GD No: 023/13



A Report by the Council of Ministers on Environment and Infrastructure Policy

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1 Introduction

To the Hon Clare Christian MLC, President of Tynwald, and the Hon Council and Keys in Tynwald assembled

In March 2012, Council of Ministers established the Environment and Infrastructure Committee, as one of its Sub-Committees. The role of Environment and Infrastructure Committee is to ensure that environmental issues and the infrastructure required to support Government strategic priorities are properly considered and any improvements required are given more detailed political level consideration, particularly where the allocation of resources is concerned. The Environment and Infrastructure Committee comprises:

Hon P A Gawne MHK, Minister for Environment, Food and Agriculture (Chair) Hon D C Cretney MHK, Minister for Infrastructure Mr E Lowey, Chair of the Manx Electricity Authority Mr L Skelly MHK, Member for Economic Development

In January 2013 Tynwald approved Agenda for Change which lists nine priorities under the heading of Environment and Infrastructure and details the commitment of Council of Ministers for this policy area:-

"We must provide an Island infrastructure that enables people to live, work and travel and to enjoy a good quality of life. We must also provide the support which new and existing business needs to flourish. We must use our natural resources sustainably and ensure we respond to the global challenges, responsibilities and opportunities which food security, energy security and climate change present."

The following report details proposed key objectives by which the nine priorities listed under Environment and Infrastructure in Agenda for Change are planned to be delivered. During the Agenda for Change debate, some Members sought further detail as to how listed priorities are to be implemented; I trust that the objectives listed in this report provide at least some of the clarity which Members sought. The report also contains more detailed information, which Members have also previously requested in policy debates; for each of the topics relating to an objective.

Council of Ministers recommends to Tynwald that Key Objectives detailed in the report be the general framework for the development of Environment and Infrastructure policy.

Hon P A Gawne MHK

Minister for Environment, Food and Agriculture

Chair – Environment and Infrastructure Committee

2 Key Objectives

Environment and Infrastructure is one of the five key policy areas in the Council of Minister's <u>Agenda for Change</u>, which sets out the priorities for Council of Ministers for the four years to September 2016. Council of Ministers has listed nine priorities under the heading of Environment and Infrastructure. Agenda for Change also provides the following commitment from Council regarding Environment and Infrastructure:-

"We must provide an Island infrastructure that enables people to live, work and travel and to enjoy a good quality of life. We must also provide the support which new and existing business needs to flourish. We must use our natural resources sustainably and ensure we respond to the global challenges, responsibilities and opportunities which food security, energy security and climate change present."

The Environment and Infrastructure Committee is leading the work to deliver those priorities listed in Agenda for Change for 'Environment and Infrastructure'.

In the following sections of this report, further information, detail and evidence is provided in relation to the identified issues along with details of objectives which will contribute towards delivery of the nine priorities.

Summarised below is a listing of the objectives/actions which the Environment and Infrastructure Committee will ensure are delivered as part of its and Government's public commitment to delivering Agenda for Change.

We will identify sustainable ways to reduce the financial and environmental cost of energy in the medium to long term (Section 3).

- i. Government will explore opportunities to develop potential offshore energy production in Isle of Man territorial seas for export to neighbouring jurisdictions; this may include the establishment of strategic partnerships.
- ii. Government will develop a national energy strategy which balances the competing needs of supply security, sustainability and affordability.

We will address the issues posed by the effects of climate change (Section 4).

- iii. Government will adopt a greenhouse gas emissions target for the Isle of Man of 80% reduction of 1990 levels by 2050.
- iv. Government will develop policies and strategies that will lead to reductions in greenhouse gas emissions to meet that target.
- v. Government will develop policies and strategies to ensure that it understands the risks of climate change to the Isle of Man and adapts to these risks.

vi. Government will seek loan provision and then introduce a Manx Homes Energy Efficiency Scheme to allow the self funding investment in energy efficiency measures in domestic and commercial properties.

We will produce a marine spatial plan to guide appropriate future commercial use of our territorial seas (Section 5).

vii. An Isle of Man Marine Spatial Plan will be published for public consultation by 31 Dec 2013.

We will prioritise the schemes in the capital programme which further develop our infrastructure and support economic development (Section 6).

