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#### COMMISSION STAFF WORKING DOCUMENT

#### **Environmental Implementation Review 2022**

**Country Report - CZECHIA** 

#### 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 2022: Turning the tide through environmental compliance

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#### Czechia 1

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#### **Table of Contents**

EXEC	CUTIVE SUMMARY	3
PAR	T I: THEMATIC AREAS	4
1.	CIRCULAR ECONOMY AND WASTE MANAGEMENT	4
	Measures towards a circular economy	4
	Waste management	6
2.	BIODIVERSITY AND NATURAL CAPITAL	9
	Nature protection and restoration	9
	Ecosystem assessment and accounting	14
3.	ZERO POLLUTION	16
	Clean air	16
	Industrial emissions	17
	Major industrial accidents prevention – SEVESO	
	Noise	
	Water quality and management	
	Chemicals	
4.	. CLIMATE ACTION	27
	Key national climate policies and strategies	
	Effort sharing target	
	Key sectoral developments	
	Use of revenues from the auctioning of EU ETS allowances	29
PAR	T II: ENABLING FRAMEWORK: IMPLEMENTATION TOOLS	30
5.	. Financing	30
	Environmental investment needs in the European Union	30
	EU environmental funding 2014-2020	32
	EU environmental funding 2021-2027	33
	National environmental protection expenditure	
	Green budget tools	
	Overall financing compared to the needs	38
6.	. ENVIRONMENTAL GOVERNANCE	40
	Information, public participation and access to justice	40
	Compliance assurance	41
	Effectiveness of environmental administrations	
	Reforms through the Commission's Technical Support Instrument	
	TAIEX EIR Peer to Peer Project	44

#### **Executive summary**

In previous Environmental Implementation Reviews the main challenges identified for Czechia for the implementation of EU environmental policy and law were:

- to step-up efforts to put the necessaryinfrastructure and conditions in place to move towards a circular economy;
- to improve air quality in critical regions of the country, especially in urban areas and to decrease the pressure on water and nature ecosystems;
- to create transparent and effective permitting procedures while ensuring compliance with EU legislation, especially on public participation and access to justice;

While a full assessment is pending, Czechia seems to be on track to meet the EU's 2020 recycling target, on the basis of the methodology chosen by the authorities. However, greater efforts are still needed to comply with the post-2020 recycling targets set out in the revised Waste Framework Directive, as the main **waste** treatment option is still landfilling and the diversion targets for biodegradable waste are not yet met. Although Czechia has steadily improved on some **circular economy** indicators, ambitious measures set out in the EU Circular Economy Action Plan still need to be implemented.

**Air quality** remains a significant problem. Although Czechia projects to fulfil its emission reduction commitments for all air pollutants covered by the National Emission Reduction Commitments Directive, the persistent breaches of the Ambient Air Quality Directive requirements – mainly the exceedances of limit values for particulate matter, nitrogen dioxide, ozone and benzo(a)pyrene – continue to cause health risks for people living in Czechia.

Although the designation process of the **Natura 2000 network** is almost complete, achieving the objectives of the EU Biodiversity Strategy remains a challenge for Czechia as for other MSs. The share of habitats and species in a good conservation status increased slightly between the two reporting periods under the Habitats Directive (2007-2012 and 2013-2018). The share of habitats in a bad conservation status also increased while the share of species in the same status decreased. Czechia's **biodiversity** together with the forestry and agriculture sectors are exposed to climate related risks. Land use change is one important pressure also affecting people living in urbanised areas.

Despite the progress made on reaching the objectives of the Water Framework Directive, it is not certain if this is sufficient to fulfil the obligations until 2027 and to reach a good water status of all **water** bodies. According to the water exploitation index, Czechia has the 4<sup>th</sup> lowest score in the EU, close to water scarcity values.

**EU financing** continues to provide substantial support for the environmental implementation gap.Czechia is due to receive EUR 7.1 billion in grants in 2021-2026 in its national Recovery and Resilience Plan (RRP) and EUR 19.8 billion from the cohesion policy in 2021-2027. Czechia's environmental financing for investments was estimated at 1.1% of GDP per year in 2014-2020.Over two thirds of these investments rely on national financing. The country's environmental investment needs in 2021-2027 are estimated to reach over 1.43% of its GDP, suggesting a potential environmental financing gap of at least 0.32% of GDP. This can only be addressed by a continued strong commitment to the environment, including through the mobilisation of additional financing for the country's remaining implementation priorities.

Czechia has continued to improve the environmental infrastructure. However, it needs to increase its level of ambition if it is to overcome remaining challenges an to meet the of the European Green Deal objectives.

Czechia needs to harness the potential of Cohesion Funds and national financing to scale-up the measures oulinedin its RRP to implement reforms on: (i) management of drought and systemic enhancement of water retention in the countryside; (ii) creation of forest resilient to climate change; and (iii) new circular economy framework. It needs to continue its sucessful projects, like the national scheme for exchanging boilers and improving energy efficiency in residential and public buildings. At the same time, investments to potentially stranded assets are to be avoided, like mechanical biological treatment or waste-to-energy facilities and support for renewable sources of energy shall respects the 'do no significant harm' (DNSH) principle. Finally, maximising the use of economic instruments to ensure that polluters pay is also relevant for some environmental sectors.

**Environmental governance** seem to be compromised in environmental decision-making processes, as well as access to justice in the context of Czechia's legislative framework on granting permits. Further streamlining is expected. This should not lower the level of environmental protection but rather use the flexibilities allowed under the EU environmental legislation.

#### Part I: Thematic areas

#### 1. Circular economy and waste management

#### Measures towards a circular economy

The new Circular Economy Action Plan adopted in March 2020 is one of the main building blocks of the European Green Deal. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. It is also a prerequisite to achieve the EU's 2050 climate neutrality target and to halt biodiversity loss. The Action Plan announces initiatives along the entire life cycle of products, aiming to reduce the EU's consumption footprint and to double the EU's circular material use rate by 2030. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible.

The circular material-use rate is a good indicator of an economy's circularity, as it includes all the materials that are fed back into our economy. Large differences in the circularity rate exist between countries. To help achieve the goal in the EU circular economy action plan of doubling the EU's circular material-use rate by 2030, ambitious measures targeting the whole product life cycle are needed at Member-State level. Such measures range from sustainable product design that makes it possible to increase the durability, reparability, upgradability and recyclability of products, to other measures, like: (i) 'remanufacturing'<sup>1</sup>; (ii) increasing circularity in production processes; (iii) recycling; (iv) boosting eco-innovation; and (v) increasing the uptake of green public procurement.

The circular (secondary) use of material in Czechia was 7.6% in 2016 and rose to 13.4% in 2020, above the EU average of 12.8%, demonstrating a steady increase in secondary material usage in the country over the past few years.

Figure 1: Circular material use rate (%), 2010-2020<sup>2</sup>

Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help to minimise negative impacts on the environment and reduce dependency on volatile raw-material markets.

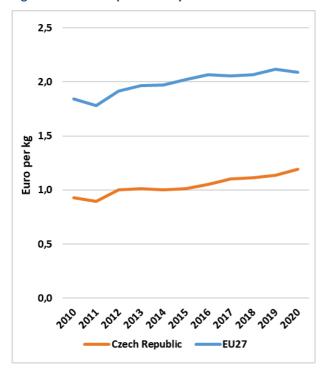
As shown in Figure 2, with EUR 1.19 generated per kg of material consumed in 2020, resource productivity in Czechia remained well below the EU average of EUR 2.09 per kg.

<sup>2</sup> Eurostat, Circular Economy Monitoring Framework.

<sup>14</sup> 12 10 8 6 4 2 10<sup>10</sup> ton<sup>1</sup> ton<sup>2</sup> ton<sup>2</sup> ton<sup>4</sup> ton<sup>5</sup> ton<sup>5</sup> ton<sup>1</sup> ton<sup>5</sup> ton<sup>5</sup> ton<sup>0</sup> Czech Republic \_\_\_\_EU 27

<sup>&</sup>lt;sup>1</sup> A standardized industrial process that takes place within industrial or factory settings, in which cores are restored to original as-new condition and performance or better

Figure 2: Resource productivity 2010-2020<sup>3</sup>



#### **Circular economy strategies**

The Commission encourages Member States to adopt and implement national/regional circular economy strategies covering the whole life cycle of products. This is because such strategies are one of the most effective ways to progress towards a more circular economy. Since the launch of the online European Circular Economy Stakeholder Platform in 2017<sup>4</sup>, national, regional or local authorities have used the platform to share their strategies and roadmaps.

