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

Country Report: Slovakia



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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:** After the change of Government in March 2012, it remains to be seen if climate change policy or any environment related policy will rank highly on PM Fico's agenda.
- **GHG target:** The non-ETS emissions in 2011 were below Slovakian ESD allocation for 2013 and the country is also projected to significantly overachieve its 2020 target.
- **Policy development:** The most recent legislative changes set new standards for the compilation of energy performance certificate. Furthermore, the feed-in tariff will only apply to rooftops photovoltaic installations up to 30 kW.

I Background on climate and energy policies

Following the breakup of the centre-right coalition under Prime Minister Iveta Radičová, a parliamentary election took place in Slovakia on 10 March 2012. The absolute majority was won by the Social Democrats and their leading candidate, Robert Fico, who served as Prime Minister from July 2006 to July 2010.

It remains to be seen if climate change policy or any environment related policy will rank highly on Prime Minister Fico's agenda. At the end of his first term, Fico decided to dissolve the Ministry of Environment in order to cut costs during the economic crisis, sending a clear signal that the environment is not among his top priorities. The Ministry was subsequently reinstated by his successor in office Ms. Radičová, whose Government generally showed a stronger interest in climate related issues (EurActiv 2010).

In recently elaborated documents, Slovak authorities have begun using the term "economy of green growth" however this concept remains quite vague (Bankwatch 2012). In its National Reform Programme, the Slovak Government announced that it would publish a "Low-carbon strategy for development until 2030" by the end of this year. Yet, as of February 2013, there has been no visible progress in this regard.

According to a poll conducted at the request of the European Commission, 44% of the Slovak respondents considered energy savings as a priority for reducing GHG emissions. This share is much higher than the European average of 28%. Moreover, the Slovaks were also most in favour of carbon capture and storage – this was 22% in Slovakia vs. 12% in the EU27. In contrast, only 52% of Slovaks regarded the stronger use of renewable energy as a priority, which is clearly below the EU average of 70% (Energia 2013a).

Slovakia has been able to significantly reduce its total GHG emissions in the past. The reduction of GHG emissions was mainly driven by structural changes in the economy. The perception of climate change policies has been characterised by a strong focus on economic development (Climate Policy Tracker 2011). Thus, the government has implemented some reforms supporting renewable energy, mainly in order to reduce the very high dependence on imports of primary energy sources. However, in 2012, the Slovak Government's focused on the objective to considerably lower the financial report for renewable energy in order to "put an end to disproportionate high final energy prices"

(MFSR 2012). Nevertheless, in contrast to the Czech Republic – which had to cope with similar problems in connection with the rapid development of the PV sector – Slovakia strived to maintain the balance between preventing sharp price increases and ensuring a steady development of the renewable industry (i.e. there was no moratorium on renewable energy).

Next to renewable energy generation, nuclear power is supported by the government to reduce the dependency on energy imports. Nuclear still represents more than half of Slovakia's electricity generation, despite the shutdown of two older nuclear reactors at Bohunice NPP in 2006 and 2008 because they did not meet European safety standards. After the closure of these units, the country was forced to increase its imports of natural gas and oil from the Russian Federation. In this context, two new 470 MW reactors have been planned at the Mochovce NPP (World Nuclear Association 2012). Following delays due to EU stress tests, the start-up has been scheduled for 2013 and 2014, and commercial operation should begin in 2014 and 2015 (Energia 2013b).

2 GHG projections

Background information

In 2011, Slovakia emitted 45.3 Mt CO₂eq (UNFCCC inventory 2011). Total emissions decreased by 37% between 1990 and 2011, mainly driven by the structural changes in the transition to a market economy. A third of total emissions stems from energy use. However, emissions in that sector have been reduced significantly by more than 50% between 1990 and 2011, due to declining economic activity in the 1990s and more recently due to improved energy efficiency in buildings. Also, emissions from energy supply have decreased notably by around 50%. Reductions in livestock numbers and fertilizer use have resulted in a decrease of more than 50% of emissions from agriculture. Emissions from industrial processes decreased by 14%, mainly due to the recent economic recession. Only emissions from transport reported an increase of 27% between 1990 and 2010 driven by the growing number of passenger cars and freight road transport (UNFCCC inventory 2011, EEA 2012c, UNFCCC 2012).

