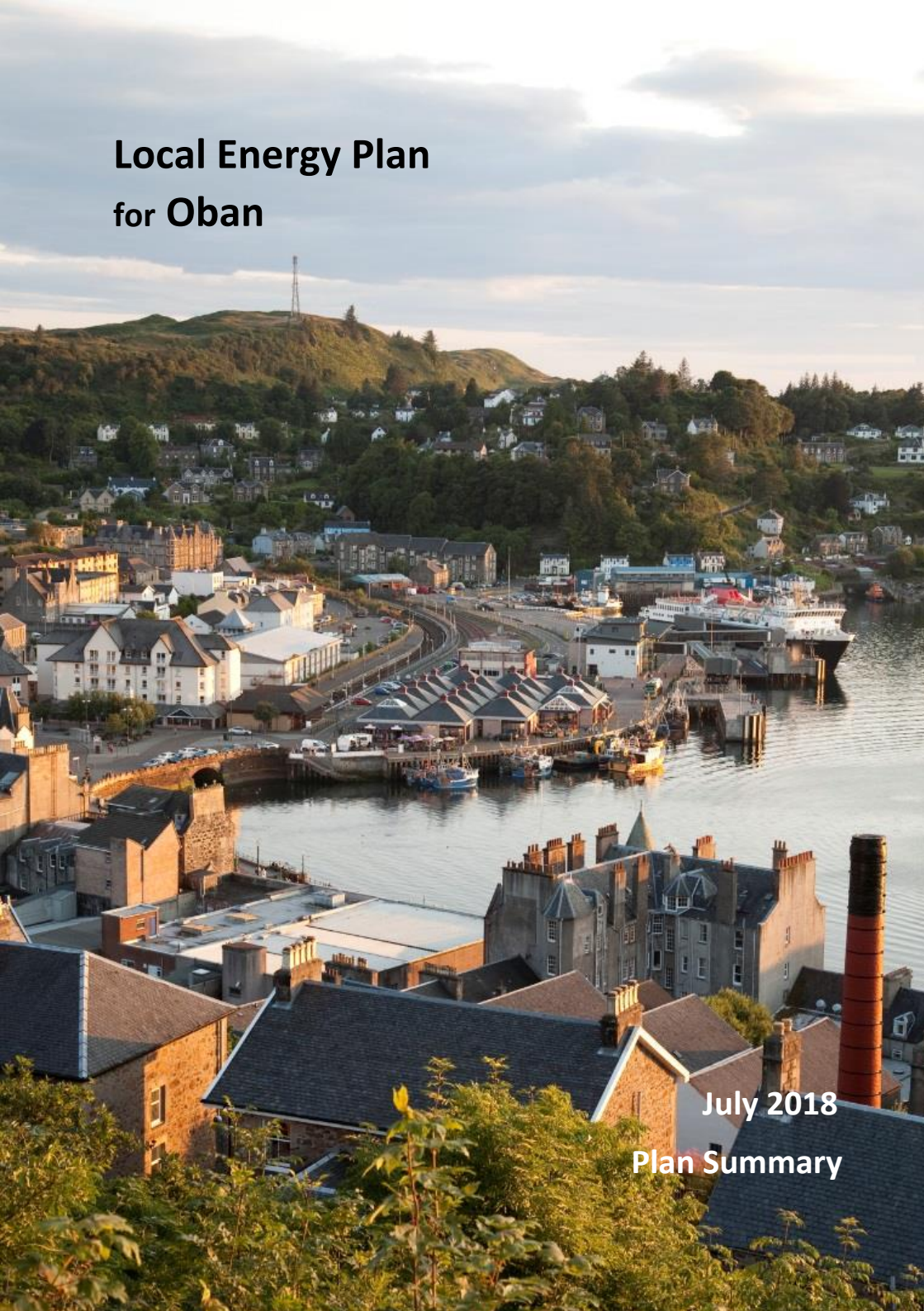
Local Energy Plan for Oban



July 2018

Plan Summary

A Local Energy Plan for Oban

This Local Energy Plan has been developed to enable the Oban community to look at its existing and future energy needs in terms of power, heat and transport and determine where it sees priorities for action.

