

Mass Market Energy Services – Strategies for Success from 2011 to 2020

How big is the energy services opportunity?

How much of this value can energy suppliers capture?

What strategies will best enable them to capture this value?

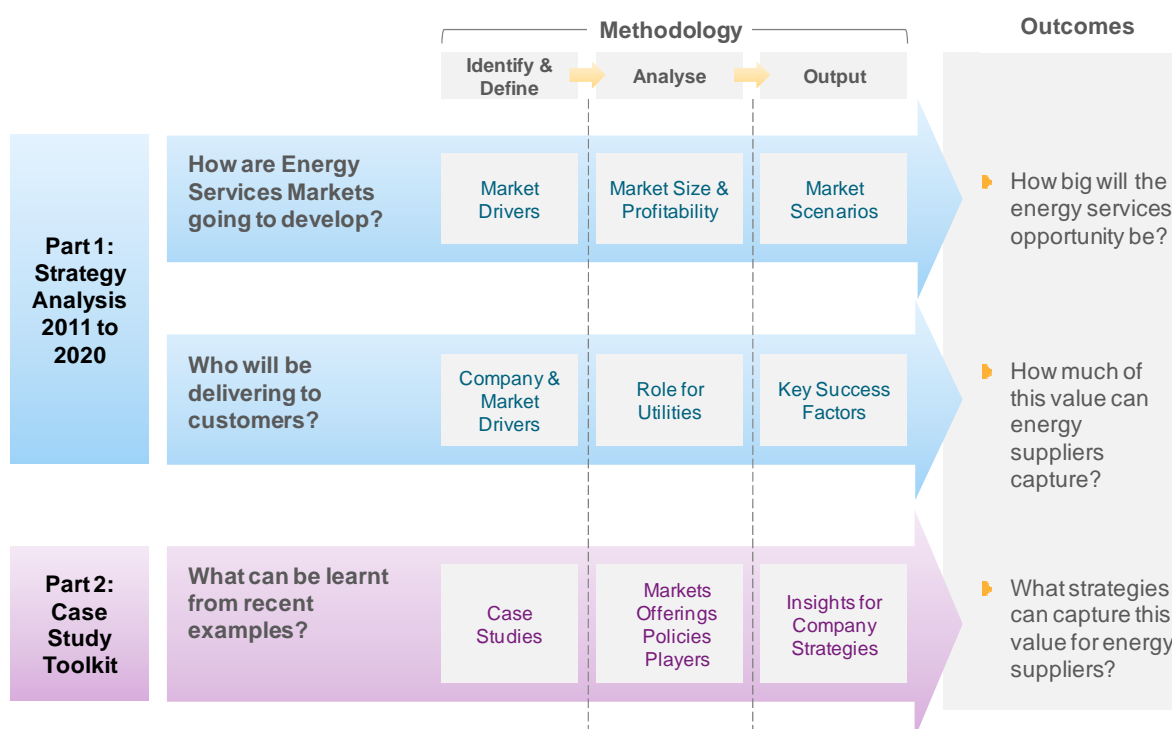
Where should energy suppliers focus their investment?



Study Objectives and Overview

This Delta multi-client Study will provide you with tactical and strategic insights to help you make the best-informed energy services decisions. It has been developed to help European energy suppliers answer four core questions:

- ▶ **How big will the energy services opportunity be?**
- ▶ **How much of this value can energy suppliers capture?**
- ▶ **What strategies will enable energy suppliers to best capture this value?**
- ▶ **Where should energy suppliers focus their investment?**



The four core markets that this Study analyses are:

UK

Germany

Spain

Denmark

This analysis of these four very different markets is the basis for a **separate executive-level strategy report**. This identifies key trends and learnings which can be applied to any European market and provides energy companies with a framework to evaluate their strategic and tactical decisions in energy services.