A strategic framework for Czechia's transition to a circular economy by 2040 (also called 'Circular Czechia 2040') was adopted by the Czech government in December 2021. The implementing action plan for 2022-2027, currently under preparation, will set specific goals and measures for the next 6 years. It is expected to be adopted in Q4 2022, with a strategic environmental assessment to be conducted to evaluate the environmental outcomes of the strategy.

The finalisation and implementation of Circular Czechia 2040 has been included in the RRP as a part of a reform to be completed by Q4 2025.

Circular Czechia 2040 sets out 10 priority areas related to the circular economy: products and design; industry, raw

Specific targets, goals and measures for plastics, textiles, construction and demolition waste are set in the Czech Waste management plan, the Czech Waste prevention programme and also in the new Circular Czechia 2040 strategy.

#### **Eco-innovation**

A successful transition to a circular economy requires social and technological innovation. This is because the full potential of the circular economy can only be reached when it is implemented across all value chains. Ecoinnovation is an important enabling factor for the circular economy. New approaches to product design and new business models can help to produce circularity innovations, creating new business opportunities.

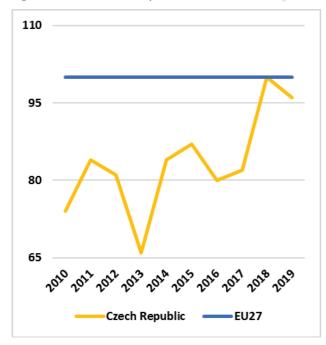
In 2021, Czechia ranked 14th on the 2021 Eco-innovation Index, with a total score of 111, classifying the country as an 'avergage eco-innovation performer. In 3 out of 5 components (eco-innovation inputs, eco innovation outputs and resource efficiency outcomes) of the 2021 Index, Czechia performs below the EU average, while for eco-innovation activies and socio-economic outcomes, it performs above the EU average.

materials, construction, energy; bioeconomics and food; consumption and consumers; waste management; water; research, development and innovation; education and knowledge; economic instruments; circular cities and infrastructure.

<sup>&</sup>lt;sup>3</sup> Eurostat, <u>Resource productivity</u>.

<sup>&</sup>lt;sup>4</sup> Circular Economy Stakeholder Platform.

Figure 3: Eco-innovation performance 2010-2019<sup>5</sup>



#### **Green public procurement**

Public procurement accounts for a large proportion of European consumption, with public authorities' purchasing power representing around 14% of EU GDP. Public procurement can help drive the demand for sustainable products that meet reparability and recyclability standards.

In 2017, The Czechia adopted rules to ensure a responsible approach to public procurement and purchasing by the State and local governments. Under the public procurement law, from 1 January 2021, contracting authorities must comply with social, environmental and innovative requirements when purchasing goods and services.

### EU Ecolabel and the eco-management and audit scheme (EMAS)

The number of EU Ecolabel products and EMAS-licensed<sup>6</sup> organisations in a given country provides some indication of the extent to which the private sector and national stakeholders in that country are actively engaged in the transition to a circular economy. It also shows how

committed public authorities are to supporting instruments designed to promote the circular economy.

As of September 2021, Czechia had 5 187 products out of 83 590, and 22 licences out of 2 057 registered in the EU Ecolabel scheme, showing a reasonable take-up of the products and licences<sup>7</sup>. Moreover, 18 organisations, located across 44 sites are currently registered in EMAS, the European Commission's Eco-Management and Audit Scheme<sup>8</sup>. Since the 2019 report, there have been 5 093 new product registrations and 11 new EU Ecolabel licenses. However, EMAS organisation registrations have decreased by 6.

#### 2022 priority actions

• Speed up the transition towards the circular economy in all economic sectors, including by implementing Circular Czechia 2040.

#### 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

(ii) reducing waste generation and waste generation per capita in absolute terms;

(iii) limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

This section focuses on the management of municipal waste $^9$  for which EU law sets mandatory recycling targets.

Preventing products and materials from becoming waste for as long as possible is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste. Waste prevention and reuse are the most preferred options, and are therefore at the top of the waste hierarchy. The amount of municipal waste generated is a good indicator of the effectiveness of waste-prevention measures.

<sup>&</sup>lt;sup>5</sup> European Commission - Directorate-General for Environment (DG ENV), Eco-innovation Observatory, Eco-innovation scoreboard and the eco-innovation index.

<sup>&</sup>lt;sup>6</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>&</sup>lt;sup>7</sup> European Commission, Ecolabel Facts and Figures.

<sup>&</sup>lt;sup>8</sup> As of May 2018. European Commission, <u>Eco-Management and Audit</u> Scheme.

<sup>&</sup>lt;sup>9</sup> Municipal waste consists of: (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households. (Directive 2008/98/EC, Article 3(2)(b)).

Municipal waste generation in Czechia has started to increase in recent years. It rose to 507 kg/year/inhabitant in 2020, and is now slightly above the EU average (505 kg/year/inhabitant), as Figure 4 shows. However, the steep increase in 2017 is a result of a break in time series according to Eurostat. The first Waste Prevention Programme (WPP)<sup>10</sup> was adopted 2014-2020, now integrated into the Waste Management Plan (WMP) 2015-2024, currently under revision.

According to the European Environment Agency assessment of the WPP<sup>11</sup>, there has been some decoupling of waste generation and economic growth since 2014, altough it is not significant enough and a longer time period is needed to confirm this trend<sup>12</sup>. This indicates that Czechia's economic growth is not yet fully decoupled from its generation of waste. The Circular Czechia 2040 also sets out goals and measures that should help to achieve the decoupling.

The 2019 EIR pointed out discrepancies between the municipal waste information systems of the Ministry of Environment and the Czech Statistical Office, which resulted in significant differences in data sets used in national and regional WMPs for projections compared to data reported to EurostatT. According to the Czech authorities, discrepancies between the information systems were almost eliminated during the reporting period and a new Memorandum of Cooperation was signed by both institutions in 2021. The Commission has not made any assessment in this regards<sup>13</sup>.

# Figure 4: Municipal waste by treatment in Czechia, 2010-2020<sup>14</sup>

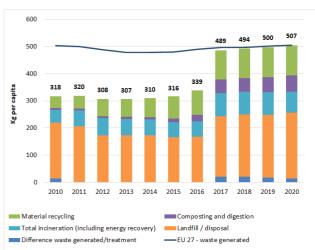


Figure 4 also depicts the municipal waste by treatment in Czechia in terms of kg per capita. Landfilling remains the main treatment option, well above the EU average (at 23% in 2020), which is the main problem for Czechia. Moreover, although the landfilling rate had been slightly decreasing in the last decade, this trend seems to have reversed over the latest reporting period as landfilling accounted for 49.2% in 2020, compared to 48.5% in 2018 (2019 EIR). This suggests a correlation with increasing amounts of total waste generated in Czechia.

As reported in th 2019 EIR, Czechia is struggling to meet EU targets on diverting of biodegradable waste away from landfills, even if legislative changes should have helped to bridge this implementation gap. Since 2015, municipalities have been obliged to introduce separate collection for vegetable biowaste, however only seasonally until 2021, when it also became compulsory also for vegetable oils and fat. There is no obligation, however, for the separate collection of kitchen animal waste. Biowaste still accounted for more than 30% of mixed municipal waste<sup>15</sup> in 2020 and was landfilled or incinerated. At the same time, a ban on the landfilling of recyclable, recoverable and mixed municipal waste originally announced for 2024 was delayed to 2030 by the 2021 Waste Act.

