CLIMATE CHANGE
ANNUAL PROGRESS REPORT

March 2023 GD 2023/0044

NET ZERO
ISLE OF MAN

Isle of Man

CONTENTS

This Annual Progress Report has been prepared by the Climate Change Transformation Team, in accordance with the requirements of section 19 of the Climate Change Act 2021.

Foreword by Chair of the Climate Change Transformation Board

2022 was a year of climate extremes. The Isle of Man, along with 28 other countries,[i] including the UK, experienced the hottest days on record.[ii] Europe experienced unprecedented wildfires[iii] and devastating floods affected every inhabited continent.[iv] In Pakistan, a third of the country was inundated, affecting 33 million people and displacing eight million.[v] Antarctica is now losing ice mass at a rate of 150 billion tonnes a year.[vi]

The global energy crisis, triggered by Russia's invasion of Ukraine, caused fossil fuel consumption subsidies to double between 2021 and 2022,[vii] while prices for consumers also soared. At the same time, adverse weather is contributing to increases in the price of food. Climate change and the cost of living crisis are therefore closely linked and the transition away from fossil fuels is key to mitigating both.

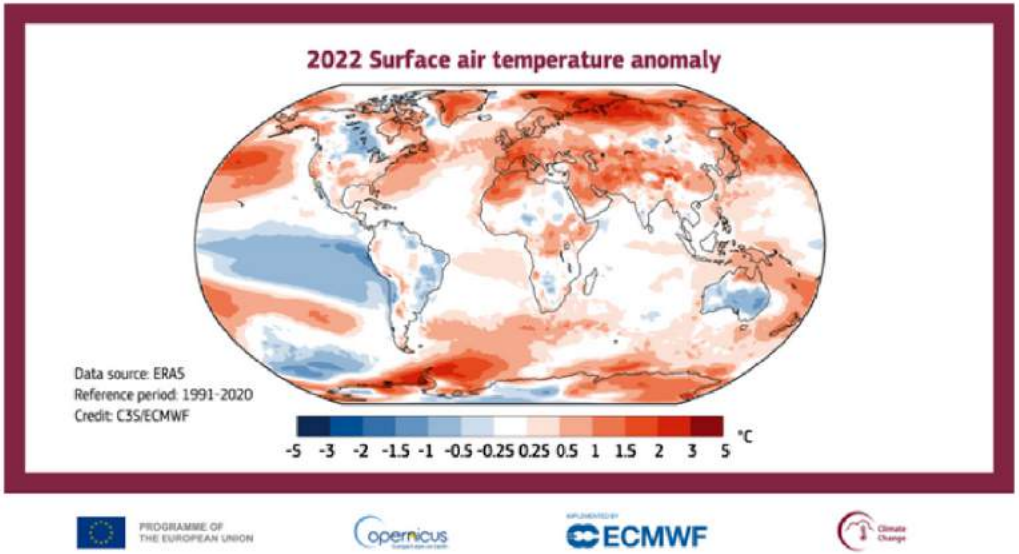
"The case for climate action has never been clearer."

The case for climate action has never been clearer and the Island's response to climate change has stepped up considerably in recent years. The Climate Change Act 2021[viii] came into effect in 2021,[ix] followed by the Phase One Climate Action Plan and then, in October 2022, the Isle of Man Climate Change Plan 2022-2027.

The Island Plan[x] and the Isle of Man Economic Strategy[xi] provide essential context for ongoing climate action. In particular, delivering the aim of the Economic Strategy to increase our Island's economically active population, while still reducing our emissions will require significant attention and cross-government collaboration.

Fossil fuels and other high emitting practices are woven into every part of our lives. The transition to net zero is a programme of change unprecedented in scale and breadth, impacting government, businesses and individuals. It is therefore critical that we focus our efforts on delivering the necessary changes at pace and in ways that will benefit our community, our economy and our environment.

Daphne Caine MHK
Chair of the Climate Change Transformation Board



Air temperature at a height of two metres for 2022, shown relative to its 1991-2020 average. Source: ERA5. Credit: Copernicus Climate Change Service/ECMWF