It has been created by the community, rather than being developed for them by other bodies (e.g. local authorities or National Government).

The development of the plan has been led by a steering group that includes representatives from the the Oban Community Council, Argyll Community Housing Association, West Highland Housing Association, Atlantis Community Leisure, Bid4Oban, Argyll and Bute Council, Local Energy Scotland, Home Energy Scotland and ALIenergy.

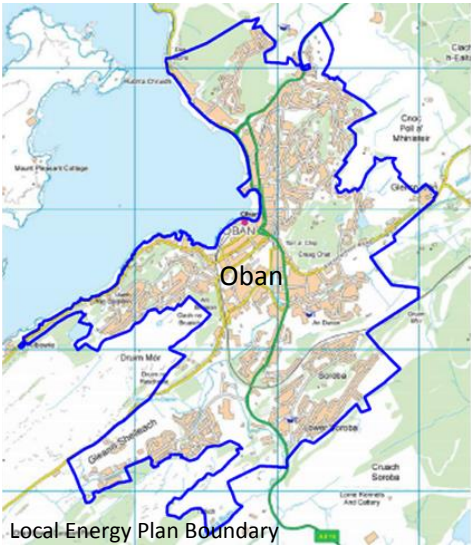
The Local Energy Plan provides a start in the community's engagement with its energy needs. It offers a focus for immediate opportunities that can be developed in the short term. It also provides scope for longer term planning for further changes in the future.

Approach to Local Energy

Our energy needs, and how these are met reliably, cost effectively and without long term environmental consequences, are one of the key considerations for every community.

For this reason the present and future energy needs of a community are most usefully considered in a 'whole system' approach. In this way the overlapping impacts of how we use power, heat and transport can be considered at the same time, rather than in isolation.

As part of this there needs to be a study boundary to provide a primary area of focus. This does not exclude the linkages with neighbouring areas or opportunities that may be nearby.



Identifying Community Needs

At the heart of the development of the Local Energy Plan are the views of the community of Oban. These have been sought by a combination of:

- working with a local steering group
- public events
- display noticeboards in the Library and Leisure Centre
- an online survey (144 respondents)

Community Views

Of the responses received during the development of this plan, the three main priorities that individuals wanted to see tackled by Oban's Local Energy Plan were:

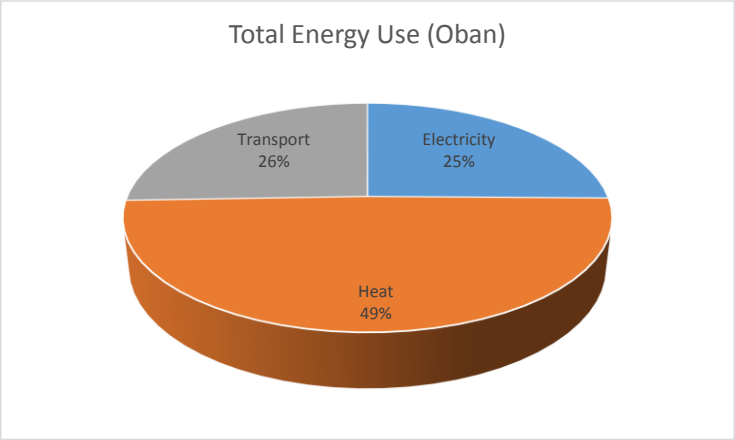
- cheaper energy bills
- warmer homes that are better insulated
- increased local energy generation

In terms of any proposed energy projects, individuals wanted those projects to be prioritised in order to deliver benefits relating to:

- lower fuel poverty
- reduction in electricity prices
- increased local energy generation

Energy Use for Oban

The annual estimated total energy demand is shown here.



Source	Annual Energy Use (GWh/yr)	Annual Carbon Emissions (tCO_{2e}/yr)
Residential, *of which:*	120.3	36,803
Electricity	24.3	9,348
Heating	53.9	15,737
Transport	42.1	11,718
Non-Domestic, *of which:*	44.4	14,567
Electricity	17.2	6,624
Heating	27.2	7,943
Total (All Sources)	**164.7**	**51,370**

Challenges to address

In meeting the energy needs of Oban a number of challenges have been identified:

High levels of fuel poverty

Argyll & Bute has an average fuel poverty rate at 45% (Scottish House Condition Survey, 2016)

Inefficient energy consuming housing

55% of dwellings are assessed as being in the least efficient Energy Performance Certificate (EPC) rating bands (E – G)

51% of dwellings are 35 or more years old.

