Establish easy mechanisms for donations, offsetting fund and Isle of Man scheme(s)

1. EXECUTIVE SUMMARY

1.1. Carbon offsetting provides a mechanism to pay to balance greenhouse gas emissions with the equivalent carbon sequestration, resulting in a net zero outcome.

1.2. A carbon offset scheme could be administered by an on-Island Charitable Trust with independently Trustees and operated on an arms-length basis with estimated administration costs <10% p.a. There would be an expectation that offset projects would be operated by Isle of Man (IOM) Government Departments in order to maintain traceability, monitoring and control of carbon sequestration and/or emissions reductions.

1.3. A fundamental obstacle to any IOM offset scheme is project accreditation (informing the credibility of schemes and inclusion in reportable emissions). The projects and offset units will require verification by independent auditors through internationally recognised standards. These standards ensure the projects are implemented, run and managed properly and the credits they generate represent real and actual emissions sequestered or avoided. To date the international standards (Clean Development Mechanism (CDM) contained in the Kyoto Protocol) restrict what projects can be conducted in the UK i.e. under CDM developed countries could invest in offset projects only in developing nations. The Paris Agreement however means domestic mitigation measures can be pursued with the Paris Mitigation Crediting Mechanism replacing CDMs. To date however there is no precedent.

1.4. There is therefore a potential opportunity for IOM to establish an offset scheme with on-Island projects as test beds and, if certified appropriately, use these to claim emissions reductions e.g. design scheme/projects to limit to ownership of reduction to IOM residents and businesses purchasing IOM offset units/certs. Detailed forecasts of project finance requirements, potential CO_2 reduction, availability and demand for offsets would be required; especially given the inherent intermittency of funds flow from voluntary offsetting.

1.5. Emissions reduction should always take precedence over carbon offset. However, offset is recognised by the Inter-Governmental Panel on Climate Change as a necessary interim measure to achieve net zero emissions targets. IOMG may determine to establish a voluntary carbon neutral standard and certification for businesses to provide guidance, support and demonstrate Island carbon neutrality.

1.6. Whilst there is currently no requirement for carbon disclosure, there may be appetite for Island businesses to participate as a means of enhancing brand reputation and to provide competitive advantage against a backdrop of public pressure for climate action and sustainability.

1.7. Currently businesses can give carbon neutral claims credibility with the internationally applicable *British Standards Institute PAS 2060 Specification for the Demonstration of Carbon Neutrality* (British Standards Institute, 2019) however, as referenced above, IOM could have its own standard and certification based on BSI specifications (e.g. British Standards Institute. (2011). *PAS 2050:2011 – Specification for the assessment of the life cycle greenhouse gas emissions of goods and services.)*.

1.8. Further work is required to estimate total carbon store and the viability of this scheme.

1.9. It will be necessary to identify what projects are capable of delivery on IOMG estate(s) and those that would require third party input/reliance/contract to deliver and to establish a mechanism and framework to evaluate the merits of each project on a consistent basis.

1.10. It will also be necessary to identify what projects are already in course (or potentially planned) and associated costs expected to be met from IOMG Revenues, and would therefore not be available for offset due to additionally. Only projects that wouldn't otherwise be possible would be eligible (e.g. from IOM Carbon Offset).

1.11. The advantage of using a Charitable Trust to administer an IOM offset scheme is the opportunity for offset purchasers to potentially claim up to £7K p.a. tax relief if the acquisition/donation meets the public benefit test. IOMG retaining control over project operations however mitigates risk of project failure due to availability and timing of funding.

1.12. The success, or otherwise, of an IOM voluntary offset scheme will be wholly reliant on its credibility as people will only donate to causes they consider are legitimate and worthwhile. There is a danger that offsetting may be perceived as a means of absolving Government from taking action that may otherwise have been funded; therefore transparency in the documentation and auditability of additionally will be key in addition to an arms-length SPV administrator with sound financial governance being appointed to receive and distribute funds.

2. OVERVIEW

2.1. The purpose of this WEFT is to establish mechanisms to encourage philanthropic donations from individuals and Isle of Man (IOM) businesses (including IOM registered companies and on Island operating entities) to fund IOM carbon offset scheme(s).

2.2. Considerations, not limited to yet, include:

- The amount of emissions, and the potential available to be offset in IOM incl. methods and associated costs;
- the financial governance and mechanisms within Isle of Man Government's ("IOMG") existing Financial Regulations, including anti-money laundering of a carbon offset scheme(s);
- long term sustainability;
- flexibility and ease of access;
- credibility;
- reputational risk;
- scheme set up and operation incl. legal entity, operator and scheme selection process, accreditation, digital platform, payment platform, auditability, independence, governance, transparency etc.

