Letter from: Ole Toft, Deputy Head and Deputy Permanent Representative, Danish Permanent

Representation to the EU Date: 20 December 2013

To: DG ENER

Subject: Notification to the Commission concerning reporting under Article 14 of

Directive 2012/27/EU on energy efficiency

Ref.: 400.K.4-0.BRU.

Please find enclosed the report submitted to the European Commission under Article 14(6) of Directive 2012/27/EU on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC.

(Complimentary close)

#### DANISH ENERGY AGENCY

19 December 2013 File No 2532/1650-0001 Ref. RVN/BJK/FBE Supply

Notification of exemptions under Article14 of the Energy Efficiency Directive

### 1. Introduction

Denmark hereby gives notice of exemptions under Article14(6) of Directive 2012/27/EU of the European Parliament and of the Council on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC.

The Directive requires a number of Danish laws to be amended. The draft amendment law is scheduled to be presented to Parliament on 29 January 2014. The requirements laid down in Article 14(5) of the Directive, relating to the carrying-out of a cost-benefit analysis to promote economically viable exploitation and use of CHP, industrial surplus heating and district heating and cooling, will be implemented in three Orders:

- 1. Projects Order under the Heat Supply Act,
- 2. Plants Order under the Electricity Supply Act and
- 3. a new Order on the approval of industrial installation and district cooling system projects under the Heat Supply and District Cooling Acts.

The Orders are expected to be submitted for consultation in spring 2014 following adoption of the draft law. They will enter into force on 5 June 2014.

Existing Danish legislation already includes an authorisation procedure for heat-producing plants and district heating networks in Order No 374 of 15 April 2013 as amended by Order No 1297 of 15 November 2013 ('the Projects Order'). Electricity producers must also obtain authorisation under Order No 493 of 12 June 2003, as amended by Orders No 684 of 18 June 2010 and No 1335 of 2 December 2010, on conditions and procedures for granting permission for the establishment of new electricity production plants and major alterations to existing plants ('the Plants Order'). The Orders can be found at <a href="https://www.retsinformation.dk">www.retsinformation.dk</a>.

The following sections will describe the procedures set out in the various Orders and the exemptions which Denmark expects to grant from the requirement under Article 14(5) to carry out a cost-benefit analysis.

2. Authorisation of heat-producing plants and district heating networks (the Projects Order) Under the Projects Order the current procedure for heat-producing plants and district heating networks, which requires undertakings to carry out a socio-economic analysis, is maintained. The municipal council, which is the approval authority, can only approve projects specifically found to be the most socio-economically advantageous option. For this reason applications for approval of a project proposal must be accompanied by a socio-economic assessment and analysis. The municipal council may decide that certain information, including the socio-economic assessment and analysis, need not be provided in view of differences in the nature and background of the project proposals. However, given that the municipal council must

assess whether a particular project is the most socio-economically advantageous one, a socio-

economic assessment and analysis will usually be required unless there are other alternatives to the project.

## 3. Authorisation of establishment for electricity producers (the Plants Order)

Under current law new electricity production plants may be established and major alterations to existing plants made only with prior authorisation by the Danish Energy Agency. There is at present no requirement to carry out a cost-benefit analysis. One of the conditions for authorisation is compliance with certain  $CO_2$ ,  $N_2O$  and  $CH_4$  emission limits.

The current procedure will be extended so that applications for authorisation will in future have to be accompanied by a cost-benefit analysis in accordance with Part 2 of Annex IX to the Energy Efficiency Directive. A cost-benefit analysis will <u>not</u> have to be submitted for projects already designed as CHP projects. As the purpose of the cost-benefit analysis is to establish whether it makes economic sense to use surplus heat from electricity production, such analysis is irrelevant in cases where the project is already designed for the exploitation of surplus heat. In other words a cost-benefit analysis need only be carried out for applications concerning electricity production plants which do <u>not</u> use heat.

Denmark is considering granting the following exemptions from the requirement for electricity producers to carry out a cost-benefit analysis:

- 1) plant projects where the national cost-benefit analysis under Article 14(3) of the Energy Efficiency Directive finds conditions to be unsuitable for district heating or cooling;
- 2) plant projects where the exploitation of surplus heat would require the establishment of a line more than 5 km in length for transmission to the district heating or cooling network;
- 3) projects for peak-load and back-up electricity generation installations which are planned to be operational for less than 1 500 hours per year as a rolling average over a five-year period;
- 4) projects for electricity production plants that need to be located close to a site approved under Directive 2009/31/EC for the storage of  $CO_2$  from the plant.

