ETC/SCP

European Environment Agency

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

COUNTRY PROFILE:

Romania

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 Mihaela Ştefănescu, Councillor, the Climate Change and Sustainable Development Directorate, the Ministry of Environment and Forests. The information is current as of February 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:

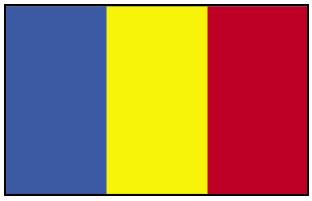
- **Short 'country profiles' (this document)** - self assessments prepared by countries, describing the current status of resource efficiency policies, including key strategies and action plans, policy objectives, instruments, targets and indicators used, institutional setup and information needs.
- **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 Romania – facts and figures

1.1 General facts and figures about the country



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

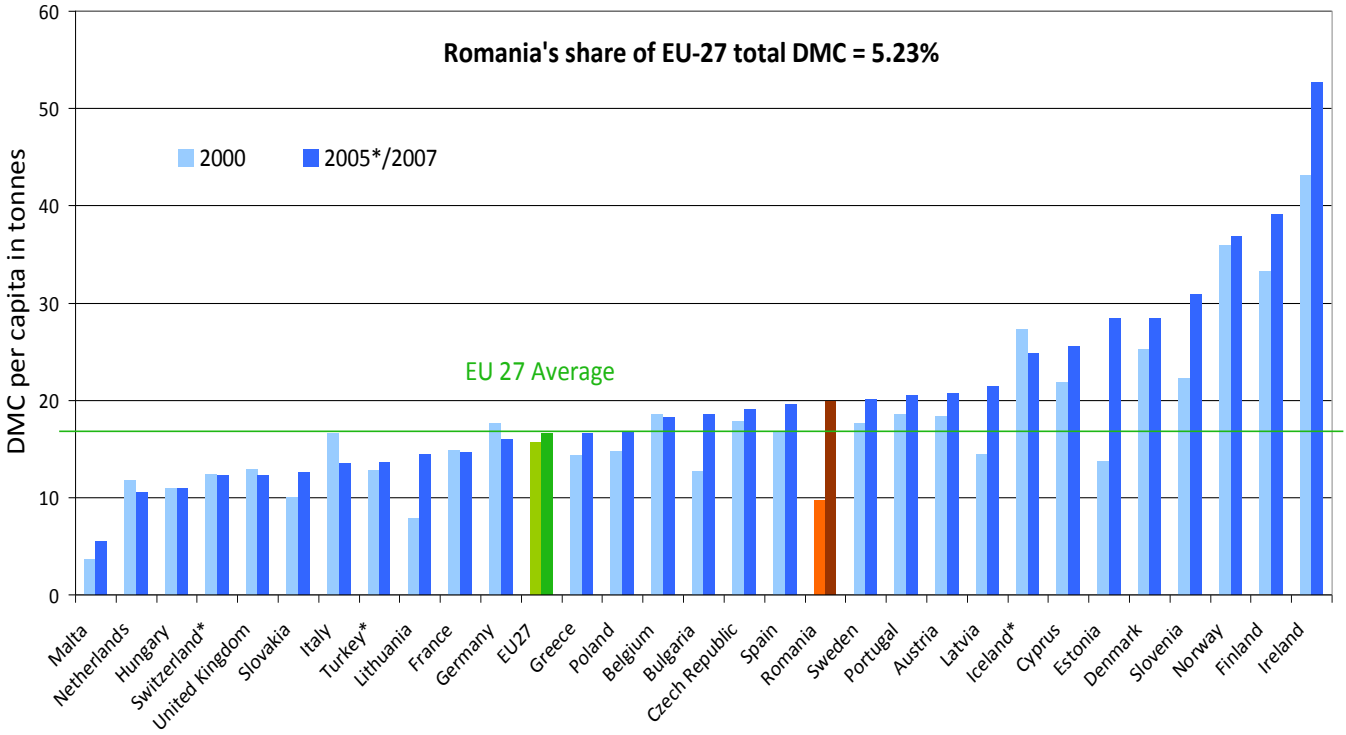
Population (projected inhabitants for 2010) [1]	21,462,186
➢ Percent of total EEA-32	3.7%
Surface area (km^2) [2]	238,391
➢ Percent of total EEA-32	4.2%
GDP at market prices – Purchasing Power Standard – Current Prices (Million Euro, 2009) [3]	233,305
➢ Percent of total EEA-32 (minus Liechtenstein)	1.8%
GDP per capita in Purchasing Power Standards (PPS) [4] EU27=100 (2009)	46
Urban population (rate of pop., 2009) [5]	55.1%
Main economic sectors and their share in total GDP (2009 est.) [2]	
Agriculture	6.4%
Industry	24.5%
Services	69.1%
EU accession date [6]	1.1.2007

Additional relevant background information on Romania (and on 37 other EEA member and cooperating countries) can be found at the SOER2010 website: http://www.eea.europa.eu/soer/countries/ro

Factsheet on national waste policies for Romania is available at: http://scp.eionet.europa.eu/facts/factsheets_waste/2009_edition/factsheet?country=RO

