Assessment of climate change policies as part of the European Semester

Country Report Estonia

26 January 2015

A report submitted by ICF Consulting Limited
in association with
Ecologic Institute, Berlin and eclareon GmbH

to DG Climate Action
### Document Control

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<th>Document Title</th>
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<tbody>
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1 Short Summary

In 2014, Estonia adopted a new Energy Economy Development Plan 2030+ (ENMAK 2030+) which sets out priorities for national energy policies. ENMAK 2030+ outlines several strategies for sectors related to energy production and consumption and offers strategic guidance for the increase of energy efficiency in energy production and consumption (See Chapter 2).

In 2014, important developments could be observed also in the field of climate change. The Ministry of the Environment launched a tender to draft a climate change strategy and an action plan. Both documents are expected to be in force in 2016 (see Chapter 2).

The share of GHG emissions not covered by the European Emission Trading Scheme (EU ETS) is around 25%, which is significantly below the EU28 average. The Estonian non-ETS target under the Effort Sharing Decision (ESD) is 58% (compared to 2005) non-ETS emissions increased by 6% between 2005 and 2013 which is below of the interim target. According to the latest national projections submitted to the Commission and taking into account existing measures, the 2020 target is expected to be met by a 4,8%.

2 Climate and energy policy priorities

Currently, Estonia’s climate and energy policies are contained in two national strategies: 1) the Estonian National Strategy on Sustainable Development (Sustainable Estonia 21) and 2) the National Environmental Strategy by 2030. Sustainable Estonia 21 was adopted in 2005 and is the key national strategic document aimed at developing country’s public sectors in a sustainable manner.

Environmental sub-goals of this policy document include the use of natural resources in the way and in amounts that ensures an ecological balance, reduction of pollution, and preservation of biodiversity and natural areas. More concrete long-term environmental objectives along with the measures for their achievement are formulated in the National Environmental Strategy by 2030 that was endorsed by the Parliament in 2007. Among others, it sets out measures for the reduction of waste generation, for balancing the use of forests, for eliminating the use of substances depleting the ozone layer, for developing an environment-friendly and comfortable public transport system, etc. The plan includes both EU-oriented and national activities, for example reducing environmental impact of the energy sector and elimination of residual pollution.

In addition, climate and energy related issues are contained in several development plans prepared by different ministries such as the Estonian Forestry Development Plan 2020 adopted in 2012, the Nature Conservation Development Plan 2020 of 2010 and the Development Plan of the Ministry of the Environment 2013-1016 adopted in 2012.

In 2014, the Ministry of the Environment launched a tender for drafting a national climate strategy that would foresee a reduction of GHG emissions by 75% by 2050 compared to 1990 levels. The Climate change strategy is meant to be complemented by an action plan. The first draft is expected to be ready in January 2015 and the final document by the end of 2016. The climate change strategy will cover such sectors as human health and the environment, industry, food production industry, forestry, agriculture, land development, usage of natural resources (including fishing and hunting), biodiversity, tourism, building sector, infrastructure, climate change adaptation measures (ENVIR, 2014a).

In 2014, the Energy Economy Development Plan 2030 (ENMAK 2030+) was drafted. ENMAK 2030+ is expected to be approved by the Parliament in 2015. ENMAK 2030+ contains targets to guarantee energy supply in the electricity sector, the heating sector, housing and the transport sector; to reduce energy intensity and increase energy efficiency in energy production, transmission, distribution and in consumption without reducing competitiveness of Estonia and to increase energy security by developing a competitive energy business sector, energy infrastructure and energy connections and production of local fuels.
The above given key Estonian climate and energy policies are aimed at achieving the national targets agreed under EU legislation in a most cost-efficient and environmental-friendly way. Even though the country has large resources of oil shale, which is the primary source for electricity generation, one of the key priorities in the energy sector is to produce less electricity from oil shale. The new oil shale taxation system, which is expected to be in place in the end of 2017 (see Chapter 4.2.1), shall reduce attractiveness of the oil shale and in turn encourage electricity producers to use renewables such as biomass, biogas and natural gas for electricity generation. Greater use of renewables is promoted also in the Estonian transport sector. In October 2014, the Estonian Development Fund published the Estonian Biomethane Programme – Growth Engine of the Economy. According to this programme, Estonia has possibility to increase its biomethane production by around 350 million Nm³ annually (see Chapter 4.2.4).

