



Green Investment Plan, Cumbria

### Transformational Infrastructure Projects

- 1. Green Hydrogen:** Cumbria has significant potential to produce and pipe green hydrogen<sup>2</sup> that will complement the process of decarbonisation and electrification in hard-to-abate sectors such as steel, cement and heavy road transport. In this report, we suggest a three pronged strategy for establishing a green hydrogen economy in Cumbria that, as well as local uses, could include export of the gas to ports across the Irish Sea (and beyond), creating employment throughout the supply chain, including at Cumbria's ports.
- 2. Offshore Wind Expansion:** Significant expansion of offshore wind capacity (with community ownership) in Cumbria. We suggest developing a 1.2GW community owned offshore wind farm in West Cumbria. What we call project "Collette" would lead to significant emission reductions – between 850 and 1100 Kt CO<sub>2</sub>e savings each year. At between 23% and 30% of Cumbria's total 2019 emissions, these savings are enough on their own to match the savings needed for Cumbria to meet its net zero targets. "Collette" would also use surplus renewable energy generated to produce green hydrogen, facilitating the strategy mentioned above and further carbon savings.
- 3. Decarbonisation of major industrial emitters** via tailored programmes, that address their specific circumstances while respecting their importance to employment, productivity and contribution to the national and Cumbrian economies.
- 4. Decarbonisation along the M6 Cumbrian Corridor** to reduce transport emissions, again linked to the green hydrogen strategy.
- 5. Expansion of nature-based renewables** opportunities such as agrivoltaics, linked to the nature strategy.
- 6. Improvements to local rail electrification.**
- 7. Expanding EV charging infrastructure** including in rural areas and key destinations of the visitor economy.

### Innovative Community / Collective Projects

We propose a number of projects with financing and delivery mechanisms that involve either community engagement or where a collective approach would be beneficial. Some of these also involve the use of carbon credits, which as things presently stand (and in the absence of significant fiscal incentives in sectors such as domestic heating) is the main novel financing instrument that private actors have access to. These projects include:

- 8. Agrivoltaic and agroforestry** schemes where dedicated funds could be established if a co-ordinated collective approach was taken by farmers.
- 9. An innovative financing mechanism for the proposed Cumbrian Coastal Community Forestry** is designed to promote community governance and engagement and maximise community 'goods' arising from the project. This mechanism also involves the use of carbon credits.
- 10. A proposal for a collective financing 'warehouse'** for woodland, peatland and other nature-based projects using carbon financing. The latter might include such as nutrient reduction through changes to livestock farming in the Petteril and Natural Flood Management (NFM) measures in the Wyre.
- 11. Significant community investment in the "Collette" offshore wind project**, engaging the local community in this major contributor to Cumbria's net zero agenda and promoting the flow of investment returns and other economic benefits into the local economy.



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### Enabling Actions

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| 12. | Create an <b>agri-innovation hub</b> to develop skills in innovations such as agri-forestry, agri-voltaics, livestock management and nature-based solutions opportunities mentioned above. Combining public payments with private investments, they have the potential to scale up to many of the catchments in Cumbria.  |
| 13. | Develop a <b>retrofit skills hub</b> and a <b>retrofit delivery organisation</b> to train Cumbrians in retrofitting skills and encourage consumers to undertake projects by increasing the understanding of options among consumers and confidence that works will be professionally carried out. The skills hub could be delivered by the Cumbrian network of further education colleges, the Ecological Building Systems, based in Carlisle, and others.  |
| 14. | Allied to the above, a potential <b>carbon-credit for domestic retrofit schemes</b> . This would help to create a financial incentive for property owners to undertake such work. Although we do not propose a precise mechanism for this, we also recommend that <b>stakeholders investigate the best way for future plans and strategies to be connected to financing</b> . Such a mechanism should promote the development of a pipeline of projects that are relevant to Cumbria's net zero ambitions, promote community and economic benefits and are ready for investment by a range of finance providers from national and local government to private finance, corporations, philanthropy and local residents themselves. |
| 15. | Tackle visitor travel behaviour and accelerating rural on demand responsive transport (DRT). Behaviour change and demand management are important tools for reducing carbon from transport.   |

# Report Methodology



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- Four roundtables in 2021 - cross section of local and national practitioners and experts.
- Categorised based on the Green Financing Framework:
  - Living and Natural Resources
  - Renewable Energy
  - Energy Efficiency and Retrofits
  - Clean Transportation

## **“NOW, NEXT, NEW”**

- To give an indication of the investability and feasibility of proposals:
  - “Now”, meaning those that are possible/investable ideas without major further development.
  - “Next”, those that don’t depend on new technology but do require some development in terms of behaviour, policy, feasibility and/or means of financing.
  - “New” opportunities that require significantly fresh approaches (for example to financing mechanisms) or advances in technology