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The EU Environmental Implementation Review 2019  
Country Report - BULGARIA  
*Accompanying the document*  
Communication from the Commission to the European Parliament, the  
Council, the European Economic and Social Committee and the  
Committee of the Regions  
Environmental Implementation Review 2019: A Europe that protects its  
citizens and enhances their quality of life

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**COMMISSION STAFF WORKING DOCUMENT**

**The EU Environmental Implementation Review 2019  
Country Report - BULGARIA**

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**Communication from the Commission to the European Parliament, the Council, the  
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**Environmental Implementation Review 2019:  
A Europe that protects its citizens and enhances their quality of life**

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## Executive summary

### Bulgaria and the Environmental Implementation Review (EIR)

In the 2017 EIR report, the main challenges identified for Bulgaria for the implementation of EU environmental policy and law were:

- to improve air quality,
- to ensure appropriate collection and treatment of urban waste water; and
- to properly implement nature protection legislation.

Since the 2017 EIR report, Bulgaria has not yet held a national EIR dialogue to discuss those challenges.

In 2017, the Commission launched TAIEX-EIR Peer-to-Peer (EIR P2P) tool to facilitate peer-to-peer learning between experts from national environmental authorities.

Bulgaria took part in a peer-to-peer workshop on reducing emissions from domestic heating.

### Progress on meeting challenges since the 2017 EIR

There has been some progress in implementing measures addressing **air pollution**. It is, however, limited to the adoption of legal acts. No effective implementation in practice has been reported so far. Bulgaria remains among the Member States with the most pollution-related deaths, number of years of life lost associated with air pollution, and urban population exposure to micro-particles.

There is no significant progress in ensuring compliance with the **urban wastewater** collection and treatment obligations. Currently, close to 26% of the wastewater is collected and even less of the load collected is subject to secondary treatment or undergoes more stringent treatment.

There is still no overarching **circular economy** policy programme in Bulgaria.

**Waste** management continues to be a challenge, despite municipal waste generation being below the EU average. According to the Commission's 'Early Warning Report' (2018), Bulgaria is considered at risk of non-compliance with the 2020 municipal waste recycling target of 50 %. Bulgaria has adopted a good legal basis for fair calculation of waste collection fees but the law has not yet entered into force, so the 'polluter pays' principle has yet to be applied.

Bulgaria has made substantial progress in providing support for mapping and assessment of **ecosystems** and services, and for valuation and development of natural capital accounting systems.

However, proper implementation of **nature** protection legislation remains a challenge. Among the main threats to biodiversity in Bulgaria remains the loss of habitats resulting from urban and infrastructure development. Policy-related weaknesses still include poor enforcement of conservation laws and environmental regulations due to absence of conservation objectives and measures, ineffective management and administration of protected areas as well as insufficient financing or inefficient spending of available financing.

### Examples of good practice

- Bulgaria has taken steps to provide for streamlined environmental assessments by incorporating the appropriate assessment under the Habitats Directive, the integrated pollution prevention and control (IPPC) permitting process and the 'Seveso' process for chemical safety into its EIA procedures. Streamlining helps to reduce the administrative burden, enhances coherence and accelerates decision-making, and efforts should turn towards adequate implementation of these provisions.

## Part I: Thematic Areas

### 1. Turning the EU into a circular, resource-efficient, green and competitive low-carbon economy

#### Measures towards a circular economy

The Circular Economy Action Plan emphasises the need to move towards a life-cycle-driven ‘circular’ economy, reusing resources as much as possible and bringing residual waste close to zero. This can be facilitated by developing and providing access to innovative financial instruments and funding for eco-innovation.

Following the adoption of the Circular Economy Action Plan in 2015 and the setting up of a related stakeholder platform in 2017, the European Commission adopted a new package of deliverables in January 2018<sup>1</sup>. This included additional initiatives such as: (i) an EU strategy for plastics; (ii) a Communication on how to address the interplay between chemical, product and waste legislation; (iii) a report on critical raw materials; and (iv) a framework to monitor progress towards a circular economy<sup>2</sup>.

Examining the 10 indicators in the circular economy monitoring framework, the circular (secondary) use of material in Bulgaria was 4.3 % in 2016 (significantly lower than the EU-28 average of 11.7 %). On the other hand, Bulgaria performs in line with the EU-28 average in terms of the number of persons employed in the circular economy, at 1.76 % of total employment in 2016 (EU-28 average 1.73 %). The percentage of jobs in Bulgaria related to the circular economy seems to have dropped since 2012, when it was 1.83 %.

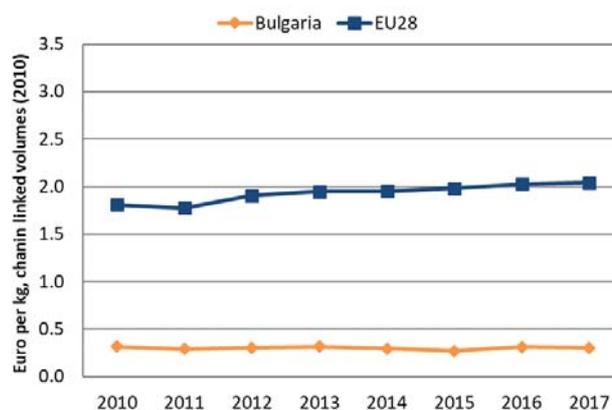
In the 2017 Special Eurobarometer on EU citizens’ attitudes towards the environment, 84 % of Bulgarians said they were highly concerned about the effects of plastic products on the environment (EU-28 average 87 %). 89 % said they were concerned about the impact of chemicals (EU-28 average 90 %)<sup>3</sup>. Support for circular economy initiatives and environmental protection measures in Bulgarian society appears to be strong.

Resource productivity<sup>4</sup> (how efficiently the economy uses material resources to produce wealth) in Bulgaria was

0.30 EUR/kg in 2017 compared to the EU average of 2.04 EUR/kg (as shown in Figure 1). Resource productivity in Bulgaria remains among the lowest in the EU together with Estonia and Romania<sup>5</sup>.

As pointed out in the 2017 EIR, no overarching circular economy policy programme exists in Bulgaria.

Figure 1: Resource productivity 2010-2017<sup>6</sup>



The number of EU Ecolabel products and EMAS<sup>7</sup>-licensed organisations in a country can give a rough measurement of the circular economy transition. These two indicators show to what extent this transition is engaging the private sector and other national stakeholders. These two indicators also show the commitment of public authorities to policies that support the circular economy. As of September 2018, Bulgaria had only 23 products and 5 licences registered in the EU Ecolabel scheme out of 71707 products and 2167 licences in the EU<sup>8</sup>. Bulgaria had 9 organisations registered in EMAS as of May 2018<sup>9</sup>.

#### SMEs and resource efficiency

Bulgarian SMEs continue to perform below the EU average on environmental aspects of the Small Business Act (see Figure 2). Since 2008, only limited progress has been made in this area.

<sup>1</sup> European Commission, [2018 Circular Economy Package](#).

<sup>2</sup> [COM\(2018\) 029](#).

<sup>3</sup> European Commission, 2017, [Special 468 Eurobarometer](#), ‘Attitudes of European citizens towards the environment’.

<sup>4</sup> Resource productivity is defined as the ratio between gross domestic product (GDP) and domestic material consumption (DMC).

<sup>5</sup> European Commission, [Resource productivity](#).

<sup>6</sup> European Commission, [Resource productivity](#).

<sup>7</sup> EMAS is the European Commission’s Eco-Management and Audit Scheme – a programme to encourage organisations to behave in a more environmentally sustainable way.

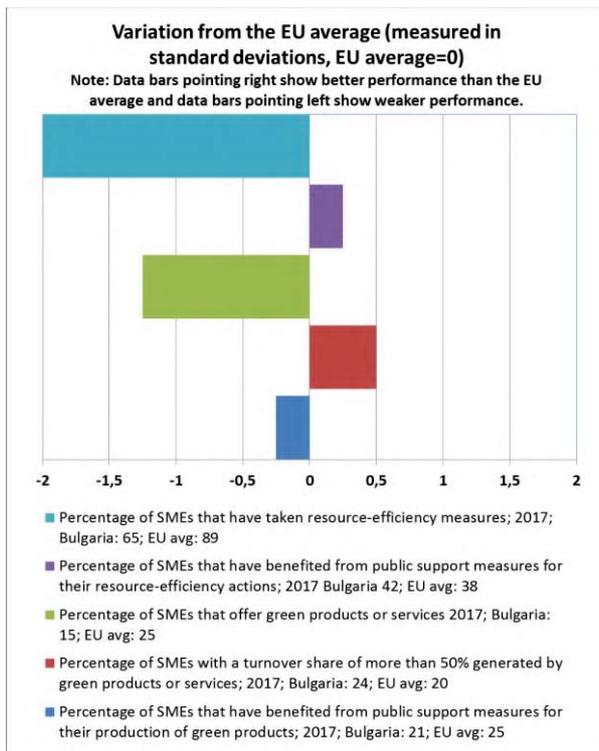
<sup>8</sup> European Commission, [Ecolabel Facts and Figures](#).

<sup>9</sup> European Commission, [Eco-Management and Audit Scheme](#).

The percentages of SMEs that have taken resource efficiency measures or that offer green products or services are well below the EU average.

The proportion that create more than 50 % of their turnover from green products and services is higher than in most EU countries. Small businesses taking resource efficiency measures receive more public support than the EU average. Against this background, the Bulgarian support system seems well equipped to reach out to more SMEs and encourage them to take actions that are more ambitious.

**Figure 2: Environmental performance of SMEs<sup>10</sup>**



The latest Eurobarometer on ‘SMEs, resource efficiency and green markets’<sup>11</sup> asked companies about both recent resource-efficiency actions they had taken and additional resource efficiency actions they planned to take in the next 2 years. The Eurobarometer then compared these responses with responses given to the same questions in 2015. Bulgarian companies show a decline in intentions to invest in all eight aspects of resource efficiency, from the already low levels in 2015.

Only 13 % of Bulgarian companies (against a range of 3 %-38 % in the EU and an average of 22 %) relied on external support in their efforts to be more resource

efficient. For them, private sector funding and private sector consultancy gained in importance, while public sector funding and advice fell significantly compared to 2015.

Among Bulgarian companies, grants and subsidies are mentioned by 32 % as useful help; the different types of consultancy are assigned similar importance (17-18 %) slightly less than the EU average (20-23 %).

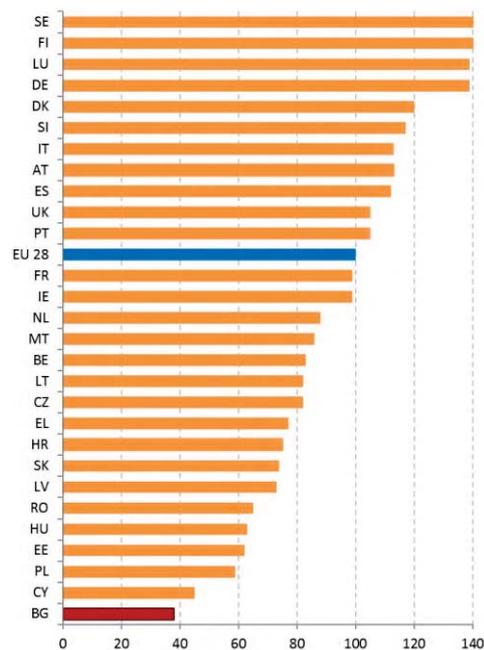
There is significant potential for raising awareness and ambition among SMEs to become more resource efficient and to develop products and services for green markets.

Establishing accessible and effective support services is an essential element of any strategy — but this is having less impact because Bulgarian enterprises currently assign little value to external cooperation.

**Eco-innovation**

In 2018, Bulgaria ranked 27th on the 2018 European Innovation Scoreboard, as the sixth worst-growing innovator (having slipped 1.5 % since 2010)<sup>12</sup>. In 2017, the country was ranked last under the Eco-innovation Scoreboard (see Figure 3). As shown in Figure 4, since 2010, Bulgaria’s performance continues to be well below the EU average.

**Figure 3: 2017 Eco-innovation index (EU=100)<sup>13</sup>**



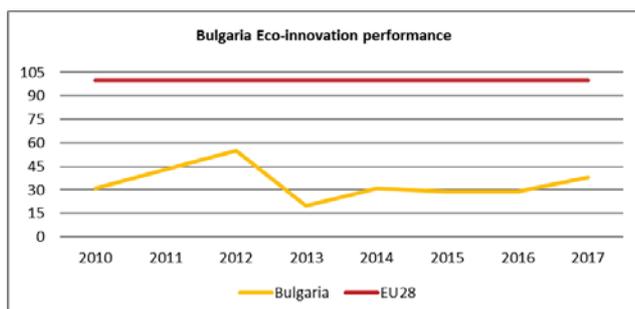
<sup>10</sup> European Commission, [2018 SBA fact sheet](#) - Bulgaria, p. 14.

<sup>11</sup> Flash Eurobarometer 456 ‘SME, resource efficiency and green markets’ January 2018. The 8 dimension were Save energy; Minimise waste; Save materials; Save Water; Recycle by reusing material internally; Design products easier to maintain, repair or reuse; Use renewable energy; Sell scrap materials to another company.

<sup>12</sup> European Commission, [European Innovation Scoreboard 2018](#).

<sup>13</sup> European Commission, Eco-Innovation Observatory: [Eco-innovation Scoreboard 2017](#).

**Figure 4: Bulgaria’s Eco-innovation performance**



Some of the main challenges for eco-innovation in Bulgaria are still: to increase investment opportunities, promote efficient use of resources, further develop renewable energy sources, and improve sustainability practices within the transport sector.

Significant drivers of eco-innovation have also been identified, such as: increased awareness among businesses, citizens and government of the benefits of green products and technologies; highly skilled human resources and knowledge capital; and Bulgaria’s leading regional position in the information and communications technology (ICT) sector.

Targeted support for eco-innovation is provided, for example, by the National Innovation Fund and the European Regional Development Fund (by Operational Programme “Innovation and Competitiveness” 2014-2020). In recent years, projects have been approved for innovative technologies for environmentally sound treatment of hazardous waste, recovery of waste rubber products, production of heat by waste pyrolysis, analysis of exhaust emissions, conversion of conventional electric vehicles, etc. In 2018 Bulgaria approved 11 National Research Programmes with around EUR 30.5 million to be spent in research projects until 2022. Two of these programmes cover research related environmental challenges – National research programme for low carbon energy for the transport and households and National research programme for environmental protection and reduction of the risk of adverse phenomena and natural disasters with financial resource of approximately EUR 3.7 million and EUR 3 million respectively<sup>14</sup>.

Eco-innovation is also promoted by organisations such as Cleantech Bulgaria, which is a business network founded in 2012 to promote sustainable economic development through clean technologies and green innovation.

The Eco-innovative Virtual Lab was set up as part of the EcoInn Danube project co-funded by the Interreg Danube Programme. The general objective is to improve cooperation between people active in eco-innovation,

<sup>14</sup> The Republic of Bulgaria, [National research programmes](#).

with special emphasis on the development and application of eco-technologies in the Danube Region<sup>15</sup>.

**2019 priority action**

- A strategic long-term view and an integrated approach for mainstreaming government’s policies to speed up the uptake of the circular economy by all economic sectors needs to be developed.

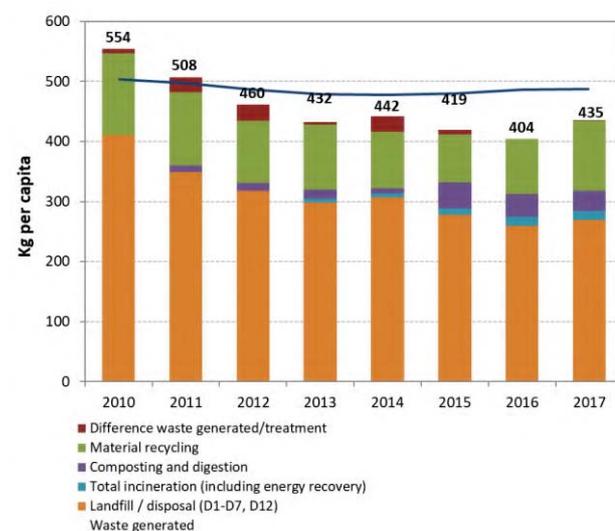
**Waste management**

Turning waste into a resource is supported by:

- (i) fully implementing EU waste legislation, which includes the waste hierarchy, the need to ensure separate collection of waste, the landfill diversion targets, etc.;
- (ii) reducing waste generation and waste generation per capita in absolute terms; and
- (iii) limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

This section focuses on management of municipal waste<sup>16</sup> for which EU law sets mandatory recycling targets<sup>17</sup>.