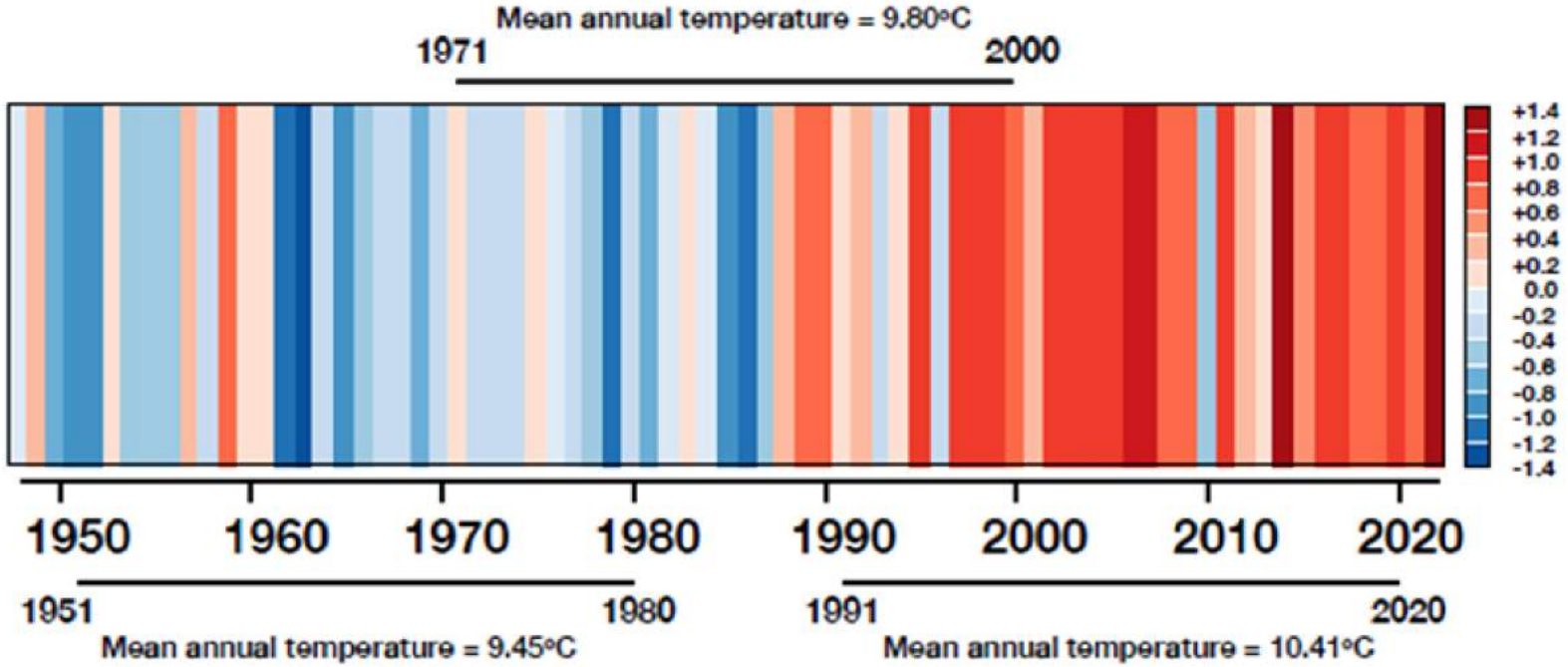
INTRODUCTION

The Climate Change Plan 2022-2027 (the Plan), which outlines the policies and proposals necessary to reduce emissions over the next five year period, and which was intended to be in place by 1 April 2022, was delayed until October 2022. However, over that period, agreement was reached to include sectoral emissions reduction targets sufficient to put the Island on track to reach net zero by 2050 and our interim targets of 45% by 2035 and 35% by 2030. The 2030 target was approved at the same sitting of Tynwald as the Plan provided a clear route to achieving it.

This report, therefore, covers progress, across all sectors identified in the Plan, from October 2022 to March 2023. It aligns with the statutory requirements set out in section 19 of the Climate Change Act 2021. It is not an emissions or greenhouse gases (GHG) inventory report.

It should be noted that during this reporting period, the Climate Change Transformation Team (CCTT) became extremely short staffed and at the time of writing, recruitment was underway to enable resource to deliver the Plan. Due to the lack of resources, and the delay of the climate change plan, some actions are yet to be started until staff are in place. The CCTT also moved from Cabinet Office to DEFA during this period.

The Isle of Man's 'Climate Stripes' - Year on year average temperature change



PROGRAMME HIGHLIGHTS

This section provides information on some of the projects that have progressed since the Plan came into effect in October 2022.

The sections correspond with those in the Plan and the 'deliverables' refer to the numbered actions in the Plan.

1. ELECTRICITY

Energy Strategy (Deliverable 1.1)

Following previous research by Ove Arup,[xii] a first draft of the high level contents of an energy strategy was developed in March 2023, underpinning the need for a transition to carbon neutral generation on Island to improve energy security and meet our net zero goals. The principles of the strategy are to:

- Provide support to the delivery of Our Island Plan and the economic strategy
- Provide support to the delivery of the Island's net zero targets
- Enable the transition of energy generation to occur in an economically efficient manner, when considering the economy as a whole
- Make greater use of our own energy resources
- Increase energy independence
- Maintain the Island's existing levels of power system resilience

Decarbonising the electricity system will rapidly reduce the Island's dependence on imported oil and gas, reducing in turn our exposure to volatile international prices. The 30MW announcement (see across) marks the start of the pathway towards total decarbonisation by 2030, where the Island's dependence on natural gas will shrink by 80% once the Combined Cycle Gas Turbines ('CCGT') is no longer in use.

The full strategy is expected to be launched in Autumn 2023. Manx Utilities has published the Future Generation Delivery Strategy,[xiii] based on the findings of several technical reports undertaken in relation to grid capacity, resilience and commercial factors.

Biomass Feasibility Study (Deliverable 1.1, supporting action)

A study has recently concluded that the Isle of Man has the potential to produce significant quantities of sustainable bioenergy feedstocks, potentially for use in power or heat. Promising feedstock types include wood, for example, from existing forestry or short rotation coppice, miscanthus and sugar beet.

Before taking any of these options forward, further work would be required to understand a number of key issues, including potential competition with food production. Moreover, the analysis also demonstrates that it would be unlikely that we could meet all future energy demand from on Island feedstocks, therefore some level of import would be required. Decisions on whether bioenergy is right for our Island will depend on our technological choices for power and heat decarbonisation, as well as considerations about land use priorities in general.

30MW renewables (Deliverable 1.2)

In February 2023, approval was given for Manx Utilities to proceed with work on construction projects, which will see up to 30MW of electricity produced from onshore wind and solar energy by 2026. This exceeds the commitment to renewable electricity made in the Climate Change Plan by 10MW.

Energy Advice Service (Deliverable 1.4)

At the time of writing, DEFA is about to launch its Energy Doctor service to offer free, impartial advice to help homeowners understand how they can save energy to reduce utility bills and their emissions whilst keeping warm and staying well.

HIGHLIGHTS

2. BUILDINGS

Bring forward the ban on fossil fuel heating systems in new builds to 2024 (Deliverable 2.2)

A consultation on proposals relating to fossil fuel heating systems was undertaken between March and May 2023, with a view to stopping new Building Control approvals from being granted from 1 August 2023. Due to the 'locking in' of emissions for the lifetime of heating systems, the potential emissions avoided by these proposals are around 15,000 tonnes.

At the time this report is being prepared, the outcomes of the consultation are not yet known. Alongside the consultation, work is underway to inform and engage with the construction sector and current planning applicants of the proposed ban in new builds in 2025.

Free Energy Efficiency Measures (Deliverable 2.3)

In January 2023, the new Energy Efficiency Scheme was launched providing free energy saving materials to certain financially eligible homeowners and tenants on the Isle of Man utilising funding from the Climate Change Fund as a response to the cost of living crisis. Energy efficiency measures such as fabric improvements like insulation as well as better control of heating systems using smart meters save both money and emissions. As of March 2023, the scheme had reached 1,000 households and around £400,000's worth of stock had been ordered.

Green Living Grant Scheme (Deliverable 2.3)

Responding to public demand, the Green Living Grant Scheme, which offers up to £6,000 in support towards decarbonising homes, was made more flexible in October 2022, and to date 2,500 homes have been assessed, with around £1 million allocated in grant approvals. Further schemes are currently being planned to help the public move away from fossil fuels and towards cleaner technologies.

HIGHLIGHTS 2. BUILDINGS Cont.

Biodiversity Net Gain in Planning (Deliverable 2.4)

The Built Environment Reform Programme (BERP) was launched in July 2022 and includes the implementation of biodiversity net gain (BNG), in line with the requirements in the Climate Change Act 2021.

BNG is already a requirement in many areas of the UK and ensures that development protects and enhances ecosystems and the benefits they provide, for example, by improving nature corridors, urban green spaces and habitat creation/restoration.

Work is underway to establish a methodology and implement BNG by the target date (1 January 2025) or earlier if this is possible. Discussions and workshops have been held with key stakeholders and relevant bodies in neighbouring jurisdictions to understand the different approaches, the local issues and opportunities, and options for developing a system for the Island that adds value but avoids unnecessary bureaucracy or delay.