Progress on GHG target

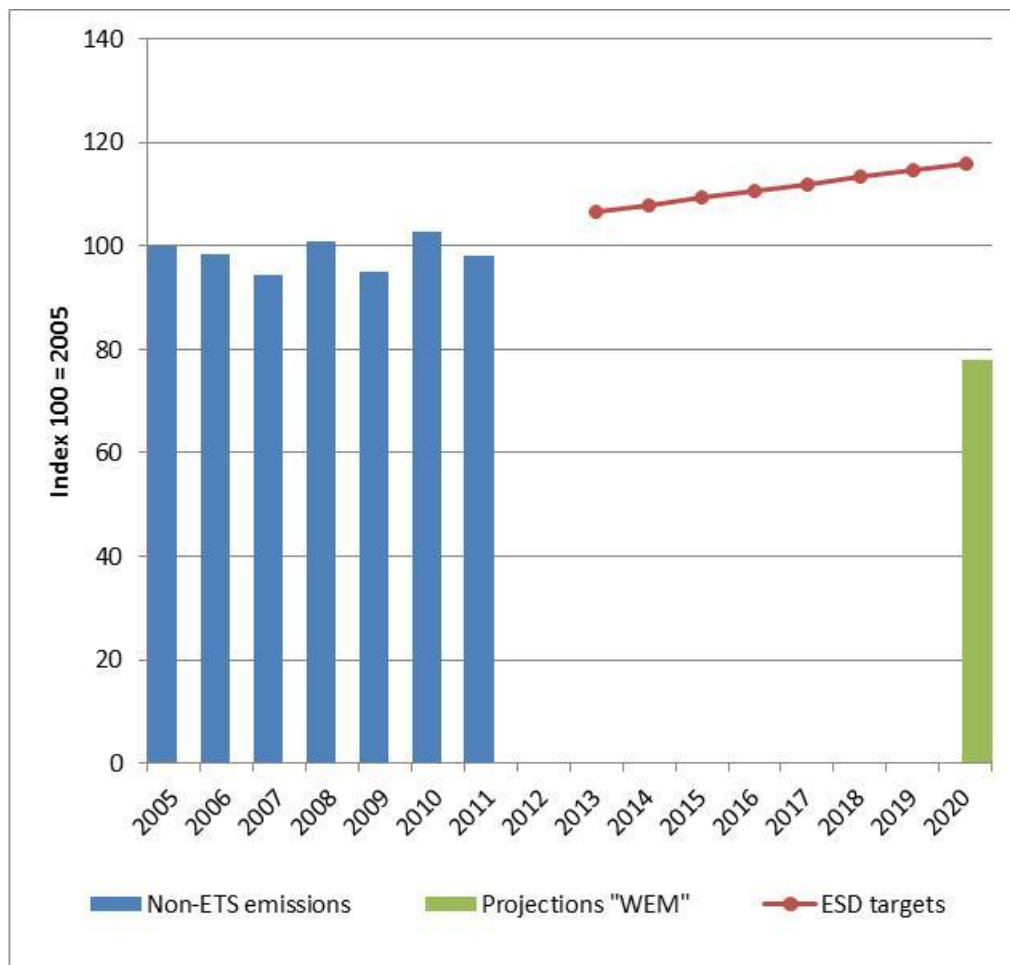
There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for Slovakia for the period 2008-2012 has been set to minus 8 % based on 1990 levels. An evaluation of the latest complete set of greenhouse gas data (for the year 2011) shows that Slovakia's emissions have decreased on average by 37.1% compared to the Kyoto base year (EEA 2013a). Therefore, Slovakia is going to meet its Kyoto target through domestic emissions reductions directly.

