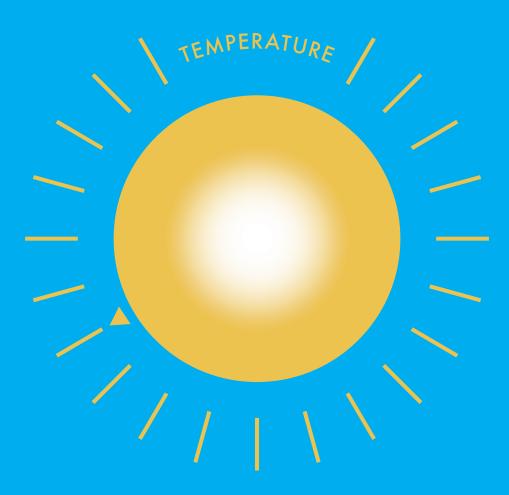
Climate Change Mitigation Strategy Consultation Findings August 2019





Sustainable Island

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Introduction

The Department of Environment, Food and Agriculture (DEFA) consulted on options for possible inclusion in a new climate change mitigation strategy for 2020-2030 and interim targets.

The Isle of Man is faced with an energy trilemma, of balancing energy security, affordability and minimising the impact on the environment.

The United Nations has stated that Climate Change is the defining issue of our time and that urgent action must be taken now.

Through the consultation process the DEFA sought the views of the public on:

- education
- improving energy efficiency in buildings
- electrification of the heating and transport sectors
- planning for when existing fossil fuel power generation is decommissioned so it will be replaced with low emission and sustainable generation
- improve efficiency and sustainability in land use and waste sector

1. Consultation exercise

The consultation was open for a period of over eight weeks from 19^{th} March 2019 to 17^{th} May 2019.

The consultation was publicised by way of a news release and public roadshows held at the Sea Terminal in Douglas and DEFA headquarters in St John's. This resulted in radio interviews, posts on local media websites and social media.

The consultation documents were made available online on the Isle of Man Government Consultation Hub and links on social media, along with paper copies available in public places such as the Libraries throughout the Island.

1.1 Number of responses received

Responses received over the course of the consultation period were as follows:

Total number of responses included in analysis 1029	Number of responses from individuals 989	Number of responses from organisations 40
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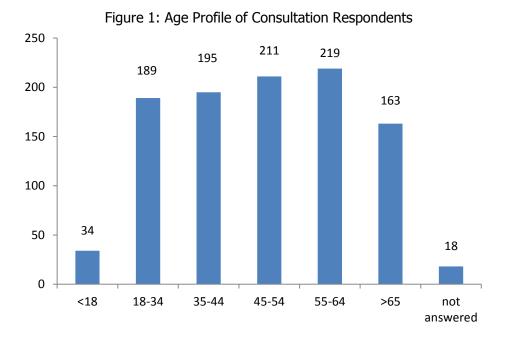
A total of 899 respondents gave permission for their responses to be published.

The vast majority of responses came through the consultation hub online and only 60 written consultation responses were received.

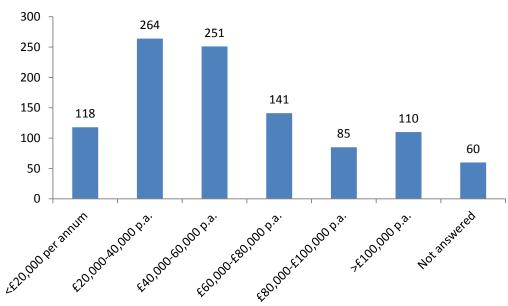
2. Consultation results

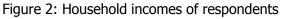
2.1 Respondents' demographics

The following chart shows the number of responses received across all age groups:



The following chart shows the number of responses received across total household income groups:





The following chart shows the number of responses received regarding the characteristics of the home and sources to heat the home:

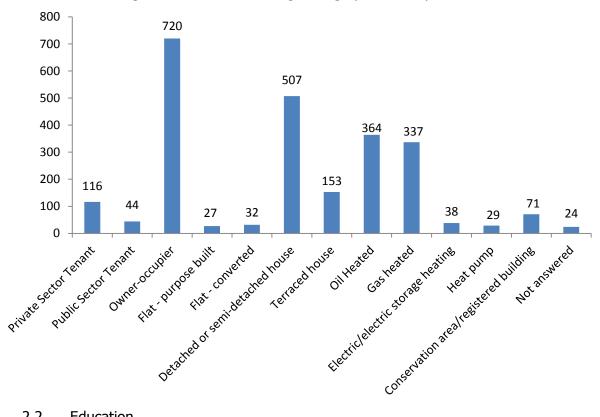


Figure 3: Home and heating demographics of respondents

2.2 Education

Education is the most cost effective way to deliver energy savings. Some simple, relatively cheap measures can save households and businesses money and dramatically reduce their energy consumption.

The majority of respondents (93%) support the change of public behaviour through long term awareness raising and initiatives.

