



2011 Survey of resource efficiency policies in EEA member and cooperating countries

COUNTRY PROFILE:

Estonia



Country information on resource efficiency policies,
instruments, objectives, targets and indicators,
institutional setup and information needs

May 2011

This country profile is based on the information provided by Kätlin Mandel from the Estonian Ministry of Environment, Analysis and Planning Department. The information is current as of January 2011.

This country profile was prepared as part of the EEA-ETC/SCP 2011 survey of resource efficiency policies, which aims to collect, analyze and disseminate information about national experience in the development and implementation of resource efficiency policies in EEA member and collaborating countries. The work resulted in the following outcomes:

- **Short 'country profiles' (this document)** - self assessments prepared by countries, describing the current status of resource efficiency policies, including key strategies and action plans, policy objectives, instruments, targets and indicators used, institutional setup and information needs.
- **Summary report** - prepared by the EEA and ETC/SCP, the report reflects on trends, similarities and differences in policy responses, showcases selected policy initiatives from member countries and identifies information needs and knowledge gaps.
- A session on resource efficiency policies during the 2011 EIONET workshop to discuss further needs and to facilitate information sharing and experience exchange among EIONET members.

More information about resource efficiency policies, including an analytical report "Resource efficiency in Europe" and thirty one country profiles, can be found at:

<http://www.eea.europa.eu/resource-efficiency>

1. Resource use in Estonia – facts and figures

1.1 General facts and figures about the country



Population (projected inhabitants for 2010) [1]	1,340,127
➤ Percent of total EEA-32	0.23%
Surface area (km ²) [2]	45,228
➤ Percent of total EEA-32	0.8%
GDP at market prices – Purchasing Power Standard – Current Prices (Million Euro, 2009) [3]	20,080
➤ Percent of total EEA-32 (minus Liechtenstein)	0.15%
GDP per capita in Purchasing Power Standards (PPS) [4] EU27=100 (2009)	64
Urban population (rate of pop., 2009) [5]	69.5%
Main economic sectors and their share in total GDP (2009 est.) [2]	
Agriculture	2.5%
Industry	28.7%
Services	68.8%
EU accession date [6]	1.5.2004

Source:
<https://www.cia.gov/library/publications/the-world-factbook/index.html>

Additional relevant background information on Estonia (and on 37 EEA member and cooperating countries) can be found at the SOER2010 website:

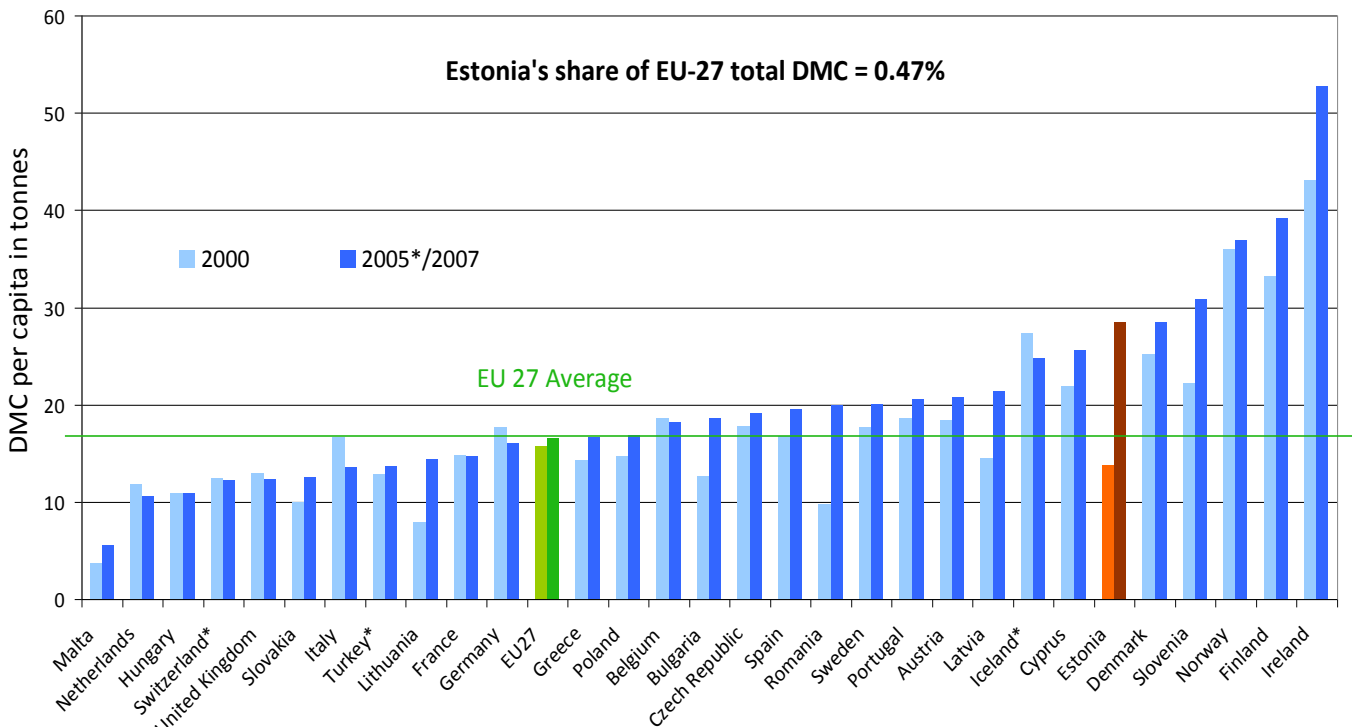
<http://www.eea.europa.eu/soer/countries/ee>