Moreover, Czechia did not correctly transpose into its national legislation the obligation of pre-treatment before landfilling. The Commission therefore sent a letter of formal notice to Czechia in April 2022<sup>16</sup>. According to the Commission study investigating the landfilling of

<sup>&</sup>lt;sup>10</sup> Program předcházení vzniku odpadů ČR (2014) | Databáze strategií portál pro strategické řízení (databaze-strategie.cz)

<sup>&</sup>lt;sup>11</sup> Measures in the WPP are focused especially on waste prevention, while decoupling of waste generation from economic growth is a secondary output.

<sup>&</sup>lt;sup>12</sup> <u>Czechia waste prevention country fact sheet 2019 — European</u> <u>Environment Agency (europa.eu)</u>

<sup>&</sup>lt;sup>13</sup> ESTAT data shows a break in data series between 2016 and 2017

<sup>&</sup>lt;sup>14</sup> Eurostat, <u>Municipal waste by waste operation</u>, April 2022.

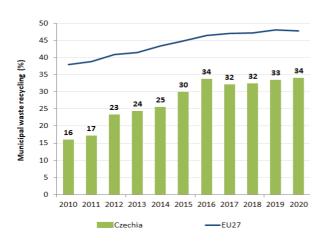
<sup>&</sup>lt;sup>15</sup> <u>Rozbory skladby směsného komunálního odpadu z obcí v roce 2020 –</u> <u>EKO-KOM (ekokom.cz)</u>

<sup>&</sup>lt;sup>16</sup> Waste: Commission calls on CZECHIA to improve the treatment of waste in landfills. <u>April infringements package: key decisions</u> (europa.eu)

untreated municipal waste in Member States, the selection of different fractions of waste and the stabilisation of organic waste is not ensured in any of the five landfill sites visited.

Incineration and energy recovery stood at 15% in 2020, still below the EU average but managing waste efficiently remains an important challenge for Czechia amid concerns over planned capacity for residual waste treatment, namely waste-to-energy set out in the national and regional WMPs under the revision.

#### Figure 5: Recycling rate of municipal waste, 2010-2020<sup>17</sup>



34% of municipal waste is recycled, still below the EU average (46 %). The Commission's 2018 Early Warning report<sup>18</sup> did not list Czechia among the countries at risk of missing the EU 2020 target of recycling 50 % of municipal waste. The Commission is currently finalising its analysis of progress made on the recommendations in the 2018 Early Warning Reports as a well its analysis of progress towards achieving the 2025 waste recyling targets set out in the Waste Framework Directive<sup>19</sup>. This report will be presented at the end of 2022. Figure 5 shows that Czechia needs to step up investment in recycling to meet the 2025 recycling targets, as already pointed out in the 2019 EIR.

#### Implementation of the 2018 waste legislative package

Czechia has notified the transposition of the 2018 waste package<sup>20</sup> to the Commission. A conformity assessment is now ongoing.

<sup>19</sup> Directive 1999/31/EC.

#### Implementation of the Single use plastics Directive

By 3 July 2021 Member States had to bring their national laws in line with the Single use Plastics Directive. Since Czechia failed to notify all transposition measures by January 2022, the Commission has initiated an infringement procedure.

### Waste management plans and waste prevention programmes

Waste Management Plans (WMPs) and Waste Prevention Programmes (WPPs) are instrumental for a sound implementation of the EU waste legislation. They set out key provisions and investments to ensure compliance with existing and new legal requirements (e.g. waste preventiion, separate collection for a number of specific waste streams, recycling and landfill targets). Revised plans and programmes were due on 5 July 2020.

Czechia has revised its national WMP 2015-2024, but has not yet notified it the Commission. A revised WMP should transposes the EU 2018 Waste package and the 2020 Circular Economy AP and was adopted with a slight delay by the Government in the first half of 2022<sup>21</sup>. Regional plans should be prepared in the next 18 months. The Commission will assess whether the WMP complies with Article 28 of the revised WFD.

#### 2022 priority actions

Given the limited progress since the 2019 EIR, and in light of the Early Warning Report to be released in 2022, a number of priority actions set out in the 2019 EIR are rolled over:

- Avoid building excessive infrastructure for the treatment of residual waste, such as mechanical biological treatment (MBT) facilities or incinerators.
- Shift reusable and recyclable waste away from incineration by introducing incineration taxes.
- Improve and extend the separate collection of waste, including for bio-waste. Establish minimum service standards for separate collection
- Use the economic instruments available, such as pay-as-you-throw
- Improve the functioning of Extended Producer Responsibility Systems (EPR), in line with the general minimum requirements on EPR
- In addition, ensure regional WMPs are aligned with revised Waste Framework Directive.

<sup>21</sup> Materiál - Portál Aplikace ODok

<sup>&</sup>lt;sup>17</sup> Eurostat, <u>Recycling rate of municipal rate</u>, April 2022.

<sup>&</sup>lt;sup>18</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 <u>COM/2018/656 final</u>

<sup>&</sup>lt;sup>20</sup> <u>Directive (EU) 2018/851</u>, <u>Directive (EU) 2018/852</u>, <u>Directive (EU)</u> <u>2018/850</u> and <u>Directive (EU) 2018/849</u> amend the previous waste

legislation and set more ambitious recycling targets for the period up to 2035.

### 2. Biodiversity and natural capital

The 2030 EU biodiversity strategy adopted in May 2020 aims to put the EU's biodiversity on a path to recovery and sets out new targets and governance mechanisms to achieve healthy and resilient ecosystems.

In particular, the strategy sets out ambitious targets to: (i) protect a minimum of 30% of the EU's land area and 30% of its sea area and integrate ecological corridors, as part of a true trans-European nature network;

(ii) strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests;

 (iii) effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

The strategy also sets out an EU nature restoration plan – a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.

The EU Habitats and Birds Directives are the cornerstone of EU legislation aimed at the conservation of the EU's wildlife, natural habitats and ecosystems. As such they are key legislative tools to deliver on the targets of the EU Biodiversity Strategy for 2030<sup>22</sup>.

Czechia's most recent biodiversity strategy (2016-2025) was adopted in 2016. It sets out four priorities for the protection and sustainable use of biodiversity<sup>23</sup>.

#### Nature protection and restoration

Natura 2000<sup>24</sup>, the largest coordinated network of protected areas in the world, is the key instrument to achieve the objectives in the Birds and Habitats Directives. These objectives are: (i) to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats; and (ii) to maintain or restore the favourable conservation status of these species and habitats. Key milestones towards meeting the objectives of the Birds and Habitats Directives are: (i) the setting up of a coherent

Natura 2000 network; (ii) the designation of sites of community importance (SCIs) as special areas of conservation (SACs), and (iii) the setting of site-specific conservation objectives and measures for all Natura 2000 sites. Natura 2000 network can contribute to the target of the 2030 EU biodiversity strategy - to protect a minimum of 30% of the EU's land area and 30% of the EU's sea area and to integrate ecological corridors, as part of a true Trans-European Nature Network, however national designation schemes are key in achieving this target.

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

Czechia hosts 60 habitat types<sup>25</sup> and 173 species<sup>26</sup> covered by the Habitats Directive. The country also hosts populations of 85 bird taxa listed in the Birds Directive Annex  $I^{27}$ .

By 2021, 14.1% of the national territory of Czechia was covered by Natura 2000 (EU average 18.5%). Special protection areas (SPAs) classified under the Birds Directive covered 8.9% (EU average 12.8%) and SCIs designated under the Habitats Directive covered 10.1% (EU average: 14.2%) of the Czech territory.

Considering both Natura 2000 and other nationally designated protected areas, Czechia legally protects 21,9% of its land (EU 27 average 26,4%)<sup>28</sup>.

The latest assessment of the SCI part of the Czech Natura 2000 network shows that there are a few remaining insufficiencies which Czechia has committed itself to resolve by 2023. There is an ongoing infringement against Czechia related to these insufficiencies<sup>29</sup>.

