

# CLEAN ENERGY TRANSITION AGENDA

Mull Archipelago, Scotland

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*Supporting Document: Executive Summary*



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## Executive Summary

The Clean Energy Transition Agenda (CETA) is a strategic roadmap for the transformation of the Mull Archipelago into a “zero emissions, energy secure, self-reliant, and thriving place with efficient homes and transport systems, all driven by a local and community ethos”. This is the community’s vision for change across the islands of Mull, Iona, Ulva, Gometra, Erraid, and Inch Kenneth, as identified by the CETA report.

The project forms part of the AMAZE project (The Archipelago of Mull Actions for Zero Emissions) which is an EU-funded partnership project between the New Energy Solutions Optimised for Islands consortium (NESOI), the Mull and Iona Community Trust (MICT) and the AMAZE volunteer Steering Group. The CETA is designed by the local community, for the local community, who recognise the urgent need for communities to take measures to reduce carbon emissions and are committed to taking action.

### Conclusions and Recommendations

The core conclusion from the CETA process is that there is the **clear capability for collective community action to substantially reduce the archipelago’s carbon footprint**. This is particularly the case for decarbonising energy use and on-island transport. However, there are several challenges particular to the archipelago, most notably local grid constraints, limited on-island low carbon workforce, energy inefficient buildings, and the large impacts from tourism.

To progress the clean energy transition agenda, it is recommended that the community follows the following action pathways:

- 1. Develop on-island generation:** by examining the feasibility of energy projects, such as solar arrays, wind turbines, or heat networks.
- 2. Focus on community ownership:** prioritising local energy use and maximising community benefit.
- 3. Empower individuals via community resources:** Form community groups that can enable and incentivise individual decarbonisation actions.
- 4. Work with key stakeholders:** Effective actions require engagement with Argyll & Bute Council, SSEN, CalMac, landlords, landowners, and local businesses.
- 5. Promote journey sharing:** Pooling deliveries and ride sharing and implement community-led car club(s).
- 6. Strengthen on-island businesses:** Provide incentives for people to work and live on the islands and promote local resource use.

### CETA Summary

#### Islands Context

Decarbonisation is heavily influenced by the islands’ context, particularly that they rely on the mainland for fuel deliveries and electricity connection. The five ferry crossings are critical to islands’ functioning and are responsible for 19% of total archipelago emissions. Over half of this is attributable to tourist activity, with tourism a key industry on the islands along with forestry, aquaculture, and agriculture. The archipelago population of ~ 3,100 residents are spread across ~ 900 km<sup>2</sup>, a rural landscape that includes numerous environmentally protected areas, diverse wildlife, and landscape.

### Energy and Carbon Audit

The energy and carbon audit provides an understanding of the source and scale of archipelago emissions, and a baseline for emissions in 2019, from which progress can be measured. Key findings include:

- Archipelago emissions total **35,800 tonnes CO<sub>2</sub>e**.
- “Addressable” emissions total **21,301 tonnes CO<sub>2</sub>e**, equivalent to 7.1 t CO<sub>2</sub>e per resident – this removes those sectors outside the control of island-led actions: livestock and ferries.
- **17%** of total emissions are attributable to tourist activity.
- The islands self-generate around **38%** of current total electricity consumption, including hydro and wind generation.
- There is high electricity usage due to the widespread usage of electric heating, with **38%** of buildings using electricity for heating and **36%** using oil boilers.
- **75%** of homes do not meet EPC grade C standards, meaning many homes are energy inefficient and in need of upgrade.
- Most on-islands transportation emissions come from petrol and diesel cars, with over **2,000** vehicles owned by residents at an annual fuel cost of almost **£2m**.
- Forestry reduces island emissions by over 1,000 tonnes CO<sub>2</sub>e per year, but livestock emissions have a large emissions footprint due to the large land area and small population.

