Tackling the Climate Emergency Initial report

Your Island Your Say



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Introduction

- 1.1 The Council of Ministers has heard, and acknowledges, the strength of public feeling about climate change, and the Assembly's ambition that Jersey plays its part in addressing this fundamental challenge. While our contribution to worldwide emissions is small, we have a unique opportunity (as a small jurisdiction) to show global leadership and help chart the course to a more sustainable future.
- 1.2 A new carbon neutral strategy will be lodged in the States Assembly in December 2019, as agreed. This will describe a range of scenarios to achieve neutrality, and will outline the significant benefits - and significant costs - associated with these. Government, businesses and islanders will all have to play their part in developing and delivering this strategy, and the transformative carbon reduction measures that will be necessary.
- 1.3 As well as the obvious environmental benefits to carbon neutrality, there is a strong case that, by embracing this challenge in a bold way, Jersey can secure a range of strategic benefits at a local and global level. For example:
 - Jersey is more likely than many jurisdictions to achieve carbon neutrality at an early stage, because we start from relatively low emissions per capita, and we understand the origins of our emissions and the policies needed to minimize them
 - success would differentiate Jersey on the global stage as a leading carbonneutral jurisdiction. A global transition away from a carbon economy is inevitable; making early progress provides a point of differentiation to

- support existing strategic priorities, such as protecting and developing our finance and digital sectors
- as a small, connected community there is a real opportunity to adopt a participatory approach that involves everyone. If we can engage families, communities, parishes and businesses in designing our carbon neutral strategy, this can create a strategy that is more likely to be delivered and lead to an increased sense of empowerment and, potentially, increased trust in politics
- · our Overseas Aid programme, and the global reach of many island businesses, provide a network through which to develop innovative carbon reduction and offsetting strategies that also support our existing international and strategic objectives.
- To ensure early implementation of the carbon neutral strategy, the Council of Ministers proposes to create a Climate Emergency Fund. This fund will support new policies in a range of areas including island transport and travel, providing investment for electric and low-carbon vehicles and new cycling and walking infrastructure; the transformation of our energy market; urgently increasing environmental

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- protection in key areas; and innovative approaches to offsetting residual carbon in Jersey and abroad.
- 1.5 This initial report has been developed in the ten weeks following the declaration of a climate emergency. It sets out:
 - the principles, agreed by the Council of Ministers, that will frame the development and subsequent delivery of a carbon neutral strategy by the end of 2019
 - the climate context in which we are operating, both in Jersey and globally
 - the approach to developing the carbon neutral strategy, including the necessary research and opportunities for whole-island engagement
 - details of the operation and resourcing of the proposed Climate Emergency Fund, including the proposed increases to fuel duty over the Government Plan period.

1.6 The bold measures outlined in this report show a clear but realistic commitment by the Council of Ministers to respond to the climate emergency with energy and pace, and show to our global partners that we are serious about moving quickly to become a sustainable low-carbon jurisdiction.

2. Framing our response to the declaration of a climate emergency

- 2.1 The States Assembly, on 2 May, voted to approve P.27/2019 and declare a climate emergency. In agreeing P.27, as amended, the States Assembly agreed that:
 - "there exists a climate emergency likely to have profound effects in Jersey, and that in order to deal with this situation
 - a. Jersey should aim to be carbonneutral by 2030, and the Council of Ministers is accordingly requested to draw up a plan to achieve this, for presentation to the States by the end of 2019
 - b. The Minister for the Environment is requested to carry out, as part of the process for drawing up the forthcoming Government Plan for 2020, an examination and assessment of more ambitious policies to accelerate carbon reduction. This will include an assessment of the use of fiscal levers to change behaviour and raise awareness
 - c. The Chief Minister is requested to ensure that consideration of action to tackle climate change in Jersey is included as a standing item on the agenda of the Council of Ministers."
- 2.2 There is considerable overlap between an ambitious carbon reduction journey, the existing Energy Plan, Pathway 2050¹ (see section 3), and the decision of this Council of Ministers, for the first time, to agree a strategic, crossgovernment priority to protect the environment².

- 2.3 The Council of Ministers, on 24 May, discussed a series of principles, and agreed the following:
 - the need to act quickly, both by refocusing and reframing existing work in the light of the new ambition, and by developing some new policies while more detailed policy development is underway
 - the importance of acknowledging the public strength of feeling about these issues, and the ambition of the Assembly and, in doing so, the importance of striking a balance between seizing the opportunity for ambitious policy without undermining the past
 - the importance of bringing critical stakeholders on board, recognising that the climate emergency represents a whole-Island challenge to which government, business and the public will need to respond together
 - a strong desire to explore opportunities to put individual citizen and community action at the heart of our response, creating the conditions in which bottom-up initiatives flourish and islanders support each other to change their behaviours and adapt to lower carbon lifestyles.

¹ https://www.gov.je/Government/Pages/StatesReports.aspx?ReportID=1039

https://www.gov.je/government/planningperformance/strategicplanning/pages/commonstrategicpolicy.aspx

- 2.4 The Council of Ministers has discussed the climate emergency at each meeting since it was declared on 2 May. The subjects covered have included:
 - the role of the Island Plan in responding to the climate emergency (8 May)
 - framing Ministers' initial views and agreeing early work in response (24 May)
 - future responses to sea-level rise⁴ (12 June)
 - the importance of engaging with the public and the role of the Your Island, Your Say campaign in starting this conversation⁵ (24 June)
 - how other jurisdictions are addressing the low carbon agenda, including feedback from the recent British-Irish Council meetings (10 July).