**Figure 5: Municipal waste by treatment in Bulgaria 2010-2017<sup>18</sup>**



Municipal waste generation in Bulgaria increased in 2017 (see Figure 5), stopping a slightly downward trend since

<sup>15</sup> European Commission, Eco-Innovation Observatory: Eco-innovation Country Profile 2016-2017: Bulgaria.

<sup>16</sup> Municipal waste consists of mixed waste and separately collected waste from households and from other sources, where such waste is similar in nature and composition to waste from households. This is without prejudice to the allocation of responsibilities for waste management between public and private sectors.

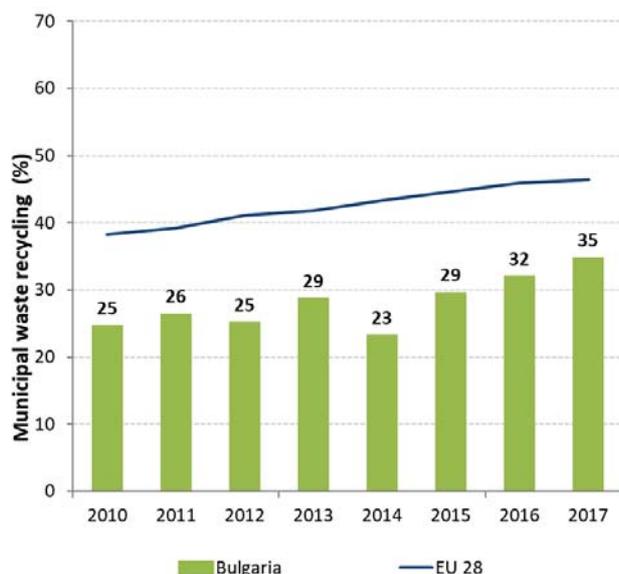
<sup>17</sup> See Article 11.2 of [Directive 2008/98/EC](#). This Directive was amended in 2018 by [Directive \(EU\) 2018/851](#), and more ambitious recycling targets were introduced for the period up to 2035.

<sup>18</sup> Eurostat, [Municipal waste by waste operations](#).

2014, but remaining below the EU average (435 kg/y/inhabitant compared to 487 kg/y/inhabitant). Figure 5 depicts municipal waste by type of treatment in Bulgaria in kg per capita. It shows the landfilled amounts have fallen since 2010, composting has increased, and a small amount of waste has been diverted from landfill to incineration.

Recycling of municipal waste (including composting) has slightly increased, to 35 % in 2017 (see Figure 6). The recycling rate remains considerably lower than the EU average of 46 %; and significant efforts will be needed to meet the 50 % EU recycling target by 2020<sup>19</sup>. One of the root causes of the lack of progress in separate collection of recyclable materials other than metals is the competition between the formal and the informal waste collection systems. This competition affects the incentives both of extended producer responsibility schemes to invest in separate collection and of citizens to participate in it.

**Figure 6: Recycling rate of municipal waste 2010-2017<sup>20</sup>**



For this reason, in its ‘Early Warning Report’<sup>21</sup>, the Commission listed Bulgaria among the Member States at risk of missing the 2020 municipal waste recycling target, and recommended country-specific actions to close the gap. Even more effort will be necessary to comply with recycling targets for the post-2020 period<sup>22</sup>. Notable

<sup>19</sup> Member States may choose a different method than the one used by ESTAT (and referred to in this report) to calculate their recycling rates and track compliance with the 2020 target of 50 % recycling of municipal waste.

<sup>20</sup> Eurostat, [Recycling rate of municipal waste](#).

<sup>21</sup> European Commission, Report on the implementation of EU waste legislation, including the early warning report for Member States at risk of missing the 2020 preparation for re-use/recycling target on municipal waste, [COM\(2018\) 656](#).

<sup>22</sup> [Directive \(EU\) 2018/851](#), [Directive \(EU\) 2018/852](#), [Directive \(EU\) 2018/850](#) and [Directive \(EU\) 2018/849](#) amend the previous waste

progress has been made in increasing composting, which stood at 8 % in 2017 but is still below the EU average of around 16.5 %. Most of this increase, however, relates to non-household biodegradable waste (e.g. from businesses and parks).

Bulgaria still has one of the highest landfill rates for municipal waste in the EU (at 62 % in 2017 compared to the EU average of around 24 %).

Bulgaria reported that all landfills which do not comply with EU standards have stopped accepting waste but its implementation record needs to be further improved: as a matter of priority, they need to be definitively closed and rehabilitated, and illegal dumpsites eliminated. Despite significant progress in the closure of non-compliant sites, their rehabilitation remains a challenge.

In 2013, Bulgaria introduced a law that required waste collection fees to be calculated based on the generated waste (the ‘pay-as-you-throw’ principle), instead of being based on the value of the real estate property. It was due to enter into force on 1 January 2015 but this has been postponed a number of times, the last target date being 1 January 2018. In October 2017, an amendment to the Law on Local Taxes and Fees clarified the methods for calculating costs and waste collection fees, but further postponed the implementation of the polluter-pays principle until 1 January 2020.

All municipalities are obliged to collect at least four recycling streams, plus biodegradable waste. There is no door-to-door collection for these, and waste collection points are mainly for packaging materials, such as glass, metal and plastic, paper and residual waste.

A new Ordinance on separate collection and treatment of biowaste was adopted in early 2017. The new Ordinance stipulates that the amount of landfilled biowaste must not exceed 109kg per capita by 2020. Progress in accordance with that target has yet to be measured.

The landfill tax is set to rise progressively to EUR 48.6 per tonne by 2020. There is an incentive scheme for municipalities linked to this tax. Those municipalities that meet their recycling target will not have to pay landfill tax. This should stimulate the market if the measure is enforced.

In 2016, several calls to use cohesion policy funds were published, targeting green and other biodegradable waste collection and treatment. The Operational Programme makes funding available to municipalities for biowaste treatment<sup>23</sup>. Bulgaria continues to set up

legislation and set more ambitious recycling targets for the period up to 2035. These targets will be taken into consideration to assess progress in future Environmental Implementation Reports.

<sup>23</sup> The Republic of Bulgaria, [Operational programme environment 2014-2020](#)

municipal sorting and mechanical biological treatment facilities. Most of these investments so far have been oriented towards RDF preparation for combustion in cement kilns, with little focus on recycling.

Bulgaria is also planning to strengthen legal enforcement and control of implementation by municipalities.

**2019 priority actions**

- Address as a matter of priority the sealing and rehabilitation of non-compliant landfills.
- Make continuous efforts to prevent illegal dumping of waste, including littering.
- Improve and extend separate collection of waste, including for bio-waste. Set minimum service standards for separate collection (e.g. frequency of collection, types of containers etc.) in municipalities to ensure high rates of capture of recyclable waste. Develop and run implementation support programmes for municipalities to help support efforts to organise separate collection and improve recycling performance.
- Enforce and use economic instruments, such as pay-as-you-throw. Introduce new instruments to improve recycling performance.

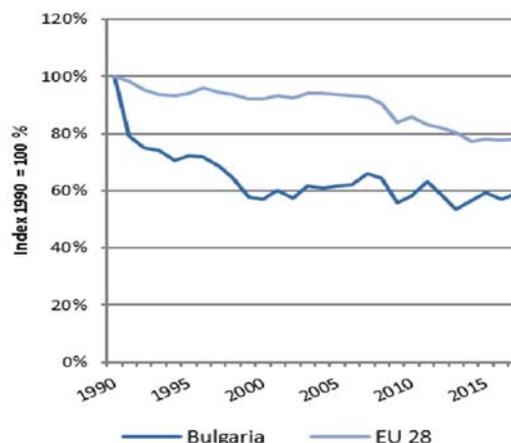
**Climate change**

The EU has committed to undertaking ambitious climate action internationally as well as in the EU, having ratified the Paris Climate Agreement on 5 October 2016. The EU targets are to reduce greenhouse gas (GHG) emissions by 20 % by 2020 and by at least 40 % by 2030, compared to 1990. As a long-term target, the EU aims to reduce its emissions by 80-95 % by 2050, as part of the efforts required by developed countries as a group. Adapting to the adverse effects of climate change is vital to alleviate its already visible effects and improve preparedness for and resilience to future impacts.

The EU emissions trading system (EU ETS) covers all large greenhouse gas emitters in the industry, power and aviation sectors in the EU. The EU ETS applies in all Member States and has a very high compliance rate. Each year, installations cover around 99 % of their emissions with the required number of allowances.

For emissions not covered by the EU ETS, Member States have binding national targets under effort sharing legislation. Bulgaria’s emissions were below its annual emission allocations (AEAs) in each of the years 2013-2016. According to preliminary data, Bulgaria had slightly higher emissions than the AEAs in 2017. For 2020, Bulgaria’s national target under the Effort Sharing Decision is to avoid increasing emissions by more than 20 % compared to 2005. For 2030, Bulgaria’s target under the Effort Sharing Regulation will be to have emissions no higher than in 2005.

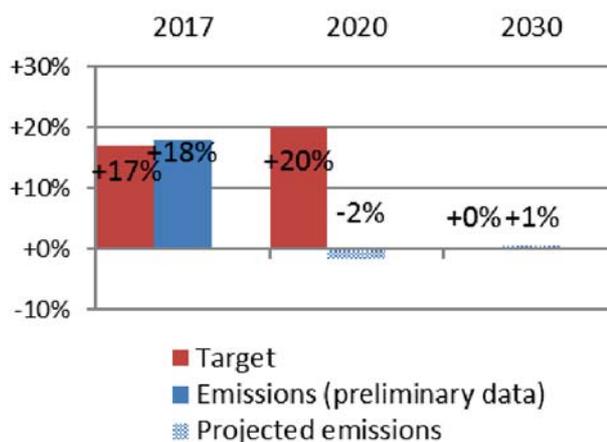
**Figure 7: Change in total GHG emissions 1990-2017 (1990=100 %)²⁴.**



Under the energy union initiative, Member States are preparing integrated national energy and climate plans (NECPs) and long-term climate and energy strategies. Bulgaria submitted its NECP in January 2019.

Under the F-gas regulation, Member States must introduce training and certification programmes and rules on penalties, and notify these measures to the Commission by 2017. Bulgaria has notified both measures.

**Figure 8: Targets and emissions for Bulgaria under the Effort Sharing Decision and Effort Sharing Regulation²⁵.**



Accounting of emissions and removals from forests and agriculture are governed by the Kyoto Protocol. Reported quantities under the Kyoto Protocol for Bulgaria show net removals of, on average, -7.1 Mt CO<sub>2</sub>-eq for the period

²⁴ Annual European Union greenhouse gas inventory 1990–2016 (EEA greenhouse gas data viewer). Proxy GHG emission estimates for 2017 Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

²⁵ Proxy GHG emission estimates for 2017 Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

2013 to 2016. In this regard, Bulgaria contributes some 1.9 % to the EU-28's annual average sink of -384.4 Mt CO<sub>2</sub>-eq. Accounting for the same period depicts net debits of, on average, 0.8 Mt CO<sub>2</sub>-eq, which corresponds to a negative contribution of -0.7 % of the EU-28 accounted sink of -115.7 Mt CO<sub>2</sub>-eq. Bulgaria is one of six EU Member States that show net debits in this preliminary accounting exercise. Reported net removals show minor variations with no trend, while accounted net debits depict the same variation with slight decreasing tendencies.

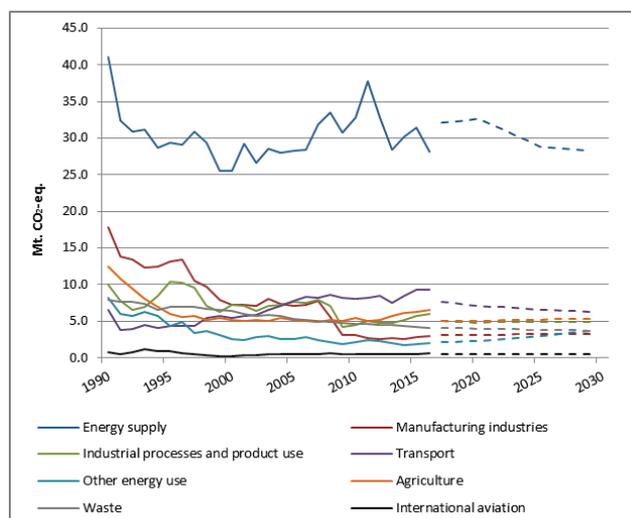
The EU Strategy on adaptation to climate change, adopted in 2013, aims to make Europe more climate-resilient, by promoting action by Member States, better-informed decision making, and promoting adaptation in key vulnerable sectors. By adopting a coherent approach and providing for improved coordination, it seeks to enhance the preparedness and capacity of all governance levels to respond to the impacts of climate change.

Bulgaria is currently drafting its national adaptation strategy and plan, through a project run with advisory support from the World Bank. The draft strategy is underpinned by climate adaptation assessments in nine sectors of interest and by a study on the macroeconomic implications of climate change. A strategy on adaptation to climate change for the municipality of Sofia has been drafted under the EU-funded project 'Transitioning towards Urban Resilience and Sustainability 'TURAS'.

### 2019 priority action

In this report, no priority actions have been included on climate action, as the Commission will first need to assess the draft national energy and climate plans which the Member States needed to send by end of 2018. These plans should increase the consistency between energy and climate policies and could therefore become a good example of how to link sector-specific policies on other interlinked themes such as agriculture-nature-water and transport-air-health.

**Figure 9: Greenhouse gas emissions by sector (Mt. CO<sub>2</sub>-eq.). Historical data 1990-2016. Projections 2017-2030<sup>26</sup>.**



Bulgaria's total revenues from auctioning emission allowances under the EU ETS over the years 2013-2017 came to EUR 427 million. 100 % of the auctioning revenues have been spent on climate and energy purposes.

<sup>26</sup> European Environmental Agency, [Total GHG trends and projections](#).

## 2. Protecting, conserving and enhancing natural capital

### Nature and biodiversity

The EU biodiversity strategy aims to halt the loss of biodiversity in the EU by 2020. It requires full implementation of the Birds and Habitats Directives to achieve favourable conservation status of protected species and habitats. It also requires that the agricultural and forest sectors help to maintain and improve biodiversity.

#### Biodiversity strategy

The major national document related to biodiversity in Bulgaria is the second national biodiversity conservation plan 2005-2010. The plan has not been updated formally but new national priorities have been formulated and implemented.

Although Bulgaria is a relatively small country (111 001.9 km<sup>2</sup>), due to its highly varied climatic, geological, topographic and hydrologic conditions it is very rich in biological diversity — 26 % of the total species described for Europe occur in its territory and represent more than 2 % of the species in the world<sup>27,28</sup>. Thus, Bulgaria ranks among the countries with the greatest biological diversity in Europe. 38,55 % of the land is covered by forests situated mostly on mountain slopes and non-arable lands.

Among the main threats to biodiversity in Bulgaria remain the loss of habitats resulting from urban and infrastructure development; unsustainable agriculture; increased levels of air pollution; and exploitation of economically viable species. Policy-related weaknesses still relate to poor enforcement of conservation laws and environmental regulations, including absence of conservation objectives and measures; ineffective management and administration of protected areas; and insufficient financing or inefficient spending of available financing.



<sup>27</sup> IUCN Red List, [Bulgaria's biodiversity at risk](#).

<sup>28</sup> [Bulgarian biodiversity portal](#).

#### Setting up a coherent network of Natura 2000 sites

The Birds and Habitats Directives require Member States to establish a coherent national network of Natura 2000 sites. The Commission assesses compliance with this requirement individually for each species and habitat type occurring on the national territory of the Member States.

Bulgaria has designated 233 Natura 2000 sites under the Habitats Directive (Sites of Community Importance/SCIs). Three of these are entirely marine sites, while 14 include marine sites in their territory. Bulgaria has also designated 119 Natura 2000 sites under the Birds Directive (Special Protection Areas/SPAs). In total, the SCIs and SPAs cover 41 053.2 km<sup>2</sup> of Bulgaria's territory, of which 38 231.84 km<sup>2</sup> is land and 2 821.35 km<sup>2</sup> is marine territory.

Bulgaria's Natura 2000 network hosts 90 habitat types and 121 species other than birds, including 28 priority habitats and 8 priority species, 120 birds and 70 migratory birds.

The terrestrial part of the Natura 2000 network for birds is almost complete, with one exception. A 2018 judgement of the Court of Justice of the EU confirmed that Bulgaria has not designated sufficient territories in the Rila mountain for the protection of 17 bird species (C-97/17). With the implementation of this judgement, the terrestrial part of the network for birds can be considered as completed.