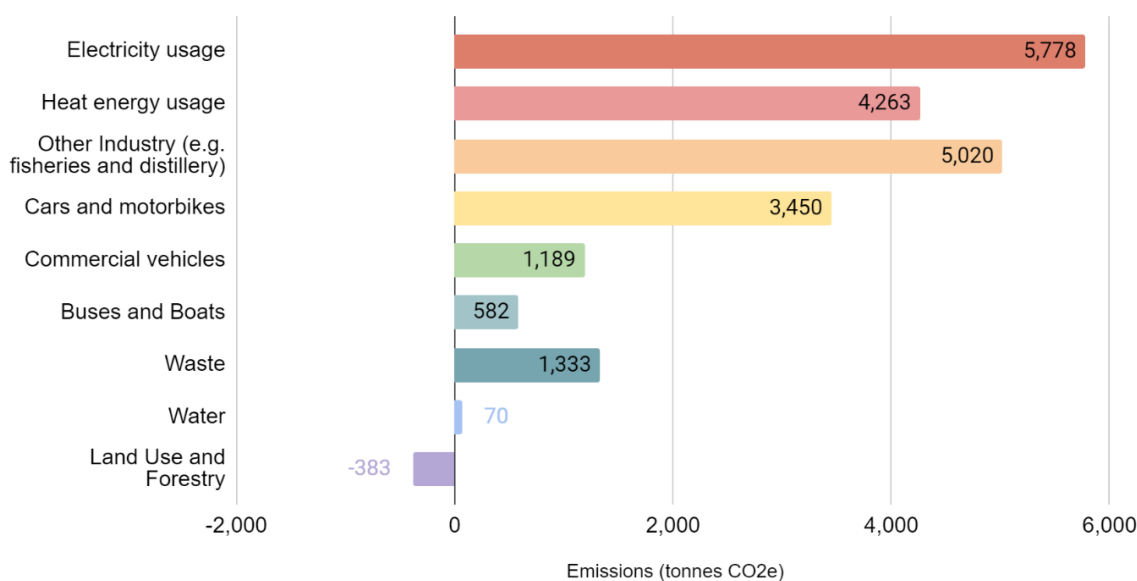


Figure 1: 2019 Mull Archipelago “addressable” emissions by sector (t CO<sub>2</sub>e) (excludes ferries & livestock)

### Community Vision

In May 2023 a series of workshops were held across the islands to co-create a low carbon community vision. Figure 2 provides an overview of the key pillars (*themes*), pathways (*general actions*) and goals (*specific ambitions*) as developed with community input.

Key areas where community-led decarbonisation can have notable impact include:

- **Energy Generation:** Community-owned on-island energy generation, particularly electricity generation with a focus on on-island use of energy (“Direct Supply”).
- **Domestic Energy:** Collective action and purchase can reduce the costs associated with implementing home energy efficiency measures, heat pumps and/or rooftop solar PV.

- **Low Carbon Transport:** Electric Vehicle ownership is expected to rise to ~425 EVs by 2030, and communities can enable this through supporting EV charger installation and shared journey projects (car clubs, promoting car sharing, etc.).

Areas where the island communities may have less control but should still be considered priority decarbonisation actions are:

- **Low Carbon Ferries:** Hybrid ferries only reduce ferry emissions by ~20%. Longer term technological breakthroughs are required to decarbonise ferries.
- **Electricity Network Upgrades:** Grid constraints are a critical barrier to new renewable generation. Until this is addressed by network upgrades, progress can be made by utilising innovative flexibility solutions.

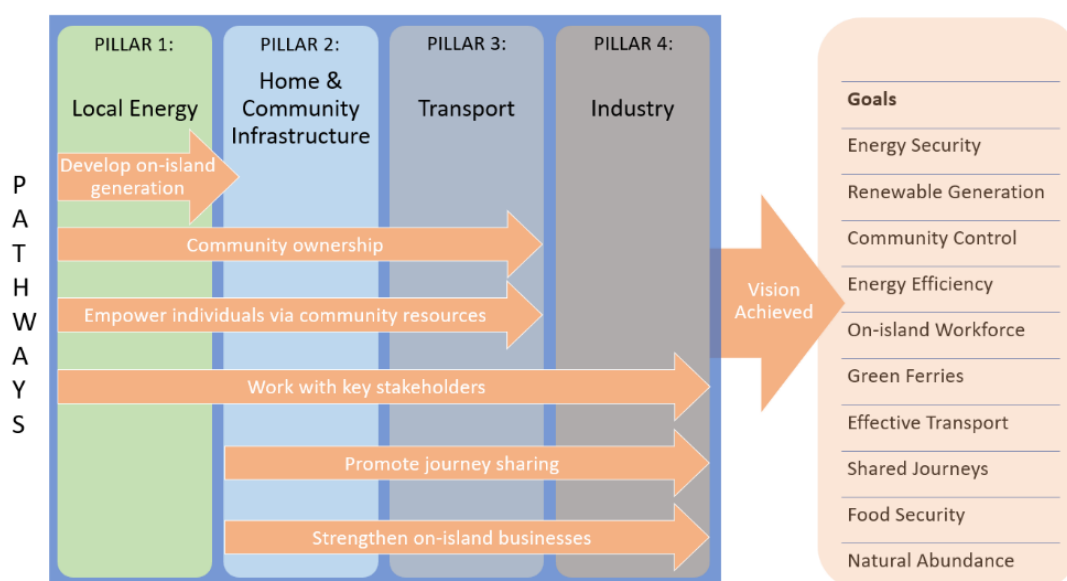


Figure 2: The Clean Energy Transition Framework

## Next Steps

1. Engage island communities in the CETA process, promoting and sharing the agenda via presentations, promotional campaigns, and a call to action.
2. Share the CETA with key stakeholders (e.g., local council, SSEN) and engage their support.
3. Recruit more local residents and stakeholders to the Transition Team, tasked with monitoring progress and ensuring delivery in line with the CETA monitoring framework.
4. Decide on the most viable and priority strategies and projects to pursue from those proposed.
5. Establish the governance structures required for those actions, such as project-specific community entities or steering groups.
6. Use the CETA funding opportunities guidance to identify for onwards support and apply for funding.



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