

## Report of the Cabinet Member for Transformation and Performance

Cabinet – 18 June 2015

### SWANSEA COMMUNITY RENEWABLE ENERGY AND ENTERPRISE SCHEME

<b>Purpose:</b>	To develop the Community Renewable Energy & Enterprise Scheme (CREES) social enterprise in support of the 'Tackling Poverty' and 'Building Sustainable Communities' Corporate Priorities.
<b>Policy Framework:</b>	Sustainable Development Policy
<b>Reason for Decision:</b>	To agree options for developing the CREES social enterprise.
<b>Consultation:</b>	Legal, Finance and Access to Services.
<b>Recommendation(s):</b>	It is recommended that:
1)	The Council work with local communities to develop a social enterprise to own and run the Community Renewable Energy and Enterprise Scheme, based in and with controlling influence from the locality of the installations (Townhill, Penderry, Castle and the surrounding area).
2)	Model 3 is agreed as the most appropriate for the CREES scheme
3)	The Council should continue to provide officer support through development of the project including drafting and entering into roof lease agreements for the buildings that will host the PV systems.
4)	Support should be sought for the project through the Ynni'r Fro programme, including development officer input and grant funding for development work.
5)	The CREES Project Board should continue to explore options for developing a Council-owned scheme further with the Council's Commercialisation Team.
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## 1.0 Introduction

- 1.1 The Community Renewable Energy and Enterprise Scheme (CREES) concerns the development of community-scale renewable energy projects in the most economically deprived areas within Swansea, where local people benefit from the renewable energy produced.
- 1.2 The 'community-energy' scheme aims to promote skills, enterprise, economic growth and job creation by creating an income out of environmental assets and maximising the social and economic benefits for the local community. In addition to contributing towards Swansea's renewable energy targets, the project aims to act as a platform to help build capacity, credibility and confidence to the point where the community are able to develop further schemes to address their local needs.
- 1.3 The approach is in line with the Department of Energy & Climate Change (DECC) [Community Energy Strategy](#) launched in 2014 (updated March 2015) and is increasingly common across the country. Over 5,000 community energy groups have been set up in the UK since 2008, with 150-300 actively developing renewable energy projects. Examples include [Plymouth Energy Community](#), [Staffordshire Sunny Schools](#), [Egni](#) and [Repowering London](#).

## 2.0 Background

- 2.1 Previous decisions have been taken as part of the feasibility process, carried out by the Energy Saving Trust and Pure Leapfrog, to prioritise properties in the Target Areas of Penderry, Townhill and parts of Castle. It was recommended that CCS proceed with an approach, using photo-voltaic (PV) panels on non-domestic buildings in a first phase.
- 2.2 In Phase 1 of the scheme it was recommended that a social enterprise or the council could develop the scheme by:
  - raising capital through a community share offer, Council funds or a social investor
  - solar PV is installed on suitable non-domestic buildings, generating electricity
  - some of the electricity is used directly by the host building and sold to the building occupier at a reduced cost under a long-term agreement
  - a Feed-in-Tariff payment is received by the social enterprise for any surplus electricity exported to the grid. This is guaranteed for 20 years and increases annually with inflation.
  - This provides an income to:
    - cover the costs of maintaining the installations and running the scheme (e.g. management costs, insurances, accountancy and audit fees)
    - repay loans to investors and pay shareholders a return between 5-10% p/a depending on eligibility for tax relief)

- o surplus income is allocated to a community benefit fund to support the local community to develop skills, enterprise, economic growth and job creation

2.3 Feed-in Tariffs (FiTs) were introduced on 2010 as the main financial incentive to encourage uptake of renewable electricity-generating technologies in the UK. The economic viability of this project is directly linked to the FiT payments that are received from an energy supplier as a result of generating electricity from solar panels. The FiT rates are directly linked the amount of renewable energy installations across the UK, which is increasing, and the cost of installation, which is decreasing. As a result the FiT payments are reviewed every 3 months and continue to decrease to point at which as subsidy is no longer needed. Once a solar PV system has been registered, the tariff level is locked-in, meaning that the rate is guaranteed for the period of the tariff (up to 20 years) and are index-linked.

2.4 The viability of this scheme has been based on the FiT rates at the time of writing this report. Inevitably there will be a further reduction in the FiT payments before this scheme is at a stage where it can be registered. Recent UK Government directives showing support for both community ownership of renewable energy and rooftop-mounted systems should provide some comfort that there are unlikely to be significant changes in policy that would negatively affect this project in the short term (1-2 years). However there is a potential risk that should level of deployment of Solar PV across the UK continue to rise and the cost of installation continue to fall that at some point the FiT payments cease to exist in their current form and projects such as this may become unviable or may need to operate under a different business model in order to provide the social and economic benefits as outlined in this report. This is a recognised risk and can be managed by regularly reviewing the financial model which has to be independently verified before the share offer for the community energy enterprise is launched.