By 2020, Slovakia can increase its emissions not covered by the EU ETS by 13% compared to 2005, according to the Effort Sharing Decision (ESD) ⁽¹⁾. The latest data suggest that Slovakia is currently on track to meet 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 show that Slovakia is expected to reduce its non-ETS by 24% compared to 2005 in scenarios with existing measures and by 25% with additional measures ⁽²⁾ (EEA 2013b).

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

Figure 1: 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

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.

² Calculations are based on domestic emissions only, without accounting for possible use of flexibility options. The 2020 targets and 2005 non-ETS emissions are all consistent with 2013-2020 ETS scope, i.e. they take into account the extension of the ETS scope in 2013 and the unilateral inclusion of installation in 2008-2012.

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	71.8	50.6	45.9	45.3				
Non-ETS emissions (% from 2005)		23.6	24.2	23.1	25.1	25.4	17.1	16.8
				-2%	7%	13%	-24%	-25%
Energy supply (% share of total)	16.9	11.7	9.4	9.4				
	24%	23%	20%	21%				
Energy use (w/o transport) (% share of total)	28.6	15.1	13.8	13.6				
	40%	30%	30%	30%				
Transport (% share of total)	5.0	6.3	6.7	6.4				
	7%	12%	14%	14%				
Industrial processes (% share of total)	9.5	9.4	8.6	8.2				
	13%	19%	19%	18%				
Agriculture (% share of total)	7.1	3.2	3.1	3.1				
	10%	6%	7%	7%				

Source: UNFCCC inventories 2011; EEA (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 22.5 Mt CO₂eq.

** 2013 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 EEA need to be prepared by the Member States in accordance with the EU Monitoring Mechanism ⁽³⁾ every two years, and the latest submission for Slovakia was in 2013. 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 by the Member States as basis for their projections as of April 2011 ⁽⁴⁾ - have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most ⁽⁵⁾. An update on the status of the policies and measures is included in order to assess the validity of the scenarios.

³ 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.

⁴ The respective policies and measures were not available at the time of the preparation of this country report. Thus, policies and measures as outlined in April 2011 are given here.

⁵ 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.

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
Energy	Act N. 137/2010 Coll. on air quality: Defines goals for air quality, the assessment of air quality and the rights and duties of public and middle and large scale of sources in air protection.	On 19.9.2012, the Parliament approved an amendment (Decree No. 318/2012) which came into effect on 1.11.2012.
	Act N. 309/2009 Coll. on support renewable energy sources and high-efficiency combined energy production: Defines specific options of support for renewable electricity, including the timeframe of guaranteed price for purchasing.	The most important recent amendment (Decree 251/2012) to the renewable energy act came into effect on 1.9.2012 (see: Policy development).
Energy Efficiency	Act N. 555/2005 Coll. on Energy Performance of Buildings: Defines measures leading to improvement of energy efficiency in buildings with the aim to optimize indoor conditions in buildings and reduce CO ₂ emissions emitted from building maintenance. Also stipulates the respective competences of public authorities.	The last amendment (Decree 300/2012) to this act came into effect on 1.1.2013 (see: Policy development).
	Act N. 476/2008 Coll. on Energy Efficiency: Provides the obligation to develop a concept for a ten year period. This policy defines min. technical requirements for heat insulation of heat and hot water distribution networks, as well as minimum standards of transfer, transport, and distribution of heat.	The last amendment (Decree 251/2012) to this act came into effect on 1.9.2012. The amendment regulates the obligations to conduct energy audits.
Transport	Decree N. 362/2010 Coll. determining the requirements for quality of fuels and maintaining the operational evidence on fuels: Defines higher share of biofuel in gasoline and mineral oil, and the duty of providing information on the share of biofuels in transport petrol and diesel.	The decree came into effect on 15.9.2010. So far, there have been no amendments.
	Regulation N. 655/2007 Coll. on technical conditions to reduce emissions from air conditioning systems in motor vehicles	The regulation came into effect on 5.1.2008. So far, there have been no amendments.
Other non-ETS sectors	Act. N. 286/2009 Coll. on fluorinated GHG emissions and on the change and amendment of certain acts (and Decree N. 314/2009 Coll. implementing Act 286/2009 Coll.): Regulates the obligations of handling, products and equipment. Also regulates the sphere of action of the state administration bodies and responsibilities.	The last amendment to this act (Decree 321/2012) came into effect on 1.11.2012. The amendment regulates the obligations of companies dealing with ozone-depleting substances, products and equipment.
	The Nitrates Directive represents a set of measures to reduce water pollution (surface and underground) caused by nitrates stemming from the application of mineral and farm fertilizers.	Decree 199/2008 as amended by Decree 462/2011. The decree comprises: designation of vulnerable zones (NVZs); elaboration of good agricultural practices and of mandatory action programmes (AP) for the NVZs; 4) water monitoring; 5) revision of NVZ and AP at least every 4 years if necessary (WRI 2012)

