Agenda Item	10
Report No	HC/3/22

THE HIGHLAND COUNCIL

Committee: Highland Council

Date: 10 March 2022

Report Title: Climate Action, Green Energy and Jobs

Report By: The Chief Executive

1. Purpose/Executive Summary

1.1 This report provides information on a range of activities that the Council is currently involved in relating to climate action, green energy and associated employment opportunities and sets out a number of areas for future action. This is a fast moving agenda and the Council needs to be able to react quickly and respond flexibly in order to maximise the opportunities that are likely to come forward in the weeks and months ahead.

2. Recommendations

- 2.1 Members are asked to
 - i. Agree the scope of the study being undertaken in respect of Renewable Energy income opportunities;
 - ii. Note the many encouraging developments being pursued by the Council and the work with partners to learn from best practice;
 - iii. Agree to restate the Council's commitment to work with Opportunity Cromarty Firth on the development opportunities that will arise from a Green Freeport bid;

- iv. Agree to seek the involvement and backing of the Scottish
 Government to provide a legislative and regulatory framework that
 supports the Council's ambitions for Highland communities and
 people; and
- v. Agree that officers should continue to pursue investment opportunities in hydrogen and other renewable energy schemes.

3. Implications

- 3.1 Resource Implications: The Council has already agreed to invest £100,000 in exploring how to derive income from renewables and this is set out in Section 6 and Appendix 1. The Council has also invested alongside the Salix Fund to deliver improvements in the Council's infrastructure from street lighting through to the River Ness Hydro. The Council's Sustainable Highland budget strategy for 2022/23 proposes a £2million investment in Climate Action, Green Energy and Jobs. In every case, it is anticipated that there will be a financial return on the investment as well as a major contribution to the Council's Net Zero agenda. Going forward, there are also likely to be opportunities to work with the private sector to deliver schemes in the Highlands which may require the Council to commit further funds on a joint venture basis, with a view to securing substantial long term income streams.
- 3.2 <u>Legal</u>: Due diligence will be required to ensure any and all investments achieve best value and adhere to the Council's Financial Regulations and Contract Standing Orders.
- 3.3 <u>Community (Equality, Poverty and Rural, Island):</u> There are potentially huge benefits for rural areas in developing sustainable renewable energy networks and investing in green travel options.
- 3.4 <u>Climate Change / Carbon Clever:</u> This report sets out a wide range of approaches which will all have very positive implications for the Council's commitment to tackling climate change and achieving net zero.
- 3.5 <u>Risk</u>: Current risks to Hydrogen production in the Highlands predominately are infrastructure led. If the Council can get the right infrastructure established then the Highlands is well placed for supply both on a national and international basis.

If infrastructure is not developed to deliver hydrogen across the region, areas are likely to become disadvantaged as transport moves to new fuels. With fossil fuel costs likely to increase significantly it is vital we develop an infrastructure which will allow transition for all areas within the Highlands.

3.6 Gaelic: There are no specific implications arising from this report.

4. Introduction and background context

This report brings together a number of strands that have been reported previously to the Economy Infrastructure and Environment Committee, and to the full Council, relating to the potential the Highlands has in the renewables sector. At the time of writing the Council has not yet approved its budget for 2022/23 but as part of that, the Sustainable Budget Strategy 2022/23 proposes investing £2million in Climate Action, Green Energy and Jobs. Investment that will enable the Council to maximise the potential benefits derived from green energy opportunities and nature restoration and secure a fair share of the income that this can generate for the Highland region.

5. Recent Developments

- 5.1 As Members will be aware, the announcement of the Scotwind leasing application process in January 2022 highlighted 17 projects that have been offered options agreements which reserve the rights to specific areas of seabed. Many of these off-shore sites will offer huge potential benefit to the Highland economy through employment opportunities during construction and operation and through the development of supply chain linkages to local and incoming firms based throughout the area. The applicants have all made supply chain commitments to Crown Estate Scotland and it is expected that these commitments will be made available once the lease agreements have been signed.
- 5.2 The Council Leader and officers are already being approached by successful applicants to discuss technical and regulatory issues as well as a broader discussion on how the Council and public and private sector partners can work together to ensure the benefits are realised. Discussions are being held with partners such as HIE and the Caithness and North Sutherland Regeneration

