



Notes from Members' meeting 19:45- 20:50

Tuesday 17th July 2018

Bridport Literary and Scientific Institute

1) Feedback and questions on the members' survey completed in May 2018- Derek Moss

Note- a copy of Derek's presentation will be placed on the DCE website in the Members section / AGM 2018

Derek thanked all members who had responded to the questionnaire, which was very useful to demonstrate the level of interest for a funding application for feasibility studies for 2 new projects. Peter Martin won the prize draw for a box of luxury House of Dorchester chocolates.

There was a question and discussion on the financial benefits to schools from the free and low cost solar electricity provided by Dorset Community Energy, e.g. do the schools and academies directly financially benefit or is the saving to Dorset County Council who purchase grid electricity on behalf of schools? Pete West agreed to investigate and also to offer a presentation to all school governors to explain the performance of the solar PV installations to date, financial savings and educational benefits.

2) Discussion and presentation on two new Dorset Community Energy projects proposed for August - December 2018 – Tom Burnett

Note – a copy of Tom's presentation will be placed on the DCE website in the Members section/AGM 2018

i) Feasibility study for renewable energy at the Bridport Co-housing Project

Tom Burnett explained that a funding application to the Rural Community Energy Fund for a feasibility study for renewable energy for 54 new build houses in development by the Bridport Co-housing group has been approved. It is proposed that the houses will be built to passive house standard and require only a small amount on additional space heating, approximately 1200 kWh per year, around a tenth of similar housing constructed 15 years ago. Tom will be providing financial modelling and co-ordinating input from several external consultants, including Damon Rand, a director of CEPRO, a Bristol-based company with previous experience of solar PV microgrids. Phase 1 of the feasibility has been completed. The 2 initial recommendations for consideration by the Bridport Co-housing group are:

- Not to install a mains gas supply, but instead householders could consider installing air source heat pumps, which would provide space heating and hot water and are lower carbon than gas. The heat pumps would be financed by home-owners who would receive the Renewable Heat Incentive grant over the following 7 years, which would effectively recover the capital cost. Operating costs would be low because of the passive house design. There would be a substantial saving to the housebuilder by not requiring a mains gas supply to the site.

There was a discussion on whether householders would prefer a gas supply for cooking with a gas hob (compared to an electric induction hob) and also a small gas condensing combi boiler for space heating and hot water, as a hot water storage cylinder would then not be required. It was pointed out that bottled LPG (Calor gas) could be cost effective for cooking (but not advised for space heating or hot water). A final choice is up to the members of the Bridport Co-Housing group.

There was also a question on whether solar water heating panels could be used for hot water. Tom Burnett replied that this option was considered but would take up roof space which otherwise could be used for solar PV panels.

- The second low carbon option would be to install a micro grid, i.e. all houses have electricity connections which are linked to a central sub-station. There is only a single connection point to the grid supply and a central storage battery would be installed. All housing would have roof-mounted solar PV panels which would allow electricity to be shared wherever it was needed among houses connected to the microgrid and also supplied at night through the central battery. Each house would have a single electricity supply meter as usual. The solar PV panels, battery, supply meters and microgrid would be owned, operated and maintained by a new not-for-profit company (not Dorset Community Energy). The benefit to householders would be low carbon metered electricity supplied by the local not-for-profit company at a lower cost compared to grid electricity (e.g. 80%- 90% of grid electricity cost). Back-up grid supply would be provided through the central connection point when needed.

There were a number of questions:

Malcolm Drew asked if there was likely to be shading of the solar PV panels and if the architects had specified roof trusses of structural strength to take the additional weight of the solar panels.

Derek Moss replied that all roofs are south facing and although there is potential shading in winter from a hill to the south of the site, initial estimates are that the roofs will not be shaded, although there could be less passive solar gain in mid-winter through south-facing windows. The architects have specified roof trusses suitable for the additional weight of solar PV panels.

There was a question on whether electric car charging points have been included in the scheme and also the option of vehicle to grid battery storage (which new Nissan cars can already offer).

Tom Burnett replied that this will be included in the 2nd stage feasibility study.

There was a question on the central car parking facility included in the design. Could a solar PV canopy be provided over the car park to add to the generation capacity and also supply electric car charging points?

Tom Burnett replied that this is a good suggestion and will be included in the 2nd stage feasibility study.

ii) Project for a new DCE share offer to finance solar PV on more schools and community buildings.

Tom mentioned that the Feed-in Tariff has been reduced by over 60% since the initial 16 Dorset Community Energy solar PV installations in 2015-16, making the economic viability of further installations more marginal. However Dorset County Council has developed a £2.2m Low Carbon Dorset grant programme offering 40% grants to eligible energy efficiency and renewable energy projects. The grants will be available until 2020 and open up opportunities for DCE to install solar PV on additional schools and community buildings.

Therefore a 2nd Rural Community Energy Fund grant application has been submitted to cover the 'at risk' feasibility study costs of identifying new sites for solar PV installations. It is hoped the feasibility study grant will be approved before the end of July.

AOB- There was a comment that Dorset Community Energy should do more to publicise activities and 'good news stories' in the local press.