3 GHG trends and projections

Estonia increased its total GHG emissions by 15% between 2005 and 2013. The share of GHG emissions not covered by the European Emission Trading Scheme (EU ETS) is around 25%, which is significantly below the EU28 average (see Table 1).1

Table 1 Key data on GHG emissions

<table>
<thead>
<tr>
<th>National data</th>
<th>EU28</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2005</td>
</tr>
<tr>
<td>Total GHG emissions Mt CO₂eq</td>
<td>18.4</td>
</tr>
<tr>
<td>Non-ETS emissions Share in total emissions</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: EEA 2014a; EEA 2014c

By 2020, Estonia can increase its emissions not covered by the EU ETS by 11% compared to 2005, according to the Effort Sharing Decision (ESD). The latest data for 2013 show that Estonia emitted 15.5 percentage points less than it was allowed under the annual allocation interim target under the ESD for the year 2013 (contrary to the development for its total GHGs) (see figures in Table 2). National projections indicate that while emissions may increase from there the country will not only meet but exceed its 2020 target by about 4.8 percentage points with existing measures (WEM) and by about 9.3 percentage points with additional measures (EEA 2014a).

Table 2 Non-ETS emission targets, trend and projections

<table>
<thead>
<tr>
<th>Compared to base year</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
</tr>
<tr>
<td>ESD interim target</td>
</tr>
<tr>
<td>ESD emissions</td>
</tr>
<tr>
<td>2020</td>
</tr>
<tr>
<td>ESD target</td>
</tr>
<tr>
<td>ESD projections WEM</td>
</tr>
<tr>
<td>ESD projections WAM</td>
</tr>
</tbody>
</table>

Source: EEA 2014a. Green indicates target met or exceeded, orange indicates a value below.

1 The European Environment Agency has developed a complex methodology to measure progress on the Non-ETS/ESD targets of all EU Member States. This report uses the figures derived on this basis. A detailed explanation and the underlying absolute amounts are contained in Annexes 1-3 of the EEA report No 6/2014 “Trends and projections in Europe 2014. Tracking progress towards Europe's climate and energy targets for 2020” available at http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2014/
GHG emissions are mainly created by the energy industries, while all other sectors emit relatively little (see figure below for historic and estimated emissions by sector). Projections indicate that by 2020 emissions from the energy industries may decrease slightly, while all other sectors will remain constant.

Figure 1 GHG trends and projections by sector


4 Policy development

This section covers significant developments made in key policy areas between January and December 2014. It does so through two different perspectives: 1) progress on the policies communicated under the National Reform Programme 2) developments in the identified national priority sectors and policy areas.

4.1 Key policies as outlined in the National Reform Programme

Member States prepare National Reform Programmes (NRPs) each April outlining the country’s progress and the key policies and measures to achieve targets under the EU 2020 Strategy. These key policies and measures are summarised in the following table and their current status is provided.

Table 3 Key policies and measures as outlined by the NRP 2014

<table>
<thead>
<tr>
<th>Development of a new environmental fee system for 2016–2020</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status in the NRP</strong></td>
</tr>
<tr>
<td>To be done by 2016</td>
</tr>
<tr>
<td><strong>Status as per Dec 2014</strong></td>
</tr>
<tr>
<td>In progress. Drafting of the new environmental fee system and amendments to legislation has been completed and sent for coordination to ministries.</td>
</tr>
<tr>
<td><strong>Description of policy</strong></td>
</tr>
<tr>
<td>See Chapter 4.2.1</td>
</tr>
</tbody>
</table>
### Promotion of the energy and resource efficiency in companies