Energy Efficiency Campaign (Deliverable 2.8)

A campaign to help increase awareness of energy-saving measures to Island residents to reduce their bills and emissions was launched in October 2022. Partnering with key charitable organisations to reach the most vulnerable in our community with the information given in impactful, friendly visuals, the campaign aimed to encourage changes to daily behaviours in the home to improve energy efficiency. The smallchanges.im website was used by 17,000 residents, the social advertisements reaching 66,000. In a survey, 23% of the 249 respondents reported seeing a reduction in their energy bills as a result of implementing changes.

HIGHLIGHTS

3. TRANSPORT

Strategic Transport Decarbonisation Review (Deliverable 3.1)

The roadmap for our transport decarbonisation is still in its infancy, with a contract awarded in February 2023 to SYSTRA, a leading Transport and Mobility solutions consultancy, to help develop a series of scenarios which will decarbonise the Island's transport sector whilst acknowledging the need for reliable routes to and from the Island to enable economic development and food security.

SYSTRA is currently in the process of gathering data from the transport sector to start modelling the various pathways to net zero whilst also taking account of the interim targets.

Rollout of electric vehicles (EV) charging infrastructure (Deliverable 3.5)

Manx Utilities are undertaking the rollout of the EV charging infrastructure across the Island, working to a target of one public charger for every 10 registered EVs. As of March 2023, there were 109 charging points and 1015 registered EVs showing that this target is being met.

HIGHLIGHTS

4. AGRICULTURE, LAND & SEA

Tree planting (Deliverable 4.3)

5,200 trees have been planted at Greeba forest, extending the current woodland with a mix of native trees, which will improve biodiversity, increase sequestration and connect habitats in the area.

Land Management Plan (Deliverable 4.2)

£500,000 from the Climate Change Fund has been made available for the development of a ground-breaking Land Management Plan which, when finalised, along with the Blue Carbon Strategy, will make the Isle of Man one of the only jurisdictions in the world with a complete terrestrial and marine management plan.

4. AGRICULTURE, LAND & SEA Cont.

Blue Carbon (Deliverable 4.4)

The Manx Blue Carbon Project successfully completed its first year in February 2023, including the formation of an internal project Steering Group, and of the Manx Blue Carbon Working Group with members from government departments and external organisations, supporting a collaborative and holistic approach to blue carbon work across the Island. A PhD researcher with Swansea University and the National Oceanography Centre (NOC) has commenced work on a blue carbon inventory for the Isle of Man. Initial findings of their fieldwork, collecting sediment cores and conducting drone surveys, has confirmed the potential for management of blue carbon in Manx waters, supporting the bid for continued project funding.

Further funding has been secured from the Climate Change Transformation Fund for years two and three, which commenced in February 2023. This will include completion of the blue carbon inventory, fieldwork for the PhD with Bangor University looking at fishing interactions with blue carbon, creation of the Manx Blue Carbon Strategic Management Plan, and recruitment of a part-time Fisheries Liaison and Blue Carbon Support Officer to support the Blue Carbon and Fisheries teams' work.

Peatland Restoration (Deliverable 4.3)

A new peatland restoration project has been awarded climate change funding. This project seeks to address the issues affecting peatland degradation across the Island's uplands and, where possible, restoring habitat. Lessons have been learnt from the previously funded project where adequate resourcing was not included, and the increased resourcing in the new project should significantly impact on the extent and quality of the restoration work undertaken. Restoration projects such as this have significant benefits for biodiversity and ecosystem services.

Land Use, Land Use Change and Forestry (LULUCF) (Deliverable 4.3)

The LULUCF project has been finalised, which has led to a number of improvements in the methodology for calculating sources and sinks of greenhouse gas emissions in the sector. Significantly, aerial photography and Geographic Information System (GIS) mapping have been utilised to more accurately determine the extent of habitat types, these data, along with local factors, have led to increased accuracy in reporting.

HIGHLIGHTS

5. BUSINESS

Business Support Programmes (Deliverable 5.2)

The Climate Change Transformation Team is currently working with the Department for Enterprise on increasing the financial support available to businesses looking to reduce energy use (and therefore emissions), including installing energy efficiency measures and low carbon technologies.

6. WASTE

Waste Composition Audit (Deliverable 6.1)

The Climate Change Transformation Team is currently working with the Department of Infrastructure (DOI) on a project to better understand residential waste composition, which will inform a wider plan on waste management. This plan will ensure that the 15% sectoral emissions reduction target for waste is achieved by 2027. Part of the audit will identify materials which should be targeted for separation from the waste stream for recycling.

HIGHLIGHTS

A. ADAPTATION & RESILIENCE

Climate Risks and Opportunities Assessment (Deliverable A.5)

Work has begun on the procurement of an independent Climate Risks and Opportunities assessment. The assessment will encourage and enable earlier adoption of focused measures to mitigate risks and realise opportunities.

B. FAIR CHANGE

Climate Impact Assessments (Deliverables B.1 and C.2)

The Climate Change Act 2021 requires regulations to be made in relation to climate impact assessments (CIAs) no later than 31 December 2023. Work began in 2022 to establish a suitable methodology and to develop an assessment tool for public bodies.

The CIA framework will guide low emission, sustainable policy development in alignment with the climate change duties for public bodies and the Fair Change Framework. The climate change duties incorporate, alongside emission reduction, the principles of just transition, climate justice, sustainable development and the protection and enhancement of biodiversity and ecosystems, referred to collectively as Fair Change. The CIA framework will therefore contribute significantly to public bodies' ability to implement the duties (Deliverable C.2) and encourage use of the Fair Change Framework (Deliverable B.1).

The tool has now been made available to public bodies to use voluntarily. The voluntary period will inform appropriate criteria for making the assessments mandatory via the regulations to be made later this year. The Climate Impact Assessment tool and associated documents are available at netzero.im

HIGHLIGHTS C. LEADING BY EXAMPLE

Public Bodies Climate Change Duties and Reporting (Deliverables C.2 and C.3)

The climate change duties for public bodies contained in section 21 of the Climate Change Act 2021 came into effect in December 2021. Since then, statutory guidance and regulations setting out reporting requirements have been published. During 2022, the CCTT collected feedback from public bodies and, in March 2022, responded to their concerns with Regulations amending the reporting requirements.

The first reporting period (1 April 2022 to 31 March 2023) has now concluded, and reports from public bodies are due to be received over the next six months. Once these have been received, they will be reviewed, and a report will be published.

The climate change duties are a key part of the framework created by the Climate Change Act 2021 as they ensure that all Manx public bodies must work toward the common goal of reducing emissions, in a way that provides benefit for our Island.

Extension of the UK's ratification of the Paris Agreement to the Isle of Man (Deliverable C.6)

Following negotiations with the UK Government, in March 2023, the Paris Agreement was extended to the Isle of Man. This means that the Isle of Man's statutory interim targets of 35% reduction by 2030 and 45% reduction by 2035 will officially contribute toward the UK's commitment to reduce its emissions by at least 68% on 1990 levels, by 2030.

