



**REPORT TO: ECONOMIC DEVELOPMENT AND INFRASTRUCTURE
SERVICES COMMITTEE ON 6 SEPTEMBER 2022**

SUBJECT: MORAY HYDROGEN STRATEGY

**BY: DEPUTE CHIEF EXECUTIVE (ECONOMY, ENVIRONMENT AND
FINANCE)**

1. REASON FOR REPORT

- 1.1 To seek the agreement of the Committee to adopt the Moray Hydrogen Strategy and to agree that an application to the North East Just Transition Fund to progress action on the strategy be submitted if the Council's expression of interest is successful.
- 1.2 This report is submitted to Committee in terms of Section III (F) (33) of the Council's Scheme of Administration relating to providing, developing and monitoring the Council's Economic Development and Infrastructure Services.

2. RECOMMENDATION

2.1 It is recommended that Committee:-

- (i) approves and adopts the Moray Hydrogen Strategy (Appendix 1) including recommended actions; and**
- (ii) notes the Council's expression of interest to the North East Just Transition Fund (Appendix 2) in respect of funding for hydrogen pilot project feasibility studies, and the development of a costed delivery plan.**

3. BACKGROUND

- 3.1 On 10 March 2021, the Council adopted a Climate Change Strategy (CCS) for 2020-2030. In response to the actions approved as part of the CCS, and funded through the Improvement and Modernisation Programme, consultants were commissioned to develop a Moray Hydrogen Strategy (para 13 of the Minute refers).
- 3.2 Hydrogen is fast becoming a key energy resource in the transition to a low carbon future. When produced from renewable energy sources, hydrogen is a zero carbon, zero emissions fuel that can be used for heavy duty vehicles, industrial uses and to heat homes.

- 3.3 A hydrogen economy is an economy that relies on hydrogen as the commercial fuel to deliver a substantial fraction of an area's energy and service needs. Developing a hydrogen economy in Moray during the short to medium term, including connecting into adjacent areas, could:
- contribute towards a reduction in greenhouse gas and particulate emissions;
 - improve the security of Moray's energy supply;
 - increase and make better use of local renewable energy generation; and
 - help to address fuel poverty issues, particularly in rural areas.
- 3.4 Development of a hydrogen economy is a national priority. In December 2020, the Scottish Government published a Hydrogen Policy Statement which aims for Scotland to be a "leading hydrogen nation in the production of reliable, competitive, sustainable hydrogen".
- 3.5 Highlands and Islands Enterprise (HIE) seek to advance a hydrogen economy across the region and were a key stakeholder in the development of the Moray Hydrogen Strategy. HIE therefore sought that the strategy include information on the decarbonisation of Moray's distilling industry and other key projects including the infrastructure required to produce, store and supply hydrogen, and provided funding to facilitate this expanded remit.
- 3.6 Wider stakeholder engagement was carried out by the consultants in collaboration with the Council and HIE. Over 70 stakeholders located within or adjacent to Moray were identified and consulted with in a series of interviews and follow-up sessions. Stakeholders represented the following areas:
- Adjacent local authorities;
 - Community groups;
 - Industry;
 - Renewable energy developers;
 - Transport sector;
 - Internal representatives;
 - Distilleries;
 - Public sector bodies; and
 - Renewable energy influencers.
- 3.7 Feedback from the stakeholder engagement process revealed a very positive outlook that hydrogen can form part of the solution to achieving net zero, and that action must be taken promptly. The process identified many stakeholders who would like to be involved in the next steps in development of a Moray hydrogen economy, as well as several opportunities and challenges to consider.

4. PROPOSED STRATEGY

- 4.1 The proposed strategy is presented in **Appendix 1**. The strategy demonstrates that there is a demand for hydrogen within Moray and several opportunities to develop a hydrogen economy which would retain significant benefits within the area by progressing a series of short, medium and long-term actions.

4.2 A series of short-term actions to be taken up to 2030 have been identified within the strategy as necessary to generate interest, demand and capacity for hydrogen in Moray. The creation of a delivery plan for the strategy will be progressed to include the feasibility of actions such as:

- deciding how the council will progress development of a hydrogen economy – as a supporting facilitator or by leading developments;
- establishing a hydrogen steering group including key stakeholders identified by the strategy to develop a cohesive vision and drive for the development of a hydrogen economy;
- establishing a hydrogen stakeholder network including industry, community and education groups;
- investigating funding opportunities and applying for initial funding to engage a dedicated team to develop hydrogen economy opportunities;
- promoting hydrogen knowledge development in schools and engaging with further education establishments to progress programmes which deliver necessary skills to support the hydrogen economy;
- setting up, funding and initiating/delivering at least one pilot project;
- determining the suitability and cost of pilot projects proposed in the strategy; and
- developing an appropriate organisational vehicle to drive forward the hydrogen economy within Moray.

4.3 In the medium term, from 2030 to 2040, it is forecast that demand for hydrogen will have increased significantly. At this time, there will be a focus on growing the hydrogen supply and developing a network of refuelling stations. This will create the necessary capacity for an industry switch to hydrogen and to further decarbonise the transportation element of hydrogen production.

