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Assessment of climate change policies in the context of the European Semester

Country Report: Romania



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The report provides an overview of current emission trends and progress towards targets as well as policy developments that took place over the period May 2012 to January 2013.

The content of the report represents the state of knowledge in February 2013, specific updates were made adding the latest official greenhouse gas emission data by the European Environment Agency (EEA).

Please feel free to provide any comments or suggestions to the authors through the contacts listed above.

Short summary

- **Background:** *Climate change policies play a somewhat moderate role in Romania. However, the National Climate Change Strategy was finalised and other renewable energy and energy efficiency measures were implemented in 2012, which may facilitate green growth.*
- **GHG target:** *Non-ETS emissions in 2011 were below of the 2013 target and according to the latest national projections the 2020 target is expected to be reached with a margin of 10%.*
- **Policy development:** *The 2008 law creating the green energy certification scheme was amended in 2012 to begin promoting small-scale renewable energy production. The building sector as well as energy efficiency have become emerging areas in climate change policy via new schemes District Heating, Heat and Comfort 2006-2015 and ROBUST Programmes.*

I Background on climate and energy policies

Climate change receives somewhat moderate attention in Romania. Of historical significance is the fact that Romania was the first country to ratify the Kyoto Protocol. In addition, some positive measures are being taken to reduce GHG emissions and facilitate green growth in Romania, as evidenced by various clean energy and efficiency policies and the finalisation of its National Climate Change Strategy in 2012. In January 2013, the former Ministry for Environment and Forestry was renamed as the “Ministry for Environment and Climate Change” (MMediu). In addition, climate change policies play a prominent role in the ministry’s governance programme for 2013-2016. The objectives and measures enlisted refer to mitigation of GHG emissions and adaptation to the effects of climate change in Romania (MMediu 2012a). Moreover, the Romanian National Climate Change Strategy was finalised in 2012, referring to mitigation as well as adaptation strategies and measures, and reforestation and afforestation policies are considered in the context of climate change mitigation (MMediu 2012b and 2010).

The general discussion on climate change is focusing on the adaptation to climate change impacts rather than on climate mitigation and green growth. In the last years (2005-2012), Romania suffered from various weather extremes, especially extreme droughts and floods (MMediu 2012b). Thus, Romania is focusing on policy measures for adaptation to the effects of climate change. The Romanian Minister for Environment and Climate Change has also been pushing the issue of adaptation to climate change at the European level.

Climate mitigation is mainly supported through the promotion of renewable energies and energy efficiency. The focus seems to be on energy efficiency and new energy generation capacities, as energy generation and distribution systems have already exceeded their lifespans and need to be updated. Moreover, Romania is supporting CCS, which is perceived as expecting ongoing economic development in the country, which will make use of domestic carbon resources (MMediu 2012b). Green growth is mentioned in connection with CCS research and the demonstration project in Turceni. It is expected

that research on and implementation of CCS projects will foster employment, but no concrete estimates are mentioned (ISPE 2011).

2 GHG projections

Background information

In 2011, Romania emitted 123.3 Mt CO₂eq (UNFCCC inventory 2011). Total emissions decreased by around 50% between 1990 and 2011. Energy supply and energy use still account for the highest emissions. However, emissions in both of these sectors were reduced significantly, by 49% and 63% respectively, between 1990 and 2011. The sharpest decrease was reported in the 1990s, reflecting the economic downturn driven by the transition to a market economy. A notable drop in emissions was also observed in industrial processes (-49%) between 1990 and 2011 due to plant closures. Emissions from agriculture were reduced by 48%, driven by a reduction in the number of livestock, the cultivated area and, the associated fertilizer use. Transport is the only sector that showed increasing emissions between 1990 and 2011 (almost 22% up) (UNFCCC inventory 2011, EEA 2012c, UNFCCC 2012).