- Partnership to ensure that a prospectus of the opportunities that can be delivered in Highland is prepared and resourced as the projects evolve.
- 5.3 Many of the port facilities in Highland will have great opportunity to benefit from the short-, medium- and long-term opportunities. Building on the positive focus provided by the Scottish Offshore Wind Energy Council, all ports in the region are being encouraged to develop a collaborative approach. The Council will continue to support each port in respect of expansion or redevelopment opportunities, as well as ensure that the Council's own harbours are positioned to benefit from any opportunity that presents itself.
- 5.4 Whilst Scotwind and the committed off-shore renewables sector provides a massive opportunity, it must not be forgotten that there remains high levels of industry interest in on-shore wind development as well as significant hydro schemes. It is important the current work being undertaken through the transformation agenda to ensure maximum benefit arising from those schemes in terms of infrastructure improvements is maintained and strengthened.
- 5.5 Work continues to engage with Crown Estates Scotland to ensure that the benefits arising from the Scotwind leases and future leasing rounds are retained as close to the point of generation as possible. Encouraging discussions have been held to date on the opportunities for a new approach to community benefit that might arise.

6. Income from Renewables – Maximising the Benefits

- As Members will recall, in May 2021, The Highland Council agreed the terms of a Notice of Motion calling for a fairer share of the income derived for the development of the Highland's natural resources. At the meeting, the contrast was highlighted between the massive profits being made by private energy companies from renewables/green energy schemes in the Highlands and the relatively limited benefits received by The Highland Council, with its sub optimal infrastructure. This statement could equally apply to local community groups.
- 6.2 It is clear that with the opportunities highlighted above, the work to analyse the opportunities that might be achievable as well as a strategy to capture these benefits is now timely. A draft scope of the work to be undertaken has been

prepared and this is attached as Appendix 1 of this report. It sets out the objectives of the work that will be undertaken that will shortly be put out to tender. The draft scope has been the subject of discussion through the newly established Regional Economic Partnership to gauge partner local authority interest in the study, and to investigate the potential of a comprehensive regional approach. Members are asked to agree the scope of the tender and to make any additions they feel necessary.

- 6.3 These discussions with other local authorities have highlighted other approaches being operated across the region. Of particular interest to Members may be the approach being adopted in North Ayrshire where alongside the development of large scale renewables projects (see here), which resonates with the progress the Council has made for example at Ness Hydro, they are also ensuring that Community Wealth Building is integrated into their approach to renewables, particularly focusing on district heating schemes. It is intended to follow up with North Ayrshire Council on their approach.
- It is also important to note that the "traditional" approach to community benefit to date has been in the form of financial contributions to affected communities.

 Whilst this will continue to play a role, it is important to look beyond that to address the opportunities for investment by communities or the Council in renewable schemes. There is a great deal to learn from others, whether that be close to home (for example community wind farms in the Western Isles that are beginning to look at battery storage opportunities) or examples from further afield where regulations allow direct partnership investment in schemes.

7. Hydrogen Opportunities

- 7.1 Hydrogen has a potential to provide a number of opportunities in the Highlands with surplus energy production in the region providing future grid balancing opportunities to manage grid consumption better. It could also be used to provide local energy services offering opportunities for community energy projects that could reduce energy costs in some of the more challenging areas within Highland.
- 7.2 Within the region Highland Council are engaging with a number of external stakeholders keen to establish themselves within the hydrogen economy in the

area, many related to the co-location of production with renewable generation. The key to securing production within the region for long term development is to deliver infrastructure from production to storage and/or processing to distribution at scale. It should be noted production at scale is not limited to wind. With the right infrastructure Highland cold produce via Hydro, Tidal, Off-shore wind and Solar. Much of the engagement currently underway is commercially confidential and so it is not possible to share the detail publicly at this stage. Members will be kept informed as discussions progress.