- viii. By 2015/16 Government will deliver, subject to appropriate approvals and permissions:
 - Douglas Promenade Refurbishment stages 1, 2 and 3.
 - Regeneration of village and town centres through the Chief Minister's Regeneration Programme including, the lower Douglas shopping area of Strand Street, Duke Street, Regent Street and Drumgold Street by Dec 2013, Laxey village centre including the MER station and Coach park by 2013, Port Erin Railway Station by 2013/14, Castletown, George Lane and Coach Park by 2013/14. Schemes have been identified in Ramsey, Peel and Castletown for 2014/15.
 - The Regional Sewage Treatment Strategy (including new sewage treatment facilities in the north, east and west of the Island).
 - Improvement works to Douglas Outer Harbour and initial design work for a replacement link span.

We will make sure town and country planning supports economic development (Section 7).

- ix. By 2015/16 Government will:
 - Complete the review of the Isle of Man Strategic Plan by end of 2015 (preliminary publicity will be issued in 2013).
 - Delivery of a Draft Area Plan for the East by 2016 (the aim is that the Area Plan for the East will go to Inquiry in 2017).
 - Detailed preparatory work on the Area Plans for the North and West by 2016 (these Plans will likely go to Inquiry 2018/19).
 - A series of Planning Policy Statements including a final PPS on Planning and the Economy by the end of 2013 which will give additional information about how the economic benefits of development proposals can be taken into account in the assessment of planning applications.

• Review of the Island's Retail Strategy to inform the review of the Isle of Man Strategic Plan.

We will ensure our transport links are secured (Section 8).

- x. Government will await the outcome of the review of the Open Skies Policy and linkspan user agreement and will act upon its findings.
- xi. Government will invest in its major harbour infrastructure to ensure it meets future commercial and domestic needs.

We will develop a realistic strategy for food security in the Isle of Man (Section 9).

xii. Government will establish a realistic strategy, which will meet the varying challenges of both short term and long term food security for the Manx nation.

We will promote the value and utilisation of our amenity, cultural and landscape resources (Section 10).

- xiii. Government will work with the tourist sector to harness the economic opportunities associated with eco and adventure tourism.
- xiv. Government will prepare a nomination to UNESCO to seek the granting of Isle of Man Biosphere Reserve status by 31 March 2015.
- xv. Government will engage the farming industry in seeking enhanced access and increased biodiversity and landscape management through voluntary additional arrangements within the main agricultural support scheme; the Countryside Care Scheme.
- xvi. Government will work in partnership with Local Authorities to improve the management and control of unsightly and dilapidated properties that have a negative impact on our communities.

We will encourage sustainable economic activity in harmony with our natural resources (Section 11).

xvii. Government will formulate a long term strategy for sustainable development which meets the needs of the present generation without compromising the ability of future generations to meet their needs.

3 Sustainable Ways to Reduce the Financial and Environmental Cost of Energy in the Medium to Long Term

3.1 Economic development opportunity to export energy

Energy is vital to a modern economy, being needed for heating and lighting of homes, travel and for powering businesses and economic development. Energy policy across the world is evolving in response to rising fossil fuel prices, issues over security of supply and the need to reduce carbon emissions to combat climate change.

3.1.1 Renewable Energy

The UK's indigenous hydrocarbon energy sources are in decline which creates an opportunity for the Isle of Man to export more energy to the UK.

The Isle of Man owns its territorial seas out to the 12 nautical mile limit, and as such has responsibility for marine spatial planning and zoning over approximately 4,000 km² of the Irish Sea which is greater than 87% of the Island's territory.

The Energy Bill currently proceeding through the UK legislative process will enable joint projects to be eligible for renewable incentives so that renewable energy can be generated in neighbouring countries such as the Isle of Man for export to the UK.

The shallow Isle of Man territorial seas, close proximity to the UK and significant wind resource creates an opportunity to develop offshore wind farms in the Isle of Man territorial seas using proposed joint projects to generate renewable energy for export to the UK.

Development of offshore wind farms would generate revenue to Government from leasing of the seabed and also create new jobs providing operation and maintenance services.

3.1.2 Gas

Gas currently forms an integral part of the UK's power generation mix contributing approximately 40% in 2011. However, power generation by gas in 2011 declined sharply by approximately 18% due to high gas prices.

