

## Just Transition Fund: Call for year one projects

## Expression of Interest

**Summary of Proposal****Moray Hydrogen Pilots**

To support the development of a hydrogen economy within Moray. Moray Council and its partners are seeking to obtain Just Transition Funding and submit this multi-year bid.

In 2022/23 there will be a feasibility study to develop the pilot projects in the Moray Hydrogen Strategy including:

- Feasibility designs to determine preferred pilot project(s) – locations, size, details etc.
- Feasibility work on conversion of Moray Council vehicle fleet to Hydrogen
- Set up Hydrogen Working Group. Grow interest in Moray Hydrogen, attract private investment to develop.

The outcome of the feasibility work will result in future years bids towards delivery of the hydrogen strategy. Pilot projects include opportunities in Lossiemouth, Buckie, Aberlour, Blackhillock and Elgin. It is intended that this bid will complement the Just Transition bids for Buckie Harbour and Blackhillock Masterplan by exploring the feasibility of pilot projects in these areas. The draft Hydrogen strategy is attached.

Developing a hydrogen economy in Moray during the short to medium term, including connecting into adjacent areas, could contribute to a reduction in greenhouse gases and particulate emissions, improve security of energy supply, contribute towards the decarbonisation of transport, increase and make better use of renewable energy generation, and could help address fuel poverty issues, particularly in rural areas.

<b>Eligibility Criteria</b>	<b>Achieved</b>
Organisation Headquartered and project benefits in area	Yes, the bid is being led by Moray Council. All project activity will be based in Moray. The majority of benefits from the project will be realised within Moray.
Registered Charity / Business / Public Sector	Public sector
Positive Impact on Decarbonisation and efficiencies Just Transition Outcome	Yes, this bid will be able to deliver against a number of the Just Transition Outcomes and will deliver on the Scottish Government's decarbonisation and energy efficiency goals.

Spend in financial year 22/23	Yes, £80k
Matched funding costs and pilot project definitions	Consultants will be employed to carry out the work given its specialist nature
<p><b>Alignment with Impact objectives</b></p> <ul style="list-style-type: none"> <li>• <b>Ensure that the investment is targeted in such a way that can create good, green jobs now and throughout the transition to net zero</b></li> </ul> <p>Developing a hydrogen economy will provide the opportunity to create new, high-quality jobs within Moray in a sector based on sustainable resource management and protection. Not only can this help to alleviate current challenges within Moray around unemployment, but the provision opportunities within this high-growth, environmentally conscious space may help to attract more young-people to live and stay in Moray.</p> <ul style="list-style-type: none"> <li>• <b>Ensure communities directly benefit from the Fund, including through the ability to decide on and drive spend</b></li> </ul> <p>The creation and development of a hydrogen economy within Moray offers the opportunity to empower and invigorate communities whilst strengthening the local economy.</p> <ul style="list-style-type: none"> <li>• <b>Work in partnership with the private sector, especially shaping opportunities to crowd in private sector finance</b></li> </ul> <p>As hydrogen can be produced locally from several sources within Moray (e.g. off-shore and on-shore wind), developing capacity will help to diversity the local market and support the transition to a sustainable, low-carbon economy and related jobs (in high-value areas). It is also recognised that a hydrogen scheme of this nature is likely to bring greater interest from outside investment, supporting and increasing local economic activity.</p> <p>Investment in hydrogen technology can bring about jobs and continued advancements in every industry touched by it. For Moray, this can help to future-proof existing markets, jobs and businesses, whilst also providing a new space for local capabilities to develop into. This will help to foster innovation within existing businesses and industry processes, supporting a wider transition within the region to more sustainable and green ways of working. For those local organisations and people engaged with the proposed scheme, owing to the relative infancy of hydrogen technologies globally (but increasing interest), there is the added benefit of being able to position themselves and access opportunities as they develop within domestic and international markets.</p> <ul style="list-style-type: none"> <li>• <b>Collaborate at a local and national level on the decisions that impact the North East and Moray</b></li> </ul>	

Progressing the Moray Hydrogen economy and the hydrogen strategy will enable Moray to link in with Aberdeenshire and Aberdeen City to supply locally produced green hydrogen to initiate local projects in line with the national strategy to promote hydrogen.