Progress on GHG targets

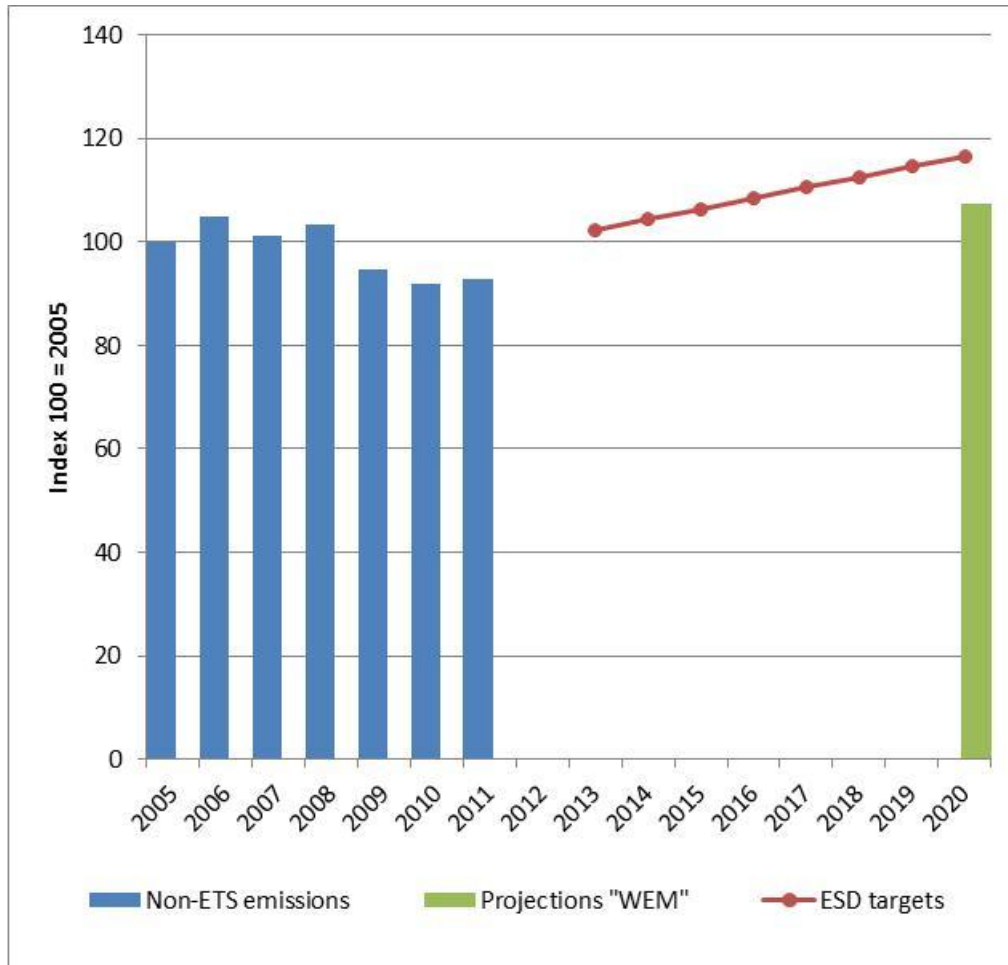
There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for Romania for the period 2008-2012 has been set to minus 8% based on 1989 for CO₂, CH₄ and N₂O and for F-gases. An evaluation of the latest greenhouse gas data (for the year 2011) shows that Romania's emissions have decreased on average by 55.7% compared to the Kyoto base year (EEA 2013a). Hence, Romania is expected to definitely meet its Kyoto target through domestic emissions reductions directly.

By 2020, Romania can increase its emissions not covered by the EU ETS by 19% compared to 2005 according to the Effort Sharing Decision (ESD) ⁽¹⁾. The latest data suggest that Romania is currently on track to meeting this target. According to the 2011 inventory data, emissions in 2011 were 9% below the Annual Emissions Allocation (COM 2013) for the year 2013. National projections up to 2020 show that Romania is expected to overachieve its target by 2020 by 10% compared to 2005, in scenarios with both existing and with additional measures (EEA 2012c and EEA 2013b).

Figure 1 shows Romania's non-ETS emissions until 2011, its targets under the ESD for the period 2013-2020 and the projections with existing measures for 2020.

¹ Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

Figure I: Non-ETS emission trends and projections compared to the ESD targets

Source: EEA. Projections are based on 15/04/2013 draft GHG inventory submissions under the UNFCCC and MS projections submitted

Table I: GHG emission developments, ESD-targets and projections (in Mt CO₂eq)

	1990	2005	2010	2011	ESD target*		2020 Projections**	
					2013	2020	WEM	WAM
Total	244.4	141.6	116.6	123.3				
Non-ETS emissions (% from 2005)		77.3	71.1	71.8	79.1	83.6	76.9	76.9
				-7%	2%	19%	9%	9%
Energy supply (% share of total)	71.2 29%	41.3 29%	33.2 28%	36.6 30%				
Energy use (w/o transport) (% share of total)	70.4 29%	29.5 21%	23.4 20%	26.0 21%				
Transport (% share of total)	12.0 5%	12.7 9%	14.3 12%	14.6 12%				
Industrial processes (% share of total)	24.8 10%	18.2 13%	12.4 11%	12.6 10%				
Agriculture (% share of total)	36.7 15%	20.9 15%	18.8 16%	18.9 15%				

Source: UNFCCC inventories 2011; EEA (2012c, 2013b); COM (2013), Calculations provided by the EEA and own calculations.

* The ESD target for 2013 and for 2020 refer to different scopes of the ETS: The 2013 target is compared with 2011 data and is therefore

consistent with the scope of the ETS from 2008-2012; the 2020 target is compared to 2020 projections and is therefore consistent with the scope of the ETS from 2013-2020. Non-ETS emissions in 2005 for the scope of the ETS from 2013-2020 amounted to 70.2 Mt CO₂eq.

** 2011 projections with existing measures (WEM) or with additional measures (WAM).

Legend for colour coding: green = target is being (over)achieved; orange = not on track to meet the target

Total greenhouse gas emissions (GHG) and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international aviation and international maritime transport..

National projections of GHG emissions up to 2020, summarised by the, need to be prepared by the Member States in accordance with the EU Monitoring Mechanism ⁽²⁾ every two years, and the latest submission was in 2013. However, Romania has not handed in 2013 projections so far and the latest data available is from 2011.

The projections need to be prepared reflecting a scenario that estimates emissions reductions in line with policies and measures that have already been implemented (with existing measures, WEM), and an additional scenario that reflects developments with measures and policies that are in the planning phase (with additional measures, WAM) may also be submitted.

In the following two tables, these measures - as outlined Romania as basis for its projections as of April 2011 - have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most ⁽³⁾. An update on the status of the policies and measures is included in order to assess the validity of the scenarios. Below the tables you will find a summary assessment.