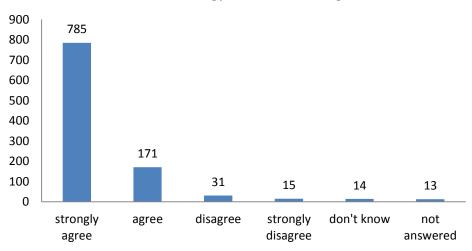
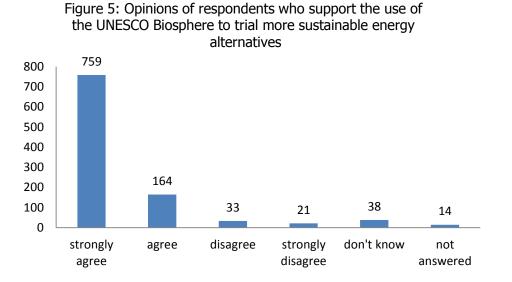


Figure 4: Opinions on awareness raising and initiatives about energy and climate change

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Strong support was received from respondents (90%) for using the UNESCO Biosphere to trial more sustainable energy alternatives and showcase the results to the world.



Majority of respondents (93%) support making climate change and energy awareness part of every child's education.

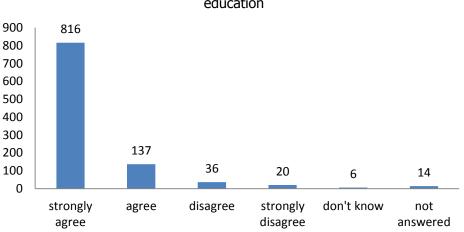
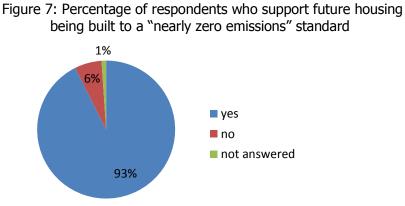


Figure 6: Opinions of respondents on topic of making climate change and energy awareness part of every child's education

2.3 Residential/business properties

Residential and business properties are responsible for over 40% of our total greenhouse gas emissions, the single largest sector and the reason for most of our increased emissions.

Majority of respondents (953) support future housing being built to a "nearly zero emissions" standard.



Over 76% of respondents support Building Regulation amendments for extensions to existing homes to also include a requirement of air tightness testing and suitable insulation throughout the property.

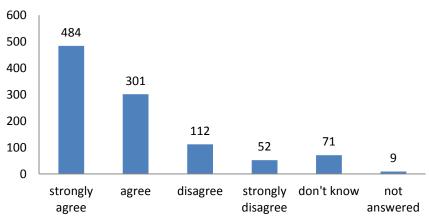
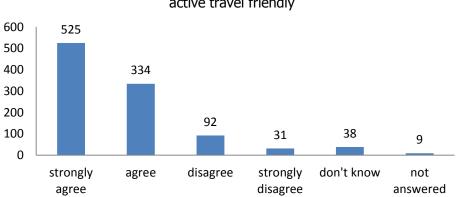
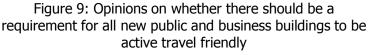


Figure 8: Opinions on Building Regulation amendments

Over 83% of respondents support public and business buildings being active travel-friendly.





Over 87% of respondents would support a finance package to fund home energy efficiency surveys, insulation/draft proofing and installation of heat pumps.

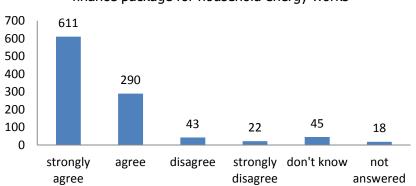
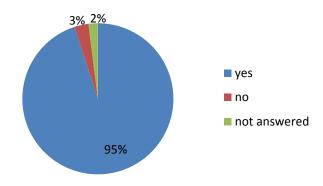


Figure 10: Opinions if givernment should support a finance package for household energy works

Over 95% of respondents (982) support grants, loans and tax relief to invest in property energy efficiency.

Figure 11: Percentage of respondents who support grants and loans for energy efficiency improvements for the domestic sector.



Majority of respondents (85%) thought there should be grants or loans for Registered Buildings and those in Conservation areas to tackle damp issues, window repairs and energy efficiency improvements, see below

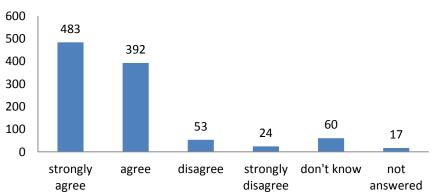


Figure 12: Opinions about grants and loans for Registered Buildings and those in conservation areas

Over 72% of respondents support Framework Agreements to benefit home owners undertaking improvements.

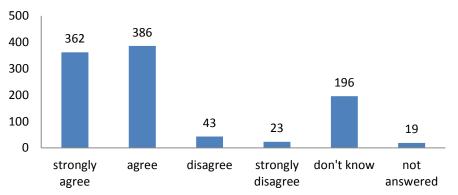


Figure 13: Opinions on Framemwork Agreements option

A lack of understanding regarding a framework agreement to benefit private sector property owners undertaking home improvements may have have been responsible for the higher "don't know" response rate for this question.

Majority of respondents (902) support a minimum energy efficiency standard when renting or selling properties.

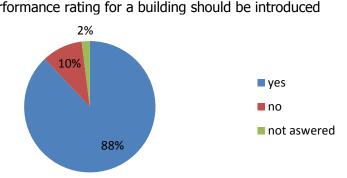


Figure 14: Percentage of respondents who think an energy performance rating for a building should be introduced

Majority of respondents (79%) support the introduction of a Manx Standard Assessment Procedure (SAP) energy efficiency rating to assess the energy performance of dwellings.

