

**Shetland Islands Council**

**Key Carbon Reduction Actions**

**January 2020**

## Shetland Island Council - Proposed Approach

Described in more detail in the “Climate Change - Strategic Programme” reporting January 2020.

That programme recommends the Council;

- Adopts a “proactive” approach to Climate Change mitigation and adaptation in Shetland.
- Proposes a range of immediate actions and priority areas
- Emphasises that it is essential to act in partnership with other agencies, business and communities to be successful.

*See Climate Change - SOP section 4.2 & draft PID*

## Key Action - Energy Efficiency & Community Recycling

- Accelerate current energy efficiency, energy conversion, waste reduction and reuse initiatives, within the Council and across the community.
  - Timing - this is a core long term foundation for Council and community behavioural change and needs to be progressed from now, through 20+ years.
  - Actions / Outcomes -
    - Support “Climate Change Conversations” across the community
    - Act to double the pace of domestic energy efficiency upgrades
    - Promote commercial energy efficiency actions, particularly for SME companies.
    - Ensure all Council new builds / refurbishments prioritise zero carbon
    - Accelerate roll-out of electric vehicle charging points.
    - Increase Electric / Pilot hydrogen vehicles in the Council fleet
    - Intensify community recycling and reuse initiatives.
    - Prepare and implement a Green ports and harbours plan

## Key Action - Energy Efficiency & Community Recycling

- Accelerate current energy efficiency, energy conversion, waste reduction and reuse initiatives, within the Council and across the community.
  - Potential Council contributions;
    - Facilitative community engagement on climate change
    - Maximise carbon impact from spend of existing Council replacement and renewal budgets
    - Provide support to access external funding
    - Potential pilot or trial project investments through Change Fund
    - Options to further extend / target / accelerate efficiency actions through individual business cases

## Key Action - Green Internal Ferries and/or Fixed Links

- Internal ferries are 50% of the Councils carbon emissions;
  - Timing - Conclude the funding and implementation plan for “Fair Ferry Funding” with the Scottish Government, including a delivery programme across the next 2 - 7 years, ensuring fixed links are also properly considered as alternatives.
  - Outcomes / Actions;
    - Renew all internal ferries with zero-carbon vessels, or zero-carbon capable within 10 years.
    - And / or replace internal ferry routes with fixed links.
    - Provide renewable power sources for vessels at all ferry terminals.
    - Provide renewable power sources for vehicles at all ferry terminals.

## Key Action - Green Internal Ferries and/or Fixed Links

- Internal ferries are 50% of the Councils Carbon emissions
  - Potential Council contributions;
    - Secure Fair Ferry Funding agreement
    - Conclude and implement the internal ferry renewal programme
    - Pilot project support including research into practical alternative fuels
    - Research support to translate marine lessons learned / support of linkages across to commercial marine sectors
    - Conduct fixed link research and progress options for future funding through national infrastructure planning

## Key Action - Strong / Smart / Green / Affordable Electricity Grid

- Support the design and delivery of a strong, smart, green internal electricity distribution grid; one which reaches across all of Shetland, and enables further public, community and commercial “greening”.
  - Timing - Reliable green electricity would appear to be a fundamental prerequisite for most transition opportunities. Target for replacement of Lerwick Power station is 2025. Planning local grid strengthening needs to be before that; grid build out would also ideally be before then too, but most likely after.
  - Actions / Outcomes;
    - Contribute to the defining the requirements and design for a strong, reliable, smart, green and affordable electricity grid across the whole of Shetland that can integrate with community generation and use.
    - Integrate community scale projects into the Shetland Energy Hub project to emphasise Shetland based solutions
    - Support research and learning from other areas that are advancing green energy through “smartening” constrained electricity grid situations

## Key Action - Strong / Smart / Green / Affordable Electricity Grid

- Support the design and delivery of a strong, smart, green internal electricity distribution grid; one which reaches across all of Shetland, and enables further public, community and commercial “greening”.
  - Potential Council contributions;
    - Campaigning and facilitation
    - Support for research
    - Input to ensure the new local grid is designed to meet Shetlands needs
    - Support pilot project work / linkages across to commercial sectors
    - Alignment of Council transition planning and implementation with new grid capacity and smart capabilities.