The UK Government expects that gas will continue to play a major role in the electricity mix over the coming decades, alongside low-carbon technologies as a diverse generation mix balances risks and uncertainties of different technology options, including uncertainty on future gas prices. However, there is a need to ensure the security of future supplies of affordable gas.

Ownership of the Isle of Man territorial seas also includes all hydrocarbon resources within the territory. Although all previous prospecting licences have lapsed due to disappointing results there may exist hydrocarbon resources which could be extracted with recent improvements in technology and may be economically viable due to Brent oil prices exceeding \$100 per barrel. Furthermore, hydrocarbon deposits in the Isle of Man territorial seas may also contain significant quantities of coal. Coal gasification is a well established technology involving production of a Syngas (mixture of hydrogen and methane) underground which can be extracted to the surface using directional drilling. Several licences

have been issued for offshore coal gasification in the UK and initial trial projects are expected to commence in 2013.

A significant opportunity exists for the Isle of Man to licence extraction of gas for export to the UK. Furthermore, new technologies including coal gasification expands the hydrocarbon resource available in the Isle of Man territorial seas.

Extraction of conventional and non conventional gas would generate revenue to Government from hydrocarbon duties and also create new jobs providing operational services.

 Government will explore opportunities to develop potential offshore energy production in Isle of Man territorial seas for export to neighbouring jurisdictions; this may include the establishment of strategic partnerships.

3.2 National Energy

The current national energy strategy seeks to achieve an effective balance across three main interdependent policy aims:

- maintaining secure energy supplies;
- maintaining <u>affordable</u> energy supplies;
- developing <u>sustainable</u> long term energy supplies and preserving the environment for the next generation

These energy policy aims were previously approved by Tynwald in 2006.

Energy policy aim 1: maintaining secure energy supplies

This policy aims to secure the reliable energy resources needed by our Island to underpin economic growth and quality of life objectives. The aim requires a resilient supporting framework to ensure our energy supplies and systems are effectively risk managed and sufficiently diversified to help protect us from potential supply chain disruptions. Where economic, the policy supports the use of indigenous energy resources as a means of mitigating strategic energy import risks.

Energy policy aim 2: maintaining affordable energy supplies

This policy aims to ensure that economic considerations remain central in decision making relating to energy infrastructure investment and delivery mechanism arrangements. The policy directly underpins Government's priorities of economic growth and protecting the vulnerable. The policy also supports the setting and promotion of energy efficiency objectives.

Energy policy aim 3: developing sustainable long term energy supplies and preserving the environment for the next generation

This policy aims to ensure that we recognise the changing energy landscape and potential impacts in both a global and local context. The policy requires that appropriate long term sustainable energy systems are developed to support the prosperity of future generations.

The policy acknowledges the key role of natural gas as a transition fuel on our Island and supports the longer term decarbonisation of electricity, heating and transport sectors.

 Government will develop a national energy strategy which balances the competing needs of supply security, sustainability and affordability.

4 Issues Posed by Climate Change

4.1 Climate Change Mitigation

We are already seeing the effects of climate change. There has been a clear decreasing trend in Arctic sea summer ice levels since records began in 1979. Sea levels around the UK rose by 10cm during the 20th century. The earth's surface has warmed by about 0.4°C on average since the 1970s. In 160 years of records, the 10 hottest years have all been since 1997.

The main cause of this warming is the emission of "greenhouse gases", such as carbon dioxide (CO_2) , methane and nitrous oxide. Human activity over the past 250 years, including the burning of fossil fuels, change in land use and agriculture has increased the concentration of greenhouse gases in the earth's atmosphere. As these gases build up in the atmosphere, they strengthen what is known as the 'greenhouse effect'. Taking measures to try and reduce this greenhouse effect is known as climate change mitigation.

Although in global terms the Isle of Man contributes very little to world greenhouse gas levels, as a responsible jurisdiction, the Isle of Man has ratified the Kyoto Protocol through the UK. This commits us to producing annual inventories of greenhouse gas emissions expressed as CO₂ equivalents to the UK for inclusion in their returns.

- Government will adopt a greenhouse gas emissions target for the Isle of Man of 80% reduction of 1990 levels by 2050.
- Government will develop policies and strategies that will lead to reductions in greenhouse gas emissions to meet that target.