<sup>22</sup> These should be strengthened by the Nature Restoration Law, according to the new EU Biodiversity Strategy.

https://www.mzp.cz/web/edice.nsf/4A46CA81084E521FC125805000 2DAE0C/\$file/SOBR\_CR\_2016-2025.pdf

<sup>&</sup>lt;sup>24</sup> Natura 2000 comprises 'Sites of Community Importance' (SCIs) designated under the Habitats Directive as well as 'Special Protection Areas' (SPAs) classified under the Birds Directive. Coverage figures do not add up as because some SCIs and SPAs overlap. 'Special Areas of Conservation' (SACs) means an SCI designated by the Member States.

<sup>&</sup>lt;sup>25</sup> EEA, <u>Article 17 dashboard</u>, Annex I total, 2019.

<sup>&</sup>lt;sup>26</sup> EEA, <u>Article 17 dashboard</u>, Annex II + Annex IV excluding those in Annex II + Annex V excluding those in Annex II, 2019. This counting only takes into account species and habitats for which assessment of conservation status was requested.

<sup>&</sup>lt;sup>27</sup> EEA, <u>Article 12 dashboard</u>, Annex I, 2020. This counting only takes into account birds taxa for which information was requested.

<sup>&</sup>lt;sup>28</sup> European Environment Agency (EEA), <u>Protected Areas</u>, terrestrial protected area percentage (2021), March 2022

 $<sup>^{\</sup>rm 29}$  Biodiversity: Commission calls on CZECHIA to complete Natura 2000 network.

https://ec.europa.eu/commission/presscorner/detail/en/inf 19 6304

Figure 6: Terrestrial protected area coverage, 2021<sup>30</sup>

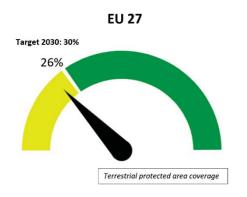
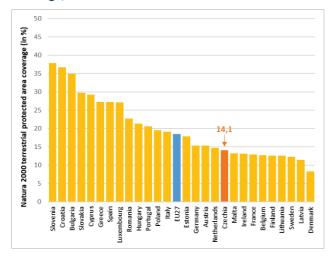


Figure 7: Natura 2000 terrestrial protected area coverage, 2021<sup>31</sup>



# Designating Special Areas of Conservation (SACs) and setting conservation objectives and measures

The 6-year deadline set by the Habitats Directive to designate SCIs as SACs and establish site-specific conservation objectives and measures has expired for 1,061 sites in Czechia. Of these, 989 have acquired SAC status (as of February 2021) and Czechia has committed itself to continue the process of SAC designation for all sites.

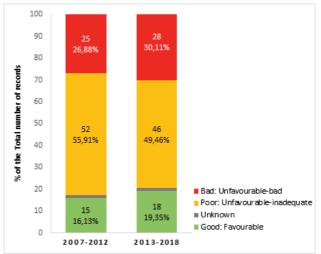
### Progress in maintaining or restoring favourable conservation status of species and habitats

To measure the performance of Member States, Article 17 of the Habitats Directive and Article 12 of the Birds Directive require reporting on the progress made towards maintaining or restoring the favourable conservation status of species and habitats<sup>32</sup>.

According to Czechia's report for 2013-2018 on the conservation status of habitats and species covered by Article 17 of the Habitats Directive, the share of habitats assessed as being in good conservation status increased slightly since the previous reporting period (2007-2012), reaching over 19%. Similarly, the share of species assessed as being in good conservation status also increased to over 30% between the two reporting periods. Regarding birds, about 44% of the breeding species showed short-term increasing or stable population trends while the same figure for wintering species was 51%.

Between the two reporting periods, the share of habitats assessed as being in bad conservation status also increased slightly to 30% while the same figure for species decreased to 26%.





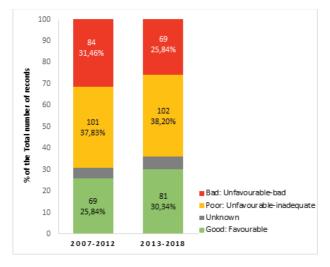
 $<sup>^{\</sup>rm 30}$  EU Biodiversity Strategy Dashboard, indicators A1.1.1 and A1.2.1, February 2022.

<sup>&</sup>lt;sup>31</sup> European Environment Agency, Natura 2000 Barometer, February 2022.

<sup>&</sup>lt;sup>32</sup> Conservation status and trends of habitats and species — European Environment Agency (europa.eu)

<sup>&</sup>lt;sup>33</sup> European Environment Agency, Conservation status and trends of habitats and species, December 2021. Please note when comparing the figures shown for 2007-2012 and 2013-2018 these may also be affected by changes of methods or due to better data availability.

# Figure 9: Assessments on conservation status for species for 2007-2012 and 2013-2018 reporting periods<sup>34</sup>



As mentioned above, the share of habitats and species in good conservation status increased slightly between the two reporting periods, while, the share of habitats in bad conservation status increased and the share of species in the same status decreased. Natural processes were by far the main pressure for habitats while for species the main pressures were agriculture, natural processes and forestry. On the latter, cases of massive logging were reported in Natura 2000 sites such as Východní Krušnohoří or Soutok-Podluží as destroying the habitats of protected saproxylic beetles and birds.

# Bringing nature back to agricultural land and restoring soil ecosystems

#### Agricultural land

The biodiversity strategy works alongside the new farm to fork strategy and the new common agricultural policy (CAP) to support and achieve the transition to fully sustainable agriculture.

The biodiversity and farm to fork strategies have set four important targets for 2030:

 a 50% reduction in the overall use of – and risk from – chemical pesticides;

- a 50% reduction in the use of more hazardous pesticides;

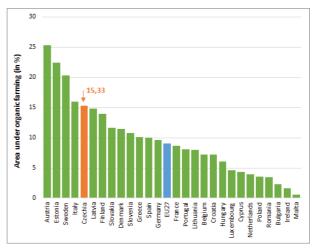
 a 50% reduction in losses of nutrients from fertilisers while ensuring there is no deterioration of soil fertility (which will result in a 20% reduction in the use of fertilisers);

- bring back at least 10% of agricultural area under highdiversity landscape features and increase areas under

#### organic farming to at least 25%.

Czechia with an estimated 15.33% of its area under organic farming is above the EU average of 9,07% (2020 data, Eurostat)<sup>35</sup>.

Figure 10: Share of total utilised agricultural area occupied by organic farming per Member State, 2020<sup>36</sup>



According to the Commission's recommendations for Czechia's common agriculture policy (CAP) strategic plan (SP)<sup>37</sup>, Czechia's agricultural sector should take urgent action on the management of natural resources and on climate change mitigation, notably by: (i)accelerating the conversion of conventional farming to organic; (ii) reducing greenhouse gas emissions by supporting practices to improve soil management and substantially limiting NH3 emissions, and (iii) improving the conservation status of farm and forest habitats and applying sustainable forest management techniques to strengthen the resilience of forest ecosystems.

As in other EU countries, Czechia's agriculture and forestry sector are exposed to climate related risks due to a substantial change in weather patterns in the last few years, typically taking the form of mild dry winters and hot summers with heavy rain. These are some of the factors causing droughts, which have major effects on the forestry sector where a large area of spruce forest is being felled due to the presence of bark beetles.

Agriculture is one of the biggest pressures affecting surface waters and is the main pressure affecting ground waters and Czechia has one of the highest portions in the EU of groundwater bodies failing to

<sup>&</sup>lt;sup>35</sup>Area under organic farming <u>Statistics | Eurostat (europa.eu)</u> <sub>36</sub>

https://ec.europa.eu/eurostat/databrowser/view/sdg\_02\_40/default/ table?lang=en (Eurostat, Area under organic farming, February 2022). <sup>37</sup> CAP strategic plans | European Commission (europa.eu)

<sup>&</sup>lt;sup>34</sup> idem

achieve a good chemical status mainly due to nitrate pollution.

The conservation status of agricultural habitats is broadly assessed as unfavourable. Natural habitats are usually quite small and fragmented in large agricultural areas, occupying mostly marginal areas, with ongoing degradation and loss. A substantial proportion of productive agricultural land is managed in an intensive, profit-oriented way.

