REPORT BY THE REPUBLIC OF ESTONIA IN ACCORDANCE WITH ARTICLES 6(3) AND 10(2) OF DIRECTIVE 2004/8/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL ON THE PROMOTION OF COGENERATION BASED ON A USEFUL HEAT DEMAND IN THE INTERNAL ENERGY MARKET AND AMENDING DIRECTIVE 92/42/EC

1. Transposition/implementation of the legal text of Directive 2004/8/EC

Question 1: *What is the level of transposition of the Directive in your country? What is the timeline for the remaining parts of the transposition of the Directive, if any?*

Directive 2004/8/EC has been fully transposed in Estonia.

Question 2: *What is the timeline for implementing measures based on the Commission Decision of 19.11.2008 establishing detailed guidelines? Please indicate how this has taken place (revision of a general energy law, a specific law, decree, regulation,…).*

Estonia has taken note of the Commission Decision. There has been no need to improve existing legislation, in particular Regulation No 30 of the Minister for Economic Affairs and Communications of 3 May 2007 establishing rules for efficient cogeneration, despite support for efficient cogeneration on the electricity market being provided for in Estonia under Section 59(1)(2)-(4) of the Electricity Market Act.

Question 3: *To what extent do you consider your country to have already significantly implemented the Directive?*

Pursuant to the Directive, the Electricity Market Act introduced in Estonia support schemes to promote on the electricity market the production of electricity in cogeneration plants. A great deal of emphasis has been placed on promoting cogeneration in implementing Estonia's energy policy and legislation as well as in the Competition Authority's rules on energy pricing.

Question 4: *Is your country using the alternative calculation method according to Article 12(2)?*

Estonia does not use the alternative calculation method according to Article 12(2) because there are no cogeneration plants producing mechanical energy in Estonia.

Question 5: *Is there any need for your country to review in accordance with Article 13 the threshold values used for calculation of electricity from cogeneration and/or the threshold values used for calculation of efficiency of cogeneration production and primary energy savings?*

Estonia does not consider it necessary to change the threshold values at present.

2. National potential to increase the share of high-efficiency cogeneration

Question 6: *Can your country already show progress in high-efficiency cogeneration since the last report on national potential which can be ascribed to either EU or national legislation and support schemes?*

Measures which foster the development of cogeneration are overwhelmingly based on European Union legislation, national legislation and support schemes. However, it is also necessary to recognise the achievements of local authorities where district heating is used in densely populated areas — with a view to safeguarding district heating systems, they have analysed the development of the local energy economy and in many cases established district heating areas (areas in which district heating is the only available source of heating). Local authorities and their utility companies have searched actively for funding to improve the condition of district heating systems and, as regards support, have found the own-funding required for projects.

There have been no significant changes in Estonia's cogeneration potential (see also Annex 1).

Question 7: *What is your evaluation of the progress towards increasing the share of high-efficiency cogeneration in your country? Your assessment should be based on the specific figures to be* ***included*** *in the attached* ***spreadsheet (Excel file****) designed to facilitate the submission of your data.*

The development of cogeneration in Estonia can be considered satisfactory. The contribution of cogeneration plants on the electricity market has been preserved in spite of significant changes in the energy sector, such as the closure of old oil-shale fuelled cogeneration plants in Estonia, the increase in natural gas prices to a level comparable to that of other EU countries and the dwindling market in heat. The use of local fuels in cogeneration is increasing. More detailed indicators are provided in the attached Excel files (see Annex 2).

3. Barriers to high-efficiency cogeneration

Question 8: *Please give your views on the current barriers to high-efficiency cogeneration in your country:*

- barriers in relation to administrative procedures (authorization, coordination among competent authorities, streamlined simplified procedures, etc);

- barriers in relation to electricity grid system and tariff issues (including specific measures for small scale and micro cogeneration units);

- other barriers (internalisation of external costs, energy prices, financial & technical barriers, etc) in accordance with Articles 9 and 6 of the cogeneration Directive 2004/8/EC.

Indicate the measures to overcome them.

There are no significant barriers in relation to administrative procedures in Estonia. The administrative procedures in place ensure the various parties have the opportunity to participate in decision-making processes.

There have to date not been any barriers in relation to the electricity grid system and tariffs which have hindered investment decisions regarding cogeneration plants. However, the authorities have had to intervene to resolve some disputes between market

participants. An open exchange of information is enough to overcome the problems that arise. So far Estonia has not used the network service tariffs applicable to producers but their introduction is being looked into. However, a fundamental change of this kind must be flexible and take account of events on neighbouring markets in order not to have an unnecessarily negative impact on the competitiveness of Estonian electricity producers.

One other barrier we wish to highlight is the issue of fuel supply. All potential fuel price changes and circumstances that affect the fuel supply have a major impact on the development of cogeneration because, as a rule, fuel is the biggest outlay of cogeneration plants.

