

Business Plan 2014/2016

1 Executive Summary

This outline business plan, describes the mission and objectives of Avalon Community Energy Co-op (ACE), and uses PESTLE and SWOT analysis techniques, to explore the current context for renewable energy projects and provide some provisional market analysis, prior to the completion of the feasibility study. Once a feasibility study is completed and renewable energy projects are identified, a full financial analysis will be provided. The business plan also explains the legal structure chosen and includes summaries of the experience and skills of the directors on the board.

There are a variety of drivers in place that make this the right time to set up a community energy project, whilst utilising a wide choice of renewable energy technologies. There is a range of possible funding mechanisms that could be used to create a sustainable business model that will benefit the local community and economy. More importantly, there are strong social drivers such as fuel poverty and public health, that make access to affordable energy critical if we are to mitigate the risks and consequences of high fuel prices and carbon emissions in our local community.

The key characteristics of our target market are those living in the Glastonbury and surrounding areas who are concerned about protecting their environment, seeking affordable clean energy and are interested in supporting a community owned venture. There is a strong local culture that supports environmental initiatives that aim to improve the health and wellbeing of residents, and all indicators tell us, that a renewable energy project, providing clean and affordable energy, would flourish in this area. We would also strive to attract customers from local high energy businesses to improve the sustainability of the local economy and maintain and increase local employment.

Our market strategy is:

- 1) Do it first and or do it better, to establish an excellent reputation with existing and potential members/customers
- 2) Emphasise the plans to develop an energy park providing safe, clean and continuous power source
- 3) Be more ethical than other energy providers, by being a not for profit organisation and communicate intent to use surpluses for community benefit.

2 Mission statement and goals

Our mission is as follows:

Engage the community (household businesses and community organisations) in their energy economy so they understand and can respond to the challenges and opportunities it presents;

Be the number one choice for generating renewable energy and for advice and information on energy efficiency in Glastonbury and the surrounding Mendip area;

Create energy independence for community groups, residents and local businesses;

Provide sources of community owned and affordable renewable energy and address local fuel poverty;

3 Objectives for 2014/16

Our objectives for the coming year will be reviewed following the completion of the feasibility study and currently are as follows:

1) To commission a feasibility study to:

- a) consider a range of potential sites for an energy park in the Avalon area;
- b) establish a base line of the current energy economy
- c) identify the range of technologies and business models that present opportunities at household, business and community scale;

2) To raise awareness of the imperative need for community renewable energy projects and energy efficiency;

3) To build a significant support base for the aims and objectives of ACE, from the public, from business and, most importantly, local and National politicians.

4) To raise funds for community owned energy generating projects through a co-op shared fund;

5) To identify a portfolio of projects, carry out detailed, site specific studies and apply for planning;permissions and grid connection agreements where required;

6) To set up installer partnerships for delivery of ACE developed projects;

4 The Context

The section provides an overview of the context affecting the development of community renewable energy projects, using PESTLE to cover the main subject headings.

4.1 Political drivers

The UK has set a target to deliver 15% of final energy demand from energy sources by 2020.

An ICM Poll (November 2012), has revealed that 6 times as many people would rather have wind turbines than a shale gas well near their homes.

Public consultation carried out by Mendip DC has highlighted that renewable energy is an important issue and renewable energy projects are widely supported. (Portrait of Mendip 2008)

The local authority has a crucial role in supporting renewable energy as the planning authority for renewable energy developments and through setting local plans and standards that encourage renewable energy in new developments. DECC March 2010. There 'Task and Finish' select committee on renewable energy, is an opportunity for ACE to make representations, ideally with demonstrable public support.

The Coalition's programme for government sets out a commitment to encourage "community-owned renewable energy schemes" and states it will "support the creation and expansion of mutual, co-operatives, charities and social enterprises." This has been taken forward with the current DECC consultation on community right to buy, which ACE will track as this could influence the 'shape' of community renewable energy going forward.