Factsheet on national waste policies for Estonia is available at:

http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=EE

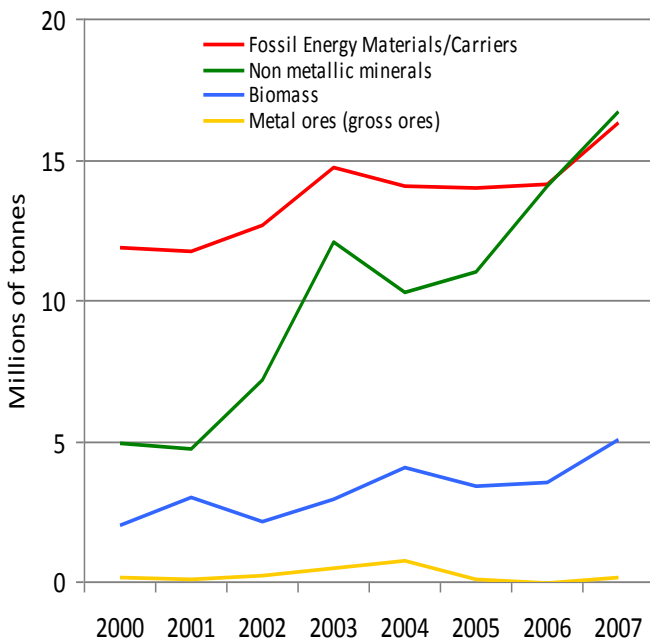
1.2 Facts and figures on resource efficiency for Estonia

Use of resources per capita 2000 and 2007 [tonnes DMC/capita]



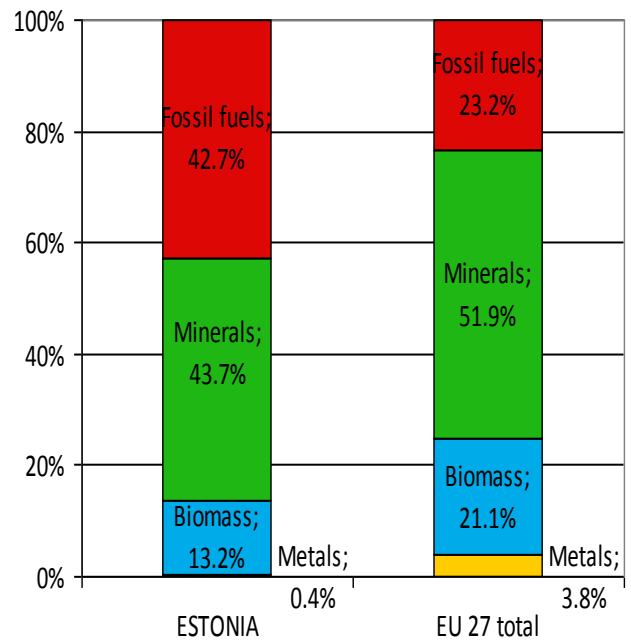
Source: Eurostat, OECD and Total Economy Database [7] * = For these countries data is for 2000 and 2005.

