
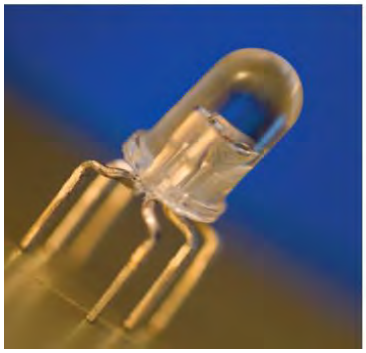


Assessment of climate change policies as part of the European Semester

DRAFT Country Report Bulgaria

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A report submitted by ICF Consulting Services
in association with

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to DG Climate Action

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Contents

1 Short Summary

In the last two years, the Bulgarian Government has reconsidered its energy policy for both the short and the long term. As a result, in 2013 amendments to the Law on Energy were adopted to limit the production of energy from renewable energy sources (RES) in order to balance the system and prevent a perceived overproduction of electricity from intermittent renewable sources. Subsequently, the Bulgarian Government has introduced different retroactive measures to halt the further development of the renewable energy sector.

In 2014, a draft Energy Strategy towards 2030 was prepared which is meant to replace the previous Energy Strategy once it is adopted by Parliament. This strategy does not foresee further support for renewable energy plants, but rather emphasizes additional future energy supply through the construction of the South Stream pipeline (see Chapter 4.1) as well as the realisation of the Belene nuclear power plant.

By 2020, Bulgaria can increase its emissions not covered by the EU ETS by 20% compared to 2005, according to the Effort Sharing Decision (ESD). The latest data for 2013 show that Bulgaria emitted 7.4 percentage points less than it was allowed under its annual allocation interim target under the ESD for the year 2013. However, national projections indicate that the country will miss its 2020 target by about 2.6 percentage points with existing measures but could meet the target with additional measures.

The key policy developments in the last year (Jan 2014 – Jan 2015) include the heated debate with the European Commission over the construction of the South Stream pipeline, the introduction of several retroactive measures targeting renewable energy producers as well as the severe financial situation of the state-owned utility NEK (see Chapter 4.2).

2 Climate and energy policy priorities

In 2014, the political debate in Bulgaria was overshadowed by another sudden change of government. On 23 July 2014, Bulgarian Prime Minister Plamen Oresharski submitted his resignation after only one year in office. After the three largest parties in parliament had refused the mandate to form a new government, a caretaker government was sworn into office which led the country to the next parliamentary elections on 5 October 2014 (BBC, 2014). These elections were won by Boyko Borisov's GERB party (Borisov had previously served as Prime Minister from 2009 to 2013). One week before the parliamentary elections, Bulgaria's President Rosen Plevneliev urged the new assembly to undertake prompt reforms of the country's energy sector. Otherwise, he said, Bulgaria could face "dramatic consequences, including bankruptcy." According to the President, the first step should be the establishment of a politically independent energy regulator (Novinite, 2014a). However, up to date no considerably progress has been made in this regard.

In general, climate change policy receives little attention in Bulgaria. However, energy policies as such and energy prices in particular are an item of political contest. This situation is also due to the fact that the Bulgarian Government is keeping household electricity prices artificially low. While the country has the lowest electricity prices in the European Union, it also has the lowest average wages. All political parties are therefore trying to avoid social unrest at any cost. In February 2013, then Prime Minister Borisov had resigned following nationwide protests against high energy prices and low living standards. Therefore, the next Bulgarian government led by the Socialist party even ordered three price decreases for households. Yet, after the resignation of Prime Minister Oresharski in the middle of the year, the caretaker Minister of Economy and Energy, Vasil Shtonov, finally decided to raise electricity prices by 10% in order to stabilise the state energy utility NEK (see chapter 4.2.4) with effect from 1 October 2014 (Sofia Globe, 2014a).

Due to the fact that the price regulated system in Bulgaria does not allow for passing on the additional costs of renewable energy support to electricity consumers, the low electricity prices have created a significant tariff deficit in the entire energy system, not only in the state utility NEK, but also in the three

foreign-owned DSOs. Therefore, the Bulgarian Government has reconsidered its originally RES-friendly energy policy both for the short and the long term. As a result, in 2013 amendments to the Law on Energy were adopted to limit the production of energy from RES in order to balance the system and prevent a perceived overproduction of electricity from intermittent renewable sources (NRP, 2014). Subsequently, the Bulgarian Government has introduced different retroactive measures to halt the further development of the renewable energy sector (see chapter 4.2.3).