2.3. The ethics of offset and its potential impact on behaviours are reviewed.

3. CARBON OFFSET

3.1 The IOM Climate Action Plan will inform the agenda to, inter alia, produce less waste and use more renewable energy and provide a roadmap for IOM to be carbon neutral by 2050. After reduction has reached its limit, or its comfortable threshold, carbon offsets could account for the residual. Carbon offsets are a form of trade. In purchasing an offset, projects that reduce greenhouse gas ("GHG" or GHG Equivalent "GHGe") emissions are funded. The challenge is to establish an appropriate on Island mechanism and scheme(s) to capture IOM emissions.

3.1. A "Carbon Offset" represents one tonne of CO_2 (or CO_2e) and is generated by a reduction in emissions made by a (voluntary) project designed for that purpose. The offsets are generated by projects with clearly defined objectives e.g. woodland afforestation/reforestation and peatland restoration, however are additional to any reduction in emissions that would ordinarily be achieved from participation in existing and/or mandatory schemes or regulatory compliance.

3.2. One of the challenges in this workstream is to identify carbon sequestration projects that, due to e.g. financial constraints or project type, cannot or would not ordinarily be funded (by IOMG) thus requiring voluntary contributions (from

third parties - individuals, corporate entities, philanthropic investors etc) to implement.

3.3. Typically offsets purchased in developed countries fund projects based in developing countries, thus contributing to a reduction in future emissions recorded in that country (in the short or long term). In this instance however the Climate Change Emergency Transformation Team (CCETT) has been tasked with identifying on-Island projects that will specifically reduce the IOM's recorded emissions and that could be funded by voluntary donations from (say) residents, visitors and businesses wishing to offset their individual carbon footprint, in addition to being of a scale and credibility to be available to purchase in the wider arena (if desired).

3.4. Once suitable on-Island projects have been identified, the amount of carbon available for offset calculated, and the project(s) costed, a suitable mechanism (legal entity) will need to be established to operate and monitor the scheme(s). The fundamental legitimacy of the scheme(s) is paramount and transparency, accessibility, ease of operation, and credibility of its operators will be vital.

3.5. On average, a person in the UK is estimated to be responsible for approximately 10 tonnes of CO_2e (CO_2 Equivalent) (Carbon Calculator, 2019) per year and, with an increase in demand for more transparency, there is a shift towards consumers seeking to buy from companies with strong environmental and social purpose. It could therefore be estimated that it would cost approximately £75 per person (i.e. £7.50/tonne (Climate Care, 2019)) to offset annual personal CO_2e emissions.

3.6. Many of the Island's businesses are (for example) reliant on flights/ferries to and from the island in order to transact with clients in the UK, thus potentially increasing an individual employee's expected/average carbon footprint. It may be possible, e.g. through exploration with Department for Enterprise, to develop momentum for IOM based companies to make voluntary contributions to an IOM offset scheme to account for its staff's per capita carbon footprint, or even to offer the purchase of offset units to staff as part of its ethical employee benefits package.

3.7. The purchase of offset units supports projects that reduce or remove emissions from the atmosphere, such as through woodlands management, renewable energy or energy efficiency. Many of these projects also deliver other environmental, social and economic benefits; for example increased biodiversity. Organisations often seek offset projects that provide these benefits to align with their organisational or corporate values.

4. CHALLENGE AND OPPORTUNITY

Challenges

4.1. In the absence of legislation and regulation, encouraging spontaneous voluntary donations from individuals, business, philanthropic investors and other third parties and to apply funds to credible IoM carbon offset schemes could be challenging. The offset process can be illustrated in Figure 1.

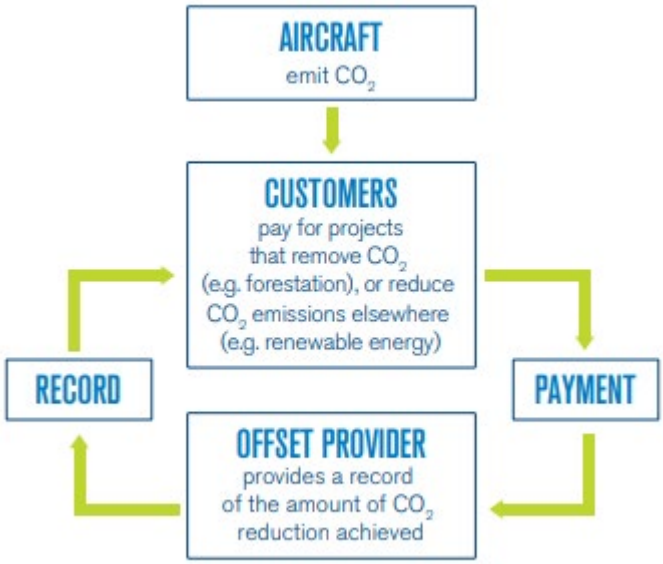

Figure 1 the offset process, extract from: Aviation Carbon Offset Programmes: IATA Guidelines and Toolkit (International Air Transport Association, 2008)