Bulgaria still has to address some gaps in the network under the Habitats Directive. Apart from missing territories in Rila mountain for *Ursus arctos* and *Cottus gobio*, there are several other terrestrial features to be addressed. In addition, the latest assessment of the SCI part of the Natura 2000 network shows that there are still some scientific reservations regarding features for the marine components of the network<sup>29</sup>. The Commission is monitoring this issue closely.

#### Designating Natura 2000 sites and setting conservation objectives and measures

Bulgaria has not yet met its obligations under Article 4(4) of the Habitats Directive to designate SCIs as special areas of conservation (SACs) and under Article 6(1) to

<sup>29</sup> For each Member State, the Commission assesses whether the species and habitat types in Annexes I and II of the Habitats Directive are sufficiently represented by the sites designated to date. This is expressed as a percentage of species and habitats for which further areas need to be designated in order to complete the network in that country. [The current data](#), which were assessed in 2014-2015, reflect the situation up until December 2013.

define site-specific conservation objectives and establish conservation measures for them in order to maintain/restore species and habitats of community interest to a favourable conservation status across their natural range. In September 2018, only 9 of the 233 SCIs had their designation orders published.

A strong and urgent focus is essential, on setting site-specific conservation objectives and conservation measures, setting up an efficient management structure for Natura 2000 and strengthening the capacity of the administration and other bodies dealing with the Natura 2000 network.

Bulgaria has made no progress since the 2017 EIR in setting up management bodies for the Natura 2000 sites. Management bodies are only in place for the sites that overlap with the three national parks and the six nature parks. Management plans for these nine parks exist but some of them are long outdated. Very few other Natura 2000 sites have management plans in place.

Integrating nature and biodiversity policy into other sectoral policies will not only lead to better management of the Natura 2000 areas and protection of species, but could provide additional sources of financing<sup>30</sup>.

This is particularly relevant for agriculture. Significant destruction of high nature value grasslands seems to have occurred in Bulgaria, particularly in a number of Natura 2000 sites.

The 2017 EIR Report referred to the latest report on the conservation status of habitats and species; new data will be available for the next EIR.

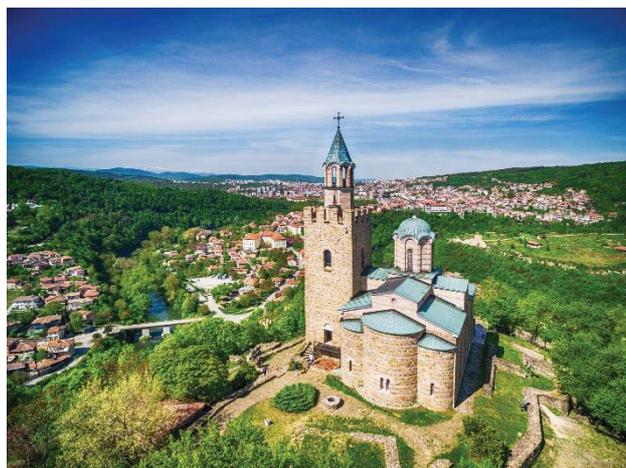
Communication initiatives to explain Natura 2000, its objectives, obligations, opportunities and benefits both at national and regional level, especially in areas where opposition to the Natura network is found, are still to be carried out in order to help avoiding negative attitudes and gain local people's support.

### Progress in maintaining or restoring favourable conservation status of species and habitats

Considering that Member States report every 6 years on the progress made under both directives, no new information is available on the state of natural habitats and species, or on progress made in improving the conservation status of species and habitats in Bulgaria, as compared to the 2017 EIR Bulgarian Country Report.

The practice of authorising plans and projects without taking into account the cumulative impact of existing and authorised plans and projects to Natura 2000 areas

continues. Many developments representing a major threat to conservation objectives have still been authorised. Although Bulgaria has taken some measures to address the issue, this structural problem persists and the Commission regularly receives complaints about plans and projects being authorised on the basis of inadequate assessments, or even without appropriate assessments. Bulgaria would have to enhance efforts to collect reliable data and improve the quality of the assessment and permitting procedures.



### 2019 priority actions

- Complete the SAC designation process as a matter of priority and put in place clearly defined site-specific conservation objectives and the necessary conservation measures for each habitat and species of community interest in all Natura 2000 sites.
- Establish efficient management structures for the Natura 2000 network, with sufficient administrative and financial capacity.
- Address shortcomings in the implementation of the nature directives (in particular the authorisation of plans and projects) and integration of the policy in the other sectoral policies.

### Estimating natural capital

The EU biodiversity strategy calls on Member States to map and assess the state of ecosystems and their services<sup>31</sup> in their national territories by 2014, assess the economic value of such services and integrate these values into accounting and reporting systems at EU and national level by 2020.

Bulgaria has profited from funding under grants provided by Norway and the European Economic Area to set up national projects on mapping ecosystems and their services. This allowed substantial progress in 2016 and

<sup>30</sup> European Commission, 2016. [Integration of Natura 2000 and biodiversity into EU funding \(EAFRD, ERDF, CF, EMFF, ESF\). Analysis of a selection of operational programmes approved for 2014-2020.](#)

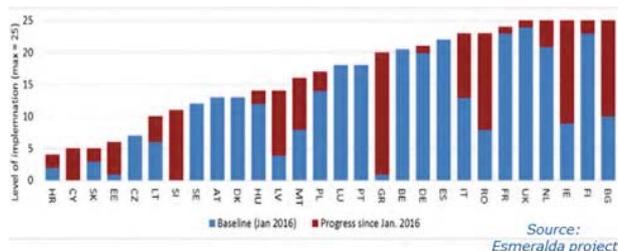
<sup>31</sup> Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

2017. The seven projects on nine ecosystems conditions by type outside Natura 2000 were completed and summarised. Horizontal topics (theoretical guidance, landscape-level, pollination and fieldwork in Bulgaria) are available electronically.

A methodology for monetary valuation of ecosystem services will be introduced in 2019 and is expected to be incorporated into national accounts as a next step. The Bulgarian Biodiversity Information System provides visual maps of all assessments, including the mapping and assessment projects and some other projects that may inform ecosystem monitoring — such as the East and South European Network for Invasive Alien Species — a tool to support the management of alien species in Bulgaria, citizen science and policy-related projects for biodiversity outside NATURA 2000.

At the MAES working group meeting held in Brussels in September 2018, it was shown that Bulgaria has made substantial progress since January 2016 in implementing MAES (see Figure 10). This assessment was made by the ESMERALDA project<sup>32</sup> and based on 27 implementation questions. The assessment is updated every 6 months.

**Figure 10: Implementation of MAES (September 2018)**



### Invasive alien species

Under the EU biodiversity strategy, the following are to be achieved by 2020:

- (i) invasive alien species identified;
- (ii) priority species controlled or eradicated; and
- (iii) pathways managed to prevent new invasive species from disrupting European biodiversity.

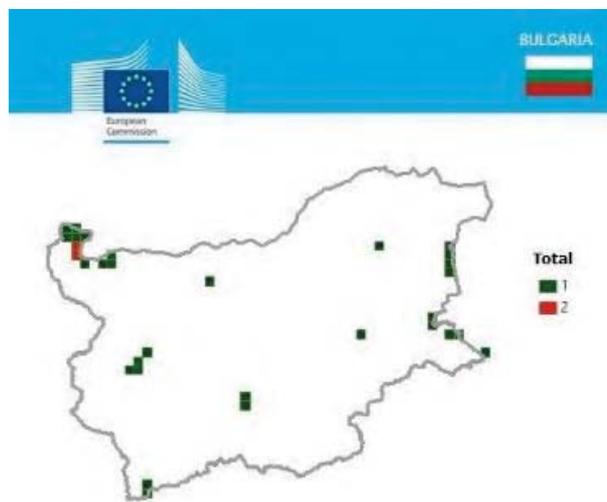
This is supported by the Invasive Alien Species (IAS) Regulation, which entered into force on 1 January 2015.

The report on the baseline distribution (Figure 11), for which Bulgaria did not review its data, shows that of the 37 species on the first EU list only 4 have been observed in Bulgaria. All are aquatic species with a limited distribution: coypu (*Myocastor coypus*), spiny-cheek crayfish (*Orconectes limosus*), amur sleeper (*Percottus glenii*) and sliders (*Trachemys scripta*). The data suggest that Bulgaria is less invaded than neighbouring countries, but this could instead indicate that the data available is

<sup>32</sup> EU project Esmeralda.

poorer because listed species were not subject to surveillance until the EU list was adopted.

**Figure 11: Number of IAS of EU concern, based on available georeferenced information for Bulgaria<sup>33</sup>**



Between the entry into force of the EU list and 18 May 2018, Bulgaria did not notify the Commission of any new appearances of IAS of EU concern, in line with Article 16(2) of the IAS Regulation.

As, according to the baseline distribution, coypu (*Myocastor coypu*) still seems in an early invasion stage, Bulgaria is advised to attempt to eradicate this species, to avoid considerable long-term management costs.

Finding ways of improving its surveillance system and data collection would help Bulgaria's performance in this area.

### Soil protection

The EU soil thematic strategy underlines the need to ensure a sustainable use of soils. This entails preventing further soil degradation and preserving its functions, as well as restoring degraded soils. The 2011 Roadmap to a Resource Efficient Europe states that by 2020, EU policies must take into account their direct and indirect impact on land use.

Soil is a finite and extremely fragile resource and it is increasingly degrading in the EU.

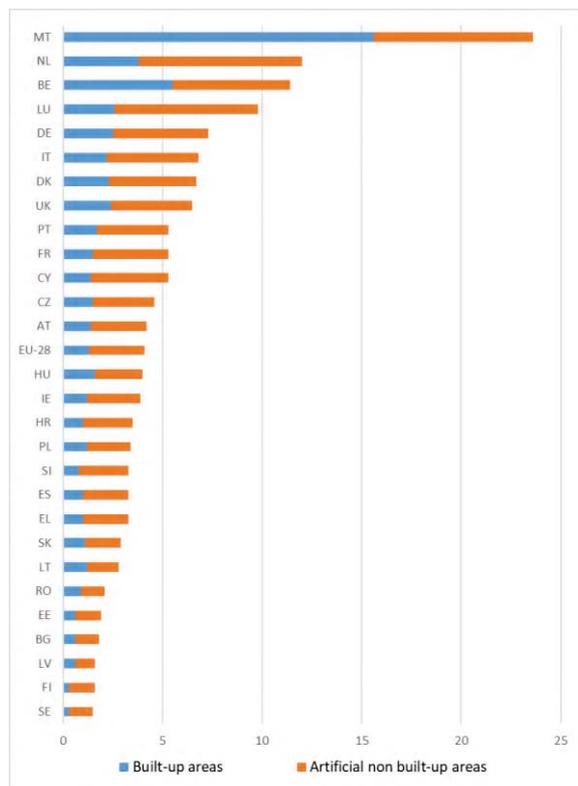
The annual land take rate (growth of artificial areas) as provided by CORINE Land Cover was 0.14 % in Bulgaria over the period 2006-12, well below the EU average (0.41 %). It represented 755 hectares per year, mainly

<sup>33</sup> Tsiamis K; Gervasini E; Deriu I; D'amico F; Nunes A; Addamo A; De Jesus Cardoso A. [Baseline Distribution of Invasive Alien Species of Union concern. Ispra \(Italy\): Publications Office of the European Union; 2017, EUR 28596 EN, doi:10.2760/772692.](#)

mines, quarries and dumpsites, plus housing, services and recreation<sup>34</sup>.

The percentage of artificial land<sup>35</sup> in Bulgaria (Figure 12) can be seen as a measure of the relative pressure on nature and biodiversity, as well as the environmental pressure on people living in urbanised areas. A similar measure is population density.

**Figure 12: Proportion of artificial land cover, 2015** <sup>36</sup>



Bulgaria ranks below the EU average for artificial land coverage, with 1.8 % of artificial land (EU-28 average: 4.1 %). The population density is 64.8/km<sup>2</sup>, which is far below the EU average of 118<sup>37</sup>.

Contamination can severely reduce soil quality and threaten human health or the environment. A recent report of the European Commission<sup>38</sup> estimated that potentially polluting activities have taken or are still

taking place on approximately 2.8 million sites in the EU. At EU level, 650 000 of these sites have been registered in national or regional inventories. 65 500 contaminated sites already have been remediated. Bulgaria has registered 26 sites where potentially polluting activities have taken or are taking place, and already has remediated or applied aftercare measures on 20 sites.

Soil erosion by water is a natural process, but this natural process can be aggravated by climate change and human activities such as inappropriate agricultural practices, deforestation, forest fires or construction works. High levels of soil erosion can reduce productivity in agriculture and can have negative and transboundary impacts on biodiversity and ecosystem services. High levels of soil erosion can also have negative and transboundary effects on rivers and lakes (due to increased sediment volumes and transport of contaminants). According to the RUSLE2015 model<sup>39</sup>, Bulgaria has an average soil loss rate by water of 2.05 tonnes per hectare per year (t ha<sup>-a</sup> yr<sup>-y</sup>), compared to the EU mean of 2.46 t ha<sup>-a</sup> yr<sup>-y</sup>. This indicates that soil erosion is medium on average. Note that these figures are the output of an EU level model and can therefore not be considered as locally measured values. The actual rate of soil loss can vary strongly within a Member State depending on local conditions.

Soil organic matter plays an important role in the carbon cycle and in climate change. Soils are the second largest carbon sink in the world after oceans.

## Marine protection

EU coastal and marine policy and legislation require that by 2020 the impact of pressures on marine waters be reduced to achieve or maintain good environmental status (GES) and ensure that coastal zones are managed sustainably.

The Marine Strategy Framework Directive (MSFD)<sup>40</sup> aims to achieve good environmental status of the EU’s marine waters by 2020. To that end, Member States must develop a marine strategy for their marine waters, and cooperate with the EU countries that share the same marine (sub)region.

The Convention on the Protection of the Black Sea against Pollution (Bucharest Convention) contributes to achieving Bulgaria’s goals required by the Marine Strategy Framework Directive. The marine strategies comprise different steps to be taken over six-year cycles. The latest step required Member States to set up and

<sup>34</sup> European Environment Agency [Draft results of CORINE Land Cover \(CLC\) inventory 2012](#); mean annual land take 2006-12 as a percentage of 2006 artificial land.

<sup>35</sup> Artificial land cover is defined as the total of roofed built-up areas (including buildings and greenhouses), artificial non built-up areas (including sealed area features, such as yards, farmyards, cemeteries, car parking areas etc. and linear features, such as streets, roads, railways, runways, bridges) and other artificial areas (including bridges and viaducts, mobile homes, solar panels, power plants, electrical substations, pipelines, water sewage plants, and open dump sites).

<sup>36</sup> Eurostat, [Land covered by artificial surfaces by NUTS 2 regions](#).

<sup>37</sup> Eurostat, [Population density by NUTS 3 region](#).

<sup>38</sup> Ana Paya Perez, Natalia Rodriguez Eugenio (2018), Status of local soil contamination in Europe: Revision of the indicator “Progress in the management Contaminated Sites in Europe”

<sup>39</sup> Panagos, P., Borrelli, P., Poesen, J., Ballabio, C., Lugato, E., Meusburger, K., Montanarella, L., Alewell, C., The new assessment of soil loss by water erosion in Europe, (2015) Environmental Science and Policy, 54, pp. 438-447.

<sup>40</sup> [Directive 2008/56/EC](#)

report their programme of measures to the Commission by 31 March 2016. The Commission assessed whether Bulgarian measures were appropriate to reach good environmental status (GES)<sup>41</sup>.

Bulgaria's measures partially address most pressures on its marine environment and associated relevant activities, which shows they have been designed in line with their latest GES and target definitions and in line with pressures felt at regional level, but with a few gaps (e.g. physical loss and damage caused by port operations, land claim and coastal defence). Bulgaria did not report a clear timeline for achieving GES; it frequently refers to a general lack of knowledge of the state of the marine environment and reported that it cannot estimate if GES is expected to be achieved by 2020, because of knowledge gaps. Overall, the Bulgarian programme of measures partially addresses the requirements of the Marine Strategy Framework Directive.



### 2019 priority actions

- Define GES and targets where these do not exist and determine timelines for achieving them.
- Provide more information about measures to achieve GES, establish more that have a direct impact on pressures and quantify the expected reduction of pressure as a result.
- Ensure regional cooperation, where practical and appropriate, to address predominant pressures in the Black sea region.
- Ensure reporting of the different elements under the Marine Strategy Framework Directive by the set deadline.

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<sup>41</sup> [COM\(2018\) 562](#) and [SWD\(2018\) 393](#).

### 3. Ensuring citizens' health and quality of life

#### Air quality

EU clean air policy and legislation require the significant improvement of air quality in the EU, moving the EU closer to the quality recommended by the World Health Organisation. Air pollution and its impacts on human health, ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with EU air quality legislation and defining strategic targets and actions beyond 2020.