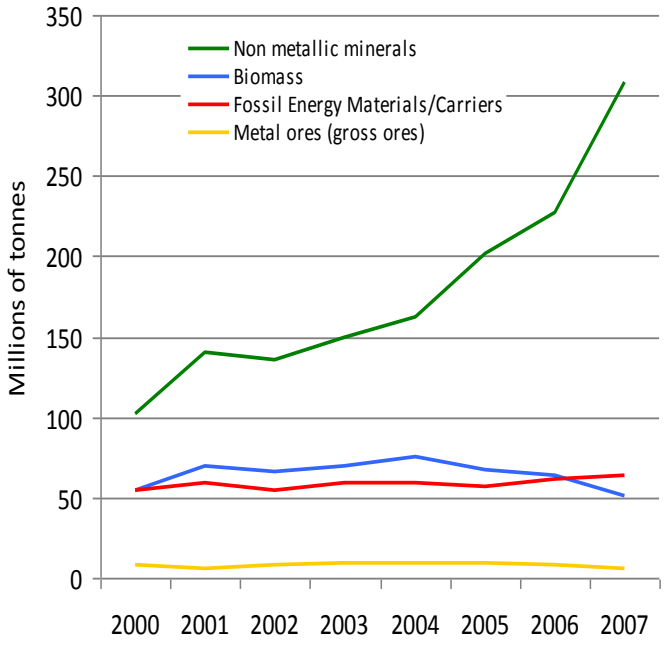
1.2 Facts and figures on resource efficiency for Romania

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



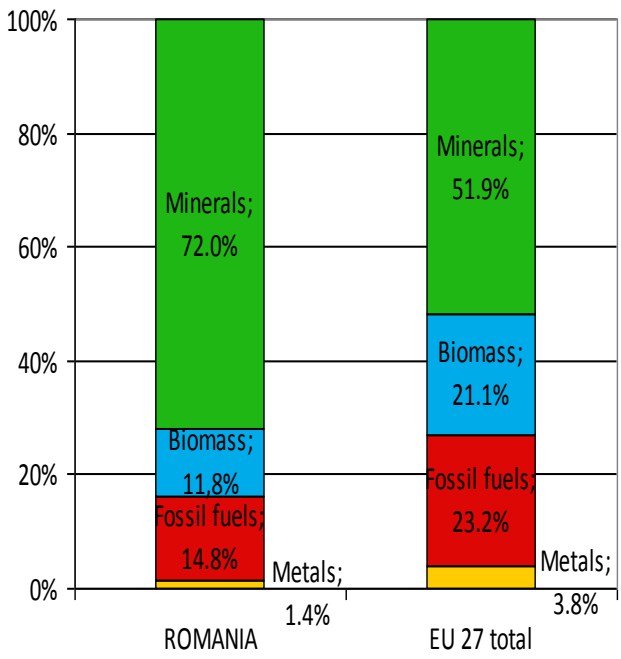
Source: Eurostat, OECD and Total Economy Database [7] * = For these countries data is for 2000 and 2005.

Domestic Material Consumption by category over time, Romania



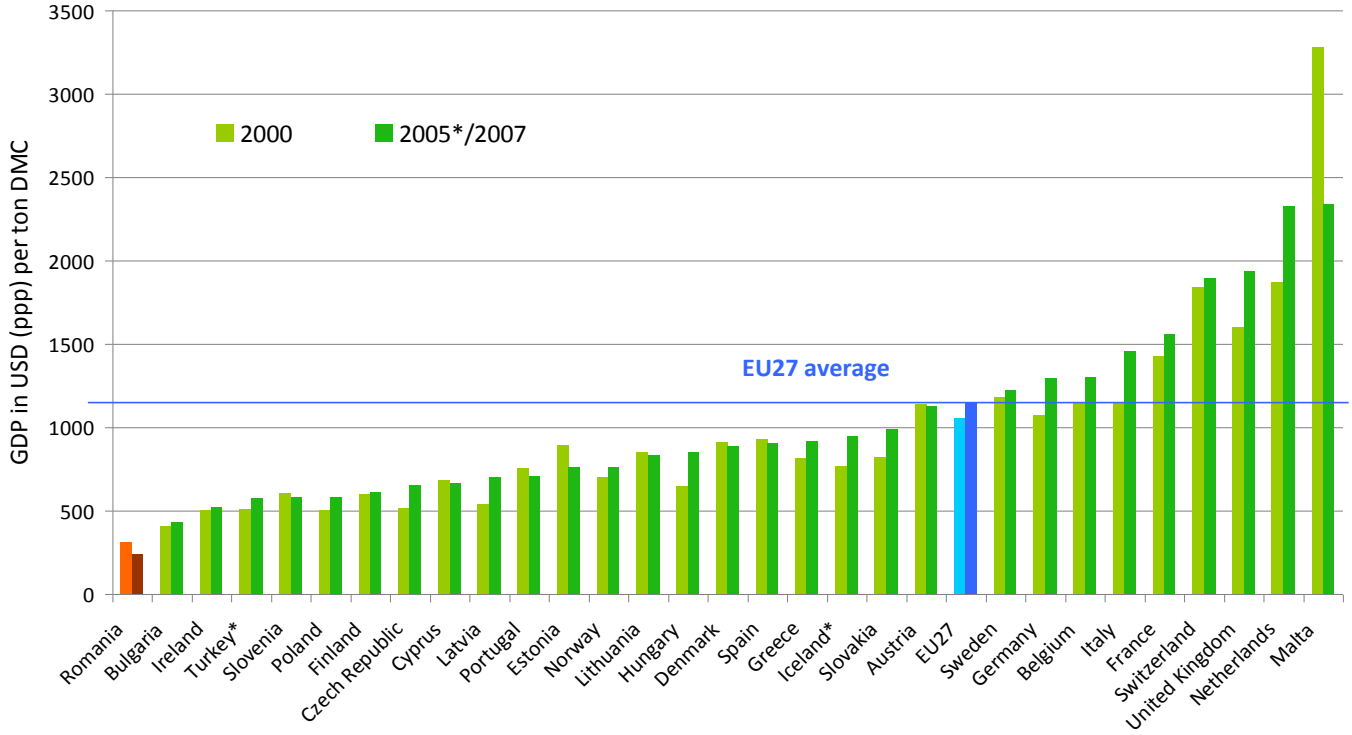
Source: Eurostat [8]