Domestic Material Consumption by category over time, Estonia



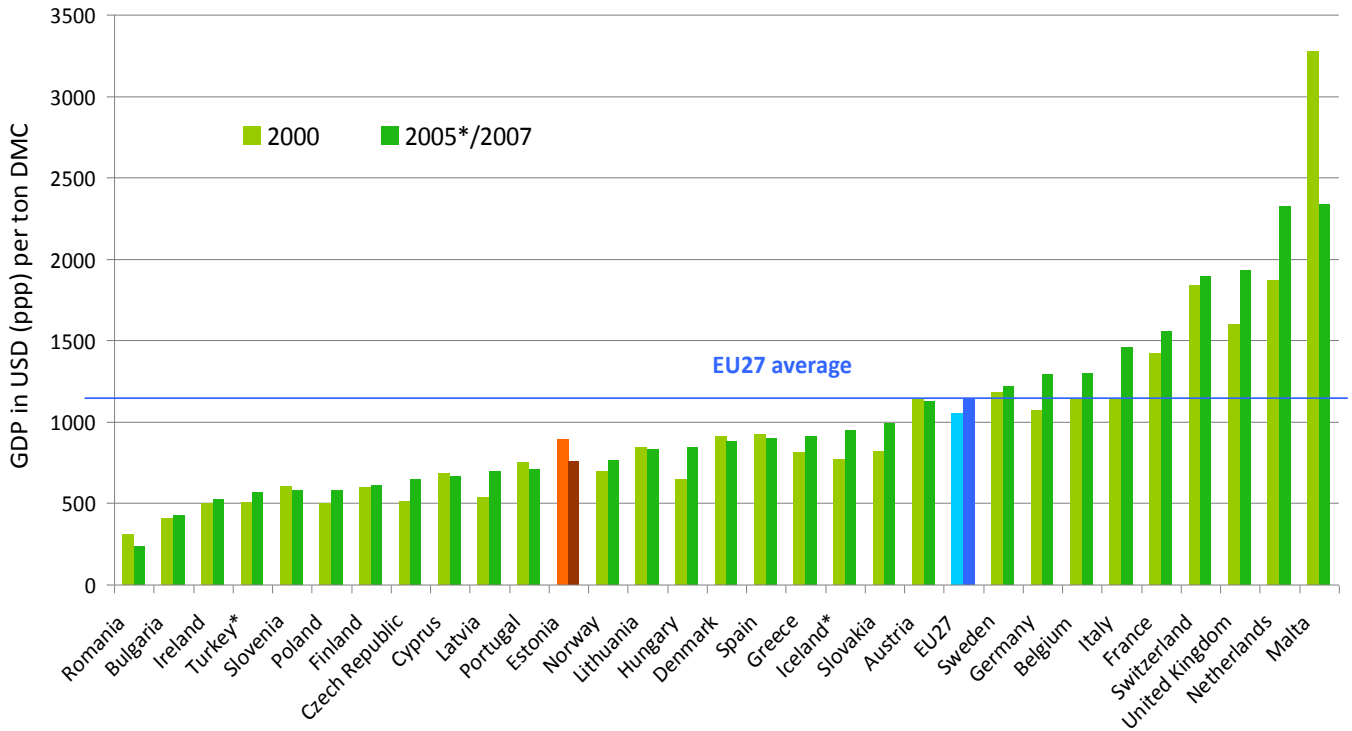
Source: Eurostat [8]

Breakdown of DMC by type of materials (2007)



Source: Eurostat [8]