In general, electricity generation in Bulgaria is highly dominated by fossil fuels (47.9%) and nuclear power (33.1%); hydro power accounted for almost 12%, whereas the remaining renewable energy sources combined amounted to 7% of the total electricity generation in 2013. Although it has relatively few reserves of fossil fuels, Bulgaria's well-developed energy sector and strategic geographical location make it a key European energy hub. In 2013, Bulgaria ranked 4th in physical imports and 3rd in physical exports of energy (ENTSO-E, 2014). Final energy consumption has decreased considerably in recent years, though Bulgaria exhibits the highest energy intensity within the EU, with industry being the most energy-consuming sector (European Commission, 2012).

In 2014, a draft Energy Strategy for 2030 was prepared which shall replace the previous Energy Strategy from June 2011 (Energy Strategy, 2011) once it is adopted by Parliament (Energy Strategy, 2014). This strategy does not foresee further support for renewable energy plants, but rather emphasizes future energy supply through the construction of the South Stream pipeline (see Chapter 4.1) as well as the realisation of the Belene nuclear power plant. According to experts however, the realisation of Belene remains questionable, as its Environmental Impact Assessment is about to expire and the project is lacking strategic investors (Novinite, 2014b).

3 GHG trends and projections

Bulgaria reduced its total GHG emissions by 11% between 2005 and 2013. The share of GHG emissions not covered by the European Emission Trading Scheme (EU ETS) is around 42%, which is significantly below the EU28 average (see Table 1). [1]

Table 1 Key data on GHG emissions

		National data				*EU28*
		2005	**2011**	**2012**	**2013**	***2013***
Total GHG emissions	Mt CO_2eq	63.7	66.0	61.0	56.7	4 539
Non-ETS emissions	Share in total emissions	100%	39%	43%	42%	58%

Source: EEA 2014a; EEA 2014c

By 2020, Bulgaria can increase its emissions not covered by the EU ETS by 20% compared to 2005, according to the Effort Sharing Decision (ESD). The latest data for 2013 show that Bulgaria emitted 7.4 percentage points less than it was allowed under its annual allocation interim target under the ESD for the year 2013 (see figures Table 2). However, national projections indicate that the country may miss its 2020 target by about 2.6 percentage points with existing measures (WEM) but could meet the target with additional measures (WAM) (EEA 2014a).

[1] The European Environment Agency has developed a complex methodology to measure progress on the Non-ETS/ESD targets of all EU Member States. This report uses the figures derived on this basis. A detailed explanation and the underlying absolute amounts are contained in Annexes 1-3 of the EEA report No 6/2014 "Trends and projections in Europe 2014. Tracking progress towards Europe's climate and energy targets for 2020" available at http://www.eea.europa.eu/publications/trends-and-projections-in-europe-2014/

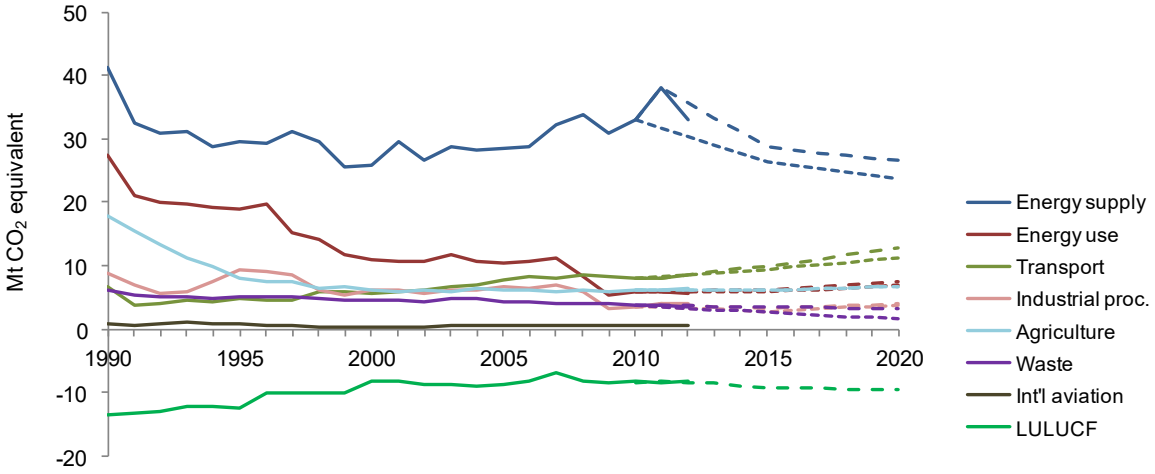
Table 2 Non-ETS emission targets, trend and projections

