

DTA Scotland

GRASS-ROUTES

COMMUNITY PATHWAYS TO SUSTAINABILITY

Case studies:

1. Isle of Eigg Heritage Trust
2. Garmony Hydro, Mull & Iona Community Trust
3. Greener Kirkcaldy
4. Newlands Community Development Trust

GARMONY HYDRO, MULL & IONA
COMMUNITY TRUST



MULL & IONA COMMUNITY TRUST

The community energy sector in Scotland is thriving, with capacity up 16.7% over the 18 months to December 2020.¹ At this time, Scotland recorded 853 megawatts of community-owned generating capacity from over 25,000 installations.

One example of community-owned renewable generation is Mull and Iona Community Trusts' (MICT) Garmony Hydro Scheme, situated on the island of Mull. In 2010, local residents took the decision to develop renewable energy generation on the island with a view to addressing both local energy security and the climate crisis. Owing to the island's rich wildlife – more specifically, the golden eagle and white-tailed eagle – it was decided that the community would eschew wind in favour of hydroelectric generation.

Through a combination of loans and a community share offer totalling £500,000, the community raised £1.5 million to cover the project's capital costs in one of the earliest examples of community share offers for renewable energy generation. Completed in 2015, the scheme now generates 1,100 megawatt hours per year – enough to power approximately 285 homes.²

THE ACCESS PROJECT

In rural and remote areas of Scotland, communities are less well-served by the national grid than in central urban areas. At the time of Garmony Hydro's construction, the west coast grid was already saturated. Heavy restrictions on connecting new generating capacity constituted significant practical and legal impediments to Mull's long-term viability.

Following the commissioning of the hydro scheme, and to overcome these challenges, MICT worked with Community Energy Scotland to devise smart technology that would link generation to real-time consumption, to keep the net impact on the grid neutral. To the satisfaction of regulators, this allowed Garmony Hydro to meet the needs of local residents and businesses, in a climate-friendly manner, and without overloading the grid.

While technologically challenging at the time, this approach could now be easily replicated and offers a less disruptive and environmentally damaging approach than installing new lines of pylons across the countryside. It also had the added benefit of allowing MICT to install new, efficient storage heaters in 70 homes, helping to provide affordable, and carbon-neutral heating across the island.

This enterprising approach appears to reflect the Green Alliance's vision of a 'digitised' smart system of community energy, providing the flexibility to match

¹ (Energy Saving Trust, 2020)

² Calculated on the basis of average energy consumption in Scotland of 3,850 kilowatt hours per year (Statista, Average

domestic electricity consumption per household in Great Britain in 2019 by region, 2020)

supply with demand.³ This sort of smart technology is central to the roll-out of renewable and community-based energy, and promises improved distribution and security of energy-provision while simultaneously minimising wastage.

LOCAL IMPACT

In addition to the initial local stimulus of £1.5 million of investment and construction, Garmony Hydro has had a wealth of longer-term benefits for the local community. The Green Alliance has shown previously that “as well as their low carbon credentials, [community energy projects] have the potential to offer big economic and social benefits as the income they earn can be captured and retained within the community.⁴ Garmony Hydro is no exception: its Waterfall Fund, run as a standalone charitable organisation, sees profits (net of maintenance costs and loan repayments) re-invested within the community. The fund’s primary principles and goals were to strengthen Mull’s financial sustainability, though these were revised and expanded owing to the Covid-19 pandemic. The fund has paid out a total of £195,000 since 2016, with yearly profits rising as the capital loan and the burden of servicing these debts are reduced. As a result, net profits in 2020 rose to over £50,000.

Over its lifetime, the fund has paid out a dozen business start-up loans to boost the island’s economic potential, and the past year saw funds redeployed to a new Covid-19 hardship fund. The Covid Crisis Fund, financed in large part by Garmony Hydro, paid out

£47,000 in total to households hit by the pandemic and businesses that needed to respond to the crisis. An additional Winter Hardship Fund has supported 40 families through £9,000 of small grants.

COMMUNITY OWNERSHIP AND COMMUNITY SHARES

Garmony Hydro was one of the earliest examples of a community share offer for renewable energy generation, with a subsequent spate of similar projects seen across Scotland. Through community ownership, the trust and residents have secured a much greater sum of profits than would have been the case under a community benefit scheme from a private provider.

The share offer itself also has notable benefits for local residents. Local residents were given first refusal on buying into the share offer, with two thirds of holders resident on the island. Owing to the Scheme’s one-member-one-vote rules, democratic control of the Scheme rests with the community itself. In addition, this arrangement also serves to generate decent financial returns for residents, offering 4% interest at a time when commercial interest rates lie close to zero.

Garmony Hydro was made possible by the now-scrapped Feed-in Tariff (FIT) that ensured viability for small-scale producers. MICT report that a similar or second scheme could have considerable benefits – for both the environment and the local community – but in the absence of these financial supports would not be viable for MICT or many other development trusts. The FIT closed to new applicants in 2019.

WIP Economics have argued that “Given the right policy support [...] the community energy sector could

³ (Green Alliance, 2018)

⁴ (Green Alliance, 2018)

grow to between 12-20 times larger than today by 2030.”⁵ Similarly, according to the Scottish Power Energy Networks (SPEN) a community energy revolution of 4,000 new projects could generate enough power for 2.2 million homes, 1,000 new jobs, and £1.8 billion worth of economic activity, all while reducing carbon output by 2.5 million tonnes by 2030.⁶ However, in the absence of effective financial support from the UK or Scottish Governments, this appears unlikely.

There appears to be a loss of momentum in the community energy sector that demands renewed policy-attention. An initial Scottish Government target, set in 2011, of 0.5 gigawatts of community generating capacity by 2020 was exceeded by 2015. However, progress appears to have slowed since, with Scotland failing to meet its revised 2020 target of 1 gigawatt, and currently sitting at 43% of its 2030 target of 2 gigawatts.⁷

CONCLUSION

The Garmony Hydro Scheme and Waterfall Fund have had a hugely positive impact for Mull & Iona Community Trust – in terms of enhanced local recognition and reputation – but even more so for the local community: households have benefited from clean energy and improved, affordable heating as well as hardship funds, and the community has benefitted from sustained investment and business creation.

MICT report seeing themselves as an effective way to support the realisation of governmental objectives, in ways that best serve the local community and its needs. Their expert local knowledge allows them to tailor plans accordingly to take account of local assets, needs and priorities. In the case of Garmony Hydro, MICT is supporting Scotland towards its 2045 net-zero target whilst also strengthening the island’s long-term economic viability.

Community organisations like MICT are also well-placed to facilitate and encourage individual behavioural changes towards these aims: the Access Project and the installation of storage heaters would almost certainly not have happened, or not have been as successful, if left to a private provider. MICT’s local embeddedness and determination drove innovative solutions to technical challenges and lent credibility to the proposed scheme among potential consumers.

However, if community organisations are to effectively support the Scottish Government to meet its aims, they will require a supportive policy and finance landscape. As long as energy remains a reserved competency, the Scottish Government may struggle to replicate the scrapped Feed-in Tariff, but a capital grant for community renewables could help to set in motion an inclusive and democratic transition to net-zero.

⁵ (WIP Economics, 2020)

⁶ (Usave, 2020)

⁷ (Energy Saving Trust, 2020)