Breakdown of DMC by type of materials (2007)



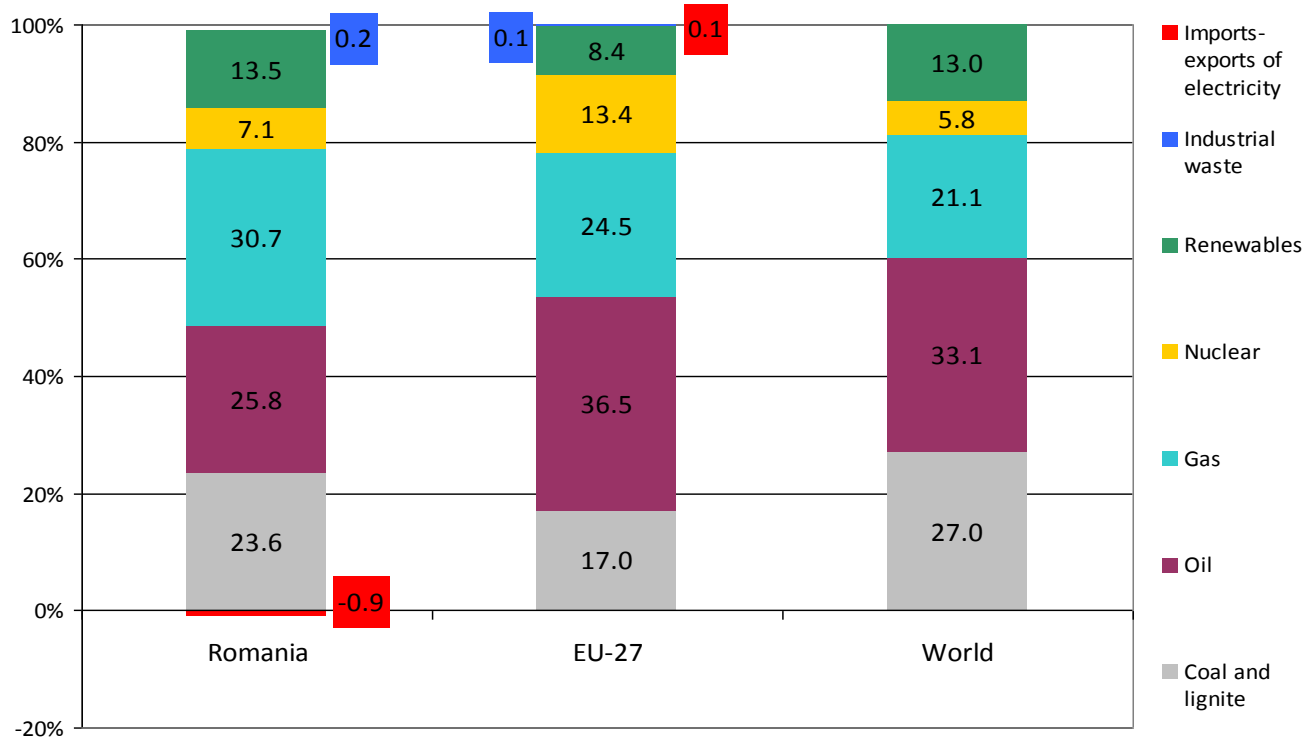
Source: Eurostat [8]

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

In Romania's case resource efficiency is not the subject of a separate policy or strategy. However, the main steps made by Romania towards resource efficiency policies are connected with sustainable development. In this context, within the National Strategy for Sustainable Development - Horizons 2012 – 2020 - 2030, the concept of production and sustainable development is applied to various sectors like mining, industry etc. Also, the National Strategy for Sustainable Development mentions that using the adequate economic policy instruments the productivity of material and energy consumption resources can increase with an annual medium rate of 3 - 4% within the period 2008 - 2030. The main steps envisaged in this direction are:

- Macroeconomic structural adjustment (raising the service sector contribution to the GDP from 48.8% in 2005 to about 55% in 2013, 60 - 65% in 2020 and 70% in 2030) and intra-sectoral structural adjustment (lower share of energy and material intensive sub-sectors in industry);
- Reduction by a minimum of 1.2-1.5% per year of the specific materials and energy consumption rates and production losses in the processing industries, power generation, residential sector, transport and construction following a significant increase in investment for technological renewal and infrastructure upgrading, and also as a result of better management of technology and energy;
- A 2-3% annual increase of the share of products having high value added and relying on medium-grade and high technology, and also of the share of services in the structure of exports;
- Significant improvement in the technological content and the quality of products and services leading to better performance on the market and higher value added in relation to the cost of resources actually used;
- Enhanced commercial management, better procedures for the acquisition of raw materials (particularly energy resources), materials, components and services, and improved terms of sale of products and services on the most favorable niche markets in relation to the international fluctuation of prices.

Furthermore, the strategy mentioned that by meeting these objectives it is estimated that over 60% of the economic growth can be accomplished without additional consumption of material and energy resources.