The EU has developed a comprehensive body of air quality legislation<sup>42</sup>, which establishes health-based standards and objectives for a number of air pollutants.

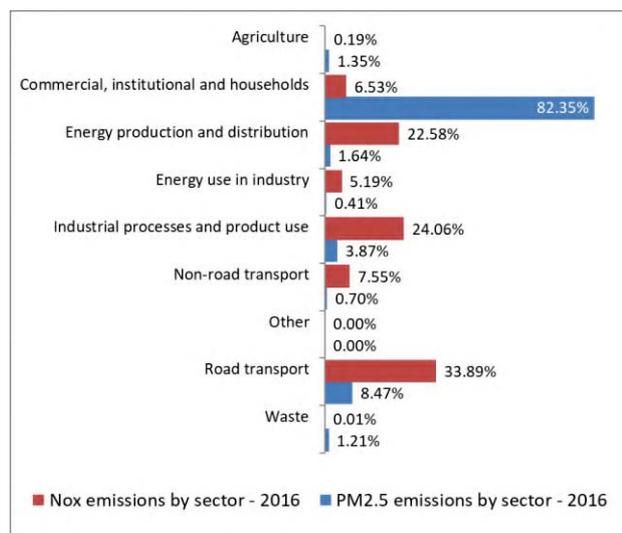
The emissions of several air pollutants have decreased significantly in Bulgaria<sup>43</sup>. The emission reductions between 1990 and 2014, mentioned in the previous EIR, continued between 2014-2016. Emissions of sulphur oxides (SO<sub>x</sub>) fell by 44.34 % and emissions of nitrogen oxides (NO<sub>x</sub>) by 5.16 %. Meanwhile, emissions of volatile organic compounds (NMVOCs) increased by 2.22 %, emissions of ammonia (NH<sub>3</sub>) by 1.78 % and emissions of fine particulate matter (PM<sub>2.5</sub>) by 2.41 % between 2014 and 2016 (see also Figure 13 on total PM<sub>2.5</sub> and NO<sub>x</sub> emissions per sector).

Despite the reduction in emissions, additional efforts are needed to meet the emission reduction commitments (compared to 2005 emission levels) set by the new National Emissions Ceilings Directive<sup>44</sup> for the period 2020 to 2029 and for any year from 2030.

Air quality in Bulgaria continues to give cause for serious concern. For 2015, the European Environment Agency estimated that about 14 200 premature deaths were attributable to fine particulate matter<sup>45</sup> concentrations, 350 to ozone<sup>46</sup> concentrations and 640 to nitrogen dioxide<sup>47</sup> concentrations<sup>48</sup>. The main sources of air

pollution with particular matter (dust) are domestic heating sector using solid fuels, and transport. The old road transport fleet elevates the risk of exceeding nitrogen oxides (NO<sub>x</sub>) emissions. Bulgaria has not yet implemented any structural measures to address air pollution and to align the air quality objectives with key specific sectoral policies (e.g. climate, energy, transport).

**Figure 13: PM<sub>2.5</sub> and NO<sub>x</sub> emissions by sector in Bulgaria<sup>49</sup>**



Bulgaria did not provide data for the years 2015 and 2016 of sufficient quality to allow meaningful analysis of attainment of environmental objectives. For 2017, exceedances related to the annual limit value for nitrogen dioxide (NO<sub>2</sub>) in 1 (out of 6) air quality zones (Plovdiv). Exceedances have also been registered related to particulate matter (PM<sub>10</sub>) in 5 (out of 6) air quality zones (including Plovdiv, Burgas, and Sofia), and related to fine particulate matter (PM<sub>2.5</sub>) in 3 (out of 6) air quality zones (Plovdiv, Sofia, and Ruse). For sulphur dioxide (SO<sub>2</sub>) exceedances have been reported for two air quality zones. Furthermore, the target values regarding ozone and benzo(a)pyrene concentrations are not being met in some instances. See also Figure 14 on the number of air quality zones where limits for NO<sub>2</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub> were exceeded.

According to the European Court of Auditors (ECA)<sup>50</sup>, EU action to protect human health from air pollution has not delivered its expected impact. There is a risk that air pollution is being underestimated in some instances

report as regards the underpinning methodology).

<sup>49</sup> 2016 NECD data submitted by Member State to the EEA.

<sup>50</sup> European Court of Auditors, Special report no 23/2018, [Air pollution: Our health still insufficiently protected](#), p.41.

<sup>42</sup> European Commission, 2016. [Air Quality Standards](#)

<sup>43</sup> See [EIONET Central Data Repository](#) and [Air pollutant emissions data viewer \(NEC Directive\)](#)

<sup>44</sup> [Directive 2016/2284/EU](#)

<sup>45</sup> Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM<sub>10</sub> (PM<sub>2.5</sub>) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many anthropogenic sources, including combustion.

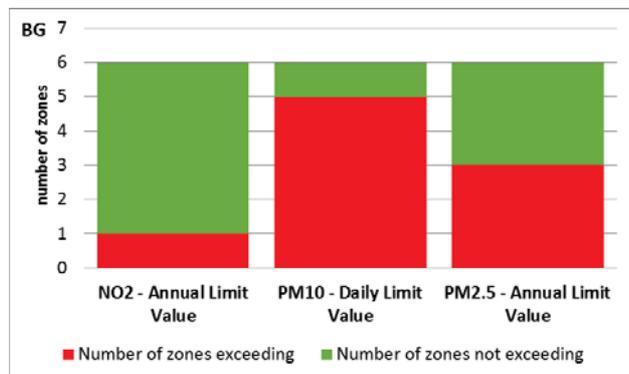
<sup>46</sup> Low-level ozone is produced by photochemical action on pollution.

<sup>47</sup> NO<sub>x</sub> is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NO<sub>x</sub> is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO<sub>2</sub>).

<sup>48</sup> [Air Quality in Europe – 2018 Report, p.64](#). Please see details in this

because it may not always be monitored in the right places. Member States are now required to report both real-time and validated air quality data to the Commission<sup>51</sup>. In the case of Bulgaria, this reporting has unfortunately been delayed in recent years.

**Figure 14: Air quality zones exceeding EU air quality standards in 2017<sup>52</sup>**



The persistent breaches of air quality requirements (for PM<sub>10</sub> and SO<sub>2</sub>), which have severe negative effects on health and the environment, are being followed up by the European Commission through infringement procedures covering all the Member States concerned, including Bulgaria. As regards PM<sub>10</sub> exceedance, the Commission referred Bulgaria to the European Court of Justice, which ruled on the matter in *Case C-488/15*, confirming the Commission’s position. The aim is to have adequate measures put in place to bring all zones into compliance.



## 2019 priority actions

- Take action to reduce the main emission sources, in the context of the forthcoming National Air Pollution Control Programme (NAPCP).
- Accelerate the reduction of nitrogen oxide (NO<sub>x</sub>) emissions and nitrogen dioxide (NO<sub>2</sub>) concentrations. This will require, for example, further reductions in transport emissions — particularly in urban areas (and may require proportionate and targeted urban vehicle access restrictions) and/or fiscal incentives.
- Accelerate reductions in particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) emission and concentration; this will require, for example, further reductions in emissions from heat generation and energy production using solid fuels, or the promotion of efficient and clean district heating.
- Upgrade and improve the air quality monitoring network, and ensure timely reporting of air quality data.
- Build on the “Coal regions in transition” initiative to reduce the use of coal for domestic heating in order to limit air pollutants emissions.

## Industrial emissions

The main objectives of EU policy on industrial emissions are to:

- protect air, water and soil;
- prevent and manage waste;
- improve energy and resource efficiency; and
- clean up contaminated sites.

To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the Industrial Emissions Directive<sup>53</sup> (IED).

The below overview of industrial activities regulated by the IED is based on the ‘industrial emissions policy country profiles’ project<sup>54</sup>.

In Bulgaria, around 475 industrial installations are required to have a permit based on the IED<sup>55</sup>. Industrial sectors in Bulgaria with the most IED installations in 2015 are ‘other activities’ (30 %, mainly food and drink production, intensive rearing of poultry or pigs, pulp and paper production and textiles) and waste management (21 %), followed by the chemical industry (18 %, mostly pharmaceutical products) (see Figure 15).

<sup>51</sup>Article 5 of [Commission Implementing Decision 2011/850/EU](#) of 12 December 2011 laying down rules for [Directives 2004/107/EC](#) and [2008/50/EC](#) of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality (OJ L 335, 17.12.2011, p. 86) requires Member States to provide up-to-date data.

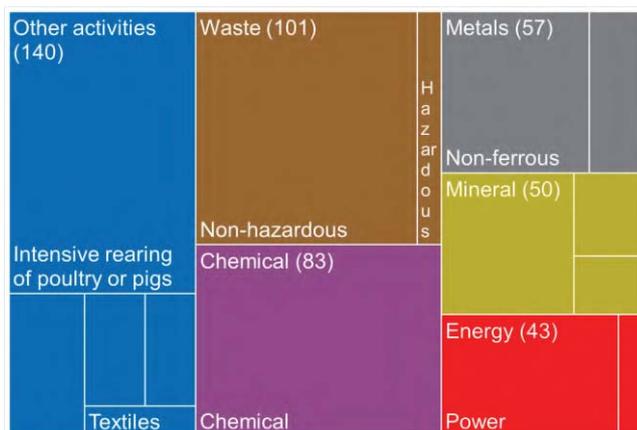
<sup>52</sup> EEA, EIONET Central Data Repository. Data reflects the reporting situation as of 26 November 2018.

<sup>53</sup> [Directive 2010/75/EU](#) covers industrial activities carried out above certain thresholds. It covers energy industry, metal production, mineral and chemical industry and waste management, as well as a wide range of industrial and agricultural sectors (e.g. intensive rearing of pig and poultry, pulp and paper production, painting and cleaning).

<sup>54</sup> European Commission, [Industrial emissions policy country profile – Bulgaria](#).

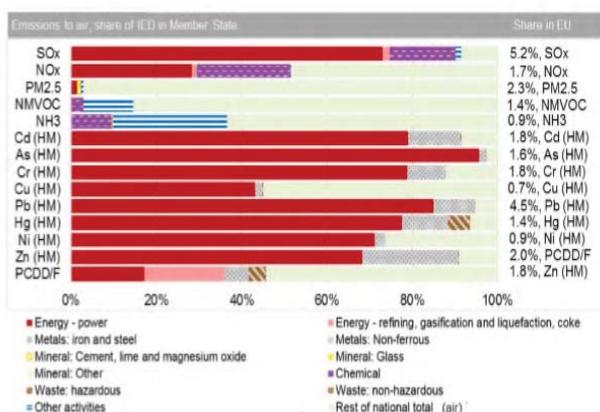
<sup>55</sup>This overview of industrial activities regulated by IED is based on the project on industrial emissions policy [country profiles](#).

**Figure 15: Number of IED industrial installations by sector in Bulgaria (2015)<sup>56</sup>**



The sectors contributing most to air emissions are: energy / the power sector, for sulphur oxides (SOx), nitrogen oxides (NOx), cadmium (Cd), arsenic (As), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni) and zinc (Zn); ‘other activities’ (mostly intensive rearing of poultry or pigs and surface treatment), for non-methane volatile organic compounds (NMVOC) and ammonia (NH3); chemicals, for sulphur oxides (SOx) and nitrogen oxides (NOx); iron and steel, for cadmium (Cd), mercury (Hg) and zinc (Zn); and energy refining, for polychlorinated dibenzodioxins and polychlorinated dibenzofurans (PCDD/F). The breakdown is shown in the following graph.

**Figure 16: Emissions to air from IED sectors and all other national total air emissions in Bulgaria (2015)**



Regarding water emissions, the sectors energy/power, chemicals, metals and ‘other activities’ are more significant than other sectors. The metals sector is most significant in the generation of hazardous waste (even after the reported closure of one of the main metal

installations in 2008), while energy/power is most significant for non-hazardous waste.

The enforcement approach under the IED gives citizens substantial rights to obtain relevant information and to participate in the permitting process for IED installations. This empowers NGOs and the general public to ensure that permits are appropriately granted and their conditions respected.

Best available techniques (BAT) reference documents and BAT conclusions are developed through the exchange of information between Member States, industrial associations, NGOs and the Commission. This ensures a good collaboration with stakeholders and better application of the IED’s rules.

Thanks to the national competent authorities’ efforts to apply the legally binding BAT conclusions and associated BAT emission levels in environmental permits, pollution has decreased considerably and continuously in the EU.

For example, by applying the recently adopted BAT emission levels for large combustion plants, emissions of sulphur dioxide will be cut on average by between 25 % and 81 %, nitrogen oxide by between 8 % and 56 %, dust by between 31 % and 78 % and mercury by between 19 % and 71 %. The extent of the reduction depends on the situation in individual plants.

The most significant challenge for Bulgaria is the pressure on the energy/power sector arising from the need to comply with emission limit values laid down in the IED and with the recently adopted implementing rules setting best available techniques (BAT) and associated emission levels for that sector. These implementing rules will need to be applied by mid-August 2021 at the latest.

### 2019 priority actions

- Review permits to comply with new BAT conclusions.
- Strengthen control and enforcement to ensure compliance with BAT conclusions.
- Address the pressure on the power sector arising from the need to comply with emission limit values under the IED and with the recently adopted implementing rules on BAT and associated emission levels for that sector, to be implemented by August 2021.

### Noise

The Environmental Noise Directive<sup>57</sup> provides for a common approach to avoiding, preventing and reducing the harmful effects of exposure to environmental noise.

<sup>56</sup> European Commission, [Industrial emissions policy country profile – Bulgaria](#).

<sup>57</sup> [Directive 2002/49/EC](#).

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU<sup>58</sup>.

Based on a limited set of data<sup>59</sup>, environmental noise causes at least around 700 premature deaths per year in Bulgaria and is responsible for around 2 900 hospital admissions. Noise also disturbs the sleep of some 480 000 people in Bulgaria. Noise mapping for the previous reporting round (reference year 2011) is complete as are the action plans (reference year 2013).

These instruments, adopted after a public consultation had been carried out, should include the measures to keep noise low or reduce it.

### Water quality and management

EU legislation and policy requires that the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) be significantly reduced. Achieving, maintaining or enhancing a good status of water bodies as defined by the Water Framework Directive will ensure that EU citizens benefit from good quality and safe drinking and bathing water. It will further ensure that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

The existing EU water legislation<sup>60</sup> puts in place a protective framework to ensure high standards for all water bodies in the EU and addresses specific pollution sources (for example, from agriculture, urban areas and industrial activities). It also requires that the projected impacts of climate change are integrated into the corresponding planning instruments e.g. flood risk management plans and river basin management plans, including programme of measures which include the actions that Member States plan to take in order to achieve the environmental objectives.

#### Water Framework Directive

Bulgaria has adopted and reported the second generation of river basin management plans under the Water Framework Directive and the European Commission has assessed the status and the development since the adoption of the first river basin

management plans, including suggested actions in the EIR report 2017.

The **most significant pressures on rivers** in Bulgaria are from unknown anthropogenic pressure (23%), point source pressures from urban waste water (22%) and diffuse pollution from agriculture (19%). For **groundwater bodies the most significant pressure** is diffuse pollution from agriculture (50%) and diffuse pollution related to discharges which is not connected to sewerage network (49%).

The most **significant impact on surface water** bodies was nutrient pollution (40%) and organic pollution (25%). For **groundwaters the most significant impacts** was nutrient pollution (27%) and chemical pollution (11%).

There are still significant gaps in the establishment of reference conditions for all water categories and quality elements in Bulgaria and there are still significant gaps in the quality elements monitored (hydromorphological quality elements are for example not monitored in lakes and transitional waters). There have been increases in the number of surveillance and operational sites regarding the ecological status in rivers, transitional and coastal waters, and decreases in the numbers of sites in lakes.

The ecological status/potential is good or better in 46% of all classified river water bodies as illustrated in figure 17. This shows that Bulgaria has a long way to go to achieve the good status/potential objectives set down in the Water Framework Directive.

Overall in Bulgaria in the second RBMP, there has been a net increase in the number of monitoring sites and water bodies monitored for chemical status in all water categories.

Between the first and second river basin management plans there was progress with the development of a range of common national methodologies and guidance documents regarding monitoring and assessment of chemical status but some issues remain, including the fact that a very large proportion of water bodies has unknown status. There has been a decrease in the proportion of water bodies with good chemical status and increase of water bodies with unknown status. Good chemical status of surface water bodies is not expected to be fully achieved by the end of the third planning cycle.