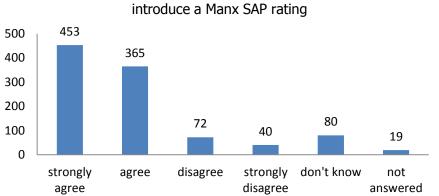


Figure 15: Opinions of whether Government should introduce a Manx SAP rating

Over 84% of respondents support an Energy Efficiency Capital Fund to pay for future energy efficiency improvements in Government buildings.

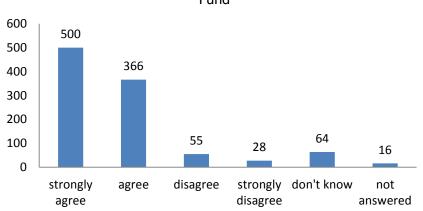


Figure 16: Opinions on an Energy Efficiency Capital Fund

Majority of respondents (85%) support use of locally produced building construction materials.

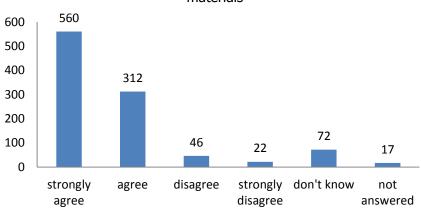


Figure 17: Opinions on use of local construction materials

Majority of respondents (74%) support a scrappage scheme for old fridges and freezers.

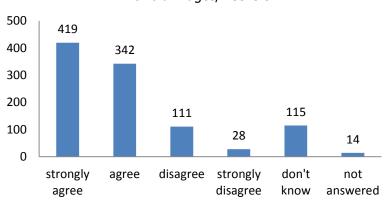
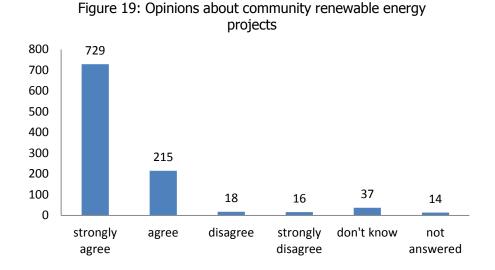


Figure 18: Opinions about a scrappage scheme for old fridges/freezers

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Majority of respondents (92%) support community renewable energy projects.

Over 81% of respondents support Planning Permitted Development Orders (PDOs) for installation of air source heat pumps in non-conservation areas.

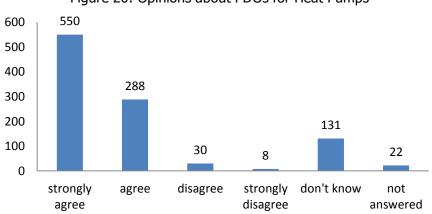


Figure 20: Opinions about PDOs for Heat Pumps

Majority of respondents (62%) support the introduction of a Climate Change Levy on new fossil fuel boilers.

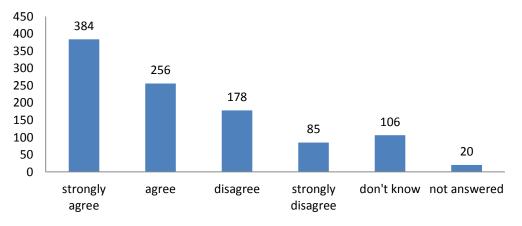
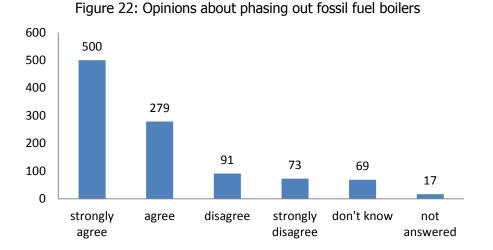


Figure 21: Opinions about Levy on new fossil fuel boilers



Majority of respondents (76%) support phasing out and banning of new fossil fuel boilers.

Majority of respondents (59%) support the introduction of a Climate Change Levy on domestic and commercial heating fuels based on the carbon intensity of the fuel.

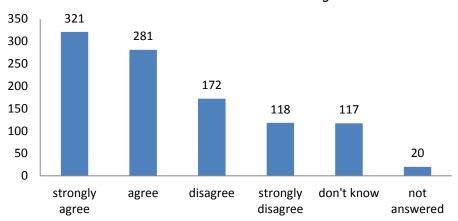


Figure 23: Opinions on a Climate Change Levy for use of fossil fuels in heating

Most respondents (70%) support the phasing out of coal and peat for heating.

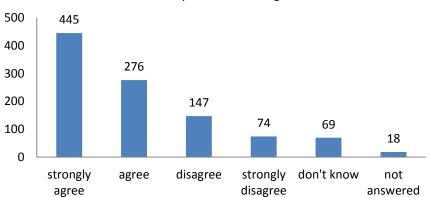


Figure 24: Opinions about phasing out coal and peat for heating

Almost 90% of respondents support the use of sustainable energy in public sector properties.