Most importantly, the political future is quite uncertain until May 2015, and ACE will need to be resilient to potential changes in Government, policy and support mechanisms.

4.2 Economic considerations

As well as the overlap with community right to buy, the Electricity Market Reform (ERM) currently being rolled out by Government will also affect the economics of renewable energy. Perhaps most significantly, the existing Renewables Obligation scheme is being replaced by a system of Contracts for Difference (CfD), with different 'strike prices' for different technologies over the 5MW FiT threshold. This will affect the economics of projects, but also project timescales – particularly around securing grid connections, as it will not be possible to bid for CfDs without an 'oven ready' project.

A variety of funding opportunities exist for renewable energy projects e.g.

- Community share fund and pioneer share offers
- DECC development grant

- Feed in Tariff
- Renewable Heat Incentive
- Sales of energy produced either directly to customers or exported to renewable energy company such as 'Good Energy' or 'Ecotricity'.
- Renewables Obligation is the main support scheme for renewable electricity projects over 5MW in the UK (smaller installations are supported through the Feed in Tariff). It places an obligation on UK suppliers of electricity to source an increasing proportion of their electricity from renewable sources.

4.3 Social and cultural aspects

In DECC's report 'Estimated impacts of Energy and Climate Change Policies on Energy Prices and Bills' (March 2013), it was noted that the average prices of gas and electricity paid by UK households have risen by around 18% and 9% (in real terms), respectively, since 2010 and by around 41% and 20% (in real terms), respectively, since 2001. Accounting for changes in consumption, average household dual fuel bills are estimated to have increased by around 13% in real terms between 2010 and 2012. Since this report All the major energy suppliers have announced further price increases for both gas and electricity. Domestic gas and electricity prices were up by 7% and 6% respectively in December 2013 (DECC Quarterly Energy Prices April 2014).

Access to affordable energy will be crucial for the residents in Glastonbury and the surrounding areas, in Mendip fuel poverty already affects 15.7% (7,277) of households. (DECC May 2012) Age UK say those in poorly insulated, cold homes are 3 times more likely to die of heart attack or stroke than those living in warmer ones.

Locally produced clean energy will enhance energy security and create sustainable communities.

4.4 Technology

The total installed capacity of sites generating electricity from renewable energy sources in the UK at the end of 2011 was just over 10GW around 9% of total electricity generation.

The main technologies used to generate renewable energy are

Wind

Solar PV and Solar HW, heat pumps

Biomass

Geothermal

Anaerobic Digester

Hydro power

Smart technologies

The sheer range of technologies mean that one technology or another will be appropriate for almost every community and can be built close to where it is actually needed. Solar power alone has the potential to meet energy needs several times over.

4.5 Legal - current and impending legislation

Planning permissions, grid connection agreements and legal constraints will be fully explored through the feasibility study and will vary according to the sites identified.

Relevant legislation includes:

The 'Energy Act' (2013) which covers Power Purchase Agreements (PPAs), to ensure the availability of long-term contracts for independent renewable generators.

The 'Climate Change Act' which identifies carbon emissions targets.

4.6 Environment

The UK target under the Climate Change Act (2008) is to reduce carbon emissions by 80% below 1990 levels by 2050 with an interim target of 34% by 2020.

Renewable energy has the potential to dramatically reduce emissions of greenhouse gases that harm the environment. We have some of the best and most accessible sources of clean energy available coming from natural resources e.g., sun, wind and geothermal heat. In addition, it will never run out and does not pollute the environment or cause dangerous climate change.

Having local renewable energy supplies, will help to reduce fuel miles and carbon emissions in the area, and in so doing, improve the environment.

5 Market analysis

While considering the feasibility of becoming a provider of renewable energy, a SWOT analysis of the current market environment was carried out and the main points are listed below:

5.1 Strengths

Climate change concerns, high oil prices, peak oil and government support, are driving legislation, incentives and commercialisation and the market for renewable energy technologies continue to grow.

