Business Models for a More Effective Uptake of DSM Energy Services


In 2014 the IEA DSM Programme started DSM Task 25, a research project on new business models for energy efficiency services. This Task is now part of a growing body of research aimed at understanding what is causing the apparent lack of market uptake of Energy Efficiency. The second phase of this work started this year and will run until October 2020.

The Key Hypotheses

The principal hypotheses guiding this work are:

- There are major differences between a business model that is supporting a product compared to a business model that is supporting a service.
- Companies that have made the adjustments towards service orientation have a better uptake, and thus are more successful than companies that have a product oriented business model, that is a technocratic and technology push approach type of business model.
- To conduct a service oriented business (deliver services instead of a product), an entrepreneur needs to have developed at least four capabilities at an acceptable level: sensing user needs, conceptualizing, orchestrating and scaling.
- A business model design is strongly influenced by context, for example, existing legislation and available subsidies, bottlenecks and constraints, and various players within the current energy production and consumption system.
- Alignment of the business model with existing context is helpful in delivering energy efficiency more effectively, but also inhibits more innovative types of business models to be successful.
- Context is very much product oriented. Most incentives, for example, inhibit service oriented business models and do not focus on the use phase, an essential phase for services.

These key hypotheses are based on an analysis of multiple business models in the Netherlands, Sweden, Norway, Austria, Switzerland and South Korea. The focus was on a mix of retrofitting, lighting, smart solutions and total solution (one-stop-shop) products and services.

Phase 2 – May 2018 - October 2020

The Task’s research in Phase 1 was not comprehensive, but did allow for the exploration and identification of interesting business models and strategies for energy efficiency focused services and how these could be supported by policy and or other institutional arrangements. What the Task accomplished thus far is just the starting point for understanding what the business models delivering energy efficiency services need to do to be successful, which sectors need what type of models, and what is needed from policy makers or other institutional players in terms of support. In sum, much more research and other activities are needed. From 2018 till October 2020 we will perform the following tasks.

Subtask 2: we will select and investigate business models for several new categories of energy efficiency services (see below), and further validate and develop the 4 strategies we developed in Phase 1.

- Demand response energy services
- ICT and data driven energy services
- New actors driven energy services such as community energy, community VPPs, peer2peer
- Sufficiency and or circular energy services including renewables

Subtask 3: We will explore how context factors and actors, such as rules, regulations, market rules, culture, etc. influence how business models for energy services are developed. And, we will examine this impact and discuss with agencies, governments (i.e., context players) how they can better stimulate market uptake of energy services, especially for smaller companies, and co-create potentially

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more supportive policies and strategies with them. Participants will conduct a comprehensive analysis of which kinds of policy support would best support the four models and strategies we identified in Phase 1.

Subtask 4: One key finding from Phase 1 is that it is imperative to transfer the knowledge gained and the findings to the relevant actors in different countries and settings. Simply communicating this information through a webinar or presentation is insufficient. This type of knowledge needs to be experienced and worked with in a real life setting, investigating real business models, real policies and real users. Therefore, the Task will set-up a training system, organize user centered business modelling interventions, potentially involve end-users in a living lab setting, potentially develop an online course (consisting of multiple webinars) in close cooperation with the DSM University as well as perform the more standard dissemination at conferences, in journals, etc.

Benefits This Research Provides

- New knowledge for the market on how a business model should be assessed and can be adjusted to become more successful in the market both on a national and international level.
- 4 archetypes of business models, to be used in research and by the market and policy environment.
- Insight into the servitisation transition and its role in the energy system, and the role to play by context actors
- New knowledge on how energy efficiency stimulation programs could be designed as well as which initiatives need stimulation.
- Clear guidance on how the three levels of business model, entrepreneurial capability, and context are strongly interrelated and how the entrepreneur can improve on all these levels.
- A tool named Fittoserve to help entrepreneurs do a quick scan of their business model, as most entrepreneurs seem to be more or less unaware of their options in this area.
- A description of the service ‘version’ of the business model canvas, a new tool for business model analysis.
- Workshops focused on knowledge transfer and training of entrepreneurs and context players such as policy officers, financial institutions, etc.
- Insight into what new innovative business models for new innovative energy services need to become more successful.

To learn more about Task 25 work and download reports and presentations from Phase 1 visit, http://www.ieadsm.org/task/task-25-business-models-for-a-more-effective-uptake/.

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