Executive Summary

At a time of rapid global energy transition, Shetland needs to be clear on its ambitions for clean, secure and affordable energy. We need to transform the way energy is generated, transported and used here, and to consider how we engage with energy project development. With our clean energy resource and established skills base, energy transition offers a huge opportunity to deliver benefits to Shetland's people, workers, communities and the wider economy. Shetland's role in energy transition is of national importance, as it has been for the past 50 years.

The Shetland Net Zero Route Map¹ prepared in 2022, provided a routemap for how Shetland as a whole can work towards achieving net zero emissions. Highlighting the magnitude of the challenge across different fuel types and sectors.

Our vision is that by 2045:

- We will have full access to clean, affordable and secure energy produced in Shetland.
- Energy Developers will have fully engaged with our Energy Development Principles across all four themes through project development, delivery and decommissioning.
- Shetland continues to have a skilled workforce and strong supply chain, building on the foundations which are currently in place.

Shetland has a long and successful history in the energy business, achieved through commitment to a number of key principles, which recognised all parties' legitimate interests and concerns. In order to deliver the vision we need to emphasise cooperation and collaboration, build on the successes of the past and understand why unsuccessful ventures did not work.

The interim Energy Strategy sets out the components of energy transition for Shetland, considering the current position and looking to the future for each, with associated action areas. These components highlight a range of interlinkages and dependencies.

Energy transition will impact all aspects of life in Shetland. While there are many routes to net zero, we need a route which will deliver secure affordable energy, create and retain local wealth to enable Shetland to remain a viable place to live and work. In order to do this we will need to grow capacity within our community, including the skills, accommodation and enabling infrastructure.

The development of the energy strategy has faced the challenge of changing national priorities in relation to energy transition. Changing priorities in energy transition will continue to be a challenge, particularly the balance between reaching net zero and energy security. However, within the wider lenses of seeking affordable energy and the development of our own Energy Development Principles, we can press forward to achieve a just energy transition for Shetland.

In addition to the climate emergency which is the basis for the requirement to reach net zero and the need to mitigate and adapt to climate change. We are also facing a biodiversity crisis. It is therefore essential that developments consider environmental protection throughout the stages of development, delivery, operation and decommissioning. In addition, a holistic approach is taken to developments to promote cooperation and collaboration which should reduce the overall cumulative impact of the developments and associated infrastructure. This is in line with the overarching policy principle from NPF4, Local Development Plans and Planning.

¹ https://www.shetland.gov.uk/downloads/file/6460/shetland-net-zero-route-map

The four long term outcomes of the Shetland Energy Strategy are to:

- Reduce emissions
- Secure affordable energy
- Create & retain local wealth
- Develop Skills and capacity

Reducing emissions

We need to take action to transform the way we generate and use energy along with considering how energy is stored and transported.

The renewable energy generation potential in and around Shetland far exceeds our local demand and, as we are remote from the energy markets, alternative business models need to be developed. These models will require taking a whole system approach to energy infrastructure, to reduce the risk of duplicated or sub-optimal infrastructure and minimise the impact on the local environment.

Targets

The UK and Scottish Governments have set ambitious targets for both energy generation and for the use of energy. Such as the path to zero emission vehicles and for the decarbonisation of oil and gas. Shetland's role in contributing towards these targets is unclear but we must ensure that any proposals are holistic, taking the whole energy system into consideration. We will follow the energy hierarchy to ensure the most appropriate use of energy across all of the different sectors.

Secure and affordable energy

In addition to the decarbonisation of energy, we must also ensure that energy is secure and affordable.

The three factors driving affordable energy are:

Energy Consumption

Domestic Household energy consumption in Shetland is nearly 150% higher than a typical domestic property in the UK.

The cost of energy

Due to the high use of electricity because, like most rural areas, there is no access to the UK gas grid and the price of electricity is around three times the price of gas.

Another factor is the vast majority of energy (petrol, diesel and kerosene) used in Shetland needs to be imported at additional cost.

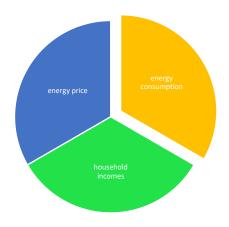


Figure 1 Affordable energy tri-challenge

Household incomes.

The Shetland Partnership report that according to CACI paycheck data (2021), 47% of household in Shetland do not earn enough to live well, based on the minimum income standard for remote and rural areas².