2.5 The initial feasibility study identified five potential business models for CREES with different financial and legal arrangements between the Council and the community-owned social enterprise. These are listed below:

Model 1	Model 2	Model 3	Model 4	Model 5
<p>LA has no financial involvement</p> <p>Community Enterprise develops and finances the whole scheme, providing 100% of the capital cost through a community share issue.</p>	<p>LA develops the scheme and sells it to a Community Enterprise</p>	<p>LA provides 50% of the capital cost through an equity investment.</p> <p>Community Enterprise develops the scheme and provides 50% of the capital cost through a community share issue.</p>	<p>LA provides low cost loan for 50% of the capital cost</p> <p>Community Enterprise develops the scheme and provides 50% of the capital cost through a community share issue.</p>	<p>LA is a 100% owner of the scheme and the Community Enterprise has no involvement.</p>

- 2.6 Models 1-4 involve different methods of collaboration between CCS and the social enterprise. Model 5 considers an option of 100% Council ownership of the social enterprise. The decision on which of these models would be most appropriate relies on the level of appetite within the community to work with CCS in developing the scheme. Whilst Model 5 maximises the return for the Council, a community approach has significant additional benefits such as: the development of a sustainable finance for the community; the development of technical skills relating to not only the installation and maintenance of PV panels but business and administration skills as well; increased community self-confidence and identity. It also supports the Council's priorities of tackling poverty and building sustainable communities and supporting local community action.
- 2.7 Further work was required to identify the most suitable business model for delivering the project's objectives:
- Technical surveys investigating the structural and electrical integrity of the non-domestic building stock identified in the initial feasibility
  - Stakeholder engagement with community and industry representatives
  - Financial and business modelling based on intelligence gathered from above.

These studies have been completed and this report makes recommendations on the most suitable model for delivering the scheme.

### **3.0 Technical Feasibility**

- 3.1 Building upon the original desktop study, on-site electrical and structural surveys have been carried out by the council and solar installers on CCS owned non-domestic stock in or close to the Target Areas. These surveys and additional studies carried out by the CREES Project Team assess a number of factors to evaluate each site's suitability for solar PV.
- 3.2 Following the completion of the detailed technical feasibility work, it is recommended that the 14 CCS-owned non-domestic properties listed form the 1<sup>st</sup> phase of CREES. These sites, most of which are schools, have a theoretical capacity of 481.75kWp and would cost approximately £561,000 to install. Additional buildings just outside of the original Target Areas have been included to increase the solar potential for the scheme.
- 3.3 As expected for a project such as this, there are some structural and grid capacity issues that need to be resolved and the overall capacity of the scheme is likely to drop to between 405kWp-450kWp. It is not uncommon for community energy schemes to raise capital for schemes based on theoretical capacities as all figures will inevitably change once validated by an MCS accredited solar installer and their structural engineers prior to installation.

## **4.0 Stakeholder Feasibility**

- 4.1 During the initial feasibility study, structure telephone interviews were conducted with a variety of local stakeholders. As part of the second feasibility study, five focus groups were held with 30-40 stakeholders made up of professionals in the community energy and renewable energy sectors, local residents, ward councillors, school caretakers and community-based organisations. The groups explored topics relating to each of the five possible business models to help identify the most appropriate approach to deliver the scheme's objectives.
- 4.2 The focus groups identified broad support for the scheme from all stakeholders. There was a preference for community ownership and control but specific concerns were voiced over the current capacity of the community to deliver the project.
- 4.3 The key messages are summarised below:
- a community-owned model would create the most economic benefit
  - ancillary benefits such as skills development, confidence building, administration etc. should be maximised
  - professionals in the community energy sector, community organisations and business development organisations are interested in helping local residents develop the scheme
  - there is a lack of trust between representatives of voluntary sector organisations and the Council, relating to past funding issues and budget cuts leading to suspicion over the authority's motives
  - residents were keen for decisions regarding the community benefit fund to be made by local people for local people with a focus on work-experience, skills development and apprenticeships
  - the opportunity to educate and engage school children in renewable energy should be a priority
  - there is a need to proceed with the scheme quickly before further Feed-in-Tariff reductions affect the viability of the business model
  - it is unlikely that many residents from the immediate area would purchase shares in a scheme regardless of the minimum threshold. Therefore local personal financial gain should not be a priority.

## **5.0 Financial and Business Modelling**

- 5.1 The business models from the initial feasibility study that deliver both speed of development and strong community involvement and ownership are Models 1, 2 and 3. These models require varying levels of support from both CCS and/or the community energy sector to set-up and develop the scheme and act as a mentor to the local community.
- 5.2 A financial analysis has been performed on each of the five possible business models. This analysis details:
- the capital costs,
  - building and business set-up costs,

- operating costs,
- annual cash flows,
- returns to investors
- financial surpluses allocated to a community benefit fund.