		Compared to base year
2013	ESD interim target	+ 12.2%
	ESD emissions	+ 4.8%
2020	ESD target	+ 20.0%
	ESD projections WEM	+ 22.6%
	ESD projections WAM	+ 9.5%

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

GHG emissions are mainly created by the energy industry and the transport sector followed by energy use and the agriculture sector (see figure below for historic and estimated emissions by sector). Projections indicate that by 2020 emissions from the energy industry will be reduced, while emissions from transport and energy use increase. Emissions from agriculture are projected to stay stable.

Figure 1 GHG trends and projections by sector



Source: EEA 2014a. Actual data until 2012 and projections from 2010 onwards. Dashed lines indicate the WEM projection, dotted lines the WAM projection.

4 Policy development

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

4.1 Key policies as outlined in the National Reform Programme

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

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

Construction of the South Stream energy infrastructure project	
Status in the NRP	Ongoing.
Status as per Dec 2014	On hold. On 19 May, the European Commission launched a so-called "EU Pilot" against Bulgaria over the latest amendments of the country's Energy Act. On 4 April, the Bulgarian Parliament had approved amendments, according to which "South Stream" will be considered an interconnector, and not a pipeline. Thus, the project would be exempted from the prescriptions of the EU's Third Energy Package. On 9 May, deputy energy minister Ivan Ayolov confirmed that the controversial amendments to the Energy Act were coordinated with Gazprom (EurActiv, 2014a). On 2 June 2014, the European Commission announced an infringement procedure against Bulgaria on the grounds of non-compliance with the European legal framework. During this procedure, the Commission expects the Bulgarian Government "to suspend all activities connected with the construction of the South Stream project". Subsequently on 8 June, Bulgaria's Prime Minister Plamen Oresharski ordered the suspension of all activities related to the South Stream project and further explained that Bulgaria would only proceed with the gas pipeline after achieving compliance with the EU (Sofia Globe, 2014b). On 18 August 2014 however, it was revealed that South Stream had raised its capital 25 times to a total of almost 400 million BGN (approx. 200 million EUR), despite the fact that caretaker Minister for Economy and Energy, Vassil Shtonov, had ordered to freeze all activities until the project conforms to European Union law (EurActiv, 2014b). The "South Stream" project was officially abandoned, after Russian president Vladimir Putin announced on 1 December 2014 that Russia was withdrawing from the project, blaming Western sanctions and lack of construction permits in the territory of the European Union. The Bulgarian Government was dismayed at the suspension of South Stream and is now looking for alternative possibilities to strengthen the country's energy security. At a meeting with the EU Commissioner for Energy Union Maroš Šefčovič on 12 January 2015, Bulgarian Prime Minister Boyko Borisov asked the EU to fund the construction of as gas hub on the Bulgarian Black Sea coast. This gas hub should allow member states to jointly negotiate, buy and distribute gas shipments from third country suppliers (EU Observer, 2015).
Description of policy	"South Stream" is a gas pipeline project, which is meant to transport natural gas from Russia to Bulgaria and other European countries through the Black Sea. According to the government, the implementation of this project will allow to diversify the energy supply routes and will guarantee the security of supply (NRP 2014).

Development of a new Energy Strategy of Bulgaria until 2030	
Status in the NRP	Currently being developed
Status as per Dec 2014	Ongoing. In June 2014, a draft Energy Strategy for 2030 was prepared which is meant to replace the previous Energy Strategy after it will be adopted by Parliament.
Description of policy	Main priorities: energy security, energy efficiency and clean low-carbon energy, diversification of sources and routes, effective utilisation of own energy resources, development of nuclear energy and export potential, transparent and functioning energy market and protection of consumers (Energy Strategy, 2014).