- 2.5 The Council of Ministers' approach to tackling the climate emergency was also discussed extensively throughout May and June as part of the development of the Government Plan.
- 2.6 Following on from the declaration of a climate emergency in May, a Proposition was bought forward in June seeking free bus travel for school children. Part (c) (P.52/2019 as amended) was agreed, committing the Council of Ministers to bring forward a Sustainable Transport Strategy by end of 2019; this will be developed by the end of 2019 alongside, and as part of, the carbon neutral strategy.

 $^{{}^4\}underline{\text{https://www.gov.je/Environment/GenerateEnergy/Pages/ShorelineManagementPlan.aspx}}$

https://www.gov.je/Environment/Pages/YourIslandYourSay.aspx

3. The existing context for a carbon reduction journey

- The States Assembly, in 2014, agreed a carbon reduction plan, Pathway 2050 An Energy Plan for Jersey. This was in response to the extension, through the UK, of the Kyoto Protocol of the United Nations Framework Convention on Climate Change and in recognition of Jersey's commitment to tackling our island's carbon emissions.
- 3.2 Jersey's greenhouse gas emissions are monitored, independently validated and reported⁶. It is notable that Jersey already has relatively low per capita emissions, in part due to the lack of heavy industry in the island⁷.
- 3.3 Successful implementation of the polices in the current Energy Plan should deliver the projected reduction in emissions shown by the pink line on the graph below: nearly 80% lower than 1990 levels by 2050. Without any policies to reduce emissions, conservative projections are that emissions will follow the red line.
- 3.4 The trajectory of historic emissions (dark green line) demonstrate that Jersey has made good progress in reducing emissions since 1990. This is primarily due to the transition from heavy fuel oil power generation in the island to imported electricity. Around 70% of our imported electricity is nuclear-generated, and around 30% is certified renewable generation from the tidal barrage at La Rance. Equally, any carbon emissions associated with the production of this electricity are accounted for in the country of production (in this case, France).

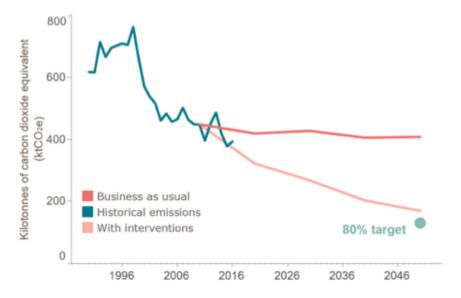


Figure 1 - Projected reductions in emissions 1996 - 2046: Pathway 2050 targets

⁶ https://www.gov.je/Environment/GenerateEnergy/Pages/GreenhouseGasEmissions.aspx

⁷ https://www.aether-uk.com/Resources/Jersey-Infographic

4. The case for a more ambitious carbon reduction policy

- The latest scientific evidence tells us that the Pathway 2050 emissions reduction target is now not ambitious enough to stabilise the climate and reduce the negative impacts of climate change.
- 4.2 | In October 2018, the Intergovernmental Panel on Climate Change (IPCC) published a report that was two years in the production and included the assessment of more than 6,000 scientific studies⁸. It gathered all the available scientific literature and laid out two future scenarios: one in which the Earth's average temperature was allowed to increase by 1.5°C above preindustrial temperatures (since around 1850); and one in which it increased by 2°C.
- 4.3 The report concluded that we are on track to reach 1.5°C between 2030 and 2052 if temperatures continue to increase at the current rate, and 3°C by the end of the century. Once we hit 2°C warming, the world will be a profoundly different place. There will be almost no coral reefs remaining, the Arctic will be completely devoid of ice during summer at least once a decade, and a huge number of animals and plants will become extinct as their habitats become smaller and smaller.
- 4.4 The impact for humans will be enormous, particularly in areas already vulnerable to rising sea levels, such as the low-lying coastal regions of Bangladesh and Vietnam, and island territories like Kiribati and the Maldives. The report warns that sea level rise will drive millions from their homes, and crop yields will fall dramatically in sub-

- Saharan Africa, Southeast Asia, and Central and South America.
- 4.5 Jersey is already planning for the impact of sea level rise. A public consultation is underway on a draft Shoreline Management Plan, which models the impact of sea water flooding, and sets a range of policies to manage the different parts of the Island's coast over the next 100 years. To have your say on this consultation, and related issues, go to www.gov.je/yourisland
- 4.6 To stay below the 1.5°C target, and avoid the impacts of 2°C temperature rise, the IPCC advised that "unprecedented" changes would be needed, requiring serious effort at every level of society.
- 4.7 In response to this latest stark evidence, many countries are aiming for carbon neutrality by 2050. P27/2019 asks for a plan that aims for carbon neutrality for Jersey by 2030. Jersey begins this journey with some advantages, including low per capita carbon emissions; no hydrocarbon reliant heavy industry; and secure access to low-carbon electricity supplies.
- 4.8 Appendix A sets out the high-level carbon reduction ambitions of a range of jurisdictions, and progress towards these.

⁸ https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

5. How might we achieve carbon neutrality

- In line with P.27/2019, part A, a new carbon neutral strategy is being developed to be presented to the States Assembly by the end of 2019. This strategy will also address the Sustainable Transport Plan required by P.52/2019.
- 5.2 Figure 2, below, shows how current emissions from key areas of activity in 2017 were c. 359,000 tonnes of CO2 equivalent. By 2030, and with a successful implementation of the Pathway 2050, this would decline to approximately 277,000 tonnes of CO2 equivalent. The chart demonstrates the key sectors in which these emissions arise, notably road transport fuels; oil and gas used for space heating; and air transport.
- 5.3 A direct route to carbon neutrality is presented in the graph opposite (page 11) and shown against the previously-agreed emissions reduction path. The steepness of the green line and the gap between the two emissions-reduction pathways demonstrates the scale of the challenge ahead.