The analysis is based on the assumption of installing 427.5kWp of Solar PV which reflects the grid capacity of the sites rather than the theoretical solar capacity.

- 5.3 The consultants have advised that the Council can choose with confidence several of the model choices and feel assured of seeing investment returned. The key considerations should be around how to value the impact of the project, both internally for the Council and externally in the community.
- 5.4 The business modelling suggests that Models 1 or 3 would provide the best combination of community benefit, return on investment and simplicity of structure.
- 5.5 In Model 1, the Council has no financial involvement. Community Enterprise develops and finances the whole scheme providing 100% of the capital cost through a community share issue:
- No investment cost to CCS
  - Capital is returned to investors in years 4-17.
  - Investors receive share interest payments totalling £407,236 in years 1-17, giving an IRR of 5.94% (Investor IRR with EIS relief is 10.69%)
  - The cumulative financial surplus at the end of 20 years is £273,144.
  - The total community benefit is £563,428.
  - The NPV of the cumulative financial surplus is £115,660.
  - The NPV of the total community benefit is £253,310.
- 5.6 With Model 3, the Council provides 50% of the capital cost through an equity investment. Community Enterprise develops the scheme and provides 50% of the capital cost through a community share issue:
- The financing outcomes are identical to Model 1, apart from CCS receives 50% of the share interest payments as an investor.
  - Cost to CCS: £294,385
  - Share interest payments of £203,618 (IRR of 5.97%)
- 5.7 The choice between the two models is based on the Council's ability and appetite to invest in the project. As the Council is developing its commercialism agenda, with energy identified as a pathfinder for the first phase, Model 3 would meet the aims and aspirations of this agenda with a potential internal rate of return (IRR) of 5.97%.
- 5.8 Despite not needing direct financial investment from the Council, support for the community will be needed to carry out Model 3, both in the form of CCS officer time and support from the Welsh Government's Ynni'r Fro Programme that is made available to community energy projects in Wales. This support

typically consists of development grants or loans and/or the allocation of a community energy development officer to support the delivery of a scheme.

5.9 Limited officer time may be available from the Council's Sustainable Development Team to support to next stage of development. However, it is felt that additional external support will be needed to deliver the scheme quickly. It has been advised that the Council or the community should look to access support through the Welsh Government's Ynni'r Fro programme for the next phase of development. This should be tailored towards overcoming the concerns and lack of confidence within the community, enabling timely delivery of the project and building the capacity of the community to manage and develop the project in future. Support available from Ynni'r Fro could include:

- Development Officer support –from programme staff to plan and develop the project.
- Preparatory grant – funding for feasibility and project development costs, which may be appropriate to resource expert project development activity for the project.
- Loan finance – for later stage development and potentially capital from the project.
- The monies could help support the creation of the necessary legal documents.
- The project should be well placed as the group will have a clear line of sight of the project, particularly with feasibility work having been carried out and a draft business plan in place.

## **6.0 Next Steps**

6.1 If the Cabinet agree to move forward with Model 3, then Council Officers will need to support community representatives, an existing community enterprise and industry representatives in establishing a new social enterprise to develop and implement CREES in the Townhill and Penderry communities. This will include:

- Legal steps regarding the setting up of the new social enterprise and lease arrangements regarding the roofs and license arrangement to procure the electricity.
- Complete structural surveys/EPCs etc.
- Preparation of share offer (concurrent with above actions)
- Share offer marketing/Funding work
- Procurement of installer
- Installation

## **7.0 Equality and Engagement Implications**

7.1 There are no equality and engagement implications with this report.

## **8.0 Financial Implications**

8.1 Model 3 was recommended as being the most appropriate business model. The financial implications:

8.2 The Council provides 50% of the capital cost through an equity investment. The Social Enterprise develops the scheme and provides 50% of the capital cost through a community share issue:

- The Council receives 50% of the share interest payments as an investor.
- Cost to CCS: £294,385
- Community Benefit Value is predicted to be is £563,428.
- Share interest payments of £203,618 (IRR of 5.97%)

## **9.0 Legal Implications**

9.1 The legal implications of this report are:

- Legal issues will need to be explored regarding the procurement/ granting rights to community groups to install on properties
- The Council will need to agree lease/licensing arrangement to allow the community group to install solar PV on the council's non-domestic asset.
- The Council is the legal owner of school buildings and land but the Governors of Schools have governance and control over school property. The Governors have responsibility for the controlling the use of premises, inspecting the premises and equipment annually and ensuring the school estate is properly maintained. Regarding the installation of Solar Panels, each school currently needs authority from the Council as legal owner of the property as this goes beyond "managing" the property as the works involved would be materially changing the fabric and structure of the building.

**Background Papers:** None.

**Appendices:** None.