The monitoring situation of **quantitative status of groundwater bodies** shows overall drawbacks although the situation improved in certain River Basin Districts and the status changes show mixed results, with some improvement and some deterioration. The assessment of groundwater quantitative status has improved.

Groundwater bodies failing good chemical status increased since the first river basin management plan

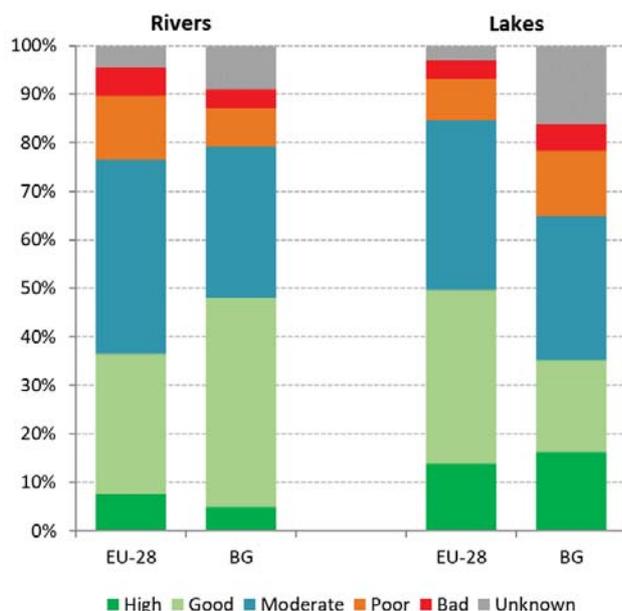
<sup>58</sup> WHO/JRC, 2011, Burden of disease from environmental noise, Fritschi, L., Brown, A.L., Kim, R., Schwela, D., Kephelopoulou, S. (eds), [World Health Organisation, Regional Office for Europe](#), Copenhagen, Denmark.

<sup>59</sup> European Environment Agency, [Noise Fact Sheets 2017](#).

<sup>60</sup> This includes the [Bathing Waters Directive \(2006/7/EC\)](#), the [Urban Waste Water Treatment Directive \(91/271/EEC\)](#) (on discharges of municipal and some industrial wastewaters), the [Drinking Water Directive \(98/83/EC\)](#) (on potable water quality), the [Water Framework Directive \(2000/60/EC\)](#) (on water resources management), the [Nitrates Directive \(91/676/EEC\)](#) and the [Floods Directive \(2007/60/EC\)](#).

from 54 (31%) to 58 (34%). The application of a common national methodology for assessment of the chemical status and the availability of more data for analysis, may have impacted the groundwater bodies classified chemical status.

**Figure 17: Ecological status or potential of surface water bodies in Bulgaria<sup>61</sup>.**



Bulgaria did not ensure that the river basin management plans clearly identify the gap to good status or that the programme of measures is designed and implemented in order to ensure that gap is closed. The use of exemptions is not adequately justified.

A large number of significant pressures have been reported and many seem to be addressed with measures in the programme of measures. There are, however, obstacles to their implementation, including delays. A critical factor for their success is the availability of funding to support the required investments.

#### Drinking Water Directive

As regards drinking water, no new data is available since the last Environmental Implementation Review<sup>62</sup>.

#### Bathing Water Directive

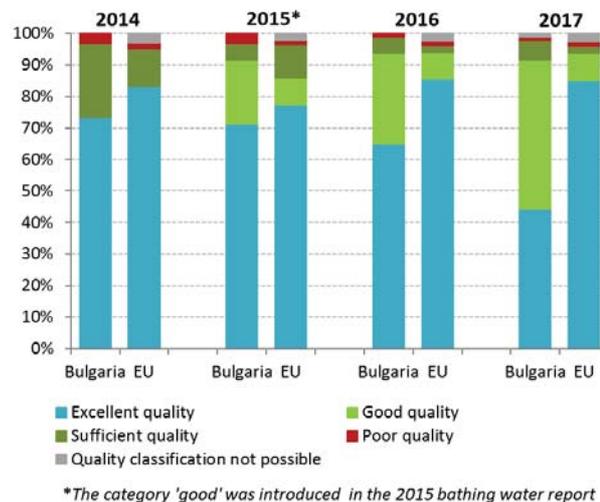
Figure 17 shows that in 2017, out of the 95 Bulgarian bathing waters, 44.2 % were of excellent quality, 47.4 % of good quality and 6.3 % of sufficient quality (64.9 %, 28.7 % and 5.3 % respectively in 2016). In 2017, one

<sup>61</sup> EEA, [WISE dashboard](#).

<sup>62</sup> Compliance with the Drinking Water Directive microbiological and chemical parameters as last reported was very high.

bathing water was of poor quality in Bulgaria<sup>63</sup>. Detailed information on Bulgarian bathing waters is available from a national portal<sup>64</sup> and via an interactive map viewer of the European Environment Agency<sup>65</sup>.

**Figure 18: Bathing water quality 2014-2017<sup>66</sup>**



#### Urban Waste Water Treatment Directive

The Accession Treaty with Bulgaria set the final deadline for reaching compliance with the Urban Waste Water Treatment Directive as the end of 2014. Despite ongoing investment in building necessary infrastructure, mainly supported by the EU Funds, Bulgaria is still having difficulty in complying with the Directive, as shown by collection and treatment rates. Overall in Bulgaria, close to 26 % of waste water is collected, and 20.4 % of the load collected is subject to secondary treatment. 6.7 % of the waste water load collected undergoes more stringent treatment. The Commission started infringement proceedings against Bulgaria in 2017 to address these issues.

The estimated investment needed to ensure adequate collection and treatment of the remaining agglomerations is EUR 2 145 million<sup>67</sup>. According to the latest information provided by Bulgaria, final projects should be finished by 2023, far beyond the 2015 final deadline. Bulgaria should improve its internal management and planning to complete the infrastructure projects for agglomerations in breach of the Directive as soon as possible.

<sup>63</sup> European Environment Agency, 2017. [European bathing water quality in 2016](#), p. 17.

<sup>64</sup> Ministry of Health, [national bathing waters portal](#).

<sup>65</sup> EEA, [State of bathing waters](#).

<sup>66</sup> European Environment Agency, 2018. [European bathing water quality in 2017](#), p. 21.

<sup>67</sup> European Commission, Ninth Report on the Implementation Status and the Programmes for Implementation of the Urban Waste Water Treatment Directive ([COM\(2017\) 749](#)) and Commission Staff Working Document accompanying the report ([SWD\(2017\)445](#)).

## Nitrates Directive

According to the last report on the implementation of the Nitrates Directive, for 2012-2015, groundwater quality is very slightly worse than in the previous reporting period. The percentage of stations reaching or exceeding 40 or 50 mg nitrate per litre rose from 26.1 % to 26.8 % and from 18.1 % to 18.7 % respectively. For nitrate concentrations in surface water, the situation is fairly stable and there were some improvements in terms of the reduction of eutrophication of surface water.

Bulgaria adopted a new action programme in 2017. It is important that the measures adopted are implemented appropriately and properly enforced in order to reach the water quality objectives.

## Floods Directive

The Floods Directive established a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences associated with significant floods.

Bulgaria has adopted and reported its first Flood Risk Management Plans under the Directive and the European Commission conducted an assessment.

The Commission's assessment found that good efforts were made with positive results in setting objectives and devising measures focusing on prevention, protection and preparedness. The assessment also showed that, as was the case for other Member States, Bulgaria's Flood Risk Management Plans do not yet include an, as complete as possible, estimation of the cost of measures with identification of specific sources of funding. In addition, there is scope for expanding the use of cost-benefit analysis for the prioritisation of measures that lend themselves to this.

## 2019 priority actions

- Improve monitoring capacities with a view to lower dependence on expert judgment for assessing the ecological status/potential of water bodies in accordance with the Water Framework Directive.
- Ensure that projects, which potentially can affect the status of water bodies, are thoroughly assessed and justified in line with the requirements in the Water Framework Directive (Article 4(7)).
- Step up efforts to address compliance gap with the Urban Waste Water Treatment Directive.
- Take steps to clarify the method for selecting measures, including the use of cost/benefit analysis in relation to the Flood Risk Management Plans.

## Chemicals

The EU seeks to ensure that by 2020 chemicals are produced and used in ways that minimise any significant adverse effects on human health and the environment. An EU strategy for a non-toxic environment that is conducive to innovation and to developing sustainable substitutes, including non-chemical options, is being prepared.

The EU's chemicals legislation<sup>68</sup> provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

In 2016, the European Chemicals Agency (ECHA) published a report on REACH and the CLP<sup>69</sup> Regulation that showed that enforcement activities are still evolving. Member States cooperate closely within the Forum for Exchange of Information on Enforcement<sup>70</sup>. This cooperation has shown that there is scope to increase the effectiveness of the enforcement activities, particularly for registration obligations and safety data sheets where the level of non-compliance is still relatively high.

Whilst progress has been made, there is room to further improve and harmonise enforcement activities across the EU, including controls on imported goods. Enforcement remains weak in some Member States, particularly for controls on imports and supply chain obligations. The enforcement architecture is complex in most EU countries and enforcement projects reveal differences in compliance between Member States.

A 2015 Commission study emphasised the importance of harmonised market surveillance and enforcement when implementing REACH at Member State level, deeming it to be a critical success factor in the operation of a harmonised single market<sup>71</sup>.

In March 2018, the Commission published an evaluation of REACH<sup>72</sup>. The evaluation concludes that REACH delivers on its objectives, but that progress made is slower than anticipated. In addition, the registration dossiers often are incomplete. The evaluation underlines the need to enhance enforcement by all actors, including

<sup>68</sup> Principally for chemicals: REACH (OJ L 396, 30.12.2006, p.1.); for Classification, Labelling and Packaging, the CLP Regulation (OJ L 252, 31.12.2006, p.1.), together with legislation on biocidal products and plant protection products.

<sup>69</sup> European Chemicals Agency, [Report on the Operation of REACH and CLP 2016](#).

<sup>70</sup> ECHA, On the basis of the projects [REF-1](#), [REF-2](#) and [REF-3](#).

<sup>71</sup> European Commission. (2015). Monitoring the Impacts of REACH on Innovation, Competitiveness and SMEs. Brussels: European Commission.

<sup>72</sup> [COM\(2018\) 116](#).

registrants, downstream users and in particular for importers, to ensure a level playing field, meet the objectives of REACH and ensure consistency with the actions envisaged to improve environmental compliance and governance. Consistent reporting of Member State enforcement activities was considered important in that respect.

In Bulgaria, the Ministry of Environment and Water is the competent authority for REACH. REACH and the CLP Regulation are implemented through the Law on protection from the harmful impact of chemical substances and mixtures. The law allocates responsibility for REACH and CLP enforcement to a number of enforcing authorities. It requires other competent authorities to cooperate and share information with the bodies responsible for REACH and CLP enforcement and specifies the need for coordinated and harmonised enforcement by the means of joint inspections and common enforcement guidelines, among other measures. The Law also lays down offences and penalties for contravention of REACH and CLP requirements<sup>73</sup>.

Cooperation between the Ministry of Environment and Water, the Ministry of Economy and the Executive Agency 'General Labour Inspectorate' is ensured through the Standing Committee for implementation of REACH. The Ministry of Environment and Water organises annual workshops for training and exchange of information between the competent authority and the enforcement authorities. Awareness-raising activities have been carried out via articles in newspapers, information seminars, a website and social media<sup>74</sup>.

### Making cities more sustainable

EU policy on the urban environment encourages cities to put policies in place for sustainable urban planning and design. These should include innovative approaches to urban public transport and mobility, sustainable buildings, energy efficiency and urban biodiversity conservation.

Europe can be seen as a union of cities and towns. Around 75 % of the EU population live in urban areas<sup>75</sup> and this figure is projected to rise to just over 80% by 2050<sup>76</sup>. Urban areas pose particular challenges for the environment and human health, but they also provide opportunities for using resources more efficiently. The EU encourages municipalities to become greener through

initiatives such as the Green Capital Award<sup>77</sup>, the Green Leaf Award<sup>78</sup> and the Green City Tool<sup>79</sup>.

### Financing greener cities

Bulgaria has assigned almost EUR 724.3 million, or almost 20 % of its allocation under the European Regional Development Fund (ERDF), to sustainable urban development<sup>80</sup>. It is also part of the European Urban Development Network<sup>81</sup>.

### Participation in EU urban initiatives and networks

Though not as leading partners, Bulgarian municipalities are generally involved in EU initiatives on environmental protection and climate change.

Four municipalities (Burgas, Smolyan, Sofia and Varna) are involved in the URBACT initiative to support sustainable urban development, through six of its 15 different thematic networks<sup>82</sup>.

Several Horizon 2020 network projects have also contributed to the sustainability of Bulgarian cities. CIVITAS includes seven municipalities representing Bulgaria in a common effort to achieve cleaner and better transport in cities<sup>83</sup>. Yugozapaden Region is part of the Mild Home initiative, where partners from seven countries have joined forces to develop workable plans for energy efficient homes and an eco-village concept that can cater for the needs of medium- and low-income families<sup>84</sup>. Sofia (Oborishte) is one of the three STACCATO project European capital districts to demonstrate sustainable energy concepts in existing, representative, residential areas<sup>85</sup>.

Twenty-five Bulgarian cities are involved with the EU Covenant of Mayors. As of July 2018, Assenovgrad, Burgas, Dobrich and Gabrovo had already implemented their action plans and their results were being monitored. The other 21 cities have presented their climate action plans and commitments<sup>86</sup>.

These urban initiatives and networks should be welcomed and encouraged, as they contribute to a better urban environment. In 2017, 19.2 % of Bulgarian population living in cities considered their residential

<sup>73</sup> ECHA, [National Inspectorates – Bulgaria](#).

<sup>74</sup> European Commission, [Member States Reporting under REACH art. 117 / CLP art.46](#)

<sup>75</sup> European Commission, [Urban Europe](#), 2016.

<sup>76</sup> European Commission, Eurostat, [Urban Europe](#), 2016, p.9.

<sup>77</sup> European Commission, [European Green Capital](#)

<sup>78</sup> European Commission, [European Green Leaf Award](#)

<sup>79</sup> European Commission, [Green City Tool](#)

<sup>80</sup> EU Structural Funds — Single Information Web Portal, [Partnership Agreement 2014-2020](#), 2014, p. 150.

<sup>81</sup> European Commission, [The Urban Development Network](#).

<sup>82</sup> URBACT, [Associated Networks by country](#).

<sup>83</sup> European Commission, [Horizon 2020 Civitas Project](#).

<sup>84</sup> European Commission, [Mild Home: Building affordable, energy efficient homes and villages](#)

<sup>85</sup> [EU Smart Cities Information System](#).

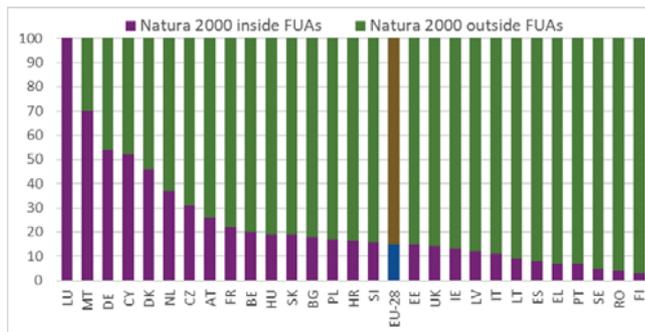
<sup>86</sup> Covenant of Mayors for Climate and Energy, [Country signatories](#).

area to be affected by pollution, grime or other environmental problems, down from 20.3 % in 2016<sup>87</sup>.

### Nature and cities

In Bulgaria, 18 % of the Natura 2000 network is to be found within functional urban areas<sup>88</sup>. This is slightly above the EU average of 15 % (see Figure 18).

**Figure 19: Proportion of Natura 2000 network in Functional Urban Areas (FUA)** <sup>89</sup>



To ensure integrity of the Natura 2000 sites, the law on Biodiversity sets out particular requirements for spatial development plans, regional plans for the development of wooded areas, forestry plans and programmes and the national and regional programmes drafted according to procedures established by other acts. They must include measures and activities to conserve features of the landscape which are essential for the migration, dispersal and genetic exchange of plant and animal populations and species — either because the areas are linear and continuous, or because they act as stepping stones. Public awareness of the opportunities offered by Natura 2000 is still not sufficient. More effort is needed to inform people about ways of effectively cohabiting with natural habitats, species and their habitats without negatively affecting their status.

There are, however, positive examples which should be acknowledged.

Karlovo is one of the cities participating in the EnRoute project (Enhancing Resilience of Urban Ecosystems through Green Infrastructure) as part of MAES, which ran from 2017 until 2018. The project aimed to introduce the MAES approach into the local policy arena, with a view to contributing to further deployment of green infrastructure in cities and in urban contexts.

