and the planet, the development of a policy framework and legislation that supports the infrastructure investment required to deliver to the Jet Zero scenario 2 will be developed. This scenario forecasts a reduction in emissions from aviation of 7% by 2030, and 43% by 2050.

Emissions from maritime transport

The Government of Jersey will work with Ports of Jersey to monitor the marine sector in line with the International Maritime Organisation's (IMO's) greenhouse gas strategy⁷⁸ and in compliance with our obligations as a signatory to the IMO's pollution prevention treaty, MARPOL.

Support for this work will be required from SPPP, IHE departments, Local Economy team and Ports of Jersey.

⁷⁸ International Maritime Organisation's greenhouse gas strategy



HT - Heating policies

#	Policy	Summary	Deliverables	4-Year Budget	Carbon	MCA
HT1	Supporting low-carbon heating systems and home insulation	 Purchase incentive to replace oil or gas boiler with specified alternatives Covers 50% of the cost up to £5k Up to £10k and no match funding required for lowincome households 	998 low- carbon heating systems	£5,706,227	4	3.36
HT2	Update building bye-laws	 Review and update building bye-laws in 2022 Increases minimum energy standards in new buildings and when existing buildings are renovated End the replacement of oil and gas boilers from 1 January 2026 		BAU+	4	3.58
HT3	Energy Performance Certificates	 A system of Energy Performance Certificates is in place New regulations would make Energy Performance Certificates mandatory at point of sale or re-rental, from 2024 	825 energy audit incentives	£285,000 BAU+	3.2	3.79

HT1 - Supporting low carbon heating systems and home insulation

The Government of Jersey will:

Provide a subsidy to enable both householders and commercial businesses to transition to low carbon heating systems. The scheme will run from 2022 until 2025.



Greenhouse gas emissions are generated when fossil fuels are burnt. In Jersey, the majority of emissions are generated when we drive petrol and diesel vehicles and in the boilers that heat our homes and business premises. A key priority policy is therefore accelerating the switch from fossil fuel to low-carbon property heating. This proposal is split into two separate but related schemes – a domestic incentive and a commercial incentive to switch away from fossil fuels. Recognising that running costs to the householder may be increased, energy efficiency measures will also be eligible for funding under the domestic scheme.

The aim of the incentive is to assist Islanders with the costs of the new equipment to encourage them to choose the lower carbon option when needing to replace their heating system and to encourage people to make this switch earlier than they may have chosen to. The incentive will run from 2022 until 2025. The domestic heating sector accounts for the second highest contribution to the Island's greenhouse gas emissions. With an estimated 21,559 fossil fuel boilers currently in the Island, the target is c16,000 boilers to be switched by 2030.

Emissions from the business sector accounted for 15% of total greenhouse gas emissions in the 2019 inventory⁷⁹. There are 6,830 private sector companies in Jersey. Data on commercial heating systems is poor, but an assumption that 50% of commercial properties have fossil fuel boilers would provide a baseline of 3,415 commercial properties. With the target of achieving a 50% reduction in this sector from current (2019 inventory) figures we are therefore setting a provisional target of 1,700 commercial properties to fuel switch by 2030.

The greenhouse gas emissions modelling assumes that the remaining 6,559 domestic boilers and 1,715 commercial boilers will have switched away from fossil fuels by 2034. Proposed changes to the building regulations will help achieve this by preventing fossil fuel boilers going into new properties by 2025 and ensuring that fossil fuel boilers can only be replaced with non-fossil fuel alternatives from 2026. All remaining fossil fuel boilers will need to be replaced, or to switch to using renewable biofuels from 2034.

The key elements of both domestic and commercial programmes will be confirmed in the programme design phase, following consultation with islanders and the industry. The current design assumptions are that:

⁷⁹ Jersey's Greenhouse Gas Emissions (gov.je)



- Existing properties with gas or oil boilers will be eligible to apply for 50% funding up to a maximum of £5,000 where the gas or oil boiler is being replaced with a qualifying renewable technology or electric heating system
- Property owners (including landlords) are eligible to apply
- The maximum total value claimed per property will be £5,000
- Individuals can apply for grant funding for multiple properties that they own up to a given cap

Additional elements of domestic programme

- There will be a controlled system so that those on lower incomes will be entitled to a maximum of £10,000 without needing to match fund
- Householders replacing their fossil fuel heating source will be able to include energy efficiency measures that are identified on a completed Energy Performance Certificate within their funding application

Additional elements of the commercial programme

- Leaseholders who own the heating system can apply but it is the applicant's responsibility to ensure that written permission is obtained from property owner
- Types of heating systems eligible for funding are likely to include: electric flow boilers; electric storage heaters; electric panel radiators; electric immersion water heaters; ground source heat pumps; air source heat pumps; photovoltaic panels; solar thermal panels; micro wind turbines; biomass boilers; and battery storage.

SMART objectives

1. Establish and commence an incentive scheme to subsidise the replacement of fossil fuel heating systems with non-fossil fuel heating systems in properties by end of 2022.

Assumptions

• That there is sufficient electricity capacity to meet the increased demand from these fuel switches.

Dependencies

- Support from industry to set up a supplier/installation accreditation/verification scheme
- Link to key polices on improved building energy efficiency standards (HT2) and Energy Performance Certificates (HT3)
- Planning/building control support in getting approval for fuel switch installations
- Availability of suitably qualified local tradesmen to install heating systems and service them, see policy on Green Skills (EN3)
- Energy performance certificate/energy audit possible and sufficient surveyors to meet increased demand.

CEF 4-Year budget	Total 2022-2025	Deliverables
Low-carbon heating incentive	£5,706,227	998 low-carbon heating systems



HT2 - Update building bye-laws

The Government of Jersey will:

Bring into force legislation that updates current building regulations and sets increased energy efficiency and carbon emission standards of new and existing domestic and commercial buildings and prohibits new fossil fuel boilers being installed in any property after 1 January 2026.



New buildings.