Table 2: Existing and additional measures as stated in the 2011 GHG projections

Existing Measures (only important national measures; w/o EU legislation)	Status of policy in January 2013
National strategy for sustainable development which sets specific objectives for moving toward a new model of development that is capable of generating high value added, is motivated by interest in knowledge and innovation, and is aimed at continued improvement of the quality of life and human relationships in harmony with the natural environment.	Was approved by Government Decision no. 1460 in November 2008
Cross-cutting Strategy on national research, development, and innovation for 2007–2013: Promote the necessity to include science, technology and innovation in the development of the knowledge on economic and social progress in Romania	Implementation ongoing, methodology for contracting, financing, monitoring and evaluating research projects in the context of this strategy shall be aligned to the strategy's objectives
Action Plan for Environmental Technologies - ETAP: Support the transfer of environmental technologies from the research stage to the market; Improve market conditions to encourage the use of environmental technologies	Ongoing

² Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.

³ The implementation of the EU-ETS has not been included. Other EU Directives have only been considered if they have been outlined in the projections as one of the main instruments to reduce GHG emissions.

	National energy strategy 2007-2020 to increase energy security, sustainable development, and competitiveness in the energy market	Revision of this strategy "Romanian Energy Strategy 2007-2020", updated for 2011-2020 and published in 2012; Study conducting an environmental impact assessment for the revised strategy published in August 2012
Energy	Law no. 220/2008, amended by the Law no. 139/2010, for the establishment of the system to promote energy production from renewable energy sources	Draft published by Romanian Regulatory Authority in November 2012 for a methodology for a support mechanism of regulated prices for electricity by small-scale RES plants
	Green certificates (GCs) system for promoting renewable energies as regulated under Law no. 220/2008.	Ongoing; in July 2012 minor operational amendments implemented by Law no. 139/2010
	Strategy for using renewable energy sources	On pace with targets for share of renewable electricity generation for 2010, 2015, and 2020.
Energy Efficiency	Romanian Energy Efficiency Fund	Ongoing
	Warmth and Comfort 2006-2015: Significant reduction of thermal energy costs for heating and hot water consumption for all consumers connected to the centralized power system	Restarted in July 2012
Transport	Development priorities for the transport infrastructure - Law 203/2003	Ongoing
	National Action Plan for reducing emission of greenhouse gases in the field of civil aviation for the period 2011-2020	Implementation and monitoring of measures ongoing, collection of statistical data, first estimations regarding the effect of implemented measures expected in early 2014
Other non-ETS sectors	National Strategic Plan for Agriculture and Rural Development for 2007-2013	Currently under revision for the period 2014-2020; the revision process was initiated in autumn 2012 putting a draft document up for public debate
	the National Strategy on the organization of pastures improvement and exploitation activity at national level on medium and long term	Still in place
	The National Strategy on Drought Effects Mitigation and on the Prevention and Combating the Land Degradation and Desertification	Ongoing implementation
	National waste management strategy and National waste management plan	Both documents are currently under revision

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011

Additional Measures: Still to be implemented (only important national measures; w/o EU legislation)		Status of policy in January 2013
Transport	Review of existing transport strategies on climate change aspects	There is no evaluation publicly available .

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011

Romania has made some progress recently toward the revision of its policy documents and respective measures to reduce GHGs. Some examples include the expansion of the 2008 green energy certificate scheme to now include small-scale renewable energy production and the re-initiation of the District Heating, Heat and Comfort 2006-2015 Programme. However, other policy areas are less developed. For example, in transport, the announced measures haven't been implemented so far.

Overall, though, Romania is on track to stay well below its GHG target levels mainly due to the restructuring of its economy. The variety of climate change policy activities to date is encouraging and should be noted as evidence that Romania is moving in the right direction.

3 Evaluation of National Reform Programme 2012 (NRP)

In April of each year, Member States are required to prepare their National Reform Programmes (NRPs), which outline the country's progress regarding the targets of the EU 2020 Strategy. The NRPs describe the country's national targets under the Strategy and contain a description of how the country intends to meet these targets. For climate change and energy, three headline targets exist: 1) the reduction of GHG emissions, 2) the increase of renewable energy generation, and 3) an increase in energy efficiency ⁽⁴⁾.

In the following table, the main policies and measures as outlined in the NRP of April 2012 ⁽⁵⁾ have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

⁴ There are specific targets for all MS by 2020 for non-ETS GHG emission reductions (see section 2) as well as for the renewable energy share in the energy mix by 2020 (see section 4, renewable energies). Specific energy efficiency targets will be defined (or revised) by the MS until the end of April 2013 in line with the methodology laid out in Article 3 (3) of the Energy Efficiency Directive (Directive 2012/27/EU).

⁵ All NRPs are available at: http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm

Table 3: Main policies and measures as outlined in the NRP, April 2012

Romanian National Climate Change Strategy for 2013-2020	
Status as stated in the NRP	Under development
Status as per Jan 2013	Finalised
Description of policy or measure	The strategy defines policy fields and measures for climate change mitigation and adaptation. GHG emissions reductions are foreseen in the sectors of energy, industrial processes, agriculture, land-use, land-use change and forestry, waste disposal. Regarding adaptation to the effects of climate change, the strategy specifies general actions as well as sector specific measures for adaptation.
Action Plan on Adapting to Climate Change	
Status as stated in the NRP	Under development
Status as per Jan 2013	Finalised
Description of policy or measure	This Action Plan is part of the Romanian National Climate Change Strategy for 2013-2020. Regarding adaptation to the effects of climate change, the strategy specifies general actions like measures for awareness rising of the general public or up-dating national climate change scenarios. Additionally, sector specific measures for adaptation are indicated.
Programme for the Promotion of Electricity Generation	
Status as stated in the NRP	Ongoing
Status as per Jan 2013	Ongoing, but no new application round has taken place since 2010. Funds foreseen for 2011 and 2012 have been used for financing projects on the waiting lists from the call for applications in 2010. There is no new application round for 2013 yet.
Description of policy or measure	Under the Programme for the Promotion of Electricity Generation from Renewable Sources, grants are allocated to projects for renewable electricity generation. The scheme applies to legal entities that have been carrying out business activities in Romania for at least 6 months and whose articles of association state that the company generates heat or electricity.
Research on CCS	
Status as stated in the NRP	Initiated in 2011
Status as per Jan 2013	Ongoing
Description of policy or measure	Romania has initiated a first demonstration project on CCS in the Energy Complex Turceni being the biggest thermal energy plant in Romania. Additionally, the Institute for Studies and Power Engineering (ISPE), the research institute GeoEcoMar, the Ministry for Economy and the Government are involved in this demonstration project. The project was financed from the state budget with 1.2 million € and was co-financed by the European Union within the NER 300 subsidy programme. Furthermore, seven major potential areas for geological storage of CO ₂ were identified. Currently, further potential projects shall be identified in Romania based on the experiences gained within the demonstration project in Turceni.

The National Programme for Reforestation

Status as stated in the NRP Initiated in 2011

Status as per Jan 2013 Implementation from 2012 to 2020

Description of policy or measure The National Programme for Reforestation from 2010 foresees the continuous re- and afforestation of a total 160,000 ha of degraded and agricultural land. The National Forestry Agency (ROMSILVA) is in charge of these measures.

Expansion of national collection and treatment of urban wastewater under the national programme for infrastructure development (NPID)

Status as stated in the NRP Ongoing

Status as per Jan 2013 Terminated, due to national budget restrictions imposed by World Bank and IMF. All measures under the National Programme for infrastructure have been terminated.

Description of policy or measure In autumn 2012 a new programme for infrastructure development was initiated. "The National Programme for Rural and Urban Infrastructure Development" aims at improving living conditions in municipalities and towns with max. 50000 inhabitants. Relevant sub-programmes relate to the extension of water supply infrastructure as well as to extension of canalisation infrastructure.

Green certification system : Law No 220/2008 on establishing the system to promote energy production from RES

Status as stated in the NRP Implemented in Jan 2011

Status as per Jan 2013 Ongoing

Description of policy or measure The green certification scheme established by Law No. 220/2008 obliges electricity suppliers and producers to present a certain number of green certificates by the end of each trimester. The failure to satisfy this obligation carries a penalty. The number of green certificates issued depends on the technology used and varies between 0.5 and 6 certificates per MWh.

Framework of SOP-IEC Priority Axis 4 (PA4): Increasing energy efficiency and security of supply, in the context of combating climate change / Key Area of Intervention 2 (KAI 2) - Valorization of renewable energy resources for producing "green" energy

Status as stated in the NRP Call for projects: complete; implementation of projects: started in 2012

Status as per Jan 2013 No call for projects since 2010

Description of policy or measure The subsidy programme provides a total sum of 200 million € for the period 2008-2013. Funded Projects are entrepreneurial projects aiming to install facilities for the production of electricity or heat from renewable energies in the context of the new construction, expansion or renovation of the basic business site. Only those projects will be funded which do not exceed a total value of 50 million €. However, there was no call for projects since 2010 and no reliable information is available regarding budget allocation for 2013.

Framework of SOP-IEC Priority Axis 4 (PA4): support investments in facilities and equipment generating energy savings

Status as stated in the NRP Ongoing tenders

Status as per Jan 2013 Ongoing, but currently no call for projects

Description of policy or measure The subsidy programme provides support for new investments in facilities and equipment leading to energy savings. Eligible parties are industrial small- and medium-sized enterprises as well as large enterprises.

Green House Programme: Programme for installing heating systems using renewable energy sources including replacing or complementing classical heating systems – beneficiaries being administrative-territorial units, public institutions and units of education

Status as stated in the NRP Ongoing

Status as per Jan 2013 Ongoing, but even though there shall be one call for projects each year, the budget for 2012 has been used to finance projects on the waiting list from 2011. Thus, there was no call for application in 2012. There is no reliable information available about a call for projects in 2013 yet.

Description of policy or measure Under the Programme for installing heating systems using renewable energy sources including replacing or complementing classical heating systems – beneficiaries being administrative-territorial units, public institutions and units of education grants are allocated to projects using renewable energy sources for heating and cooling. In general all RES technologies for heating and cooling are eligible including aerothermal energy, hydrothermal energy, biogas, biomass, geothermal energy, and solar thermal energy.

Green House Programme: Programme for installing heating systems using renewable energy sources including replacing or complementing classical heating systems – beneficiaries being natural persons

Status as stated in the NRP Ongoing

Status as per Jan 2013 Even though there shall be one call for projects each year, the budget for 2012 has been used to finance projects on the waiting list from 2011. Thus, there was no call for application in 2012. There is no reliable information available about a call for projects in 2013 yet.

Description of policy or measure Under the Programme for installing heating systems using renewable energy sources including replacing or complementing classical heating systems grants are allocated to applicants being natural persons introducing renewable energy sources for heating and cooling. The programme subsidises projects installing solar thermal installations, heat pumps, and installations using biomass.