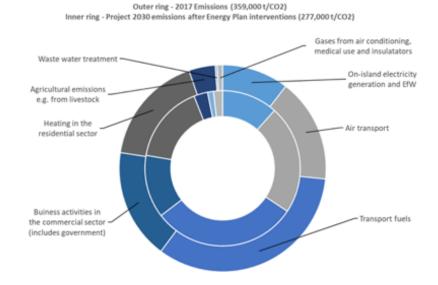


Figure 2: Reducing emissions by sector

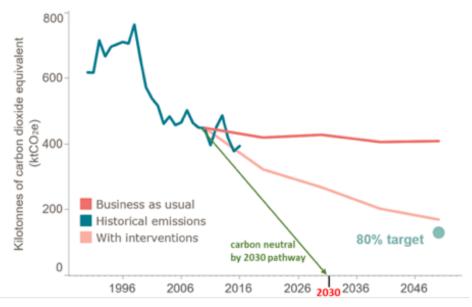


Figure 3 - Projected reductions in emissions 1996 - 2046: new targets

- 5.4 To achieve neutrality we will need to develop more ambitious policy interventions to reduce the around 277,000 tonnes of CO2 equivalent that are projected to be emitted, on current trends, in 2030. Policies will be required both to make sustainable reductions in emissions over time, and to offset residual emissions over the transition period. These policies will need to be bold, and will require the continued support of States Members when the Assembly considers, in response to their declaration of a climate emergency, the adoption of a new carbon neutral strategy.
- The ring chart (figure 2, page 10) shows how projected emissions in the air transport sector remain a similar proportion of the total amount of emissions. This is because the forecast assumes on-going need for air transport at roughly current levels to support external travel and trade links, and that airplanes remain primarily fuelled by hydrocarbons (albeit becoming more fuel-efficient). Tackling emissions from air and sea travel is widely considered to be a global issue that requires globally agreed solutions and transformative technology9. The island will have to consider how to deal with emissions from our external transport links as part of the development and implementation of its carbon neutral strategy.

6. Reducing island emissions

- The carbon neutral strategy will set out fully considered and costed carbon reduction policies in which the public, government and States Assembly can have confidence.
- 6.2 At this stage, based on the existing understanding of Jersey's current carbon emissions and the modelling that informs Pathway 2050, it is possible to conclude that significant new policy interventions will be required in all of the areas set out below.

Transport

- 6.3 A third of the island's emissions arise from road transport. A transition away from petrol and diesel vehicles to more sustainable and active modes of transport, and towards ultra-low-emissions vehicles, will be critical to achieving a significant reduction in emissions.
- 6.4 Principles for investment and developing new policies in this area might include:
 - prioritising investment in an improved, fairly-priced public transport system with low-carbon vehicles to encourage people away from car use. Steps towards this might include the use of electric buses, bus advantage schemes, extensions to the bus network or a re-designed school bus service
 - delivering better infrastructure to encourage sustainable and active travel, shared journeys, walking and cycling in a safe environment.
 Steps towards this might include extensions to the eastern and western cycle routes, re-opening a grant scheme for electric

- personal transport, promotional travel initiatives and workplace travel planning coordination
- bringing forward policies that correctly price and cost pollution for those who choose to use private vehicles. It is recognised that some people will always need to, or wish to, use their cars, vans and commercial equipment, but steps might be taken to ensure that policies favour the lowest carbon-emitting vehicles and those vehicles with the least impact on air quality.

Space heating in the residential, business and public sectors

- A third of the island's emissions arise 6.5 from heating residential, commercial and government buildings, using LPG gas or kerosene. Policies that promote energy efficiency can go some way to reducing emissions, although without accompanying approaches to encourage people to choose different heating behaviours, these can have limited effect. For example, when insulation is fitted people often simply heat their homes to a higher standard; this is particularly the case where homes were poorly heated in the first instance.
- 6.6 Principles for investment and developing new policies in this area might include:
 - developing policies for the built environment that ensure new buildings are as energy efficient as

- possible and new heating systems are low-carbon. Steps toward this might include more ambitious building bye-laws for residential and commercial buildings
- helping people to make their existing homes as energy efficient as possible. Steps toward this might include an extension of current grant-assisted home energy assessments⁹, or support for modernising some heating systems
- ensuring that those responsible for residential and commercial rented properties both measure and communicate the current energy performance of their buildings. Steps toward this might include mandatory requirements for energy performance certificates or similar audit schemes
- investment by the government and parishes in existing and new public buildings, to create highly energy-efficient stock, heated by low-carbon and renewable energy solutions wherever possible.