The knowledge and technology exist today to build properties that require no external input of energy for heating. To reach net-zero emissions our aim is for all buildings to require no external input of energy through fossil fuel consumption by 2050. This means that new buildings must meet this requirement as soon as possible. Under the new Future Homes standards, the UK has set the target of new domestic buildings being 'zero-carbon ready' by 2025. Jersey's building standards will be updated to match this requirement – with the aim that all new buildings should be required to be zero-carbon by 2025.

Existing buildings.

The majority of buildings that will exist in 2050 already exist today and it is these existing buildings that make the biggest contribution to greenhouse gas emissions. There are a number of policies proposed to incentivise property owners to voluntarily make changes, however voluntary measures alone are unlikely to get the required pace of decarbonisation. There are key points in the lifetime of a property where it is possible to mandate that energy efficiency or carbon emission levels are improved. These include: the point of sale or rental and at the point of having renovation work that requires planning permission/building permits.

The current building regulations will be reviewed with the aim of identifying how best to increase the energy efficiency and reduce the number of oil and gas heating systems as rapidly as possible, and to ensure that no new fossil fuel boilers will be installed in any building from 2026.

The draft Bridging Island Plan⁸⁰ seeks to introduce a 20% reduction in Target Energy Rate beyond existing building bye-laws for larger-scale developments, as an interim measure whilst formal changes to the building bye-laws are developed (Policy ME1).

SMART objectives

- 1. Commission a Building Bye-Law review to be completed in 2022
- 2. From this review implement legislation by 2024 at the latest to support the following likely outcomes:



- o Increase minimum energy efficiency/carbon standards in new builds in line with the zero-carbon homes standard by 2025
- o Increase in the energy efficiency/carbon standards for existing properties at the point of key changes to the building fabric
- o Ensure that no new fossil fuel boilers will be installed in any building from 2026

Assumptions

- That the local electricity network could cope with the increased demand within its current or future capacity
- That alternative heating fuels (e.g., second generation biofuels, hydrogen, synthetic fuels etc) will come onto the market over the next 10 year providing a range of non-fossil fuel boiler types for consumers
- That the construction industry is able to keep pace with the necessary improvements

Dependencies

- Ability of local market to be able to adapt to supply and maintain new types of boiler/heating system as they come onto the market
- HT1 Supporting low-carbon heating systems and HT3 Energy Performance Certificates

Resources for this work will be provided from IHE business as usual.



HT3 – Energy Performance Certificates

The Government of Jersey will:

Develop and introduce legislation to make both domestic and commercial Energy Performance Certificates mandatory at the point of sale and rental by the end of 2024, with minimum standards being brought in sequentially from 2026.



Government will also ensure that Energy Performance Certificates are displayed on public buildings by 2025.

Energy Performance Certificates (EPCs) are necessary to allow Islanders to understand the increasing energy efficiency standards homes they might buy, and other buildings, and to create market incentives to encourage developers to pursue higher energy ratings. Greater uptake of EPCs is also necessary to support better targeting of future decarbonisation policies and investment.

Across the EU and UK, Energy Performance Certificates are mandatory and have been used as the key tool in understanding the energy and carbon performance of buildings as a first step and then going on to drive forward the continual improvement in standards through the introduction of minimum standards. While Jersey does have a system of EPCs in place, these are not mandatory.

We will develop legislation to make both domestic and commercial Energy Performance Certificates mandatory at the point of sale and rental by 2024 with minimum standards being brought in sequentially from 2026. EPCs will have to be displayed on public buildings by 2025.

Between 2022 and the point in which the legislation comes into force we will:

- Review the existing home energy audit and Energy Performance Certificate process
- Continue to provide a £250 subsidy for home energy audits
- Complete the development of commercial energy audit tool in 2022
- Deliver on-Island training for commercial energy auditors in 2022
- Introduce a commercial EPC subsidy of around £500 towards the cost of an EPC

SMART objectives

- 1. Deliver 250 home energy audits/domestic EPC subsidies (£250 per subsidy) per year until EPCs become mandatory
- 2. Complete design of the Jersey-specific commercial EPC tool in 2022
- 3. Provide training for 50 accredited auditors by end of 2023
- 4. Run an introductory subsidy (around £500 per subsidy) for commercial EPCs to 75 commercial



- buildings
- 5. Valid EPC to become mandatory at point of rental or sale for both domestic and commercial properties by the end of 2024
- 6. Legal requirement to reach minimum EPC standard at point of rental or sale by 2026

Assumptions

- Energy prices will continue to rise so demand for energy efficiency will continue
- That energy efficiency is preferable to buyers and renters and therefore the market will force landlords and sellers to make improvements
- Uptake of voluntary EPCs is underpinned by knowledge of future policies. Greater uptake of the EPC subsidy is expected as the mandatory date coming sooner

Dependencies

- Uptake of energy assessor training by local market
- Landlord licensing legislation is passed so that rental properties can be identified

CEF 4-Year budget	Total 2022-2025	Deliverables
	£285,000	825 energy audit incentives



OE - Other on and off-Island emissions policies

#	Policy	Summary	4-Year Budget	Carbon	MCA
OE1	Promoting low- carbon lifestyles	Awareness raising and practical solutions to reduce Jersey's scope 3 (off-Island) emissions	£200,000	3.2	3.56
OE2	Construction sector emissions	Sets an expectation of steps to decarbonise construction, including work on Island Plan policies, building bye-laws and modern methods of construction	BAU+	n/a	n/a
OE3	Agricultural sector emissions	Reduce emissions from operational agricultural activities in line with the Rural Economy Strategy	BAU+	n/a	n/a
OE4	Emissions from waste and water management	 Sets an expectation of a decarbonised waste management system from 2038 or earlier (date of Energy Recovery Facility obsolescence) and steps needed to deliver this, starting with a waste strategy review Development of a net-zero water management strategy 	BAU+	n/a	n/a
OE5	F-Gas emissions	 Explains emissions from F-gases (HFCs, PFCs, SF6) and industry assumptions about this Commits to reporting on NF3 in line with the Paris Agreement 	BAU+	n/a	n/a
OE6	Delivering a sustainable finance framework	Continue to develop a sustainable finance framework within the Government of Jersey	£60,000	n/a	n/a

OE1 - Promoting low-carbon lifestyles

The Government of Jersey will:

Develop and deliver an education and engagement programme to help Islanders to reduce their off-Island (scope 3) emissions.