Czechia has the highest average size of agricultural holdings in the EU. Large-scale agriculture is a major cause of natural habitat decline and of a low water retention. This is due to extreme scarcity of landscape features like grass margins, shrub margins, single tree bushes, lines of trees, hedges and ditches.

#### Soil ecosystem

Soil is a finite and extremely fragile resource. It is increasingly degrading in the EU. new EU soil The strategy, adopted on 17 November 2021, stresses the importance of soil protection, of sustainable soil management and of restoring degraded soils to achieve the Green Deal objectives as well as land degradation neutrality by 2030. This entails: (i) preventing further soil degradation; (ii) making sustainable soil management the new normal;

(iii) taking action for ecosystem restoration.

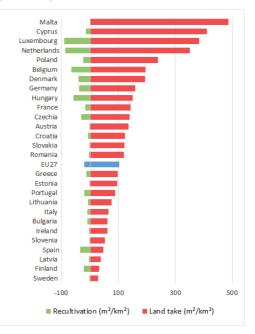
One factor in the degradation of soil ecosystems is the area of soil that is sealed or artificialised<sup>38</sup>. In Czechia (Figure 11), the land taken per year in 2012-2018 can be seen as a measure of one significant pressure on nature and biodiversity – land-use change. At the same time, land-use change constitues an environmental pressure on people living in urbanised areas.

Despite a reduction in the last decade (land take was over 1000 km<sup>2</sup>/year between 2000-2006), land take in EU-28 still amounted to 539 km<sup>2</sup>/year in 2012-2018. The concept of 'net land take' combines land take with the return of land to non-artificial land categories (recultivation). While some land was re-cultivated in the EU-28 in 2000-2018, 11 times more land was taken than returned.

Czechia ranks well above  $^{39}$  the EU average with a net land take of 161,7  $m^2/km^2$  (EU-27 average: 83,8  $m^2/km^2).$ 

In 2018, Czechia updated its reporting on land degradation according to the PRAIS3 reporting platform<sup>40</sup> with actions intended to achieve the degradation identified.

Figure 11: Land take and re-cultivation in EU27 (m2/km2), 2012-2018<sup>41</sup>



In 2015, the United Nations Convention to Combat Desertification reached an agreement<sup>42</sup> to endorse a vision of land-degradation neutrality and link this vision to the implementation of the UN's sustainable development goals (SDGs) in general, and to SDG 15.3<sup>43</sup> in particular. Czechia has not yet committed to set land degradation neutrality targets under UNCCD agreement<sup>44</sup>.

#### **Forests and timber**

The EU forest strategy for 2030, adopted in July 2021, is part of the Fit for 55 package. The strategy promotes the many services that forests provide. Its key objective is to ensure healthy, diverse and resilient EU forests that contribute significantly to the strengthened

<sup>&</sup>lt;sup>38</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>&</sup>lt;sup>39</sup> Land take in Europe — European Environment Agency (europa.eu) fig 6

<sup>&</sup>lt;sup>40</sup> All Reports | Prais3 (unccd.int)

<sup>&</sup>lt;sup>41</sup> European Environment Agency, Land take in Europe.

<sup>&</sup>lt;sup>42</sup> The LDN Target Setting Programme | UNCCD.

<sup>&</sup>lt;sup>43</sup> 'By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world.'

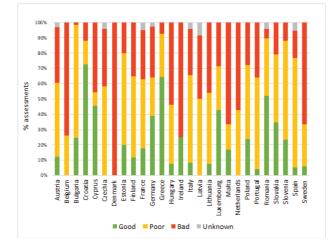
<sup>&</sup>lt;sup>44</sup> The LDN Target Setting Programme | UNCCD

biodiversity and climate ambitions. Forests are important carbon sinks and conserving them is vital if the EU is to achieve climate neutrality by 2050.

Of the 27% of EU forest area protected under the Habitats Directive, less than 15% of assessments show a favourable conservation status<sup>45</sup>. The share of forested areas in the EU with a bad conservation status increased from 27% in 2015 to 31% in 2018<sup>46</sup>.

In Czechia, forests cover 35,6% of territory<sup>47</sup> and more than 90% of the assessments reveal a bad to poor status. 10 000 ha in Czechia is covered by primary forests<sup>48, 49</sup>.

Figure 12: Conservation status of forests protected under the Habitats Directive in EU Member States, 2013-2018 (% assessments)<sup>50</sup>



The European Union Timber Regulation (EUTR)<sup>51</sup>, prohibits the placing on the EU market of illegally harvested timber. In accordance with the EUTR, Member States' competent authorities must conduct regular checks on operators and traders, and apply penalties for non-compliance. With the amendment of

<sup>47</sup> EEA, Forest information system for Europe

Article 20 of the EUTR, reporting every 2 years has been changed to annual reporting, and covers the calendar year as of 2019.

Between March 2017 and February 2019<sup>52</sup>, Czechia carried out 116 checks on domestic timber operators. It also carried out 83 checks on operators importing timber. It is estimated that Czechia had 300 000 operators placing domestic and 2 500 operators placing imported timber types onto the internal market over the reporting period.

The new Deforestation Regulation will repeal and replace the EUTR, as it will essentially integrate and improve the existing system to check the legality of timber.

#### Invasive alien species (IAS)

IAS are a key cause of biodiversity loss in the EU (alongside changes in land and sea use, overexploitation, climate change and pollution). Besides inflicting major damage on nature and the economy, many invasive alien species also facilitate the outbreak and spread of infectious diseases, posing a threat to humans and wildlife. The implementation of the EU Invasive Alien Species Regulation and other relevant legislation must be stepped up. The biodiversity strategy for 2030 aims to manage recognised invasive alien species and decrease the

number of 'red list' species they threaten by 50%.

The core of Regulation (EU) 1143/2014 on invasive alien species<sup>53</sup> ('the IAS Regulation') is the list of IAS of Union concern.

The total number of IAS of Union concern is currently 66, of which: 30 are animal species; 36 are plant species; 41 are primarily terrestrial species; 23 are primarily freshwater species; 1 is a brackish-water species; and 1 is a marine species.

According to the 2021 report<sup>54</sup>, the implementation of the IAS Regulation is already starting to deliver on its objectives such as a coherent framework for addressing IAS at EU level and increased awareness of the problem of invasive alien species. However, the report also

<sup>&</sup>lt;sup>45</sup> EEA, <u>State of Nature in the EU</u>

<sup>&</sup>lt;sup>46</sup> The state of nature in the European Union Report on the status and trends in 2013 - 2018 of species and habitat types protected by the Birds and Habitats Directives. <u>COM/2020/636</u> <u>final</u>.

<sup>&</sup>lt;sup>48</sup> JCR, Mapping and assessment of primary and old-growth forests in Europe, p. 13.

<sup>&</sup>lt;sup>49</sup> According to Czech authorities, Czech legislation defines the highest level of naturality as "native forest", which can be understood as "primary forest", nevertheless it is defined on a narrower scale than in JRC study.

<sup>&</sup>lt;sup>50</sup> European Environment Agency, Conservation status and trend in conservation status by habitat group - forests, January 2022.

<sup>&</sup>lt;sup>51</sup> <u>Regulation (EU) No 995/2010 of the European Parliament and of the</u> <u>Council of 20 October 2010</u>.

<sup>52</sup> COM/2020/629 final

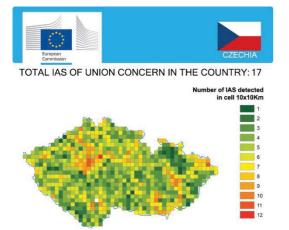
<sup>&</sup>lt;sup>53</sup> Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species

<sup>&</sup>lt;sup>54</sup> Report from the Commission to the European Parliament and the Council on the review of the application of Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species, <u>COM(2021) 628 final</u>, 13.10.2021

identified challenges and areas for improvement. Given that the deadlines for the various obligations under the IAS Regulation applied gradually between July 2016 and July 2019, it is premature to draw conclusions on several aspects of the implementation of the IAS Regulation.

A 2021 report<sup>55</sup> on the baseline distribution shows that of the 66 species on the Union list, 17 have been observed in the environment in Czechia. The spread is shown in the Figure 16.