The ratification demonstrates the commitment made by the Island to contribute toward global efforts to mitigate climate change.

HIGHLIGHTS

D. INVESTING IN OUR FUTURE

Our Island Plan & Economic Strategy (Deliverable D.7)

The Climate Impact Assessment framework (see section B. Fair Change) will support departments with their responsibilities under the Island Plan and Economic Strategies and delivering those goals in a sustainable and low emission way.

This is particularly important in relation to the Economic Strategy's objective to "Further develop the infrastructure and services for our community to plan for an estimated population of 100,000 by 2037". This synergy poses significant risk and opportunity, if managed carefully and in line with over-arching principles of emissions reduction and Fair Change, this objective could support and drive our transition to net zero. Likewise, if those principles are not adhered to, changes to infrastructure, services and an increase in population could undermine our ability to reach our statutory climate targets.

D. ENGAGEMENT & AWARENESS

Education (Deliverables E.1 and E.3)

Two Eco Schools and Sustainability training mornings with seven primary schools were delivered by Department of Education, Sport & Culture (DESC). These sessions included UNESCO Biosphere Isle of Man and Manx Utilities Authority Energy Eye[xiii] training. A Global Teacher training session was provided by the One World Centre for 12 schools incorporating global learning and citizenship education into teaching, with one school now successfully implementing it into their curriculum. Scoillyn Eco (Manx Eco Schools) website was launched to promote the UK Eco Schools initiative in a Manx context. All the Island's schools also engaged in a UNESCO Biosphere Week and becoming Partners and the Single Use Plastics Reduction Plan has been shared with all schools.

The DESC Advisory Teacher for Climate Change contributes to curriculum review work stream and any associated project/task and finish groups, to promote climate change and sustainability content, as required. They chair an Environmental Educators group with membership of 15 environmental and wildlife organisations who work directly with Island schools. Resources for climate anxiety and wellbeing and schemes of work are being produced in conjunction with UK curriculum providers.

Engagement (Deliverables E.4 - E.6)

Engagement initiatives in the year focused predominantly around the consultation on the Climate Change Plan and the campaign 'Small Changes Make a Big Difference'. The campaign grew users of the Net Zero website significantly. Net Zero Isle of Man's social media following has grown between 60-80% in the year. Our email newsletters have a high 60% open rate and higher than the average click-through rate of nearly 7%. Plans will progress to nurture and grow this engaged audience.

Further, we are delivering an insights programme over the period of the Climate Change Plan, which will both inform the Engagement Strategy, underpin the foundations for future awareness and educational campaigns, measure our progress and lead the narrative to empower the Island's residents to take positive climate action. This is so we can better understand our audience and deliver messages that resonate with them to help drive behaviour change towards net zero living.

FINANCES & BUDGET

In the 2022-2023 budget year, the Climate Change Fund was provided with an additional £25 million to aid delivery of climate action. The funds are separated into two funds, revenue and capital, with the latter providing the funding for the decarbonisation of the Government estate and fleet. To access the fund, there is a rigorous governance process. The funding criteria are centred on emissions reductions, with actions within the Climate Change Plan 2022-2027 being the primary focus of the fund. Business cases are assessed on a £/tCO2 saving.

Climate Change Fund (,000) (Revenue)	Climate Change Mitigation Fund (,000) (Capital)	Allocated as at 31st March 2023 (,000)
£11,000 (carried forward)	£5,000	
£25,000 (new funding in 2022)		
£36,000	**£5,000**	**£24,000**

£24mn has been allocated to the following projects, contributing to the listed Plan deliverables, as at 31 March 2023:

Project	Deliverable
Green Living Grant Scheme	2.3
Blue Carbon Audit	4.4
Woodland Grant Scheme	4.3
Biomass Feasibility Study	1.1
Recruitment of Board Advisors	All
Manx Utilities EV rollout (civil works and hospital and Fast EV Chargers)	3.5
Peatland Partnership	4.2, 4.3
Land Management Plan	4.2
Climate Change Partners	All
Transport Decarbonisation Scenarios	3.1
Climate Impact Assessments Tool	B.1, B.2, C.2
Energy Efficiency Scheme	2.3
Woodland Planting at Greeba	4.3
Waste Audit	6.1

IMPLEMENTATION OF FAIR CHANGE

The Fair Change principles comprise the following parts of the climate change duties for public bodies:

- The just transition and climate justice principles
- The protection and enhancement of biodiversity ecosystems and ecosystem services
- Sustainable development including the achievement of the United Nations sustainable development goals.

These principles underpin public sector climate action in the Isle of Man and are supported by the Fair Change Framework, which forms part of the statutory guidance for public bodies.

The principle tools/actions undertaken or commenced during the reporting period that will support the implementation of the Fair Change Principles are:

- The Fair Change Framework
- Climate Impact Assessments
- Public body annual reporting
- Monitoring Framework, which will be aligned to the Sustainable Development Goals
- Biodiversity Net Gain in Planning
- Tree planting and peatland restoration
- Blue Carbon Project
- Land Management Plan
- Green Living Grant and Energy Efficiency Scheme

