

Case study iPower Energy

iPower Energy UK is a social enterprise focused on the development of low carbon projects that reduce energy bills. The company was founded in 2011 and is driven by a commitment to new forms of energy provision which put more power - economically as well as practically – in the hands of local energy users.

iPower Energy UK is based in Stirling and currently employs 6 people including associates. Their annual turnover in 2014 was circa £1.5 million.

Background

The company focuses on a number of different technology projects including BlueGEN unit, a micro-CHP (combined heat and power) fuel cell generator that converts natural gas to electricity. The size of a washing machine, iPower describes it as equivalent to having a mini power station in the home or office.

BlueGEN uses natural gas from the UK gas network to generate electricity within a building, which is generated and used locally meaning that nothing is lost in transmission. This significantly reduces the amount of electricity needed from conventional energy suppliers.



Benefits of the BlueGEN unit include:

- Generation and delivery of electricity more efficiently than the national grid – up to 13-17.5 kWh electricity a year which is sufficient to meet the energy needs of 4-5 homes
- Typically 20% savings in energy costs
- Creation of up to 200 litres of hot water each day through heat generated by the process
- Savings of around 3.6 tonnes of CO₂ emissions each year
- Eligibility for the Government Feed-In-Tariff scheme whereby installing electricity generating technology means money can be earned from the energy supplier
- Fuel cell units small enough for domestic and office purpose are not widely available.

iPower works in partnership with the Australian manufacturers of the BlueGEN (Ceramic Fuel Cells Ltd) to introduce it to the UK market. The first Scottish installation of BlueGEN was at Edinburgh Napier University. iPower covered the costs of the installation of the unit while Napier University pays for the servicing and gas consumed. The university will in turn enjoy the free use of all energy and heat generated and iPower are able to claim the Feed-in-Tariff. iPower Energy retains ownership of the unit and the servicing is conducted via an agreement with the manufacturer.

Jon Cape of iPower Energy UK says:

“Our funded fuel cell business model allows customers to get the benefit of a low carbon solution without the burden of upfront cost. iPower has been delighted to be given the opportunity to work in partnership with WRAP in developing our programme through its REBus (Resource Efficient Business Models) initiative and also with Zero Waste Scotland who are supporting the scale up of our business.”

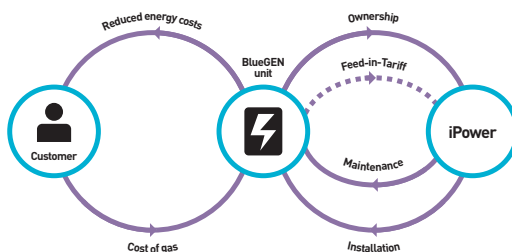
Business Model

iPower Energy have developed innovative business models as a means of allowing access to this technology for customers who can't meet the costs of purchasing the unit outright.

The way iPower operate through their funded BlueGEN model can be seen as an example of a performance/service system business model. The focus of this business model is on providing a service based on delivering the performance outputs of a product while the service provider retains ownership. Through this long term contracting approach, the manufacturer of BlueGEN has a strong interest in producing a product that lasts. In essence this model means that the customer pays for the output of the product or service not the product itself – in the case of BlueGEN, the electricity and hot water generated. Maximum value is extracted from the product and emphasis is moved away from the material object and onto the system.

Under this model iPower will pay for the installation of the unit and claim the Feed-in-Tariff for the term of the agreement to cover the costs of the installation. At the end of the 10 year agreement, ownership of the unit can be transferred to the customer free of charge. The customer pays for the gas consumed and the maintenance contract while enjoying reduced energy bills in turn.

Alternatively, customers can also lease the unit from iPower through a finance or operating lease and claim the Feed-in-Tariff for the term of the lease. With this model there is also the option to purchase outright.



Benefits



Manufacturer retains greater control over the items they produce and the embodied energy and materials, enabling better maintenance, reconditioning and recovery



Unit provides customer with reduced energy consumption and carbon emissions through access to domestic fuel-sized technology



Maintenance issues are eliminated for the customer as this becomes the responsibility of iPower Energy



For iPower, the model offers a different income stream and a new service for new and existing customers



The Feed-in-Tariff is a guaranteed income for either the business or customer



Contributes to the development of a circular economy, which will ultimately mean a stronger and more sustainable economy in Scotland

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