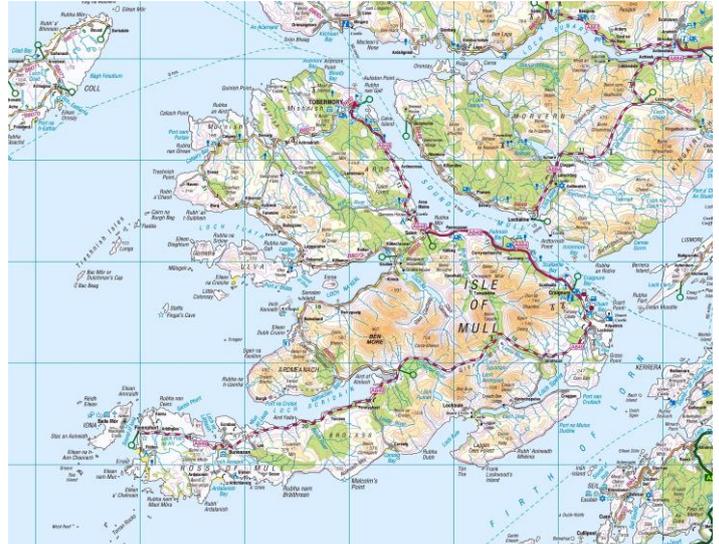


## The island of Mull

Mull is Scotland's fourth largest island at c.900 sq km, and part of the Argyll and Bute Council Area. The main ferry crossing from the mainland takes 45 minutes. Fishing, farming and forestry are all important to Mull's economy, but tourism is increasingly dominant. In summer, holiday makers and seasonal workers augment the sparsely distributed population of c3000. Over 500,000 annual visitors (including many day trippers to the neighbouring Isle of Iona) are attracted by the Islands' unspoiled scenery, abundant wildlife, rich cultural heritage and hospitable islanders.



## The starting point

The resilient wellbeing of remote island communities like Mull and Iona depends on reliable affordable energy. Mull has no gas network; electricity comes from the mainland. Extreme weather disrupts power and ferries. Fuel prices and transport costs are high. Over 25% of local households are estimated to suffer fuel poverty but upgrading domestic energy efficiency to certified standards is expensive on islands.

The Mull and Iona Community Trust (MICT) was established in 1997 as a community owned charitable company, committed to sustainable development and improving the quality of island life. See [www.mict.co.uk](http://www.mict.co.uk) As a founding member of the Scottish Islands Federation (SIF), MICT co-hosted a European Islands Energy Conference on Mull in 2012.

MICT withdrew controversial proposals for an income generating community wind farm, but explores other options to cut CO2. Biogas seems financially impractical. Potential sites for hydro schemes were identified in 2010, but mainland grid constraints limit export of island power before 2020.

In 2014, MICT Home Energy Advisors reported problems achieving 'affordable warmth' locally through Government backed schemes.



## Thanks to Smilegov

MICT registered two bankable projects with SMILEGOV: Garmony Hydro Scheme and a Virtual Private Network (VPN) proposal to overcome grid constraints which inhibit new local generation above 50 kW. See: [www.garmonyhydro.info](http://www.garmonyhydro.info) and [www.accessproject.org.uk](http://www.accessproject.org.uk).

Successful application for Scottish Government funding for the VPN project (re-titled 'ACCESS' - Assisting Communities to Connect to Electrical Sustainable Sources), cited opportunities to share outcomes widely through SIF and SMILEGOV networks.

SMILEGOV also enabled SIF to build local capacity to undertake Island Energy Audits within our Scottish 'cluster', to inform enhanced energy planning. Mull's draft report presents useful baseline data, anticipating further research.

Thanks to SMILEGOV, 18 Estonian islanders visited Mull for 4 days in June 2015, to exchange information and ideas about sustainability.

## This is what we achieved so far

During SMILEGOV, hydro-electric project plans were fully developed and implemented: Garmony came online in June 2015.

Garmony's Community Share Issue raised over a third of total project costs. Details were networked through SIF and SMILEGOV.

The £2m+ ACCESS project will use all Garmony power locally, by 2016. 100 island households recruited in 2014 and surveyed in 2015, will soon have new electric heating systems installed, featuring integral telemetry.

Through SMILEGOV, the scope and benefits of ACCESS were extended to Iona, also a member of SIF's SMILEGOV islands cluster.

## Future hopes and expectations

ACCESS applies smart solutions to Mull's grid constraints: A virtual district heating system, fuelled by community power.

Garmony's variable outputs will be transmitted via existing infrastructure to match flexible new local demand. ACCESS pioneers technologies to remotely monitor and automatically switch to Garmony electricity when it is available.

Grid issues, fuel poverty, low carbon energy and more is thus being strategically addressed on Mull, in increasingly integrated ways.

The hope is that trials on Mull will inspire and inform new energy projects here and overseas.