Principle 1 in Carbon Neutral Strategy⁸¹ recognises and requires a strategic focus on Jersey's scope 1, 2 and 3 emissions. It is important that Islanders understand the impact our local choices have across the world including recognising the impact that Jersey based businesses can have.

The main aim of this policy is to raise awareness and engagement on scope 3 emissions, which are emissions associated with the manufacture and transport of the goods and services consumed in Jersey. This is intended to help Islanders to reduce their global impact.

The new programme will build on the eco active network and the work carried out through Jersey's Climate Conversation⁸², which have begun to build momentum to the conversation, raising awareness and helping to educate Islanders through engagement and action. The programme will engage individuals, businesses, community organisations and Parishes to explore and how they can act to reduce scope 3 emissions. This will include the development of climate-action plans that might subsequently secure funding through the small grants programme proposed under policy EN2.

The programme will learn from existing practice in identifying sectors that are scope 3 heavy in order to change behaviour, such as the pilot *Green Kitchen Standard* that began in 2020 to support the hospitality sector to reduce their environmental impacts.

SMART objectives

- 1. Sector analysis to identify sectors with particularly large scope 3 emissions by mid-2022
- 2. Implementation plan addressing key sectors and messages informed by sector analysis by end-
- 3. Develop a costed communications plan in 2022, to deliver educational and engagement messages and tools that can be used to reduce scope 3 emissions
- 4. Identify if there is a suitable tool that can be used (or created) to measure reduction in scope 3 emissions for public by end 2022
- 5. Deliver initial programme of targeted sector education and awareness by end 2022 tackling priority sectors first
- 6. Increase in locally sourced goods and services

⁸² Jersey's Climate Conversation



⁸¹ Carbon Neutral Strategy (gov.je)

Assumptions

- A mechanism for measuring scope 3 emissions reductions can be found or created
- There are some national and international schemes established that can support specific sectors to achieve net-zero targets
- Funding can be used to establish dedicated officer capacity to deliver

Dependencies

- Carbon Neutral Alliance established and grants fund available (Policy EN2)
- Sustainable finance policy delivered (OE7)
- Data availability

CEF 4-Year budget	Total 2022-2025
	£200,000



OE2 – Construction sector emissions

The Government of Jersey will:

Work closely with the Jersey Construction Council, Association of Jersey Architects, and others in the industry to drive-down the whole life carbon impact of the Island's construction sector, including considering the use of all available policy levers. Government will also adopt higher construction standards for all public construction projects.

Greenhouse gas emissions from material extraction, manufacturing of construction products, and construction and renovation of buildings are estimated at 5-12% of a jurisdictions total national greenhouse gas emissions. Greater material efficiency could save 80% of those emissions.⁸³

Locally, construction accounts for about 50% of all extracted material in the Island⁸⁴, and the sector has a large impact on emissions through selection and transport of materials, and the methods used in development. Industry bodies such as the Jersey Construction Council and Association of Jersey Architects are key stakeholders in meeting the aim to accelerate the transition to a sustainable built environment using low impact construction methods and materials.

A range of regulatory frameworks are due to be strengthened to require lower-carbon construction methods and reduced whole-life carbon from buildings, including:

- Changes to building-bye-laws (Carbon Neutral Roadmap policy HT2)
- A 20% reduction in Target Energy Rate, beyond existing building bye-laws for larger-scale developments, as an interim measure whilst formal changes to the building bye-laws are developed (draft Bridging Island Plan⁸⁵ policy ME1)
- Introduction of Energy Performance certificates (Carbon Neutral Roadmap policy HT3)
- Requirement for Passivhaus standards for affordable homes; large-scale commercial developments where these are in less-sustainable locations and retrofitting of some homes to EnerPHit standards (draft Bridging Island Plan policy ME2)
- BREEAM standards for larger non-residential buildings (draft Bridging Island Plan policy ME3)
- Making better use of embodied carbon, with a renewed focus on the retention of existing building fabric, stronger site waste management requirements and the use of whole-life carbon assessments (draft Bridging Island Plan policies GD5 and WER1).

The measures in the Bridging Island Plan will be reviewed in light of changes to the building bye-laws by 2024, to form the updated Island Plan policies for the period 2025-2035.

⁸⁵ draft Bridging Island Plan (gov.je)



⁸³ Buildings and construction (europa.eu)

⁸⁴ Jersey's Greenhouse Gas Emissions (gov.je)

Ministers have also commissioned work to explore the potential for greater use of modern methods of construction in Jersey, including identifying areas where government might support the industry by making regulatory or other changes. Construction industry activity is also shaped by waste, water, energy and other natural resources management law and policy.

The purpose of this policy statement is to commit government to a process of honest and ambitious dialogue with industry, to increase sustainable construction standards in the Island, and to identify clear targets and delivery plans to achieve measurable reductions in construction industry emissions in the coming decades.

To support this process, a Sustainable Construction Summit will be convened by ministers in 2022, supported by the Jersey Architecture Commission and developed in partnership with industry bodies.

Embracing sustainable building standards will need to be supported through provision of training and upskilling as part of future skills policy.

As part of the Decarbonising Government programme (EN1), and in line with managing emissions policies set out in the draft Bridging Island Plan⁸⁶, government will also adopt higher construction standards for all public construction projects. This step will build on the excellent progress already made by government-backed developers, including planned BREEAM Excellent development by Jersey Development Company at South Hill and the Waterfront (with work continuing to understand if Outstanding might be achievable), and work by Andium Homes to explore the application of Passivhaus standards in affordable homes.

SMART objectives

1. Reduce emissions from the construction sector in line with international targets

Assumptions

- Changes are made to relevant legislation
- Island Plan policies are adopted

Dependencies

- Upskilling programme in place through green skills policy EN3
- Legislation changes introduced in line with proposed timeline

Support for this work will be needed from SPPP and IHE departments and the Construction Council and Association of Jersey Architects.