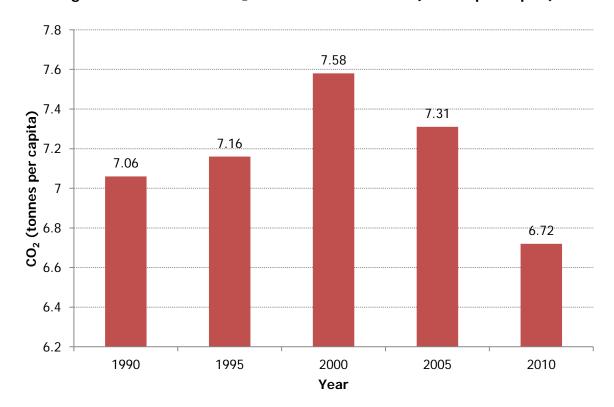


Figure 1 - Isle of Man CO₂ Emissions 1990-2010 (tonnes per capita)

Source: Department of Environment, Food and Agriculture

4.2 Climate Change Adaptation

One of the Isle of Man's top priorities is economic growth linked to economic resilience. To achieve this we need an economy that innovates, diversifies and is resilient to the challenge of change.

Therefore we need to embrace long-term planning; and better understand risks, backed up by the best evidence, including horizon-scanning and science.

Nowhere is this approach more important than in understanding our climate and how it might change. The climate is fundamental to almost all aspects of our lives: it directly affects our economy, ecosystems, food, water, health, homes, infrastructure, trade and leisure.

We know that the world's weather and climate is continually changing, resulting in both long term and short term variability and that these natural variations often have significant effects on our lives. We also know that over the past century there has been a trend of increasing global average temperatures and atmospheric carbon dioxide levels. Global temperatures are projected to continue rising, which is likely to cause continued changes in weather patterns, rising sea levels and importantly increased frequency and intensity of extreme weather events.

The UK Climate Predictions (which cover the Isle of Man) published in 2009 (UKCP09) suggest that in the Isle of Man we are likely to continue to observe average temperature rises, with a greater likelihood of drier summers and wetter winters, plus a greater proportion of precipitation to fall as heavy events. However, we cannot be certain and these uncertainties bring their own challenges that are often highlighted by climate sceptics. However, what is certain is that our climate is changing and this change is fundamental to our lives and livelihoods.

- Agriculture and forestry are sensitive to climatic conditions, so any changes in climate have the potential for impacts on productivity and economic viability.
- ➤ The main climate challenges to business include: flooding and coastal erosion; increased competition for water, energy and materials; and the disruption of transport networks and communication links.
- > There could be implications for public health, the continuity of health and social care services, the resilience of local emergency services and the impact on those most vulnerable within Manx society.
- Climate change may have significant implications for the built environment, including structures and energy, transport, water and ICT infrastructure. Infrastructure assets and buildings are in operation or use for many years, which means that decisions made now about design and construction will have long term consequences.
- The natural environment theme covers a range of elements across both the physical and biological world: wildlife, rivers, ponds, seas, open country side, forests, fisheries and farmland. It underpins all aspects of our lives. The ecosystem services provided by the natural environment are the foundation of sustained economic growth and personal wellbeing.
- ➤ These implications will need to increasingly inform strategic thinking for Government, business and the local community.
- Government will develop policies and strategies to ensure that it understands the risks of climate change to the Isle of Man and adapts to these risks.

4.3 Improving Energy Efficiency in Our Homes

Current evidence shows that low income households face extra costs to keep warm above those for typical households with much higher incomes. These costs are largely outside the control of those households – given the capital investment that would be required to reduce them – except through trading off the temperatures at which they live against other necessities, exacerbating the difficulties faced by all on such low incomes.

From a health and well-being perspective: low income households with high energy costs living at low temperatures will be subject to a larger incidence of ill health and in extreme circumstances it may contribute to "winter deaths". This in turn brings greater demands on the health service and a wider range of problems of social isolation and poor outcomes for young people.

From a carbon reduction perspective not only is the energy inefficiency of the homes of those living on low incomes a direct concern in terms of reducing carbon emissions, it also acts as a barrier to the implementation of other policies to mitigate climate change, since those on low incomes are least able to afford any increases in prices in energy that may result from them.