Tax exemption for electric vehicles	
Status in the NRP	In force. A tax exemption for electric vehicles was introduced with the amendment to the Law on Local Taxes and Fees in January 2013.
Status as per Dec 2014	In force
Description of policy	Electric vehicles are exempt from the “tax on motor vehicles”. This is meant to act as an incentive to buy and use “hybrid” and electric vehicles (NRP, 2014).

New long-term strategy for development of sustainable mobility	
Status in the NRP	Envisaged
Status as per Dec 2014	No further progress.
Description of policy	Development of a new long-term strategic document for the development of sustainable mobility, including measures to promote the use of renewable energy in transport.

Green Industry Innovation programme	
Status in the NRP	In force
Status as per Dec 2014	In force. Funding is available. On 9 January 2015, a new call was opened to support green investment projects in Bulgarian enterprises.
Description of policy	The programme objective: Increased competitiveness of green enterprises, including greening of existing industries, green innovation and green entrepreneurship (EEA Grants, 2015).

Energy Efficiency and Green Economy programme (BEECIFF)	
Status in the NRP	In force. At the end of February 2014, 270 contracts with a value of 90.4 million EUR were concluded.
Status as per Dec 2014	In force. The remaining 59.6 million EUR in the total budget were distributed in 2014 (BEECIFF, 2014).
Description of policy	The BEECIFF programme is targeted at micro-, small and medium-sized enterprises to support energy savings.

Energy Renovation of Bulgarian Homes	
Status in the NRP	In force. Implemented under the Operational Programme Regional Development (OPRD) 2007-2013.
Status as per Dec 2014	In force. The follow-up of the OPRD is the Operational Programme "Regions in Growth" (OPRG) 2014-2020, which focuses on the renovation of residential and administrative buildings. So far, no calls for applications have been opened under the new OPRG (BG Regio, 2014).
Description of policy	The programme supports investments to improve the energy efficiency and the use of RES in housing projects.

National Action Plan on Energy Efficiency	
Status in the NRP	Envisaged.
Status as per Dec 2014	Being developed.
Description of policy	The Action Plan will define measures for improving energy efficiency and achieving energy savings, including measures in the field of generation, transmission and distribution of energy, and in the field of final energy consumption (NRP, 2014).

4.2 National policy priorities

The sub-sections below provide updates on key existing and new policies in priority sectors and policy areas of relevance to the energy and climate targets under the Europe 2020 strategy[2]. Each sector or policy area contains information on the most important policy instruments in operation or development.

4.2.1 Environmental Taxation

Bulgaria has the second lowest implicit tax rate on energy in the EU with 66 EUR per ton of oil equivalent in 2012 (Eurostat, tsdcc360). However, the share of environmental tax revenues in overall tax revenue was 10.1% in 2012 and therefore the second highest in the EU (Eurostat, ten00064). The implicit tax rate on energy therefore indicates that the high revenue stems from the high energy-intensity of the economy rather than from high excise rates on energy products (SWD Bulgaria, 2014). When comparing environmental tax revenues with GDP, Bulgaria's tax revenues amount to 2.8% in 2012 which is above average (2.4%) and the ninth highest in the EU (Eurostat, ten00065).

In 2014, there has been no further progress in this sector.

4.2.2 Energy Efficiency

Despite decreasing the energy intensity of its economy by 21% between 2005 and 2012, Bulgaria is still the MS with the highest energy intensity in the EU (Eurostat, tsdec360). Over the period between 2005 and 2012 Bulgaria managed to reduce its energy consumption by 9%, but in the time between 2010 and 2012 this trend reversed and the consumption increased by 4%. This increase is mainly caused by increases of energy consumption in the transport and residential sectors but also in the industry and service sectors (Eurostat, tsdpc320). Bulgaria is currently on track towards its indicative EU energy efficiency target on final energy consumption. Concerning primary energy consumption, however, more effort is needed (EEA, 2014a).

In 2014, the 2007-2013 programming period of the Operational Programmes ""Development of the Competitiveness of the Bulgarian Economy" (OPDCBE) and "Regional Development" (OPRD) was

[2] The Consortium jointly with DG Clima identified these based on identified challenges in Country Profiles (EEA, 2014), share of sectors in total GHG emissions, and Country Specific Recommendations (2014). DG Clima has identified additional relevant issues to be reviewed for some or all Member States, including country specific energy challenges.

concluded. Several energy efficiency programmes have been implemented under these two Operational Programmes:

The “Investments in green industry” programme was targeted at reducing the energy intensity of large enterprises in Bulgaria. Overall, 29 contracts in the total amount of 75.9 million BGN (approx. 38 million EUR) have been implemented under this programme, which shall lead to energy savings of approx. 94 GWh per year (NRP, 2014).