4.2. An individual's differing motivations and attitudes with regard to how monies should be spent on climate action makes estimating demand for an (IOM) carbon offset scheme difficult to calculate e.g. :

- to invest directly in infrastructure, research and development to fund climate change mitigation, such as efforts to reduce emissions; versus
- willingness to adapt e.g. make no or limited changes to lifestyle and purchase carbon credits to offset personal carbon footprint.

4.3. Offsets are generally promoted using a narrative that it is everyone's moral responsibility to contribute to "net zero" and in direct correlation with one's calculated carbon footprint and therefore not on the basis of what is affordable.

4.4. The UK Committee on Climate Change "Net Zero" Report (Committtee on Climate Change, 2019) advocates that an overall reduction in emissions should take precedence over offset however that offset will be required to deal with the

remaining emissions. There is therefore a growing market for carbon offset schemes to work hand in hand with ambitious reduction targets, albeit the growth in recent years was primarily driven by corporations for compliance reasons.

4.5. Identifying and selecting the type of project(s) to support (and by whom) could cause controversy as each come with their own pros and cons e.g. tree planting is effective but can displace people/animals and create monocultures, and whilst investment in wind and solar programmes are often welcomed at community level, improving the Island's domestic buildings energy efficiency which is could make a more immediate and greater immediate impact on emissions.

4.6. As the carbon offset market matures globally so does the choice of offsets available e.g. from trees, travel etc., therefore there will be a high level of competition for any new entrant to overcome; albeit as far as CCETT is aware, there are currently no schemes investing in carbon offset projects on IOM that could lead to a direct reduction in the Island's emissions.

4.7. The complexities and anomalies in calculating and pricing carbon offsets can be daunting. In the UK the World Land Trust's online calculator (World Land Trust, 2019) is an example of a relatively simple model. Companies such as Climate Care also help people and organisations offset residual carbon emissions in addition to working with governments and organisations to source, structure, develop and deliver large-scale emission reductions, helping them meet their compliance obligations. Climate Care's online calculator (Climate Care, 2019) prices carbon offsets of less than 2,000 tonnes at £7.50 per tonne with calculation categories comprising flight, car, energy, event and business.

4.8. Over recent years many offset standards have been developed in the voluntary offset market. Standards set the criteria by which projects are chosen and evaluated incl. project type, additionality, CO_2 leakage and impact on the local community.

4.9. Offsets verified by the UN under the Clean Development Mechanism ("CDM") – the largest regulatory project-based mechanism - are called UN Certified Emissions Reduction units ("CER") and are Kyoto Protocol compliant and fully traceable; albeit expensive to obtain due to the high transaction costs and requirements of the certification process - usually only large projects are registered (United Nations, 1998). Some controversy surrounds the cost of offsetting with CERs with regard to the amount of money that makes it to actual projects versus that absorbed by verification costs, overheads, and project developers' profits.

4.10. CERs facilitate companies buying and selling credits to fulfil their legal and compliance obligations through the UN's Clean Development Mechanism which is notoriously bureaucratic, so this may not be representative of the voluntary

market. Nearly all carbon offsetting and is done by for-profit companies, not charities, and all of the carbon counting, trustworthy or not, inevitably comes at a price which dilutes the benefits achieved from contributions.

4.11. Those produced under a voluntary standard/certification process are called Verified Emission Reductions ("VER") where there are no unified rules and regulations however they can serve as a test bed for new technologies and methodologies because projects can be implemented with fewer transaction costs than CDM due to the lower administrative burden. The lack of quality control and concern over the quality of VERs led to several voluntary offset standards being developed in order to enhance the credibility of the process.

4.12. Buyers of offsets in the voluntary market can choose to purchase CERs or VERs. There exist a large number of offset certifiers globally e.g. Gold Standard ("GS") (for renewable energy and energy efficiency projects) (Gold Standard, 2019), which was developed under the leadership of the WWF (World Wildlife Fund) with a focus on projects that provide lasting social, economic and environmental benefits and can be applied to voluntary offset and to CDM projects; albeit allowing programme developers to collect their own data on how much carbon is being saved without independent monitoring (Anja Kollmuss *et al.*, 2008). Examples of other certifiers (to name a few) include Climate Action Reserve, Plan Vivo System (Plan Vivo, 2019) and Verra (Verra, 2018) with each focussing on different areas such as project design and biodiversity benefits or promotion of sustainable development and improving rural livelihoods etc.

