

Cynulliad Cenedlaethol Cymru Pwyllgor Amgylchedd a Chynaliadwyedd	National Assembly for Wales Environment and Sustainability Committee
Dyfodol Ynni Craffach i Gymru?	A Smarter Energy Future for Wales?
Ymateb gan Ynni Cymunedol Caerdydd (Saesneg yn unig)	Response from Cardiff Community Energy
SEFW 10	SEFW 10



Cynulliad
Cenedlaethol
Cymru

National
Assembly for
Wales

Response to the consultation on: **A Smarter Energy Future for Wales?**

from: **Cardiff Community Energy**

Cardiff Community Energy is a community benefit society set up to renewable energy systems for community benefit. (www.cardiffcommunityenergy.co.uk)

1. We note that the Wellbeing of Future Generations Act places a well-being duty on public bodies in Wales.
2. We believe that a key part of meeting well-being goals is carbon footprint reduction by carrying out energy efficiency measures and by installing on-site renewable energy systems.
3. For this to be effective there need to be measurable targets and monitoring but also assistance for public bodies with understanding options, making good decisions and accessing finance. Local Partnerships (<http://localpartnerships.org.uk>) is already providing this kind of assistance.
4. Energy efficiency for public bodies can be funded through Salix (<http://salixfinance.co.uk>)and boosted by Green Growth Wales.
5. Roof-top solar PV could (and should) be fitted on most hospitals, schools, colleges, universities and other elements of the public estate in Wales. In most cases grid connection is unlikely to be a major problem. Hospitals are likely to use all generated electricity on site. Schools will export over weekends and school holidays. Through the Piclo scheme being trialled by Open Utility (www.openutility.com) it should be possible for electricity exported from schools to be sold on to other public estate users (such as council offices) at a discount. Roof-top solar on the public estate has great potential for raising awareness and acting as an exemplar to the private sector and to householders.
6. Rooftop solar can be funded by power purchase agreements (PPA). Here the company or organisation installing the system meets all of the capital cost. The building occupant pays for as much or as little as wanted of the electricity generated (at a discounted rate compared with grid electricity) and any surplus electricity is exported to the grid.
7. Currently solar PPA agreements depend on feed in tariff (FIT) which guaranties income for each kWh generated for 20 years from installation. In turn they typically offer electricity at about half current grid cost and guarantee a discounted electricity cost for 20 years.
8. Funding rooftop solar through community share offers carried out by community benefit societies offers added benefits. People get a chance to make an ethical investment in tackling climate change and at the same time support cherished local services such as schools or hospitals. They can invest in the local economy rather than outside of it. Interest payments on their shares come back to the local economy. As non-profit organisations community benefit societies must channel any operating surplus into a community benefit fund. Awareness can be raised of climate change, the potential for renewable energy and the potential for community ownership. Community benefit societies also offer financial transparency and (one member one vote) democratic control. There are several examples of roof-top solar on schools being funded by community share issues (e.g. www.lowcarbonhub.org). Community Energy Warwickshire (www.cew.coop) has funded roof-top solar on hospitals with community share issues. Cardiff Community Energy has

proposed community funded PPA roof-top solar installations to Cardiff Council and to Cardiff and Vale University Health Board.

9. Community share issues should be used as much as possible in order to foster engagement, local ownership and a circular local economy. However they are not likely to come close to funding all possible installations of solar on the public estate. They could be supplemented by pension funds within Wales. Perhaps Green Growth Wales could investigate the potential for bond issues to fund energy efficiency and renewable energy development in Wales. The end of public ownership of the Green Investment Bank has left a vacuum.
10. With feed in tariff under threat in the current review by DECC, the economics of rooftop solar are about to change dramatically. FIT seems set to be either reduced very drastically or else curtailed altogether in January 2016. With or without feed in tariff the operating costs of rooftop solar are predictable over a time span of twenty years or more. PPA arrangements could still guarantee electricity prices for building occupants for 20 years. For PPA arrangements still to be financially viable for the provider the price per kWh charged to the occupant will surely need to rise. So long as the starting price offered by the PPA is no more than currently paid for grid electricity then even if there is little or no immediate financial advantage to the building occupant there is still a good case for them to go ahead with PPA solar. The occupant gets stable and predictable electricity costs that over the long term are likely to be progressively less and less than grid costs. Carbon footprint is reduced compared with grid electricity. Lastly a local solar installation and maintenance industry would be supported. If community funding is used then it brings its own set of extra wider benefits. For the organisation paying for installation and offering the PPA the most financially viable sites will be those where all or most of the electricity generated is used on site and the PPA price per kWh is higher than the export price per kWh. This would apply to most hospitals. A drive for solar on the public estate could help keep alive solar installers through the cliff-edge boom and bust of drastic reductions in FIT (or its loss).
11. We would like to see an expectation that public bodies will include a major take-up of roof-top solar in their well-being plans and that they will favour community funding of this wherever possible.