<table>
<thead>
<tr>
<th>Status in the NRP</th>
<th>To be done as soon as possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status as per Dec 2014</strong></td>
<td>In progress.</td>
</tr>
<tr>
<td><strong>Description of policy</strong></td>
<td>Estonia has already sent its Energy Efficiency Action plan to the European Commission, foreseeing several tax changes aimed at reducing GHG emissions. Additional support measures are currently being developed and should be published in the beginning of 2015. Measures will support investments in energy and resource efficiency by companies, energy audits and educational programmes (Kredex, 2014a).</td>
</tr>
</tbody>
</table>

### Adapting the National Energy Sector Development Plan to Changes in the Energy Market

<table>
<thead>
<tr>
<th>Status in the NRP</th>
<th>To be done as soon as possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status as per Dec 2014</strong></td>
<td>In progress. Energy Economy Development Plan 2030 (ENMAK 2030+) is published and awaiting the approval by the Parliament.</td>
</tr>
<tr>
<td><strong>Description of policy</strong></td>
<td>ENMAK 2030+, being the newest energy policy document, takes into account the opening of the electricity market. ENMAK 2030+ emphasizes that of all options considered, the one with least state interventions is the best for the competitive power markets to emerge (Energiatalgud, 2014).</td>
</tr>
</tbody>
</table>

### Reducing environmental impact of transport sector through more extensive use of biogas

<table>
<thead>
<tr>
<th>Status in the NRP</th>
<th>To be done as soon as possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status as per Dec 2014</strong></td>
<td>Ongoing (see Chapter 4.2.5).</td>
</tr>
<tr>
<td><strong>Description of policy</strong></td>
<td>ENMAK 2030+ and Estonian Biomethane Programme consider biomethane to be most promising local renewable fuel for transport sector that would contribute to the achievement of Estonia’s renewable energy targets. It also foresees future support mechanisms to be developed. It does not approve using feed-in tariff scheme in biogas sector, however all companies active in the biomethane value chain are expected to be eligible for the support in the future (Estonian Biomethane Programme, 2014).</td>
</tr>
</tbody>
</table>

### Establish sufficient energy connections

<table>
<thead>
<tr>
<th>Status in the NRP</th>
<th>To be done as soon as possible.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Status as per Dec 2014</strong></td>
<td>Ongoing.</td>
</tr>
<tr>
<td><strong>Description of policy</strong></td>
<td>The Estonia-Latvia electricity connections and the underwater gas pipeline between Estonia and Finland would improve energy security and better connect energy markets (see Chapter 4.2.4).</td>
</tr>
</tbody>
</table>

### 4.2 National policy priorities

The sub-sections below provide updates on key existing and new policies in priority sectors and policy areas of relevance to the energy and climate targets under the Europe 2020 strategy. Each sector or policy area contains information on the most important policy instruments in operation or development.

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2 The Consortium jointly with DG Clima identified these based on identified challenges in Country Profiles (EEA, 2014), share of sectors in total GHG emissions, and Country Specific Recommendations (2014). DG Clima has i
4.2.1 Environmental Taxation

In Estonia, the implicit tax rate on energy is the ninth lowest in the EU with EUR 91 per ton of oil equivalent in 2012 (Eurostat, tsdce360). However, the share of environmental tax revenues in overall tax revenue was 8.6% in 2012 and therefore above the EU average of 6.1% (Eurostat, ten00064). The same holds true for a comparison of environmental tax revenues with GDP, amounting to 2.8% in 2012 (with the average at 2.4%) (Eurostat, ten00065).

In 2013, Estonia received environmental tax revenues amounting to 84 million EUR. Nearly three quarters (74%) of that came from environmental charges paid by oil shale companies. In 2014, Ministry of the Environment published the Environmental Fee Framework Plan 2016+. The aim of the framework is to compare several options for modifying the environmental tax system. Based on the framework, amendments to the Environmental Charges Act and other environmental fees and taxes related acts are under development. The framework contains several scenarios for environmental taxation for the period 2016-2026 and offers several policy options. It also takes into account environmental impacts and costs for Estonia and its society (Envir, 2014c).