⁸⁶ draft Bridging Island Plan (gov.je)



OE3 – Agricultural sector emissions

The Government of Jersey will:

Work with key stakeholders from the agricultural sector to develop and implement a new net-zero Rural Economy Strategy (RES) in 2022, that aims to support the agricultural sector to continue to reduce emissions from their activities, and to adapt to the effects of climate change. The RES will address both agriculture and aquaculture.

The Rural Economy Strategy (RES) provides the strategic support needed to help the industry adapt to climate change and economic changes. The updated RES will provide a policy framework to reduce emissions from this sector, with targets in the Strategy be aligned to Paris commitments as set out in Strategic Policy 1 of the Carbon Neutral Roadmap.

In 2019, the Agriculture sector accounted for 6% of Jersey's total greenhouse gas emissions⁸⁷. The largest agriculture emissions source in 2019 was enteric fermentation from dairy cattle. Emissions therefore come from the raising of animals for meat and milk. Agricultural emissions have steadily decreased by 17% since 1990 largely due to declining numbers of dairy cattle. Emissions in the agriculture sector split as follows in 2019:

- Methane (60%),
- Nitrous oxide (37%)
- Carbon dioxide (3%).

The Rural Economy Strategy will be published in Q2 2022 with the aim to implement it through the Government Plan 2023-2026. The Strategy will be subject to public and stakeholder consultation.

SMART objectives

- 1. Reduce emissions from operational agricultural activities in line with the Rural Economy Strategy
- 2. Support the Rural Economy Strategy objectives to be implemented through the Government Plan 2022-2025

Assumptions

• The Rural Economy Strategy is produced on time and picks up emissions reductions in line with the Paris Agreement

Dependencies

• Policy is linked to the skills and market policy to ensure that any skills gaps are identified and addressed in order to move to a low-carbon agricultural sector

Resources for this work will be provided from IHE and Economy business as usual.

⁸⁷ Jersey's Greenhouse Gas Emissions (gov.je)



OE4 – Emissions from waste and water management

The Government of Jersey will:

Make on-Island solid waste disposal net-zero by 2040. To achieve this, a net-zero waste strategy will be developed by 2025. Work to explore opportunities for carbon capture from the existing electricity from waste plant will begin in 2022.

Work with Jersey Water to prepare a net-zero water management strategy by 2024, which incorporates existing planned work, in order to inform the next Island Plan.

Emissions from waste come when it is created but also when it is collected and disposed of. The current waste strategy has expired and will be reviewed and updated by the end of 2025. It will show the steps that will be taken to reduce emissions from waste in Jersey, including setting a high-level specification for a net-zero facility to succeed the current energy from waste plant from 2040.

This work will build on the existing waste management hierarchy, which recognises the need to reduce, reuse and recycle, before recovering energy and, ultimately, disposal. It will also consider the drivers of waste production in Jersey, and how the Island might interpret and adopt modern concepts of the circular economy. It will build on the recent Infrastructure Capacity Study and the Integrated Minerals, Waste and Water Study, developed as part of the evidence base for the draft Bridging Island Plan⁸⁸; and support the effective implementation and enforcement of construction site waste management plans (draft Bridging Island Plan policy WER1).

Alongside the planned review of energy market requirements, the new waste strategy will feed into the long-term infrastructure roadmap proposed in the draft Bridging Island Plan. In particular, the two studies will help set out future scenarios for the La Collette area of St Helier.

The implementation of Carbon Neutral Roadmap policies themselves will have implications for waste management and treatment. In particular, the management of waste arising from accelerated vehicle replacement and changing of heating and cooling systems needs to be carefully considered.

In line with Strategic Policy 3 of the Carbon Neutral Roadmap, government will consider the introduction of commercial waste charges for some activities in order to recognise the life cycle costs of high emission activities. Income from any new charges would be first be used to support infrastructure improvements, with remaining income ring-fenced to the Climate Emergency Fund.

Starting in 2022, and working in partnership with Jersey Electricity, the government will also explore opportunities to carbon capture from the existing electricity from waste plant.

⁸⁸ Draft Bridging Island Plan evidence base



Greenhouse gases, such as methane and nitrous oxide emissions, arise from the treating and supplying of clean water as well as handling of liquid wastes and sludge from housing and commercial sources (including human waste). Both the size of the population (and associated water demand) and the method of waste-water treatment are strongly correlated with these emissions.

The new net-zero water management strategy will consider how we can reduce greenhouse gas emissions associated with the Island's water consumption and treatment and how we can ensure that it has sufficient resilience to adapt to the challenges a changing climate will present.

It will build on the recent Minerals, Waste and Water study, and on the recommendations of Jersey Water's *Water Resources and Drought Management Plan*⁸⁹, which aims to address an expected deficit in water supplies over a 25-year period caused by climate change and population growth. It will consider both supply and demand, including water efficiency-related planning policies and building bye-laws, and demand management through non-household water efficiency and intensive media campaigns; and potential requirements for infrastructure enhancement, expansion, or provision. It will also examine industry best practice and technological developments in waste-water treatment that reduce (or capture) associated greenhouse gas emissions.

The net-zero water management strategy will inform both the next Island Plan from 2025, as well as future Carbon Neutral delivery plans and the proposed long-term infrastructure roadmap.

SMART objectives

- 1. Net-zero waste strategy will be developed by 2025
- 2. High-level specification for a net-zero facility to succeed the current energy from waste plant from 2040
- 3. Explore opportunities to carbon capture from the existing electricity from waste plant will begin in 2022
- 4. Research options for the introduction of commercial waste charges for some activities
- 5. Produce net-zero water management strategy by 2025

Assumptions

• The net-zero waste Strategy is produced on time and picks up emissions reductions in line with the Paris Agreement

Dependencies

- Resource availability and political acceptability
- Island Plan policies agreed
- Jersey Water Plan delivered

Resources for this work will be provided from SPPP and IHE business as usual, working closely with Jersey Water.

⁸⁹ Water Resources and Drought Management Plan (Jersey Water)



OE5 - F-gas emissions

The Government of Jersey will: Seek extension of the UK's compliance with the Kigali Amendment to Jersey by 2025.