4.13. Project quality can only be reliably evaluated though the validation and verifications these standards provide. The verification process involves the periodic monitoring and review of projects in addition to a post project evaluation to ensure the project has met its goals and is fully operational.

4.14. In the UK the Woodland Carbon Code, launched in 2011, is a voluntary government-backed standard for woodland creation projects allowing the project developer to quantify and account or CO_2 sequestered by the project using scientific knowledge provided by Forest Research.

4.15. An extract from a report produced by Ecostar Natural Talents on the State of European Markets 2017 – Voluntary Carbon (Ecostar, 2017) states:
A third-party validation and verification process ensures that projects are initiated and managed to high quality carbon standards as well as sustainable forest management as set out in the UK Forestry Standard. The UK Forestry Commission has also developed a framework for outlining the wider social and environmental benefits of projects. All projects use the publicly available UK Woodland Carbon Registry, provided by Markit, which shows project documentation as well as tracks the issuance, ownership, transfer and use of carbon credits, known as 'Woodland Carbon Units'. This provides transparency

and clarity to the market and minimizes the possibility of double-selling. By the end of 2016, 243 projects had registered with the Woodland Carbon Code. Altogether these projects are creating over 16,000 hectares of woodland and over their lifetime are predicted to sequester almost 6 $MtCO_2e$.
Of these projects, 138 were validated. Validated projects have created almost 5 thousand hectares of woodland and are predicted to sequester 2.3 MtCO2e over their lifetime. Projects have to be verified after year five and then every decade thereafter, so the first projects are just beginning to go through this process. So far, three of the projects have been verified at year five and now have started converting 'potential' to 'actual' sequestered carbon.

These three projects cover 150 hectares and in five years have sequestered 730 tCO_2. The number of verified projects and units will increase steadily. In terms of numbers of players in the market, there are at least 14 project developers who have validated projects and at least 70 different corporate buyers to date.

NOTE: UK Forestry Commission www.forestry.gov.uk (Ecostar, 2017) was decommissioned as part of structural changes to the Forestry Commission with data now contained under https://www.forestryengland.uk/

4.16. Policies and Laws
The UK Government has set emissions reduction targets through the UK Climate Change Act to bring all net greenhouse gas emissions to net zero by 2050. Across the UK there are also targets for woodland creation.

4.17. Projects meeting the Woodland Carbon Code help to meet both of these targets. The UK government's Environmental Reporting Guidelines set out how companies in the UK should report their gross and net emissions, and states that UK-generated Woodland Carbon Units can be used to compensate for gross emissions. The British Standards Institute's "PAS 2060: Carbon Neutrality" sets out what companies need to do to claim 'carbon neutral 'status. UK-generated Woodland Carbon Units can be used to compensate for unavoidable emissions in claims of carbon neutrality.

Opportunities

4.18. Offsets should come from real projects that have actually been implemented or will be implemented but because they are used to compensate for emissions that the buyer produces, it is vital that the project offsets would not have happened otherwise i.e. additional to business as usual. Determining additionality is difficult but essential. Work will be required to review the CCETT WEFT outputs to attempt to quantify and evaluate the opportunities that may exist on the Island for carbon offset, however it is anticipated that there may be an opportunity to generate additional discretionary sources of funding from the establishment on an on-Island offset scheme and to and apply these funds to carbon offset projects which will directly benefit the IoM.

4.19. There may exist an opportunity to capitalise on the IOM's UNESCO Biosphere status as a special place to live, work and visit as a means of attracting inward investment for IOM offset projects that support the biosphere, this should therefore be explored further.

4.20. Furthermore it may be possible, if there is a market appetite, to establish e.g. a "The International Stock Exchange (TISE) Biosphere Fund" (similar to Guernsey's TISE Green) (The International Stock Exchange, 2019) to enable those seeking to invest in environmentally beneficial initiatives to highlight their green credentials and access investments that have been verified as meeting globally recognised standards in carbon offsetting – with benefits of investing in an IOM fund potentially providing a direct route to offset credits.

4.21. CCETT contacted TISE to explore if there may be appetite for an IOM fund linked to carbon on-Island offset and awaiting a response. It is worth noting however Guernsey Fund Managers are subject to income tax at 0%. Guernsey does not levy any form of VAT, and so management fees charged or transaction/deal costs incurred by a Guernsey Manager do not suffer any VAT leakage.