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
Energy	Act proposal on carbon capture and storage: Installations are allowed to reduce their emissions from power production through CCS.	On 12 July 2011, Act N. 258/2011 Coll. on carbon capture and storage came into effect. The law determines the conditions for issuing, updating and withdrawing permits for carbon capture and storage.

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

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 ⁽⁶⁾.

In the following table, the main policies and measures as outlined in the NRP of April 2012 ⁽⁷⁾ have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

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

Low-carbon Development Strategy of the Slovak Republic until 2030	
Status as stated in the NRP	to be prepared by the end of 2012
Status as per Jan 2013	the strategy has not been published yet.
Description of policy or measure	
Adoption of the Act on Energy in order to foster liberalisation and transparency of the market in electricity and gas	
Status as stated in the NRP	to be implemented (draft has been prepared in 2011)
Status as per Jan 2013	The new Energy Act was passed on 31 July 2012 and entered into force on 1 Sep 2012.
Description of policy or measure	The Energy Act introduces the obligation to unbundle energy generation and supply from transmission services. Furthermore, the law strengthens consumer rights and gives new competences to the independent national energy regulator (Schönherr 2012).

⁶ 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).

⁷ All NRPs are available at: http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm

Introducing a carbon tax in non-ETS sectors

Status as stated in the NRP under consideration

Status as per Jan 2013 no further development

Description of policy or measure

In 2012, the Slovak Ministry of Finance analyzed the possibility of introducing a so-called carbon tax (a tax based on the amount of CO₂ emitted) as well as increasing the share of environmental taxes in Slovakia. The results show that, even given the internationally-compared low level of energy taxation in Slovakia, the carbon tax would contribute to increased efficiency, and fairness of the tax system and incentives could encourage consumers to switch consumption habits with respect to carbon dioxide emissions. At present, however, a practical problem is that Slovak households are spending less money on energy. A major limiting issue remains the price competitiveness of fuel in relation to neighboring countries. In the short term and in the area of environmental taxation, there are real opportunities to improve primarily through abolishing many cases of unjustified exemptions in excise taxes (See Slovak Ministry of Finance, 2012)

Promotion of the introduction of smart distribution networks allowing for optimisation of the use and efficient management of energy

Status as stated in the NRP under consideration

Status as per Jan 2013 under consideration

Description of policy or measure no further details available

Redefining the support provided to RES in order to meet the set targets in a cost-effective manner

Status as stated in the NRP to be implemented

Status as per Jan 2013

As of July 2012, tariffs have been cut to nearly half compared to 2009. In addition, since February 2011, only solar installations up to 100 kW are eligible for the feed-in tariff and can be connected to the grid.

Description of policy or measure

According to the NRP, the biggest portion of support shall be provided in the years close to 2020. Nevertheless, the feed-in tariffs have been notably reduced for all technologies in recent years.

Reform of coal production support

Status as stated in the NRP to be implemented

Status as per Jan 2013

The support of electricity from domestic coal has been considerably lowered. While consumers were obliged to pay a total sum of € 70.6 million in the final price of electricity to support domestic coal in 2011, in 2013, this fee shall only amount to € 24 m and in 2014 to € 19 m (Ministerstvo spravodlivosti 2011).