### **Proposal**

**(to demonstrate evidence against criteria outlined below)**

Demonstration of alignment with the [impact objectives](#)

Moray Council and their partners want to create a hydrogen economy to achieve the benefits by developing a Hydrogen Strategy and Action Plan which explores the use of green hydrogen to help achieve this. The Council recognises that Hydrogen could have a key role in providing an alternative energy to fossil fuels.

The development of a hydrogen economy within Moray will bring many benefits to the region including inward investment, creation of new opportunities and jobs, retention and development of young persons in Moray. Inward investment in the hydrogen supply, demand and infrastructure within Moray offers a sustainable economic growth opportunity with a positive impact on reducing poverty.

Moray has access to significant sources of green renewable power including offshore and onshore wind farms which, subject to contract, could create the conditions required to produce green hydrogen within Moray at scale.

The draft Moray Hydrogen Strategy prepared by Mott MacDonald clearly demonstrates that there is a demand for Hydrogen within Moray and the opportunity to produce hydrogen within Moray. The draft Strategy also outlines a number of key steps to realise this opportunity. This project will implement these steps and assist in developing Moray's Hydrogen Economy that will be truly transformational, not only for Moray but for the North-East of Scotland and beyond.

<b>Year</b>	<b>Step</b>	<b>Task Summary</b>	<b>Total Approx. Cost (£M)</b>
22/23	Feasibility Designs for Pilot Projects	<p>Feasibility designs to determine preferred pilot project(s) – locations, size, details etc.</p> <p>Feasibility work on conversion of Moray Council vehicle fleet to Hydrogen</p> <p>Set up Hydrogen Working Group. Grow interest in</p>	£80,000

		Moray Hydrogen, attract private investment to develop.	
23/24	<p>Complete designs, land agreements etc, and look to Implement preferred pilot project(s)</p> <p>Start conversion of Moray fleet and purchase hydrogen to meet this demand</p>	<p>Undertake design for preferred pilot(s). Carry out land agreement, place orders for electrolyser and long lead items.</p> <p>Potential purchase of hydrogen from Aberdeen to allow pilot(s) for Moray Council vehicle fleet to be operational as early as possible.</p> <p>Start conversion of Moray Council vehicle fleet to Hydrogen.</p>	The outcome of the feasibility work will result in future years bids towards delivery of the hydrogen strategy
24/25	<p>Implement preferred pilot project(s).</p> <p>Continue fleet conversion for Council and other public bodies</p>	<p>Purchase remaining infrastructure. Construct the pilot project(s) and produce hydrogen.</p> <p>Continued conversion of Moray Council vehicle fleet to Hydrogen. Liaise with other public bodies to encourage wider conversion</p>	
25/26	<p>Explore feasibility and timing to scale up pilot project(s) or support creation of new Hydrogen Hubs.</p> <p>Continue public fleet conversion</p>	<p>Building on ongoing further design works to scale up hydrogen hubs. Assist in development of other hydrogen hubs using private investment.</p> <p>Continued conversion of Moray Council vehicle fleet and other public sector fleet to Hydrogen.</p>	

26/27	Development of Hydrogen Hubs within Moray – design works and commence implementation, infrastructure procurement etc.	Infrastructure procurement for new or expanding hydrogen hubs.  Continued conversion of Moray Council vehicle fleet and other public sector fleet to Hydrogen.	
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The type of funding requested and indicative timeline for delivery, including high level annual timelines if a multi-year proposal.

£80k Capital – feasibility for future development and investment.

The outcome of the plan will result in future years bids towards delivery of some aspects of the plan, the plan itself will identify costings for proposal together with future maintenance costs for the authority.

By undertaking the initial works to develop the hydrogen economy, Moray Council will be able to ensure that it develops in a coordinated and collaborative manner and that moving forwards, the wealth and benefits generated are, to the greatest possible extent, retained within Moray for the benefit of Moray.