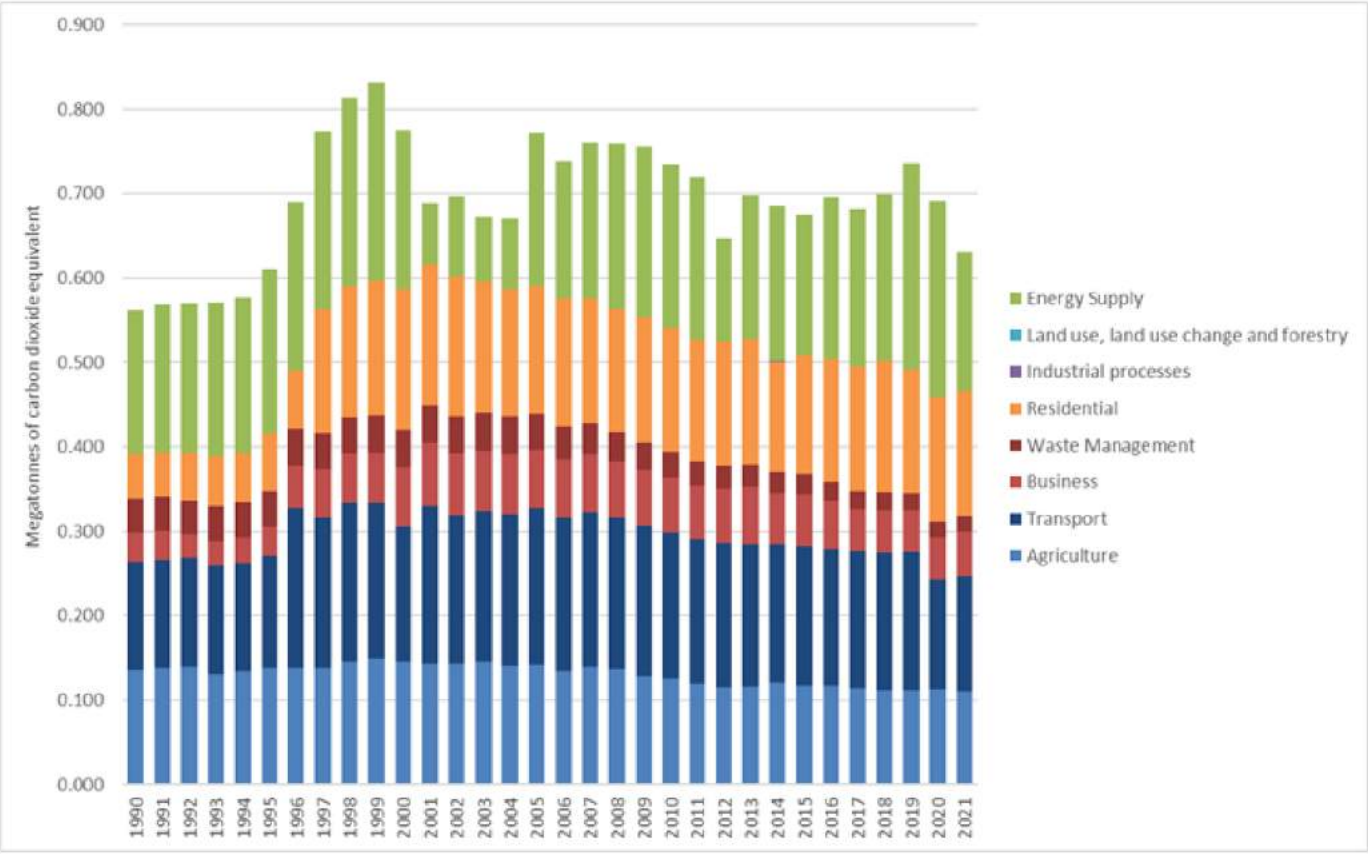
Progress toward raising awareness, understanding and implementation of Fair Change has been slow for a number of reasons. Over the period of this report, focus within the CCTT has been on developing the Climate Impact Assessment methodology and setting up and preparing public bodies for their first annual reports. There are a large number of public bodies, with diverse functions and their individual needs are difficult to manage and support centrally from a very small team.

Many public bodies are being proactive in their approach to implementing the duties. However, many have cited funding, time and staff resources as barriers to implementation of the climate change duties. The momentum for change is being driven, in some cases, by the CCTT rather than from within public bodies, which is not efficient. For public sector climate action to be effective it is essential that public bodies incorporate the climate change duties into the delivery of their usual functions (as is their legal obligation) and drive change in their respective areas. It is hoped that reporting and the Climate Impact Assessments will help to enable this.

EMISSIONS PROGRESS

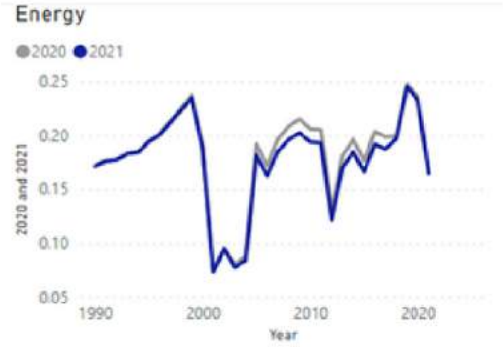
Emissions data for the reporting period is unavailable as there is a two year lag on receiving the data. However, at the time of writing, emissions data had just been received for 2021 and, this being the most up to date information, is used to understand our progress in reducing emissions. In addition to the emissions tracking, the Climate Change Team have developed a monitoring framework which identifies qualitative and quantitative indicators to track the progress towards meeting our targets and identify early signals of change.

2021 ISLE OF MAN GREENHOUSE GAS INVENTORY

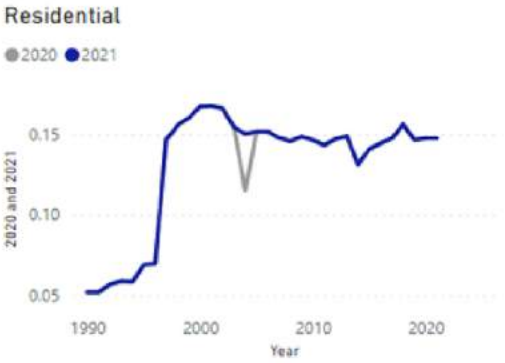


EMISSIONS PROGRESS Cont.

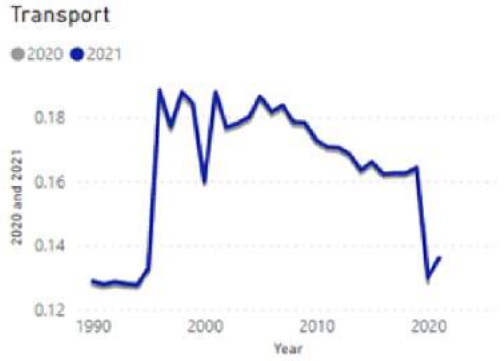
EMISSIONS CHANGE 2020-21 to 2021-22



Energy (30% decrease)
Emissions from energy (ie electricity generation which is predominantly fossil fuel based) dropped significantly due to a planned outage of the Combined Cycle Gas Turbine (CCGT), which led to an increase in importation of electricity via the interconnector. Emissions from the interconnector are classed as carbon neutral and so our overall inventory emissions were lower as a result. The CCGT was returned to service in November 2021 and emissions are expected to be significantly higher in 2022.



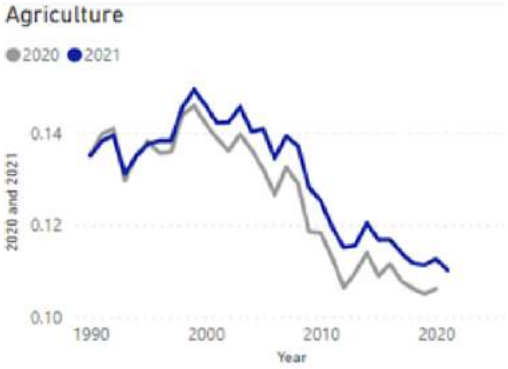
Residential (static)
Residential emissions relate to the use of fossil fuel heating and hot water systems such as natural gas and oil. These continue to plateau as the number of homes and buildings on the Island more or less stays static on an annual basis.