The “Energy Renovation of Bulgarian Homes” for improving the energy efficiency and use of RES in housing projects was implemented under the OPRD with a total budget of 50 million BGN (approx. 25 million EUR). The follow-up of the OPRD is the Operational Programme “Regions in Growth” (OPRG) 2014-2020, which focuses on the renovation of residential and administrative buildings (NRP, 2014). So far, no calls for applications have been opened under the new OPRG.

In October 2014, Norway, Iceland and Liechtenstein announced that they will grant 16 million EUR under the European Economic Area (EEA) Financial Mechanism to support energy efficiency and renewable energy projects in Bulgaria. The funding will be available under the “Energy Efficiency and Renewable Energy” programme, which aims at enhancing energy efficiency and increasing the share of renewable energy for heating and/or cooling in municipal and state buildings. Both state institutions and municipalities can apply to receive subsidies in the order of between 170,000 and 500,000 EUR. Eligible activities are for example the replacement or reconstruction of fuel boilers and heating systems as well as the construction of heating and/or cooling systems from: biomass, solar, aerothermal, geothermal and hydrothermal energy. The deadline for the submission of applications is 7 January 2015 (EEA Grants, 2014).

In January 2015, a new call was opened under the “Green Industry Innovation” programme, which aims at supporting green investment projects in Bulgarian enterprises. The programme focuses on increasing the competitiveness of green enterprises, including greening of existing industries, green innovation and green entrepreneurship. Applications must be submitted by 26 February 2015 (EEA Grants, 2015).

Even though the National Reform Programme (NRP) – which was published in April 2014 – states that a new National Action Plan on Energy Efficiency was currently being drafted, there has been no visible progress so far. According to the NRP, the Action will define measures for improving energy efficiency and achieving energy savings, including measures in the field of generation, transmission and distribution of energy, and in the field of final energy consumption (NRP, 2014).

4.2.3 Renewable Energy

The share of renewables in gross final energy consumption was 16.3% in 2012, which is above the indicative 2012 target of 10.7% set out by the Renewable Energy Directive (RED). The average annual growth rate was 7% between 2005 and 2012. Thus, an annual growth rate of only 2.6% is needed between 2013 and 2020 to reach the 2020 target of 16% (EEA, 2014a). The share of renewable electricity generation in final electricity consumption almost doubled from 9.8% to 17.0% between 2005 and 2012; similarly, the share of renewable heating also almost doubled from 14.3% to 27.5% (Eurostat, SHARES, 2014).

Despite the current progress on renewables (above the interim target), stakeholders from the Bulgarian renewable energy sector sincerely doubt that the target has actually been reached and have repeatedly pointed out that the Bulgarian Government is using a wrong methodology to estimate the share of RES in final energy consumption (Petrova, Moiry Consult, 2014). Nevertheless, since the 2020 target of 16% was nominally achieved already (under present energy demand), the Bulgarian Government has declared to halt the further development of the renewable energy sector in order to prevent increases of electricity prices (Energy Strategy, 2014). Since late 2012, the Bulgarian energy regulator has therefore introduced several measures in order to make renewable energy sources less attractive for investors.

On 14 September 2012, a retroactive grid usage fee was introduced for all RES-E plants connected to the grid since 2010, which had to be paid by RES-E plant operators to the grid operator in charge. For some technologies, this grid usage fee amounted to almost 40 % of the respective feed-in tariff (RES

LEGAL Europe database). This decision brought many investors to the brink of bankruptcy. Particularly because of its retroactive nature, this measure subsequently led to a massive loss of trust in Bulgaria's governing and investment climate, as the European Commission began examining the legality of the grid usage fee in order to identify potential breaches of EU law (Petrova, Moiry Consult, 2014).

However, on 18 June 2013, the Supreme Administrative Court of Bulgaria overruled this grid usage fee, after almost 1,000 companies filed official complaints (PV Magazine, 2013). The court concluded that the fee was introduced in violation of the Energy Act, which stipulates that prices must be non-discriminatory, based on objective criteria and determined in a transparent manner. Subsequently, on 12 December 2013, the State Commission for Energy and Water Regulation (SEWRC) announced that renewable energy companies will receive a refund of the sums they paid to the three power distributors (ČEZ, EVN and Energo Pro) and the Electricity System Operator (ESO) in form of the grid usage fee. According to SEWRC, the total sum of grid access fees amounted to over 400 million BGN (approx. 200 million EUR) (Novinite, 2014c).