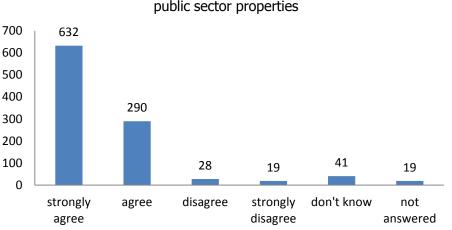


Figure 25: Opinions about sustainable energy in public sector properties

Over 75% of respondents support for use of Biomass/woodchip in public sector buildings.

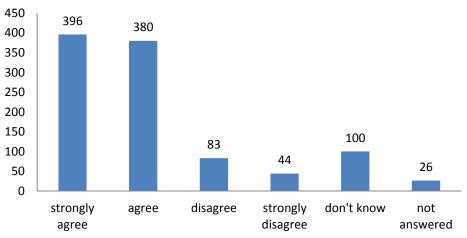
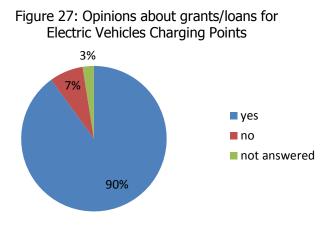


Figure 26: Opinions about use of woodchip in public buildings

3. Transport

There are currently around 60,000 light vehicles (cars, motorbikes and vans) and around 2,000 heavy vehicles (lorries, buses and machinery) on the Island. Transport is responsible for around 20% of our greenhouse gas emissions.

Majority of respondents (926) support grants and loans for electric vehicle charging points.



Majority of respondents (887) support grants and loans for purchasing new electric vehicles.

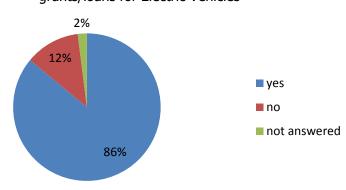
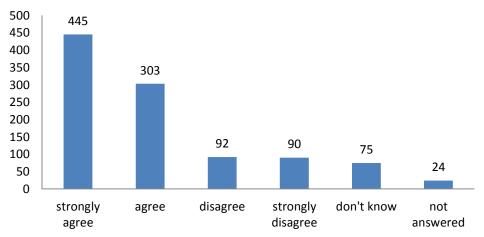
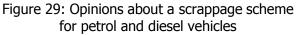


Figure 28: Opinions about government involvement in grants/loans for Electric Vehicles

Most of the respondents (73%) support a scrappage scheme for petrol and diesel vehicles to encourage their removal from the roads.

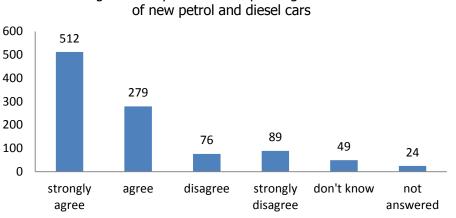




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Majority of respondents (77%) support phasing out sale of new petrol and diesel cars.

Figure 30: Opinions about phasing out sales



Majority of respondents (56%) support an increase in new vehicle registration fee for fossil

fuel cars.

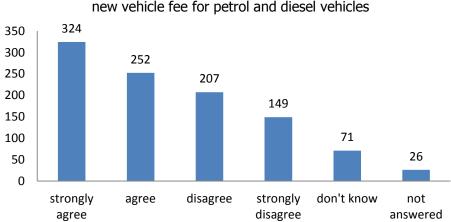
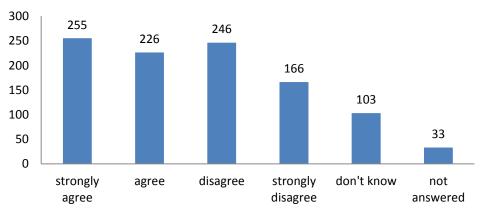
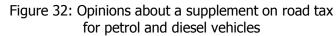


Figure 31: Opinions about an increased new vehicle fee for petrol and diesel vehicles

Only 47% of respondents support an additional road tax for fossil fuel cars.





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Majority of respondents (79%) support vehicle emission testing to clean up the most polluting vehicles on the road.

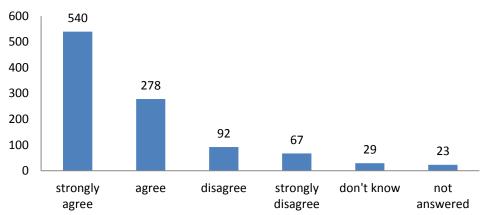


Figure 33: Opinions about a Vehicle Emissions Test

Majority of respondents (80%) support only Euro5/6 HGVs being used in Government work.

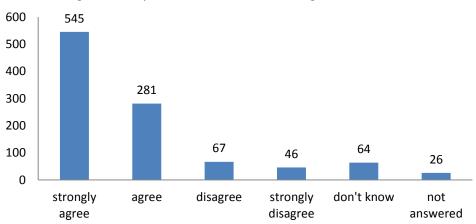


Figure 34: Opinions about HGV use for government work

Majority of respondents (75%) support a company electric vehicle (EV) scheme.

