

Energy Companies, Energy Savings and Subsidies

Sirid Sif Bundgaard, consultant Ea Energy Analyses, MSc Geography, Copenhagen University and MSc Environmental Sustainability, Edinburgh University.

Abstract

In 2006 the network- and distribution companies in the electricity, natural gas and district heating sector along with the oil industry signed a voluntary agreement with the Danish Government on an Energy Efficiency Obligation (EEO). The annual binding energy efficiency target has been adjusted several times since. Following the political energy agreement of March 2012 the annual target is about to be doubled and thus amounting to almost 3.5 GWh first year energy savings.

The network- and distribution companies have freedom of method in order to promote cost-effective energy savings and meet the objectives of the EEO. This means i.e. that subsidies to households, businesses and collaborator such as installers and consultants can be used as an instrument. The use of subsidies, including: *extent, subsidy amount, significance, contributed savings, and how energy companies in practice fund the subsidies*, have not previously been elucidated.

These topics are studied to assess *whether it is socially appropriate to promote energy savings through the use of subsidies from energy companies*. An assessment of "social appropriateness" could potentially include a long list of criteria, depending on which perspective is used. In this presentation, the use of subsidies is discussed in relation to: *effect, legitimacy and cost-effectiveness*.

The assessment is made, based on 2010 data from energy companies, the Danish Energy Agency, the Danish Energy Regulatory Authority, end users and external stakeholders. Primary data has been collected as part of the official evaluation of the EEO conducted by Ea Energy Analysis, NIRAS and Viegand & Maagøe. Data includes detailed information on 635 energy saving projects implemented in 2010, questionnaire-based telephone interviews with 175 end-users who have implemented energy saving projects in 2010 under the EEO, telephone interviews with 27 installers and consultants who have been involved in the scheme and finally additional interviews with 16 experts and stakeholders.

A number of issues regarding the use and management of subsidies are identified:

- Energy companies meet their targets, but many households are free riders in relation to the subsidy
- Subsidies are provided for projects which are already very profitable and in some cases subsidies exceeds investment cost
- There is identified a lack of transparency in relation to how the scheme is financed and what the money is spent on
- Regulatory scrutiny and potential sanctions for non-compliance are limited by the scope of the voluntary agreement.

These issues reflect the dilemmas embedded in the EEO. However, it is estimated that with limited adjustments subsidies for business are socially appropriate, while the effort towards households should be rethought to achieve a greater net effect.