In order to tackle these issues the Committee proposes exploring the introduction of a new Manx Homes Energy Efficiency Scheme which by driving down energy use through promoting energy efficiency measures, will also create social and economic benefit for the Island. The Environment and Infrastructure Committee will work closely with the Social Policy and Children's Committee to ensure that as well as achieving environmental benefits we target the most vulnerable members of society living in homes that cannot be kept warm at a reasonable cost.

 Government will seek loan provision and then introduce a Manx Homes Energy Efficiency Scheme to allow the self funding investment in energy efficiency measures in domestic and commercial properties.

5 Marine Spatial Plan

To guide appropriate future commercial use of our territorial seas

Key Government Aim: Growing the Economy, achieved via

- Offshore Energy Generation
- Minimise Environmental Cost

Marine Spatial Planning is largely founded on the principles of, "Planning for Sustainable Economic Development", "Nature and Heritage Conservation" and "Equity" such that the Isle of Man Marine Spatial Plan must properly balance the following:

- i) The sustainable use and economic development of the territorial sea's resources; with
- ii) the conservation and sustainable management of the sea's environment; such that
- iii) the public environmental, economic and social interests of 'working' the territorial sea is appropriate and proportionate to the risks posed and the costs required to manage this natural resource.

The Isle of Man Marine Spatial Plan is the construct of three main elements:

- a) The Marine Spatial Plan a policy document to assist the decision-making process;
- b) An Environmental Information Constraints Map to direct development to sustainable locations; and
- c) The Legislative Framework to provide a legal foundation to the consenting regime.

Timetable Towards Adoption

Marine Spatial Plan

Development of the framework of the Marine Plan to commence in early 2013 with public consultation of the draft policies/proposals commencing December 2013.

Legislative Framework comprises the following new Orders and Regulations:

- a) The Town and Country Planning Act 1999 (Extension to the Territorial Seas) Regulations 2013;
- b) Town and Country Planning (Marine) (Development Procedure) Order 2013; and
- c) Town and Country Planning (Marine) (Application Fees) Order 2013;

The above legislation is currently being drafted. Subject to acceptance by the Attorney General's Chambers, it is proposed that the legislation be taken to Tynwald for approval as soon as possible, but no later than July 2013.

Pursuant to obtaining Tynwald approval, any application for offshore renewables (including offshore wind, wave and tidal) could be determined immediately thereafter. Revenue to the IOM Government will subsequently be generated by fee income streams while economic benefits to the Island economy will accrue as a result of grants of planning permission for such development.

 An Isle of Man Marine Spatial Plan will be published for public consultation by 31 Dec 2013.

6 Capital Programme Schemes to Further Develop Infrastructure and Support Economic Development

For the economy to flourish, people, goods and information must move freely. Businesses across all areas and industries need the right conditions to grow. Reliable infrastructure: energy, water, transport, digital communications and waste disposal networks and facilities, are essential to achieve this. Ensuring these networks are integrated and resilient is vital. We face a significant series of challenges, which will include stretching carbon reduction targets and the need to ensure long term energy security.

If we are to continue to develop new areas of commerce and industry to promote much needed economic growth we need digital communications networks that transmit information at high speed to all parts of the world. We need to maintain our transport, water and waste systems in the face of growing demand and the impact of climate change and of other threats and hazards. We need a clear analysis of the increasing interdependencies between networks and of the resulting opportunities for innovation.

All this must be delivered against a background of significant financial challenges for the Island.

The immediate challenge is to ensure that investment (whether it is public via the Government's capital work programme or via private income streams) is used to maintain and develop the existing economy, creating the conditions for enterprise to flourish based on an expansion of the commercial and industrial sectors. Government's infrastructure investment programme will help rebalance the economy and give industries the right conditions in which to grow, as well as itself providing a stimulus to short term growth.

Over the next five years, Government is committed to investing approx £326.2 M on infrastructure maintenance and improvement schemes (13/14 Pink Book). It is also underwriting a Local Authority Housing Programme of capital works of approximately £17.5M per annum and further investment in the Regional Sewage Treatment and Sludge Disposal Strategy of approx £45M to 2017/18.

