

DISCUSSION OF IMPLEMENTING UTILITY OBLIGATIONS IN AUSTRIA BY CONSIDERING EUROPEAN EXPERIENCES

Demet SUNA¹, Reinhard HAAS²

Motivation and Core Objective

In terms of addressing climate change in a cost effective way, reducing energy demand and improving efficiency became one of the key policies. Therefore, the European Union has set a target for 2020 of saving 20% of its primary energy consumption compared to BAU projections. But this target is threatened to be failed from today's point of view. EU Low Carbon 2050 Roadmap confirms this issue and states that with current policies, only half of the 20% energy efficiency target would be met by 2020. Accordingly European Commission has published a new proposal for a new energy efficiency directive and repealing Directives 2004/8/EC and 2006/32/EC (COM (2011) 370 final). One of the main proposed measures is the implementation of mandatory energy saving measures which imposes suppliers obligations on Member States. Thus this paper discusses the possibility of implementing utility obligations in Austria taking the experiences and specific lessons learned of EU Countries where such obligations are implemented, namely United Kingdom (UK), France (FR), Italy (IT), Denmark (DK) and Flemish region of Belgium (BE-Flem).

Method of Approach

First of all the characteristics and differences of utility obligations will be clarified derived from literatures Bertoldi et al. (2010), (2011), Eyre (2009), Mundaca (2008). It will be documented in detail how these obligations work in the analyzed countries. We show especially what the differences between countries are and try also to extract the weak points.

The common approach for comparative analysis of Austria with other countries is taking into account economical conditions as well as energy indicators, such as energy consumption, GDPs, CO2 emissions, energy prices and taxes etc. Beside that these countries will be compared in respect of their dependency of fossil fuel, energy market structure. This comparison will allow understanding how the utility obligations are designed in implementing countries and what are the reasons to set targets in respect of final -or primary energy reduction or CO2.

Results and conclusions

With respect to energy savings obligations to the utilities the commonly asked question is why the states should obligate a company to set measures that its customers use less its product. First, the utilities differ fundamentally from other companies as their product represents a necessity for modern human life which deserves also key attention in public regulation. Secondly, the production of this commodity is accompanied with environmental problems. In this respect the utilities claim to overtake their responsibility by undertaking energy efficiency measures. However, in practice in a liberalized market it appears that this works in general appropriately by obligating them.

Within Europe Energy efficiency targets to the utilities are imposed in particular to the suppliers or distributors. Figure 1 shows the general utility structures in Europe and accordingly the countries whether they obligate suppliers or distributors as well as, sectoral coverage of eligible saving projects. Except UK and FR –where energy suppliers are obligated- in the other implementing countries the distribution companies are committed to reduce their energy.

¹ TU Wien, Gusshausstrasse 25-29/370-3, 1040 Vienna- Austria, Telefonnr:+43-1-58801-370365 ; Fax:+43-1-58801-370397 ; E-mail: suna@eeg.tuwien.ac.at, <http://eeg.tuwien.ac.at/>

² TU Wien, Gusshausstrasse 25-29/373-2, 1040 Vienna- Austria, Telefonnr:+43-1-58801-370352 ; Fax:+43-1-58801-370397 ; E-mail: haas@eeg.tuwien.ac.at, <http://eeg.tuwien.ac.at/>

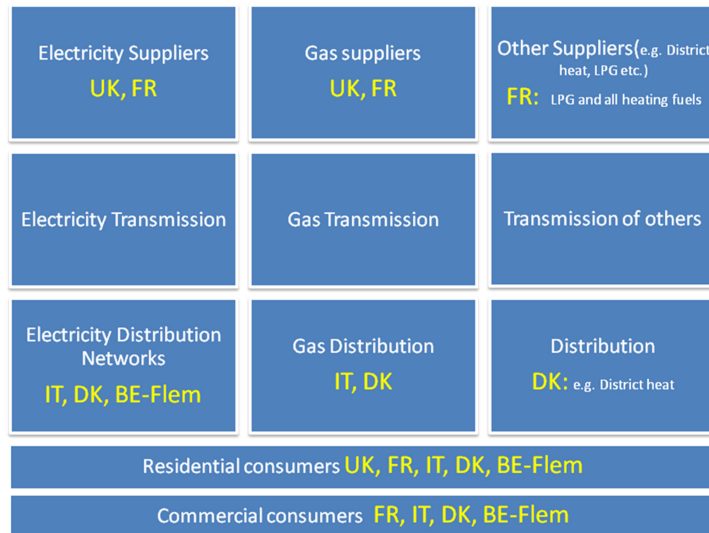


Figure 1: General Utility structures in Europe, which utilities are obligated by implementing countries and related sectoral coverage (residential and commercial consumers)

Table 1 shows that the benefit cost ratios in UK and DK's energy efficiency obligations are positive. The benefits costs ratio (BCR) expresses as a criterion for the cost efficiency of an instrument. If the value is bigger than one, the instrument can be categorized as cost efficiently. In this respect especially UK's EECs benefits cost ratios poses that this policy's cost efficiency is high. Eyre et al. (2009) concludes that the approach of obligations to the utilities is saving energy at lower costs than the cost of supply.

Table 1: Benefits cost ratios of Energy efficiency obligation to the utilities in UK and DK (source: Thomas, 2007)

Benefits cost ratios (BCR)	UK-EEC (Energy Efficiency Commitment) (2005)	Denmark-Energy efficiency obligation to the energy utilities (2008)
<i>BCR for society</i>	approx. 2,5-3	approx. 1 (with avoided CO2)
BCR for participants (for the year 2005)	5	approx. 2,5
BCR for energy suppliers (for the year 2005)	3-4	2,4

The international examples show that the target is in most cases achieved in a cost efficient way. Therefore, this policy instrument can also come into consideration for Austria and it is worth to discuss this policy as an option for Austrian energy efficiency policy mix. However, we think that the devil is in the detail. It is very important to design a utility obligation very detailed to avoid backlashes like free riders and adverse selection. So since the design and implementations play a decisive role, attention should be paid to learn from international experiences.

References

Bertoldi et al. 2010: Bertoldi P., Rezessy S., Lees E., Baudry P., Jeandel A., Labanca N., Energy supplier obligations and white certificate schemes: Comparative analysis of experiences in the European Union

Bertoldi et al, 2011: Bertoldi P., Rezessy S., Steuwer S., Where to place the saving obligation: end-users or suppliers; ECEE 2011 Summer Study

Eyre et al., 2009: Eyre N., Pavan M., Bodineau L., Energy company obligations to save energy in Italy, the UK and France: what have we learnt?, ECEEE 2009 Summer Study

Mundaca 2008: Mundaca L., Markets for energy efficiency: Exploring the implications of an EU-Wide `Tradable White Certificate` scheme, Energy Economics (30) (2008) 3016-3043

Thomas, 2007: Stephan Thomas, Aktivitäten der Energiewirtschaft zur Förderung der Energieeffizienz auf der Nachfrageseite in liberalisierten Strom- und Gas Märkten europäischer Staaten: Kriteriengestützter Vergleich der politischen Rahmenbedingungen, Buch Seite/ 334, PeterLang Europäischer Verlag der Wissenschaften, band 13, Frankfurt am Main, 2007