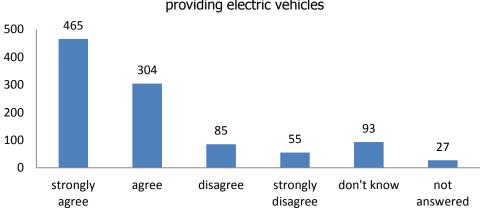
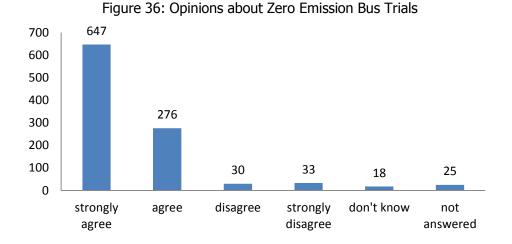


Figure 35: Opinions on employers providing electric vehicles

Majority of respondents (90%) support use of zero emission buses.



Almost 79% of respondents support a free-for-all bus service to reduce traffic congestion.

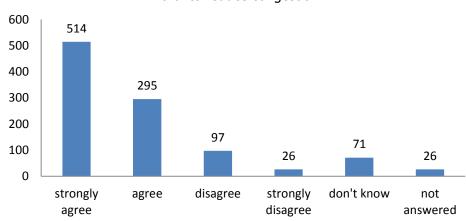


Figure 37: Opinions about a Free Bus Service trial to reduce congestion

Over 85% of respondents support zero emission HGVs and ferries.

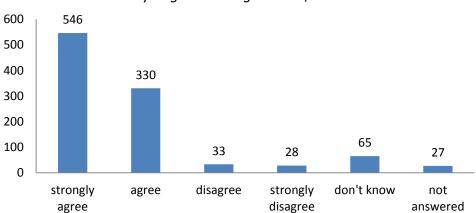
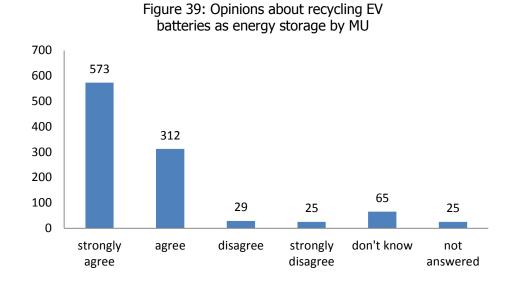


Figure 38: Opinions about exploring opportunities for hydrogen and biogas HGV's/ferries



Majority of respondents (85%) support use of EV batteries for energy storage by MUA.

Over 80% of respondents support a commercial electric vehicle tariff.

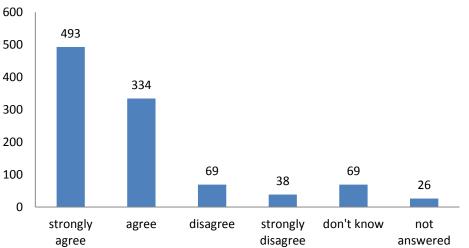


Figure 40: Opinions about a commercial EV tariff

4. Electricity Generation

More than 80% of the islands electricity is generated from natural gas in a Combined Cycle Gas Turbine power plant. Electricity generation is responsible for around 25% of the islands greenhouse gas emissions.

Majority of respondents (88%) support legislation changes to allow community energy projects to generate and supply power.

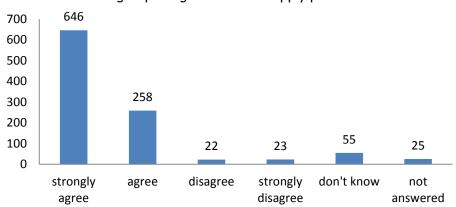


Figure 41: Opinions about allowing community groups to generate and supply power

Majority of respondents (83%) support Manx Utilities providing energy services for customers.

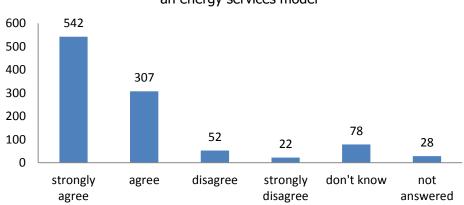


Figure 42: Opinions about whether MU develops an energy services model

Over 86% of respondents support renewables being installed before 2030.

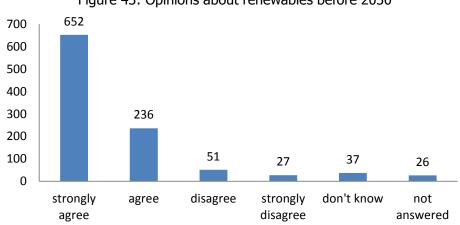


Figure 43: Opinions about renewables before 2030

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Almost 89% of respondents support Manx Utilities installing solar photovoltaic panels and battery storage at their sites around the Island.

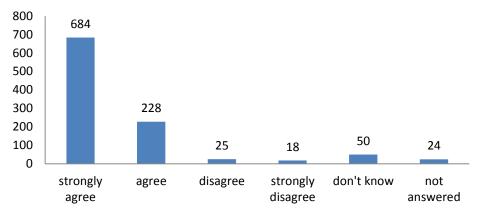


Figure 44: Opinions about whether MU should consider PV and battery storage at their sites

Majority of respondents (80%) support onshore wind generation in the Isle of Man.