Description of policy or measure

The reform of coal production support should minimise money spent on coal production. The financial support is partly covered by an additional charge on top of electricity prices for consumers. Thus, the reduction of subsidies will reduce the impacts on the final price of electricity for households and businesses.

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.

Horizontal Issues

The Ministry of Environment launched a new call (Call OPŽP-PO3-13-1) within the Operational Environment Programme (Operačný program Životné prostredie) under the priority axis “Air Pollution Control and minimisation of adverse impacts of climate change”. The objective of the call was to improve the National Emission Information System (NEIS) and support projects aimed at air quality monitoring, as well as projects to improve the monitoring and projection of GHG emissions. The call will be closed on 26.04.2013. The indicative amount of funds allocated for this call is 807,222 EUR from the ERDF and the state budget (OPŽP 2013).

Environmental Taxation

Slovakia’s economy sports the lowest implicit tax rate on energy in the EU at a mere 49.60 EUR per tonne of oil equivalent in 2010. This contributes to it also exhibiting one of the highest energy intensities in the EU (5th highest in 2010) (Eurostat 2013). Revenues from energy (1.6%) and environmental (1.9%) taxation as a percentage of GDP were among the lowest in the EU in 2010 (21st- and 24th-highest, respectively), and have been declining since 2004 (Eurostat 2012).

The introduction of a carbon tax for the non-ETS sector is under consideration (see NRP), but so far, no progress has been made in this regard. However, in contrast to previous years, the support of electricity from domestic coal will be notably lowered. While electricity consumers were obliged to pay a total sum of € 70.6 million in their final price of electricity in 2011 to support domestic coal, this fee shall only amount to € 24 million in 2013 and € 19 million in 2014 (Ministerstvo spravodlivosti 2011).

The Act on Excise Duties on Mineral Oil (Act No. 98/2004) (Zákon o spotrebnej dani z minerálneho oleja) defines the exemptions in excise taxes. The Act has been amended by Regulation No. 440/2012 on 1 March 2013; however § 10 and § 10a which define the exemptions from excise duty have not been considerably changed by this amendment.

According to §10 (exemption from excise duty), the following sectors/categories are exempted:

Mineral oil is exempt if not being used as

- a motor fuel,
- heating fuel, or
- aircraft fuel.

Additionally, mineral oils are exempt from taxation if used as

- ship operation substances in the transport of persons and cargo on the Danube,
- an intermediate manufacturing input (manufacture of other non-metallic mineral products),
- in dual uses with heating,

- for pilot projects of environmental technologies,
- for testing and maintenance of aircraft and ships,
- for electricity and combined heat and power generation,
- within the mineral oil industry, and
- as samples for inspection.

Technical and accidental losses are exempt. Volumes moved into the country under duty suspension agreements or by the military are also exempt. Biogenic substances are also exempt from taxation if imported through a mineral oil production enterprise or is used as motor of heating fuel.

Energy Efficiency

As mentioned above, Slovakia's economy exhibits high energy intensity, but this intensity has been dropping quickly, as indicated by a reduction of 25% from 2005 to 2010. This has taken place against a backdrop of increasing overall energy consumption; end-use consumption increased 6.3% from 2005 to 2010 due to increases in the transport sector. Even though energy consumption from the residential sector slightly decreased since 2005, Slovakia's energy consumption is still much higher than the EU27 average (Eurostat 2013).

The law on energy performance of buildings (Act N. 555/2005) is the main instrument to reduce GHG emissions from buildings until to 2020 (see national GHG projections). Act No. 300/2012 recently provided a regulation on energy performance certificates (EPC) for buildings. The legislative changes took effect as of January 2013, and they set standards for the compilation of EPCs in order to improve their quality. Different energy efficiency classes will help both property owners and purchasers to classify the energetic status of the building and related expenditures for energy consumption. Buildings that are obliged to provide an energy performance certificate as well as an energy efficiency label include public buildings with a total floor area of more than 500 m² owned by a public authority and frequently visited by the public (SIEA 2012a). Furthermore, energy certification is required for buildings or separate parts of a building that are sold or rented to a new tenant, as well as all newly constructed buildings or all buildings that have undergone major renovation (SIEA 2012f).