Predominance of electric heating

57% of dwellings use electric heating; 8% heating oil

These are fuels with expensive tariffs for households

Grid constraint for larger local generation assets

Present capacity limits the size of local generation, such as wind turbines, that can be connected to the local grid

Transport links

75% of the population are economically active and typically travel to work by car

46% of households have access to at least one car or van

Regional tourism results in huge seasonal traffic flows through Oban

Proposed Actions – Energy Efficiency

Action	Description	Timescale
Promote energy efficiency and opportunities for support in demand management and resource efficiency	Raise awareness among community in Oban of existing support services available to households. Potentially use community day as a forum for this	Short
Promote support for energy efficiency and transport measures available to non-domestic organisations	Community to work with relevant agencies to promote energy efficiency and transport action among non-domestic organisations. To include promotion support offered via Resource Efficient Scotland and Energy Saving Trust	Short
Provide support and advice around tariff switching	Offer support & advice to households & businesses regarding electricity tariff switching and maintaining awareness of changes to tariffs in the market. Promote potential for heating oil club within Oban	Short
Continue residential programmes of fabric improvements & insulation	Seek support, advice and funding (where available) for ongoing improvement works to insulation and building fabric	Short

Proposed Actions – Energy Generation

Action	Description	Timescale
Encourage development of solar photovoltaic (PV) on existing properties	Conduct feasibility study to look at a potential solar PV installation programme and models for community involvement or investment	Short
Promotion of use of heat pumps and other renewable options in new build properties	Seek designs for new build dwellings that use heat pumps (air or ground source) and other renewable options where appropriate as the primary heat source alongside high levels of insulation and fabric	Short / Medium
Moleigh site energy development	Continue to explore the viability of energy generation potential at the Moleigh site and any potential community involvement in the development or operation of any installed generation	Short / Medium
Heat from wastewater (Corran Esplanade)	Maintain dialogue with relevant parties during any feasibility work to ensure that potential benefits for the local community are identified	Short
Anaerobic digestion	Explore viability to develop or support changes to local food waste collection and potential development of medium scale anaerobic digestion plant	Short / Medium

Proposed Actions – Transport

Action	Description	Timescale
Inter-agency car pool (ULEV/EV)	Explore initial potential of setting up an inter-agency car pool of electric vehicles (EVs) or Ultra Low Emission Vehicles (ULEVs), including role undertaken by existing local vehicle hire businesses	Short
Promote uptake of electric vehicles	Promote awareness of existing grant and loan schemes to support the increased uptake of electric vehicles in Oban. Explore funding opportunities to support capital investment in electric vehicles and leasing models that avoid costly expenditure for households.	Short
Active Travel Plan	Continue to seek traffic management and overall flow reduction measures within Oban. Linked to this seek to develop safer cycle routes and promote use of e-bikes with associated charging points.	Short / Medium

Proposed Actions – Smart Energy Systems

Action	Description	Timescale
Smart grid development	Seek understanding of potential development of localised grid management system. Initial exploratory talks with Scottish & Southern Electricity Networks regarding appropriate smart meter designs to be rolled out.	Medium
Hydrogen production	Explore potential local market for hydrogen and scale of energy required to produce it via electrolysis. This to inform view of potential community hydrogen production.	Short / Medium

Further Information

The detailed final Local Energy Plan is available within the community.

A copy of the plan is available for download at:

https://www.localenergy.scot/what-is-local-energy/local-energy-plans/oban-local-energy-plan/

The development of the plan has been funded as part of the COBEN project (**CO**mmunity **BEN**efits of Civic Energy), an EU Interreg (North Sea Region) funded programme with fifty per cent match funding through the Scottish Government's Community and Renewable Energy Scheme (CARES). CARES is delivered by Local Energy Scotland. Technical support and plan development has been undertaken by Wood Environment & Infrastructure Solutions UK Limited. Community consultation support has been provided by ALIenergy.