Addressing residual emissions

- 6.7 As an island economy, dependent on external transport links, it is likely that, even with bold carbon reduction policies, there will be residual emissions that will continue beyond 2030. How Jersey chooses to address these emissions will be key to the success and credibility of its carbon-neutral journey. Principles for investment and developing new policies in this area might include:
 - introducing carbon sequestration schemes in Jersey. While recognising Jersey's space constraints, the management of natural spaces and the working countryside can provide opportunities for some local carbon sequestration. Welldesigned policies have the co-benefit of enhancing existing habitats

and creating new natural habitats. These can act as carbon sinks and can protect biodiversity and contribute to 'nature's recovery'. This co-benefit is an important policy principle in this unprecedented period of human-driven biodiversity losses¹⁰, as recently outlined in the United Nations Global Assessment Report on Biodiversity and Ecosystem Services

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- agreeing that offsetting emissions internationally provides a legitimate route to achieve net carbon neutrality, provided it is used either as part of a transitional plan that also includes credible, funded policies to reduce island emissions, and/or to offset residual unavoidable emissions as defined in the carbon neutral strategy. International offsetting schemes should take place through certified carbon reduction projects that match our international development, philanthropic and other strategic goals.
- 6.8 In addition, there are opportunities to help the rural economy to transition to more carbon-beneficial agricultural practices as they work in parallel to diversify into lower-intensity models of farming.

https://www.gov.je/environment/generateenergy/greenhouseemissions/energyefficiency/pages/homeenergyaudits.aspx
 Intergovernmental Science - Policy Platform on Biodiversity and Ecosystem Services - https://www.ipbes.net/system/tdf/ipbes_7_10_add-1-_advance_0.pdf?file=1&type=node&id=35245

7. Resourcing the development of a carbon neutral strategy

- 7.1 Developing a carbon neutral strategy and a new sustainable transport plan by the end of 2019 requires unscheduled policy work, such as research, analysis, engagement and consultation, to be undertaken at pace. While a significant amount of expertise and prior work exists on which these new strategic policies can be based, additional technical studies and policy resources will be required to complete the work.
- 7.2 An application for an additional £212,500 of in-year funding for 2019 has been made to the Investment Advisory Board for 2019. This funding is required, among other things, to:
 - update the evidence that underpins Pathway 2050, to take account of the current global scientific consensus on climate change and the profile of the island's carbon emissions
 - commission a full cost-benefit analysis of available policies, in order to determine how best public resources might be directed to support the transition to a carbon neutral future
 - carry out an economic appraisal of available policies to raise the necessary revenue to fund carbon reduction policies, including detailed assessment of distributional and cumulative impact of available fiscal measures

- invest in a wide-ranging citizen engagement programme, to shape the carbon neutral strategy and the design and delivery of associated policies, subject to the agreement of the States Assembly
- provide additional policy development and management capacity to steward and quality assure the above work, and to ensure it integrates strategically with wider Government priorities and activity

8. Building a carbon neutral strategy with the whole community

- Whole-island ownership of the climate emergency challenge is critical to its success, and to agreeing and achieving an ambitious pathway to a carbon-neutral future.
- 8.2 Many jurisdictions that are committing to a low-carbon journey are establishing citizens assemblies to build consensus and support for their vision, and to bring citizen participation and innovation to the policy making process.
- 8.3 As Jersey develops its carbon neutral strategy, the government will explore formal and informal ways to best engage the public in considering many of the key issues, including questions such as:
 - what are the opportunities and implications of the different paths we might take towards a carbonneutral future for Jersey?
 - how do we create citizen ownership of the change agenda and embed new low-carbon and other environmentally-positive behaviours?
 - what are the implications for individual energy choices and the island's energy market? What are the consequences in the energy market of an accelerated transition away from fossil fuels; what infrastructure will we need and what becomes obsolete?
 - how will we fund the inevitable costs of the transition to carbon neutrality, and how and when will we share in the benefits locally?

- what are the opportunities to use our low-carbon journey to position the island as a leader in a competitive global marketplace?
- 8.4 In advance of this wide-ranging citizen engagement, a number of nearer-term engagement activities have been progressed. The ecoactive programme has assumed a stronger focus on the role that islanders can play to reduce carbon emissions and help tackle the climate emergency, and issues related to the climate emergency are embedded in the Your Island Your Say consultations and events on the Island Plan, Shoreline Management Plan and Southwest St Helier Masterplan.
- is also providing support and a focus for discussion throughout the development of the carbon neutral strategy. The Minister for the Environment has met with the chair of the Energy Forum and agreed that the Energy Partnership be re-cast as a Carbon Neutral Alliance, with a revised terms of reference to focus on the climate emergency. The Energy Forum agreed this at their meeting of 13 June. A range of initial carbonneutral scenarios were considered at a carbon futures workshop on 19 July.

9. The Climate Emergency Fund

- 9.1 To provide for a rapid response to the climate emergency and ensure early implementation of the carbon neutral strategy, the Council of Ministers proposes the creation of a climate emergency fund. This fund will support new policies in a range of areas including transport and travel, providing investment for electric vehicles and new cycling and walking infrastructure; the transformation of our energy market; and innovative approaches to offsetting residual carbon in Jersey and abroad.
- 9.2 The fund will be established with an initial allocation, in 2020, of £5 million from the Consolidated Fund.
- 9.3 Acknowledging the long-term nature of the climate emergency, the government also wishes to provide recurrent sources of income to the Climate Emergency Fund over a longer period. To this end, and in line with P.27/2019 part B, a wide-range of fiscal levers are being explored. Options for future changes will be set out in the carbon neutral strategy along with details of how revenue raised would be directed to the Climate Emergency Fund.
- 9.4 A proposed Terms of Reference for the fund are set out in the Government Plan, and enclosed below at Appendix B for ease of reference.
- 9.5 The Government Plan proposes the following initial expenditure from the Climate Emergency Fund:
 - £1.55 million for the first phase of new schemes and improvements that will be set out in, and dependent on approval by the States Assembly, of the sustainable transport plan
 - £0.50 million of urgent enhancements to environmental protection systems and processes in areas that are already impacted by, or help tackle,

- climate change including the control of invasive and non-native species; marine resources; and protection of the island trees and other carbon sinks. This money will also provide for additional support to ensure the Island Plan is fully responsive to the climate emergency in key areas, including an enhanced sustainability appraisal and key technical studies
- £0.50 million to support detailed policy development and the design and coordinated implementation of the major new programmes that will be set out as part of the carbon neutral strategy and sustainable transport plan.