New financial support for energy efficiency measures, in combination with competitiveness, is provided by the Operational Programme Competitiveness and Economic Growth (Operačný program Konkurencieschopnosť a hospodársky rast) under the call KaHR-111SP-1201. On 21.12.2012, the Ministry of Economy launched a call for the submission of application for grants under the sub-measure 1.1.1 – Innovation support and technology transfer. The objective of the call was to support the private sector in order to increase innovative activities and ensure technology transfer to companies. The support shall also contribute to reducing the energy intensity of production, reducing environmental impacts of industrial activities and increasing the efficiency of production. The deadline for applications is 3 April 2013. The indicative amount of funds allocated for this call is € 110 million (SIEA 2012c).

In addition, the regular inspections of biomass- and biogas-fired boilers has been reduced in order to improve the operation of these devices, allowing owners to reduce fuel consumption and therefore contribute to environmental protection and resource efficiency. Owners or operators of these systems can be fined if they fail to ensure an on-

time inspection. However, the recommendations given by authorised personnel are not binding (SIEA 2012e). As of 01.01.2013, owners of non-production buildings using heating systems with boilers for biomass and biogas have to ensure shorter intervals for the regular monitoring of these devices. The control intervals for boilers with an output of more than 100 kW have been reduced from 6 years to 2 years. Boilers with capacities of 30-100 kW have to be inspected every 6 years and boilers with 20-30 kW every 12 years; an inspection interval of 15 years applies to residential buildings (SIEA 2012b).

Renewable Energy

Energy from renewable sources amounted to 9.8% of total energy consumption in 2010. This puts Slovakia in a good position to meet its 2020 target of 14% of total energy use from renewable energy technologies. In the electricity sector, the proportion of final consumption that is produced from renewable sources hovered around 15-16% for most of the 2000s but then jumped to 20.5% in 2010 (Eurostat 2013). Renewable energy electricity generation is dominated by hydro with a small contribution of biomass. Other renewable energies did not play any role until mid-2011, when the PV sector increased sharply after several large scale installations were been connected to the grid (RES Integration 2011). Regarding the generation of heat from renewable sources, biomass accounts for the highest proportion. However, considering its potential, the use of biomass in Slovakia is still minimal in comparison to other EU countries (FES 2012).

The Renewable Energy Act (Zákon o podpore obnoviteľných zdrojov energie, Zákon 309/2009) is the main instrument to support renewable electricity generation. Due to its generous feed-in tariffs for solar energy, Slovakia witnessed an unanticipated “solar boom” in early 2011. As a result, in February 2011, the size of the solar installations eligible for these subsidies has been scaled back to 100 kW, and feed-in tariffs were nearly cut in half compared to 2009. These changes and the regulatory instability they may imply might discourage possible future investments in this sector (UNEP 2012).

On 1 August 2012, another amendment came into effect which changed the conditions for producers of electricity from small solar installations on rooftops with installed capacities of up to 10 kWp. Operators of these installations may now generate electricity for their own use without having to register as an entrepreneur. In the past, this circumstance constituted one of the main administrative barriers for individuals willing to install small PV facilities on their residential building (Nazeleno 2012).

On 1 January 2013, only minor changes of the renewable feed-in tariffs were implemented and were relevant to several biomass and biogas technologies. For hydro, solar, wind, and geothermal power, the tariffs remained the same (URSO 2012a).

However, in December 2012, the Slovak Government proposed another amendment to the Renewable Energy Act, which was approved by Parliament on 29 January 2013. According to this amendment, the feed-in tariff will apply only to rooftop photovoltaic installations on with a maximum capacity of 30 kW. All larger installations will not longer be covered by the support mechanism. Slovak decision makers argued that this proposal would “reduce unfair practices of some electricity producers” and “reduce the impact on the end user of electricity” (Energia 2013c). On the contrary, the Slovak Association of Photovoltaic Industry (SAPI) considers the regulatory authority URSO to be highly politically dependant and claims that the amendment would eventually “liquidate the Slovak PV industry” (SAPI 2012).