Creation of a national qualification platform for installers operating in the RES field (technical assistance project under the Intelligent Energy for Europe Programme)

Status as stated in the NRP In 2012

Status as per Jan 2013

Ongoing, national qualification platform established and analysis of current state of qualification situation in the building sector already conducted.

Description of policy or measure

The Intelligent Energy Europe project "BUILD UP Skills Romania" aims at developing a national strategy for the qualification of the working forces regarding energy efficiency and renewable energy use in the buildings. The objectives covered by this project are: 1) Creating a national qualification platform, involving all actors relevant to qualification and construction in an integrated consultation; 2) Conduct a comprehensive analysis of the current state of the construction sector in terms of vocational training and training in energy efficiency and renewable energy use in buildings and defining the needs for skilled construction workforce in order to meet the national targets by 2020; 3) Defining national strategy for workforce training necessary to fulfil energy targets set for 2020.

State aid scheme to promote high efficiency cogeneration

Status as stated in the NRP Became operational on 1 April 2011

Status as per Jan 2013

Ongoing

Description of policy or measure

The state aid scheme to promote high efficiency cogeneration supports electricity and thermal energy from high efficiency cogeneration plants. Eligible parties are heat and electricity producers owning or operating commercially high efficiency cogeneration plants carrying fuel savings of at least 10% compared to separate production. They are supported by the means of bonus payments for electricity or by regulated prices for selling electricity and thermal energy.

Information and raising awareness campaigns of population and businesses environment on the importance of increasing the energy efficiency

Status as stated in the NRP Ongoing

Status as per Jan 2013

Ongoing

Description of policy or measure

Information campaigns on the importance of energy efficiency for the population and the business environment will be continued and will include following measures: 1) Informing and educating households about use of electrical equipment, appliances and efficient lighting in line with energy labelling system and possibility for saving energy by using less energy monitoring equipment and choosing constructive solutions to reduce energy losses; 2) Establishing energy efficiency information centres; 3) Promoting Energy Performance Contracting (EPC) and energy service companies (ESCO) in the public sector by information and training to municipalities for using EPC and establishing a help desk for preparing tenders for the implementation of EPC; 4) Promotion of energy management in industry by information and training for authorized energy managers, developing a new training programme for universities integrated in licensing of energy managers and auditors, and information campaign for SMEs according to the Benchmarking and Energy management Schemes in SMEs (ExBESS).

Reform of the Programme District Heating, Heat and Comfort 2006-2015: rehabilitate the centralized district heating system

Status as stated in the NRP	Maybe in 2012
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Status as per Jan 2013	Implemented in June 2012
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Description of policy or measure	The subsidy programme "Termoficare 2006-2015 – caldura si confort" encourages investment in the district heat infrastructure on local level and provides co-financing from the state budget managed by the Ministry of Administration and Interior. Local authorities may initiate projects aiming at the modernisation, extension and reset of the district heating infrastructure. Projects should e.g. reduce the heat loss in the district heating infrastructure to max. 15%. Up to 70% of the eligible costs can be co-financed from the state budget managed by the Ministry of Administration and Interior
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National Energy Efficiency Programme (2011 - 2013)

Status as stated in the NRP	Draft legal act on programme approval did not receive MFP endorsement
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Status as per Jan 2013	No further information available
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Description of policy or measure	
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Programme for refurbishment of multi-storey family buildings

Status as stated in the NRP	Ongoing
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Status as per Jan 2013	Ongoing
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Description of policy or measure	The programme for rehabilitation of multi-storey family buildings supports different refurbishment measures like for example: 1) thermal insulation of exterior walls; 2) replacement of existing windows and exterior doors; 3) thermo-waterproofing of the terrace / insulation of the last floor; 4) thermal insulation of the floor above the basement.
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4 Policy development

This section covers significant developments made in key policy areas between May 2012 and January 2013. It does not attempt to describe every instrument in the given thematic area. The time-frame was chosen based upon the release of the National Reform Programmes (in the section above) in April 2012, which contain the status quo for policy on most topics.

Environmental Taxation

Romania's economy ranked as the third-most energy intensive in the EU in 2010 and is subject to the second-lowest implicit tax rate on energy. At a mere 64.7 € per tonne oil equivalent, Romania's energy tax rate was less than half the EU average in 2009 (Eurostat 2013). Despite the high energy intensity, the low tax rate resulted in revenues from environmental and energy taxes in Romania being among the lowest in the EU as a proportion of GDP in 2010 (23rd and 26th, respectively), with none of those coming from direct taxation of pollution (Eurostat 2012).

A brief overview of relevant energy/environment taxes include the following (European Commission Taxation and Customs Union 2013):

- Excise duties for energy products and electricity (Accize pentru produse energetice și energie electrică): Romania's Fiscal Code approved by Law 571/2003 and its amendments).
Tax revenue in 2010: 2,235 million EUR (6.7% of total tax revenues)
- Tax on means of transport (Impozitul pe mijloacele de transport): Romania's Fiscal Code approved by Law 571/2003 and its amendments.
Tax revenue in 2010: 198 million EUR (0.6% of total tax revenues)
- Tax revenues

In the context of environmental taxation of fossil fuels, the Romanian Government published Government Decree no. 6/2013 on charging natural resources other than natural gas with a tax (Ordonanta Guvernului nr. 6/2013 privind instituirea unor masuri special pentru impozitarea resurselor natural, altele decat gazele natural) in January 2013. The Decree has been published in the official Romanian law gazette on 23 January 2013 and entered into force on 01 February 2013. The time of application of this tax is 01.02.2013 – 31.12.2014. The following activities are affected by the tax: forest exploitation, crude oil extraction, extraction of ferrous minerals, thorium and uranium extraction, extraction of other non-ferrous metallic minerals as well as other extraction activities. Obligated parties under this regulation are economic operators conducting any of the above-listed extraction and exploitation activities. The tax amounts to 0.5% of the revenues gained from the above-listed extraction and exploitation activities. The tax revenue will be directed to the national state budget (Government Decree no. 6/2013). According to the explanatory memorandum the government expects incomes to the state budget from this tax of RON 106,900 for 2013 (approximately EUR 24,300). The tax income shall contribute reducing the Romanian budgetary deficit in order to remain within the deficit limits negotiated with the International Monetary Fund (Explanatory Memorandum 2013a).