Fuel duty increases

- 9.6 At this stage, the Government Plan proposes to increase fuel duty by 4p a litre above RPI in 2020, and to transfer equivalent revenue to the Climate Emergency Fund.
- 9.7 The proposed fuel duty increase has two policy objectives:
 - 1. to provide revenues over the short and medium-term from carbon-producing activities that can be utilised, via the Climate Emergency Fund, to support carbon reduction policies

- 2. to provide a direct incentive to drivers, particularly over the longer-term, to drive less where this is an option. For example, walking or cycling shorter local trips; travelling to work by bus; or car sharing with friends and neighbours.
- 9.8 The extent to which the increase in fuel duty will act as a direct incentive to change the behaviour of drivers will depend on individual circumstances and the availability of viable alternative travel choices.
- 9.9 It is clear that prices for fuel already vary significantly across Jersey¹², suggesting that price is not a particularly significant factor in consumer choice over the short-term. This is known as the 'price elasticity' of a good or service. However, there is evidence that the price elasticity of motor fuel changes over time, and that "long-run elasticity is higher than the short-run figure: effects build up over time rather than fading out¹³".
- 9.10 In order to achieve both policy objectives set out above, therefore, the Government Plan also proposes further above inflation increases in fuel duty in future years. Specifically, the Plan indicates an increase of 2p above inflation in 2021 and again in 2022, such that by 2022 fuel duty will be 8p per litre above where it would have been if it had tracked RPI. These further rises, and the transfer of equivalent revenue to the Climate Emergency Fund, will be subject to confirmation in future Government Plans, and subsequent agreement by the States Assembly.

| Year | Proposed annual increase in fuel duty above inflation | To Climate Emergency Fund |
|------|---|---------------------------------|
| 2020 | 4p | £2,000,000 |
| 2021 | 2p | £3,000,000 |
| 2022 | 2p | £4,000,000 |
| 2023 | - | £4,000,000 |

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Figure 4 – Fuel duty and the Climate Emergency Fund

- 9.11 The Government Plan sets out these increases in order to be transparent about the introduction of further, increasing incentives to transition away from carbon-generating motor fuels in the coming years. Coupled with other measures such as investment in new public transport, active travel and electric vehicle infrastructure, annual increases are intended to create the context for both a reduction in carbon generating transport and an enhanced transition to electric transport.
- An analysis of the distributional impact 9.12 of the proposed fuel duty increases has been undertaken, and is set out in detail in Appendix C. It suggests that, were the proposed increases in fuel duty passed directly on the consumers, the additional cost would represent a very small proportion of the income of the average household in all of the income groups. As an example, the poorest 20% of households consume less than 10 litres of motor fuel a week. The analysis does, though, acknowledge that there may be individual households within this quintile who would feel a more significant effect as a result of the proposed fuel duty increases.
- 9.13 While increasing fuel duty is a gently regressive measure, expenditure from the Climate Emergency Fund could be used on progressive initiatives.

 This would mean that, on balance,

¹² For example, on 2 July 2019, the price for a litre of unleaded petrol ranged from 113.5p to 125.4p. Taken from https://www.jerseyfuelwatch.com/unleaded-prices/, accessed 3 July 2019.

¹³ Mark Hanly, Joyce Dargay and Phil Goodwin, Review of Income and Price elasticities in the Demand for Road Traffic, Economic and Social Research Council Transport Studies Unit publication (University College, 2002), p.95

- the overall net impact of the revenue raising would be less regressive.
- 9.14 It is acknowledged that, over the longer term, as behaviours change, the two policy objectives will come into conflict; as use of hydrocarbon motor fuels reduces, the revenue generated to support carbon reduction policies will also reduce. While this transition will need to be managed, and financial commitments met from the Climate Emergency Fund will need to anticipate this volatility, it is considered that the outcome is consistent with the overarching policy objective of reducing carbon emissions in Jersey.

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10. Conclusions and next steps

- The Council of Ministers has heard, and acknowledges, the strength of public feeling about climate change, and the Assembly's ambition that Jersey plays its part in addressing this fundamental challenge. While our contribution to worldwide emissions is small, we have a unique opportunity, as a small jurisdiction, to show global leadership and help chart the course to a more sustainable future.
- 10.2 The bold measures outlined in this interim response show a clear, but realistic, commitment by the Council of Ministers to respond to the climate emergency with energy and pace, and show our global partners that we are serious about moving quickly to become a sustainable low-carbon jurisdiction.

Next Steps

- 10.3 Work will continue throughout 2019 on all areas outlined in this response, and a new carbon neutral strategy will be presented to the States Assembly in December 2019, as agreed.
- 10.4 In particular, we will develop the detailed economic case for and prioritised programme of necessary policy interventions, and seek opportunities to engage people in framing and informing the choices we must take to agree and achieve our carbon neutral future together.

Appendix A: The approach of other jurisdictions to the climate emergency

A1 The progress a number of other leading jurisdictions is shown below. They are acting with a combination of legislative approaches and emissions reduction policies, alongside off-setting measures in their own country (frequently by reforestation where land reserves allow) or through international projects.