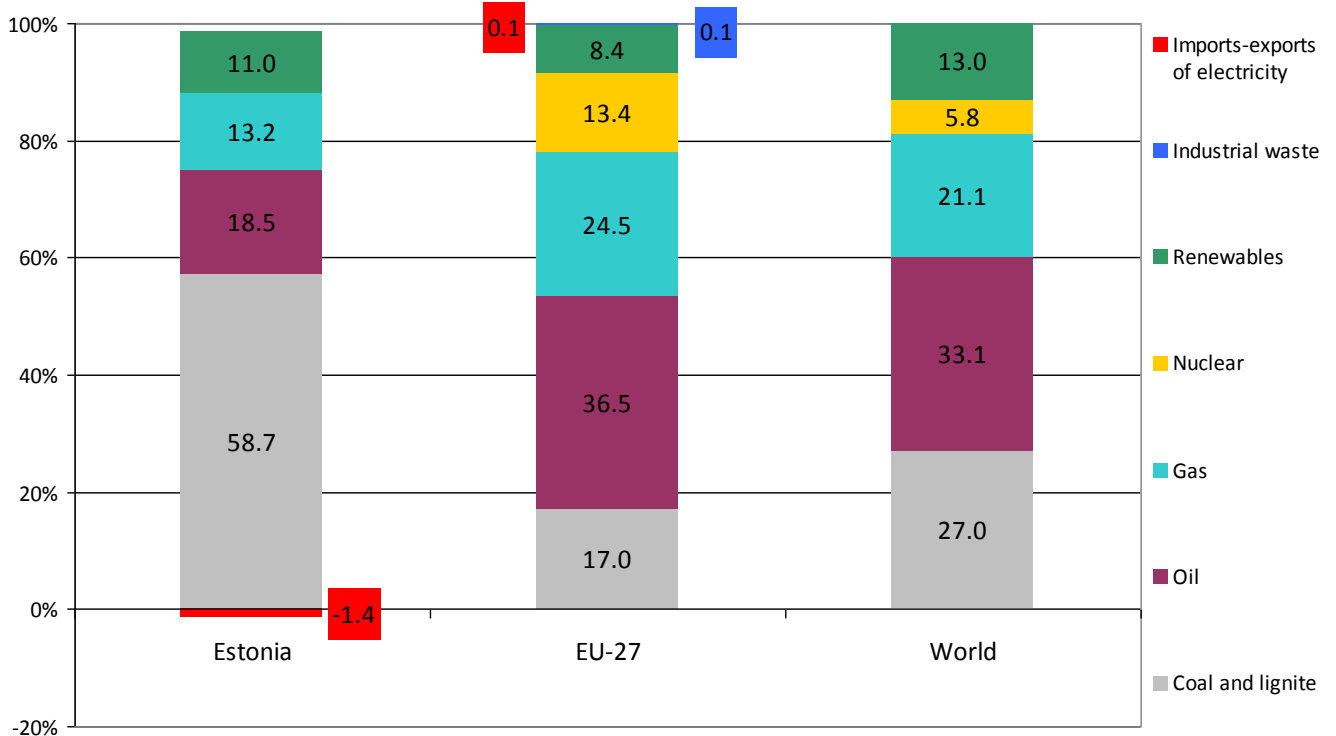
Material productivity 2000 and 2007 [USD ppp/ton DMC]



Source: The Conference Board, Total Economy Database, Eurostat [9]

* = For these countries data is for 2000 and 2005.

Primary energy consumption



Source: Eurostat [10]

2. Evolution and main drivers for the development of resource efficiency policies

The topic of resource efficiency first became a policy concern in 1997, when the first **National Environmental Strategy** was adopted. Objectives like “promoting environmental awareness”, “implementing environmentally friendly technologies” and the “better use of groundwater resources” were stated in the 1997 strategy. These objectives have become more concrete and comprehensive. For example in **Environmental Strategy 2030** adopted in 2007, objectives related to resource efficiency are “Environmentally sustainable extraction of mineral resources which are sustainable in terms of water, landscapes and air, and efficient exploitation of mineral resources with minimum losses and waste”, “Balanced satisfaction of ecological, social, cultural and economic needs in the course of utilisation of forests in a very long perspective”, “Environmentally sustainable utilisation of soil” etc.

The main driving forces behind the development of resource efficiency policies today are improving competitiveness and creating jobs according to EU's growth strategy “Europe 2020” and its national strategy “**Estonia 2020**” (Competitiveness Plan) which was approved on 28th of April 2011. Environmental concerns and sustainable consumption were the main driving forces for existing policies and also some policies under preparation.

Imports of resources are rather seen as policy concerns than an environmental problem. The main objective in the **Development Plan for Enhancing the Use of Biomass and Bio energy**, inter alia, is to reduce pressure on the natural environment and reduce dependency on imported resources. Therefore the main reasons to import resources are to ensure independence and the security of supplies. Estonia is for example quite independent in imported energy sources (stated in **National Development Plan for Energy Sector**) and imports mainly resources that are not found in Estonia, meaning that imports of resources is not seen as an environmental issue to shift burdens elsewhere.