- 7.3 Re-Fuelling: Hydrogen offers an opportunity to fill the gap in decarbonising transport with initial off take identified for road, rail & sea. While EV is currently developing as the leading choice for domestic and light freight nationally, it does bring additional challenges in the Highlands. Whereas a fully developed hydrogen refuelling network offers the region a viable future option, especially with many auto manufacturers developing hydrogen alternatives for car and small van market. Highland could benefit from the need for long range vehicles coupled with the convenience of fuelling at pumps as required. There are already a number of external stakeholders interested with local carriers and contractors identifying it as a better alternative to the current move towards EV.
- 7.4 Transport: Hydrogen offers a viable opportunity for the transition of heavy road fleet and rail in the Highlands within the current timescales with sea and air as medium range targets. The challenge in the short term is lack of available vehicles. A long-term view needs to be taken in the purchase of new vehicles as current lead times would suggest 18–24-month lag on fuel cell vehicles which is likely to extend as demand outstrips supply. There are also opportunities for hybrid vehicles in the transition period. The Council has secured Scottish Government funding of £750k to assist with conversions. There is also potential to consider leasing options to assist with transition however there are major challenges in delivering this because providers are not fully understanding of the conversion implications on new vehicles.
- 7.5 Heating: While still at a very early stage, the Council is currently working with SGN on a feasibility study within Fort William for a hydrogen network. This is being viewed as a potential follow up project to the current H100 development

ongoing in Fife. The intention is to use any surplus production capacity from the smelter hydro scheme which could be supplemented from an SSEN site in the area to provide consistent levels of supply through managed production. The Council is in very early discussions around looking at a similar proposal in Sutherland which would see an opportunity to increase local use of Hydrogen production planned for the area.

8. Opportunity Cromarty Firth

- 8.1 At the recent Economy and Infrastructure Committee on 2nd February,
 Opportunity Cromarty Firth presented the latest position in relation to progress
 being made to seize the opportunity afforded by Scotwind leases and the future
 leasing rounds being undertaken by Crown Estates Scotland. The presentation
 made to the committee is attached as Appendix 2 to this report.
- 8.2 Whilst the firm details of the Green Freeport bidding process are still being finalised between both Governments, it is clear that the Cromarty Firth will have a strong base from which to launch a bid. Along with the investment already being undertaken across the partnership and the investment in the skills base at Nigg Skills Academy and the Powerhouse, the reinforcement of the area's potential to be fundamental to the development of off-shore capabilities for Scotland was strengthened by the Scottish Offshore Wind Energy Council's report on strategic investment. It is critical that the Council continue to support the bid process and lobby for the Opportunity Cromarty Firth to be included within the National Planning Framework 4 as a National Development. As the bid process continues, the Council will continue to play an active role in promoting this catalytic opportunity for the region. As indicated in the presentation made, it is essential for recognition to be made to avoid displacement to locations elsewhere in the UK or overseas.

9. Nature Restoration and Carbon Sequestration

9.1 In recent years the interest in carbon sequestration and carbon credits in Scotland has increased exponentially. It is important that The Highland Council plays an active role in ensuring that local residents benefit from investment associated with their local natural capital. Currently, however, there is a lack of understanding

around several key elements of this opportunity and how they relate to The Highland Council and residents within the Council area.

9.2 The issues are as follows:

- the level of demand and financial opportunity for The Council, landowners and residents is unclear:
- the risk to landowners of selling carbon credits which may later be required for their own offsetting needs to be further elaborated;
- smaller landowners and community groups may struggle to access the administrative and contractor support required to take advantage of the carbon market;
- The Council needs to have a stronger understanding of the potential for carbon sequestration within its own land holdings, both for offsetting and potential for profit;
- the potential of unintended consequences (for example ecological damage caused by widespread monocrop tree planting) need to be elaborated upon in the context of the emerging carbon market.
- 9.3 It is proposed to establish a partnership for carbon management in Highland which would explore these questions and pursue options to secure public benefit from carbon sequestration. Early talks between potential partnership members took place in late 2021 with the next step to establish a formal partnership chaired by The Highland Council. If the funding for Climate Action is approved at Council on 3 March the intention would be to commission a short study to capture current issues, position and opportunities and also the actions needed to move the Council forward.