The purpose of this policy is to reduce consumption of F-gases and hydrofluorocarbons (HFCs) in line with international commitments. Jersey will aim to reduce to consumption of HFCs by 85% between 2019 and 2036. The Kigali Amendment to the Montreal Protocol makes a major contribution towards Paris Agreement targets. This is because the global warming potential of HFCs range into thousands of times more powerful as CO₂.

The business sector currently accounts for 15% of Jersey's greenhouse gas inventory⁹⁰, and of that 39% is from F-gases. HFC emissions are associated with refrigeration and air conditioning. Whilst HFC emissions have grown in the business sector since 1990, emissions have declined in more recent years from 29,927 tCO₂eq in 2014 to 23,213 tCO₂eq in 2019. PFCs are used in the electronics sector. These gases were introduced to replace ozone depleting substances, meaning F-gas emissions have increased since 1990.

Jersey's greenhouse gas inventory reports emissions of F-gases: Hydrofluorocarbons (HFCs), Sulphur hexafluoride (SF6) and Perfluorocarbons (PFCs). In accordance with the Paris Agreement, Jersey will also begin reporting on Nitrogen trifluoride (NF3). the Paris Agreement also require that the reference year used is 1995, rather than 1990 as per our other greenhouse gas inventory reporting. Extension of the UK's compliance with the Kigali amendment will mean that Jersey will need to implement controls that reduce the quantity of imports every few years in accordance with a specified schedule.

SMART objectives

- 1. To reduce emissions from F-gases in line with targets set out in the Montreal protocol and amendments that have been extended to Jersey, including the Kigali Amendment.
- 2. Reduce consumption of HFCs by 85% between 2019 and 2036
- 3. To seek extension of the UK's compliance with the Kigali Amendment to Jersey by 2025

Assumptions

• Continued compliance with Montreal Protocol and all amendments as defined

Dependencies

• IHE – Regulation department, Strategic Policy, Planning and Performance, Law Officers
Department, External Relations, Customs and Immigration to ensure continued compliance with
Montreal Protocol and seek ratification for the Kigali Amendment

Resources for this work will be provided from SPPP and IHE business as usual.

⁹⁰ Jersey's Greenhouse Gas Emissions (gov.je)



OE6 - Delivering a sustainable finance framework

The Government of Jersey will:

Continue to develop a sustainable finance framework that supports decarbonisation initiatives in Jersey and around the world, recognising that the way in which Jersey can deliver the biggest impact to global climate change is through its finance sector.

This work will be split into three distinct areas of delivery:

1. Sustainable Government of Jersey investment - establish a Public Finance Sustainable Financing Framework to improve the sustainability of the Government of Jersey's own investment and debt.

For the Government of Jersey, consideration needs to be given to how the Island's money is invested and what changes could be made to more it towards more sustainable investment options. This needs to include consideration of the appropriate investment strategy for the States of Jersey employees' pension schemes.

2. Climate finance - develop options to increase the amount/impact of money the Island provides to support climate mitigation and adaptation measures overseas

The Government of Jersey also needs to determine what funds and how it should allocate funds to international climate finance to support a global 'just transition' to net-zero in accordance with the goals of the Paris Agreement.

3. Jersey as a sustainable financial centre - continue to support the Island's finance industry to become a leading sustainable finance centre and support Islanders and local businesses to make informed decisions about how their money is invested.

As an international finance centre, with over £1 trillion of assets channelled through its shores into global investment, Jersey has a responsibility to consider the global carbon impact of its finance sector. We need to consider the impact on global greenhouse gas emissions resulting from those investments and put in place the necessary regulatory framework to protect against green-washing and provide market transparency. Work in this area is underway by Government of Jersey in partnership with Jersey Finance and the Jersey Financial Services Commission.



Jersey for Good - A Sustainable future is a cross agency initiative seed funded by Government and led by its industry representative body, Jersey Finance Limited to develop with Jersey's finance industry a 10-year vision. An initial two-year plan for Sustainable Finance was launched on 3 March 2021.

This collaboration aims to catalyse stakeholder action and accelerate Jersey's transition into being a leading sustainable international finance centre aligned with the goals of the Paris Agreement and the UN Sustainable Development Goals.

Captured within its scope are the following objectives:

- 1. to encourage product innovation and quality of delivery by local finance providers by accelerating the adoption of international standards
- 2. to deliver awareness, education and training to the private sector
- 3. to create an enabling environment with both incentives and a robust supportive regulatory framework
- 4. to communicate action and impact to embed and encourage behavioural change
- 5. to foster and enable collaboration locally and internationally.

This industry led group will deliver its initial recommendations to Government in 2022 with further recommendations to follow in 2023. These recommendations to be taken forward by Government with the Regulator and wider Industry. Government will separately be seeking to raise Jersey's profile internationally for sustainable finance and to accelerate the delivery of a sustainable finance legislative and regulatory framework.

In addition, we will work with the industry to provide independent and accurate information so that locals can make appropriate informed decisions about what they do with their own money.

The Citizens' Assembly on Climate Change's recommendations on Sustainable Finance were carefully considered in the development of this policy. Once we have had the benefit of the public and industry consultation feedback on this proposed policy, we will provide a formal response to the Citizens' Assembly recommendations. This will be included in the final lodged Carbon Neutral Roadmap.

SMART objectives

- 1. Develop a Public Finance Sustainable Financing Framework in 2022 as an overarching framework under which Government of Jersey investment and debt financing decisions are made
- 2. Develop a Climate Finance strategy for the Island by 2025
- 3. Develop a framework for Sustainable Finance work with Industry and the Regulator to develop a proportionate and internationally aligned legislative and regulatory framework for sustainable finance



- 4. Improve domestic business behaviour partner with Industry to run a public awareness campaign. To include a minimum of 2 public sustainable finance events annually to be incorporated into the eco active work stream
- 5. Seek to enhance consumer choice engage and support the natural evolution of local market in the provision of green loans and green financing
- 6. Encourage innovation work with Industry and the Regulator to deliver new products and services for sustainable finance

Assumptions

- That the Paris Agreement is extended to Jersey and we have an obligation to report on Climate Finance internationally
- This policy will not have an impact on scope 1 or 2 emissions but there is still the need to prioritise the workstream due to the extent of Jersey's influence/activities on the global stage