The city of Burgas participates in the Horizon 2020 project COproductionN with Nature for City Transitioning, INnovation and Governance (CONNECTING) which aims to co-develop the policy and practices necessary to scale

<sup>87</sup> European Commission, Eurostat, [Pollution, grime or other environmental problems by degree of urbanisation](#).

<sup>88</sup> European Commission, [Definition of Functional Urban Areas](#).

<sup>89</sup> European Commission, [the 7<sup>th</sup> Report on Economic, Social and Territorial Cohesion](#), 2017, p. 121.

up urban resilience, innovation and governance via nature-based solutions. An open innovation ecosystem approach bringing together city governments, SMEs, academia and civic society is used to co-produce usable and actionable knowledge.

### Urban sprawl

Bulgaria had a weighted urban proliferation rate, at 0.98 UPU/m<sup>2</sup> <sup>90</sup> in 2009 compared to a European average (EU-28+4) of 1.64 UPU/m<sup>2</sup> <sup>91</sup>.

### Traffic congestion and urban mobility

The number of passenger cars in Bulgaria has increased, to 3.1 million in 2016. The ratio of passenger cars per 1000 habitants increased from 418 in 2014 to 443 in 2016.

This increase is translated into more hours spent annually in road congestion, from 30.4 in 2014 to 31.9 in 2016. Bulgaria has the seventh-highest figures in the EU<sup>92</sup>.

With a congestion level of 29 %, in comparison with other cities with population over 800 thousand, Sofia is the 24<sup>th</sup> most congested city in geographical Europe (out of 43 large cities on the list) and 83<sup>rd</sup> in the world (out of 182)<sup>93</sup>.



Bulgaria records a high usage of passenger cars and in 2015, car trips represented almost 80 % of the passenger-kilometres travelled, which is just below the EU-28 average. Bulgaria has, however, much higher usage of buses and coaches than the EU-28 average — 17.5 % against the EU-28's 9.4 %. On the other hand, Bulgaria's use of rail is much lower (2.2 % vs 7.6 %)<sup>94</sup>.

<sup>90</sup> Urban Permeation Units measure the size of the built-up area as well as its degree of dispersion throughout the region.

<sup>91</sup> EEA, [Urban Sprawl in Europe, Annex I](#), 2014, pp.4-5.

<sup>92</sup> European Commission, [Hours spent in road congestion annually](#).

<sup>93</sup> [TOMTOM TRAFFIC INDEX](#)

<sup>94</sup> European Commission, [Transport in the EU trends](#), 2018.

### Urban air quality

Of the main challenges observed in this report, air quality — to an extent related to traffic congestion — requires special priority both at central and local level.

Transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. Transport emissions in Bulgaria increased by 10 % from 2012 to 2016<sup>95</sup>.

In 2016, 87 % of Bulgaria's urban population was exposed to PM<sub>10</sub> concentrations above the EU standards. That is 9 percentage points higher than the 2015 figure of 78 % and 10 percentage points less than the 2014 figure of 97 %.<sup>96</sup>

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<sup>95</sup> European Environment Agency, [Greenhouse gas data viewer](#).

<sup>96</sup> [Bulgaria – air pollution country fact sheet 2018](#).

## Part II: Enabling framework: implementation tools

### 4. Green taxation, green public procurement, environmental funding and investments

#### Green taxation and environmentally harmful subsidies

Financial incentives, taxation and other economic instruments are effective and efficient ways to meet environmental policy objectives. The circular economy action plan encourages their use. Environmentally harmful subsidies are monitored in the context of the European Semester and the energy union governance process.

Bulgaria's revenue from environment-related taxes remains slightly higher than the EU average. Environmental taxes accounted for 2.68 % of GDP in 2017 (EU-28 average: 2.4 %) (see Figure 19), and energy taxes for 2.31 % of GDP (EU-28 average 1.84 %) <sup>97</sup>. In the same year, environmental tax revenues accounted for 9.07 % of total revenues from taxes and social security contributions (EU-28 average: 5.97 %).

Revenue from labour tax makes up a low proportion of total tax revenues in Bulgaria: at 34 %, it was the lowest in the EU in 2016, while the implicit tax burden on labour was 23.5 % (only higher than Malta) <sup>98</sup>. Consumption taxes remained relatively high (the highest in the EU, at 51.3 %) measured by their share of total taxation: indirect taxation accounts for the main part of the fiscal system.

Nevertheless, the 2018 European Semester report on Bulgaria picked up on the situation of environmental taxation on transport fuels <sup>99</sup>. Although they form a larger part of tax revenue than in other Member States, tax rates on the main motor fuels (petrol and diesel) are just above the minimum EU level and have not been increased since 2011 for petrol or since 2013 for diesel. On the other hand, some progress has been made on reducing the 'diesel differential' (the difference in the price of diesel versus petrol) since 2005 <sup>100</sup>. In 2016, diesel was still taxed at a lower rate than gasoline (0.33 euro/litre against 0.363 euro/litre) <sup>101</sup>.

<sup>97</sup> Eurostat, Environmental tax revenues, 2018.

<sup>98</sup> European Commission, [Taxation Trends Report](#), 2017.

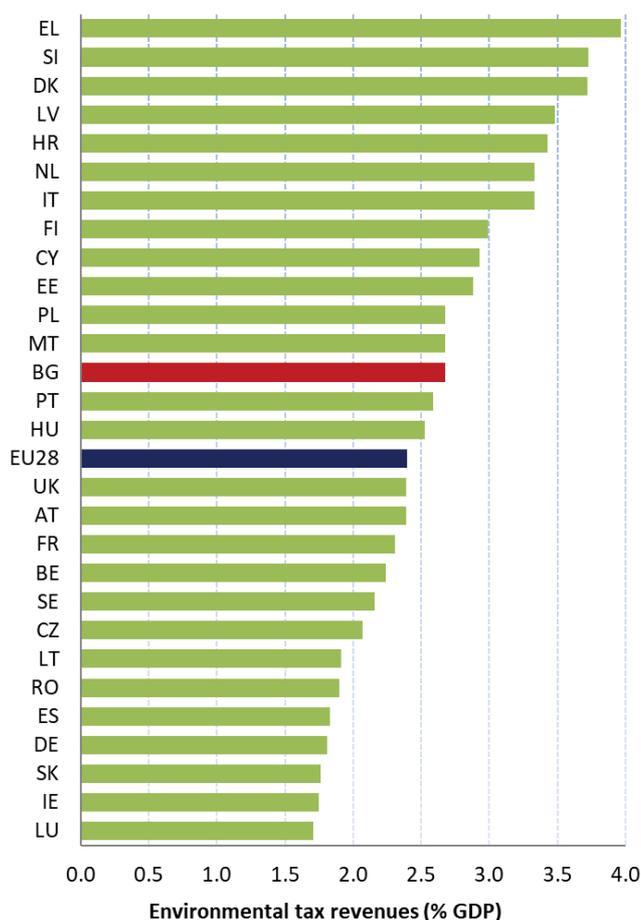
<sup>99</sup> European Commission, [European Semester: Country Report Bulgaria 2018](#), p. 21.

<sup>100</sup> European Environment Agency 2016, [Environmental taxation and EU environmental policies](#), p. 27.

<sup>101</sup> European Environment Agency 2016, [Environmental taxation and EU environmental policies](#), p. 28.

In 2015, fossil fuel subsidies stayed among the highest in the EU, mainly due to public support for coal. Post-tax subsidies (which include not only price-gap subsidies but also the negative externalities associated with the use of fossil fuels, such as local air pollution, faster climate change and congestion) added up to EUR 18 billion in 2015 <sup>102</sup>.

**Figure 20: Environmental tax revenues as % of GDP (2017)** <sup>103</sup>



By amendments to the Law on Local Taxes and Fees, in November 2018, Bulgaria introduced an 'ecological component' to the formula for calculation of the vehicle tax. Though it is still for the local authorities to decide on the precise value of this component, the law gives

<sup>102</sup> European Parliament and IMF, Fossil Fuel Subsidies, 2017, pp. 10-11.

<sup>103</sup> Eurostat, [Environmental tax revenues, 2018](#).

margins of variation for each ecological category<sup>104</sup>. Electric vehicles are exempted from vehicle tax.

In 2016 the National Trust Ecofund started a pilot scheme encouraging the use of electric and plug-in hybrid vehicles in the public administration. The scheme is in the framework of the ongoing Investment Climate Program.

The central administration, its territorial units and municipal administrations are eligible for funding. Each of them can apply for funding for a maximum of three vehicles.

There are no CO<sub>2</sub>-based motor vehicle taxes<sup>105</sup> and incentives to purchase cars with lower CO<sub>2</sub> emissions were rare in 2016. There were some incentives to use them, linked to annual circulation taxes, road tolls, and congestion or low emission zone charges, but none related to their acquisition or the use of public infrastructure<sup>106</sup>.

On the bright side, renewable energy's share of energy consumption in the transport sector, which was very low in the past, has increased considerably in recent years. In 2015, it was almost at the EU average<sup>107</sup>. The main support scheme for renewable energy sources used in transport is a quota system. This scheme obliges companies importing or producing petrol or diesel to ensure that biofuels make up a defined percentage of their annual fuel sales. Biofuels are also supported through a fiscal regulation mechanism.

The use of alternative and clean fuels in new passenger cars sold in Bulgaria remained one of the lowest in the EU in the past few years, with a market share of only 0.04 % in 2016. Despite the intention to promote the use of alternative fuels<sup>108</sup>, the number of electric charging points is the second lowest in the EU-28, with only 1.7 charging points per 100 000 inhabitants in peri-urban areas in 2017. This means there are only 22 publicly accessible charging points in Bulgaria<sup>109</sup>.

Bulgaria has had water abstraction charges since 2001<sup>110</sup>. The price charged for amounts and sources of water abstraction have changed since then. The revenue from the charges is collected by the Enterprise for Management of Environmental Protection Activities

<sup>104</sup> Bulgarian law gives highest values of the ecological component for vehicles without categorisation and vehicles of 'Euro 1' and 'Euro 2' categories, and lowest values for vehicles of category 'Euro 6' and 'EEV'.

<sup>105</sup> European Automobile Manufacturers Association, [Co2 based motor vehicle taxes in the EU](#).

<sup>106</sup> EEA, [Appropriate taxes and incentives do affect purchases of new cars](#).

<sup>107</sup> Eurostat, [Share of transport fuel from renewable energy sources](#).

<sup>108</sup> Tax exemption for vehicles with electric engines since 2018.

<sup>109</sup> European Commission, [Transport in the European Union](#), 2018, p. 31.

<sup>110</sup> Sharkov, A.: [Water abstraction charges in Bulgaria](#), The Institute for European Environmental Policy.

(EMEPA) and is then redistributed to environmental projects and initiatives.

### Green public procurement

The EU green public procurement policies encourage Member States to take further steps to apply green procurement criteria to at least 50 % of public tenders. The European Commission is helping to increase the use of public procurement as a strategic tool to support environmental protection.

The purchasing power of public procurement amounts to around EUR 1.8 trillion in the EU (approximately 14% of EU GDP). A substantial proportion of this money goes to sectors with a high environmental impact such as construction or transport. Therefore, green public procurement (GPP) can help to significantly lower the negative impact of public spending on the environment and can help support sustainable innovative businesses. The Commission has proposed EU GPP criteria<sup>111</sup>.

The National Strategy for Development of the Public Procurement Sector defines the strategic framework of the state policy in the field for the period 2014–2020 and includes a measure to promote GPP. The national strategy is implemented through the National Action Plan to promote green public procurement for the period 2014–2020. The latter inter alia previews the elaboration of practical handbook on GPP aimed at facilitating such procurement in Bulgaria. This measure is implemented by the ongoing project "Methodological Support for the Development of Green Public Procurement in Bulgaria" funded under the Bulgarian-Swiss cooperation programme. Moreover, general and specific methodological guidelines are issued on an ongoing basis.

Some mandatory rules on GPP use have been drawn up. They cover energy efficiency requirements for awarding public contracts for the supply of products; energy consumption, according to EU energy labelling legislation e.g. for office equipment and tyres, and eco-design. The rules are set out in the Energy Efficiency Act. Guidelines are available on how the energy efficiency and energy savings requirements apply to procuring equipment and vehicles, and to purchasing and/or renting buildings with high energy efficiency rates. These were drawn up and adopted jointly by the Sustainable Energy Development Agency and the Public Procurement Agency. Environmental performance requirements for the supply

<sup>111</sup> In the Communication 'Public procurement for a better environment' ([COM\(2008\) 400](#)) the Commission recommended the creation of a process for setting common GPP criteria. The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

of vehicles, in line with Directive 2009/33/EC on the promotion of clean and energy-efficient road transport vehicles, have also been published. The rules are set out in the Public Procurement Act and the ordinance defining the methodology for calculating certain costs for the vehicle's life cycle<sup>112</sup>.

Bulgaria is aiming to step up the use of green public procurement criteria in funding from national and EU sources. Therefore, under the Climate Investment Programme of the national trust Ecofund, when selecting a supplier it requires EU GPP criteria to be met for costs to qualify as eligible<sup>113</sup>.

It has also approved Guidelines for Integration of the Environmental and Climate Change Policies in European Structural and Investment Funds (ESIF). The Guidelines set general and specific criteria for evaluating project proposals relevant to specific environmental policies. A specific criterion requiring the inclusion of GPP is included.<sup>114</sup>

Monitoring is carried out on the basis of statistical data from the national procurement register (PPR). The electronic register for public procurement kept by the Public Procurement Agency allows enquiries to be made concerning GPP for specific product groups<sup>115</sup>.

A European Parliament study shows that Bulgaria has partially implemented the GPP national action plan<sup>116</sup>.

### Environmental funding and investments

European Structural and Investment Fund (ESIF) rules oblige Member States to promote environment and climate in their funding strategies and programmes for economic, social and territorial cohesion, rural development and maritime policy.

Achieving sustainability involves mobilising public and private financing sources<sup>117</sup>. Use of the European Structural and Investment Funds (ESIFs)<sup>118</sup> is essential if countries are to achieve their environmental goals and integrate these into other policy areas. Other

instruments such as Horizon 2020, the LIFE programme<sup>119</sup> and the European Fund for Strategic Investments (EFSI)<sup>120</sup> may also support the implementation and spread of good practices.

### European Structural and Investment Funds 2014-2020

Through 10 national programmes, Bulgaria has been allocated EUR 9.88 billion from the ESIF for 2014-2020. With a national contribution of EUR 1.86 billion, Bulgaria has a total budget of EUR 11.73 billion to be invested in various areas, from creating jobs and growth to providing an innovation-friendly business environment, advancing social inclusion and protecting the environment<sup>121</sup>.

### Cohesion policy

For 2014-2020, Bulgaria has been allocated around EUR 7.6 billion (current prices) in total cohesion policy funding, including EUR 2.28 billion under the Cohesion Fund, EUR 3.57 billion from the ERDF, EUR 1.52 billion from the ESF, EUR 165.6 million for European Territorial Cooperation and EUR 55.2 million for the Youth Employment Initiative<sup>122</sup>.

The European funds are key instruments for comprehensive environmental protection in the EU. The investment priorities for 2014-2020 in Bulgaria have been set out in a Partnership Agreement. These include: raising competitiveness and sustainability of the economy; developing sustainable and environmental friendly modes of transport along Trans-European Networks (TEN-T); stimulating integrated urban development in priority areas within selected cities in Bulgaria; improving management of water and other natural resources, including biodiversity and Natura 2000, closing the gap with the acquis and increasing the efficiency of water and waste management as well as strengthening the capacity of public administration and the judiciary and promoting good governance.

The allocation under cohesion policy funds for Operational Programme Environment (OPE) for 2014-2020 is EUR 1.5 billion, which rises to about EUR 1.77 billion with national co-financing<sup>123</sup>. The Cohesion Fund is supporting projects in the field of water management, air quality and of floods and landslides risk prevention and management. The ERDF is supporting projects in the fields of waste management, Natura 2000 and biodiversity.

The ERDF is supporting projects to increase waste recycling capacity by 105 000 tonnes/year, to implement

<sup>112</sup> European Commission, 2017. Documentation on National GPP Action Plans.

<sup>113</sup> The National Trust EcoFund, [Investment Climate Programme](#).

<sup>114</sup> The Republic of Bulgaria, [Operational programme environment 2014-2020](#).

<sup>115</sup> European Parliament, 2017, 'Green public procurement and the EU action plan for the circular economy'.

<sup>116</sup> European Parliament, [Green Public Procurement and the Action Plan for the Circular Economy](#), 2017, pp. 79-80.

<sup>117</sup> See, for example, [Action plan on financing sustainable growth \(COM\(2018\) 97\)](#).