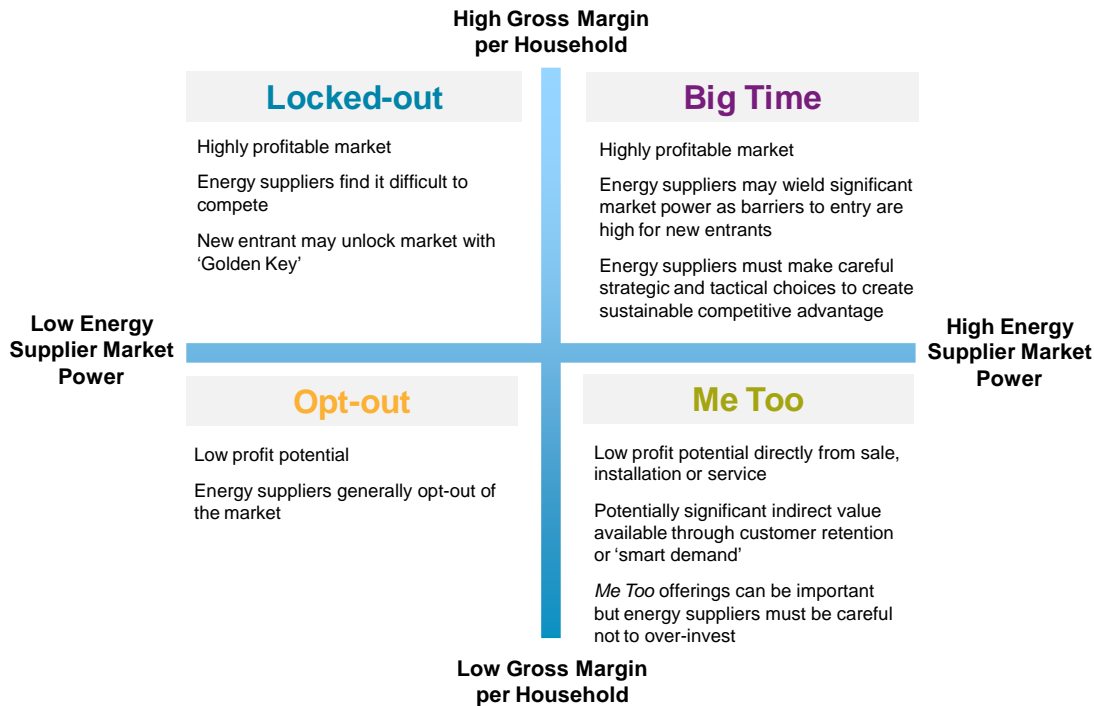
The energy services market segments covered are:

- ▶ Conventional heating (fossil boilers, including air-conditioning in Spain)
- ▶ Low carbon heating (including solar thermal, heat pumps, micro-CHP and biomass boilers)
- ▶ Heating system services (including maintenance contracts and insurance)
- ▶ Energy efficiency (insulation)
- ▶ Onsite DG (including solar PV and small wind)
- ▶ Home Energy Management (HEM) systems

Delta’s Energy Services Market Scenarios

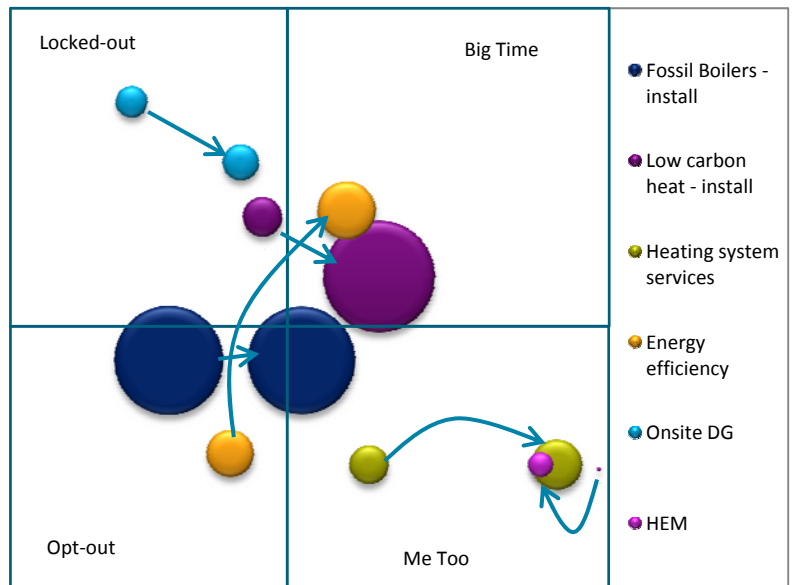
Delta has analysed the catalysts, drivers and barriers that are shaping energy services markets today. We have assessed how these will develop and the consequences of these changes for the market in 2020. We have developed the four scenarios described below to quantify the current and future size and character of each market segment, in each of the core markets.