# Figure 13: Number of invasive alien species of EU concern, based on available georeferenced information for Czechia, 2021



#### https://easin.jrc.ec.europa.eu

An infringement case has been launched against Czechia for failing to draw up a and implement one single action plan or set of action plans as required by Article 13 of of the IAS Regulation by 13 July 2019 and to submitt it/them to the Commission without delay<sup>56</sup>.

#### 2022 priority actions

- Establish site-specific conservation objectives and measures for all sites where management plans are missing. pPovide adequate resources for their implementation. Ensure that forestry management plans are assessed according to EU law to avoid the deterioration of Natura 2000 sites.
- Further ntegratebiodiversity issues into other policies (in particular agriculture, forestry, fish

farming, and infrastructure and urban development).

- Complete the Natura 2000 designation process.
- Reduce pressure from the agricultural sector on natural resources.
- Improve incentives for foresters and farmers to better protect forests and landscape. Ensure sustainable forest management through effective planning, taking account of ecosystem services provided by forests.
- Take the necessary steps to ensure full compliance with the requirements specified in Article 13 of the IAS Regulation.

#### **Ecosystem assessment and accounting**

The EU biodiversity strategy for 2030 calls on Member States to better integrate biodiversity considerations into public and business decision-making at all levels and to develop natural capital accounting. The EU needs a better performing biodiversity observation network and more consistent reporting on the condition of ecosystems.

An ecosystem assessment is an analysis of the pressures on – and the condition of – terrestrial, freshwater and marine ecosystems and their services. It uses spatially explicit data and a comparable methodology based on European data about the functions of ecosystem assets and the ecosystem services they produce.

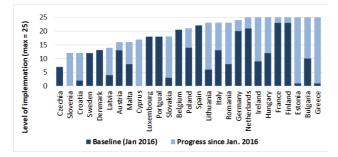
Ecosystem accounting is built on five core accounts (ecosystem extent, ecosystem condition, physical ecosystem services, monetary ecosystem services and monetary ecosystem assets). These accounts are compiled using indicators of ecosystem assets and the ecosystem services they produce.

Czechia has used field surveys to map habitats since 2001. Data were complemented by remote sensing, making the ecosystem mapping complete. Information on structure and functions of semi-natural habitats together with other data sources (agro-environmental schemes, Water Framework Directive, etc.) was also usedto estimate the condition of ecosystems. A study on ecosystem services was completed in 2013. Either biophysical quantities or socio-economic values were derived for 17 services on the basis of benefit/value transfer. Outcomes still await implementation and policy support is needed gather sector-specific. As Czechia has not provided updated information, no progress has been recorded since January 2016 (Figure 14). This assessment is based on 27 implementation questions and updated every 6 months.

<sup>&</sup>lt;sup>55</sup> Cardoso A.C., Tsiamis K., Deriu I., D' Amico F., Gervasini E., EU Regulation 1143/2014: assessment of invasive alien species of Union concern distribution, Member States reports vs JRC baselines, EUR 30689 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37420-6, doi:10.2760/11150, JRC123170.

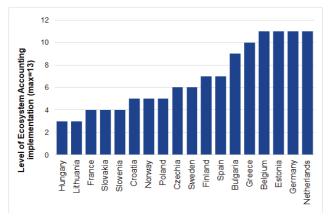
<sup>&</sup>lt;sup>56</sup> Biodiversity: Commission calls on 18 Member States to protect the environment against invasive alien species: <u>June infringements</u> <u>package: key decisions (europa.eu)</u>

### Figure 14: ESMERALDA MAES Barometer (January 2016 - March 2021)<sup>57</sup>



Progress on ecosystem accounting is assessed at national level based on 13 questions (see Figure 15).





Agriculture, water management and forestry are considered as as the key sectors for which ecosystem accounting should be applied. A recent stakeholder consultation also pointed out the value of urban accounts, a protected landscape extent account and thematic accounts for carbon and biodiversity. An ecosystem extent, condition and monetary asset account was published for all ecosystems in Czechia. An update of the condition account is currently in progress. Ecosystem accounts are under development for carbon sequestration, water filtration and nature-based recreation and this both in physical and monetary terms. An ecosystem account in physical terms is also being developed for water retention. For now there is no research on thematic accounts. The key obstacles for developing ecosystem accounting in Czechia are data gaps and out of date data, a lack of clear guidelines to implement the SEEA framework and non-existing political demand for ecosystems accounting.

These difficulties can be explained by a lack of capacity and, related to that, a lack of political interest. Institutions would need an official policy enforcement to start working on the accounts.

#### 2022 Priority Actions

 Increase training, capacity building and the sharing of information and lessons learned by the MAIA MS to helpCzechia develop a pilot ecosystem account that can demonstrate its usefulness and spark political interest.

<sup>&</sup>lt;sup>57</sup> European Commission, Joint Research Centre, Publication Office, EU Ecosystem assessment: summary for policymakers, page 80, May 2021.

<sup>&</sup>lt;sup>58</sup> Ecosystem accounting Barometer, September 2021: "MAIA uses the System of Environmental Economic Accounting – Experimental Ecosystem Accounting (SEEA-EEA) as the methodological basis for the ecosystem accounting. The SEEA EA is an integrated an comprehensive statistical framework that is based on five core accounts: ecosystem extent, condition, services and monetary ecosystem asset.".

#### 3. Zero pollution

#### **Clean air**

EU clean air policies and legislation need to significantly improve air quality in the EU, moving the EU closer to the quality recommended by the WHO and curbing emissions of key air pollutants.

Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the longterm aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with EU clean air legislation and defining strategic targets and actions for 2030 and beyond.

The 2030 zero pollution action plan targets are to reduce the health impacts of air pollution by 55% and to reduce the EU ecosystems threatened by air pollution by 25%.

The EU has developed a comprehensive suite of air quality legislation, which sets health-based air quality standards<sup>59</sup> and emission reduction commitments<sup>60</sup> by Member State for a number of air pollutants.

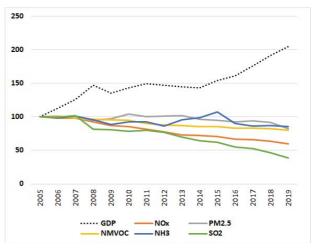
Despite the overall improvement of air quality and the continuous reduction of air pollution, air quality in Czechia continues to give cause for concern. The latest available annual estimates (for 2019) by the European Environment Agency<sup>61</sup> point to about 8 500 premature deaths (or 95 000 years of life lost (YLL)) attributable to fine particulate matter concentrations<sup>62</sup>, 460 (5 300 YLL) to ozone concentrations<sup>63</sup> and 190 (2 100 YLL) to nitrogen dioxide concentrations<sup>64, 65</sup>.

Emissions of key air pollutants have decreased significantly in Czechia over the last years, while GDP growth continued (see graph). According to the latest projections as submitted under Article 10(2) of the National Emission Reduction Commitments Directive (NECD)<sup>66</sup> Czechia projects to reach emission reduction

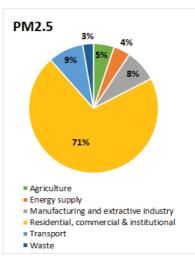
commitments for all air pollutants covered by the Directive for 2020 - 2029 and for 2030 onwards. The latest inventory data submitted by Czechia, though not yet reviewed by the Commission, indicates that Czechia is in compliance with the emission reduction commitments for all pollutants in 2020.

Czechia submitted its National Air Pollution Control Programme on 20 December 2019.





# Figure 17: PM2.5 and NOx emissions by sector in Czechia (2019)<sup>68</sup>



<sup>67</sup> European Environment Agency.

<sup>68</sup> European Environment Agency.

<sup>&</sup>lt;sup>59</sup> European Commission, 2016. <u>Air Quality Standards</u>

<sup>&</sup>lt;sup>60</sup> European Commission, <u>Reduction of National Emissions</u>

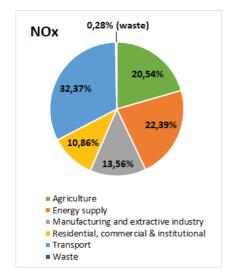
<sup>&</sup>lt;sup>61</sup> European Environment Agency. Air Quality in Europe – 2021 Report. Please see details in this report as regards the underpinning methodology, p.106.