Near the same time, the Romanian Government also issued Government Decree no. 7/2013 on charging surplus revenues gained as a consequence of price deregulation of natural gas with a tax (Ordonanta Guvernului nr. 7/2013 privind instituirea impozitului asupra veniturilor suplimentare obtinute ca urmare a dereglementarii preturilor din sectorul gazelor naturale). Economic operators conducting extraction activities of natural gas within Romania or selling natural gas are the affected parties. The tax applies to surplus revenues from natural gas extraction as well as to surplus revenues from upstream activities like extending deposits or developing new production sites. The tax amounts to 60% and 30% of the surplus revenues, respectively. However, the tax does not apply to surplus revenues realised from extraction capacities conducted after this regulation entered into force (Government Decree nr. 7/2013).

The tax will contribute to the state budget reducing the budgetary deficit and allowing for financial support for a part of the expenses for natural gas of low-income consumers. As agreed with the International Monetary Fund and the European Commission, the tax aims to address the gap between the increasing income of the respective economic operators as effect of deregulation of the natural gas prices and the costs these economic operators have for their extracting activities. This price effect combined with the decreasing purchasing power of natural gas consumers have overall negative effects on the Romanian economy and demand for correcting policy measures such as this tax. For

2013, the government expects income from this tax of RON 273,500 (approximately EUR 62,300) (Explanatory Memorandum 2013b). The Decree has been published in the official Romanian law gazette on 23 January 2013. The Decree came into force on 01 February 2013 and it covers the period from 01.02.2013 – 31.12.2014 (Government Decree no. 7/2013).

Energy Efficiency

Although Romania's energy intensity is among the highest in the EU, it improved significantly between 2005 and 2010, exhibiting a decline of 19.8%. Total consumption was also down 6.6% over the same time period, primarily due to the strong recession in 2009 and 2010. Increasing transport energy use was overwhelmed by massive drops in energy use in industry, especially the iron and steel industries, in 2009 and 2010 (Eurostat 2013).

According to the National Climate Change Strategy 2013-2020, the building sector is of particular interest (next to the transport sector, which is described below). The residential building sector in Romania is eight times more energy intensive than the EU-15 average. The reasons can be found in the inefficient district heating system and in the lack of appropriate thermal building insulation (MMediu 2012b). Thus, policies leading to an increase of energy efficiency in the building sector and heat distribution network are vital for long-term reductions of GHG emissions. In this context, the qualification programme "BUILD UP Skills Romania (ROBUST)" and the subsidy programme "District Heating, Heat and Comfort 2006-2015" are now supplementing support schemes such as the Programme for Refurbishment of Multi-Storey Family Buildings. The programme supports different refurbishment measures as for example: thermal insulation of exterior walls; replacement of existing windows and exterior doors; thermo-waterproofing of the terrace / insulation of the last floor; and thermal insulation of the floor above the basement. A study conducted as part of the ROBUST-project also forecasts the possible contribution of the building sector to target fulfilment in the field of energy efficiency and mitigation. The building sector may contribute to fulfilling Romania's GHG emission reduction target for 2020 under the ESD by 8.3% according to a pessimistic scenario of implemented refurbishment measures and by 19.7% according to a optimistic scenario of implemented refurbishment measures (BUILD UP Skills Romania 2012).

Other support programmes for energy efficiency measures are available, but budgets for 2012 or 2013 will be used to finance projects which applied already in previous years (e.g., SOP-IEC, Priority Axis 4: Increasing energy efficiency and security of supply, and support investments in facilities and equipment generating energy savings) ⁽⁶⁾.

Other programmes aiming at the building sector, such as the "Casa Verde" programmes for legal entities and natural persons, focus on the use of renewable energy sources for heating and cooling, but do not provide grants for improving insulation. However, there has been no new call for applications in 2012 since the budget has been used for financing projects on the waiting list from 2011 (Order No. 1274/2011 and Subsidy Guidelines "Casa Verde").

⁶ See list of subsidy programs on the website of the Intermediary Agency for Energy (Organismul Intermediar pentru Energie): <http://oie.minind.ro/>

The same problem occurs regarding subsidy programmes such as “Increasing energy efficiency and security of supply, and support investments in facilities and equipment generating energy savings”. This programme focuses on improving energy efficiency in the industry sector, but budgets from 2012 and 2013 will be used to finance projects from previous years.

Renewable Energy

Romania’s use of renewable energy has increased steadily since 2005 to reach 23.4% of total energy consumption in 2010, just shy of the country’s goal of 24% by 2020. In the electricity sector, the share of renewable energy dropped after 2005 but recovered thereafter to 2005-levels of approximately 35% by 2010 (Eurostat 2013). Renewable electricity is mainly generated through hydroelectric power plants.