A significant proportion of these schemes will all be carried out largely by the private sector thus feeding into the development of the island's economy through investment in infrastructure.

By 2015/16 Isle of Man Government will have delivered:

- Douglas Promenade Refurbishment stages 1, 2 and 3 by 2016
- Regeneration of village and town centres through the Chief Minister's Regeneration Programme including, the lower Douglas shopping area of Strand Street, Duke Street, Regent Street and Drumgold Street by Dec 2013, Laxey village centre including the MER station and Coach park by 2013, Port Erin Railway Station by 2013/14, Castletown, George Lane and Coach Park by 2013/14. Schemes have been identified in Ramsey, Peel and Castletown for 2014/15.
- The Regional Sewage Treatment Strategy was approved by Tynwald in July 2009 and, subject to the relevant approvals and permissions, should be completed by 2014/15. This includes new sewage treatment facilities in the north, east and west of the Island.
- Improvement works to Douglas Outer Harbour and initial design work for replacement link span by 2016.

7 Ensuring Town and Country Planning Supports Economic Development

The planning system has a key role to play in achieving a vibrant economy. It seeks to promote sustainable development through supportive planning policies contained within the Strategic Plan, zoning land for development through the preparation of Area Plans, identifying and protecting development opportunities and integrating employment generation with essential supporting provision in terms of housing and infrastructure. All of this is undertaken alongside an awareness and recognition of the valuable role of the environment in attracting and retaining people and business on the Island.

By 2015/16 Isle of Man Government will have delivered:

- Review of the Isle of Man Strategic Plan completed by end of 2015 (preliminary publicity will be issued in 2013)
- Delivery of a Draft Area Plan for the East by 2016 (the aim is that the Area Plan for the East will go to Inquiry in 2017).
- Detailed preparatory work on the Area Plans for the North and West by 2016 (these Plans will likely go to Inquiry 2018/19)
- A series of Planning Policy Statements including a final PPS on Planning and the Economy by the end of 2013 which will give additional information about how the economic benefits of development proposals can be taken into account in the assessment of planning applications.
- Review of the Island's Retail strategy to inform the review of the Isle of Man Strategic Plan.

8 Secure Transport Links

8.1 Open Skies

The Isle of Man has adopted the regulatory position, in terms of Air Transport Licensing, of providing free access for airlines with the required Operating License, to fly routes to or from the Island. This is what is referred to as an "Open Skies" Policy. It reflects the approach which has been used in the UK and Europe since 1992 when the European Community liberalised air transport throughout the European Union, giving any licensed airline the freedom to enter any internal market, and compete against any other airline. Hence, "Open Skies", which means un-fettered competition.

This is the current policy position in place for access to Isle of Man routes. This policy has served the development of the Island's air service network well with unconstrained access now enabling over 20 routes.

Tynwald determined in October 2012 that the Economic Committee should examine the following two areas and report to Tynwald Court during 2013 :

(a) the current 'Open Skies' policy is, in the light of changing circumstances, still in the best interests of the Isle of Man in preserving and encouraging an adequate, frequent and long-term network of scheduled air services between the Island and major business and social destinations; and

(b) the determination of the Island's civil aviation policy should properly be in the remit of the Department of Economic Development, with the operation and management of the Airport the responsibility of the Department of Infrastructure.

8.2 Steam Packet User Agreement

Following the disruption to passenger and sea freight services that occurred in the 1980s, due to a series of strikes by Isle of Man Steam Packet Company (IOMSPCO) staff that lasted for many weeks, the then Department of Highways Ports and Properties with Tynwald approval, entered into the User Agreement with the IOMSPCO in 1995. The main purpose of the User Agreement was to provide preferential use of the Government owned linkspan in Douglas Harbour in exchange for a guaranteed minimum ferry service that would maintain the strategic lifeline for the Isle of Man. It is therefore in the commercial interests of the Company and its shareholders to ensure that the terms of the User Agreement are complied with and therefore maintain the ferry service that is required.

Failure to meet the terms of the User Agreement could result in the User Agreement being terminated and Government would then commence the process of identifying another suitable provider of the ferry service.

