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Extract from Rigsrevisionen's report on

## the energy efficiency obligation scheme (EEO)

submitted to the Public Accounts Committee



# 1. Introduction and conclusion

#### 1.1. PURPOSE AND CONCLUSION

- 1. This report concerns the effort made by the Danish Ministry of Energy, Utility and Climate to ensure that the energy efficiency obligation scheme (EEO) promotes cost-effective energy savings.
- 2. The purpose of the EEO is to achieve energy savings in domestic households and in the business sector by various measures like, for instance, replacing old windows with more energy-efficient ones or switching to more energy-efficient lighting. All with the purpose of reducing energy consumption in Denmark. In 2015, the total costs of the EEO was just under DKK 1.6 billion.
- 3. Rigsrevisionen initiated the study in August 2016 at the request of the members of the Danish Public Accounts Committee, cf. appendix 1 who had noted that the average costs of energy savings achieved under the EEO had increased considerably. Furthermore, parts of the energy sector had criticized the scheme for being too expensive (not cost effective), and had indicated that inadequate supervision and control increased the risk of abuse of the scheme as well as distortion of competition.
- 4. The network and distribution companies within electricity, natural gas, district heating and oil (in the following referred to as the *utility companies*) are obliged to achieve a certain amount of energy savings under the EEO. The utility companies generally agree with independent builders or energy consultants to carry out the end-use energy-saving projects, primarily in the household and business sector. When the projects are completed, either the subcontractors or end users receive a subsidy payment from the relevant utility company, who reports the achieved energy savings to the ministry. The costs incurred by the utility companies for the energy-efficiency effort are financed over the consumers' energy bill.
- 5. The Ministry of Energy, Utility and Climate has defined the framework and principles that govern the EEO under the provisions of the utility acts. The EEO is based on a voluntary agreement entered between the minister and the utility companies, which has subsequently lead to the issue of a ministerial order by the Ministry of Energy, Utility and Climate. The first voluntary agreement was set up in 2006, and has been re-negotiated in 2009, 2012 and 2016.

#### THE UTILITY ACTS

The acts concerning supply of electricity, natural gas and heat (the utility acts) authorise the minister for energy, utility and climate to regulate the utility companies' implementation of energy savings.

### THE VOLUNTARY AGREEMENT ON THE

The voluntary agreement on the EEO has been entered between the minister for energy utility and climate and the trade associations for electricity, district heating and oil, and the three gas companies in the Danish market.

Prior to the 2012 voluntary agreement, the political parties behind the energy policy agreement, covering the period 2012 to 2020, decided to increase the target set for the savings obligation, and aim for a cost-effective agreement with the utility companies. This decision has provided the basis for the two most recent voluntary agreements entered between the ministry and the utility companies in 2012 and 2016.

6. The purpose of the study is to assess whether the Ministry of Energy, Utility and Climate has ensured that the EEO promotes cost-effective energy savings. The utility companies are required to deliver a certain amount of energy savings, which they do primarily by subsidizing implementation of energy-saving measures. It is not possible to measure the actual amount of energy saved as a result of these measures, and the utility companies are therefore – in accordance with the provisions of the EEO – required to report the estimated energy savings for each measure implemented. The provisions of the EEO are intended to ensure the accuracy of these estimates. The report answers the following questions:

- Has the Ministry of Energy, Utility and Climate adequately ensured that reported energy savings are in accordance with the provisions of the EEO?
- Has the Ministry of Energy, Utility and Climate adequately ensured that the utility companies achieve energy savings at the lowest possible costs?

#### **CONCLUSION**

It is Rigsrevisionen's assessment that the Ministry of Energy, Utility and Climate's effort to ensure that the EEO promotes cost-effective energy savings has been unsatisfactory.

The Ministry of Energy, Utility and Climate has not adequately ensured that the reported energy savings are in accordance with the provisions of the EEO. First, the ministry's annual random samples have generally been carried out on a very limited amount of the total reported energy savings in spite of the fact that the random sample revealed high and increasing error rates. The ministry increased the number of companies and cases in the random sample in 2015, but as a result of the selection criteria applied by the ministry only around half of the utility companies risked being sampled for control. This is not considered satisfactory by Rigsrevisionen.

Second, the ministry has failed to ensure that the utility companies – in their reports – have deducted the energy savings that the ministry refused to accept based on the results of the sample checks. This is not considered satisfactory by Rigsrevisionen, because of the risk that energy savings that have not been accepted are nevertheless included in the statement of reported energy savings.

Third, the Ministry of Energy, Utility and Climate has not adequately followed up on suspected abuse of the EEO. In the period from 2012 to 2016, the ministry was informed of aspects of the administration of the scheme that gave the ministry reason to suspect abuse. In most of these cases, the ministry changed the rules to prevent potential future abuse. This step is welcomed by Rigsrevisionen. However, the ministry has not adequately investigated past incidents of abuse. This means that the ministry has no information of the extent of abuse in the past, nor is it able to refuse potential energy savings that do not meet the requirements of the EEO.

The Ministry of Energy, Utility and Climate has not adequately ensured that the utility companies achieve energy savings at the lowest possible costs. Rigsrevisionen has reached this conclusion based on the ministry's failure to monitor and ensure that the costs of the EEO were calculated by the utility companies in accordance with the rules. Until the autumn 2016, the ministry was under the impression that the Danish Energy Regulatory Authority monitored the costs of the EEO. However, according to the rules governing the scheme – which were established by the ministry itself – the Danish Energy Regulatory Authority does not have legal authority to monitor the area. Rigsrevisionen finds it unsatisfactory that the ministry has not ensured monitoring of the costs.

The EEO is based on a principle of financial self-sustainability, and Rigsrevisionen therefore finds it particularly problematic that the costs have not been monitored. According to the principle of self-sustainability, all costs incurred by the utility companies in connection with their energy-saving effort will be covered. This means that the utility companies have no incentive to achieve energy savings at the lowest possible costs. Another consequence of the financial self-sustainability principle is that costs incurred by the utility companies for energy savings that have subsequently been refused by the ministry, are also covered. This means that there is no financial incentive for the utility companies to ensure that the energy savings they report are in accordance with the provisions of the EEO.

To the above should be added that external evaluations have demonstrated that directing approximately one third of the energy-efficiency effort at the household sector is not so-cio-economically viable. Overall, this effort has produced a socio-economic deficit, whereas the effort aimed at the business sector has produced a socio-economic surplus. The reason for this is primarily that the additionality of energy savings implemented in the household sector has been relatively low, meaning that the energy savings achieved in the household sector would have been realised in all circumstances – also without the effort by the utility companies.

Rigsrevisionen has established that the Ministry of Energy, Utility and Climate changed the rules governing the EEO in a new ministerial order issued in June 2017 in order to strengthen monitoring of the scheme, among other things. The new rules authorise the Danish Energy Regulatory Authority to monitor the costs of the utility companies. The ministry also allocates more resources to the performance of the monitoring task that are to be financed within the EEO. The steps taken by the ministry to strengthen monitoring of the scheme are considered sensible as well as necessary by Rigsrevisionen. However, it is too early to assess the effect of these initiatives.

## THE DANISH ENERGY REGULATORY AUTHORITY

This is an independent body under the Ministry of Energy, Utility and Climate, which means that the ministry can only impose an obligation on the regulatory authority by issuing specific rules in a ministerial order. Up to now, the energy-efficiency order has not given the Danish Energy Regulatory Authority authority to monitor the costs of the EEO.