On 7 November 2014 Ministry of the Environment presented a draft amending the Environmental Charges Act and the Earth’s Crust Act that entails fees for environmental activities, for using natural resources and for waste and emissions. Amendments foresee an increase in environmental fees for mining non-renewable natural resources by 3-6% per year for the next ten years. The highest raise of 6% per year would be seen in mining sand, peat and rock minerals. In the oil shale sector environmental charges will rise by 3% per year up to 2020. By the end of 2017 a new oil shale taxation scheme is meant to be developed that takes into account the value (in terms of product refinement) of oil shale products. This means also an increase in charges, fees and taxes for companies active in the oil shale industry. The goals of the amendments are to receive a fair price for the usage and exploitation of natural resources and to force companies to reduce the negative environmental effects and emit less pollution to air and water. Current environmental fees are fixed until the end of 2015 and the amendments are planned from 2016 up to 2026 (ERR, 2014).

Large consumers whose annual consumption exceeds 200 Gwh are worried about their competitiveness on export markets. Heinzel Group GmgH has concluded a comparison of electricity prices in their consortium. Results show that in Estonia Heinzel Group companies pay 35% more for electricity than in Austria and 69% more than in Sweden. This is caused not by the expensive electricity itself, but electricity excise duties, value added tax and renewable electricity fee. Estonia has already granted electricity excise duty exemptions for companies involved in electrolytic and mineralogical activities but has so far refused to make also exemptions to large consumers, putting new investments at risk (Energiaturg, 2014).

4.2.2 Energy Efficiency

Within the EU28, Estonia has the second most energy-intensive economy, despite the fact that energy intensity declined by 5% from 2005 to 2012. This is mainly due to very steep decreases between 2010 and 2012 (Eurostat, tsdec360). Final energy consumption did not change significantly between 2005 and 2012. Therefore, Estonia belongs to the seven EU MS that did not decrease their final energy consumption during this time period at all (Eurostat, tsdpc320). Despite having a positive energy efficiency target, Estonia is currently not on track towards meeting it (EEA 2014a).

The Estonian Environment Agency, administered by the Ministry of the Environment, published a report in the beginning of October 2014 called “Emitted waste emissions and their amounts in Estonia between 1990-2012”. The report shows that emissions have decreased heavily during last 22 years. For example heavy metal (e.g PMsum) and sulphur dioxide has decreased by 90% and 85% accordingly. Decrease is due to energy efficiency increase in combustion installations and usage of emission capture devices in power plants fired by oil shale and in cement production. Therefore Estonia currently enjoys the cleanest air in the last 22 years, according to the government (Keskonnaagentuur, 2014). In Estonia around 33% of energy is used by the households. Therefore, energy efficiency increases in the household sector could have a large positive impact. During 2009-2013 over 600 apartment houses were renovated as part of a support program. During 2014-2020...
Estonia is planning to invest over 100 million EUR of European Structural fund support to renovate around 100 apartment houses, increasing their energy efficiency (MKM, 2014a).

In the beginning of 2014 amendments to Governments decree No. 68 from 30 August 2012 "Minimum Requirements to Energy Efficiency" were published in the State Gazette and took effect from 27 January 2014. According to the amendments all state owned new buildings must be nearly zero-energy buildings from 1 January 2019. All other new buildings must be nearly zero-energy buildings from 1 January 2021. Amendments are necessary in order to fully transpose the requirements of the EU Energy Efficiency Directive 2010/31/EC (RT, 2014).

The Minimum Requirements to Energy Efficiency decree was amended on 18 December 2014, when the Government decided that buildings with an area of less than 100 m² are given less ambitious energy efficiency requirements, because those in place from January 2014 were too high and costly. According to the new decree, buildings with the area of less than 100 m² are allowed to consume up to 184 kWh of energy instead of 160 kWh per year. The amendments will be in force from 9 January 2015 (MKM, 2014b).

According to the District Heating Act the government had to unveil a new Energy Conservation Programme in 2014 due to the fact that the previous Energy Conservation Programme 2007-2013 ended in 2013. However, amendments to District Heating Act in 2014 eliminated this requirement.