The Government is committed to driving forward the move to low carbon alternatives to cut carbon and help meet renewable targets, and heat strategy (DECC March 2013)

Stimulating low carbon investment is seen as an essential strategy in getting the economy moving. (DECC March 2013)

While many renewable energy projects are large scale renewable technologies are also suited to remote areas where energy is often crucial to local economic development.

Renewable energy is seen by local residents and potential customers as a safe and clean energy source and therefore the energy of choice. There is a strong local community culture within Glastonbury and the surrounding area, which historically

has supported a wide range of community initiatives that aim to improve health and wellbeing

5.2 Weaknesses

Some renewable power, such as wind and solar are seen by potential customers as being reliant on intermittent sources of energy e.g. sun and the wind, emphasizing the need for a mixed renewable energy economy or park.

5.3 Opportunities

Traditional power stations, reliant on fossil fuels, are to be decommissioned creating an opportunity to develop new cleaner sources of energy and an increase in market share for renewables.

Mendip has potential for further renewable energy projects especially, wind, hydro and biomass projects (Portrait of Mendip 2008)

5.4 Threats

The government excludes "Feed in Tariff businesses" from receiving investment from the Enterprise Investment Scheme (EIS) and Venture Capital Trusts (VCT) schemes. Many community renewable schemes rely on these tax efficient investments.

With cuts in welfare benefits in increasing unemployment, the ability of customers to pay for energy they use, could be compromised.

6 Feasibility Study

We will apply for funding to contract an independent energy consultant to carry out a feasibility study to cover the following:

- 6.1 Establish a baseline picture of the electricity economy in the area including:
- a) Domestic and commercial electricity consumption (energy and £ total and average consumption)
 - b) Domestic and commercial heat fuel consumption (energy and £ total and average)
 - c) Domestic and commercial transport consumption (energy and £ total and average)

This may be done through both the use of government energy statistics and local primary research.

Provide an overview of the current level of renewable energy generation in the area.

Provide an overview of the energy mix.

Develop scenarios for the likely future cost of energy for the area, and average household if nothing is done.

6.2 Identify the range of renewable energy and energy efficiency options that be economically viable and their potential, including:

- Loft, cavity wall and solid wall insulation
- Solar PV (building scale and stand alone)
- Biomass heating
- Solar H/W, heat pumps etc
- Anaerobic Digester
- Hydro
- Wind
- Smart technologies

For each technology to provide:

- Economics
- Local potential capacity (capacity and % of the area's energy needs) including identifying potential sites
- Delivery considerations (planning, supply chains, commercial risk etc)

6.3 Identify the range of business models possible for the delivering each technology including:

- Community funded through co-operative share offer
- Building/landowner funded through installer partnership
- Green Deal ECO funded
- Other

6.4 For each technology and business model consider the potential benefits through:
Income generation for ACE for re-investment in the area
Returns to local investors
Energy cost saving

6.5 Support ACE to develop a business plan based on the findings.

7 Main features and benefits of the legal structure Industrial and Provident Society

ACE Co-op Ltd. is an Industrial and Provident Society (IPS). An industrial and Provident Society is an organisation conducting an industry, business or trade, either as a cooperative or for the benefit of the community and is registered under the Industrial and Provident Societies Act 1965. This prevents sells of shares to a third party and moreover provides protection against inference from those outside local community.

ACE Ltd will be run as a co-operative for the mutual benefit of its user members, with any surplus being ploughed back into the organisation to provide better services and facilities.

ACE Ltd is supported by Somerset Co-operative Services CIC, who is providing advice and guidance on setting up and running an IPS, launching share offers and other advice on other possible sources of funding.

8 Community Share Issues

Over 160 projects in the UK have raised money through community shares. Community shares will mean that local residents will own and benefit from local energy resources.

User members will have an equal say in how the co-operative is managed and how the energy resources are used.

They will also be eligible for interest paid to members.

Approved by ACE Board May 2014

Amended and approved by ACE Board August 2014