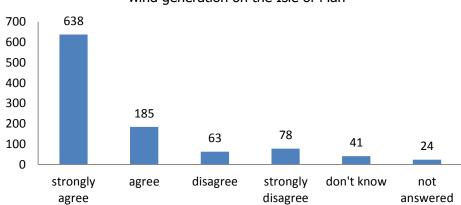
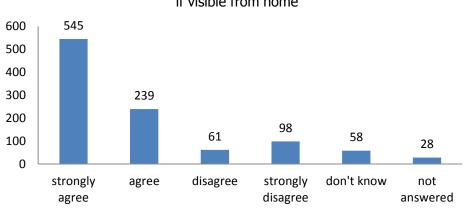
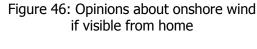


Figure 45: Opinions about whether supportive of onshore wind generation on the Isle of Man

Over 76% of respondents are supportive of onshore wind even when the wind turbines are visible from their home.



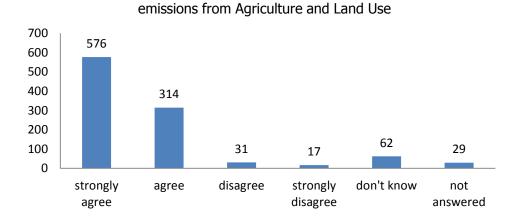


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5. Land Use and Waste

Agriculture, land use and waste contribute around 10% of our greenhouse gas emissions. Majority of respondents (86%) support reducing emissions from agriculture and land use.

Figure 47: Opinions about exploring options to reduce



Majority of respondents (88%) support utilising waste heat from the Energy from Waste (EfW) plant to replace a fossil fuel heat source.

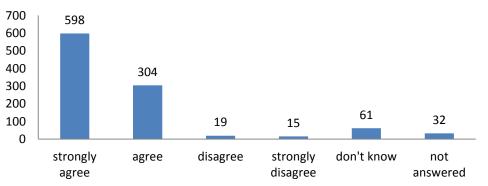
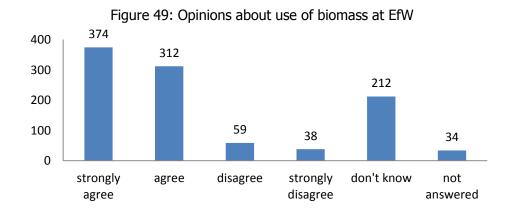
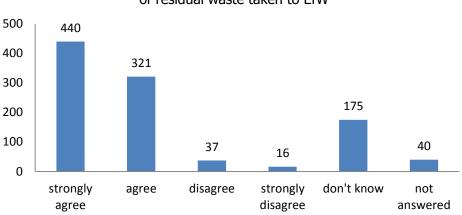


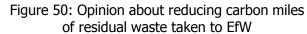
Figure 48: Opinions about Using Waste Heat from EfW

Most of respondents (67%) support use of biomass to prevent unplanned shut downs at the EfW plant.



Most of respondents (74%) support reducing carbon miles for collection of waste for disposal at the EfW plant.





Majority of respondents (81%) support construction site waste management plans.

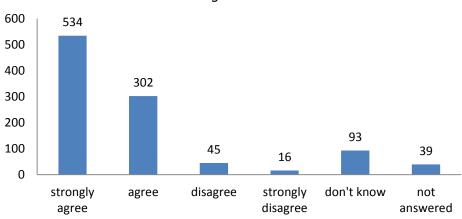


Figure 51: Opinions about use of compulsory Site Waste Management Plans

Majority of respondents (88%) support increased recycling.

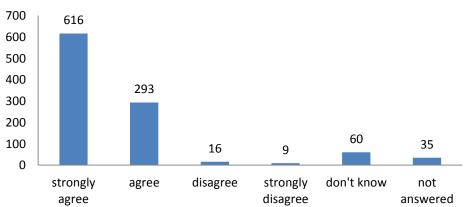


Figure 52: Opinions about recycling

Majority of respondents (76%) support introduction of Clean Air legislation to regulate pollution.

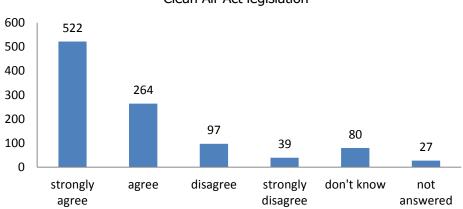


Figure 53: Opinions about introducing Clean Air Act legislation

Most of the respondents (73%) support carbon capture and storage.

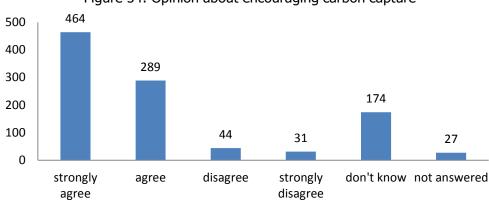
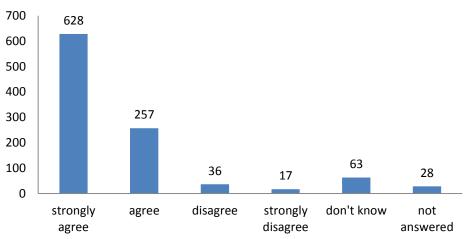
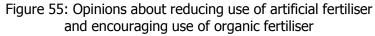


Figure 54: Opinion about encouraging carbon capture

Over 86% of respondents support reduction in the imports of artificial fertilisers and more efficient use of organic fertilisers and leguminous plants.