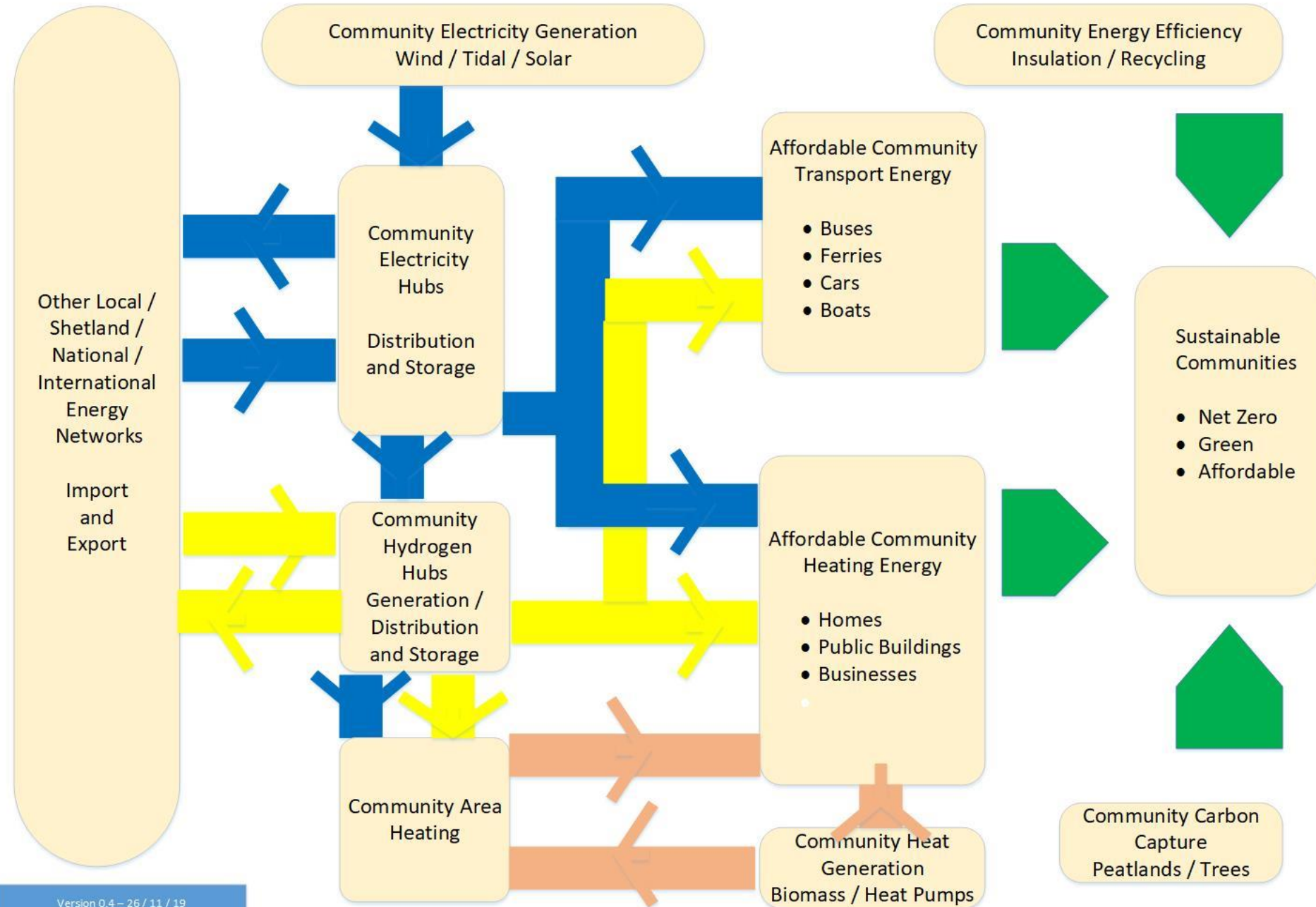
## Key Action - Facilitate Community Energy Networks

