



**CONCERTED ACTION
ENERGY EFFICIENCY
DIRECTIVE**

Empowering energy consumers – the role of the EED

Consumer information programmes, training and certification of professionals

Executive summary 6.8

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Date: 18 November 2016

1 Background

Information, awareness and behavioural change are important elements in energy efficiency policy. Barriers to energy efficiency in households, SMEs and other organisations are often related to a lack of knowledge or a lack of interest. Lack of time and/or resources can also be barriers.

The purpose of this document is to summarise the main findings from the work under Concerted Action for Energy Services Directive (CA ESD II) and Concerted Action for the Energy Efficiency Directive (CA EED) relating to consumer information programmes, training and certification of professionals for the period 2011-2016. The following image illustrates the areas covered by the working groups:

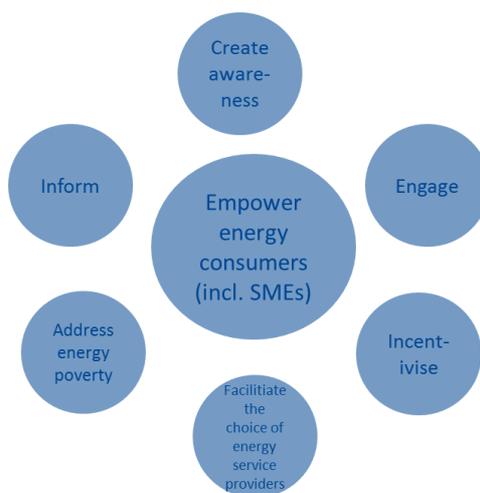


Figure 1: Topics related to consumer engagement under CA ESD II and CA EED

Under the EED, Member States (MS) shall promote the efficient use of energy by small energy consumers, including domestic consumers. The EED plays a role in empowering energy consumers, for instance through Articles 12 and 17 covering information, awareness raising and other measures relating to behavioural change such as consumer engagement during the roll out of smart meters¹.

Lack of proper communication and lack of awareness of the financing options available have been identified as barriers to the financing of energy efficiency investments. These barriers, as well as certain aspects of energy poverty are within the scope of the CA EED.

Energy services such as energy audits are important to increase knowledge and raise awareness. For households and SMEs it is important that it is easy to find professional energy service providers for energy audits and other energy services. This is where the certification of energy service providers (EED Art. 16) plays a role.

Relevant articles covered under CA EED:

- Policies and strategies for behavioural change (Art. 12)
- Designing and evaluating measures for behavioural change (Art. 7, 12)
- Smart meters and consumer engagement (Art. 9, 12)
- Information to banks and financial institutions (Art. 17, 20)
- Certification of energy service providers (Art. 8, 16)
- Energy poverty (Art. 5, 7, 12, 17)

¹ Metering and billing in art.9-12 is mainly covered in another section of the CA EED

2 Best practice

2.1 Night Hawks

At CA EED Plenary Meeting (PM) in Bratislava, there was a presentation of the EU project [Night Hawks](#). The aim of the project is to identify easy-to-realise energy efficiency potential through energy checks during closing time – night walks. A night walk is a check of a building (shop, SME, library, school, etc.) after hours, when the building is unoccupied (i.e. evening, night, weekend, holiday). A night walk is more advanced than general energy advice but less advanced compared to a complete energy audit.

One of the target groups for the project is shopping centres where energy saving potential ranging from 5% to more than 50% has been identified, and where 10% energy savings can be achieved through low cost or free measures. Around 4.5 TWh could be saved in shopping centres across Europe.

One concrete example is the shopping centre Regent Arcade in the Cotswolds (UK) where the estimated cost savings are around €20,000 through low cost measures identified during night walks.



Potential cost savings: < 20000€

- Increase staff awareness
- Time control on certain equipment
- Occupancy sensor time control
- Reduce compressed air settings
- Fix compressed air leaks
- LED lighting

Figure 2 Example from the Night Hawks project

The project also includes training and capacity building. One concluding remark was that the method to perform Night Walks is easy to replicate in other kinds of businesses and buildings where energy losses are suspected.

2.2 Main results of IEA’s work on policies for behavioural change

At the Bratislava PM there was also a presentation of the main results of the work on behaviour change that has been carried out at the International Energy Agency (IEA). The focus was on measures for behavioural change in the transport sector, although measures in buildings and industry were also presented and discussed.

The main areas for discussion in IEA’s work have been how energy policy should take account of behaviour to increase the uptake of energy efficient technologies and improve the efficient use of energy. The IEA has also looked into how behavioural trends affect energy consumption.