² <u>Households in Shetland who do not earn enough to have an acceptable standard of living – Shetland</u> <u>Partnership</u>

Targets

The Scottish Government have set a statutory target for no more than 5% of households being in fuel poverty by 2040. This is particularly ambitious for Shetland as the most recent official figures from 2019 suggest 30.9% of households in Shetland were in fuel poverty and this figure predates the significant price increases we have seen in recent years. We will ensure we have full access to clean, affordable and secure energy produced in Shetland. Using the Energising Shetland programme agreed by the Council in September 2023 as the overarching mechanism.

Creating and Retaining local wealth

To secure a just transition on the route to net zero that benefits everyone we must support our existing industries to decarbonise and remain competitive. We are taking a "Team Shetland" approach to new energy developments based on the set of energy development principles approved by the Council in December 2022. These principles are now being developed into guidelines which can be used in discussions with developers and the four themes are summarised below.

Environmental Protection	Local Supply Chain Integration
 Climate Change impact and mitigation Impacts and protection of wildlife and bio- diversity on and around Shetland Protection of the Shetland landscape and seascape and containment of impacts on it 	 Jobs in Shetland Contracts and opportunities for Shetland businesses Commercial Infrastructure Skills and Training for current, and new,
	Shetland residents
Sectoral Co-Existence	Benefits to the Shetland Community
 Competition for mutually important locations Impacts on the sustainability of our key natural resources Any other beneficial or detrimental interactions between sectors 	 Fair Share of value from all developments, offshore and onshore Financial Benefits to the community Product Benefits; e.g. affordable energy for Shetland households Public Goods Benefits

Targets

The UK and Scottish Governments have set out their plans for economic transformation in relation to their net zero targets. We need to build on our strengths and, along with supporting our existing industries to decarbonise and remain competitive, we must also look at opportunities for maintaining future prosperity. Our main mechanism for this will be using and developing our Energy Development Principles to engage with energy developers within the broad context of our community's needs.

In addition, we require a coordinated approach to support all of our local industries to reduce their emissions and adapt to the opportunities and challenges associated with energy transition. This will require a mixture of approaches depending on the industry and challenge faced.

Skills and capacity development

Understanding the current and future skills and capacity needs of the net zero transition is critical to a skilled workforce and economic growth. Energy transition will impact everyone across society and as we are all starting from a different position there can be no single set of actions which can be applied and followed. It is however essential that we ensure no one is left behind and a fully just energy transition is achieved.

One key lesson from the past is that areas which have seen abrupt unmanaged transitions tend to take decades to recover and the impacts are far reaching. As we know we are entering a period of huge transition, so it is therefore vital that our people are supported to engage and empowered to take action.

Target

The Scottish Government has recognised the importance of achieving a Just Transition to Net Zero through the development of their Energy Strategy and Just Transition Plan³. As energy transition for Shetland will be significantly different to other communities across Scotland we need to prepare our own Just Transition route map.

We must build our own roadmap for transitioning jobs and skills based on the unique circumstances of a rural, remote island.

Action summary as per Section 11 Conclusions

Overarching

Governance and Leadership - In progress. Dedicated Energy Steering Group (working title) and sub groups being designed.

Communication - Good communication is key to enabling engagement and collaborative action on energy transition. A revised communications plan will be developed following approval of this interim energy strategy.

Delivering on the four long term outcomes

Reduce emissions – work on this has been initiated through the Shetland Net Zero Route Map which provides an overview of the magnitude of the challenge ahead and the level of action required to meet the target of net zero by 2045.

Action – Follow the energy hierarchy to ensure the most appropriate use of energy across all of the different sectors.

Secure affordable energy – work on this has been initiated through the Energising Shetland campaign. However the route to affordable is complex with various technical and regulatory challenges.

Action – Ensure we have full access to clean, affordable and secure energy produced in Shetland.

Create & retain local wealth – Work has been initiated on the Energy Development Principles, which were approved by Council in December 2022. These are now being developed into guidelines with strategic oversight to be provided by the Energy Steering Group.

Action - Advance the Energy Development Principles approved Dec 2022 as guidelines for engaging with Energy Developers.

³ Draft Energy Strategy and Just Transition Plan (www.gov.scot)

Skills and capacity development– The Shetland Green Skills group led by UHI Shetland has already been established, with a wide terms of reference to support the skills pipeline for green skills development in Shetland. Further work is required to ensure alignment on capacity development.

Action – Build our own roadmap for transitioning jobs and skills based on the unique circumstances of a rural, remote island.

Annex 1 provides a summary of the action areas across all of the sectors of energy transition considered within the strategy.

Energy Transition will impact everyone and we must ensure no one is left behind.