Waste is poorly integrated into the planning of resource efficiency policies; it is rather seen as separate policy area, with the National Waste Management Plan. There is a measure in the **National Development Plan for the Energy Sector** for the development of energy technologies, which provides actions towards reuse and recycling of waste generated in oil shale processing waste. However the **National Development Plan for the Use of Oil Shale** does not provide any measures to develop waste management in the oil shale energy sector.

3. Overall Policy Approach for Resource Efficiency

Estonia has a National Strategy on Sustainable Development – „**Sustainable Estonia 21**“, which was approved by the Estonian Parliament in September 2005. It is a strategy for developing the Estonian state and society until the year 2030 with the aim of integrating the success requirements arising from global competition with the principles of sustainable development and preservation of the traditional values of Estonia. Four development goals for Estonia according to the strategy are:

1. Viability of the Estonian cultural space
2. Growth of welfare
3. Coherent society
4. Ecological balance

One of the components of the ecological balance goal is “the use of natural resources in ways and quantities that ensure ecological balance” which reflects the idea of resource efficiency.

The Estonian Environmental Strategy 2030 is a strategy for developing the sphere of the environment which builds upon the principles of “Sustainable Estonia 21” and serves as the basis for the preparation and revision of all sector-specific development plans within the sphere of the environment. Environmental Strategy 2030 is implemented through **The National Environmental Action Plan of Estonia 2007-2013**. Environmental Strategy deals with the areas specified in the Sixth Environmental Action Plan of the European Union. The areas are:

1. *The environment, health and quality of life*: provides objectives and measures relating to environmental health;
2. *Preservation of the diversity of landscapes and biodiversity*: provides objectives and measures relating to nature conservation;
3. *Sustainable use of natural resources and reduction of waste generation*: provides objectives and measures relating to the utilisation of major natural resources, and waste management;
4. *Climate change mitigation and quality of ambient air*: provides objectives and measures relating to energy and transport;
5. *Environmental management*: provides objectives and measures to deal with environmental management questions, methodological instructions of sector-specific working groups and creating links between and harmonisation of the results of these working groups.
6. *Resource efficiency* is reflected and implemented under the sustainable use of natural resources in the Environmental Strategy and its action plan.

Sustainable Estonia 21 (2005)

http://www.envir.ee/orb.aw/class=file/action=preview/id=166311/SE21_eng_web.pdf

Estonian Environmental Strategy 2030 (2007)

<http://www.envir.ee/orb.aw/class=file/action=preview/id=1104361/inglisekeelneStrateegia.pdf>

National Environmental Action Plan of Estonia 2007-2013 (2007)

http://www.envir.ee/orb.aw/class=file/action=preview/id=1103821/inglise_keeles_tegevuskava.pdf

4. Strategies or action plans to improve resource efficiency for individual economic sectors, products or product groups

Sector-specific strategies and action plans:

1. **National Waste Management Plan 2008-2013** (2008)
Objectives are reducing waste deposition, increasing waste recovery and reducing harmfulness of waste, in order that the negative impacts to the environment are minimal.
2. **Water Management Plans for 3 watersheds** (East-Estonian, West-Estonian and Koiva watersheds) **and 9 sub-basins** (last one was approved in 2010)
Water management plans require results from the EU water policy directive 2000/60/EC, which aims at maintaining and improving the aquatic environment in the Community. One of the objectives in the water management plans is to promote sustainable water use and protect surface waters and groundwater as in principle renewable natural resources.
3. **National Development Plan for the Use of Oil Shale 2008-2015** (2008)
Objective is to ensure the use of oil shale as efficiently and as environmentally friendly as possible with the state's primary interest being the uninterrupted supply of electricity and heating energy to Estonia's consumers meaning that the best available technology (BAT) must be applied in the mining and processing stages.
4. **National Development Plan for the Use of Construction Minerals 2011-2020** (2011)
One of the objectives is increasing the efficiency of extraction and use of construction minerals and the use of possible alternative building materials.
5. **Forestry Development Plan until 2020** (2011)
Main goal is to ensure productivity and vitality, diverse and efficient use of forests.
6. **Hunting Development Plan 2008-2013** (2008)
Objective is to maintain the diversity of game species and ecological balance between habitats and species in view of recreational, social and economic aspects of hunting.
7. **Estonian Fisheries Strategy 2007-2013** (2007)
Objective is to develop the fisheries sector in order to secure stable and sustainable management in the fisheries sector and to guarantee an increase in the income of people engaged in fisheries.
8. **Recreational Fisheries Development Plan 2009-2013 with perspective till 2018** (2009)
Objective is to popularize, simplify and diversify recreational fisheries as healthy leisure and sustainable use of fish resources and thereby to increase the number of people engaged with recreational fisheries to one hundred thousand (7% from population) by 2018.
9. **Nature Conservation Development Plan 2020** (*in the process of approval*)
Objective is to ensure systematised and reasoned nature conservation and management of biodiversity protection, resource saving and optimised use and regulation of distributing revenue based on single political guidance paper.
10. **Development Plan for Enhancing the Use of Biomass and Bio energy for 2007-2013** (2007): The vision is to ensure efficient and sustainable use of Estonia's land resources and biomass.
11. **National Development Plan for Energy Sector until 2020** (2009)
Objectives are ensuring continuous power supply to Estonian population, more sustainable