Other steps made by Romania towards energy efficiency are increasing the renewable energy sources quota in order to meet European and international climate change commitments. Furthermore, in this direction the efforts made are targeting the usage of energy efficiency in buildings (thermal rehabilitation of apartments) thorough various programs. One example is the '**Green House' Programme** managed by the Romanian Environmental Fund Administration. The 'Green House' Program promotes the use of heating systems based on alternative energy. The Romanian Government, through the Ministry of Environment and Forests and Environment Fund Administration, will finance replacing or supplementing traditional heating system with installations using solar, wood waste and geothermal energy sources. This program allows the installation of heating systems using renewable energy, replacing or supplementing traditional

heating systems and encouraging the use of renewable clean energy sources. The grants for households vary according to the chosen heating system, up to 6,000 LEI or up to 8,000 LEI (for heating pumps). The overall budget for households, in 2010, was 110 million LEI, being distributed to county level with allocation based on population. The purpose of this program is to improve air quality and energy efficiency by reducing water and soil pollution caused by burning wood and fossil fuels for heating and hot water.

Furthermore, this program addresses the public sector as well, by financing, with grants up to 90% of the eligible costs, local administrations, public institutions and religious institutions to invest in replacing or supplementing classical heating systems with new ones based on renewable energy sources;

Other resource efficiency projects and programs financed through the Romanian Environment Fund Administration are targeting:

- energy efficiency by financing renewable energy projects – the program 'Increasing the energy production from renewable sources';
- waste management by financing companies and regional administrations;
- The 'Jalopy' program, which consists of coupons (worth about 890 EUR a piece) received by individuals or legal persons for every used car (older than 10 years) sent to recycling centres;
- awareness campaigns developed through NGOs;
- financing, with up to 95% of the eligible costs, new sewage systems for local administrations, in order to protect water sources;
- financing parks and forests for local administrations, with up to 100% of the eligible costs;

The Romanian Ministry of Development and Housing is working in collaboration with the local government authorities in order to promote the 'Thermal Rehabilitation Program' for housing blocks. The main goal is to attract a large number of housing units to enter in this program in order to increase the energy efficiency. In this context, the beneficiaries of this program are the owners of associations aiming to increase energy performance of residential buildings.

Also, the R&D activities that promote innovation and eco-efficient technologies will be focused towards priority sectors and areas where their application may create significant environmental progress and competitiveness (organic food, water technology, energy efficiency, urban transport industries with significant impact on the environment, construction, selective collection, recycling and disposal of waste, biofuels, etc.).

Mineral resource efficiency is targeted in the following lines of action:

- The capitalization of the mining products (hence: coal, ferrous and nonferrous minerals, aluminum and aluminous rocks, precious metals, radioactive metals, haloid salts, useful nonmetallic substances, useful rocks, gems, bituminous rocks, combustible gases, geothermal waters, water natural mineral, therapeutic mineral waters and mining waste product from the dumps and tailings dams etc.) in a free market competition between internal and external suppliers.
- Create an integrated national system for monitoring the environmental impact caused by industrial mining activities as a tool of prevention, planning and emergency response.

- An efficient management of the natural resources through the use of domestic energy-import mixes to stabilize domestic prices.

In our opinion, the main drivers for resource efficiency policies are providing energy security, environmental protection, increasing competitiveness and sustainable production and consumption patterns. In this context, the implementations of efficient measures of resource usage are very important for an effective resource policy.

3. Overall Policy Approach for Resource Efficiency

At the present, Romania has the National Strategy for Sustainable Development adopted by the Government Decision no. 1460/2008 that was realized by the Ministry of Environment and Forests in partnership with United Nations Development Program through the National Centre for Sustainable Development. This strategy is establishing the sustainable development general framework, mentioning also some strategic points for the resource conservation and their management.

Within the strategy's content there is a distinct chapter regarding the theme of sustainable production and consumption. This chapter is presenting a realistic evaluation of Romania's production and consumption patterns aiming to identify solutions for reducing material resources consumption per unit of Gross Value Added and decoupling the dynamic of GDP from integrated material resource and energy consumption, and also from the negative impact posed on the environment.

The legal framework for the approval and adoption of the strategy is represented by:

- The Government Decision no. 1460/2008 regarding the approval of the Romania's National Strategy for Sustainable Development - Horizons 2012-2020-2030.
- The Government Decision no. 1635/2009 – the Ministry of Environment and Forest ensures the inter-ministerial coordination for preparation of the National Sustainable Development Strategy and aims to implement it.

Overall, the national sustainable development strategy takes into consideration the following items:

- the strategy's framework includes a long-term vision and principles on the main environmental items;
- the political and social leadership;
- coordination of government policies (for the whole strategy and sectoral policies);
- encouraging the involvement of civil society;
- awareness campaigns.

Regarding the conservation and management of natural resources, the strategy is mentioning the main national goals, measures, finance etc., respecting the general guidelines mentioned within the renewed EU's Sustainable Development Strategy. In this context, the following aspects are taken into consideration:

- for safeguarding the water resources is needed an efficiency water/ wastewater service management;
- the conservation of biodiversity and natural capital for supporting the management of protected areas and also for the implementation of Natura 2000 Network.

Also, Romania has a National Action Plan for Environmental Protection (2008) that aims to support the most important projects in order to improve the quality of the final environmental factors in Romania.

The National Action Plan for Environmental Protection was updated during 2007 – 2008 and approved by the Interministerial Committee for coordination of the integration of environmental protection into sectoral policies and strategies at national level by Decision no. 1/7.11.2008. This action plan promotes and supports the most important projects, aiming to gradually improve the quality of the final environmental factors in Romania.

The document offers an image on the investments made in Romania for environmental protection and is addressed only to regional and national projects or to projects that have a significant impact on the environmental. Most projects undertaken relate to water and urban areas.