The Green Certificate System ⁽⁷⁾ promoting renewable energy sources for electricity is the main measure to promote renewable energies in Romania. In July 2012, minor operational amendments have been implemented which include, for example, reducing the penalty for not meeting the number of certificates prescribed or changing the frequency at which electricity suppliers and producers have to present the prescribed number of green certificates.

In addition, the amendment of the Romanian Renewable Energy Law No. 220/2008 allows the establishment of a support mechanism of regulated prices for electricity generated and sold by small-scale renewable energy plants. In November 2012, the Romanian Energy Regulatory Authority (ANRE) published a draft for the methodology setting these regulated prices, which is currently under discussion. It applies to renewable energy projects up to 1 MW. Furthermore, the regulated prices may apply to heat production by highly efficient CHP plants up to 1 MW and up to 2 MW if heat production is based on the use of biomass. These producers may opt between selling the electricity under the Romanian Green Certificate System or under the support scheme of regulated prices. Power plants benefiting from regulated prices have priority access to the grid. The law shall enhance the development of small-scale renewable energy plants offering a less complicated alternative to the Green Certificate System for small-scale producers.

The significant challenges regarding the qualification of the workforce are addressed by the Intelligent Energy Europe project “BUILD UP Skills Romania (ROBUST)”, which aims to develop a national strategy for the qualification of the working forces regarding energy efficiency and renewable energy use in buildings. In the course of 2012, a national qualification platform was created, involving more than 200 actors relevant to qualification and construction in an integrated consultation. Furthermore, a comprehensive analysis has been conducted regarding the current state of the construction sector in terms of vocational training and training in energy efficiency and renewable energy use in buildings. The study intends to define the needs for skilled construction workforce in order to meet the national 2020 targets (BUILD UP Skills Romania 2012).

⁷ Law No. 134/2012 Regarding the approval of Emergency Regulation No. 88/2011 Amending and Complementing Law No. 220/2008 Establishing a System for the Promotion of Electricity Generation from Renewable Energy Sources (Legea 134/2012, legea pentru aprobarea Ordonantei de urgenta a Guvernului nr. 88/2011 privind modificarea si completarea Legii nr. 220/2008 pentru stabilirea sistemului de promovare a producerii energiei din surse regenerabile de energie). Online available at: http://leg-armonizata.minind.ro/leg_armonizata/energie/Legea_134_2012.pdf

Energy Networks

One of the key challenges in Romanian energy policy in the electricity as well as the heating sector is the condition of the infrastructure. The energy infrastructure of Romania is poorly maintained and transmission losses are quite high. Thus, the district heating network is suffering from high energy losses. At the same time, the electricity network is lacking connection capacities for renewable energy plants especially at the distribution network level.

In order to address these problems, the subsidy programme "District Heating, Heat and Comfort 2006-2015" (Termoficare 2006-2015 – caldura si confort) ⁽⁸⁾ was reformed and restarted in June 2012. The programme encourages investment in the district heating infrastructure on local level and provides co-financing from the state budget managed by the Ministry of Administration and Interior. Local authorities may initiate projects aiming at the modernisation, extension and reset of the district heating infrastructure. Projects should e.g. reduce the heat loss in the district heating infrastructure to max. 15%. Up to 70% of the eligible costs can be co-financed from the state budget.

In addition, the subsidy programme "Investment support for interconnection of national electricity and natural gas transport networks of electricity with European networks" under the framework of SOP-IEC, Priority Axis 4: "Increasing energy efficiency and security of supply, in the context of combating climate change" has launched a new call for projects open from 13 April 2012 until 14 June 2013. Eligible parties are transmission system operators in the electricity sector and transmission operators in the natural gas sector. The subsidy programme aims at enhancing the interconnections of the electricity and natural gas network to the neighbouring countries. Through this programme, the capacities for integrating energy produced in Romania in neighbouring regions shall be increased. Co-financing of 40-50% of the eligible cost is granted (Intermediary Agency for Energy 2012).

Transport

Romania has experienced large GHG emissions increases in the transport sector over the last 20 years, which have come to represent 15% of total emissions in 2010 (see Table 1). Taxation of transport is very low in comparison with other EU MS, with revenues equivalent to 2% of GDP in 2010 (Eurostat 2012). Meanwhile, newly registered vehicles emit on average 140.8 gCO₂/km driven which is 2% above the EU average. Between 2007 and 2009, a trend of decreasing vehicle emissions efficiency was apparent in Romania but since then emissions could be reduced by more than 10% (EEA 2012e). Still, modernising the Romanian vehicle fleet as well as improving the modal split will be major challenges for Romania's climate policy.

The Ministry for Environment and Climate Change has addressed this problem by issuing a legislative draft changing and complementing Law No. 9/2012 about the taxation of polluting emissions from vehicles in January 2013, which is now under public discussion. The draft for this tax regulation introduces environmental stamps for passenger cars with

⁸ Regulation from 05/06/2012 on the implementation of the programme "Termoficare 2006-2015 warmth and comfort", regarding the component for rehabilitation of the district heating infrastructure (Regulament din 05/06/2012 privind implementarea programului "Termoficare 2006-2015 caldura si confort", componenta de reabilitare a sistemului centralizat de alimentare cu energie termica).

up to eight seats and will be based on CO₂ emissions. The policy shall encourage the purchase of cleaner cars and shall apply the “polluter pays” principle. The tax will be paid only for the first registration of a car. Cars with European emission standard Euro 6, as well as hybrid and electric cars, are exempted from the tax. Most cars with Euro 3 and 4 will face higher tax levels compared to current tax legislation. There will be a difference in tax level calculation for Euro 1, 2, and non-Euro cars. The calculation for these car categories will be based not only on CO₂ emissions, but on the cylinder capacity of the car as well. For most cars in the Euro 1, 2 and non-euro categories, this calculation approach will lead to reduced tax levels under the environmental stamp compared to tax levels under current legislation⁽⁹⁾.