4.22. Further consideration of indirect taxation on fund management services provided by IOM VAT Registered companies is required when considering a potential IOM Biosphere Fund however, in general:

- the management of some collective investment schemes are liable to VAT; those liable to VAT are defined in the VAT Act (1996) (IOM Act). However any Fund Management ("FM") activity that corresponds with the specific exemptions noted in the VAT Act (for finance activities) would not be subject to VAT;
- where VAT is liable it would be charged at 20% (Standard Rate) – and the company would be able to recover the input tax in these cases – so effectively able to reclaim it through the normal VAT return process by offsetting it against any output VAT incurred;
- FM services supplied to non-IOM Funds belonging overseas – i.e. outside the UK or IOM, fall outside of scope of UK and IOM VAT, with full rights to related input tax recovery; and
- any FM activity that meets the exempt criteria would mean that VAT wouldn't be charged and also that the right to recover input tax would be waived.

4.23. In any event, there exists an opportunity for IOMG to lead by example in demonstrating a commitment to (say) offset all IOMG official and ministerial travel and/or emissions from Government owned assets, thereby encouraging local registered businesses to follow suit.

4.24. The voluntarily disclosure of IOM business' carbon emissions and an opportunity for business certification (to IOM Standard, with IOM offset if required) to demonstrate carbon neutrality could be attractive to business to meet Corporate Social Responsibility objectives (Figure 2).

Figure 2 Corporate social responsibility diagram

5. ACTION

Identify Carbon Sequestration Project(s) suitable for IOM Offset Schemes

5.1. In 2009, UK Government who took the decision to endorse only compliance carbon offsets for use in the UK voluntary market, therefore attempting to regulate the voluntary offset market. (in 2008 Department Environment, Food and Rural Affairs (DEFRA) issued a Draft Code of Practice for Carbon Offset Providers) (DEFRA, 2008). There currently exists only two UK voluntary carbon standards:

1. The Woodland Carbon Code ("WCC") (GOV.UK, 2018) is the UK Government led voluntary gold standard for woodland creation/carbon sequestration projects, providing reassurance about the carbon savings that woodland projects may realistically achieve; and
2. The Peatland Code is a voluntary certification standard for UK peatland project (IUCN, 2017)

5.2. As the IOM CO_2 emissions are included within the UK's recorded emissions total, there are strict guidelines as to what offsets can be included in reported emissions.

5.3. Potential opportunities for IOM carbon sequestration could comprise of:
- Blue Carbon
- Afforestation and Reforestation;

- Peatland Restoration; and
- Soil Carbon Capture.

5.4. These projects may be relatively quick to establish however their potential impact is longer term i.e. the length of time it takes before sequestration from that source is effective.

5.5. If it were possible to utilise offset funding for projects such as offering a new and/or free Energy Advice Service(s), which may lead to residential and commercial property energy efficiency improvements being identified and carried out, this could have a more immediate impact in directly reducing IOM CO_2 emissions.

Potential carbon offset projects

5.6. At this stage it is however premature to quantify the potential market for IOM carbon offset. Additional work will be required to (a) review all CCETT WEFT outputs to attempt to quantify and evaluate the opportunities that may exist on the Island for carbon offset projects; then (b) to explore whether there exists a route to accreditation for any of the projects identified (with the aid of external consultants specialising in the field of carbon offset accreditation).

5.7. Blue Carbon (Work package 18) - Studies suggest that blue carbon sediments are 2-5 times more efficient in the sequestration of carbon that terrestrial forests (Murray *et al.,* 2011; CEAB, 2019). As such, the restoration and conservation of blue carbon ecosystems could be used to offset terrestrial emissions, and may be more cost effective that terrestrial ecosystems due to their efficiency at storing carbon (CEAB, 2019).

Case Study: Seagrass Restoration in Cardigan Bay:

Seagrass absorbs carbon 35 times faster than a terrestrial rainforest; it also absorbs pollution, protects coastlines and acts as important nursery grounds for many species, including commercially important fish such as cod and plaice. We have lost 92% of seagrass in the UK in the last century. Swansea University have partnered with Sky Ocean Rescue, launching the largest ever sea grass restoration project in the UK. This project has so far been successful and is leading the way for mass seagrass restoration projects in the future across the UK. The cost of this project has not yet been established as we are awaiting correspondence with the project lead.

5.8. Seaweed aquaculture also has the potential to provide a form of offsetting in the oceans (Froehlich *et al.,* 2019); due to seaweeds high uptake of carbon and fast growth rates. The practise could offer additional benefits to coastlines that are affected by eutrophic, hypoxic and/or acidic conditions, whilst increasing biodiversity and coastal protection (Froehlich *et al.,* 2019).