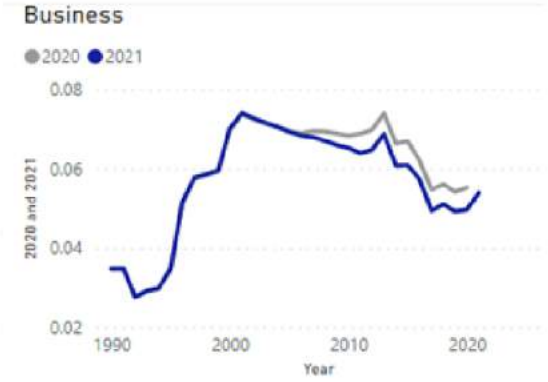
Transport (5% increase)
Transport emissions, which remained lower than pre-Covid years, are beginning to grow steadily following the transport disruption caused by Covid in 2020 and 2021.

EMISSIONS PROGRESS Cont.

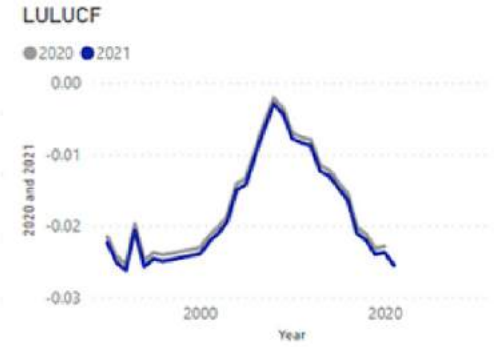
EMISSIONS CHANGE 2020-21 to 2021-22



Agriculture (2% decrease)
The agriculture sector is dominated by emissions of methane largely from enteric fermentation of livestock (cattle and sheep) and nitrous oxide emissions largely associated with soils and manure management. Emissions continue to fall in the agriculture sector, mainly due to lower livestock numbers.



Business (8% increase)
Business emissions are mainly associated with air conditioning and refrigeration, with energy and heating captured under separate emissions categories. Business emissions increased slightly between 2020 and 2021.



Land Use Change (LULUCF) (7% increase)
Net emissions from the LULUCF sector represent the balance between land emissions, from sources such as settlements and carbon changes in croplands and grasslands, and removals through natural sequestration such as by forests as they grow. During 2022, more accurate LULUCF figures were obtained, indicating that the Island has been underestimating its greenhouse gas removals to date and we expect the improved data to take effect in the Island's inventory in 2023 figures.

BARRIERS TO EMISSION REDUCTION

Climate change is not yet at the heart of decision making across Government

We have previously reported the need to embed emissions reduction with the existing functions of government departments and boards. We continue to see conflicting government policies, which may have an impact on emissions but without those impacts first being considered.

For this reason, we are now accelerating an internal engagement plan to underpin the new Climate Impact Assessments and public body climate change duties. This will consist of training, communications, internal networking groups and the championing of departments who lead the way.

Emissions reductions must become embedded into decision making across government. The CCTT's role is to facilitate departments (and other public bodies) to decide themselves how best to deliver emissions reductions but often finds itself delivering the work needed to meet our targets and statutory deadlines.

Underestimation of the scale of change needed

The transition to net zero is a programme of work unprecedented in scale and breadth. Fossil fuel use and other high emitting practices are embedded deeply in every aspect of our daily lives. Therefore, the changes required to attain our statutory climate targets are similarly wide reaching and will affect all members of our community, our businesses and public sector organisations.

There is a persistent view that transition can be achieved with only slight adjustments to business as usual or by waiting for behaviours to change without intervention. This mindset risks missing opportunities and targets. An 'invest to save' approach should be more widely applied, with a focus on value for money (incorporating the cost of carbon) rather than obtaining the cheapest upfront price, as there is significant research which shows that deferring action leads to increased future costs and decreased co-benefits.

The Climate Change Transformation Team is looking into training options, similar to those in operation in the UK civil service, that will improve awareness and carbon literacy, at all levels, throughout the organisation.

Under resourced public bodies, with competing priorities

Many key stakeholders are struggling with resourcing issues, such as staff shortages and budgetary constraints and feel the pressures caused by day to day challenges experienced across the public sector. The CCTT is actively stepping in to run projects on behalf of departments to ensure actions are delivered on time, despite being a small team structured to act as facilitators rather than delivering actions.

Climate change and emissions reduction are too frequently seen as niche environmental issues, 'side of the desk' projects or the responsibility solely of the CCTT. To be successful in reaching our statutory emissions reduction targets, in ways that are beneficial for our community, economy and environment, climate action must become fully embedded into every day work across the Isle of Man Government. Not only is it a legal duty under the Climate Change Act 2021 but without being properly resourced, collaborative effort from across the public sector we will not achieve effective climate action or reach our statutory targets.

The CCTT itself has been significantly under staffed for the past year. Staff levels are now increasing, as is necessary to facilitate departments in their delivery of actions outlined in the Plan. However, the workload is substantial and ongoing lack of staff resource, coupled with similar issues in other areas/departments leading to resistance or slow progress, limits the team's ability to work strategically. Temporary resource is available for departments via the Climate Change Fund.

BARRIERS TO EMISSION REDUCTION

Cost of living crisis

The cost of living crisis may lead to a reduction in emissions in some areas, as households and businesses adopt more energy efficient practices to reduce their bills. However, many of the changes needed to drive the emission reductions necessary to meet our targets are unattainable to many, due to cost. Many members of our community, who are keen to make personal changes to reduce emissions, have exhausted all of the low and no cost options and only large purchases, such as electric vehicles, air source heat pumps, costly measures to improve their home efficiency, and changes outside their control remain, for example waste disposal options, renewable energy via the grid etc.

There are many examples of 'hidden' disincentives to personal behaviour change. For example, access to curbside recycling is dependent on the relevant Local Authority. Some residents, keen to contribute to lowering their own and the Island's emissions, are opting to use private recycling services at their own cost. Although this significantly reduces the amount of general waste being produced and collected, this is not reflected in property rate discounts, although some Local Authorities subsidise the service. It is essential that public bodies review their policies to ensure that they do not inadvertently discourage individuals and business from making low carbon choices.

Slow speed of delivery

Access to funding to deliver climate change action is laborious and time intensive, which is not in keeping with the pace of change needed to react to the climate emergency. Business cases can take months to develop, gather multiple sign-offs and access funding, and whilst good programme governance is important, it should not be at the expense of delivery, particularly when the Island is already many years behind the UK in terms of progress on climate action.

Skills shortage and busy construction sector

We are encouraged by the number of people who want to either retrofit their home to improve its energy efficiency or to switch to renewable sources of heating, but we are equally aware of the shortage of contractors specialising in renewable energy.

Simply put, supply cannot keep up with demand, particularly when factoring in supply chain issues caused by Covid, Brexit and the global demand for renewables in light of the energy crisis and the desire to transition to net zero. Upskilling, reskilling and providing relevant training for new entrants will be an essential part of our journey to net zero. Supply chains and skills pools will need to grow significantly to meet demand over the next decade.