The administrations of the British-Irish Council

- A2 Jerseys Chief Minister and Minister for External Relations attended the 32nd Summit Meeting held in Manchester (27/28 June). The theme for the meeting was smart grids. The energy work sector of the Council, of which Jersey is a member, presented a paper on the importance of decentralised grids in the energy transformation away from hydrocarbons to smart grids. Smart grids are characterised by customer-led demand management, micro and macro scale renewable energy generation and battery storage. These grids are a transformative step away from centralised hydrocarbon powered grids. The development of these forms of grids is critical to a low carbon future and the jurisdictions discussed their respective progress in these areas.
- A3 In both the thematic meeting and the heads of state main summit, the jurisdictions' discussed their low-carbon journeys. A commitment was made by all jurisdictions to work together on the shared journey of carbon neutrality and the next four examples show the approach of some of our closest strategic partners.

The UK

A4 The UK has legislated for net zero carbon emissions by 2050 through an amendment to the Climate Change Act. This makes it the first member of the G7 group of industrialised nations to legislate for net zero emissions. They aim to tackle emissions by reducing emissions and using off-sets in the case of unavoidable emissions.

Scotland

- A5 Scotland aims for net zero carbon by 2045 and has set out a journey of 70% by 2030 and 90% reduction by 2040. The most ambitious statutory targets in the world for these years.
- A6 Scotland has more potential sites for carbon capture and a greater landmass for tree planting than rest of the UK. To achieve the goal, a fifth of agricultural land needs to shift to alternative uses, that support emissions reductions, such as forestry or biomass production. Carbon capture and storage are crucial, as is investment in renewable energy and energy-efficiency measures, and decarbonised buildings and vehicles.

The Isle of Man

A7 The Isle of Man aims to be carbon neutral by 2050 and will bring forward a plan to achieve this by the end of 2019. Key challenges include moving to a low-carbon vehicle fleet and reducing the reliance on hydrocarbons, in the IoMs case natural gas, for space heating. Officers will continue to work together and build on the already strong partnership that has recently been forged between Jersey and the Isle of Man.

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Guernsey

- A8 Guernsey is due to set a climate crisis action plan in 2020. The States of Guernsey and the efforts it makes to address the multitude of environmental issues that are faced and have committed to bring a climate crisis action plan to the Assembly in the first part of 2020.
- A9 In 2018, Guernsey joined the International Network of Financial Centres for Sustainability (FC4S), which encourages financial centres to focus their energy on green, climate friendly operations. At the British-Irish Council it was agreed that the administrations would work together in the future to explore the opportunities around environmentally positive financial services.

Other leading global jurisdictions

Norway

- A10 Norway aims to be carbon-neutral in 2030, if emissions cuts are made by other countries, and by 2050 regardless of international emission cuts. Norwegian climate policy is based on cost efficiency, meaning a significant portion of the cuts will likely be achieved through offsetting with emissions reductions abroad.
- A11 Norway emits 53M CO₂eq tonnes annually and wanted to offset this by paying other nations to cut emissions under carbon trading schemes. The country's electricity and heating is largely provided by hydropower, leaving transport and oil and gas extraction and processing as the largest emitters.

Iceland

A12 | Iceland aims for neutrality by 2040 and starts with an advantage in that 99% of its electricity is from sustainable geo-thermal sources. Fossil fuels are used in fisheries (11%), transport (20%), industrial processes (42%), agriculture (13%) and waste management (5%). Iceland's climate action plan was launched in 2018 and consists of 34 government measures and two main areas of focus: to phase out fossil fuels in transport; and to increase carbon sequestration in land use, by restoration of woodlands and wetlands, revegetation and afforestation. They also intend to gradually increase a general carbon tax that is already in place.

Sweden

- A13 Sweden legislated to reach net-zero emissions by 2045. The emissions covered are mainly from transport, machinery, small industrial and energy plants, housing and agriculture. With more than half of Sweden's energy already coming from renewable sources notably hydropower the focus will be on greening transport.
- A14 | The climate policy framework consists of three pillars: a Climate Act, climate goals and a climate policy council. It will provide the long-term conditions for business and society to implement the transition needed to solve the challenge of climate change.

Costa Rica

A15 Costa Rica is aiming to be the first carbon-neutral nation in the world by 2021, and start from a strong position, with 98% of their electricity coming from renewable sources. The focus, is on transportation which accounts, for two thirds of emissions. The approach involves planting five million trees a year and employing better land management to sequester their emissions.

Vatican City

A16 Vatican City planned to offset its entire emissions in 2007 through the 'Vatican Climate Forest', a reforestation project in Hungary.

New Zealand

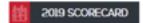
- A17 New Zealand aims for zero carbon emissions by 2050. More than half of their city's greenhouse gas emissions come from agriculture, with methane from livestock digestive systems producing 35%. New Zealand aims to generate 90% of its energy from renewable sources by 2025, and to halve its transport emissions per head by 2040.
- A18 New Zealand too intends to sequestering carbon by planting one billion trees over 10 years whilst ensuring the electricity grid runs entirely from renewable energy by 2035.

The net zero emissions race – where does Jersey stand?

The scorecard opposite (page 23) A19 shows information from the Energy and Climate Intelligence Unit (a nonprofit organisation that supports informed debate on energy and climate change issues in the UK¹⁴⁾. They show how nations are responding to the Climate Emergency in responding to P.27. Jersey would fall into the orange portion of the scorecard with policy under development and an aim for neutrality by 2030 (similar to Uruguay). To progress to the green portion, Jersey would need to set out and agree targets in legislation.