Dependencies

- Link with Financial Services Strategy for Sustainable Finance
- Link to Jersey Finance work in this area

CEF 4-Year budget	Total 2022-2025
	£60,000



EN - Enabling policies

#	Policy	Summary	4-Year Budget	Carbon	MCA
EN1	Decarbonising government	 Creation of a decarbonisation unit within government Funding to deploy Second Generation Renewable Diesel in Government of Jersey fleet where viable and other exemplar projects 	£1,260,000	4	3.76
EN2	Create a Carbon Neutral Alliance	 Create an alliance of businesses and community groups to drive forward decarbonisation Provision of a small grants fund to stimulate local networks and innovation 	£500,000 BAU+	3.4	3.2
EN3	Developing supply chains and on-Island skills for a sustainable economy	 To be developed as part of the Future Economy Programme Work with Highlands, industry and others to design targeted training programmes and identify routes to market for key technologies – to support delivery of the Carbon Neutral Roadmap 	BAU+	3.2	3.34
EN4	Delivering COP26 education pledge	Resource to support enhanced climate education in schools	£200,000	n/a	Н
EN5	Blue carbon, biodiversity and sequestration	 Promote Jersey as a centre of excellence for blue carbon sequestration An ambition to double the extent of sea grass beds Tackling the climate emergency by using nature-based solutions that also address the biodiversity crisis provides multiple benefits on land and at sea Develop a carbon sequestration framework 	£1,325,000	n/a	n/a
		Develop a Marine Spatial Plan	£150,000	n/a	n/a
EN6	Carbon offsets	Develop a policy position on carbon offsets	BAU+	n/a	n/a

EN1 - Decarbonising Government of Jersey

The Government of Jersey will:

Reduce its operational emissions in line with the Paris Agreement trajectory established by Strategic Policy 1.



A new decarbonisation unit will be established in 2022 to develop a comprehensive action plan, which will set quantified emissions reduction targets in Departmental Operational Business Plans from 2023. Second generation renewal diesel (SGRD) will be phased into the government of Jersey fleet from 2022, and a range of exemplar projects undertaken.

The decarbonisation unit will report to the Operations Committee of the Executive Leadership Team, chaired by the Chief Operating Officer. Funding is provided to bring together dedicated officer resource from Treasury and Exchequer, Commercial Services, People and Corporate Services, Jersey Fleet Management, and Jersey Property Holdings, and to implement practical decarbonisation actions including phasing in second generation renewable diesel (SGRD) from 2022.

Building on existing work undertaken as part of the Carbon Neutral Strategy Strong Start programme, initial actions are expected to focus on:

- Integrating emissions performance and reporting requirements into the Government of Jersey (GoJ) governance framework in 2022.
- Publish improved emissions reporting in the Annual Reports and Accounts for 2022 in line with Comptroller and Auditor General recommendations.
- Integrate sustainability and emissions into the estate management building condition survey in 2022 to identify a priority action plan to inform the programme of planned maintenance and capital works. To report by end of 2022, with necessary investment identified in 2023 for inclusion in Government Plan 2024-2027.
- As part of the move to the One Gov office, develop workplace travel plans that encourages sustainable travel; and advise on energy efficient heating in the home office when working remotely.
- Consider how to include the cost of carbon in feasibility stage gateway review of capital programmes from 2022.
- All public buildings to display Energy Performance Certificates by 2025.
- Implement recommendations from fleet review starting in 2022 with the aim of decarbonising the government vehicle fleet by 2025.
- In 2022, work with Commercial Services to consider how to integrate calculation of the cost of carbon emissions into commercial decision-making process.



• Develop a staff engagement programme, recognising that the Be Heard survey was clear that public servants want the government to do more in this area.

SMART objectives

- 1. To decarbonise GoJ in line with the emissions trajectory set in Strategic Policy 1.
- 2. To set up a strategic decarbonisation unit, in 2022.
- 3. To produce a detailed costed action plan by end of 2022 that identifies the emissions reduction actions required across the GoJ property portfolio, activities, services and materials procurement.
- 4. To identify the long-term costs and benefits of decarbonisation to government by end of 2022.
- 5. To deliver an initial programme of actions to begin to decarbonise government operations by end of 2025.
- 6. To run a 6-month pilot programme through the estate management strategy building condition survey in 2022 to identify highest emission properties and develop a programme of emissions reductions.
- 7. All public buildings to display Energy Performance Certificate by 2025

Assumptions

• Comptroller and Auditor General report recommendations are incorporated; including a review of strategic governance principles

Dependencies

- Sufficient priority afforded to decarbonisation by Executive Leadership Team and senior managers
- Appropriately skilled team can be brought together

CEF 4-Year budget	Total 2022-2025
Decarbonising Government of Jersey	£1,260,000



EN2 - Create a Carbon Neutral Alliance

The Government of Jersey will:

Work with the Economic Council sustainability working group to support the development of a Carbon Neutral Alliance of businesses and voluntary, community, social enterprise and faith sector organisations; and establish a £500k Climate Action Fund to support grassroots projects to tackle the climate emergency.

Government wishes to support the development of a Carbon Neutral Alliance, led by Jersey businesses and local organisations from the voluntary, community, social enterprise and faith sectors. The Alliance would provide a focal point for the vast amount of support and energy for decarbonisation that exists in the Island. The overall aim would be to mobilise action across the Island and in particular to focus on two key areas:

1. Support for businesses and organisations to decarbonise their activities

- o Peer-to-peer networking and best practice sharing
- o Joint procurement of technical advice on topics such as commercial energy audits, waste audits, carbon accounting, sustainable finance
- Linking businesses/organisations with community initiatives they can support

2. Support and funding for community decarbonisation project – decarbonisation impact fund

- o A place for smaller community group to share learning and develop programmes of work together
- o Access to small grants funding for decarbonisation and adaptation projects

Government will work initially with the Economic Council sustainability working group to develop an initial proposal that can be set out for further public consideration.