Furthermore, the objectives mentioned by the National Action Plan for the Environment are:

- **Water resources**:
  - Sustainable use of water resources by increasing the share of water energy potential through new hydroelectric plants and waterways transport modernization;
  - Ecological restoration of rivers through rehabilitation of destroyed habitat and insurance of the environmental flows of rivers.
- **Nature Protection**:
  - Conservation of biological diversity, sustainable use of natural habitats, wild flora, fauna and ecological restoration of damaged systems. Enhancing the national network of protected areas and nature reserves, rehabilitation of the Romanian coastal shore, sustainable management of forest and supporting their role in the social-economic developments, etc.

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

During the period 2004 – 2010, Romania had a Mining Industry Strategy that was approved by Government Decision 615/2004. Currently, for the next period (2010 – 2020) Romania elaborated a mining draft strategy, which for the moment is under approval procedure on the environmental report for the mining strategy 2010 – 2020 being followed by Government's approval.

Romania's Biomass Master Plan (2010**)**

Romania has the opportunity to make a major step towards effective use of biomass. This measure will contribute to achieve the provisions of the Directive 2009/28/EC on the use of renewable sources. Also, the Biomass Master Plan will help to reduce CO_2 emissions in Romania, will increase the efficiency of various industries and will create new opportunities for national and international private companies.

The National Action Plan for Energy from Renewable Sources (2010) is laying down the national and sectoral goals for energy efficiency, measures to increase the availability of biomass, taking into account other biomass users (based on agriculture and forestry) etc.

Furthermore, the legal aspects of the electrical energy production for renewable sources are represented by: the Government Decision no. 443/2003 on the promotion of electricity from renewable energy and by the Government Decision no. 1535/2003 regarding the approval of the renewable energy sources capitalization. These strategically decisions have direct effects on reducing final energy consumption.

Romania's National Strategy for Energy Efficiency approved by the Government Decision no. 163 of 12 February 2004 establishes the goals and the evaluation of the potential of increasing energy efficiency in various sectors. The main goal of the strategy is to identify the possibilities and the means of increasing energy efficiency alongside the energy cycle. In this context, promoting energy efficiency aims to reduce energy consumption at the final consumer, having effects at the energy production level and at the utilization of the primary energy resources.

The policy and the Strategy for Forest Sector Development in Romania (2001 - 2010) have as objective to increase the forest sector contribution for raising the quality of life, based on sustainable forest management. Also, there are mentioned as strategic objective the necessity of upgrading the institutional framework in order to achieve a uniform and sustained implementation of the forest sector development.

Currently, the National Plan to Combat Illegal Logging is placed on public consultation in order to involve the civil society and NGOs in combating illegal activities in forestry and wildlife.

The National Action Plan for environmental public procurement (2008 - 2013) is presenting the general and legislative framework establishing the criteria for green procurement for different categories of products and services. Furthermore, this plan highlights the necessity to develop ecological criteria in order to promote an effective public procurement in Romania.

Starting in 2007, Romania implemented in her national legislation the **Eco-Design Directive** (2005/32/CE) that established the ecological design criteria for the energy consuming products.

The Action Plan for water protection against nitrates pollution from agriculture sources approved by the Government Decision no. 964/ 2000 with subsequent amendments.

The main elements of the Action Plan are targeting the following areas:

- the diagnosis of the vulnerable areas to nitrate pollution and the list of localities where there are sources of nitrates resulted from agricultural activities;
- the Action Program Framework for vulnerable zones to nitrate pollution from agricultural sources at the level of administrative units (PA-NVZ);
- the organization of integrated national system for soil monitoring, supervision, control and decisions for reduction the quota of the pollutants from agricultural sources and the management of organic wastes from livestock sources in areas potentially vulnerable or vulnerable to nitrate pollution;
- the Code of good agricultural practices, approved by the Order no. 1270/2005 of the Ministry of Environment, Water Management and the Ministry of the Agriculture, Forestry and Rural Development.

The Code provides practical measures and mandatory requirements for farmers regarding the protection of waters against pollution by nitrates from agricultural activities: the systems for sustainable, conventional, biological agriculture; the general and specific rules for the use of chemical and organic fertilizers; the storage of used waters and manure management from the farms; the agriculture land management – nitrogen's dynamics; the systems of irrigation and the water management for irrigation; the fertilization plan and the register of fertilizers within the farms.

The Good agricultural and environmental conditions (GAEC) were approved by the Order no. 30/2010 of the Ministry of Agriculture and Rural Development and Ministry of Environment and Forests.

This order is establishing the good agricultural and environmental conditions that should be met by the farmers that are applying for direct payments from EU funds or from the national budget and other financial support. This also applies to the following directions: soil erosion, maintaining the optimal content of organic matter in soil, maintain soil structure, ensuring a minimum level of maintenance of agricultural land protection, and water management.

More information on Codes of good agricultural and environmental practices, Codes of good farming practices, the Code of good agricultural practice for protection of waters against pollution by nitrates from agricultural sources are available at:

The project '**Support for the organization and implementation of a functional cross-compliance'** is funded by the Netherlands (October 2010 - November 2011). The project goal is to support Romania to organize the implementation of cross-compliance system taking into account the fact that from January 1, 2012, Romania is obliged to implement, in addition to good agricultural and environmental conditions, the statutory requirements management, in accordance with the art. 124 para 6 of Regulation (EC) no. 73/2009 of 19 January 2009 that is establishing common rules for direct support schemes for farmers under the common agricultural policy and establishing certain support schemes for farmers.