In the transport sector, energy efficiency policies can act at different levels: the first would be to avoid travel, the second to shift to energy efficient modes of transport and the third to improve the energy efficiency of vehicles (see the illustration below – figure 3). This “hierarchy” is important to be aware of in order not to focus policies solely on vehicle efficiency for instance. Policies for behavioural change would typically address the two first levels – avoid and shift modes.

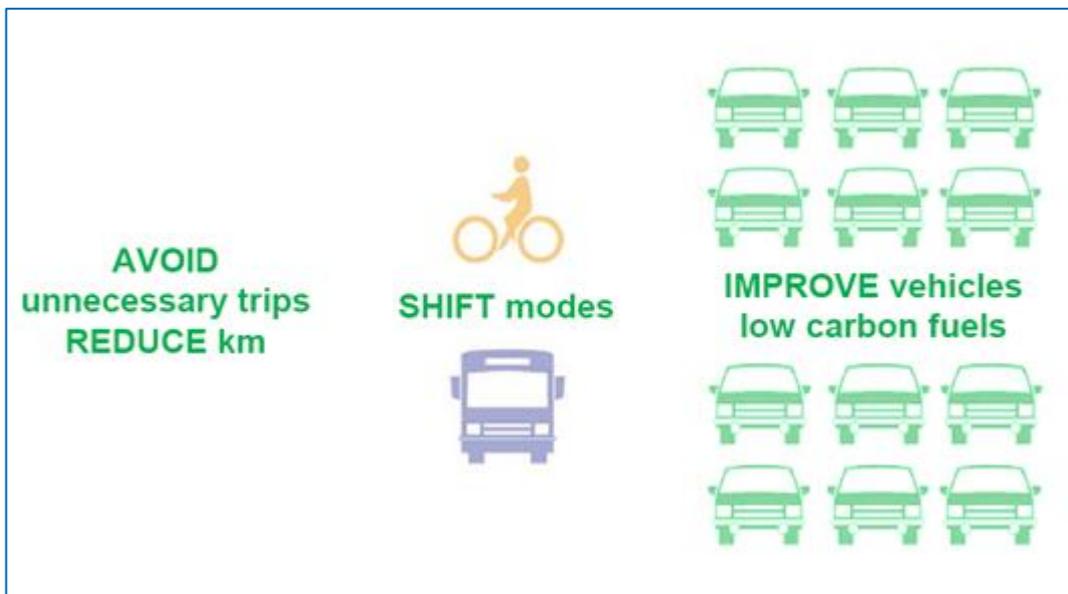


Figure 3 Behavioural change in the transport sector

Several examples of energy efficiency policies for the transport sector were presented, including:

- Vehicle fuel economy labels
- Free parking and access to express lanes for electric vehicles
- Urban planning tools to change consumer preferences and reduce vehicle travel demand
- Increase public transport demand by improving convenience and comfort
- Eco-driving programmes
- Information communication technology (ICT) and improved connectivity
- Dynamic pricing for roads and parking to reduce traffic congestion, fuel consumption, CO₂ emissions and air pollution
- In some markets, transport systems may be transformed by 'mobility as a service' (including Uber, car sharing, autonomous vehicles and integrated transport systems).

3 Main findings

Throughout the Concerted Action, MS have exchanged a wide variety of best practice relating to consumer aspects of energy efficiency and a collective learning process and capacity building has taken place among the participants. The learning has also included experiences from outside the EU and from the field of research. An overview of existing and planned policy instruments in the field of consumer information has been developed and a discussion relating to the design and evaluation of such policies has taken place.

The results achieved within the CA EED have been shared with other Concerted Actions, for instance the Concerted Action for Energy Performance in Buildings Directive (CA EPBD), and with other organisations, such as the International Energy Agency (IEA) and the Joint Research Centre (JRC). The focus has been to share general recommendations and conclusions gathered from the work within the CA EED, without entering into details for individual MS that fall under the confidentiality agreement.

Below is a summary of recommendations that have been given to MS relating to empowering energy consumers.

