A Business Model Framework for New Small and Medium-Sized Enterprise Energy Service Provision Companies in China

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1 Introduction

Holistic Energy Service Provision (ESCO) has the potential to provide new business models for stakeholders currently working in the area of building design, construction, building operation, energy management, maintenance, etc. since customers may wish to get access to all services related to energy supply, energy consumption and building services maintenance through a “one-stop-shop”.

China's attempts to address energy efficiency and reduce greenhouse gases are varied and there are numerous policies that cover a very broad area.
1 Introduction

There is great potential for ESCO's in the domestic and commercial area of neighbourhood management systems (NMS) and there are opportunities for large-scale cost-effective investments.

This paper describes how the concept of a Business Modelling Framework could be applied in the area of Energy Service Provision for new Small and Medium-Sized Enterprise (SME) start-up companies in China.
2 Business Models

New business models need to be created around the new development of energy provision and distribution because of the addition of renewable energy sources and market liberalisation in China.

The energy service business model will help energy managers to capture, understand, communicate, design, analyse and change the business logic of their firms.
2 Business Models

The ESCO industry in China is fully endorsed and supported by the national government however financing, taxation, payment terms and marketing are hurdles that Chinese ESCOs have to address.

To help alleviate these problems, in 2010, the PRC national government adopted favourable national tax legislations for ESCOs that implement energy efficiency projects on a paid-from-savings basis.

The World Bank has deemed the Chinese ESCO program (currently mainly active in the industrial sectors) and its associated savings-based business model to be a success.
3 Definition of Business Model

Business models themselves are complex and not well understood – they lack any formal basis that would facilitate both description and comparison.

Linder and Cantrell assert that:
“executives can't even articulate their business models. Everyone talks about business models but 99 percent have no clear framework for describing their model.”

A Minimal description:
The business model articulates how the business makes money

3 Extended Definition
The 6 functions of a business model are to:
• Articulate the value proposition
• Identify a market segment, i.e. the users to whom the offering is useful and for what purpose, and specify the revenue generation mechanism for the firm.
• Define the structure of the value chain within the firm to create and distribute the offering and determine the complementary assets needed to support the firm’s assets in this chain.
• Examine the cost structure and profit potential of producing the offering given the value proposition and value chain structure chosen.
• Describe the position of the firm within the value network linking suppliers and customers including identification of potential complementors and competitors.
• Formulate the competitive strategy by which the innovating firm will gain and hold advantage over rivals.

Chesborough, Henry; Rosenbloom, Richard: The role of the business model in capturing value from innovation: evidence from Xerox Corporation’s technology spin-off companies, Industrial and Corporate Change, Volume 11, Number 3 pp529-555.
4 Canvas for ESCO

**Key Partners**
Supplier of energy from whom the energy provider will buy from or sell back in terms of excess.

**Key Activities**
Important activities that the energy service provider needs to perform. Service provider business.

**Value Propositions**
The products and services on offer which satisfy the above customer segments.

**Customer Relationship**
Will offer the best solution by being the most dependable and responsive to customer needs.

**Key Resources**
Experienced engineers, technicians and administrative staff such as customer

**Channels**
Channels through which the energy provider communicates its value proposition

**Cost Structure**
I include fixed and variable costs and any other costs associated with running the energy service provider business.

**Revenue Streams**
Revenue earned from energy audits, project performance energy guarantees, equipment and maintenance services, project/construction management

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These building blocks will therefore form a company charter that will be referenced to ensure the ESCO company is meeting its obligations and to help create the business model framework that will become a core part of the organisation. China has proved that it embraces the need for change with respect to changes in energy consumption and the opening up of markets. Using the aforementioned building blocks will help provide a Chinese ESCO company with the necessary requirements on which to build its operations.
Thank you for your attention