Discussions with the IOMSPCO are progressing (2013) and have already covered a number of key areas including frequency and destinations. In terms of the latter, the Department of Infrastructure, as Department with responsibility for regulating the Agreement, facilitated a tripartite discussion which included the owners of Heysham and Liverpool Ports concerning future service provision.

In parallel with this, the IOMSPCO is continuing its own ongoing work in developing its vision and supporting Business Plan into the future and it is expected that those plans will become part of joint discussions with Government in the near future.

- Government will await the outcome of reviews of the Open Skies Policy and User Agreement and will act upon its findings.
- Government will invest in its major harbour infrastructure to ensure it meets future commercial and domestic needs.

9 Food Security

It is predicted that by 2030 world population growth will require the production of 50% more food and energy and need 30% more drinking water, whilst mitigating and adapting to climate change. Therefore globally, governments are progressively taking a more strategic approach to food security.

In the Isle of Man the majority of our food comes in by sea and is distributed via the retail network on the basis of "Just-in-Time" supply chains (mainly supermarkets). Consequently a major issue for food security for our population is ensuring that the number of disrupted sailings are minimised and that our suppliers are reliable.

In the short term Food Security therefore, is primarily a transport and retail network issue, and Government has to ensure food supplies are not interrupted beyond approximately three days. This should be accompanied by the local provision of high volume, relatively low cost, but essential foods of short shelf life. As such Government will need to play a key role in facilitating the local production capability of short shelf life daily staples such as meat, bread and milk.

In the medium and longer term we may find that food prices and supply are more complex and expensive, as the global factors referred to earlier take effect. This will improve the attractiveness and competitive position of local food sources and may increasingly make them a strategic necessity. In turn, this may require more emphasis to be placed on processing capacity and the amount of available chilled storage capacity.

In conclusion, whilst in the short term, local chilled storage is one of the most notable food security challenges; this is an issue which can mostly be left to the market place to resolve. In the longer term a greater reliance on local production and processing capacity are likely to be required.

Local capacity currently exists in the form of a meat plant, creamery, flour mill and bakery. Should any of these facilities close, the impact on longer term supply issues could be significant. Loss of local processing facilities could also result in a subsequent loss of agricultural production of those commodities which supply the plants. There is a rational case for protection of the infrastructure now, to ensure the facilities remain available longer term.

In supporting the infrastructure, a key challenge for Government will be ensuring that any support does not dis-incentivise commercial behaviour in the businesses involved and as such Government should ensure any financial support directly encourages greater efficiency and market focus.

 Government will establish a realistic strategy, which will meet the varying challenges of both short term and long term food security for the Manx nation.

10 Promoting Value and Utilisation of Amenity, Cultural and Landscape Resources

10.1 Eco and Adventure Tourism

The Isle of Man Visitor Economy Strategy prepared by the Department of Economic Development states that environmental considerations include;

- Consumers are more environmentally conscious
- Climate change and depletion are more embedded in consumers' minds
- Concern over carbon footprint influencing consumer travel choices
- Increasing sensitivity over the environmental impacts of existing activities and new tourist developments, particularly in the countryside

This creates opportunities for the Island to benefit from eco and adventure tourism including hosting events that benefit from utilising the Island's natural environment.

 Government will work with the tourist sector to harness the economic opportunities associated with eco and adventure tourism.

10.2 UNESCO Biosphere

A biosphere reserve for the Isle of Man would join around 580 such sites in a world network of 114 countries. Each new biosphere reserve is nominated through the UNESCO national Man and Biosphere Committee and/or national commission, in the Island's case the UK.

Biosphere reserves are essentially:

- ✓ sites for sustainable living;
- ✓ sites of excellence where new and optimal practices to manage nature and human activities are tested and demonstrated;
- ✓ tools to help countries implement the results of the World Summit on Sustainable Development and, in particular, the Convention on Biological Diversity and its Ecosystem Approach;
- ✓ learning sites for education for sustainable development.

The Isle of Man is sufficiently small, yet also highly diverse enough, to be a perfect biosphere reserve. A successful designation could provide economic development opportunities for Island businesses through association with the UNESCO biosphere reserve brand and demonstration of the Isle of Man's international responsibility, and should not be seen as purely a conservation exercise. Since 1995 all sites nominated have been focused on sustainable development and the UK has two of these "modern" biosphere reserves, Dyfi in Wales and North Devon in England, while Galloway in Scotland is currently undergoing nomination.