The project called **'The Rehabilitation and the reform of irrigation's system'** (approved and funded in accordance with Law no. 4 / 2004 with a period of implementation: 2004 - 2012). The project's goals are: to reduce the risk of drought, to increase the economic efficiency of irrigation, to improve the irrigation's management, to improve the energy efficiency of water irrigation systems, to involve the beneficiaries in the management and the rehabilitation of irrigation systems.

The project's components are represented by: the rehabilitation of irrigation systems, support for institutional reform of land improvement, energy saving technologies for the irrigation's management within interior areas, and support for project implementation (including monitoring the environment - soil and groundwater).

The National Strategy for Drought Mitigation, Prevention and Combating of Land Degradation and Desertification on short, medium and long term.

The strategy includes forecasts, indicators for monitoring the effects of drought, land degradation and desertification phenomenon in Romania, in the context of climate change.

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

Regarding the resource efficiency and their management, the **National Strategy for Sustainable Development** has identified as a priority the following thematic areas:

- the water supply and the wastewater treatment;
- the development of an integrated waste management systems;
- to reduce the negative environmental impact of urban heating systems;
- to preserve biodiversity and the natural heritage;
- to reduce the risks of natural disasters.

In Romania, mineral resources extraction activities are covered by the **Mining Law 85/2003**. The provisions of this Law are taking into account the environmental preservation and reconstruction. In the case of groundwater and drinking water this law shall apply only to the activities of prospecting, exploration and assessment.

Priority actions:

- increased security of fuel supply in thermal power plants using coal and nuclear fuel;
- efficient management and rational exploitation of useful mineral resources;

- providing investments in mining sector development;
- economic efficiency throughout the chain production (within the phases of extraction, preparation, transportation, consumption);
- organization/ transformation of coal-producing units into energy companies together with energy producers in order to achieve a balanced energy mix and to obtain a competitive energy sector that will provide the security of supply;
- the development of mining products extraction in compliance with all the environmental protection provisions.

Another resource identified as a priority at the national level is the biomass, due to its increasing importance for reducing CO_2 emissions in Romania and increasing the efficiency of various industries.

6. Strategic objectives, targets and indicators on resource efficiency

In order to implement the strategic objectives mentioned into the National Strategy for Sustainable Development, Romania started to develop, through a Eurostat Grant Programme, sustainable development indicators at national level. The general goal of this project was to offer a practical tool for monitoring the objectives established through the National Strategy for Sustainable Development.

The target fixed by the strategy is represented by a 1.2 - 1.5% minimum reduction per year of the specific materials and energy consumption rates and production losses in the processing industries, power generation, residential sector, transport and construction following a significant increase in investment for technological renewal and infrastructure upgrading, and also as a result of better management of technology and energy.

Indicators developed by the National Institute of Statistics and the Ministry of Environment and Forests that address resource efficiency use are:

Theme 5: Climate change and energy
Sub-theme 5.5. Energy intensity of economy

Final energy consumption by sector; Share of energy from renewable sources; Combined energy for heating and electricity as % of total electricity; Bio-fuel consumption in transport; Income tax for energy use and energy consumption. The National Action Plan for Energy Efficiency (2007-2010) establishes the target to decrease the annual average final energy consumption in the period 2008-2016 by 1.5%, a value that is 50% higher than the minimum required by Directive 2006/32/EC.

Theme 6: Models of production and consumption
Sub-theme 6.1. Ecological efficiency

Acidifying substances and emissions of ozone precursors and GDP in constant prices; Waste generated by economic activities; Municipal waste collected per inhabitant; Components of domestic material consumption; Domestic consumption by type of material; Treatment of municipal waste (discharged from landfills); Municipal waste recovered.

Sub-theme 6.2. Consumption patterns
The number and size of households and the Average annual meat consumption per capita

Sub-theme 6.3. Agriculture
Livestock density index; the use of selected pesticides

Theme 7: The management of natural resources

Biodiversity
Sub-theme 7.1.:
Change in the status of threatened species and / or protected

Marine ecosystem
Sub-theme 7.2:
Catches of fish exceeding capacity limits biological recovery of marine waters, Fleet fish size

Drinking water resources
Sub-theme 7.3.:
The share of fresh water collected in total water resources; Population connected to wastewater treatment plants; Organic emission (CBO_5) as biochemical oxygen demand in rivers

Land use
Sub-theme 7.4.:
Built area as % of the total area; the share of total area at risk of soil; erosion; Share of forest affected by defoliation.

Furthermore, we can mention that the development of the sustainable development indicators is a first step towards decoupling the economic increase form environmental resources. Currently, these new approaches are in a developing phase.

More information is available on:
http://www.insse.ro/cms/files/Web_IDD_BD/index.htm

Romania is currently in the process of developing the sustainable development indicators at territorial level in order to monitor the progress at regional and local level.

In the case of the mineral resources, the *strategic objective* is that of ensuring the national energy security, based on an effective system of primary energy supply, generation, transmission, distribution and supply in order to ensure uninterrupted supply of all consumers in terms of accessibility, availability and affordability of prices, given the development of quality environment. Also, the *objective in mineral resources field* is that of meeting the needs for mining products at competitive prices, safe by respecting the sustainable development principles.

Regarding the *strategic objective of the energy efficiency* the following can be mentioned:

- increasing the energy security through providing the resource energy needs and limitation of import energy resource dependency;

- the rational and efficiency usage of primary energy resources;
- the promotion of electrical and thermal energy production in cogeneration plant, especially in highly efficient cogeneration plants;
- reducing the negative impact of the energy sector on the environment;
- investment incentives for improving the energy efficiency of the whole life cycle: resource – production – transportation – distribution - consumption.

