Case Study: Trusted Renewables

Market Evaluation Study

Trusted Renewables Ltd was exploring the feasibility of new digital value chains arising from managed interconnected smart energy clusters in rural areas. These clusters would harness energy storage devices, demand side response and localised energy systems. To discover the opportunities for these new disruptive services, the company looked to understand the rural community energy scheme market in the UK.

Milner conducted secondary research and modelled the potential market for Trusted Renewables, resulting in strategic insights around customer segments, mix of micro-generation and target geographies. By quantifying the core market trends early on, Milner helped prove that there was market to be exploited.

Milner's study showed that there was a large opportunity in the rural community energy scheme market. This gave Trusted Renewables the confidence to invest further in the concept and move onto the next stage of R&D funding and market development.

About Trusted Renewables

Trusted Renewables Ltd is a UK-based renewables and environment company. The management team are specialists from telecoms, computing and IT security industry with a world-class track record of innovation.

Founded in 2008, the company provides focussed thought leadership to exploit and commercialise innovation in ICT for renewable energy, carbon reduction and smart metering. It is developing a secure and trusted architecture based upon best practice for e-commerce, applicable to the renewable energy and carbon reduction fields.

Trusted Renewables' Requirement

Trusted Renewables wanted to identify the most promising opportunities in current and emerging community energy scheme applications in the UK's rural areas.

To support further funding and investment, the management team needed a five-year market forecast model to understand how the market would evolve over time in both volume and value terms. Detailed information about the make-up of rural economies and their energy consumption was needed across the four countries that make up the UK. This country-level analysis was needed to determine the most likely number of schemes, microgeneration mix and number of retail customers. To achieve this, profiles of energy supply by generation source and demand by user segment was required.

It was necessary to quantify the market value of new energy scheme installations over a five year forecast period. These needed to be calculated by understanding the number of schemes in the market each year and the changing adoption and energy consumption patterns of retail customers.

MILNER

GROWING COMPANY VALUE

www.milnerltd.com   +44 (0)1473 633121

Milner's Solution

Secondary research

In order to get a deep understanding of the rural energy market, detailed desk-based market research was undertaken, reviewing government, charity and analyst reports, competitor profiles and information gleaned from other publications.

Milner gathered extensive data to determine the size of the addressable market, including population data from three customer segments and the volume of energy consumption across rural England, Wales, Scotland and Northern Ireland.

Forecast modelling

A detailed Excel model was built that explored five years' market behaviour. The four countries of the UK were analysed individually and then aggregated to give a complete picture.

Historic data from adjacent markets was used as a foundation to forecast future energy demand utilising market penetration levels to apply Diffusion of Innovation Theory. Forecast energy demands across three user segments were multiplied by explicit assumptions about market selling prices in order to calculate the value of the retail market.

The size of the potential micro-energy supply portfolio was assessed by four generation sources; wind, hydro, solar and biomass. The proportion of each generation source was forecast based on historic data. Finally, triangulation checks were implemented in order to validate the model findings.

Analysis and feedback

Drawing upon the secondary research, Milner provided an interim review showing the initial results of the study and provided the client with an opportunity to provide feedback and direction. Following a final phase of detailed analysis of the data and additional research, Milner presented the findings to the Trusted Renewables management team.

Trusted Renewables' Benefits

1. Information unavailable elsewhere

As a nascent market, no data on the size of the rural community energy market opportunity was available to Trusted Renewables elsewhere. Milner's analytical approach provided the best possible estimate of the market size. The robust forecast model enabled Trusted Renewables to explore the opportunity beyond the present day and play through a number of different scenarios.

2. Independent and trusted analysis

As external consultants, Milner was able to produce an unbiased and independent assessment of the market opportunity. The independence and objectivity of Milner's findings was critical in establishing investor trust and confidence in the future concept.

3. Expertise in forecast modelling

Milner has substantial client experience in analysing nascent technology markets and building forecast models. Coupled with Milner's deep understanding of many complex techniques (including Diffusion of Innovation theory), they were able to build a model that explained how consumers would join community based energy schemes and what the micro-generation portfolio mix would look like.

4. Tailored to Trusted Renewables' requirements

Milner's flexibility on the level of client engagement meant Trusted Renewables was able to engage throughout the process, to get feedback on early findings and ask further questions. As a result, Trusted Renewables came away with a market study 100% customised to its business requirements, whilst placing little demand on the management team's time.

5. Speed and cost efficiency

Milner designed and executed the market valuation study and provided a set of in-depth insights within agreed timescales and budget, allowing Trusted Renewables to proceed to the next steps of development without disruption.

www.milnerltd.com   +44 (0)1473 633121

"We chose Milner to help us understand the size of the nascent market for Community Based Energy Schemes in the UK. The team at Milner forecast how energy would be produced through micro generation and consumed locally in rural areas. Their work provided us with a very detailed understanding of the most probable market dynamics over the next five years. The Excel model was very well thought through, with a clear structure. This proved that there was a market which could be exploited and we are very happy with the results"

Colin Mallett

Managing Director

Trusted Renewables Ltd