5.9. Afforestation and Reforestation (Work package 5 "Tree Planting and Habitat Connectivity") Whilst many people associate carbon offsetting with planting trees, this is now relatively uncommon due to criticism over the permanence of carbon storage as they absorb carbon slowly until they reach maximum size and take up a lot of space therefore projects that seek to enhance and protect existing forests have grown in popularity (known as "REDD" – Reducing Emissions from Deforestation and forest Degradation).

5.10. Peatland Restoration (Work package 4) There may not be a requirement to undertake extensive restoration, rather conservation of IOM peatlands that are in reasonably good condition. With both tree planting and peatland work however there will be a requirement to conduct an impact assessment on reliance on third parties (e.g. leaseholders) before ring-fencing for carbon offset projects.

5.11. Soil Carbon (Work package 16) In addition to usual considerations for carbon offset projects (i.e. accreditation criteria, suitability and funding etc), impact assessments will be required to determine reliance on third parties (e.g. leaseholders) and preferably avoided for IOMG carbon offset projects.

Quantify IOM Co_2 and/or GHG_e Emissions and Potential Offset

5.12. Recorded and reported IOM CO_2 emissions equate to approximately 0.8 Mt per annum.

5.13. CO_2 sequestration potential in IOM via each of the above habitat restoration and conservation projects identified for offset shall require careful calculation. In addition to the above (which are carbon sequestration projects), offset funds could be used to (say) fund direct Energy Saving initiatives which could directly and more immediately reduce IOM emissions.

5.14. The criteria for good offsets (i.e. formally accredited and in addition to business as usual) includes:

- Accurate estimates of baseline emissions if the offset project was not implemented;
- expert and accurate quantification of emissions reductions/carbon sequestered with an established process and programme for ongoing monitoring;
- independent verification (by an independent third party verifier) to approved regulations to recognised methodologies;
- clear and uncontested title to offset credits i.e. government recognition of ownership rights (to avoid double counting) and recorded in an offset registry (similar to a register of shares/approved tracking system);

- address the risk of non-permanence e.g. carbon release through illegal forest fire or pests etc; and
- provide environmental or health co-benefits wherever possible.

Estimate Scheme and Project(s) Cost

5.15. Operating costs and administration fees of operating a scheme(s) varies greatly depending on the type and operational size of the legal entity. If the scheme is operated by an IOM Registered Charity (see below) donors could be eligible to avail of tax relief of up to £7K per annum if projects met the public benefit test. Charitable donations which are not made under a deed of covenant and which are made to a registered charity, may be allowable as a deduction from total income. Relief is only given for donations in excess of £100 per charity. Donations below this amount cannot be claimed.

5.16. As potential carbon sequestration projects have yet to be identified and quantified, estimated project costs are currently unknown.

Identify and Establish Mechanism(s) for Offset

5.17. IOMG would be required to lead the tendering process to appoint an existing entity, or seek to establish an easy mechanism(s) i.e. a new legal entity for (i) receiving monetary donations; (ii) distributing funds received; and (iii) [if appropriate] recording and monitoring carbon offset achieved by projects.

5.18. It may be possible to use an existing entity to administer an IOM offset scheme e.g. Manx National Heritage ("MNH") - Biodiversity Fund[1] (if suitable). Or with the assistance of IOMG Attorney General's Chambers, Treasury could promote the establishment of a new environmental charity specifically to fund projects which address climate change and which could be funded by the Treasury, by other corporate bodies, by other charities and by the public directly.

5.19. This study explored, by way of example, whether or not Manx Lottery Trust ("MLT") could potentially administer an offset scheme however were advised by Chambers this would not be feasible due to its "Source of Funds" as MLT was primarily established to receive a share of the duty received by Treasury in

[1] The Biodiversity Fund is a dedicated fund under the stewardship of the Trustees of the Manx Museum and National Trust. The Fund was set up in 2013 to support the objectives of the Island's biodiversity strategy. It was created to generate funds to not only manage, protect and conserve aspects of the Island's natural and marine heritage and wildlife in Manx National Heritage's care, but also to support the wider biodiversity sector and rural community through partnerships, advice, joint workings and sharing of expertise. The main criteria for the use of this Fund will be 'significant long-lasting benefit' to Manx Biodiversity, starting with highest priority species and habitats. Manx National Heritage's biodiversity programme includes tracking and monitoring the population of domestic and migratory birds through the Bird Observatory on the Calf of Man and working with volunteer groups at Manx National Heritage sites and in key habitats such as the Curragh. Practical projects this year have included a continuing programme of monitoring for the presence of longtails (brown rats) on the Calf of Man to protect nesting Manx Shearwaters and other breeding seabirds.

relation to the UK Lottery was not intended to be funded by the public or by corporate bodies.