On 5 December 2013, the Bulgarian Parliament approved a proposal to introduce a new 20% fee on the revenues of photovoltaic plants and wind farms by amending the Renewable Energy Sources Act, which came into effect from 1 January 2014 (RES Legal Europe, 2015). The proposal was initially presented as a tax, but was subsequently revised to "fee" (Petrova, Moiry Consult, 2014). Thus, starting from January 2014, all PV and wind power plant operators were obliged to disburse 20% of their income generated under the feed-in tariff system.

Moreover, after the first attempt to introduce a "temporary" grid access fee was rejected in 2013 by the Constitutional Court, the state regulatory authority SEWRC declared its intention to raise a new grid access fee for PV and wind power producers on 18 February 2014. This fee now amounts to 2.45 BGN (approx. 1.25 EUR) per MW for the access of wind and solar power plants to the transmission grid, which shall be paid to the transmission grid operator ESO. SEWRC decided to backdate the new fee to the date when the previous fee came into force, thus retroactively applying the fee to all renewable energy plants which have been connected to the grid since that date. This measure shall enable the highly indebted company ESO to subtract the fee out of its financial liabilities (Novinite, 2014d). The new grid access fee was harshly criticised by both renewable energy associations and distribution grid operators. This grid access fee in combination with the renewable energy tax amounted to approx. 40% of the revenues from the feed-in tariff scheme. This led to the situation that payback periods were longer than the duration of the guaranteed tariffs and investors were not able to pay back their loans (Petrova, Moiry Consult, 2014).

4.2.4 Networks

According to the Bulgarian Energy Holding (BEH), the separation of the National Electric Company (NEK) and the Electricity System Operator (ESO) was completed on 4 February 2014. The ownership of the grid has now been entirely transferred to ESO which is solely responsible for its maintenance and investment, while NEK is in charge of the production and commercial activity. The unbundling of the two companies was a requirement of the EU's Third Energy Package. After Bulgaria had failed to fulfil this requirement, the European Commission had launched an official investigation against the country (Novinite, 2014e).

However, according to stakeholders from the Bulgarian renewable energy sector, there is still no liberalised and working energy market in Bulgaria. Even though the Government adopted new Electricity Trading Rules in May 2014 which aimed at liberalising the Bulgarian energy sector, this intended market liberalisation is not working well. If the energy market had been actually liberalised, RES plant operators could officially register as energy traders and there would be some potential for new small-scale renewable energy projects (Petrova, Moiry Consult, 2014).

Moreover, as curtailment still occurs on a regular basis in Bulgaria, it is almost impossible for the affected plant operators to fulfil their electricity generation forecasts. On order of the Transmission System Operator (TSO), the three electricity distribution companies (ČEZ, EVN and Energo-Pro) are frequently limiting the maximum power generation of all PV and wind power plants. The TSO argues that this step was necessary due to an imbalance between the production and consumption of

electricity. This leads to the absurd situation that RES plant operators are being curtailed by the DSOs and then even have to pay higher balancing costs for not meeting their forecasts (Pavlov, wpd Bulgaria, 2014).

The Electricity System Operator is using the revenue from these higher balancing costs to refinance the state-owned utility NEK which is technically bankrupt (Novinite, 2014f). As of October 2014, the company has run up a total debt of 3 billion BGN (approx. 1.5 billion EUR). One reason for NEK's financial situation is the fact that due to political reasons, the Bulgarian Government is keeping household prices for electricity artificially low. Currently, these prices are far below market prices, creating a significant tariff deficit. The deficit has accumulated in the entire energy system, not only in the state utility NEK, but also in the three foreign-owned DSOs. According to stakeholders, the entire energy market is therefore not operating correctly and the industry and especially RES plant operators have to pay different fees in order to save the state-owned company from bankruptcy (Pavlov, wpd Bulgaria, 2014). This electricity tariff deficit was also analysed in a report on published in October 2014 by the EC's Directorate General for Economic and Financial Affairs (DG ECFIN, 2014). The recent 10% electricity price increase is expected to bring NEK nearly 200 million BGN (approx. 100 million EUR) to cover a part of the accumulated deficit (Sofia Globe, 2014a).