6. Interim Targets

Majority of respondents (851) support the proposed interim targets.

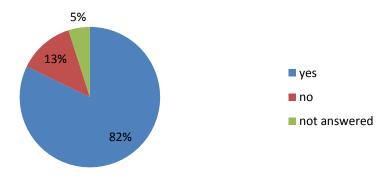
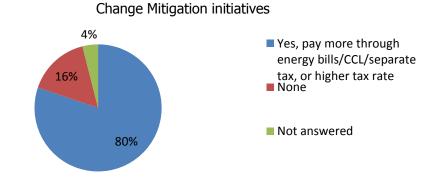


Figure 56: Opinions on Support for Proposed Interim Targets

7. Funding and Other suggestions

Majority of respondents (817) support Climate Change Levy or increased taxation to fund Climate Change mitigation initiatives.

Figure 57: Which options would you accept to finance Climate



More than 83% of respondents would be prepared to spend a proportion of their income on improving their home's energy efficiency.

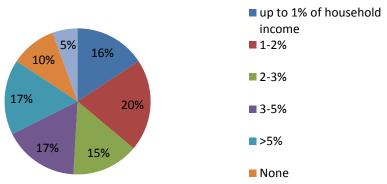


Figure 58: How much of your income would you spend on upgrades to your home

3. Qualitative response

Respondents were given the opportunity to further explain their responses at the end of each section in the consultation. In total 5,665 comments were received from respondents.

Below is a representative example of some of the comments received.

3.1 Education (698 comments received)

Education is going to be the most effective tool in the toolbox in order to get people behind the need for measure to be taken urgently regarding climate change.

Education for both adults and children. This is a steep and vital learning curve for all of us. Individual responsibility is as important as government.

I also think that primary schools and secondary schools could use initiatives to teach children from an early age to be more environmentally friendly.

Please start educating everyone of all ages now!

Education, Education, Education so this crisis becomes a normal conversation to the point of people saying "why would you not do this?"

Children should understand where electricity comes from, how oil is extracted, what fracking is etc.

Whilst we support the need to change public behaviour and awareness on the subject, it is important to understand all the facts before developing any initiatives.

We support education provided that all options/technologies/possible solutions are included.

Isle of Man is uniquely placed to give a lead in demonstrating developments in alternative energy use and sustainable lifestyles.

3.2 Residential/business properties (1,291 comments received)

All existing housing stock needs to be renovated with energy efficiency in mind.

Complete airtightness would result in condensation problems, unless (expensive) air extraction/heat exchange system installed.

All public housing should be built to higher air tightness/eco standards. This should prompt the private sector to up their game

Only A rated and above appliances should be allowed to be sold on the Island, or fitted by house builders.

It's simple the less energy we waste the better. We shouldn't waste food or money, energy should be treated the same way.

Assistance for domestic residences to be improved.

A realistic Grant scheme for people to upgrade their homes to meet the nearly zero emissions would be helpful.

We all need to take responsibility for our energy use and to reduce it, by whatever means we can.

Nudge is good to change behaviour. Likewise some assistance either advice and/or financial.

There should be incentives for small scale changes to be made to individual properties. Together this would add up to a bigger impact.

Consideration should be given to allowing a greater proportion of the public to be able to access the Energy Efficiency Scheme by increasing the threshold of £15,000 (after tax).

Anything which encourages people to make the more environmentally (and hopefully economically advantageous) choice is a good thing.

Many energy efficiency scheme criteria already in place in other countries can be easily transferred into local use.

Rates could be calculated to include an element relating to energy saving measures in place based on the SAP figures.

Check budget neutral grants for insulation by paying back VAT.

Government should be setting example by ensuring any new Government buildings are energy efficient.

Compounding historic mistakes by failing to do the right things now will not stand up to scrutiny in the medium term and should be avoided at all costs.

Some great ideas, we should look too at what has worked well in other countries who are ahead of us in this field.

Let's do this sooner rather than later.

Insulation program of old houses

...the public is generally not very "energy efficiency conscious" so any improvements to peoples knowledge on this could be very useful.

Cavity wall insulation has created more damp problems for the homeowner.... Care must be taken in improving the 'airtightness' of buildings to ensure this doesn't lead to condensation...

3.3 Transport (676 comments)

Getting rid of the most polluting vehicles generally older vehicles a priority.

An emissions test for vehicles is long overdue. Some vehicles on IOM should not be on the road.

A cheaper bus service would be better. Environmentally friendly buses would be great.

Public transport should be free, parking more expensive so that its the natural option not to drive your car, but it has to work and be efficient and convenient.

The government should be capitalising on the fact that we don't suffer from "range anxiety" in the same degree and lead the way in electric and hydrogen vehicle facilities.

The government should be leading the way in reducing vehicle omissions.

Should follow the UK and EU in terms of sale of new petrol and diesel vehicles.

Travel has to change, fuel has to change.

Free public transport on main routes at peak commuting times would be worth a trial to see if car use is reduced.

We should encourage electric cars but they should not be free to charge.

3.4 Electricity Generation (678 comments)

Fully supportive of both onshore and OFFSHORE wind generation. I don't why we aren't doing this already!