 Government will prepare a nomination to UNESCO to seek the granting of Isle of Man of Biosphere Reserve status by 31 March 2015.

10.3 Landscape Management

The Department of Environment, Food and Agriculture is heavily involved in the management, protection, promotion and enhancement of the Island's economically-important landscape and natural beauty, which residents and visitors to the Island view as being very important to them. The latest visitor statistics compiled by the Department of Economic Development show that 80% of visitors named 'coast' and 60% 'nature' as the reason for their visit.

The Department encourages use of the countryside for enjoyment, education, wellbeing and health benefits. Much of this is hosted on the Department's own 28,000 acre estate. An estimated 800,000 'visits' are made to the Department's estate annually by residents and visitors. An ecosystem valuation offered £42 million in terms of human well-being value. The benefits of outdoor recreation in health terms probably far-outweighs the income from tourism. Savings to the health budget are estimated to be a further £16.8 million, based on reducing incidence of diabetes and other long term health problems being reduced or prevented through outdoor activity (e.g. heart disease, stress, cancers and obesity). Added to this is the underlying environmental value of the landscape itself.

At a time when many organisations and Governments are facing difficult decisions in regard to reducing carbon emissions, the Isle of Man has a potentially hugely valuable asset within its own ownership. Whilst we must continue to strive to reduce carbon emissions and improve efficiency, the Department's estate, through careful management, has the capability to capture and lock-away millions of tonnes of carbon. A recent internal report has provisionally conservatively quantified the current carbon storage value of Manx soil and peat alone at 4.8 million tonnes (mt), the equivalent of 17.5mt of CO₂. This can be compared to the annual emissions from the Isle of Man economy of 0.7mt. This carbon is predominantly found within peat deposits in the uplands, as well as lowland sites such as valley bottoms and Ballaugh Curraghs. This large resource has built up over several thousand years and could be lost almost overnight if not managed effectively. Peat deposition, and therefore carbon sequestration, is most effectively created by blanket bogs and raised bogs, as found in our uplands. Policies work to protect and extend these carbon sinks.

There is a need to focus on the continuation of improved access and recreational activity in the countryside to enhance community health and also facilitate economic activity through commercial opportunities (public/private partnerships, contracts, stakeholder groups, etc) to provide recreation. Similarly there is scope for increased promotion of biodiversity, both through initiatives such as the UNESCO Biosphere and specific initiatives intended to raise the profile and public perception of value of existing and future management agreements and Areas of Special Scientific Interest.

 Government will engage the farming industry in seeking enhanced access and increased biodiversity and landscape management through voluntary additional arrangements within the main agricultural support scheme; the Countryside Care Scheme.

10.4 Dilapidated Properties

The Environment and Infrastructure Committee is aware that many Local Authorities struggle to respond effectively to the problems caused by empty, dilapidated and unsightly

properties within their town centres and surrounding areas. Government has a legitimate role in supporting Local Authorities with this problem as it strives to regenerate town centres and develop economic opportunities.

The Committee therefore, proposes to set up a cross Government working group with Local Authority representatives, in particular Douglas Corporation which has already commenced an environmental and legislative review to deal with this growing concern. Following the review the Committee will report to Council and Tynwald as necessary.

 Government will work in partnership with Local Authorities to improve the management and control of unsightly and dilapidated properties that have a negative impact on our communities.

11 Sustainable Economic Activity in Harmony with Natural Resources

The dictionary provides a definition of sustainability as "capacity for continuance into the long term." It has come to be associated with environmental limits and "green" lifestyles, but its social and economic components are equally important. The Isle of Man Government should see itself as a jurisdiction that is:-

- Exposed to threats to the environmental stability of the global environment and associated risks such as dependence on fossil fuels, unsustainable forms of consumption, disruption to essential supply chains, and various local impact scenarios that could emerge out of the changing climate and ecosystem degradation.
- 2. Able to maintain the strength and prosperity of its economy by embracing new ideas and opportunities;
- 3. Able to enjoy a reputation as a well governed and fair society that makes its own distinctive contributions to tackling international problems
- Government will formulate a long term strategy for sustainable development which meets the needs of the present generation without compromising the ability of future generations to meet their needs.