SMART objectives

- 1. Establish a Carbon Neutral Alliance by 2023
- 2. Oversee the distribution of £100,000-£200,000 per year of grant funding to decarbonisation projects across the local community from 2023 onwards

Assumptions

- There is a desire to take practical action to decarbonise local businesses/community
- There are lots of existing complementary activities underway by parishes, business and youth and community groups; and lots of potential partners to get more involved



• A network solution is needed that can provide a home and focal point for all this activity; and can amplify and provide strategic direction over the coming years

Dependencies

• Sufficient interest and motivation exist to get involved in such an enterprise

CEF 4-Year budget	Total 2022-2025
Create a Carbon Neutral Alliance	£500,000

EN3 – Developing supply chains and on-Island skills for a sustainable economy

The Government of Jersey will:

Put the development of on-Island skills at the heart of future economic and skills strategy, including integrating green skills into the Future Economy Programme and Further Education and Skills white paper. Government will also support the development of low carbon and sustainable supply chains.

The policy recognises that there is significant lead in time from gap analysis, design of range of interventions, training through to a mature skill set. As such, the develop of future skills policy and of resulting skills programmes will run in parallel with the Carbon Neutral Roadmap.

The second part of this policy is designed to ensure that there is access to low-carbon products that are required to implement the Carbon Neutral Roadmap. policy package. Anecdotal evidence indicates significant challenges in accessing sustainable products at reasonable cost.

A local market supply chain audit will be carried out including a gap analysis to identify supply chain issues which may limit implementation of the policies in the Carbon Neutral Roadmap. The results of this will feed into the development of a plan to overcome barriers, where possible, in the supply which will enable the local market supply chain to offer low-carbon goods or services.

This policy will be integrated into the commercial and procurement policies of Government of Jersey and specified organisations and will be promoted through local business networks and Islanders. The policy will be integrated with education and awareness policies on global emissions.

SMART objectives

- 1. Identify skills base for low-carbon services and goods including a gap analysis by mid-2023
- 2. Begin to identify and build on existing good practice e.g., Highlands College electric vehicle course by mid-2022
- 3. Develop a plan for filling the skills gaps by the end of 2023
- 4. Develop a local market supply chain for low-carbon goods and services by end of 2024 and link this to Government of Jersey procurement policies

Assumptions

- Government of Jersey decarbonisation unit will be established
- There is an interest in a local market supply chain and skills base
- Training for developing skills base is available and can be delivered to fit with timescales



• Some work has already been carried out on local skills and gaps by Skills Jersey and the Strategic Workforce plan group and there will be the Further Education and skills white paper report being published end of 2021.

Dependencies

- Strategic workforce plan produced by the Jersey Employer Group⁹¹
- External stakeholders will commit to providing local supply chain for low-carbon goods and services
- Investment in training delivery and uptake of courses
- May require incentives for supply chain to move to low-carbon goods/services if more expensive
- EN1 Decarbonising Government and OE1 Promoting low-carbon lifestyles

Resources for this work will be provided from agreed workstreams within the Economy and CYPES departments.

⁹¹ Developing a Strategic Workforce Plan for Jersey



EN4 - Delivering the COP26 education pledge

The Government of Jersey will: Deliver the COP26 education pledge by embedding high quality climate education into education and learning.



This main purpose of this policy is to deliver the COP26⁹² education pledge. A plan is needed to embed high quality climate education into education and learning. This policy builds on the pledge made by the Government of Jersey at COP26 and the existing work carried out by CYPES and eco active.

Environmental education is already delivered in schools, but this policy will review what is currently delivered to form a cohesive strategy to embed climate education recognising the different ways in which children learn and taking on board issues of inequality as part of our Just Transition.

COP26 Education Pledge:

- 1. The Government of Jersey pledges to put children first in our response to tackling the climate emergency. Improving climate education and learning are vital in our efforts to tackling climate change. We will continue to actively involve children, young people and students as we work towards becoming net-zero by 2050.
- 2. The Government of Jersey is committed to working with Jersey Youth Parliament to seek opportunities for embedding climate change education and sustainability into formal frameworks and linking these to the United Nation's Sustainable Development Goals.
- 3. The Government of Jersey pledges to review existing education on climate change. Including gathering the views of children and young people as well as educators and parents so that we can ensure that we deliver high quality environmental education. This should include consideration of the potential of new, digital and 'green' technologies.
- 4. The Government of Jersey recognises that we must live within planetary boundaries and that learning for sustainability must commence in early childhood and carry right through higher and further education and as part of life-ling learning. This includes investing in ensuring higher education and re-training opportunities for workers to support the Just Transition.
- 5. The Government of Jersey commits to improving climate education so that it takes on board issues of gender inequality and the impacts of minority groups and other seldom heard voices within our community

⁹² UN Climate Change Conference (COP26)



SMART objectives

- 1. Carry out an education review regarding the quality and effectiveness of climate change education across the Government and independent schools by July 2022.
- 2. Share the best practice and recommendations with schools via Jersey Curriculum Council, Headteachers and ECO leads by October 2022.
- 3. Identify key training resources required to support teaching and learning and create a plan to address these by October 2022.
- 4. Develop a training plan based on needs and share this with schools by December 2022.
- 5. Appoint a Climate Curriculum Lead on a secondment by April 2022.

Assumptions

• A review of existing education can be carried out, including non-Government of Jersey funded establishments and home schooling

Dependencies

• Commitment of CYPES/schools

CEF 4-Year budget	Total 2022-2025
Delivering the COP26 education pledge	£200,000



EN5 – Blue Carbon, biodiversity and sequestration

The Government of Jersey will:

Promote Jersey as a centre of excellence for blue carbon sequestration, with an ambition to double the extent of sea grass beds and recognise that tackling the climate emergency by using nature-based solutions that also address the biodiversity crisis provides multiple benefits for our land, air and sea.

Blue Carbon

Blue carbon is a recently coined term which collectively describes the processes associated with the capture and storage of carbon within the marine environment. Government will aim to maximise sequestration opportunities in Jersey's waters through further research, protection, enhancement and extension of marine habitats such as sea grass beds.

The natural world can play an essential role in both our mitigation and adaptation strategies for climate change. As an Island of just 120 km², the scope for terrestrial restoration is limited with it being estimated that even a large-scale reforestation project would only be able to draw down in the region of 1% of the Island's total emissions. However, 95% of the Bailiwick of Jersey consists of sea and recent assessments have demonstrated that there are areas of sedimentary seabed which may be able to sequester important weights of carbon annually.

