

## **Bringing sustainable energy to remote communities on the west coast of Scotland**

### **Summary**

Ashden Energy Champions are organisations playing a central, catalytic role in making a range of energy efficiency and renewable energy projects happen at a local level in the UK. Their role can be in the form of advice, practical support, coordination or other involvement.

The west coast of Scotland has a scattered population, in villages, on islands and in isolated farms and homes. Argyll, Lomond and the Isles Energy Agency (ALIEnergy) has worked with communities in the region to establish the use of appropriate, renewable energy supply systems and improve energy efficiency. These include a wind farm on the island of Gigha, six biomass-fuelled community heating schemes, ground-sourced heat pumps in houses and community buildings and several micro-hydro systems.

The most visible achievement facilitated by ALIEnergy is the three-turbine, 670 kW wind farm which supplies 75% of the electricity needs for the island of Gigha. The Gigha community bought the island from the former landowner in 2002. The community became interested in the possibility of a wind farm to generate a long-term income for the Gigha Community Trust. ALIEnergy was able to give expert advice on the technical and financial aspects of wind energy; provide clear information and discuss concerns with community members; and help the Trust to secure a combination of grant and loan funding. The project was supported by all community members, and the wind farm installed in 2004. Revenue from electricity sales pays off the loan and provides a substantial contribution to the Gigha Community Trust. The Trust is using this to fund the less visible but equally important work of improving the energy efficiency and facilities of homes on the island.

The Argyll region has considerable and under-used fuelwood resources from forestry. ALIEnergy has brought this into use by supporting both suppliers and users. The small community of Lochgilphead has benefited from both retrofit and new-build wood-chip boilers. ALIEnergy helped the community swimming pool to replace their oversized (400 kW) oil boiler with a 200 kW wood-chip boiler. This system is currently managed by ALIEnergy and working very successfully. It will eventually be under the management of the pool. Nearby, homes and a respite care centre on a new estate developed by Fyne Homes, are heated by a district heating system run from a 460 kW wood-chip boiler. The supply to each building is metered and paid for using prepayment cards which are sold at the local shop. Four other biomass heating systems are in place, helped by the expertise of ALIEnergy, and several more are planned. It is essential that these systems have a reliable supply of wood-chip so ALIEnergy has also helped three local sawmills to diversify into wood-chip supply.

The role of ALIEnergy in these projects, and many others, is 'helping communities to make it happen'. In a short time they have become known and respected locally, so that individuals and communities will approach them to discuss ideas. Often their initial role is to use their experience on other projects to direct community enthusiasm to realistic goals. They can then support with more formal feasibility studies, help with sourcing funding, and bring practical knowledge of consultants, contractors and suppliers. One of the best ways of understanding the potential for a

renewable energy system is to see one in action, and ALIEnergy have organised visits to the Gigha wind farm by other island communities who are considering this option. Throughout their work, ALIEnergy emphasise the importance of energy efficiency, in parallel with renewable energy.

ALIEnergy also provides sustainable energy education in schools. Under a programme part-funded by Scottish Power, the ALIEnergy education officer visits every primary school in their region at least once per year to provide teaching programmes, competitions and resources for teachers. Such external support is particularly valuable in tiny community schools.

## **The organisation**

ALIEnergy was established as an Energy Agency by Argyll and Bute Council, in 2000, under the EU 'SAVE' programme. The Agency is a charity limited by guarantee, with a commitment to increase energy efficiency and the use of renewable energy, in order to sustain local communities. Steven Watson has managed ALIEnergy since it started, and currently employs two other full-time staff and two part-time staff

**Contact:** Steven Watson, ALIEnergy

**Email:** [steven@alienergy.org.uk](mailto:steven@alienergy.org.uk)

**Website:** [www.alienergy.org.uk](http://www.alienergy.org.uk)

## **Management, finance and partnerships**

At present, ALIEnergy is partly funded through grants from the local council and the Highlands and Islands Enterprise board. They are closely linked with the Scottish Community and Homes Renewables Initiative (SCHRI) which has been the main source of grant funding for many of their projects, and supports two of their staff. A Concordat with Scottish Power provides funding towards their education work.

## **Use of the Ashden Award**

ALIEnergy plan to use their Ashden Award to increase their ability to show sustainable energy technology to schools and communities. They plan to consolidate their current equipment on a mobile trailer, and to increase the range of systems which they can demonstrate.

*This report is based on information provided to the Ashden Awards judges by ALIEnergy; and findings from a two day visit by one of the Ashden judges to see their work in Scotland.*

*Dr Anne Wheldon, Technical Director of the Ashden Awards, May 2006.*

The Ashden Awards has taken all reasonable care to ensure that the information contained in this report is full and accurate. However, no warranty or representation is given by The Ashden Awards that the information contained in this report is free from errors or inaccuracies. To the extent permitted by applicable laws, The Ashden Awards accepts no liability for any direct, indirect or consequential damages however caused resulting from reliance on the information contained in this report.