



## **SUSTAINABLE DEVELOPMENT ADVISORY PANEL**

**MINUTES OF THE MEETING HELD AT PENALLTA HOUSE, TREDOMEN,  
ON THURSDAY, 26TH FEBRUARY 2015 AT 5.00 P.M.**

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PRESENT:

Councillor D. Havard - Vice Chair (Presiding)

Councillors:

M. Adams, Mrs P. Cook, C. Elsbury, S. Kent, C.P. Mann, J.A. Pritchard, P. Leonard.

Together with:

P. Cooke (Team Leader, Sustainable Development & Living Environment), S. Martin (Principal Contracts Officer (Energy)), S.M. Kauczok (Committee Services Officer).

### **1. APOLOGIES FOR ABSENCE**

Apologies for absence had been received from Councillors K. Dawson and K. James.

### **2. DECLARATIONS OF INTEREST**

There were no declarations of interest made at the beginning or during the course of the meeting.

### **3. MINUTES**

The minutes of the Sustainable Development Advisory Panel meeting held on 6th November 2014 were approved and signed as a correct record.

### **4. MAES YR ONN FARM - HOW IS IT PERFORMING?**

The Panel welcomed Simon Lannon, Welsh School of Architecture, Cardiff University, to the meeting to present a case study that had been undertaken by Solcer/LCBE on the off-grid Maes Yr Onn project at Manmoel.

Maes Yr Onn incorporates a range of green technologies that include solar photovoltaic panels, a biomass boiler, thermal store, rainwater harvesting and battery bank to store surplus energy. The project aims not only to provide a full off-grid energy and heat supply to the family who live there but also to prove the efficiency of the systems and how well they work on off grid conditions without the back up help of the electrical, gas and water grid. Since moving

into the property the family have been monitoring their energy use so that data can be gathered on behaviour and lifestyle changes required for the effective transition from grid to off grid living.

The systems installed include a 2.88 kWp capacity solar pv array across the south facing roof; a lead acid battery bank; diesel generator for back up electricity and to maintain battery charge levels when required; 20kW biomass boiler fed from the family's own woodland and a 1,200 litre combined capacity thermal store serving an innovative skirting radiator system. Rainwater is harvested from the main house as well as adjacent barns. A 5,500 litre water tank is passed through a UV purifier lamp and filters.

Detailed graphs showing the results of monthly and daily totals and averages of energy and water usage at the property were provided. It was noted that PV is the dominant energy source for over half the year. Appliance use in the house on average is 2.0 kWh per day – the BRE report quotes a figure of 6.7 kWh per day. The house monitoring has not included the services parasitic load including the water purification energy demand. The occupant is adapting the system to protect the batteries.

It was noted that during discussions with members of the project team the family had indicated that they did not feel as though they had had to make any significant changes to adapt to the new way of living. They were satisfied with the design of the house and had confidence in the pv, solar thermal installations. Their only concern was that of water consumption, particularly if a dry summer led to a period of drought.

Following the update on the Maes Yr Onn project, details were received of examples of retrofits of five different dwellings. Before and after pictures were shown of houses that had undergone retrofits, ranging from a pre 1919 solid wall end of terrace typical Welsh valley house to a 3 bedroom, semi-detached house built in the 2000s. Details were provided of energy consumption, costs and CO2 emissions before and after the retrofits. Pre and post test surveys examined fabric performance; occupant perceptions; appliance use diaries; monitoring of construction costs; measurement of thermal comfort; indoor air quality; local weather conditions and energy demand, supply and storage.

During the course of the ensuing discussion Members sought further information on various issues relating in particular to the renewable technologies used in the Maes Yr Onn project. The Chair thanked Mr Lannon for attending the meeting and for the very interesting presentation.

## **5. CYD CYMRU COLLECTIVE ENERGY SWITCHING SCHEME**

Steve Martin, Principal Contracts Officer (Energy), presented the report which sought Cabinet approval to sign up to the Cyd Cymru Charter “A Collective Energy Scheme for Domestic Homes in Wales”. The report was presented to the Panel for information following Cabinet’s decision on 21<sup>st</sup> January 2015 to sign up to the Charter.

Cyd Cymru is a collective energy switching scheme developed to offer people in Wales an opportunity to save money by coming together to buy fuel “in bulk”. The scheme was developed in 2013 by Cardiff Council and the Vale of Glamorgan Council, with support from Welsh Government’s Regional Collaboration Fund. The scheme is being delivered in partnership with Energy Saving Trust Wales, a social enterprise with a charitable foundation.

Currently, for each household that switches its supplier through Cyd Cymru, a fee is paid by the energy provider into a community fund. This fund is redistributed to local authorities across Wales based on the number of fuel switches in each area. The fund should be donated to local charities and in this respect a further report would be presented to Cabinet following the end of the financial year to determine how and which local charities would benefit.

Members were advised that officers were busy distributing leaflets and erecting posters to promote the scheme amongst staff and residents in the best way possible.

Following consideration and discussion members of the Sustainable Development Advisory Panel noted the report and the decision taken by Cabinet to sign up to the Charter.

## **6. ENERGY GRANTS – PRESENTATION**

The Panel received a presentation from Steve Martin, Principal Contracts Officer (Energy), on Energy Grant provision and the relevant projects that have been undertaken within the County Borough.

Details were received of Arbed projects that had been undertaken as part of the Phase 2 scheme. Arbed, which is in its final year, is a Welsh Government project which aims to reduce the amount of energy we use in our homes and to reduce energy bills whilst making homes warmer and more comfortable. Successful Arbed projects had been undertaken at Fochriw, Hollybush, Markham and Phillipstown (which was also part funded by ECO funding).

There is potentially £35m available from the Welsh Government ECO fund. Bids are requested from Welsh Government periodically and a collaborative approach is sought. Bids are assessed against a Welsh Government scoring matrix. There are three obligations under the ECO i.e. Home Heating cost Reduction Obligation (HHCRO); Carbon Emissions Reduction Obligation (CERO) and Carbon Savings Communities Obligation (CSCO).

The NEST scheme is available to private and private rented homes which are classed as hard to treat i.e. F and G rated. Someone in the household has to be on a means tested benefit.

Green Deals aim to make energy saving improvements to homes. Typical measures include solid wall insulation, cavity wall insulation, loft insulation, heating, draught proofing, double glazing and renewable energy generation. The Green Deal Home Improvement Fund is available for home owners in England and Wales. A Green Deal Advice Report or an EPC less than 2 years old will be required. £30m of vouchers are released on a quarterly basis and currently there is up to £5,600 available per household.

Reference was then made to solar photo-voltaic energy and the feed-in tariff earned for each kwh of electricity generated by the system. Finally, the Panel were provided with details of the Domestic Renewable Heat Incentive, which is a government financial incentive to promote the uptake of renewable heating among domestic consumers. It is targeted at but not limited to, homes off the gas grid. Those without mains gas have the most potential to save on fuel bills and decrease carbon emissions.

Following the informative presentation, Mr Martin responded to questions from members of the Panel on the issues raised.

The meeting closed at 6.37 pm.

Approved and signed as a correct record subject to any amendments being recorded in the minutes of the meeting held on 28th May 2015.

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CHAIR