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NET ZERO EMISSIONS RACE





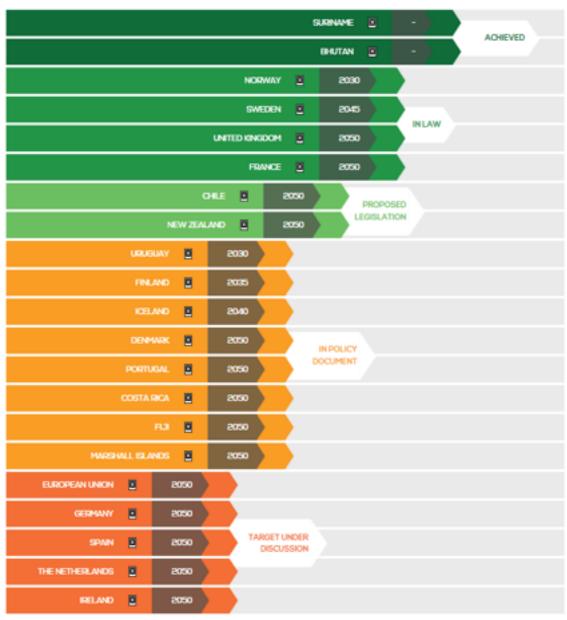


Figure 5 - Emissions Race

Appendix B: Proposed Terms of Reference for a Climate Emergency Fund

The Climate Emergency Fund is established as a "States Fund" in accordance with Article 6 of the Public Finances (Jersey) Law 2019 (subject to the sanction of Her Majesty in Council) ("the Law") which enables the States, on a proposition lodged by or with the consent of the Minister for Treasury and Resources, to establish a States Fund for specific purposes.

B1 The purpose of the Climate Emergency Fund

- B1.1 The purpose of the Climate Emergency Fund ("the Fund") is:
 - (a) to support initiatives that respond to the climate emergency, as declared in P.27/2019, and initiatives that reduce carbon emissions, in line with adopted future plans or strategies for, inter alia, energy use and management, carbon reduction, sustainable transport approved by the States Assembly including as part of an approved Government Plan; and
 - (b) to receive the following funding sources to support initiatives as defined in (a) above
 - (i) transfers from the Consolidated Fund, and other Funds as necessary
 - (ii) a grant from a head of expenditure approved in a Government Plan
 - (ii) income or charges as agreed in a Government Plan.
- B2 The powers and limitations of the Fund

- B2.1 The purpose of the Fund can only be varied by the States Assembly on a proposition lodged by, or with the consent of, the Minister for Treasury and Resources.
- B2.2 Money held in the Fund will not form part of the annual income of the States nor the Consolidated Fund balance.
- B2.3 Only those costs associated with the purpose of the Fund can be met out of the Fund.
- B2.4 All expenditure to be incurred from the Fund must be approved as part of a Government Plan or any amendment to such.
- B2.5 The Climate Emergency Fund will be maintained until such time as:
 - (a) the States Assembly is of the opinion that there is no longer a Climate Emergency; or
 - (b) alternative arrangements are put in place to fund initiatives that respond to the climate emergency, and initiatives that reduce carbon emissions, in line with adopted future plans or strategies for, inter alia, energy use and management, carbon reduction, sustainable transport, or related issues.
- B2.6 Upon the winding up of the Fund, any balance remaining in it shall be transferred to the Consolidated Fund.
- B2.7 The operation of the Fund must be in accordance with the Public Finances (Jersey) Law 2019 and the requirements of the Public Finances Manual.

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B3 Those empowered to carry out actions on behalf of the Fund

- B3.1 The Minister for the Environment has overall policy responsibility within the executive, on behalf of the Council of Ministers, for the Fund; this will include being answerable to the States Assembly and responding to questions relating to the assessment of climate conditions, appropriate strategy and responses, and delivery of associated policies and initiatives through the Fund.
- B3.2 The Minister for Treasury and Resources has ministerial responsibility for setting an appropriate investment strategy for the Fund, as required.
- B3.3 The Principal Accountable Officer has responsibility under the Public Finances Law (Jersey) 2019 for the appointment of the Accountable Officer(s) for the Fund.
- B3.4 An Accountable Officer is accountable for the proper financial management of the Fund, which includes ensuring that payments from the Fund are progressed in line with States' approvals and that the Fund is administered in a prudent and economical manner; responsibility for ensuring that proper control and assurance frameworks exist; and responsibility for ensuring that systems are in place to manage risks related to the Fund.
- B3.5 An Accountable Officer for the Fund is answerable to the States' Public Accounts Committee for the performance of their functions.
- B3.6 An Accountable Officer can delegate functions to others, but will remain accountable. In order to ensure that good governance and control is achieved, any delegation must be documented in a Scheme of Delegation.

has a duty under Article 11 of the
Comptroller and Auditor General
(Jersey) Law 2014 to provide the States
with independent assurance that the
public finances of Jersey are being
regulated, controlled, supervised and
accounted for in accordance with the
Law. This duty extends to the Fund.

B4 Reporting arrangements

- B4.1 Details of the climate emergency Fund will be included in the published States of Jersey Annual Financial Statement, and financial updates provided to the States Assembly by the Minister for Treasury and Resources.
- B4.2 In addition, monitoring and update reports on the response to the Climate Emergency, including validated carbon emissions data, will be presented to the Council of Ministers and States Assembly by the Minister for the Environment. The frequency and scope of these reports will be set out in adopted future plans or strategies for, inter alia, energy use and management, carbon reduction, sustainable transport, or related issues.
- B4.3 The Government Plan will include details of the estimated amounts that will be in the Fund at the start and end of each of the years covered by the Plan.