10. Skills and Training

10.1 There is a need to address issues related to energy skills supply in order to meet the anticipated increase in demand for skills in industry, and address identified challenges related to demand. The Council has a key role to play in this, working with partners such as University of the Highlands and Islands, Skills Development Scotland and schools themselves. A recent study by Skills Development Scotland

pointed out that "Given that employers already recruit from outwith the region to

import skills required, there is a need to develop a ready supply of more local skilled

labour – either within the Inner Moray Firth area, or on a regional basis. Recent

developments in the skills supply pipeline – such as moves by UHI to improve their

offering, the Nigg Skills Academy and the Powerhouse, suggest that this is more

than achievable." It also focussed on the need and opportunity to make it more

straightforward for suitably skilled workers to switch from other sectors to these new

sectors, and to maximise the potential for work-based learning.

Powerhouse is developing courses around Hydrogen, EV and Off-shore wind. In

conjunction with UHI it is intended to provide an opportunity to develop the

Highlands as a leading skills provider to the green economy. This will approach all

aspects of the developing industries incorporating heating, Solar, land

management, circular economy, and sustainability.

11. Conclusion

This report brings together a number of strands that have been reported

previously to the Economy Infrastructure and Environment Committee, and to the

full Council, relating to the potential the Highlands has in the renewables sector.

By investing in this area the Council not only stands to benefit financially with the

creation of potentially sizeable and sustainable income streams; it will also able to

make progress towards the net zero; and also provide long lasting benefits to

Highland Communities.

Designation: Chief Executive

Date: 28 February 2022

Authors: Malcolm Macleod, ECO Infrastructure, Environment & Economy and

Kate Lackie, ECO Performance and Governance

Appendix 1

Renewables Income Fund – Initial Scope

Background

In May 2019, The Highland Council declared a climate and ecological emergency, and recommitted to achieving a carbon neutral region by 2025. The achievement of this target is fundamentally linked to the renewable energy capacity and opportunity offered by the Highland region.

Subsequently, in May 2021, The Highland Council agreed the terms of a Notice of Motion calling for a fairer share of the income derived for the development of the Highland's natural resources.

At the meeting, the contrast was highlighted between the massive profits being made by private energy companies from renewables/green energy schemes in the Highlands and the relatively limited benefits received by The Highland Council, with its sub optimal infrastructure. This statement could equally apply to local community groups.

The Highland Council covers the largest area of any local authority in the UK and a third of the land mass of Scotland. It has an abundance of natural resources with existing and potential opportunities for green energy schemes, low carbon initiatives including carbon sequestration, and renewables.

Much of the profit from energy companies operating within Highland flow out from the region and community benefits, which are not underpinned by legislation, are voluntary and can be stopped or reduced at any given time.

It is also expected by Elected Members that developments within the renewables sector should see more job creation, skills development and long-term career progression situated within the Highland Region as opposed to the limited employment benefits that currently exist.

These benefits, extracted from Highland's natural resources, should be re-invested into Highland communities and infrastructure for the benefit of all within the region. There was a strong view expressed that wealth generated in the area should, wherever possible, stay in the area. Income generated through green schemes would, in turn, be re-invested to benefit the communities and the overall environment of the Highlands.

Shetland's approach towards the oil industry and new windfarm developments as well as the benefits accrued from Community owned windfarms and Council owned renewable energy projects such as a solar farm in North Ayrshire were discussed. These examples served to highlight the contrasts between local and multinational/private interests on a particular area with the former bringing in a higher income stream to the Council and wider communities.

Other examples exist beyond Scotland's shores, with the local government of the Island archipelago of Aland (Finland) setting up their own company in conjunction with a private sector energy company (50% private 50% public ownership with a 30,000 population). This transition is locally led and owned, placing citizen engagement and a long-term vision at its core.

These examples could go some way to informing a new model around which Highland Council could agree on that would see renewables as a sustainable income source for the area.

The inequity of the current system is evident as Highland has some of the highest levels of fuel poverty in the UK with higher than average domestic and commercial rates for electricity, despite being a net exporter. Therefore, not only does Highland create significantly more energy than it uses, it also pays more for the privilege through some of the highest electricity unit costs in the country.