### 4.2.3 Renewable Energy

The share of renewables in gross final energy consumption was 25.8% in 2012, which is above the indicative 2012 target of 19.4% set out by the Renewable Energy Directive (RED) and also higher than the 2020 target of 25%. However, to meet the target level under the projected consumption levels of 2020 as per the Estonian National Renewable Energy Action Plan of 2010, further growth in renewable energy is still required. The average annual growth rate was 6% in the period of 2005 to 2012. Thus, an annual growth rate of only 0.6% is needed between 2013 and 2020 to reach the 2020 target of 25% (EEA 2014a). The share of renewable electricity generation in final electricity consumption increased more than tenfold from 1.1% to 15.8% between 2005 and 2012, while the share of renewable heating increased by around a third from 32.2% to 43.1% (Eurostat, SHARES 2014).

Since 2010 Estonia’s renewable energy producers have received premium tariff support paid on top of the electricity price. The amount of premium has been 0.0537 EUR per KWh in addition to the income from the sale of the electricity. However, the Government has expressed opinion that continuing the current support scheme for renewable energy production would mean that Estonia would surpass the targets set for 2020. According to the Ministry of Economics and Communications the current scheme no longer corresponds to the country’s actual power market, which has seen a permanent increase in the share of renewable energy production over the last decade. Because energy prices have risen considerably due to the opening of the electricity market, the cost of energy for consumers needs to be kept lower by reducing the support allocated for renewable energy (E24, 2014). The currently applicable system is therefore no longer proportional to the targets and needs to be reformed in order to take into account changes that have taken place on the energy market since 2010. In 2014, Estonia received confirmation from the European Commission that changing the renewable energy support scheme is not a violation of the EU state aid rules. According to the new support scheme, a price ceiling for the support to renewable energy producers will be set. If the current scheme foresees to pay a certain amount (a premium) of support on top of the spot-price on power exchange NordpoolSpot, then the new scheme will set a limit to the total price of electricity including support paid to the producer. If the electricity price on spot-market is over the price ceiling, no support will be paid. Also, the new support scheme will be tied to the achievement of renewable energy consumption target and will eliminate the possibility of over-compensation. The estimates show that the support for electricity produced from renewable energy sources would be decreased by 15-20%.

The Ministry of the Economic Affairs and Communications has also prepared draft amendments to the Electricity Market Act excluding micro-producers, whose production capacity is under 100 kW, from the premium tariff support scheme. On 18 November 2014 the Estonian Renewable Energy Association and the Renewable Energy Club sent a public petition to the Ministry of Economic Affairs and Communications to show support for maintaining the premium-tariff to micro-producers. By now...
there are almost 300 micro-producers in Estonia. The petition argues that excluding micro-producers from the premium scheme will have a negative effect for many companies providing renewable energy solutions and manufacturers of photovoltaic panels in Estonia and would decrease incentives for renewable energy growth in Estonia. Amendments to the Electricity Market Act should come into force in 2015 (Taastuvenergia koda, 2014).

Estonian Wind Energy Association (EWEA) has sent a proposal to the Ministry of Economy and Communication in order to develop regulations, which would allow energy communities to be established. Electricity Market Act in force today does not offer any possibilities, as electricity production is allowed only form of a company. It is also difficult to get access to distribution networks to sell electricity in small quantities. EWEA proposed that energy communities could be area based (e.g. village), technology based (e.g. wind energy) or purpose based (e.g. cheapest electricity). An energy community should also be defined through its members, so every producer would not be an energy community. The proposal also indicates that the state should motivate local and autonomous environmentally friendly energy production and allowing energy companies to be established is the best way to achieve this (EWEA, 2014a).

In 2014, public financial institution Kredex introduced a support scheme for renovation of the heating systems in private houses. Aim of the support was to help homeowners to switch from oil-fired heating systems to renewable energy consuming heating systems. Total amount of support was 5 million EUR and applicants could apply for maximum amount of 4,000 EUR support per one household (Kredex, 2014b).

