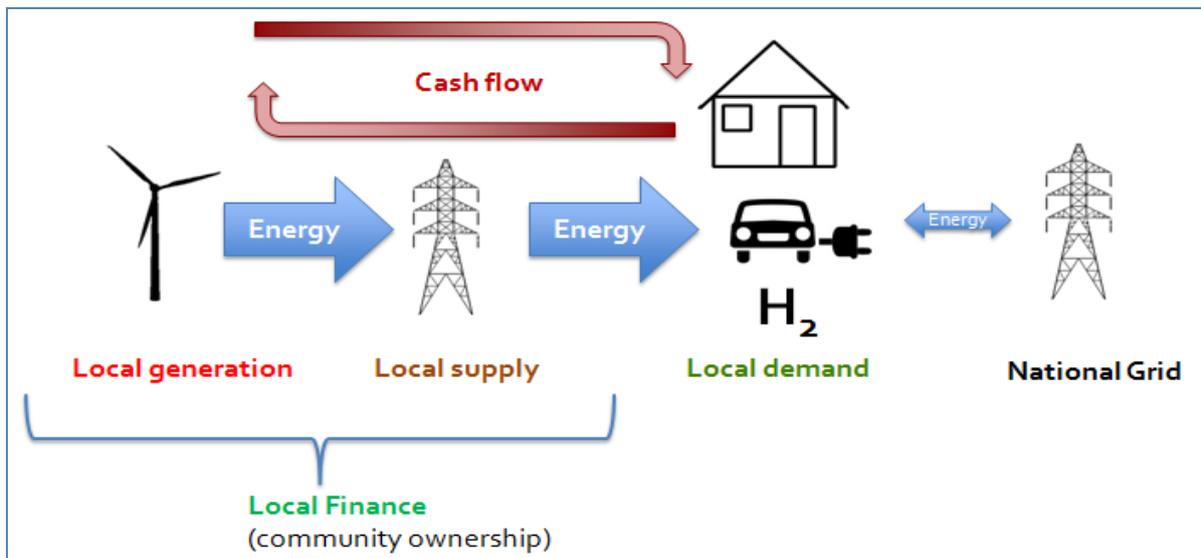


About Local Energy Economies

Community Energy Scotland has recently begun work developing an exciting new concept called the 'Local Energy Economy'. This idea describes a system where energy is generated, distributed and used locally, with the cost of energy infrastructure supported through local finance, such as community shares.

We believe that this local approach towards energy has great potential to increase the value of community energy projects, reduce reliance on the national grid and, most importantly, allow communities to become more resilient and address wider development needs.



The project is centred on the **4 Pillars of a Local Energy Economy: Local Generation, Local Supply, Local Demand and Local Finance**, and envisages economic flows that remain within the local area.

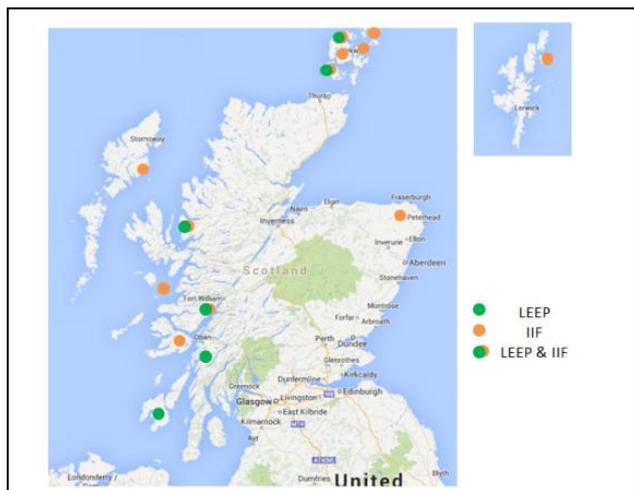
Local Energy Economies Programme

Community Energy Scotland has formed a partnership with Highlands and Islands Enterprise (HIE) to develop the 'Local Energy Economies Programme' (LEEP).

Through LEEP we are working with communities, industry and government to develop the profile and understanding of the Local Energy Economy concept. Central to this, we are working in direct partnership with community groups to deliver six practical demonstration projects which showcase the range of technological, regulatory and contractual innovation necessary to achieve a Local Energy Economy, as well as proving the related social and environmental benefits. Areas of interest include; private wire distribution, Demand Side Management, Active Network Management, electrification of heating and transport, electricity supply structures and local finance options.

CARES Infrastructure and Innovation Fund

Through this funding programme Community Energy Scotland is also working in partnership with 10 community groups (4 of which overlap with LEEP) to deliver similar projects to explore solutions to grid constraint.



Grid Constraints

There is a physical limit to the amount of power that can be carried by the wires in our electricity networks. You can think about transporting power through the electricity network like push water through a pipe; the diameter of the pipe sets a limit on how much water it can carry. The same is true of the copper wires in our electricity network; the diameter of the copper wires limits the amount of electrical power it can carry. People who work in the energy industry broadly refer to this limit as the *grid or network constraint*.

The companies which own and operate the electricity networks are called Distribution Network Operators (DNO). For northern Scotland the DNO is Scottish and Southern Energy and for southern Scotland it is Scottish Power.

We estimate that currently 65% of community energy projects in Scotland cannot gain a firm grid export connection for their planned installed capacity, because of unaffordable grid constraints.

This is forcing us and the community groups we work with to explore new and innovative ways of storing, distributing and using energy locally, with reduced reliance on the national grid to import and export energy.

Make your community a Local Energy Economy

The good news is that there is immense potential in the system to accommodate more renewable energy generation; we just need to be smarter about how and when energy is used.

If you have a project idea or are looking for more information please get in touch with us:

innovation@communityenergyscotland.org.uk