It was also recognised by Members that there were some challenges in the existing planning system around renewable developments, and it was expected that these issues would be brought to the fore for the purposes of lobbying and engagement with Ofgem and both the UK and Scottish Governments.

In terms of a wider water agenda, it is worth highlighting that Highland region is home to many of Scotland's freshwater lochs with Loch Morar, the deepest at 310

metres and Loch Ness, which holds the most water with 7.4 million cubic metres. Loch Ness holds nearly twice as much water as all the lakes of England and Wales combined. With the increasing issues arising around water shortages, and given Highland's advantageous position, it would be prudent to plan ahead for the inevitable demands the region will be faced with and any future Highland Renewables investment plan should be mindful of this and consider options available.

There is also an increasing issue around the sale of land to take advantage of subsidies and the market in carbon credits. These so called "Green Lairds" do not necessarily benefit the wider community and on a basic level, use the ownership of land to offset carbon from elsewhere in their portfolio.

The Council agreed the terms of the Notice of Motion as detailed.

Objectives

The aim of this tender is to develop an action plan detailing what The Highland Council needs to do to fully benefit from the green energy/renewables schemes that benefit from the significant natural resources that exist within the Highland region. This benefit would include long term employment, skills development and career structures that remain within the region whilst at the same time allowing The Highland Council to establish a "Highland Renewables Fund" from green income generation that will benefit the wider region.

The objectives, in terms of renewables and green energy schemes (onshore & offshore) across Highland, are.

• To understand the scale of currently operational renewables generation, what is in the pipeline and what future projects are planned or can be expected. This information will provide the context and lay the groundworks for Highland being Scotland's green energy hub as well as highlighting Highland's contribution and importance in respect of national climate change targets and the low carbon agenda. Horizon scanning will also provide a sense of what is possible.

- To highlight the benefits (income generation, company profits, job creation, skills, careers, infrastructure build, improved utilities, other advantages) the region gains from green energy schemes including those from direct planning conditions.
- To consider and advise on how we can best utilise planning conditions to maximise benefit
- To consider best practice, agreements, and other models in play elsewhere that could be utilised to benefit Highland Council
- To consider community benefits and how much control Highland Council has over that, bearing in mind the voluntary nature of these schemes.
- To look at how Highland Council can be involved in control, investment, community shares, management, maintenance, design and supply chains in green energy and renewables.
- To identify local energy opportunities that will directly reduce levels of fuel poverty across the region
- To identify the practical steps required and benefits of setting up a Highland Renewables Fund drawn directly from the green energy/renewables' schemes in the Highland Region.
- To provide template for future demand and pressures on natural resources such as water
- To identify gaps in legislation that currently facilitate the exploitation of a Local Authority's natural resources to the benefit of others outwith the region. This will present opportunities for Councilors to make the case for change to respective national bodies and both the Scottish and UK Governments.
- To clearly articulate what Highland Council needs to do to deliver a strategic benefit in the next ten years as part of an ongoing legacy for the people of Highland Region.

Approach

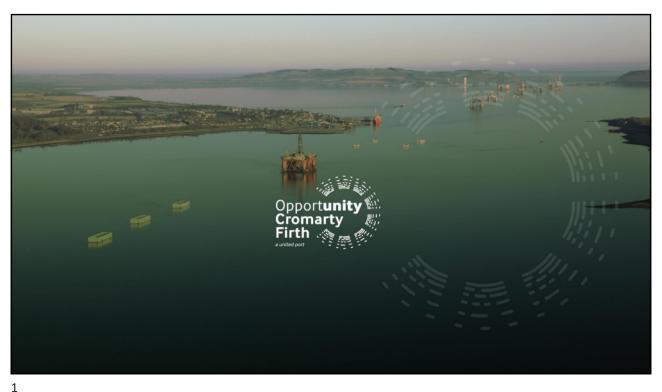
It is envisaged that this will primarily be a desk-based exercise, with bidders expected to draw on existing materials from a range of different sources. However, it is understood that face-to-face meetings will be required with key internal stakeholders and Elected Members to help the bidder fully understand the current policy position and appetite for change within The Highland Council.