Appendix C: Analysis of the distributional impact of proposed fuel duty rises

- C1 This distributional analysis focuses on which households end up ultimately benefiting or losing from the proposed increase in fuel duties changes.
- C2 To the extent that the increased duties are passed on through prices, the impact will be on consumers/ households though this will hit different groups of households to different extents. At a high level, an increase in fuel duties will disproportionately affect those who purchase more fuel.
- C3 Using the results from the Income and Expenditure Survey, it is possible to break down expenditure by different parts of the income distribution into categories.
- C4 The Jersey Income and Expenditure
 Survey divides households in Jersey
 into five equal sized groups (quintiles)
 according to their income level the
 first quintile being the 20 per cent of
 households with the lowest incomes,
 the second quintile being the next 20
 per cent of households and so on, up
 to the fifth, or highest, quintile being

- the 20 per cent of households with the highest incomes.
- C5 To get an understanding of how various fiscal measures impact on different parts of the income distribution it is possible to look at whether measures are:
 - Regressive: The average cost to the household falls as a share of income as income rises. This means that those with the lowest incomes pay more relative to their incomes (even though they may pay less in monetary terms)
 - Proportional: The average cost to the household is constant as a share of income as income rises. This could still mean that the lowest incomes pay less in cash terms, but it is the same proportion of their income
 - Progressive: The average cost to the household increases as a share of income as income rises. This will mean that the better off pay more in monetary terms and as a share of income.

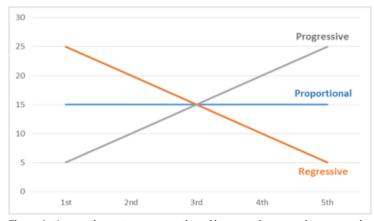


Figure 1 - the cost impact as a proportion of income of progressive, proportional and regressive measures by income quintile

- C6 The distribution of income is not necessarily indicative of the distribution of wealth, and households may be at different levels of income at different points of their life e.g. a retired household may have considerable savings but a low income in an individual year; whereas a young household at the beginning of their career may have relatively low income but also limited savings. Both example households may well have much higher incomes at different points in their lives.
- C7 Further, this analysis does not consider how people at different points of the income distribution might change their behaviour to enhance their welfare in response to the changes. For example, those on lower incomes may have limited opportunity to reduce other areas of consumption without a significant impact on their overall welfare. This may create a greater incentive to switch to alternatives such as walking/cycling or public transport.
- C8 The average household spends £16.41 per week on petrol, diesel and other motor oils (2018 prices¹⁵), equivalent to £853 over the course of a year. This ranges from £539 per year for the average household in the lowest income quintile to £1,114 per year for the household in the highest income quintile.

- C9 This means that if prices for fuel were to go up uniformly then the top two quintiles would pay around half of the increase, assuming there is no change in behaviour, the lowest quintile would pay little over 10% of the increase.
- C10 However, there is a somewhat different picture when looking at expenditure as a proportion of household income. On this basis, the lowest quintile spends the most at 2.7 per cent of income; while the highest quintile spends the least at 0.8 per cent of income.

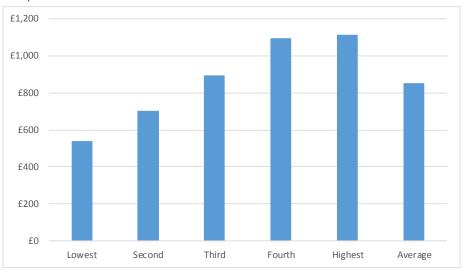


Figure 2 – yearly spend on fuel by income quintile

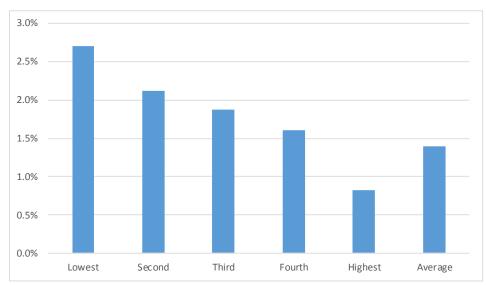


Figure 3 - proportion of income spent on motor fuel, by income quintile

- C11 For illustrative purposes, Figure 4 shows the impact of a 5 per cent increase in the cost of motor fuel (equivalent to the proposed 6p rise being fully passed on in prices at the pump).
- C12 This would have a relatively small impact on all quintiles as a proportion of household income ranging from 0.04 per cent of annual income to 0.14 per cent.

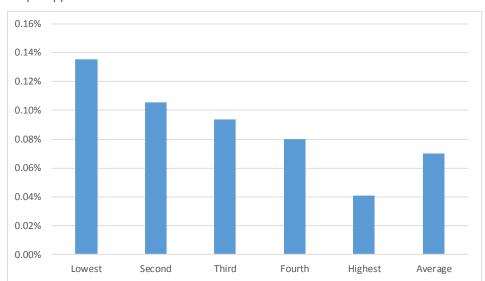


Figure 4 - impact of 5% increase on the price of motor fuel, as a proportion of income, by income quintile

- C13 In cash terms, rough estimates suggest this would be an extra £0.53/week for the average household in the lowest income quintile, and £1.10 for the highest quintile (in 2018 prices).
- C14 | In conclusion, if fuel prices went up uniformly this would disproportionately affect those with the lowest incomes as they spend a higher proportion of their income in this area than those with the
- highest incomes.
- C15 The impact of a relatively small increase in the price would represent a very small proportion of the income of the average household in any of the income quintiles. There may however be individual households within these quintiles who would feel a more significant effect if prices were to increase.