The energy saving target for 2016 is 2,800 thousand tep that is representing 13.5% from the average obtained in the 2001 - 2005. The annual average decrease of final energy consumption in the period 2008 - 2016 will be 1.5% to 50% higher than the minimum value required by Directive 2006/32/EC. Romania's energy saving goal was established taking into consideration the high value of energy intensity existed in the national economy.

The Romanian target for renewable energy quota in the final gross consumption is 24%, as indicated in 2009/28/EC. The share of electricity produced from renewable sources in total gross energy consumption is 35% for 2015 and 38% for 2020.

The paper 'Strategic approach regarding capitalization of potential production and biofuels use and directions of action for the development and the usage of biomass' (2008) for the period 2008-2020 mentions the following strategic objectives:

Energy security:

- Increase energy security by diversifying energy sources used, limiting dependence on imported energy resources;
- Reduction of imports of petroleum products;
- Broadening the base of energy resources through the use of national resource potential bioenergetics;
- Increasing the technology efficiency level.

Sustainability:

- Improving efficiency of production technology and biofuels use;
- Utilization of natural soil resources without a negative result on depleting biodiversity and carbon-rich soils;
- Reduce greenhouse emissions throughout the production cycle and use of biofuels; Use of agro-food, municipal, and forestry waste;
- Support of research and development activities, technology dissemination and transfer applicable research results on the production and the biofuels use.

Competitiveness:

- Developing competitive fuels markets in line with environmental impacts throughout their life cycle;
- Broadening the range of energy-plants grown in Romania in line with climatic conditions of the country;
- Development of energy plant technologies that maximize energy-plant cultivation production levels and increase energy efficiency;

- Optimization technologies for the production of first generation biofuels (biodiesels and biogas)
- Developing technologies for the production of second generation fuels.

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

- The Ministry of Environment and Forest, itself and through the institutions in its sub ordinance (the National Agency for Environmental Protection and the Local Agencies for Environmental Protection etc.) or coordination (the Environment Administration Fund etc.), coordinates the integration of environmental requirements into other sectoral policies in line with European and international requirements and standards. Also, the ministry has responsibilities in promoting sustainable development, protection and conservation of forests, water sources, waste management etc.

- The Ministry of Economy, Trade and Business Environment has attributions in dealing with mineral resources, energy efficiency, energy security etc. The Ministry of Economy, Trade and Business Environment develop, implement and monitor the energy efficiency policy and the security of industrial facilities. Also, it coordinates the generation, transmission and distribution of electricity and energy market monitoring.

  Regarding the above mentioned aspects, the Ministry of Economy is responsible with resources efficiency. In this context, was established an inter-ministerial working group regarding the elaboration of action plan in the field of renewable energy with the main goal of implementation of the national energy policy.
  More information on the National Action Plan in the field of renewable energy is available at http://www.minind.ro/pnaer/PNAER_29%20iunie_2010_final_Alx.pdf

- The Ministry of Agriculture and Rural Development is responsible for developing and implementing national strategies in the agricultural sector and food production, rural development, fisheries and aquaculture, land reclamation, and in connected areas: plant protection, specialized scientific research, conservation and sustainable management of soils and also of the plant and animal genetic resources.

- The Ministry of Regional Development and Tourism has special attributions related to thermal rehabilitation of apartment buildings.

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

Forest resources and timber

Romania has developed since 2000 a legal framework for the conservation, preservation and use of the forest resources. In this context, the Forest Code - Law 46/2008 establishes some measures in order to have a sustainable use of natural resources, allowing at the same time, only for certain objectives, land compensation equal with the value five times bigger and area three times larger and with payment of certain fees.

The policy concerning production and use of wood is to integrate forest exploitation and wood processing in the concept of sustainable management of the natural capital in order to both gain benefits and protect the wood resources.

Basic objectives are to increase the efficiency of logging, wood transportation and processing, to promote ecologically sound logging technologies, to improve the access to forest land, in relation with the modern methods and technologies of wood harvesting, observing the environmental protection requirements. The Forestry sector and wood as a resource have been considered in the **Biomass Master Plan for Romania**, which was prepared in 2010 by the Ministry of Economy, Trade and Business Environment, Center for Promoting Clean and Efficient Energy in Romania, assisted by the Agency for Energy from Netherlands and in cooperation with other ministries and institutions. This incorporated conclusions and recommendations and resulted in three further studies on biomass development in Romania:

1. Biomass potential and possible scenarios;
2. Markets and technologies;
3. Stakeholders in bioenergy sector and organization of this sector.

The wood biomass has been also considered in the National Action Plan on Energy from Renewable Sources, implementing the Directive 2009/28/EC. Adequate legislation has been developed, the main and latest outcome being the **Romanian System for Timber Flow Control and for Tracking the Wood Source (SUMAL)** in place since 2008. The main objectives of SUMAL, which are an integrated information system, are to:

- carry out statistic reports at national level on wood removals and on resultant wood products;
- create uniform records on wood products administration by providing wood operators with a free software application;
- increase the efficiency of the control as part of the public policies to reduce forest crime by preventing and combating illegal activities.

Waste

Currently, waste management is a serious problem due to the negative impact of waste on the environment in Romania. The waste disposal on land without complying with minimum requirements, the discharge into waterways and their uncontrolled burning create major environmental and health problems.

EU legislation transposed into national legal provisions required a new approach to waste problems, based on the need to conserve natural resources, reduce management costs and find efficient solutions to mitigate the impact of waste environment. The **National Strategy** and the **National Waste Management Plan** are based tools that ensure implementation in Romania of EU policy on waste.