Due to the fact that Estonia’s TSO Elering became a member of Association of Issuing Bodies, based in United Kingdom, it is now possible for Estonian renewable electricity producers to trade internationally with renewable electricity certificates. Renewable electricity certificate is an electronic guarantee, that 1MW of electricity is produced from 100% renewable way or produced by efficient combined heat and power technology. Association of Issuing Bodies consist of 16 countries that can easily trade with renewable energy certificates as rules and procedures are standardized (Elering, 2014a).

4.2.4 Energy Networks

After a successful testing period, the second underwater electricity cable connecting Estonia and Finland was fully handed over for usage in February 2014. Estlink 2 raised the connection capacity from 350MW to 1000MW from Estonia to Finland and to 860MW from Finland to Estonia. During 2014 the main contractors Nexans Norway AS, Siemens AG, Siemens Osakeyhtiö, Empower Oy and Bouygues Energies and Services have carried out minor works, but these did not interrupt the the full usage of the cable. Full cost of the project was 320 million EUR and European Union subsidised the project with 100 million EUR (Elering, 2014b). The Estonia-Latvia electricity connection project is currently being implemented, The connection is expected to be operational by 2020 (ERR, 2014b).

In 2014 long negotiations were held on the building of the underwater gas pipeline called Balticconnector between Estonia and Finland. The Balticconnector pipeline is meant to connect the Finnish and Estonian gas markets and it is a joint project of the Finnish company Gasum and the Estonian gas transmission system operator AS EG Võrguteenus. If realized, the Balticconnector pipeline will improve the supply security of natural gas in Finland and Estonia. Balticconnector is also essential for developing natural gas market in the region. The project is at the preliminary design stage, and a decision on the launch of the design project aiming at implementation readiness will be made in spring 2015 once the preparatory measures of as well as the prerequisites for and final support decision on the design project are in place. Environmental impact assessment (EIA) has been completed by Finland and Estonia separately and the united EIA report is currently being drawn up. The full EIA, including statements by authorities, will be completed in October 2015 (Gasum, 2014).

4.2.5 Transport

Both GHG emissions and energy consumption from transport have decreased between 1990 and 2012. However, since 2005 this trend has reversed and emissions as well as consumption have increased. Also, the proportion of transport emissions in Estonia’s total emissions has increased to 12% (Eurostat, tsdccc210 and tsdpc320). Average emissions for newly registered cars are very high in
Estonia with a level of 146.9 CO₂/km. This value is the second highest in the EU and has decreased by 20% between 2005 and 2013, at a rate lower than the EU average of 22% (Eurostat, tsdtr450). Fuel taxation in Estonia is below EU average. The road fuel excise duties on petrol are the fifth lowest among EU MS, while excise duties on diesel are slightly below EU average (EEA, 2014b).

In Estonia, vehicle taxes are well below the EU average or non-existent. No CO₂-based tax exists. Registration taxes, for example, are not applied at all and ownership taxes do not need to be paid for passenger cars. HGVs are charged with a tax according to the number of axles, weight and suspension type (ACEA 2014, 2012). However, the tax is below the EU average and CO₂ emissions are not taken into account. Furthermore, there is no charge applied to road use (CE Delft, 2012).

On 16 January 2014, the Estonian Government increased the number of new environmentally friendly trams, coming to a total number of twenty. The trams were bought with money earned from the CO₂ quota sales to Spain. The Government also amended the city bus measures. Instead of three hybrid-engine buses, three buses running on natural gas are bought. With first CO₂ quota selling contracts with Spain Estonia bought 110 efficient diesel buses and 10 natural gas buses. With second contract Spanish company CAF will provide Estonia with 20 new environmentally friendly trams. Modernising Tallinn’s railway infrastructure for trams is also subsidised from the EU’s Cohesion fund through Environmental Investment Center (Bioneer, 2014).