power supply and energy consumption and ensuring justifiably priced power supply to consumers.

12. **Development Plan for Estonian Electricity Sector until 2018** (2009)

Objective is to ensure continuous, sustainable power supply at a justified price in Estonia.

13. **Action Plan for Renewable Energy until 2020** (2010)

Objectives are increasing renewable energy percentage from final consumption, renewable electricity percentage from gross consumption and biofuel percentage from transport.

14. **Energy Conservation Programme for Estonia 2007-2013** (2007)

Objective is to ensure more efficient use of fuels and energy in Estonia.

15. **Program for better implementation of environmental management principles in public sector** (2009)

Objective is introducing environmental management principles and commissioning environmental management systems in the public sector. One of the many projects under the program is "Improving the administrative capacity to conduct Green Public Procurement and energy efficiency".

5. Individual types of resources identified as priority for national or sector-specific resource efficiency policies

According to the Estonian Environmental Strategy 2030 the distribution of natural resources is the following:

- Water
- Mineral resources
- Forest resources
- Fish resources
- Game
- Soil
- Landscapes
- Biodiversity

Examples of types of resources which are identified and specifically targeted by Sector-specific strategies and action plans:

- Surface water
- Groundwater
- Oil shale
- Natural Building Materials
- Forest
- Game
- Fisheries
- Biomass

6. Strategic objectives, targets and indicators on resource efficiency

Examples of strategic objectives:

- To achieve a good condition of the surface water (incl. coastal water) and groundwater, and to maintain the bodies of water whose condition is good or very good (*The Estonian Environmental Strategy 2030*)
- Environmentally sustainable extraction of mineral resources which is sustainable in terms of water, landscapes and air, and efficient exploitation of mineral resources with minimum losses and waste (*The Estonian Environmental Strategy 2030*)
- Balanced satisfaction of ecological, social, cultural and economic needs in the course of utilisation of forests in a very long perspective (longer than the period of 25 years discussed in the Strategy) (*The Estonian Environmental Strategy 2030*)
- To ensure the good condition of fish populations, diversity of fish species and avoid the indirect negative impact of fishing on the ecosystem (*The Estonian Environmental Strategy 2030*)
- Environmentally sustainable utilisation of soil (*The Estonian Environmental Strategy 2030*)
- Functionality and sustainable utilisation of natural and cultivated landscapes (*The Estonian Environmental Strategy 2030*)
- To ensure the existence of habitats and biotic communities necessary for the preservation of viable populations of species (*The Estonian Environmental Strategy 2030*)
- Raising the efficiency of mining and using the oil shale (*National Development Plan for the Use of Oil Shale 2008-2015*)
- Reducing waste deposition, increasing waste recovery and reducing harmfulness of waste (*National Waste Management Plan 2008-2013*)
- Developing sustainable recreational fishing (*Recreational Fisheries Development Plan 2009-2013*)
- Estonia's energy supply and consumption are more sustainable (*National Development Plan for Energy Sector until 2020*)
- To ensure productivity and viability of forests and diverse, effective and sustainable use of forests (*Forestry Development Plan until 2020*)
- To increase the efficiency of extraction and use of construction minerals and the use of possible alternative building materials (*National Development Plan for the Use of Construction Minerals 2011-2020*)

Examples of indicators and targets:

- The number of wells and springs in which the levels of detected pesticides, nitrates and other hazardous substances exceed the effective norms (per individual substance) ↓,
- The content of organic pollutants in effluent below target level by 2013: 1399 BOD tons per year,
- Mineral resources extraction volume below target level by 2015: oil shale – does not exceed 20 million tons per year,
- Forest area, expressed in hectares equal to Target level by 2013: 2,3 million ha,

- Growing stock, expressed in cubic metres above or equal to target level by 2013: 460 million m³,
- Felling volume, expressed in cubic metres above or equal to target level by 2013: 10,5 million m³,
- The relative share of felling in annual increment of timber (%) above or equal to Target level by 2013: 87%,
- Fishing (the quantity of fish caught, in tons) below Target by 2013: 98 000 tons of fresh fish in a year,
- The area of spoilt land (the area of mined areas and land under landfills, the number of abandoned buildings in local government units) reduced,
- The relative share of cultivated heritage landscapes among all cultivated land increased,
- The relative share of the area of threatened habitat types (Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, Annex I) in the territory of Estonia (%),
- Loss of oil shale reserves of underground mining (%),
- Waste recovery share in total waste generation (%) Target level by 2013: glass 60%; plastics 40%; paper 50%,
- Increase of renewable energy share in final energy consumption (%) Target level by 2020: 25%,
- The use of wood fuel in energy production (PJ/y) Target level by 2020: 30 PJ/y,
- Volume and area of regeneration cutting (m³ and ha/y) Target level by 2020: 10,1 mil m³ and 34 500 ha/y,
- Total volume of forests (m³) Target level by 2020: 450 mil m³
- Volume increment of forests (m³/y) Target level by 2020: 12,5 mil/y,
- Volume of oil shale ash recovery (%) Target level by 2020: at least 15% from total volume,
- Volume of use of oil shale mine waste (%) Target level by 2020: at least 40% from total, volume,
- Weight of building demolition waste recovery (%) Target level by 2020: at least 60% from total volume.

7. The institutional setup for the development and implementation of resource efficiency policies

All of the above-mentioned sector-specific strategies and action plans are prepared in close cooperation with other relevant ministries and institutions. Two main ministries that are responsible for the development and implementation of resource policies in Estonia are the Ministry of the Environment and the Ministry of Economic Affairs and Communications.

- Ministry of the Environment

The ministry is responsible for the implementation and coordination of National Waste Management Plan, Water Management Plans, National Development Plan for the Use of Oil Shale, National Development Plan for the Use of Construction Minerals, Forestry Development Plan, Hunting Development Plan, Recreational Fisheries Development Plan, Nature Conservation Development Plan and Program for better implementation of environmental management principles in public sector. Co-responsible ministries are the Ministry of Economic Affairs and Communications, Ministry of Agriculture and Ministry of Education and Research. There are several state commercial enterprises and companies that contribute to the implementation of resource policies: State Forest Management Center, Private Forest Centre. Also governmental authorities: Land Board and Environmental Board.

<http://www.envir.ee/>

- Ministry of Economic Affairs and Communications

The ministry is responsible for implementation and coordination of the National Development Plan for Energy Sector, Development Plan for Estonian Electricity Sector, Action Plan for Renewable Energy and Energy Conservation Programme for Estonia.

<http://www.mkm.ee/index.php>

- Ministry of Agriculture

The ministry is responsible for implementation and coordination of Estonian Fisheries Strategy and Development Plan for Enhancing the Use of Biomass and Bio energy.

<http://www.agri.ee/>

8. Selected policy instruments or initiatives on resource efficiency presented in more detail

Resource taxes

Environmental taxes in Estonia are grouped into four categories: pollution taxes, resource taxes, energy taxes and transport taxes. Resource taxes include the mineral resources extraction charge, the water abstraction charge, the fishing charge, the forest stand cutting charge and the hunting charge.

A Mineral resources extraction charge is paid for the extraction, use or rendering unusable of mineral resources belonging to the state. The following minerals are subject to the mineral resources extraction charge: dolomite, granite, gravel, sand, limestone, clay, peat, phosphatic rock, oil shale, and crystalline building stone.