The Government of Jersey has an active marine research programme largely coordinated by its Marine Resources team. Government have just completed a desktop evaluation of our blue carbon resource in partnership with the universities of Plymouth and Exeter and the Blue Marine Foundation. The amount of carbon already sequestered annually around Jersey's seas is estimated at around 60,000 tonnes of carbon dioxide⁹³ which is around the same as the carbon dioxide equivalent emissions for the entire Jersey business sector. Sequestration is estimated to be between 877 and 2,332 t OC yr⁻¹ for organic carbon, and 12,237 t IC yr⁻¹ for inorganic carbon. The maximum sequestration potential is 14,569 t C yr⁻¹.

Government will develop a Marine Spatial Plan by the end of 2023 that can provide the necessary regulatory and consenting frameworks to manage marine activity in order to support blue carbon sequestration and will work with international partners to promote the recognition of marine sequestration in greenhouse gas inventories.

⁹³ Chambers, P.M., Blampied, S., Binney, F., Austin, W.E.N., Morel, G. An Assessment of Blue Carbon Resources in Jersey, Channel Islands, Government of Jersey. In draft, due 2022.



Biodiversity

The Climate Emergency Fund is already investing in projects designed to address the biodiversity crisis. This work will continue alongside the Carbon Neutral Roadmap, with a focus on:

- species and habitat protection;
- development of a biosecurity strategy and associated projects;
- marine environment research;
- improved habitat management; and
- development of a trees strategy and associated projects.

Sequestration

As required in Strategic Policy 5 of the Carbon Neutral Roadmap, government will develop a carbon sequestration framework, including public consultation by the end of 2023. The framework will address a range of issues, including:

- Advice and support for community tree planting projects to ensure that projects maximise long term carbon sequestration as well as improve biodiversity and deliver other community benefits
- Clarity on how local carbon sequestration will be accounted for in the Island's greenhouse gas inventory and the likely potential scale of the role that local sequestration (both in the terrestrial and marine environment) can play in meeting our emission reduction targets
- Financial support for sequestration projects that use local carbon sinks in the terrestrial or marine environment
- Embed the principle that local sequestration opportunities should be maximised before the purchase of any off-Island offsets

SMART objectives

- 1. To maximise co-benefits for biodiversity through our climate policies
- 2. To use nature-based solutions where possible

Assumptions

- Legislative basis for Marine Spatial Plan can be established
- That Blue Carbon is accepted in inventory reporting

Dependencies

Dependent on work of Economy and Natural Environment colleagues

CEF 4-Year budget	Total 2022-2025
Biodiversity projects funded by Climate Emergency Fund agreed in Government Plan	£1,325,000
Marine spatial plan	£150,000



EN6 - Carbon offsets

The Government of Jersey will:

Undertake the necessary work to ensure Jersey can become carbon neutral by 2030, through the delivery of ambitious carbon reductions policies, balanced with purchased offsets. A decision on becoming carbon neutral will be taken no later than 2028.

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 and consideration must be given to policies that support the removal of carbon from the atmosphere.

International markets in offsets are still evolving, and the costs, potential benefits and availability of offsets that would fulfil local aspirations are currently uncertain. In order to meet the Paris Agreement goals, the World Bank estimates⁹⁴ that carbon prices will need to be between \$50 and \$100 per tCO₂. The Bank of England increased its forecasted price to $$150 \text{ tCO}_2$$ by the end of the decade⁹⁵.

A carbon offset framework will be developed, consulted on, and published by 2025. It will include research and information on the following:

- Up to date information on the governance structures within the different carbon markets. For example, the independent governance body of the Taskforce on Scaling Voluntary Carbon Markets
- Current academic and international thinking on the highest principles that should be applied to offsets. For example, the new Oxford Principles for Net-zero Aligned Carbon Offsetting 96
- Current international agreements and stated national positions on how offsets should be used. Article 6⁹⁷ of the Paris Agreement⁹⁸ recognises that some Parties can choose to pursue voluntary cooperation in the implementation of their Nationally Determined Contribution (NDC) to allow for higher ambition in their mitigation and adaptation actions and to promote sustainable development and environmental integrity. At the time of writing, the final agreement on Article 6 had yet to be reached.
- The current UK position on using crediting mechanisms. In the UK's recently published net zero strategy⁹⁹, October 2021, it states 'While the UK intends to meet its climate targets for each of

⁹⁹ <u>Net zero strategy (GOV.UK)</u>



⁹⁴ State and Trends of Carbon Pricing 2020 (World Bank Group)

⁹⁵ https://www.bloomberg.com/news/articles/2021-05-18/boe-s-breeden-says-banks-are-unprepared-for-150-carbon-price

⁹⁶ The Oxford Principles for Net Zero Aligned Carbon Offsetting (Oxford)

⁹⁷ Paris Agreement – Article 6 (United Nations)

⁹⁸ Paris Agreement (United Nations)

- carbon budgets 3 to 6 through reducing emissions domestically and the proposals and policies set out in this Strategy have been prepared on that basis, it reserves the right to use such voluntary cooperation under Article 6 of the Paris Agreement'.
- How, in negotiations on extension of the UK's ratification of the Paris Agreement to Jersey, agreement is reached about how the Crown Dependencies can utilise carbon offsets to meet their agreed carbon targets
- Up to date current pricing on carbon offsets and predicted future pricing as well as a proposed purchasing strategy. This should take into consideration the types of offsets, the location of the offset project, the co-benefits of that project, the certainty of the carbon reduction, the verification/standard it meets, the need to hedge purchases across different offset types and locations and when to make the purchases.

SMART objectives

- 1. A carbon offset framework will be developed, consulted on, and published in 2025
- 2. A decision on becoming carbon neutral will be taken no later than 2028

Assumptions

• The carbon offsetting remains an internationally recognised and reputable method to addressing greenhouse gas emissions

Dependencies

• Availability and pricing of suitably verified carbon offsets on the market

Resources for this work will be provided from SPPP.