In order to reduce consumption of oil and gas based plastic products, Romania has set conditions for the marketing and distribution, from farm to final consumer, for fees on plastic bags or free bags made of biodegradable materials.

Environmental taxes

Romania has implemented economic based instruments regarding resource efficiency through environmental taxes in order to limit toxic discharges and to reduce the negative impact of plastic bags disposed of directly into the environment. In order to discourage the use of non-biodegradable packaging material, such products dealers have to pay the trading fee for non-biodegradable packaging.

The resulting tax will be used to fund environmental programs and projects that stimulate eco-friendly behaviour and improve environmental quality.

Moreover, Romania has several environmental taxes, collected through the Environmental Fund Administration, such as:

- the pollution tax (registration fee), payable for new cars when they are firstly registered on Romanian territory;
- a tax of 3% on incomes from ferrous and non-ferrous metallic waste sales;
- a tax of 2 LEI/kg (about 0.47 EUR/kg) of packaging for imported goods;
- the 'Eco-tax' which is a tax on plastic shopping bags and its value is 0.1 LEI/piece (about 0.024 EUR/piece);
- taxes on pollutant emissions payable by companies;
- a tax of 2% on wood and wooden material sales.

The money collected is directed to funding environment projects, such as:

- up to 50% of the eligible costs for private companies investing in renewable energy projects;
- up to 100% of the eligible costs for public local administrations investing in creating or extending parks and forests, replacing classical heating systems with new ones based on solar or geothermal power;
- up to 90% of the eligible costs for NGOs running environmental awareness campaigns;
- coupons worth of 3,800 LEI (about 890 EUR) for every used car (older than 10 years) sent to recycling centres;
- up to 6,000 LEI (about 1,400 EUR) or 8,000 LEI (about 1,880 EUR) for households buying new solar or geothermal heating systems.

The legal framework for environmental taxes is established by the Government Ordinance no. 196/2006 regarding the organization of the Environment Fund Administration.

In the case of the mineral resources, Romania aims to capitalize its state ownership position on mineral resources by establishing stable, competitive, fair taxes and royalties, rather than through direct ownership and management of the mine operators. The Government developed a strategy that proposes a series of courses of action with respect to EU legislation transposed into Romanian legislation, both in terms of sustainable resource exploitation activity, as well as management, conservation and greening of the perimeter of inactive mining areas.

The 'Jalopy' programme (described above), run by the Environment Fund Administration, is considered a real success in 2010 and will continue also in 2011. In Romania, through this program, around 63,000 new cars were purchased in 2010 and 190,000 Jalopies were scrapped. The amount allocated for this program was in 2010 around 722 million LEI (over 170 million euro). For 2011 the program is addressed both to physical persons and legal entities, offering individuals the possibility of purchasing a new car by combining up to three vouchers value.

The novelty for 2011, developed through the Environment Fund Administration, is the possibility of acquiring new hybrid or electrical cars, even if not taking part in the 'Jalopy' Program, according to the Government Ordinance no. 40 / 2011; any private or legal person (except companies, be it private or state owned) will benefit of a 10% discount (but not more than 1,800 EUR) on the sale price of a hybrid car and up to 20% discount (but not more than 3,700 EUR) on the sale price of an electrical car.

This program is very important, because it facilitates the replacement of old polluting cars with new cars.

The necessary fund allocation for financing environmental programs is limited to the annual revenue and expenditure budget of the Environment Fund Administration approved by yearly Government decisions.

Renewable energy resources are promoted using the binding quota system combined with the green certificate transactions. This scheme is applied during a plant function and includes supportive measures for producers that are delivering energy from renewable sources to the public network for a maximum period of 15 years.

This scheme is applied to energy delivered from the following renewable resources: hydro energy delivered from 10 MW installed power plants, wind energy, solar energy, geothermal energy and associated burns gases, biomass, waste fermentation gas, sewage gas fermentation form used water plants.

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

- the accomplishment of a synergic integration between resource efficiency management and the sustainable development principles;
- practical ways to implement resource efficiency policies;
- discussions regarding common standards for gauging resource efficiency policies in the member states;
- New funding policies within the E.U. and new/efficient financial models that could help create public-private partnerships;
- possible tax exemptions for private entities which not only comply with the existing regulations, but keep investing in BAT (best available technologies);
- possible subsidies for private entities which invest in resource efficiency projects;
- comparison of energy efficiency policies and means of implementation in various countries (information exchange regarding the best practices regarding this activity);
- means of information collection regarding the energy efficiency resource usage policies in the Member States;
- Relevant results obtained by applying energy efficiency resource usage policies.

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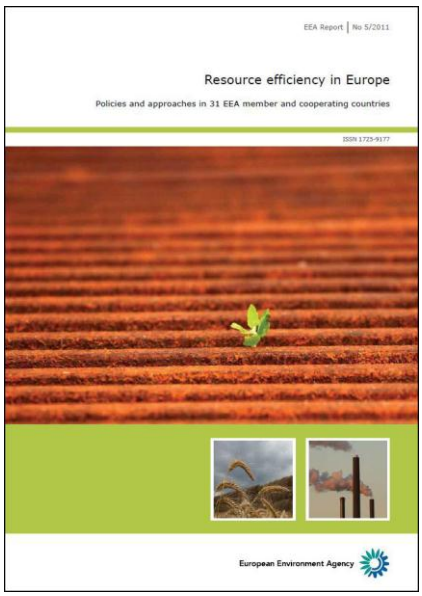

Resource efficiency in Europe

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