4.4 From 2040 onwards, it is envisaged that Moray's hydrogen economy will be fully developed. A key priority in the long-term will be continuing production and importing/exporting hydrogen as part of the national hydrogen pipeline network. Consolidating existing hydrogen facilities and identifying further expansion opportunities will be necessary. As technologies are mainstreamed and costs decrease, there will be potential for smaller scale community hydrogen projects, particularly in off-grid areas.

5. DELIVERING THE STRATEGY

5.1 Upon approval of the strategy, officers will begin to implement those short-term actions which can be accommodated within existing staffing resources.

5.2 A hydrogen steering group will be formed including representation from the Council, HIE, and key stakeholders from the industrial base and wider community as proposed within the strategy. The progress of the steering group will be reported on a quarterly basis to the existing Climate Change Board and within wider CCS routine updates to the committee.

5.3 Consideration has been given to the resources required to achieve the aims of the strategy. There is no revenue budget other than that for the Climate

Change team and so any additional revenue funding will be subject to external funding applications. There is a climate change capital budget of £500,000 which could potentially be used for a pilot project, depending on the details of that project. Both revenue and capital proposals would be the subject of separate reports following the creation of a detailed delivery plan.

- 5.4 Following the report on the North East Just Transition Fund considered by Council on the 29 June 2022, the agreement of Group Leaders was sought to enable an £80,000 expression of interest (EOI) to be submitted to the fund (**Appendix 2**). The EOI sought funding to cover the cost of pilot project feasibility studies identified within the short-term actions. These include:
- Feasibility designs to determine preferred pilot project(s) – locations, size and details; and
 - Feasibility work on the conversion of Moray Council's vehicle fleet to hydrogen fuel.
- 5.5 Community wealth building opportunities will be explored throughout the life of the strategy. The use of contractual commitments around community benefits performance and delivery can ensure that locally relevant positive impacts and community wealth are generated due to the work involved to progress the strategy's aims.

6. SUMMARY OF IMPLICATIONS

(a) Corporate Plan and 10 Year Plan (Local Outcomes Improvement Plan (LOIP))

Development of a Moray Hydrogen Strategy was an action of the Council's Climate Change Strategy 2020-2030 which supports the priorities set out in the Corporate Plan 2019-2024.

(b) Policy and Legal

The Climate Change (Scotland) Act 2009 places a duty on public bodies to act in a way that they consider most sustainable and in the way best calculated to deliver the emission reduction targets set in the Act.

(c) Financial implications

There is a climate change budget of £500,000 in the capital plan for 2022/23 which could potentially be used for a pilot project. There is no budget for any additional revenue expenditure and further funds will be sought via external funding applications, including the North East Just Transition Fund.

(d) Risk Implications

There is a risk that the Council will be unable to comply with its own net zero target and subsequent statutory net zero targets if work to develop sustainable energy systems does not commence. If a hydrogen strategy is not implemented, Moray would fail to maximise the benefits of developing a hydrogen economy.

(e) Staffing Implications

There will be a requirement for staff from several services including Strategic Planning & Development, Housing & Property and Environmental & Commercial Services to contribute to the progression of actions within the strategy and the work of the hydrogen steering group.

(f) Property

There will be property implications linked to the delivery of the Moray Hydrogen Strategy around provision of depot facilities linked to hydrogen fleet vehicles. These implications will be set out in more detail as the key actions relating to fleet decarbonisation are agreed and progressed.

(g) Equalities/Socio Economic Impact

There are no equalities/socio economic impacts at this stage. This will be considered and an equalities impact assessment carried out where funding applications are progressed.

(h) Climate Change and Biodiversity Impacts

Adoption of a hydrogen strategy will assist with the Council's decarbonisation target to be net zero by 2030, and the transition to net zero across the wider Moray area, in line with the aims of the Moray Council Climate Change Strategy 2020-2030. By piloting hydrogen projects within Moray, it will be possible to influence, educate and engage the wider community in climate action initiatives.

(i) Consultations

Consultations have been undertaken with the Depute Chief Executive (Economy, Environment and Finance), the Head of Economic Growth & Development, the Head of Housing and Property, the Head of Education Resources & Communities, the Acting Housing & Strategy Development Manager, the Property Asset Manager, the Community Wealth Building Officer, the Energy Officer, the Equal Opportunities Officer, the Legal Services Manager, the Elected Member Climate Change Champion and L Rowan, Committee Services Officer. Where comments have been received, these have been included within the report.

5. CONCLUSION

5.1 The Moray Hydrogen Strategy supports the development of a hydrogen economy in Moray. It will enable the necessary capacity building for an industry shift to hydrogen, and the production of green hydrogen to reduce reliance on carbon intensive energy sources.

5.2 The recommendations support a sustainable approach to achieving emissions reduction in line with the Council's own net zero target and its duties under the Climate Change (Scotland) Act 2009.

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Background Papers:
Ref: