

## HORIZON 2020 EU PARTNER SEARCH

Name of Organisation: South Gloucestershire Council, England

Type of Organisation: Unitary Authority [first tier Local Authority]

**Title and call identification**: Demonstration of renewable electricity and heating/ cooling technologies **Funding programme**: Horizon 2020: H2020-LCE-2015-3

EC service: DG RTD

Link to the call document:

http://ec.europa.eu/research/participants/portal/doc/call/h2020/common/1632649-

part 10 energy v2.1 en.pdf

Submission deadline: 05-05-2015 17:00 CEST

## Outline of the project idea

To enable Building Integrated Photovoltaic (BIPV) solar electricity generation to be incorporated in the roofs of new build homes in the regions. This will:

- significantly increase the proportion of solar electricity generating potential installed in participating EU regions;
- assist local authorities to meet their own and national / international renewable energy targets
- secure and create new green jobs for the EU regions involved.

Currently in the UK there is no tangible incentive for housing developers to incorporate solar technology in large developments as developers are simply looking at the retail price of the homes and perceive that new technology of this kind would erode their profit margins. Legislative powers of unitary authorities are limited in scope and so a carrot is required.

The opportunities are significant – for example, current projections for new homes in the West of England (WoE) region are in excess of 6,000 per annum between 2015 and 2020, >30,000 in total. By 2020, the total installed electricity generation potential (at an average of 2.5kW per home) resultant from this project will be 37.5MWp. Assuming a linear growth in the number of new installations and current weather profiles in the WoE, this capacity will generate a total of 75 Giga Watts of power by 2020. Removing the incremental cost offsets the perceived loss in profitability and would enable a trial development to proceed.

It is proposed that this project will work in partnership with residential housing developers, solar energy installers and wholesalers, regional energy co-operatives and the Distribution Network Operator (DNO). The **consortium will develop a new sustainable funding model** that will enable Building Integrated Photovoltaic (BIPV) solar electricity generation to be incorporated in the roofs of new build





homes in the regions.

Horizon 2020 funding is required to work with developers and partners to develop and roll out the learning from demonstration projects that will show the viability of building integrated PV systems into buildings during initial construction along with onsite energy storage to feed the local development taking away dependency on the national grid. This will open the opportunity for other developers and building owners to follow. Once proven, the model can be rolled out regionally, nationally and internationally.

Securing Horizon 2020 funding would address the major barrier to implementation and as a trial, will cover the incremental cost of installing BIPV. The aim would be to demonstrate a financially viable model that can be scaled up to match the size of the development. However, the larger the development the greater the challenge for local grid infrastructure upgrade. This explains why engagement with DNOs and development of onsite energy storage is so important as the full downstream potential of the programme will not be recognised unless schemes can be delivered to the largest housing developments.

**Partners sought**: Two or more advanced cities where partners can demonstrate and support large-scale development and implementation of domestic BIPV. Ideally, one of these bodies would be the lead partner.

Partners already involved: None

Answers expected before: As soon as possible

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Date of publication of this form: 14<sup>th</sup> January 2015