STATUTORY INFORMATION

The regulation and order making powers under the Act have been used as follows during the reporting period:

- Climate Change Plan 2022-2027 (SD 2022/65)
- Climate Change (Public Bodies' Reporting Requirements) Regulations 2022 (SD 2022/0124)
- Climate Change (Public Bodies' Reporting Requirements) (Amendment) Regulations 2023 (SD2023/0075)
- Climate Change (Interim Target) Regulations 2022 (SD 2022/0210)
- Climate Change (Interim Target) (No.2) Regulations 2022 (SD 2022/0204)
- Climate Change (Single Use Plastics) Regulations 2022 (SD 2022/0077)
- Climate Change Road Map to 2050 (GD 2022/0057)

No amendments have been made to the Climate Change Plan 2022-2027 during the reporting period, and none are planned at this time.

RESEARCH - LOCAL

Manx Utilities Transition – Future Generation Delivery Strategy

In March 2022 Manx Utilities commissioned WSP, an engineering consultant, to carry out an appraisal of a preliminary future generation strategy, which had been developed following the Isle of Man Government Future Energy Scenarios work carried out in 2022.

The final document, published by Manx Utilities in February 2023, includes the full results of the Network Stability Study and summarises the findings by WSP and other technical reports in relation to grid capacity, resilience and commercial factors, presenting them in the wider policy setting.

Biomass Feasibility Study

This study (referred to in detail in Section 1. Electricity) was undertaken during the reporting period but is currently awaiting publication.

RESEARCH - GLOBAL

IPCC Working Group III contribution
Climate Change 2022: Mitigation of Climate Change (4 April 2022).

The third instalment of the International Panel on Climate Change's (IPCC) Sixth Assessment Report (AR6) was released in April 2022. The report outlined that global temperature increase is set to rise above 1.5 Celsius unless immediate and deep emissions cuts are made across all sectors.

Fortunately, there are options in all sectors to halve emissions by 2030 but this will rely on significant shifts in all sectors, particularly the energy and industry sectors. The report states that the next few years are crucial and that clear signalling from governments and the international community, including a stronger alignment of public sector finance and policy and climate change action, will be required to adequately mitigate and adapt to the impacts of climate change.

IPCC, AR6 Synthesis report (20th March 2023)

The final instalment of the IPCC's Sixth Assessment Report (AR6) report describes the catastrophic consequences of continually rising greenhouse gas emissions around the world. The report provides examples of where climate change has increased the consequences of, or led to, the destruction of homes, the loss of livelihoods and the fragmentation of communities, among others. Additionally, these impacts are becoming increasingly dangerous and potentially irreversible risks should humanity fail to change its current course.

ACTION BY ACTION UPDATE

It is important to note that this report covers only the actions included in the Climate Change Plan 2022-2027, which was approved by Tynwald in October 2022, so the period reflected is October 2022-March 2023.

Note: In progress means an action that has commenced but is not yet completed.
Ongoing means an action that will continue throughout the Plan period.

Ref	Action	Action overview	Status
1.1	Energy strategy	Energy strategy to supply 100% of our electricity from carbon neutral sources by 2030.	IN PROGRESS
1.2	20MW local generation	A minimum of 20MW locally generated, renewable electricity to be available by 2026.	IN PROGRESS
1.3	Planning - net zero policy and legislation	Policy and legislation reviewed and updated to support delivery of carbon neutral and renewable energy while protecting the natural environment.	IN PROGRESS
1.4	Energy advice service	Establish an energy advice service to help people reduce energy consumption and associated bills.	IN PROGRESS
2.1	Low Carbon Heating Strategy	Develop and implement a Low Carbon Heating Strategy which will deliver a 15 % sector reduction by 2027, to be underway by the end of 2023.	NOT STARTED
2.2	Fossil fuel boiler ban	Bring forward the ban on fossil fuel heating systems in new builds to 2024.	IN PROGRESS

Ref	Action	Action overview	Status
2.3	Energy efficiency incentives	Incentivise efficiency measures via grants and schemes, prioritising a fabric first approach and supporting transition to low carbon heating.	IN PROGRESS
2.4	Planning - climate change impact and biodiversity gain	Policy and legislation (eg. planning and building control) reviewed and updated to support delivery of the Low Carbon Heating Strategy and, as set out in the Climate Change Act 2021, to ensure that future development supports biodiversity net gain and delivery of our climate goals.	IN PROGRESS
2.5	EPCs	Introduce Energy Performance Certificates to drive improvements to the efficiency of the Island's housing.	NOT STARTED
2.6	Net zero building regulations	Amend building regulations to ensure new build properties are 97% energy efficient.	NOT STARTED
2.7	Upskilling construction	Work with the construction industry to ensure that local businesses have the skills needed to meet increased demand for low carbon heating technologies.	IN PROGRESS
2.8	Energy Efficiency Campaign	Roll out a public engagement campaign promoting energy efficiency in homes and businesses.	COMPLETE
2.9	Public building retrofit	Undertake a retrofit programme for Government buildings.	NOT STARTED

Ref	Action	Action overview	Status
3.1	Transport Strategy	Transport Strategy to deliver 15% sector reduction by 2027, to be underway 2024, informed by Strategic Transport Decarbonisation Review to be completed in 2023.	NOT STARTED
3.2	Active Travel Strategy	Renew Active Travel Strategy to significantly increase participation.	NOT STARTED
3.3	Ban new ICE vehicles	Ban registrations of new petrol and diesel cars from 2030 and hybrids from 2035, in line with the UK and EU.	NOT STARTED
3.4	Planning - public service provision	Reduce the need to travel by continuing to support provision of public services close to where people live (eg. licence applications, payments etc.) and supporting practices such as home working.	NOT STARTED
3.5	EV charging	Ensure that electric vehicle charging infrastructure is in place to meet increasing demand.	IN PROGRESS
3.6	Government fleet	Electrify the public sector cars and vans as soon as possible.	IN PROGRESS
4.1	Agriculture Strategy - 15% GHG reduction	Agricultural Strategy to deliver 15% reduction in sector emissions by 2027, to be underway by 2023.	IN PROGRESS

Ref	Action	Action overview	Status
4.2	Land Management Plan - 10% increase in GHG sequestration	Commission and implement a Land Management Plan and Strategy, to increase carbon sequestration by 10% by 2027, linking in with the Agricultural Strategy.	IN PROGRESS
4.3	Nature based solutions	Undertake and facilitate tree planting, peatland restoration and other nature based solutions, where possible leveraging private sector investment.	ONGOING
4.4	Blue Carbon Project	Complete Phases 1a and 1b of the Blue Carbon Project and develop a Blue Carbon Strategy based on the results.	IN PROGRESS
4.5	Baseline agriculture emissions	Establish improved baseline agricultural emissions to ensure the impacts of strategies, actions and policies can be accurately monitored.	IN PROGRESS
4.6	Reduce GHG impact of fishing industry	Work with the fishing industry to continue to reduce the carbon footprint of trawling and dredging, increase the efficiency of fishing effort and cut fuel costs.	IN PROGRESS
5.1	Business Emissions reduction by 15%	Business Emissions Reduction Strategy to support delivery of a 15% sector emissions reduction by 2027, to be underway by 2023.	NOT STARTED