DELTA’S 2020 SCENARIOS FOR ENERGY SERVICES MARKETS



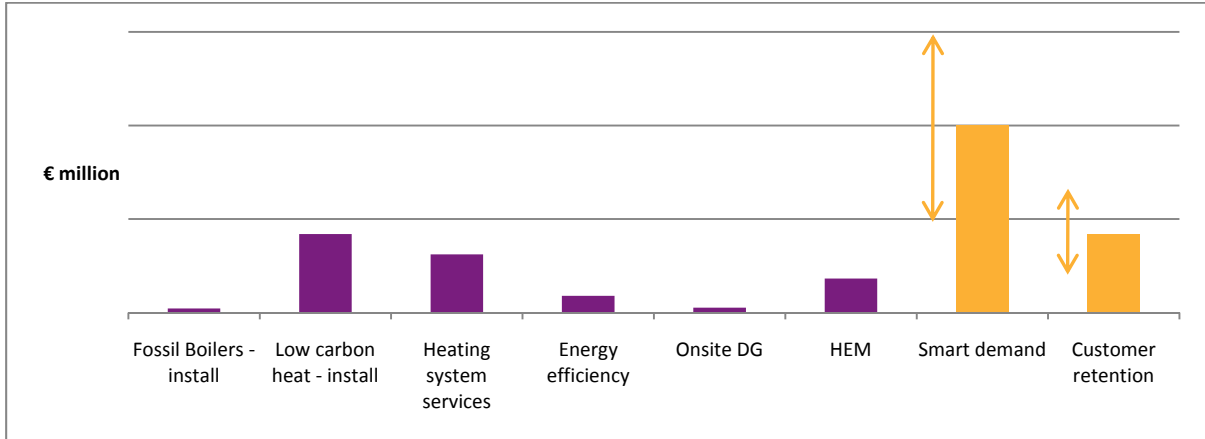
For example, consider the following market.

- ▶ **Fossil boilers** remain a large market, and energy suppliers’ share grows by 2020
- ▶ The **low carbon heating** market explodes in size, and energy suppliers capture a large chunk of the market
- ▶ **Energy efficiency** becomes a much more profitable market, and energy suppliers’ market share improves
- ▶ **Heating system services** becomes a very important Me Too offering, but profitability remains low
- ▶ **Onsite DG** is highly profitable, but the market is too crowded for energy companies to compete
- ▶ **HEM** remains a small market, dominated by energy suppliers.



But energy suppliers cannot realistically capture all of the opportunity – many market segments have incumbent suppliers (typically local installers) that wield significant market power. Or perhaps a new entrant is likely to unlock the market with a ‘Golden Key’ offering. This study will consider the realistic value that energy suppliers could capture.

DELTA BELIEVES THERE WILL NOT BE HUGE VALUE DIRECTLY AVAILABLE TO ENERGY SUPPLIERS IN THIS MARKET FROM ENERGY SERVICES. THE REAL VALUE IS TO BE CAPTURED INDIRECTLY, FROM SMART DEMAND AND CUSTOMER RETENTION



Investment Details

Subscription rate: €13,500 + VAT. This includes an onsite presentation at cost and two free places at Delta’s ‘Energy Services in Europe’ Summit, June 2011 in Copenhagen

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5. Case Study Toolkit

The toolkit will include around 20 relevant case-studies and examples of best-practice.

Virtual Power Plant - revenue security

Reference Data
 Country: Germany | Industry: Utility | Company: Vattenfall
 Classification: Future revenue security | Sub-sectors: revenue security, retention

Description
 Vattenfall Europe in an energy company supplying electricity and gas to the German market. It launched a virtual power plant (VPP) model in Germany based on a central control centre ('brain'). The brain looks at the day ahead power prices and dispatch schedules to 5 - 800 kWt CHP and to 50 kW and larger heat pumps.

Illustration of fluctuating generation: Forecast January 2010 electricity price in GB based on wind patterns to 2000. Surplus generation results in zero or negative electricity price

Smart demand: generate heat when electricity prices are at their lowest or below agreed heat price (see heat price index to gas prices) below

Benefit to the utility
 Maximize profit margins by indexing revenue and managing heat generation cost
 Turn on CHP where possible, when the electricity prices are below indexed gas price to heat customer's storage tanks
 Indexed gas price provides revenue protection

Benefit to the customer
 Customers pay less for heat from HP than from their conventional boilers, hence happy to be tied in for 10 years
 Due to operating efficiency, cost of generating heat from heat pumps will be less than that of conventional boilers

Heat price indexed to gas prices
 The utility will agree a gas price tracker indexed at an agreed percentage point e.g. 2% above retail gas price

Key learning / insight for other markets
 Utilities will increase customer retention by locking in the customers into a 10 year heat contract with a fixed tariff charge (indexed to gas prices)
 Able to control heat generation costs by generating heat when electricity prices are at a minimum or even negative
 There is a price risk element of this model where negative electricity and gas price differential could happen. A special scenario is where, in the future, due to the electrification of heat and transport demand for gas falls impacting on the decrease in gas prices and inversely increase in the demand and price of electricity. Utilities will need to hedge their electricity wholesale price and forecast retail gas prices to beyond the day ahead currently adopted

Expertise in Decentralised Energy