5.20. The entity could be a private charity with no direct link to the Treasury beyond being a potential recipient of Treasury grants (if applicable/necessary). As regulator, Chambers could assist in the provision of model Memorandum and Articles of Association and other constitutional documents.

5.21. A formal tendering process in accordance with IOMG Financial Regulations would be required to source and select an operator for an IOM accredited carbon offset scheme (IOMG, 2019). Consideration would include e.g. type of legal entity, operator credentials, project selection process, accreditation, digital platform, payment platform, auditability, independence, governance, transparency etc.

5.22. Due to the potential nature and location (on IOMG estate) of Island carbon offset projects, it is likely that the responsibility for recording and monitoring offsets achieved would fall within Department Environment, Food and Agriculture (in conjunction with the a third-party verifier).

5.23. The Mayor of London set an ambition for London to become a zero carbon city by 2050 and determined that all major development in London should comply with the Mayor's London Plan which, over time, has set increasingly stringent carbon reduction targets – exemplified by the target of zero carbon homes that came into force in October 2016 and expected to extend to non-domestic buildings this year. The aim of the zero carbon standard is to achieve significant carbon reductions on site, only then should offsetting be considered. Local Planning Authorities ("LPS"s) are however required to set up carbon offset funds to collect carbon offset payments from developers to meet any carbon shortfall from development.

5.24. The forecasts provided by Greater London Authorities' (GLA) planning data, using £60/tonne CO_2 (the nationally recognised non-traded price of carbon and recommended to increase further under the new draft London Plan), indicate offset funds could amount to approximately £30-40M annually. Importantly however, and potentially relevant to IOM, a guidance document was produced for LPAs including how to set up funds and collect payment, types of offset projects, assessing a project's eligibility etc.

5.25. In the Carbon Offset Funds Guide, LPAs are advised not to set up new processes for administration and offset of funds where internal processes (e.g. section 106 of the Town and Country Planning Act 1990) already exist. Furthermore that if additional monies are required to meet staff costs and manage identified offset projects, or even set up funds, a maximum of 10% should be allocated to this purpose (Greater London Authority, 2018).

5.26. The main priority of GLA offset project types is to reduce energy demand in existing buildings, including through energy efficiency measures and improving monitoring and operation. Given the issues (reported herein) with energy inefficient housing stock on IOM being a lead contributor to the Island's net emissions, adopting a similar approach to that set out by GLA could merit serious consideration.

5.27. The equivalent to UK section 106 Planning Obligations (a mechanism which make a development proposal acceptable in planning terms that would not otherwise be acceptable) is s.13. Section 13 of the Town and Country Planning Act 1999 allows DEFA to enter into legal agreements in relation to planning matters and are focused on site specific mitigation of the impact of development. Such agreements are often referred to as 'developer contributions' (DEFA, 2018). The parameters of the IOM Strategic Plan in relation does not cover carbon offset therefore a WEFT titled *"Develop concept of net zero housing estates/developments (land and sea) - where developments balance carbon cost with tree planting etc."* recommends carbon offset be delivered through IOM planning policy.

6. RISKS, IMPACTS AND MITIGATIONS

Risks and Impacts

6.1. The potential diminution in discretionary donations made to "traditional" charities leading to service loss and/or a need for Government intervention.

6.2. IoM project(s) failing to deliver the CO_2 emission reductions envisaged (such as from leakage in agricultural carbon sequestration) and the resultant reputational risk e.g. public loss of credibility in the process.

6.3. Financial and operational risks associated with monetary transactions and on a digital platform incl. fraud, identity theft, malware/adware etc.

Mitigations

6.4. An individual's purchase of carbon offsets is predominately driven by moral attitudes towards climate action rather than by affordability or obligation (unlike a company's CSR or ESG policy). If "traditional" charities can demonstrate that their work is helping the environment it is likely that donors may forgo a formal carbon offset certificate in order to continue to support a charity that provides local social economic benefits such as "men in sheds" repairing and recycling appliances, or mental well-being support for sufferers of eco-anxiety. Inherent uncertainty surrounding the "green" credentials of carbon offset projects and accreditation could also limit the attractiveness of carbon offset when compared to (say) a long established charity that is dealing with the effects of climate change (e.g. Red Cross helping victims of floods and hurricanes).