In addition, a quota is in place for adding biofuels to petrol and diesel. Only certified biofuels satisfying specific sustainability criteria can be counted towards the prescribed quota. These criteria are determined by law. This policy was amended in September 2012. The amendment⁽¹⁰⁾ comprises a quota reduction from 2013 for specific biofuels. In case that fuel retailers make use of biofuels produced from wastes, residues or non-alimental cellulose, fuel retailers benefit from a 50% reduction of the biofuels quota for petrol (2013-2015) and diesel (2013-2019).

Waste

Policies and measures for the reduction of GHG emissions in the other non-ETS sectors such as agriculture or waste management include the national waste management strategy and National waste management plan, which aim to decrease emissions from the waste sector. Regarding GHG emissions from waste water, the National Programme for Infrastructure Development (NPID) and associated measures were terminated by the Romanian government in May 2012 due to national budget restrictions imposed by the World Bank and IMF. In October 2012, the Ministry of Regional Development and Public Administration published a draft emergency ordinance establishing a new programme for infrastructure development⁽¹¹⁾ and put it to public discussion. The new infrastructure programme "The National Programme for Rural and Urban Infrastructure Development" aims to improve living conditions in municipalities and towns with up to 50,000 inhabitants. Relevant sub-programs relate (1) to the extension of water supply infrastructure and (2) to the extension of the canalisation infrastructure. The share of the annually allocated budget for each of these sub-programs represents 20%. Eligible parties are defined as the municipality councils. The programme is intended to create an attractive investment environment for Romanian municipalities and thus increasing the number of jobs (Romanian Government 2012).

⁹ The legal draft was not publicly available. The above information relies on an online newspaper article. Cotidianul.ro (2013): Ordonanta privind timbrul de mediu, supusa dezbaterii publice. Online available at: <http://www.cotidianul.ro/ordonanta-privind-timbrul-de-mediu-supusa-dezbaterii-publice-205116/>

¹⁰ Decision No. 918 from 5. September 2012 for amending and complementing Government Decision Nr. 935/2011 on promoting the utilization of biofuels and bioliquids (Hotarare nr.918 din 5 septembrie 2012 pentru modificarea si completarea Hotararii Guvernului nr. 935/2011 privind promovarea utilizarii biocarburantilor si a biolichidelor).

¹¹ Ministry of Regional Development and Public Administration (Ministerul Dezvoltarii Regionale si Administratiei Publice) (2012): Proiect de OUG pentru aprobarea Programului National privind Dezvoltarea Infrastructurii Rurale si Urbane. Online available at: <http://www.mdr.ro/ro/proiect-de-oug-pentru-aprobarea-programului-national-privind-dezvoltarea-infrastructurii-rurale-si-urbane-9333>

LULUCF

The National Programme for Reforestation, adopted in 2010, foresees the continuous re- and afforestation of 160,000 ha of degraded and agricultural land in period from 2012 to 2020. The National Forestry Agency (ROMSILVA) is in charge of this policy. According to the National Programme for Reforestation, the costs for these reforestation measures are estimated at approximately 1,307 billion RON (app. 299 million €), which will be financed from various sources, including the state budget, national funds financed partly by environmental taxes, and European funds. This policy aims to reduce the negative impacts of climate change in Romania, like desertification, floods or erosion, and contributing to Romania's mitigation target (MMediu 2012).

Adaptation

The Action Plan on Adaption to Climate Change is part of the Romanian National Climate Change Strategy for 2013-2020 and was finalised in 2012. On the one hand, the Action Plan specifies general measures like updating national climate change scenarios, estimating the costs of the effects of climate change in the different priority sectors, awareness raising measures for the general public, and actions for monitoring the adaptation process. On the other hand, sector specific measures for adaptation are indicated for thirteen priority sectors: industry; agriculture and fishery; tourism; public health; infrastructure, construction and urbanism; transport; water resources; forests; energy; biodiversity; insurances; recreational activities; and education. However, most measures specified in the Action Plan refer to research activities identifying major challenges from climate change in the different sectors and defining measures for action accordingly. Romania is already facing weather extremes like extreme droughts and floods, and droughts are forecasted to increase especially in the southern regions. These developments already go along with substantial economic losses in various sectors (e.g., agriculture, transport, energy production and supply, etc.). Thus, the Romanian National Climate Change Strategy considers adaptation to the effects of climate change to be crucial for ensuring the further economic development of the country (MMediu 2012b).

5 Policy progress on past CSRs

As part of the European Semester, Country Specific Recommendations (CSRs) for each MS are provided by the EU Commission in June of each year for consideration and endorsement by the European Council). The recommendations are designed to address the major challenges facing each country in relation to the targets outlined in the EU 2020 Strategy. In the following table, those CSRs that are relevant for climate change and energy that were adopted in 2012 are listed, and their progress towards their implementation is assessed.

No CSRs related to climate change and energy were issued for Romania in 2012.

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