A Water abstraction charge is paid for the right to abstract water from a water body or groundwater, if the water abstraction is at least 30 cubic metres in a day from water bodies or 5 cubic metres in a day from groundwater (excl. abstraction of mineral water). In addition to drinking water and water for technological use, the water abstraction charge is requested on water abstraction from quarries and mines and cooling water abstraction as well.

A Fishing charge is paid for rights to fish or collect aquatic plants. The nature of the fishing charge is dependent on the type of fishing activity (recreational fishing, commercial fishing, special purpose fishing).

A Forest stand cutting charge is paid for rights to do regeneration cutting in a forest which belong to the state. Owners of private forests should not pay the charge, but they should pay 26% of the income from the sale of regeneration cutting rights and the income from the sale of timber received from regeneration cutting.

A Hunting charge is paid for the right to use the hunting district for hunting, but the charge is different in case of species and quality of hunting district.

9. Topics of interest and information needs for follow up work

- Comparison of resource efficiency policies and the way they are implemented in different countries (sharing of good practices)
- Different integration of resource efficiency into other policy areas
- Need for a structured way to collect information on European resource efficiency policies
- Discussion of the policy effectiveness of different resource efficiency policies

10. References

10.1 Facts and figures about the country

[1] Eurostat, 2011 [demo_pjan]

http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=demo_pjan&lang=en

[2] CIA World Factbook (2009 est.)

<https://www.cia.gov/library/publications/the-world-factbook/index.html>

[3] Eurostat, 2011 [nama_gdp_c]

<http://appsso.eurostat.ec.europa.eu/nui/show.do>

[4] Eurostat 2011 [tsieb010]

<http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tsieb010&plugin=0>

[5] World Bank, Migration and Remittances Factbook 2011

<http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTDECPROSPECTS/0,,contentMDK:21352016~pagePK:64165401~piPK:64165026~theSitePK:476883,00.html>

[6] European Commission 2008

http://europa.eu/abc/12lessons/key_dates/index_en.htm visited December 15, 2008

[7] Eurostat, OECD and Total Economy Database

DMC data from Eurostat Database, Material Flow Accounts, and OECD, Population data from Eurostat Database, Population, and The Conference Board — Total Economy Database, September 2010. www.conference-board.org/data/economydatabase/

[8] Eurostat

Material flow accounts, env_ac_mfa, uploaded June 2010

[9] The Conference Board, Total Economy Database, Eurostat

GDP data from The Conference Board — Total Economy Database, September 2010, www.conference-board.org/data/economydatabase/ ; DMC data from Eurostat Database on Environmental Accounts, and OECD.

[10] Eurostat

Energy statistics, uploaded Oct 2010

<http://epp.eurostat.ec.europa.eu/portal/page/portal/energy/data/database>

10.2 Resource Efficiency Policy References

Sustainable Estonia 21 (2005)

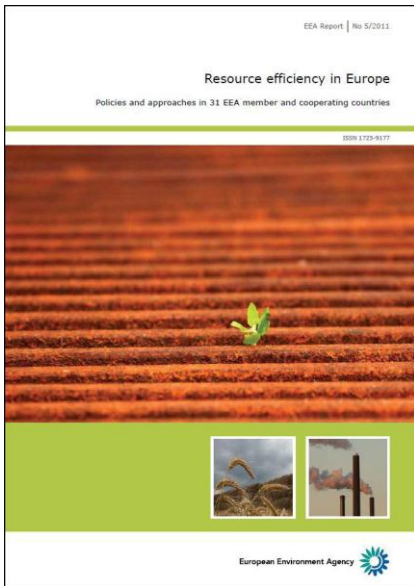
http://www.envir.ee/orb.aw/class=file/action=preview/id=166311/SE21_eng_web.pdf

Estonian Environmental Strategy 2030 (2007)

<http://www.envir.ee/orb.aw/class=file/action=preview/id=1104361/inglisekeelneStrateegia.pdf>

National Environmental Action Plan of Estonia 2007-2013 (2007)

http://www.envir.ee/orb.aw/class=file/action=preview/id=1103821/inglise_keeles_tegevuskava.pdf



Resource efficiency in Europe

Policies and approaches in 31 EEA member and cooperating countries

Further information about resource efficiency policies, including the analytical report and thirty-one detailed country profiles, are available on the EEA website:

<http://www.eea.europa.eu/resource-efficiency>

Selected examples of resource efficiency policies, instruments or targets presented in the thirty one detailed country profiles