<sup>&</sup>lt;sup>62</sup> Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 (PM2.5) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many human sources, including combustion.

 <sup>&</sup>lt;sup>63</sup> Low-level ozone is produced by photochemical action on pollution.
 <sup>64</sup> NOx is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NOx is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO2).

<sup>&</sup>lt;sup>65</sup> Please note that these figures refer to the impacts of individual pollutants, and to avoid double-counting cannot be added up to derive a sum.

<sup>66</sup> Directive 2016/2284/EU



In 2020, exceedances above the limit values established by the Ambient Air Quality Directive (AAQD) were registered for particulate matter ( $PM_{10}$ ) in two air quality zones. Furthermore, for several air quality zones the target values for ozone<sup>69</sup> concentration were not met<sup>70</sup>.

Persistent breaches of air quality requirements, which have severe negative effects on health and environment, are being followed up by the European Commission through infringement procedures (mainly over  $PM_{10}$  and  $NO_2$  exceedances) covering all Member States concerned, including Czechia for exceedances of  $PM_{10}^{71}$  and  $NO_2^{72, 73}$  limit values in several air quality zones. The aim is that appropriate measures are put in place to bring all air quality zones into compliance.

In the 2019 EIR, the Commission suggested that Czechia takes, as part of its national air-pollution control programme, actions to reduce emissions from its main emission sources including, for example, further reducing emissions from energy production and heat generation using solid fuels, or promoting efficient and clean district heating and/or fiscal incentives. As highlighted in the 2019 report as one of good practices, since 2015, Czechia is implementing a national scheme<sup>74</sup>, for replacing almost 100 000 old and poor quality boilers, out of 300 000 households using solid fuels, supported also by EU funds in 2014-2020. This scheme was launched also in a view of a future ban for boilers not complying with certain environmental standards, already introduced in the

<sup>70</sup> European Environment Agency, <u>Eionet Central Data Repository</u>

<sup>71</sup> Environment: Commission asks the CZECH REPUBLIC to act on air pollution: <u>March infringements package: main decisions (europa.eu)</u>

national Air act in 2012. In May 2022, the deadline has been extended by two years until September 2024. National RRP 2021-2026 and Programme Environment 2021-2027 will continue in supporting this scheme.

Czechia has been also recommended to accelerate the reduction in nitrogen oxide (NOx) emissions and nitrogen dioxide (NO2) concentrations. As indicated above, Czechia has made some progress in reducing the concentrations of some pollutants. However, additional efforts are still needed to ensure full compliance with the EU air quality legislation.

#### 2022 priority actions

- As a part of the National Air Pollution Control Programme (NAPCP), actions to reduce emissions from the main sources mentioned above.
- Ensure full compliance with EU air quality standards and maintain downward emissions trends of air pollutants, to reduce their adverse effects on health and the economy with a view to reaching WHO guideline values in the future.

#### Industrial emissions

The main objectives of EU policy on industrial emissions are to: (i) protect air, water and soil; (ii) prevent and manage waste; (iii) improve energy and resource efficiency; (iv) 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 (IED)<sup>75</sup>. The Commission tabled a proposal in April 2022<sup>76</sup>. The revision seeks to improve the Directive's contribution to the zero-pollution objective, as well as its consistency with climate, energy and circular economy policies.

The overview of industrial activities regulated by the IED is based on data reported to the EU Registry (2018)<sup>77</sup>.

<sup>&</sup>lt;sup>72</sup> Air Quality: Commission calls on BELGIUM, CZECHIA and POLAND to protect their populations against air pollution: <u>February infringements</u> package: key decisions (europa.eu)

 $<sup>^{73}</sup>$  According to the Czech authorities, the NO $_2$  limit value was met in all zones and agglomerations in Czechia in 2020. The Commission has not yet assessed that data.

<sup>&</sup>lt;sup>74</sup> Kotlíkové dotace – SFŽP ČR (sfzp.cz)

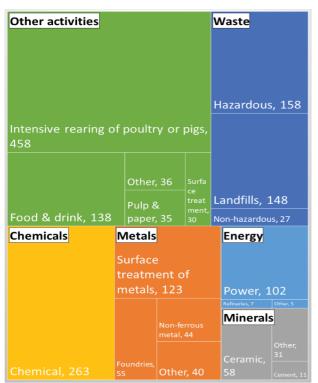
<sup>&</sup>lt;sup>75</sup> Directive 2010/75/EU covers industrial activities carried out above certain thresholds. It covers the energy industry, metal production, the mineral and chemical industry, waste management, and a wide range of industrial and agricultural sectors (e.g. intensive rearing of pigs and poultry, pulp and paper production, painting and cleaning).

<sup>&</sup>lt;sup>76</sup> European Commission, <u>proposal for a revision of the Industrial</u> <u>Emissions Directive</u>, 4 April 2022. The revision of the IED is performed in parallel to the revision of Regulation (EC) No 166/2006 on the European Pollutant Release and Transfer Register (E-PRTR).

<sup>&</sup>lt;sup>77</sup> European Environment Agency, European Industrial Emissions Portal.

In Czechia, around 1770 industrial installations are required to have a permit based on the IED. The distribution of installations is shown in Figure 18.

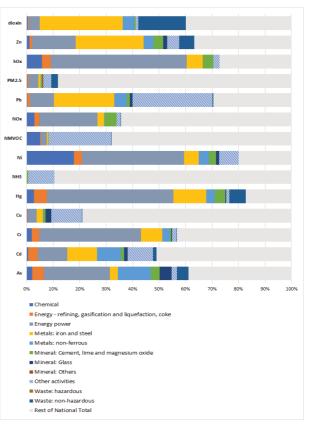
The industrial sectors in Czechia with the most IED installations in 2018 were intensive rearing of poultry and pigs (26%), followed by the waste management sector (19%), the chemicals production (15%), the food and drink sector (8%), surface treatment (7%) and power production (6%).



### Figure 18: Number of IED industrial installations per sector in Czechia, 2018<sup>78</sup>

The industrial sectors identified as contributing the largest burden to the environment for emissions to air were the energy – power sector for Sulphur Oxides (SOX), Nickel (Ni), Mercury (Hg), Chromium (Cr), Arsenic (As), Nitrogen Oxides (NOx), Zinc (Zn) and Cadmium (Cd); "Other activities" (mostly intensive rearing of poultry or pigs, surface treatment) for Lead (Pb), Non Methane Volatile Organic Compounds (NMVOCs), Ammonia (NH<sub>3</sub>), Copper (Cu), Cadmium (Cd) and Ni; the metals production for dioxins, Zn, Pb, As Cd, Cr and Hg; the chemicals production for Ni and NMVOCs and the waste management sector for dioxins.

Figure 19: Emissions to air from IED sectors and rest of national total air emissions in Czechia, 2018<sup>79</sup>



On emissions to air, in 2017, Czechia was the Member State with the third highest damage costs aggregated over all pollutant groups normalised against GDP<sup>80</sup>.

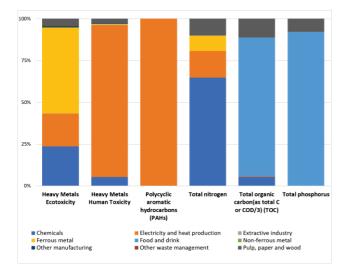
The environmental burdens for industrial emissions to water mainly result from the production of food and drink, chemicals and pulp and paper and from energy production for nitrogen, phosphorous and total organic carbon; from energy production for polycyclic aromatic hydrocarbons and from the energy production, as well as metals and chemicals production in case of heavy metals. The breakdown, based on E-PRTR data, is presented in the figure below.

<sup>&</sup>lt;sup>79</sup> European Environment Agency, LRTAP, Air pollutant emissions data viewer (Gothenburg Protocol, LRTAP Convention) 1990-2019 (data retrieved on 3 November 2021).

<sup>&</sup>lt;sup>80</sup> ETC/ATNI Report 04/2020: Costs of air pollution from European industrial facilities 2008–2017.