Ref	Action	Action overview	Status
5.2	Business support for GHG reductions	Establish support programmes to assist businesses to improve their energy and resource efficiency and build their resilience to climate change.	IN PROGRESS
5.3	Local innovation - carbon solutions	Explore the scope for schemes to encourage on-Island innovation and the associated business opportunities.	NOT STARTED
5.4	Local innovation - carbon solutions	Explore the creation of a new 'Innovation Scheme' which enables investment in clean technologies suited to the Island's environment.	NOT STARTED
5.5	ESG credit scheme	Develop a scheme enabling businesses to support local carbon sequestration projects, as part of their ESG initiatives.	IN PROGRESS
5.6	Upskilling the industry	Support delivery of training and initiatives across the property industry (e.g. design, construction, and consultancy) which will drive improvement in the built environment.	NOT STARTED
5.7	Upskilling the industry	Encourage increased resource and skills by implementing the outcomes of the Isle of Man Retrofit and Low-carbon skills analysis.	NOT STARTED
6.1	Waste Management and Circular economy - 15% reduction	Waste Management and Circular Economy Strategies to deliver 15% sectoral emissions reduction by 2027, to be underway by 2023.	IN PROGRESS

Ref	Action	Action overview	Status
6.2	Landfill emissions	Review existing and closed disposal facilities (e.g. landfills) to determine the scope for reducing ongoing emissions related to storage.	NOT STARTED
6.3	Waste & Recycling	Reduce waste and increase recycling across government.	NOT STARTED
6.4	Food waste reduction	Explore measures to reduce food waste to save money across households, businesses and government.	NOT STARTED
6.5	Single use plastics	Support the reduction of single use plastics.	ONGOING
A.1	Adaptation strategy	Deliver an Adaptation Strategy, taking account of climate impacts, across all areas of society, economy and the natural environment.	NOT STARTED
A.2	Public body reporting	Add appropriate reporting requirements, for public bodies, in relation to adaptation to existing climate change reporting timetables.	NOT STARTED
A.3	Adaptation and risks	Review and update policies and legislation to ensure that adaptation and resilience are embedded in decision making and climate risks are appropriately assessed.	NOT STARTED

Ref	Action	Action overview	Status
A.4	Adaptation working group	Establish an adaptation working group to ensure interdependencies are recognised and opportunities for collaboration maximised.	NOT STARTED
A.5	Climate risks and opportunities assessment	Obtain an independent Climate Risks and Opportunities assessment.	IN PROGRESS
B.1	Public bodies - fair change framework	Ensure that public bodies (e.g. Government departments and local authorities) are supported in implementing the Fair Change Framework.	ONGOING
B.2	Inclusive policy development	Maximise social inclusion in policy development, ensuring meaningful engagement with people and businesses affected by change.	ONGOING
C.1	Climate literacy and reporting training	Develop training to support and enable officers across government and public bodies to develop the knowledge they need to deliver effective climate action.	IN PROGRESS
C.2	Public body support	Support public bodies in achieving compliance with their legal climate change duties by providing guidance, information and coordinating collaboration.	ONGOING
C.3	Public body reporting	Reporting by public bodies on their climate change duties to commence in 2023 (for the period April 2022 – March 2023). Information collected will be used to help public bodies improve emissions reductions year on year.	ONGOING

Ref	Action	Action overview	Status
C.4	Policy review	Government-wide policy review to ensure that existing practices do not restrict our ability to meet our climate goals.	NOT STARTED
C.5	Well-being of Future Generations Act	Explore legislative options to support long-term sustainable development, eg. the Well-being of Future Generations (Wales) Act 2015.	NOT STARTED
C.6	Paris Agreement	Obtain extension of the UK's ratification of the Paris Agreement to the Isle of Man.	COMPLETE
D.1	Climate Change Funding Strategy	Climate Change Funding Strategy by 2023, which acknowledges climate financing as a priority.	NOT STARTED
D.2	Carbon emissions and ecosystem valuation	Develop an appropriate Manx carbon emission and ecosystem valuation approach, in line with those already being used in the UK and around the world.	NOT STARTED
D.3	Impact of lost revenue	Carefully assess and manage the impact of lost public revenue from fossil fuels and associated opportunities and challenges.	NOT STARTED

Ref	Action	Action overview	Status
D.4	Public support for climate action	Invest in the right forms of public support (eg. schemes, grants, information, training etc.), at the right times, to best support the most vulnerable and achievement of our climate goals.	ONGOING
D.5	ESG credit scheme	Maximise private sector contribution by providing opportunities which align with ESG criteria.	IN PROGRESS
D.6	International climate financing	Co-ordinate climate and international aid policy to ensure aid aligned to the commitments for climate finance and adaptation to align with the Paris Agreement.	NOT STARTED
D.7	Economic Strategy	Support Departments with responsibility for any future economic strategies to develop and deliver their goals in a sustainable and low emission way.	ONGOING
D.8	Sustainable investments and pensions	Review Government reserve funds and pensions investment to better align with sustainable and responsible investments.	NOT STARTED
E.1	Awareness of climate change	Continue to raise awareness and understanding of climate change and sustainability at all stages of education.	ONGOING

Ref	Action	Action overview	Status
E.2	Climate in education	Explore whether climate change and sustainability should be included as required content in the curriculum, ensuring all Island children learn about the causes and effects of climate change and the roles they can play in the Island's transition to a net zero society.	IN PROGRESS
E.3	Green skills	Ensure learning and training are available that prepares students for employment in the low carbon economy of the future.	NOT STARTED
E.4	Net Zero Engagement Strategy	Net Zero Engagement Strategy to provide a framework for engaging the Island's citizens in the transition to net zero.	IN PROGRESS
E.5	Awareness campaign for climate action	Develop awareness and educational campaigns to help ensure people understand the climate emergency, reduce climate anxiety, empower positive action and increase awareness of the Isle of Man Government's actions in addressing climate change.	IN PROGRESS
E.6	Working in partnership for climate action	Work closely with a wide range of respected and responsible partners to ensure that we raise awareness of climate change to all parts of our community.	IN PROGRESS

"Climate change is the single greatest threat to a sustainable future but, at the same time, addressing the climate challenge presents a golden opportunity to promote prosperity, security and a brighter future for all."

Ban Ki-Moon, Former Secretary-General of the United Nations

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Please note that the information contained in this report is accurate to the best of our knowledge and ability, as of the time of writing (6th April 2023)

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