The initial version of the amendment also envisaged to promote high efficiency cogeneration up to an installed capacity of 300 MW, but it was eventually revoked. Oppositional MPs referred to the entire amendment as being “tailor-made for the financial group Penta”. According to the initial version, the amendment should have provided state support for a cycle gas turbine owned by Penta for a period of fifteen years (Slovenský rozhlas 2013). The Central European investment group Penta was already involved in the so-called Gorilla scandal at the end of 2011.

In the context of financial support for large-scale PV installations, non-transparent practices were assumed to be carried out by the Government-owned power grid operator (SEPS) during the approval procedure for solar power plants in November 2009. An article published on 13 September 2012 on the EU-Observer website (EUobserver 2012) refers to a US Embassy dispatch from December 2009 stating that “fears about a lack of transparency and openness in Slovakia's renewable energy industry were realized [...]”. The SEPS approved a list of solar power projects totalling 120 MW and announced that no further approvals will be made for at least the next two years. The application process was accused to be poorly advertised and highly non-transparent (Wikileaks 2009, EUobserver 2012).

Energy Networks

On 1 September 2012, the new *Energy Act* ⁽⁸⁾ and the *Act on the Regulation of Network Industries* ⁽⁹⁾ entered into force. The principle aim of these two laws is to implement the provisions of the Third Energy Package into national legislation. The Energy Act introduces the obligation to unbundle energy generation and supply from transmission services. Furthermore, the Energy Act considerably strengthens consumer rights while the Act on the Regulation of Network Industries gives new competences to the independent national energy regulator (Úrad pre reguláciu sieťových odvetví - URSO) with regard to determining prices of energy for each supplier and licensing new market participants (Schönherr 2012).

Transport

Greenhouse gas emissions from the transport sector in Slovakia increased from 2005 to 2011 and now make up 14% of total emissions (see **Fehler! Verweisquelle konnte nicht gefunden werden.**). Revenues from taxation of transport (excluding fuels) are low in comparison to other EU MS, equivalent to only 0.2% of national GDP and ranking 23rd in the EU in 2010 (Eurostat 2012). Meanwhile, new cars in Slovakia became much more carbon-efficient on average between 2005 and 2011. They emitted on average 144.9 g CO₂/km in 2011, which was 4.5% above the EU average; thus, Slovakia is in the lower third of the EU Member States (EEA 2012e).

Aside from an increase in the obligatory biofuel content of fuels, there have been no major developments in the past 6 months. There are two different biofuel targets for the Slovak transport sector: one type of target is for the biofuel energy content share, which is calculated from the energy content of the total quantity of petrol and diesel fuels placed in the market, and the other type of target pertains to the minimum content of biofuels in

⁸ Zákon č. 251/2012 o energetike

⁹ Zákon č. 250/2012 o regulácii v sieťových odvetviach

each litre of a particular type of fuel (diesel and petrol). As of 1 January 2013, the obligatory biofuel content share amounts to 4%. While the minimum volume for biodiesel in diesel was set to 5.4%, the bioethanol component in petrol was raised to 3.3% ⁽¹⁰⁾.

Agriculture and Waste

There were no new developments in the past 6 months. The main instruments are based on EU legislations, such as the Nitrates Directive (Directive 91/676/EEC) in the agricultural sector and the Waste Framework Directive (Directive 2006/12/EC) and the Landfill Directive (Directive 1999/31/EC) in the waste sector. A basic framework for the conservation of forests and retaining of carbon stocks in forests has been set up by Act N. 326/2005.

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.

Existing Country Specific Recommendations	Progress
Make greater use of environmental taxation	<p>The introduction of a carbon tax is under consideration (see NRP), but so far no progress has been made in this regard.</p> <p>Other proposals e.g. with regard to vehicle taxation are not available so far.</p>

¹⁰ Zákon 309/2009 Z.z. o podpore obnoviteľných zdrojov energie

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