Outputs

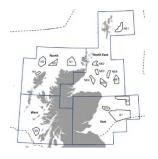
The outputs required will be:

- A report and action plan detailing what The Highland Council needs to do to fully benefit from the green energy/renewables schemes that take advantage of the enormous natural resources that exist within the Highland region.
- This action plan will include:
 - ➤ The current context of renewable schemes in Highland and how we benefit regionally and organisationally.
 - ➤ A future concept on what we can expect in terms of renewable schemes and how we can benefit. This would cover long term employment, skills development, and career structures in respect of this agenda across the Highland region.
 - Options around The Highland Council setting up a Highland Renewables Fund from green income generation that will benefit the wider region.
 - ➤ The challenges and opportunities in respect of planning conditions to include options around land ownership. What we can do within current structures and what should we be seeking to change to maximise benefit.
 - Innovative solutions that can be drawn from other areas that will see Highland Council involved in control, investment, community shares, management, maintenance, design, and supply chains.
 - Local energy opportunities that will directly address fuel poverty.

- How this work ties in with and supports national climate change targets, the low carbon agenda and helps meet The Highland Council's climate and ecological emergency commitments.
- > Present this as a legacy issue for The Highland Council.
- Provide a template for future demands and pressures on Highland's natural resources such as water.

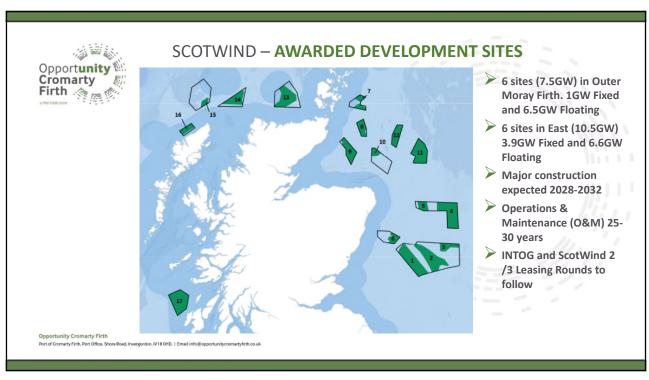


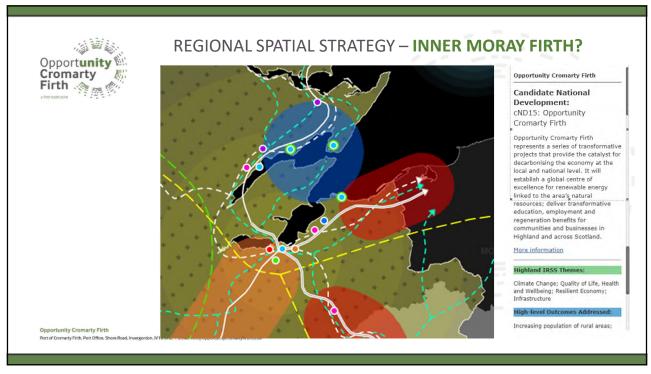


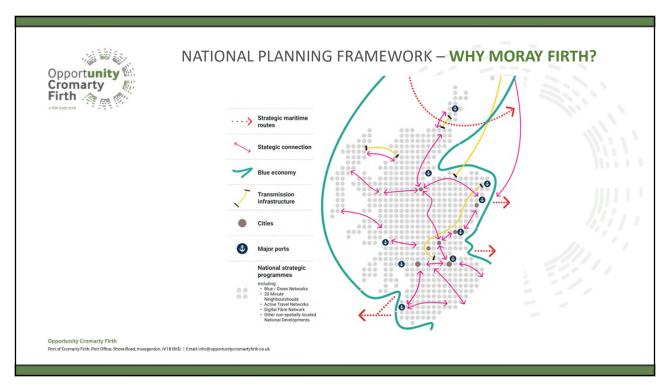


CLEAN GROWTH BOOM - WHY MORAY FIRTH?