I am not averse to wind turbines on land but there is surely also great scope for wind farms at sea?

I don't understand why we aren't using wind turbines for our electricity already!

We MUST do whatever we can to best utilise our island's natural resources e.g. wind, wave & sunlight.

I would rather see wind turbines than rising seas and increased temperatures from global warming and the devastating impact this would have around the world.

Seeing wind turbines is not as issue. We have to move on from this mental blockage. Onshore and offshore wind turbines NOW. We can be almost carbon neutral, if we start to act now!!!!!!!!

The Island must be very well situated for harnessing wind, wave, tide and solar power so get on with it.

Some people would choose a Green Tariff, & be prepared to pay a little more for it (5%)if they knew their energy supply was better for the planet. I would. Costs could be raised by a Green Gov Bond paying 1.25% available from Post Offices.

3.5 Land Use and Waste comments (549 comments)

I think the island should work towards making recycling easier than ever and mandatory.

Rationalisation of waste collections for the whole island.

Recycling should be made compulsory through road side collections. There needs to be more points in the island for plastic recycling.

Natural alternatives to chemical fertilisers are a boon for wildlife and would enhance our Biosphere status.

Artificial fertilisers should be phased out by 2030, supported by legislation.

I would totally support the island moving to organic farming and getting Soil Association recognition.

Clean air legislation is long overdue and would help manage illegal waste activity and statutory nuisance on the Island.

3.6 Interim Targets (578 comments)

They're all excellent ideas, but is there a possible way we could increase the number faster?

These targets are not aggressive enough, we need to be more ambitious.

Are the targets high enough?

Yes to all, however, targets need to be more ambitious!

The government should absolutely have interim targets but they should be significantly more ambitious than those outlined above.

It's good to have a goal and interim targets can focus the mind but I don't know if these are aggressive enough.

Aim to reach and EXCEED these targets before the time limits ASAP.

We need to know the costings which go with the targets.

3.7 Funding and other suggestions (1,195 comments)

The Isle of Man is a small country that has an opportunity to set a golden example to all countries.

Be brave - lead by example on all fronts, We are in the top 1% globally in the area of wealth so there is no excuse really to leave a legacy for our children.

Funding is difficult, but more demonstration of how much you could could save by using energy efficient products would assist. For example a comparison to switching to LED lights from standard low energy bulbs.

The Government needs to grasp the nettle and get a grip of wind power and electric vehicle adoption for all of its current vehicle fleet, leading by example!

Whatever it costs, needs to be met. Finding money to fight climate change and reduce emissions is more important than any other priority.

A Climate Change Levy ... could be hypothecated tax for transparency.

Introduce a carbon price.

We've waited long enough to do our fair share of slowing down the damage that we have caused.

Sell energy to U.K. from a Manx Offshore Windfarm.

Make the island an attractive place for development of clean energy technology.

There needs to be a fund, not managed by Government or Treasury...

Encourage new businesses and innovation - make climate change an economic opportunity.

As interest rates are so low it makes good financial sense to invest in decarbonising. Eg issue energy bonds to fund investment in renewables and energy efficiency.

If we are serious about making the difference we should be serious in investing in it.

A separate tax stating where the money is going and what for would be a good idea, rather than increasing the current tax.

Large businesses should be encouraged to support our island's efforts through funding and community initiatives.

Make the Island a model of good practice in these issues. Use that to our advantage.

It appears that this consultation document appears to infer that tackling climate change will come at a cost. Yes it will involve an initial investment but as current studies are showing the initial cost is recovered reasonably quickly and eventually results in an economic benefit. So let's approach it as an investment rather than a cost.

I think that we need to separate energy efficiency from climate change. Energy efficiency is a direct way of 'spending now to save in the long term', which would be much easier for people to grasp. 4. Summary

The focus for this consultation was on options for possible inclusion in a new climate change mitigation strategy for 2020-2030 and interim targets.

- 93% support change of public behaviour through long term awareness raising and initiatives;
- 93% support new buildings being built to a "nearly zero emissions" standard;
- 88% support a minimum energy efficiency standard when renting or selling properties;
- 92% support community renewable energy;
- 86% support installation of renewables before 2030s;
- 95% support for grants and loans to invest in property energy efficiency;
- 81% support Planning Permitted Development Orders for installation of air source heat pumps in non-conservation areas;
- 80% support onshore wind generation in the Isle of Man;
- 79% support free bus service;
- 79% support the use of a Manx Standard Assessment Procedure (SAP) energy efficiency rating for properties.
- 77% support phasing out the sale of new petrol and diesel cars 16% against;
- 62% support the introduction of a Climate Change Levy on new fossil fuel boilers 26% against;
- 59% support levy on fossil fuel heating 28% against;
- 47% support a supplement on road tax for all fossil fuel vehicles 40% against;
- 79% prepared to pay separate tax or levy for climate change 16% unwilling to pay;
- 49% would pay more than 2% of household income on energy efficiency 10% would pay none.

The key findings of the consultation have already been used by the Chief Minister when he announced that a Climate Change Bill will be introduced in the next legislative year committing this government and future administrations to reach net-zero carbon emissions. The consultation responses will also be considered by the recently created Emergency Consultative Transformation Team to assist with producing a climate change action plan that will go to Tynwald in January 2020.



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