Estonia has a large potential for energy production from biogas. According to the Estonian Biogas Association, cogeneration of electricity and heat or biomethane as a fuel for passenger vehicles is the most effective use of biomass and has a positive effect on the environment. In 2013 more than 15 million m³ of biogas was produced in Estonia. Estonian Biogas Association calculates that resources exist for production of 618 million m³ per year. Estonia’s first biomethane production facility for transport sector will be built in Viljandi County. The prerequisite for the subsidy was an obligation for the developer to find partners from transport sector and all produced biomethane shall be used in Estonia as transport fuel. This helps Estonia to meet its 10% renewable energy target for the transport sector by the year 2020. A biomethane production facility will be built into Siiman farm, where the produced biogas will be purified into biomethane. Raw material will be collected from 1700 bovine animal and young animals. In this way 70,000 tons of raw material will be reprocessed. Estimated production amount is at least 1.2 million m³ per year (KIK, 2014).

On 7 August 2014 the application period for the electric vehicle support scheme expired. The support scheme for buying electric vehicles has been extremely popular. During 2011-2014 total amount of support granted is 10.5 million EUR. The average amount of support for one applicant is 16.5 thousand EUR and over 650 vehicle purchases have been supported. Purchase of electric vehicles was funded from the CO₂ quota selling agreement between Estonia and Mitsubishi Corporation. In the future greater use of electric vehicles is promoted through non-financial measures. For examples plans have been made to amend the Traffic Act, so that the electric vehicles could use public transport lanes (ELMO, 2014).

5 Policy progress against Country Specific Recommendations (CSRs) issued 2013

The EU Commission provides Country Specific Recommendations (CSRs) for each MS for consideration and endorsement by the European Council. The recommendations are designed to address the major challenges in relation to the targets of the EU 2020 Strategy. In the following table, the CSRs relevant for climate change and energy are listed, and their progress towards their implementation is assessed.

<table>
<thead>
<tr>
<th>Existing CSRs</th>
<th>Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step up efforts to improve energy efficiency, in particular in residential and industrial buildings.</td>
<td>Energy efficiency is promoted through subsidy programmes for renovations of apartment houses. In 2014 around 800 private households received subsidies for switching from oil heating to renewable heating sources (Kredex, 2014a).</td>
</tr>
</tbody>
</table>
Energy efficiency support for companies for the period 2014-2020 is foreseen in amount of 151 million EUR. Supported activities are technology development, investment support for companies active in reusing waste, educational and energy audits (Energiatalgud, 2014b).

**Substantially strengthen environmental incentives for the transport sector to contribute to less resource-intensive mobility**

The new Estonian Biomethane Programme foresees possibilities to produce around 75% of necessary fuel from biogas and switch from liquid fuels to use biomethane in transport. Biomethane would be produced from agricultural land areas that currently are not used for feed-stock nor growing crops. Estonian Biomethane Programme maps the relevant land areas where biogas production would be possible in the future and describes the benefit of them (Estonian Biomethane Programme, 2014). The support scheme for buying electric vehicles has been extremely popular. During 2011-2014 total amount of support granted was 10.5 million EUR. The average amount of support for one applicant was 16.5 thousand EUR and purchase of over 650 vehicle was supported. Additional plans have been made to amend the Traffic Act, so that the electric vehicles could use public transport lanes (ELMO, 2014).

**Continue the development of crossborder connections to neighbouring Member States to diversify energy sources and promote competition through improved integration of the Baltic energy markets**

Additional electricity connections between Estonia and Latvia are currently in a planning phase. Public consultation on potential project routes was open until 5 January 2015 (ERR, 2014b). Separate Environmental Impact Assessments of gas connections between Finland and Estonia have been developed by both countries. A united EIA will be prepared by 2015. Estimated project completion time is between 2016 and 2017 (Gasum, 2014).
References


District Heating Act (Kaugkütteseadus), RT I 2003, 25, 154, Amendments in force 23.03.2014.


Eurostat, ten00065. Total environmental tax revenues as a share of GDP.

Eurostat, tsdcc360. Implicit tax rate on energy.

Eurostat, tsdec360. Energy intensity of the economy.

Eurostat, tsdp320. Final energy consumption by sector.

Eurostat, tsdr450. Average carbon dioxide emissions per km from new passenger cars.