Electricity production plants exempt from the requirement to carry out a cost-benefit analysis are, however, still required to obtain authorisation for verification of compliance with current emission requirements.

# 4. Approval of industrial installations and district cooling systems (Order on the approval of industrial installation and district cooling system projects)

Under current law industrial installations and district cooling systems can be established unapproved. Such installations will be subject to a new procedure laid down in a separate Order on the approval of industrial installation and district cooling system projects. Project approval applications must be accompanied by a cost-benefit analysis in accordance with Part 2 of Annex IX to the Energy Efficiency Directive. A cost-benefit analysis will not have to be submitted for projects already designed to use surplus heat. As the purpose of the cost-benefit analysis is to establish whether it makes economic sense to use surplus heat, such analysis is irrelevant in cases where the project is already designed for the exploitation of surplus heat. The project will, however, still have to be submitted for approval in order to demonstrate that surplus heat is used in its implementation.

Denmark is considering granting the following exemptions from the requirement to carry out a cost-benefit analysis of industrial installations and district cooling systems:

1) plant projects where the national cost-benefit analysis under Article 14(3) of the Energy Efficiency Directive finds conditions to be unsuitable for district heating or cooling;

- 2) industrial installation projects where the exploitation of surplus heat would require the establishment of a line more than 5 km in length for transmission to the district heating network;
- 3) district cooling production plant projects where the surplus heat used to operate the plant would require the establishment of a line more than 5 km in length for transmission to the plant;
- 4) industrial installation projects where the temperature of the surplus heat is less than 10 °C;
- 5) district cooling production plant projects where the temperature of the surplus heat available for alternative use is less than 70 °C.

As the sole purpose of the approval procedure is to ensure that a cost-benefit analysis of industrial installations and district cooling systems is carried out, projects involving such plants will not have to be approved where the analysis is deemed to be irrelevant.

## 5. Background of the exemptions

The above reported exemptions are expected to be verified/qualified as a result of the 'comprehensive assessment' at Member State level referred to in Article 14(1) of the Energy Efficiency Directive.

The comprehensive assessment must be completed by the end of 2015 at the latest. Analyses and assessments will follow the guidelines set out in Annex VIII. The analysis will be broken down into several parts:

- An analysis of the future role of district heating. That analysis follows on from the energy policy agreement of 22 March 2012 concluded by the Danish Government with the Liberal Party of Denmark, the Danish People's Party, the Red-Green Alliance and the Conservative People's Party. It considers the socio-economic and corporate economic potential for the extension of district heating and which forms of district heat production are most cost-effective.
- An analysis of the scope to improve use of surplus heat from industry. That analysis is also part of the energy agreement of 22 March 2012. It includes an assessment of the economic potential for undertakings to use surplus heat and the current framework conditions. The scope of analysis is currently being broadened to cover socio-economic potential in order to fulfil the reporting requirement laid down in Annex VIII.
- An analysis of national cooling demand and estimates of the technical and socio-economic potential for district cooling from surplus heat, etc. That part of the analysis is defined in line with the analytical requirements set out in Annex VIII as regards cooling.

Thresholds for the exemption of undertakings from the requirement to carry out cost-benefit analyses under Article 14(5)(a)-(d) are expected to be verified/qualified on the basis of the following parameters:

- minimum values for the available quantity of surplus heat and relevant temperature levels;
- minimum values for the marketability of surplus heat;
- distance between industrial installations and district heating networks or other large heat consumers;
- links between the above parameters;
- the exemption reported for plants where the exploitation of surplus heat would require a transmission line more than 5 km in length is based on preliminary findings of the analysis of the role of district heating.

The exemption for peak-load and back-up electricity generation installations is granted under Article 14(6)(a) of the Directive.

The exemption for electricity production plants for the storage of  $CO_2$  is granted under Article 14(6)(c) of the Directive.

If you have any questions regarding the exemptions which Denmark is considering granting or require any further information, please contact me on telephone number +45 3392 6841 or at email address <a href="mailto:rvn@ens.dk">rvn@ens.dk</a>.

Yours faithfully

Renée van Naerssen