A major strength in developing localised energy systems is that the system can be built around the relevant local resource and can closely match and deliver energy to the end user when required. It is also expected that regional development of renewable energy sources will provide more economically viable fuel sources for hard-to-reach areas, reducing current ‘pockets’ of deprivation seen across many rural areas. Shifting away from fossil fuels is an opportunity to build a fairer and more equal society throughout Moray that removes existing pockets of deprivation (e.g., rural areas).

Developing a Hydrogen economy in Moray during the short to medium term, including connecting into adjacent areas, could contribute to a reduction in greenhouse gases and particulate emissions, improve security of energy supply, contribute towards the decarbonisation of transport, increase and make better use of renewable energy generation, and could help address fuel poverty issues, particularly in rural areas.

**Scalability:** If the hydrogen economy in Moray is developed and as technologies improve and bring down costs, there is the potential for the development of smaller scale community projects (particularly for areas that are “off-grid”). As well as allowing energy to be created and used at source, it creates increased resilience within the energy network and offers the opportunity for communities to be self-sustaining.

**Risks:** Hydrogen can be produced in Moray from the electrolysis of water, utilising green electricity. The production and availability of high-quality water for the electrolyser is a critical step in the hydrogen production process. It is recognised that water levels in the springs and rivers within Moray and the Scottish Highlands can fall to low levels during summer periods of high temperatures with little rainfall.

Further analysis and engagement with Scottish Water and the Scottish Environment Protection Agency (SEPA) will be required to confirm the water sources, availability, and quality and ensure that there is not a negative environmental impact. This will form part of the feasibility study to identify the best locations for hydrogen production in Moray.

## Guidance

### Assessment criteria and weighting

Bids will be selected for consideration against the following criteria for either large capital projects or pilots.

Criteria for large capital projects NB: criteria are qualitative unless stated otherwise	Weighting (%)
Meets all eligibility criteria (excluding definition of pilot projects)	Yes/No
Ongoing positive impact against the Decarbonisation and Efficiencies Just Transition Outcome (mandatory for all projects) and at least two other <a href="#">JT Outcomes</a>	20
Identify the risks of negative social and environmental impacts from the proposal and approaches to mitigate those risks.	20
Potential to have a positive and significant impact on good green jobs (including number of jobs created/protected), commitment to Fair Work, and community wealth building including evidence of partnership working and engagement with relevant businesses to build up supply chain and skills capacity	25
Ability to demonstrate additionality and the requirement for JTF support including evidencing the need for public funding support.	15
Evidence of existing transparent partnership and engagement with relevant local communities. Provide a plan for ongoing community	15

involvement that involves solutions to local challenges and plans to improve people's lives.

Briefly outline the broader strategic fit to Scottish Government priorities, including the National Strategy for Economic Transformation, and demonstrate how the proposal builds upon existing North East strengths i.e. workforce, physical assets, supply chain, supporting sectors to transition to net zero. It should also seek to be a potential multiplier for other public funds, such as our wider £1.8 billion investment in Heat in Buildings. 5

### Just Transition outcomes

[Not intended to demonstrate projects or activity that would be guaranteed eligibility or funding under the criteria.]

- Citizens, communities and place: support affected regions by empowering and invigorating communities and strengthening local economies
- Jobs, skills and education: equip people with the skills, education and retraining required to support retention and creation of access to green, fair and high-value work
- Fair distribution of costs and benefits: address existing economic and social inequality by sharing the benefits of climate action widely, while ensuring that the costs are distributed on the basis of ability to pay
- Business and Economy: support a strong, dynamic and productive economy which creates wealth and high quality employment across Scotland, upholds the UN Guiding Principles on Business and Human Rights, and continues to make Scotland a great place to do business
- Adaptation and resilience: identify key risks from climate change and set out actions to build resilience to these risks, ensuring our economy is flexible, adaptable and responsive to the changing climate
- Environmental protection and restoration: commit to act within our planetary boundaries while protecting and restoring our natural environment;
- Decarbonisation and efficiencies: contribute to resource efficient and sustainable economic approaches that actively encourage decarbonisation, support low-carbon investment and infrastructure, and avoid carbon 'lock-in'
- Further equality and human rights implementation and preventing new inequalities from arising: address fuel poverty and child poverty in a manner consistent with Scotland's statutory targets on each, while furthering wider equality and human rights across all protected characteristics