- Facilitate the emergence of Community Energy Networks across Shetland. Ensure these networks can interlink with a green and strengthened Shetland Electricity Grid and complement / enable local energy efficiency, recycling and carbon capture initiatives.
  - Timing - Understanding opportunities, issues and limitations with communities over the next 5 years through the research, development and deployment of community pilots.
  - Actions / Outcomes;
    - A range of community energy networks that tap into community energy generation opportunities
    - Community involvement in delivery to contribute to reliable and affordable green energy across the whole of Shetland.
    - Achieve five community generation projects by 2025
    - Achieve a further five by 2030.

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  - Potential Council contributions;
    - Support for research on potential and opportunities
    - Support to secure external funding for local initiatives
    - Some pump-priming e.g. new technology trials or possible participation in community carbon capture (peatland restoration) or similar community initiatives
    - Community engagement and facilitation support
    - Support to identify community arrangements that facilitate community involvement and benefit from Local Energy networks
    - Support research and learning from other areas that are advancing green energy in constrained geographies

# Shetland Climate Change – Community Energy Networks



## Key Action - Support Transition in Key Commercial Sectors

- Support partners to plan and deliver energy reduction / transition in the key commercial sectors which are the big Shetland carbon emitters / energy users. They must identify solutions to remain competitive and become compliant with emissions targets.
  - Timing - The challenges are substantial and actions are likely to need to be sustained over an extended time period.
  - Actions / Outcomes;
    - Support the development of sectoral plans that address the particular needs of;
      - Fisheries
      - Aquaculture
      - Agriculture
      - Commercial Transport
      - Aviation
      - Oil & Gas

## Key Action - Support Transition in Key Commercial Sectors

- Support partners to plan and deliver energy reduction / transition in key commercial sectors.
  - Potential Council contributions;
    - Mainly facilitation and assistance in co-ordination
    - Possible “Island Proofing” lobbying and campaigning
    - Research support
    - Pilot project support
    - Linkages from any similar Council activity across to commercial initiatives
    - Assistance in learning lessons from communities with similar industry sector and geographical challenges

## “Just Transition”

The Scottish Government have emphasised that the transition away from dependence on hydrocarbons should follow “Just Transition” principles, which they summarise as;

- plan, invest and implement a transition to environmentally and socially sustainable jobs, sectors and economies, building on Scotland’s economic and workforce strengths and potential
- create opportunities to develop resource efficient and sustainable economic approaches, which help address inequality and poverty (including fuel poverty)
- design and deliver low carbon investment and infrastructure, and make all possible efforts to create decent, fair and high value work, in a way which does not negatively affect the current workforce and overall economy

## Key Action- Just Transition / Energy Affordability

- Campaigning at all levels to ensure that future developments recognise that energy affordability is already a key issue in Shetland, and ensure that progress on that issue is designed into all significant proposals and solutions
  - Timing - Importance of designing “Just Transition” principles in from the start, especially in electricity grid strengthening & Community Energy Networks.
  - Actions / Outcomes;
    - Prepare and support a Shetland Integrated Energy Plan to tackle the current inequalities in energy affordability and the reskilling required to make new energy systems work/re-engage people whose jobs have been affected by transition.

## Key Action- Just Transition / Energy Affordability

- Campaigning at all levels to ensure that future developments recognise that energy affordability is already a key issue in Shetland, and ensure that progress on that issue is designed into all significant proposals and solutions
  - Potential Council contributions;
    - campaigning support
    - research support
    - pilot project support
    - community engagement support