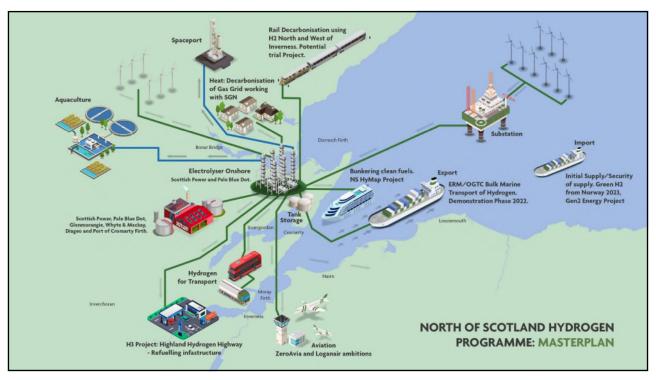
- The Highland Region, and the Cromarty Firth in particular, has a 50-year pipeline of £multi billion renewable energy projects on its doorstep
- We are in the right place at the right time: 17 ScotWind developments awarded -25GW - Jan 2022. 4.5GW INTOG round due to open 2022.
- We have the right facilities and track record: Over £100m already invested and the Firth has accommodated and supported more windfarm projects than any other Scottish Port: Beatrice and Moray East Offshore Windfarms, Hywind and Kincardine Floating Windfarms. No other location is better positioned
- Logical location for national offshore wind hub (SOWEC Strat. Invest. Assessment)
- Step change in deployment: 1GW installed capacity to 11GW by 2030. 50 year pipeline: construction timeline 2027-2050, plus 25-30 year operations and maintenance followed by repowering/decommissioning
- \blacktriangleright We are already Scotland's powerhouse, producing more renewable energy for our country than any other region. We need to ensure Scottish & UK businesses and communities benefit from this nationally significant pipeline of opportunity

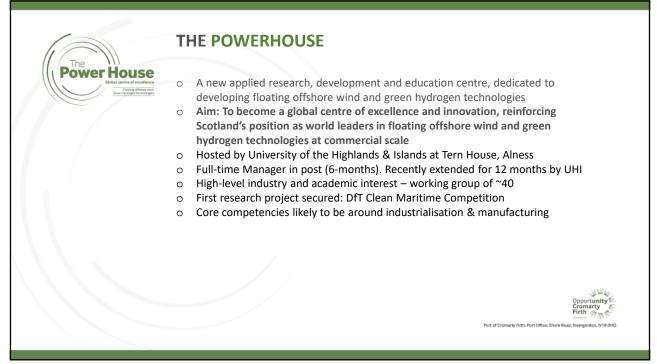




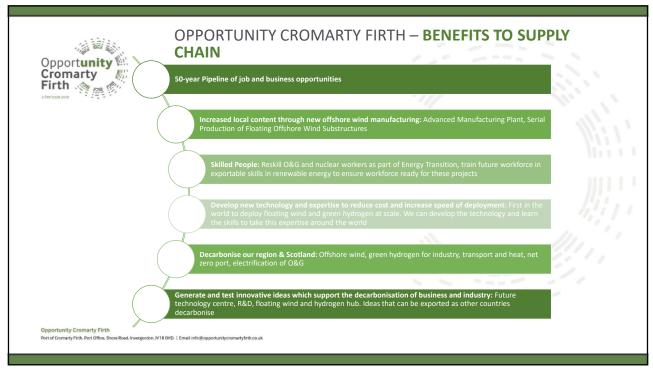














GREEN/FREEPORT COMPETITION - WHAT THIS COULD MEAN

- Long-term investment, employment and impact
- Manufacturing jobs, transferable skills in renewable energy, business opportunities
- Benefits for communities, local business and individuals. Fair work policy is a major component of the Scottish Government Green Port
- Incentives to attract international trade, innovation and regeneration
- Enhanced role in meeting net zero obligations
- Accelerating Scotland's excellence in offshore wind and renewable (green) hydrogen
- Clustering / collaboration to spread benefits throughout and beyond Highland
 - All major offshore wind manufacturing investments are already being made in new English freeport sites
 - Scotland needs to be put on a level playing field, at pace, to avoid displacement of these investments. ScotWind / INTOG both creating investment opportunities.



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