On 19 March 2014, the Bulgarian State Commission for Water and Energy Regulation (SEWRC) has launched a procedure to suspend the license of the three distribution system operators which are active in Bulgaria. SEWRC blamed the three DSOs to "deprive NEK of the funds it needs to fulfil its license activity". According to SEWRC, this situation made it impossible for NEK to settle its payments to energy producers. In the past, NEK had already filed a complaint against the DSOs over delayed payments which allegedly have reached more than 300 million BGN (approx. 150 million EUR) This claim was refuted by the distributors who argued they had no debts to NEK and that actually NEK owed them compensations for uncollected renewable energy taxes (Novinite, 2014g).

4.2.5 Transport

GHG emissions as well as energy consumption from transport have increased between 1990 and 2012. The proportion of transport emissions in Bulgaria's total emissions remained relatively stable in the last years and reached 14% in 2012. Energy consumption from transport has increased by 20% between 1990 and 2012 (Eurostat, tsdcc210 and tsdpc320). Average emissions for newly registered cars are very high in Bulgaria with a level of 141.7 CO_2/km. This value is still the third highest in the EU despite a decrease by 17% between 2007 and 2013, because this rate of improvement is lower than the EU average of 20% (Eurostat, tsdtr450). Fuel taxation is among the lowest in the EU. The road fuel excise duties on petrol are the second lowest after Romania among EU MSs and the excise duties on diesel are the lowest (EEA, 2014b).

Bulgaria has no explicit CO_2-based tax, but an ownership tax exists, which is based on the engine output and age of the vehicle (ACEA 2014, 2012). Furthermore, there is a time based vignette system in place for passenger cars and HDVs (CE Delft, 2012).

In 2013, the Bulgarian Government has introduced a tax exemption for electric vehicles. According to this amendment, all electric vehicles are exempt from tax on vehicles. According to the National Reform Programme, this measure will act as an incentive to buy and use "hybrid" and electric vehicles (NRP, 2014).

In 2014, there has been no further progress in this sector.

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

The EU Commission provides Country Specific Recommendations (CSRs) for each MS for consideration and endorsement by the European Council. The recommendations are designed to address the major challenges in relation to the targets of the EU 2020 Strategy. In the following table,

the CSRs relevant for climate change and energy are listed, and their progress towards their implementation is assessed.

Existing CSRs	Progress
Scale up the reform of the energy sector in order to increase competition, market efficiency and transparency, and energy efficiency, in particular by removing market barriers, reducing the weight of the regulated segment, stepping up efforts for the creation of a transparent wholesale market for electricity and gas, phasing out quotas, and strengthening the independence and administrative capacity of the energy regulator.	According to the Bulgarian Energy Holding (BEH), the separation of the National Electric Company (NEK) and the Electricity System Operator (ESO) was completed on 4 February 2014. The ownership of the grid has now been entirely transferred to ESO, which is solely responsible for its maintenance and investment, while NEK is in charge of the production and commercial activity. The unbundling of the two companies was a requirement of the EU's Third Energy Package (see Chapter 4.2.4). However, according to stakeholders from the Bulgarian renewable energy sector, there is still no liberalised and working energy market in Bulgaria. Even though the Government adopted new Electricity Trading Rules in May 2014 which aimed at liberalising the Bulgarian energy sector, this intended market liberalisation is not working well (Petrova, Moiry Consult, 2014). Moreover, electricity prices in Bulgaria are still regulated. Due to political reasons, the Bulgarian Government is keeping household prices for electricity artificially low. Currently, these prices are far below market prices, creating a significant tariff deficit. (Pavlov, wpd Bulgaria, 2014).
Accelerate interconnector projects with neighbouring Member States and candidate countries and enhance the capacity to cope with disruptions.	With regard to energy networks, Bulgaria is currently implementing gas interconnector projects with Romania, Greece, Serbia and Turkey. These gas interconnections are partly funded through EU grants are planned to be constructed in 2016-17. Meanwhile, the "South Stream" gas pipeline project which planned to transport natural gas from Russia to Bulgaria and other European countries through the Black Sea was officially abandoned due to political concerns (see Chapter 4.1).

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