<sup>118</sup> i.e. the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF are referred to as the 'cohesion policy funds'.

<sup>119</sup> European Commission, [LIFE programme](#).

<sup>120</sup> European Investment Bank, [European Fund for Strategic Investments, 2016](#).

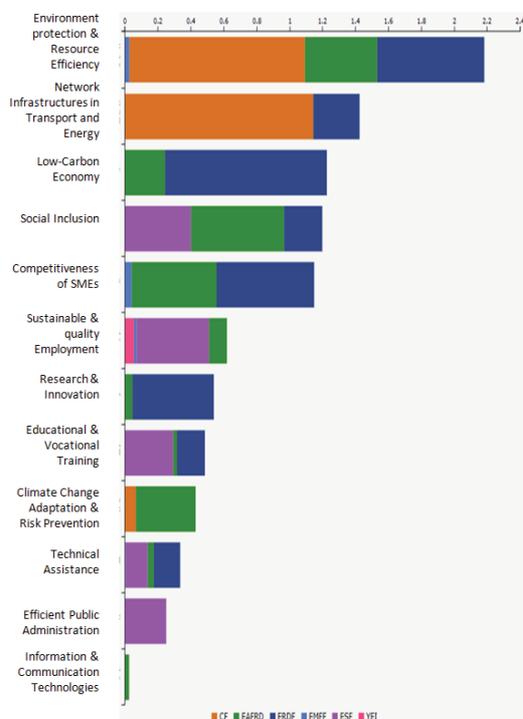
<sup>121</sup> European Commission, [European Structural and Investment Funds \(Country factsheet Bulgaria\)](#), 2017.

<sup>122</sup> European Commission, [Cohesion Policy and Bulgaria](#), 2014.

<sup>123</sup> European Commission, [Operational Programme Environment](#).

flood protection measures benefiting more than 2.75 million people, to increase by 1.5 million the number of people served by improved waste water treatment facilities and to improve water supply for 220 000 people, among many other investments<sup>124</sup>.

**Figure 21: ESIF 2014-2020 — EU allocation by theme, Bulgaria (EUR billion)**<sup>125</sup>



### Rural development

The Bulgarian Rural Development Programme (RDP) outlines the country's priorities for using EUR 2.9 billion funds available for the 7-year period 2014-2020. This funding includes EUR 2.3 billion from the EAFRD, EUR 551 million of national co-funding and EUR 29 million of additional national funding top-ups<sup>126 127</sup>.

The RDP has a solid environmental approach, aiming to convert 46 000 ha to organic farming and to implement agri-environmental measures in other 113 000 ha. Some 840 operations will tackle resource efficiency, climate change and energy efficiency<sup>128</sup>. In fact, 49 % of the RDP funds will be used for these and other environmental

priorities included under the ecosystems management and resource efficiency sections<sup>129</sup>.

One of the EAFRD-RDP projects supports the modernisation of energy infrastructure in rural areas through the introduction of solar street-lighting systems, a project selected as best practice in renewables by the Bulgarian Rural Network<sup>130</sup>.

The two key areas for integrating environmental concerns into the common agricultural policy (CAP) are: (i) using the EAFRD to pay for environmental land management and other environmental measures and (ii) ensuring the CAP's first pillar (the direct payments system) is used effectively with regard to cross-compliance and payments for 'greening'. Bulgaria's direct payments envelope for 2014-2020 is EUR 5.1 billion, 30 % of which is being allocated to greening practices to benefit the environment: crop diversification, maintaining permanent grassland and dedicating 5 % of arable land to environment-friendly measures<sup>131</sup>.

The latest financial data available (relating to 2007-2013) show that the absorption rate of rural development funds in Bulgaria was 89.9 %, lower than the EU average (97.3 %)<sup>132</sup>.

### European Maritime and Fisheries Fund

Bulgaria receives around EUR 113 million in co-financing for fisheries and the maritime sector, with an EU contribution of EUR 88 million<sup>133</sup>. Several projects benefiting the environment have been financed under OP priorities one (sustainable fisheries) and two (sustainable aquaculture). The share for environmental projects is around 54 % — more than EUR 61 million<sup>134</sup>.

The output of organic aquaculture will be increased and unwanted catches will be reduced. Action to reduce the number of old ships will also help to reduce GHG emissions<sup>135</sup>.

### The Connecting Europe Facility

The Connecting Europe Facility (CEF) is a key EU funding instrument developed specifically to direct investment into European transport, energy and digital infrastructure. It aims to address identified missing links and bottlenecks and promote sustainability.

<sup>124</sup> European Commission, [DG REGIO database for Bulgaria](#).

<sup>125</sup> European Commission, [European Structural and Investment Funds Data By Country](#).

<sup>126</sup> European Commission, [Factsheet on 2014-2020 Rural Development Programme for Bulgaria](#), 2017, p. 1.

<sup>127</sup> The European Network for Rural Development, [2014-2020 Rural Development Programme: Key facts & figures \(Bulgaria\)](#), 2016.

<sup>128</sup> European Commission, [Factsheet on 2014-2020 Rural Development Programme for Bulgaria](#), 2017, pp. 2-3.

<sup>129</sup> European Commission, [Factsheet on 2014-2020 Rural Development Programme for Bulgaria](#), 2017, pp. 4-5.

<sup>130</sup> European Network for Rural Development, [Transition to Greener Rural Economies](#), 2018, p. 21.

<sup>131</sup> European Commission, [CAP in your country \(Bulgaria\)](#), p. 2.

<sup>132</sup> [COM/2017/0554](#).

<sup>133</sup> European Commission, [European Maritime and Fisheries Fund in Bulgaria](#), 2015.

<sup>134</sup> European Commission, [European Maritime and Fisheries Fund in Bulgaria](#), 2015, p. 2.

<sup>135</sup> European Commission, [ESIF Data for Bulgaria](#)

By the end of 2017, Bulgaria had signed agreements worth EUR 406 million for projects under the Connecting Europe Facility<sup>136</sup>.

EUR 350 million has been allocated to modernising core network corridors, improving energy efficiency and reducing the emission of pollutants<sup>137</sup>.

### Horizon 2020

Bulgaria has benefited from Horizon 2020 funding since the programme started in 2014. As of January 2019, 174 participants have been granted a maximum amount of EUR 25.8 million for projects from the Societal Challenges work programmes dealing with environmental issues<sup>138 139</sup>.

In addition to the abovementioned work programmes, climate and biodiversity expenditure is present across the entire Horizon 2020. In Bulgaria, projects accepted for funding in all Horizon 2020 working programmes until December 2018 included EUR 35 million destined to climate action (46.2 % of the total Horizon 2020 contribution to the country) and EUR 3.8 million for biodiversity-related actions (5 % of the Horizon 2020 contribution to the country)<sup>140</sup>.

Several projects are achieving success. The C-BIRD project is trying to exchange knowledge and develop cooperative models and focusing on environmental and economic advantages<sup>141</sup>. The TURAS project is transforming stressful urban areas into more sustainable spaces<sup>142</sup>.

### LIFE programme

For 2014-2017, the EU allocated EUR 13 million to Bulgarian projects<sup>143</sup>. The LIFE project 'Birds on power lines' is among these projects, taking action to protect threatened birds by retrofitting hazardous overhead powerlines to make them safer in Natura 2000 sites in West Bulgaria. The EU contribution is around EUR 2 million<sup>144</sup>.

Since 2007, when the LIFE Programme was launched for Bulgaria, a total of 35 projects have been co-financed<sup>145</sup> including a capacity building project focused on widening the access to the LIFE Programme.

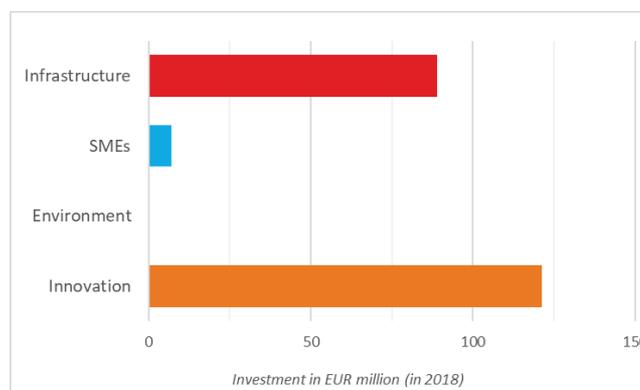
Currently, there are four ongoing projects in Bulgaria under call 2017 that are tackling diverse environmental themes, including Natura 2000, autochthonous species and habitat restoration.

The Conservation and Restoration of 11 Natura 2000 Riparian and Wetland Habitats (Riparian Habitats Project<sup>146</sup>) was selected as one of the Best LIFE-Nature projects in the EU, as were the BulPlanNet project (a pilot network of small protected sites for Plant Species in Bulgaria)<sup>147</sup> and the Vultures' Return project (for the recovery of the populations of large European Vultures)<sup>148</sup>.

### European Investment Bank

EIB loans in Bulgaria amounted to nearly EUR 1.68 billion for 2013-2017<sup>149</sup>. In 2018 alone, the EIB Group<sup>150</sup> loaned Bulgarian businesses and public institutions more than EUR 217 million (see Figure 21). Of this, no money was directly invested in environment-related projects. Nevertheless, other projects are indirectly connected to environmental protection.

Figure 22: EIB loans to Bulgaria in 2018<sup>151</sup>



### European Fund for Strategic Investments

The European Fund for Strategic Investments (EFSI) is an initiative to help overcome the current investment gap in the EU. The EFSI has mobilised more than EUR 419 million in Bulgaria as of January 2019, and the secondary investment triggered by those funds is expected to be more than EUR 1.8 billion<sup>152</sup>.

<sup>136</sup> European Commission, [European Semester Country Report for Bulgaria](#), 2018, p. 16.

<sup>137</sup> European Commission, [CEF Transport in Bulgaria](#), p. 2.

<sup>138</sup> European Commission [own calculations based on CORDA \(Common Research Data Warehouse\)](#). A maximum grant amount is the maximum grant amount decided by the Commission. It normally corresponds to the requested grant, but it may be lower.

<sup>139</sup> i.e. (ii) Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy; (iii) Secure, clean and efficient energy; (iv) Smart, green and integrated transport; and (v) Climate action, environment, resource efficiency and raw materials.

<sup>140</sup> European Commission [own calculations based on CORDA \(Common Research Data Warehouse\)](#).

<sup>141</sup> European Commission, [Supporting EU-wide sustainable rural development](#).

<sup>142</sup> European Commission, [Nature-based solutions for urban dwellers](#).

<sup>143</sup> Commission services based on data provided by EASME.

<sup>144</sup> European Commission, [LIFE Birds](#).

<sup>145</sup> European Commission, [LIFE in Bulgaria, 2017](#).

<sup>146</sup> European Commission, [Riparian Habitats](#).

<sup>147</sup> European Commission, [BulPlanNet](#).

<sup>148</sup> European Commission, [Vultures Return](#).

<sup>149</sup> European Investment Bank, [The EIB in Bulgaria in 2017](#), 2017.

<sup>150</sup> The EIB Group includes EIB and EFSI investments and loans.

<sup>151</sup> EIB, [Bulgaria and the EIB](#).

<sup>152</sup> European Investment Bank, [The EIB in Bulgaria, 2018](#).

### National environmental financing

Bulgaria spent EUR 304.8 million on environmental protection in 2016, a 15 % decrease from 2015<sup>153</sup>. 86 % of these national payments were allocated to waste management activities (EU-average: 49.7 %). EUR 2.8 million was allocated to waste water management (0.9 % of total) and 0.3 % of environmental expenditure was allocated to protecting biodiversity and the landscape (EUR 0.8 million). Between 2012 and 2016, general government funding for environmental protection came to EUR 1.63 billion<sup>154</sup>.

As it has been mentioned several times through the report, one of the main challenges for Bulgaria is to ensure that environmental financing remains at an adequate level. Existent financial gaps in sectors such as waste management, green infrastructure or biodiversity are delaying the correct implementation of EU environmental law and policies. Therefore, ensuring financial resources to reduce the implementation gap should be considered as a priority for the country.

### 2019 priority action

- Mobilise investment, including through EU funds, in waste prevention, separate collection and recycling, as well as addressing air pollution, enhancing biodiversity and green infrastructure.

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<sup>153</sup> Eurostat, [General Government Expenditure by function](#), 2018.

<sup>154</sup> No data is available on the funds used for pollution abatement.

## 5. Strengthening environmental governance

### Information, public participation and access to justice

Citizens can more effectively protect the environment if they can rely on the three ‘pillars’ of the Aarhus Convention:

- (i) access to information;
- (ii) public participation in decision making; and
- (iii) access to justice in environmental matters.

It is of crucial importance to public authorities, the public and business that environmental information is shared efficiently and effectively<sup>155</sup>. Public participation allows authorities to make decisions that take public concerns into account. Access to justice is a set of guarantees that allows citizens and NGOs to use national courts to protect the environment<sup>156</sup>. It includes the right to bring legal challenges (‘legal standing’)<sup>157</sup>.

#### Environmental information

Environmental information is provided via the main portal of the Ministry of Environment and Water and its Executive Environmental Agency. The portal is divided across two main websites: a Ministry website and an Agency website. The content relates to both nationwide and European information on the state of the environment and legislation. The sites hold most of the legal information, reports and multiple links to relevant sites.

Environmental information is provided for the key environmental topics: air, water, soil, biodiversity and waste. Vital information is under Preventive Measures, which covers environmental assessment procedures and related public registers. A number of portals are running or are under development, e.g. on public registries on EIAs, SEA, chemical use by industries, the biodiversity monitoring system and waste.

There is some overlap between the type of information on the Ministry’s main site and on that of the Agency. The latter provides more information about the state of the environment, monitoring data and links to the

<sup>155</sup> The Aarhus Convention, the Access to Environmental Information [Directive 2003/4/EC](#) and the INSPIRE [Directive 2007/2/EC](#) together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on INSPIRE.

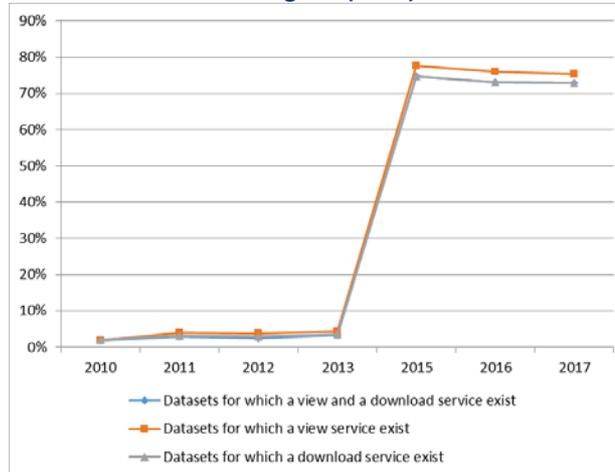
<sup>156</sup> The guarantees are explained in Commission Notice on access to justice in environmental matters, OJL 275, 18.8.2017 and a related Citizen’s Guide.

<sup>157</sup> This EIR looks at how well Member States explain access to justice rights to the public, and at legal standing and other major barriers to bringing cases on nature and air pollution.

Regional Inspectorates for Environment and Water. Searching for general information is easy; searching for specific information takes more time.

Bulgaria’s performance on the implementation of the INSPIRE Directive is lagging. Performance has been reviewed based on its 2016 implementation report<sup>158</sup> and the most recent monitoring data from 2016<sup>159</sup> (Bulgaria was late in providing monitoring results for 2017). Additional efforts are needed to identify and document spatial data, make the data accessible through services and prioritise environmental datasets in implementation, in particular those identified as high-value spatial data sets for the implementation of environmental legislation<sup>160</sup>.

**Figure 23: Access to spatial data through view and download services in Bulgaria (2017)**



#### Public participation

The Aarhus Convention and related European legislation is implemented mainly through the Bulgarian Environmental Protection Act. There are also some sector-specific provisions. The Council of Ministers created a central portal (<http://www.strategy.bg>) to allow adequate participation in the preparation of legislation and policies. The Ministry of Environment and Water also publishes information on plans, programmes and projects. Eurobarometer figures from 2017 show that in Bulgaria, there is quite a high level of agreement (73 % of respondents) that an individual can play a role in protecting the environment. This has fallen since the 2014 Eurobarometer results and the level of confidence is significantly lower than the EU-28 average of 87 %.

<sup>158</sup> INSPIRE BG [country sheet](#) 2017.

<sup>159</sup> INSPIRE [monitoring dashboard](#).

<sup>160</sup> European Commission, [List of high value spatial data sets](#).

## Access to justice

Bulgaria lacks official websites providing the public with practical information on environmental access to justice.