Inform, create awareness, engage

- Be aware that there is likely to be a lack of interest in energy consumption in the target group for Article 12 (households, SMEs and organisations) which must be taken into account. The message should try to spur curiosity rather than provoke guilt.
- It is important to keep the message simple and to clearly identify the target group, their drivers and their motivating factors.
- When targeting citizens – The most important aspect, in order to realise the energy efficiency potential, is that the information itself, as well as the sender and the conveyor of the information, are both trusted.
- When targeting SMEs – It is essential to “speak the language of the companies” in order for the communication to have an impact. MS must tap into drivers and interests of SMEs in order to trigger energy efficient actions.
- While designing an information campaign, the message must be very carefully chosen and adapted to the specific target group.
- Recognising the importance of social context and social practices is a must in order to successfully design and implement behavioural measures. Different approaches and viewpoints (such as sociological, physiological and economical) are needed in this work.
- The evaluation must be an integral part of the design of a measure. It is important for the continued success of different measures and programmes to find ways of evaluating soft measures that are not solely focused on the calculation of energy savings.
- When designing and evaluating measures for behavioural change, it is important to identify and recognise the multiple benefits of energy efficiency such as health, well-being, convenience, etc.
- Link information measures to the roll out of smart meters and plan for communication at the same time as planning for the roll-out. Distribution System Operators (DSOs) can play a key role in communicating with consumers during the roll-out.
- It is important to inform and teach consumers about the benefits of smart meters and the effective utilisation of the metering system and the energy saving potential. It is also important for consumers have to be aware of their rights concerning privacy.

Incentivise

- More dialogue between policy makers and banks on a national level could help to address some of the barriers to energy efficiency investments (lack of proper communication, weak marketing of financial instruments, a lack of awareness of the financing options available).
- There is a need for project development assistance to de-risk the investment; through standardisation and benchmarking, and aggregation of projects.
- Customers – in particular SMEs – need neutral information on different financing possibilities (i.e. grants, subsidies, etc.)
- Actors should bear in mind that the most important driver for making energy efficiency investments in buildings is increased comfort – a warmer and more comfortable house with less draughts – and that access to financing only plays a minor part in the decision to invest.

Facilitate the choice of energy service providers

- Registers of energy service providers are recommended in order for consumers to be able to easily find certified/accredited/qualified experts.
- Targeted information campaigns: The target group for energy services is not homogenous (industry, public sector, SMEs, households) and therefore the message must be adapted to different target groups in order to be effective.
- Need for a National Contact Point (NCP): There might be a need for a central contact point at national level, because requirements for certification of energy professionals are found in different Directives that typically are handled by different Ministries.
- Work on understanding the requirements in different countries: The first step in cross-border collaboration is to understand the requirements in other countries in order to be able to compare them to an MS's own requirements.

Address energy poverty

- *Identify*: The first step is to identify the households at risk of energy poverty.
- *Inform*: Lack of awareness, interest and knowledge is often a barrier to energy efficiency improvements
- *Incentivise*: Obviously, energy poor households will in general not have the financial means to invest in energy efficient renovation or new energy efficient products to the extent needed.
- Phase out financial social support measures that discourage energy inefficient behaviour (such as social tariffs) by targeted support such as direct financial payments to the energy poor and/or, even better, for support measures that reduce energy consumption and thereby help in an enduring way.

4 Next steps

The future energy system will not be the same as today's and this will also affect the role of consumers. Based on a study by the Swedish Energy Agency entitled Four Futures, a presentation of four explorative scenarios and a discussion on the role of the consumer in the future energy system was held at the conference in Bratislava.

Four Futures – explorative scenarios for the Swedish energy system after 2020

1. In Forte (forceful), it is important that society ensures that energy prices are low, especially for industry. Welfare is based on economic growth and the availability of jobs in traditional industries. Secure supply and access to energy is also one of Forte's main priorities.
2. Legato (tied together), involves reducing the energy system's environmental impact and helping to resolve a global issue. Important factors here are ecological sustainability and global justice, which characterise its solutions.
3. Espresso (expressive), is very much based on people's own initiatives and consumers who want to have individual solutions and flexibility. Here, green energy is a strong driving force. Decentralisation, small-scale private production and purchasing services are important elements.
4. Vivace (lively), has a strong climate focus. Sweden has chosen to become a forerunner in green growth and develop the export market for environmental clean technology and a new bioindustry. This entails an investment in new types of jobs.



Following this discussion in Bratislava, the participants identified areas for future cooperation within the Concerted Action with a focus on consumers and consumer information. The following areas were considered to be of highest priority:

- How to change consumer behaviour through ICT
- Transport/Mobility management
- Prosumers
- Verification of soft measures

This will serve as input to the identification of topics in the coming CA EED 2 project.

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The Concerted Action for the Energy Efficiency Directive (CA EED) was launched by Intelligent Energy Europe (IEE) in spring 2013 to provide a structured framework for the exchange of information between the 29 Member States during their implementation of the Energy Efficiency Directive (EED).

For further information please visit www.eed-ca.eu or contact the CA EED Coordinator Lucinda Maclagan at lucinda.maclagan@rvo.nl



Co-funded by
the Intelligent Energy Europe Programme
of the European Union