6.5. Given the issue of permanence surrounding carbon offset, the reputational risk regarding an IOM project failing to deliver CO_2 emission reductions, could be mitigated by electing to establish projects that were directly managed, controlled and monitored by IOMG e.g. using IOMG ring-fenced land rather than placing reliance on other parties to deliver the offset.

6.6. The financial and operational risks could be addressed, although not eliminated, by ensuring there is a robust tendering processes with criteria that includes assessment of financial and operational management practices, and that there is a process in place for the entity selected to undergo regular, formal independent audit and review of its operations and compliance with regulations etc.

6.7. From 2021 until 2026, airlines that fly internationally and between states that volunteer to participate in first phase testing will offset any extra emissions under a UN Agreement "Carbon Offsetting and Reduction Scheme for International Aviation" ("CORSIA") (agreed in 2018 in Montreal, Canada). Carriers will no longer be reliant on individuals to offset; thus reducing demand for smaller voluntary schemes and an increase in fully accredited corporate projects. CORSIA's obligations started in January 2019, requiring all carriers to report CO_2 emissions annually. It is forecast that whilst fuel efficiency is the day to day priority, CORSIA will mitigate approximately 2.5Bn tonnes of CO_2 and generate over $40Bn in climate change finance between 2021 and 2035, with all international flights to be subject to offsetting requirements by 2027. There may therefore be merit in exploring whether IOM may have a role to play in this (e.g. common purse arrangement similar to VAT).

7. COST(S) AND ANTICIPATED RETURN(S)

7.1. A large number of carbon offset schemes are operated by Non Profits however the (up to c.20%) running costs are deducted from donations received. Models for both individual carbon offset pricing (e.g. £7.50/tonne) and potentially a new development charge (e.g. £95/tonne) could be introduced for either an IOM charity or the IOMG directly to offer online for to calculate carbon footprints and collect monies for IOM carbon offset projects.

7.2. It is anticipated that e.g. local established charities (such as Manx National Heritage - Biodiversity Fund) may be able to administer simple carbon offset schemes for less than 10% (i.e. with costs expected to be lower than GLA/LPA operated funds) however expected costs could be modelled and considered within the invitation to tender. For example MLT administers grants received from Big Lotto for a 5% Administration Charge (albeit monies are limited to one source).

7.3. Similar to GLA Carbon Offset Funds, the West of England (WoE) Joint Spatial Plan includes an aspiration for new developments to be built to a zero carbon standard

with funds to be set up and used for e.g. gas and air source heat pumps – although this is recognised as the most difficult to implement in terms of scale of activity. The WoE Study into carbon offsetting (Centre for Sustainable Energy, 2019) suggested that outsourcing the day to day administration of funds, with a provider reporting directly to a panel to representatives from each of its Authorities, may be considered if a large number of applications were received for energy retrofitting or community energy projects and that a carbon offset scheme is initially piloted in these areas (with other areas requiring further investigation to determine whether or not they could offer workable carbon offset projects).

7.4. The UK model for carbon offset assumes that over the next 30 years the electricity grid will become de-carbonised and that carbon offset schemes will no longer be required however in the interim offsetting can fund retrofitting programmes in hard-to-treat existing buildings or those occupied by the fuel poor.

8. CO-BENEFITS AND RELATIONSHIPS

8.1. International Carbon Reduction and Offset Alliance and Imperial College conducted a research study (in 2014) into the socio-economic impacts of the voluntary carbon market on businesses. The study had two objectives, to:

- Identify the motivations of businesses participating in voluntary carbon offsetting and to categorise the benefits they receive; and
- quantify the social, economic and environmental benefits delivered by voluntary carbon offset projects that are in addition to the carbon reductions they achieve ("co-benefits").

8.2. The majority of the 72 businesses surveyed operated in Europe, Australia and North America, in line with the then voluntary carbon market, and covered a variety of sectors however all participants also had comprehensive internal carbon management strategies and many had in-house sustainability or environmental departments. The projects reviewed were located in Africa, Asia, Latin America and North America and ranged from afforestation/reforestation to clean gas stoves.

8.3. The results illustrated that 1 tonne of CO_2 (equiv. to c.£7.50/tonne if using Climate Care's offset calculator or £60/tonne under s.106 developer contributions) delivered benefits of est. $664 in economic, fuel saving and environmental co-benefits. Carbon price however remained the lead decision-making criteria for businesses.

8.4. If IOMG sought to devise an IOM based carbon offset scheme linked to housing development it could enable innovative carbon savings projects to go ahead

which would not achieve market funding and to help stimulate the local low carbon economy and initiatives by local communities.

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