Bulgaria's approach to legal standing is still restrictive and based on direct interest. Bulgarian courts consistently deny standing to citizens and environmental NGOs to contest the content of Air quality plans. The Bulgarian Supreme Administrative Court (SAC) recently recognised the legal standing of other parties in a case concerning the legality of a management plan for the Pirin national park, and referred to the case-law of the Court of Justice. However, it is not clear how significant this precedent will be for other cases.

A recent amendment of the Administrative Procedural Code, entering into force on 1 January 2019, significantly increases the cost of cassation referrals to challenge environmental authorisations<sup>161</sup>, which is likely to create a barrier to access to justice for the appellants at the second instance, and limits court review to one level only for referrals related to change of land use and exploration of underground resources.

## 2019 priority actions

- Improve access to spatial data and services by making stronger linkages between the central INSPIRE website and regional portals, identify and document all spatial datasets required for the implementation of environmental law<sup>162</sup>, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services provided for in the INSPIRE Directive.
- Ensure that there is legal standing for environmental NGOs to bring legal challenges on air pollution and nature.

<sup>161</sup> NGOs and members of the public would have to pay a fee of around EUR 2500 to appeal EIA decisions for with material interest over EUR 5000.

<sup>162</sup> European Commission, [Priority list of data sets for eReporting](#)

## Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste<sup>163</sup>. It includes support measures provided by the authorities, such as:

- (i) compliance promotion<sup>164</sup>;
- (ii) inspections and other checks that they carry out, i.e. compliance monitoring<sup>165</sup>; and
- (iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement<sup>166</sup>.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability<sup>167</sup> ensures that the polluter pays to remedy any damage.

## Compliance promotion and monitoring

Online information to farmers on how to comply with obligations on nitrates and nature is an indicator of how actively authorities promote compliance in areas with serious implementation gaps. The official websites of the relevant Bulgarian authorities lack structured, detailed information for farmers on how to comply with these obligations.

Major industrial installations present serious pollution risks. Public authorities are required to have plans to inspect them and to make individual inspection reports available to the public<sup>168</sup>. The regional offices of the Ministry of Environment and Water (Regional Inspectorates for Environment and Waters, National Parks and River Basin Directorates) publish their plans for monitoring and control activities<sup>169</sup> online, together with the lists of entities subject to monitoring under various relevant laws, including industrial emissions legislation. The Regional Inspectorates for Environment and Water (RIEWs) publish monthly activity reports covering the number of inspections carried out, the number of recommendations provided, and the number of penalties

<sup>163</sup> The concept is explained in detail in the Communication on 'EU actions to improve environmental compliance and governance' [COM\(2018\)10](#) and the related Commission Staff Working Document, [SWD\(2018\)10](#).

<sup>164</sup> This EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

<sup>165</sup> This EIR focuses on inspections of major industrial installations.

<sup>166</sup> This EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime.

<sup>167</sup> [The Environmental Liability Directive 2004/35/EC](#), creates the framework.

<sup>168</sup> Article 23, [Industrial Emissions Directive 2010/75/EU](#).

<sup>169</sup> The Ministry of Environment and Water, [plans for monitoring and control activities](#).

imposed, including fines<sup>170</sup>. Some inspection reports are also made publicly available.

### Citizen science and complaint handling

Involving citizens, through citizen science and in other ways, can deepen knowledge about the environment and help the authorities in their work. No information has been found on the use of citizen science in Bulgaria. The availability of clear online information about how to make a complaint is an indicator of how responsive authorities are to complaints from the public. Citizens can report matters and make complaints to Regional Inspectorates of Environment and Water via a telephone hotline (Green hotline) or by email. The Regional Inspectorates of Environment and Water keep anonymous monthly public records on such submissions and the measures taken to address them by the competent authorities. They are handled openly, without disclosing the identity of the complainant. Information on the action taken is published on the websites of the Ministry of Environment and Water and its regional offices.

### Enforcement

When monitoring identifies problems, a range of responses may be appropriate. Reports on inspections of industrial installations or summaries of their findings are published on the websites of the regional environmental inspectorates in a user-friendly manner. The Ministry of Environment and Water compiles information on sanctions imposed and publishes it monthly in the relevant section of its website<sup>171</sup>. However, the information does not allow conclusions to be drawn on whether sanctions were effective and whether installations complied after follow-up measures and enforcement action were taken. Information on responses to cross-compliance breaches on nitrates and nature is lacking.

Tackling waste, wildlife crimes and other environmental offences is especially challenging. It requires close cooperation and coordination between inspectors, customs authorities, police and prosecutors. However, no information could be identified on official websites on formal or informal cooperation between these, and there are no published statistics on trafficking in endangered species, illegal trafficking in waste or surface water pollution. The establishment of a national network of prosecutors specialized on environmental cases is a

<sup>170</sup> The Regional Inspectorate of Environment and Water – Veliko Turnovo. [Randomly selected examples of website of RIEW Veliko Turnovo](#). All RIEWs follow same approach in presenting the information.

<sup>171</sup> [MoEW control activities](#).

useful step towards building stronger enforcement capacity.

### Environmental liability

The Environmental Liability Directive (ELD) establishes a framework based on the ‘polluter pays’ principle to prevent and remedy environmental damage. The 2017 EIR focused on gathering better information on environmental damage, on financial security and on establishing guidance. The Commission is still collecting evidence on the progress made.

### 2019 priority actions

- Better inform the public about compliance promotion, monitoring and enforcement by, at least, ensuring availability of online information to farmers about how to comply with obligations on nitrates and nature.
- Publish more detailed and structured information on the outcomes of enforcement action and of the follow-up to detection of cross-compliance breaches on nitrates and nature.
- Ensure more information on how professionals dealing with environmental crime work together.
- Improve financial security for liabilities and ELD-guidance and publish information on environmental damage.

### Effectiveness of environmental administrations

Those involved in implementing environmental legislation at EU, national, regional and local levels need to have the knowledge, tools and capacity to ensure that the legislation and the governance of the enforcement process bring about the intended benefits.

### Administrative capacity and quality

The quality of a country’s institutions, both governmental and judicial, is a key determining factor for its well-being. Administrative capacity is increasingly recognised as a pre-requisite for delivering the EU’s treaty obligations and objectives, such as creating sustainable growth and jobs, and maximising the benefits from EU membership<sup>172</sup>.

Bulgaria is a unitary state with three administrative tiers – central, regional and local. The structure of the public administration reflects these three levels.

The Ministry of Environment and Water is the central and main authority in the environmental sector in Bulgaria. It is responsible for drafting and implementing national

<sup>172</sup> European Commission, [Quality of Public Administration – Toolbox 2017 edition](#).

environmental policy; for devising the environmental regulation system; and for coordinating and control over the protection, conservation and rational utilisation of natural resources, waste management policy and water management policy. It is also responsible for coordination and management of financial resources on environmental matters, including the Operational Programme for the environment. The Executive Environmental Agency reports to the environment minister and carries out management, coordination and information tasks for environmental protection.

The 16 Regional Inspectorates of Environment and Water (RIEWs) are territorial units of the Ministry. They have regulatory, information, monitoring and control tasks; their main activity is to enforce environment law. They have the power to impose sanctions and monitor the performance of municipalities and other players. They also provide a 24-hour 'Green Hotline' for environmental information and alerts. The four basin directorates are regional authorities of the Ministry with responsibility for water basin management. They cover the four river basin districts in Bulgaria: the Danube River, the Black Sea, the East Aegean and the West Aegean. The three national park directorates (NPD) — Rila, Pirin and Central Balkan — are also regional authorities of the Ministry. Their tasks include drafting and implementing the parks' management plans.

Municipalities are the basic administrative-territorial units of self-governance. The powers of municipalities vary from full-scale legal powers regarding waste management, to drafting policies and providing information on and support for administrative procedures such as SEA and EIA, for which the RIEWs are responsible. They may also participate in procedures for designating protected areas and drafting management plans for protected areas<sup>173</sup>.

Central, regional and local administrations must have the ability to carry out their own tasks and work effectively with each other within a system of multi-level governance.

With a governance score of 0.26, Bulgaria is still performing significantly below the EU average of 1.1 with regard to the government effectiveness index, as well as the regulatory quality index. It still ranks last in the EU for the rule of law and control of corruption<sup>174</sup>.

Improving the quality of services and introducing e-government has been a key priority in public administration reform for almost two decades. Progress in this area is slow, but some improvement in service delivery is already evident, particularly in terms of ease

of access and greater transparency. The expectation is that digitisation could also improve transparency and therefore lead to reduced corruption, which is not evident at present. Nevertheless, public sector information has become widely available and is the area in which Bulgaria has its highest ranking<sup>175</sup>.

As noted in the 2017 EIR, unstable policies and lack of trust in key public institutions such as the judiciary are significant deterrents to investment in the Bulgarian economy and lead citizens and environmental NGOs to opt to address their concerns about possible breaches of environmental legislation to the European Commission, even in areas not covered by EU law. While a number of reforms have been adopted, their practical implementation is delayed. Businesses are still concerned about corruption, institutional shortcomings and insufficient labour supply. Progress in public administration reform and e-government is slow. Governance in the public sector could benefit from more transparency, clearer rules and a long-term perspective<sup>176</sup>.

Non-conformity continues to be an insignificant factor in infringement proceedings against Bulgaria, as Bulgaria generally transposes environmental directives on time and correctly. Poor application and enforcement of environmental legislation, however, are still a major cause of infringement proceedings.

Air quality, appropriate assessment under the Habitats Directive, waste management and urban waste water treatment remain the most problematic issues. The application of the Directives on environmental impact assessment (EIA) and strategic environmental assessment (SEA) are also, to some extent, raised as part of complaints in the above areas.

### Coordination and integration

As mentioned in the 2017 EIR, the transposition of the revised Environmental Impact Assessment (EIA) Directive<sup>177</sup> into national law provides an opportunity for countries to streamline their regulatory framework on environmental assessments. Bulgaria transposed the Directive by the deadline of May 2017.

Bulgaria is one of the Member States providing for streamlined environmental assessments. The Commission strongly encourages that approach to reduce duplication and avoid overlaps in environmental assessments applicable for projects. Streamlining helps to reduce unnecessary administrative burden. It also

<sup>173</sup> UNECE, [Environmental performance review \(EPR\) Bulgaria, 2017](#), p. 28.

<sup>174</sup> World Bank, [2017 Worldwide Governance Indicators](#).

<sup>175</sup> Zankina, E.: Public administration characteristics in Bulgaria, 2017.

<sup>176</sup> [Council Recommendation, Bulgaria 2018](#) (para 17).

<sup>177</sup> [Directive 2014/52/EU](#).

accelerates decision-making, without compromising the quality of the environmental assessment procedure<sup>178</sup>.

Since Bulgaria's accession to the EU, its national law has successively incorporated appropriate assessment under the Habitats Directive (in 2007), the integrated pollution prevention and control (IPPC) permitting process (in 2008) and the 'Seveso' process for chemical safety (in 2015) into its EIA procedures. EIA therefore provides a single environmental ex ante quality assurance system for development proposals, extensions and amendments.

### **Adaptability, reform dynamics and innovation (eGovernment)**

Bulgaria ranks 23rd out of the 28 EU Member States on digital public services in the 2018 Digital Economy and Society Index, with a score of 49 (lower than the EU average of 58)<sup>179</sup>. In terms of eGovernment, Bulgaria is progressing, but at a slower pace than other EU countries. A number of steps have been taken to improve digital public services. A strategic framework is in place; the State e-Government Agency (SEGA), created in December 2016, is now fully operational; and the ICT budget framework has been optimised. The number of eGovernment users has increased compared to last year and is now in line with the EU average<sup>180</sup>.

### **Enabling financing and effective use of funds**

European Structural and Investment Funds improve access to finance for business. Grants from the operational programme Innovation and Competitiveness mainly benefit SMEs for investment in machinery, innovation and energy efficiency. Commercial banks are developing a loan portfolio, expected to reach EUR 600 million, guaranteed by the operational programme 'SME Initiative'. Further, a EUR 150 million agreement was signed by the Bulgarian Development Bank (BDB) under the EU Investment Plan to finance small and medium-scale projects, but the overall role of the BDB in the economic environment remains unclear. Venture capital and business angel financing are still lagging. The start-up ecosystem is still largely dependent on public support; however, there is a significant delay in implementing the available public financial instruments. The first agreements with local financial institutions arising from the Fund Manager of Financial Instruments in Bulgaria calls were signed in December 2017, but for very limited amounts. According to local stakeholders, continuity,

political independence and suitability for market needs are critical for further improving the local financing ecosystem<sup>181</sup>.

### **2019 priority action**

- Bulgaria can further improve its overall environmental governance (such as transparency, citizen engagement, compliance and enforcement, as well as administrative capacity and coordination).

### **International agreements**

The EU Treaties require the EU environmental policy to promote measures at international level to deal with regional or worldwide environmental problems.

The EU is committed to strengthening environmental law and its implementation globally. It therefore continues to support the Global Pact for the Environment process, which was launched by the United Nations General Assembly in May 2018<sup>182</sup>. The EIR is one of the tools to ensure that the Member States set a good example by respecting European Union environmental policies and laws and international agreements.

### **Forests: EU Timber Regulation (EUTR)<sup>183</sup>/ Forest Law Enforcement, Governance and Trade (FLEGT) Regulation<sup>184</sup>**

From March 2015 to February 2017, Bulgaria only reported on the annual plan for checks on operators for domestic timber, not for imported timber. Bulgarian competent authorities have performed more checks than originally planned (725, instead of 610) on 4013 estimated operators placing domestic timber onto the EU market. So far, two fines (each EUR 175) were appealed against and a court decision is expected. Additionally, a number of checks were conducted on traders<sup>185</sup>.

Generally, Bulgaria has provided relevant information to the EU with regard to penalties issued. It reported conducting 420 414 inspections (on persons, vehicles etc.) in 2016, with 22 519 breaches of forest law identified leading to 17 404 notices of administrative breaches. In terms of cooperation (Article 12 EUTR), Bulgaria is mainly working with national customs and tax agencies.

<sup>178</sup> The Commission issued a guidance document in 2016 regarding the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA Directive, Habitats Directive, Water Framework Directive, and the Industrial Emissions Directive, OJ C 273, 27.7.2016, p. 1.

<sup>179</sup> European Commission, [Digital Economy and Society Index Report 2018, Digital Public Services](#).

<sup>180</sup> European Commission, [2018 DESI Country profile, Bulgaria](#)

<sup>181</sup> European Commission, [2018 Country Report, Bulgaria](#), p. 45.

<sup>182</sup> [UN General Assembly Resolution 72/277](#) and [Organizational session of the ad hoc open-ended working group](#).

<sup>183</sup> [Regulation \(EU\) No 995/2010](#).

<sup>184</sup> [Regulation \(EC\) No 2173/2005](#).

<sup>185</sup> 390 checks were conducted on traders.

### **Genetic resources: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising (ABS)<sup>186</sup>**

In accordance with the EU Regulation on access and benefit-sharing (ABS), which transposes into the EU legal order the measures required to comply with the Nagoya Protocol, Bulgaria has designated its competent authorities and introduced sanctions for infringements of the Regulation. No due diligence declaration has been submitted so far and no penalties have been applied. Bulgaria submitted its first report to the Commission on implementation of the EU ABS Regulation at the end of 2017.

### **International wildlife trade: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)<sup>187</sup>**

Bulgaria has established relevant national authorities for the international wildlife trade and regularly processes requests for import, export, re-export, and intra-EU trade documents.

Reports on seizures of illegal wildlife shipments (in particular those reported every 6 months to TRAFFIC under its contract with the Commission, and those exchanged through the EU-TWIX platform) show the extent of the customs authorities' activity.

To ensure the EU wildlife action plan (2016) is fully implemented and to improve the rate of detection of illegal activities, Bulgaria has carried out targeted actions, e.g. the 'LIFE for Danube Sturgeons' project, which aims to combat sturgeon poaching and illegal trade in caviar<sup>188</sup>.

### **Sustainable development and the implementation of the UN SDGs**

Sustainable development links environmental, social and economic policies in a coherent framework and therefore helps to implement environmental legislation and policies.

Bulgaria has not adopted a national sustainable development strategy.

The implementation of Agenda 2030 and its SDGs does not seem to have the same priority in Bulgaria as in most other Member States. Currently, there is no single institution responsible for coordinating implementation of the SDGs. There is no evidence of an active interinstitutional process to devise a national SDGs programme.

<sup>186</sup> [Regulation \(EU\) No 511/2014](#).

<sup>187</sup> [The Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\)](#).

<sup>188</sup> EU LIFE project, [LIFE for Danube Sturgeons](#).

Bulgaria is one of only two countries, with Austria, that have not yet submitted or announced (for 2019) a Voluntary National Review on the SDGs to the UN.