There is no competition on the Estonian gas market because all gas sold in Estonia is supplied by Gazprom. Consequently, users of natural gas are dependant on one supplier. In addition to the risk involved in having a monopoly supplier, the availability of natural gas as a fuel is also affected by a lack of investment in the gas infrastructure in Russia. In spite of the Estonian gas network's relatively strong connections with the gas networks of neighbouring countries, in the cold months of winter 2005 gas supplies to Estonia were reduced significantly as a result of the gas shortage in north-western Russia. Security of supply would be helped considerably by connecting the Estonian gas network to the Baltic gas pipeline and the Finnish gas network. The largest cities, towns and villages in Estonia are connected to the gas network, which means the technical conditions required for using gas are in place. However, the lack of a gas network is a barrier to using gas for cogeneration in central and western Estonia and on the islands of Hiiumaa and Saaremaa.

Peat and renewable biofuel are local fuels with considerable energy potential which can be used sustainably in small-scale cogeneration plants. A well thought-through peat policy at national level would enable these fuels to be an important and sustainable part of cogeneration. The main negative aspect of using peat is the relatively high CO_2 content of the combustion gases. As a result of the confusion surrounding the greenhouse gas emission allocation plan and the trading system there was considerable risk to users of peat for cogeneration.

In the short term there is expected to be an increase in the demand for wood fuels due to new energy generation possibilities using wood (first and foremost new oil-shale fluidised bed blocks for wood-fuelled cogeneration), increased production of wood pellets and the development of the timber and paper industry. Increased demand has caused the price of wood to rise. However, as the price of wood fuels increases, some energy producers may shift to peat fuels which in turn will cause the price of wood fuels to drop. One factor which will stabilise the increase in the price of wood fuels is the ability to import them from Russia. The combined effect of these factors on the price and availability of wood cannot be forecast.

The availability and cost of fuels for cogeneration and additional descriptions of the restrictions on their use are set out in more detail in the report “Assessment of Estonia’s national cogeneration potential” (ESTIVO 2011).

The fact that a considerable proportion of the heating market is made up of relatively low-consumption networks is another barrier to the development of cogeneration. According to data from Statistics Estonia, the generation of heat using boilers in Estonia is as shown in the following table:

	Sectors

			Households, businesses and services							
	Industry		District heating		Non-district heating (business and public sector)		Non-district heating (households)		Other	
Boiler capacity, MW_s	Production	Average nominal capacity of boilers	Production	Average nominal capacity of boilers	Production	Average nominal capacity of boilers	Production	Average nominal capacity of boilers	Production	Average nominal capacity of boilers
	MWh_s	MW_s	MWh_s	MW_s	MWh_s	MW_s	MWh_s	MW_s	MWh_s	MW_s
Up to 1	336 000	0.31	387 000	0.47	338 000	0.26	2 200 000	0.01	42 000	0.26
1 - 5	525 000	2.3	782 000	2.3	215 000	2.4	-	-	54 000	1.7
5 - 20	556 000	8.9	1 189 000	9.4	266 000	7.2	-	-	4000	8
20 - 60	-	-	136 000	45.1	1 000	48.2	-	-	-	50
Over 60	-	-	732 000	116.3	-	-	-	-	-	-

The introduction of low-capacity cogeneration equipment is expensive and is not acceptable in those small district heating systems in rural areas which serve clients with limited means.

4. Guarantees of origin and support schemes

Question 9: *Article 5 of the Directive requires Member States to ensure that accurate and reliable guarantees of origin are issued according to objective, transparent and non-discriminatory criteria. Please indicate what is the situation concerning the implementation of this measure in your country (information on primary energy savings, type of registration system)?*

Although Estonia has implemented a certificate of origin scheme and it is possible to obtain certificates of origin from the system operator, the legal basis of the Estonian scheme is being improved. At the same time Estonia does not intend to link the support schemes arising from the Electricity Market Act with the certificates of origin.

Question 10: *Does your country have support schemes for cogeneration/CHP based on Directive 2004/8/EC (operational and/or investment aid)? What kind of support is provided (feed-in tariffs, certificates and quota, priority access to the grid,…)? Are they designed to provide stable long-term investment conditions? Which sectors will be targeted (agricultural and/or industrial and/or heating cogeneration)?*

In addition to the support scheme provided for under the Electricity Market Act under which support is paid for electricity produced in efficient cogeneration plants, investment aid is granted in Estonia for low-capacity cogeneration plants fuelled on sustainable fuels. The aim of the support scheme provided for under the Electricity Market Act is to stimulate investments in cogeneration. No distinction is drawn between sectors as regards the support schemes.

Question 11: *How much money on a yearly basis has been provided in this way in the past years to the promotion of high-efficiency cogeneration in particular? And how much*

money is expected to be made available on a yearly basis to the promotion of high-efficiency cogeneration in the coming years?

EUR 420–470 million has probably been spent solely on establishing cogeneration plants, to which must be added the cost of improving the electricity grid and modernising the district heating network.