<sup>&</sup>lt;sup>78</sup> European Environment Agency, EU Registry, European Industrial Emissions Portal (data retrieved on 3 November 2021).

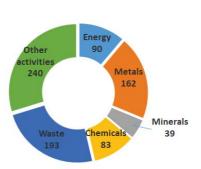
Figure 20: Relative releases to water from industry in Czechia<sup>81</sup>, 2018<sup>82</sup>



The EU approach to enforcement under the IED creates strong rights for the public to have access to relevant information and to participate in the permitting process for potentially polluting installations. This empowers the public and NGOs to ensure that permits are appropriately granted and that the conditions of these permits are complied with. As part of environmental inspection, competent authorities undertake site visits at IED installations to take samples and to gather necessary information. According to Article 23(4) of the IED, site visits must be carried out between once a year and once every 3 years, depending on the environmental risks posed by the installations.

In 2018, Czechia carried out 807 site visits, the majority of which were to installations in the waste management sector (23%), installations for the intensive rearing of poultry or pigs (16%) under other activities, followed by the chemicals production (10%), power production (9%), food, drink and milk production under other activities (8%) and surface treatment of metals (8%).

Figure 21: Number of inspections in IED installations in Czechia in 2018<sup>83</sup>



The development of Best Available Techniques (BAT) Reference Documents (BREFs) and BAT Conclusions ensures a good collaboration with stakeholders and enables a better implementation of IED<sup>84</sup>. Since the 2019 EIR, BAT Conclusions were adopted for: (i) waste incineration; (ii) the food, drink and milk industries; and (iii) surface treatment using organic solvents including the preservation of wood and wood-products with chemicals..

The Commission relies on the efforts of national competent authorities to implement the legally binding BAT conclusions and associated BAT emission levels in environmental permits. This should result in considerable and continuous reductions in pollution.

In 2019, Czechia received priority actions to review permits to ensure that they comply with the newly adopted BAT Conclusions and to strengthen control and enforcement to ensure compliance with BAT Conclusions. These actions have been followed up by the Commission through the reporting by Czechia to the EU Registry and no non-compliant permits were reported in 2018. Czechia also received a priority action to address air pollution from power plants and steel production where relevant.

An infringement has been launched against Czechia for its incorrect transposition of the IED. The Commission identified 12 grievances including on definitions, access to justice of individuals and access to information<sup>85</sup>.

#### 2022 priority actions

 Continue to address air pollution, in particular from the energy sector.

<sup>&</sup>lt;sup>81</sup> The heavy metals are presented both as a weighted sum of eco toxicity and human toxicity factors to illustrate both the ecological and human impact (based on USEtox).

<sup>&</sup>lt;sup>82</sup> European Environment Agency, E-PRTR, European Industrial Emissions Portal (data retrieved on 3 November 2021).

<sup>83</sup> EU Registry

<sup>&</sup>lt;sup>84</sup> European Commission <u>BAT reference documents</u>

<sup>&</sup>lt;sup>85</sup> Pollution: Commission calls on CZECHIA to improve its rules on pollution arising from industrial activities: <u>June infringements package:</u> <u>key decisions (europa.eu)</u>

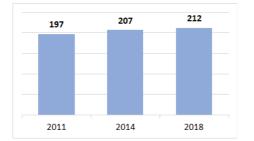
# Major industrial accidents prevention – SEVESO



The below overview of industrial plants regulated by Seveso-III Directive ('Seveso establishments'), is based on data reported to the eSPIRS database (2018)<sup>87</sup> and the Czech report on the implementation of the Seveso-III Directive for 2015-2018<sup>88</sup>.

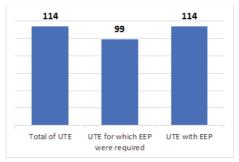
Of Czechia's 212 Seveso establishments, 98 are categorised as lower-tier establishments (LTE) and 114 as upper-tier establishments (UTE) – based on the quantity of hazardous substances likely to be present. The UTE are subject to more stringent requirements. The evolution of the number of Seveso establishments is presented in Figure 22.

## Figure 22: Number of Seveso establishments in Czechia, 2011, 2014 and 2018<sup>89</sup>



Czechia requires and External Emergency Plan (EEP) is for 99 UTE. In 2018, 114 UTE had an EEP asshown in Figure 23. These EEPs are essential to allow proper preparation and effective implementation of the necessary actions to protect the environment and the population should a major industrial accident occur at them.

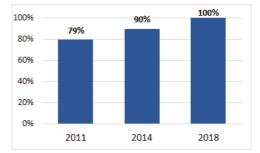
#### Figure 23: Situation regarding EEP in Czechia (2018)



The information to the public referred to in Annex V of the Seveso-III Directive – especially about how the public concerned will be warned in the case of a major accident; the appropriate behaviour in the event of a major accident; and the date of the last site visit – are permanently available for 100% of Seveso establishments in Czechia.

The share of UTE for which information on safety measures and requisite behaviours were actively made available to the public over the last years are presented in Figure 24.

# Figure 24: Share of UTE for which information on safety measures and requisite behaviours were actively made available to the public in Czechia, 2011, 2014 and 2018<sup>90</sup>



Czechia has some issues with the transposition of the Seveso III Directive identified in the national legislation by the Commission in 2021<sup>91</sup>.

#### 2022 priority actions

• Strengthen control and enforcement to ensure compliance with the Seveso-III Directive, especially the provisions on External Emergency Plans (EEPs).

<sup>&</sup>lt;sup>86</sup> Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances

<sup>&</sup>lt;sup>87</sup> European Commission, Seveso Plants Information Retrieval System

<sup>&</sup>lt;sup>88</sup> As provided for by Article 21(2) of the Seveso-III Directive

<sup>&</sup>lt;sup>89</sup> European Commission, Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU (implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances), 2022.

<sup>90</sup> Idem.

<sup>&</sup>lt;sup>91</sup> Prevention of major accidents involving dangerous substances: Commission calls on CZECHIA, POLAND and SLOVENIA to improve its national rules: <u>June infringements package: key decisions (europa.eu)</u>

#### Noise

The Environmental Noise Directive provides for a common approach to avoid, prevent and reduce the harmful effects of exposure to environmental noise although it does not set noise limits as such. Its main instruments in this respect are noise mapping and planning. A key target under the 2030 zero pollution action plan is to reduce by 30% the share of people disturbed by transport noise compared to 2017.

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU. It can cause ischemic heart disease, stroke, interrupted sleep, cognitive impairment and stress<sup>92</sup>.

In Czechia, based on a limited set of data<sup>93</sup>, environmental noise is estimated to cause at least 400 premature deaths and 1100 cases of ischaemic heart disease annually<sup>94</sup>. It also causes some 110 000 people to suffer from disturbed sleep. The proportion of people exposed to noise fell by 6% between 2012 and 2017. On the basis of the latest full set of information that has been analysed, noise mapping of agglomerations, roads and railways is complete.

In the 2019 EIR, Czechia received a priority action to complete noise action plans. Given that, there has been some progress, as detailed above, no priority actions are proposed for 2022.

#### 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.

#### Water Framework Directive

The Water Framework Directive (WFD)<sup>95</sup> is the cornerstone of the EU water policy in the 21<sup>st</sup> century<sup>96</sup>. The WFD and other water-related legislation<sup>97</sup> set the framework for sustainable and integrated water management, which aims at a high level of protection of water resources, prevention of further deterioration and restoration to good status.

By March 2022, Member States had to report the third generation of River Basin Management Plans (RBMPs) under the WFD. Czechia has adopted and reported the third generation of RBMPs on time. The Commission will assess the reported status and progress, checking how the findings identified in the assessment of the second RBMPs<sup>98</sup> have been addressed<sup>99</sup>.

In Czechia, the public consultation for the 3rd management cycle started one year before the deadline for adoption, allowing the public and all stakeholders to express their views in paper or electronically.

The Commission published in December 2021 the 6th Implementation Report, which assesses implementation of the WFD and the Floods Directive<sup>100</sup>. This report includes an assessment of: (i) the implementation of the programmes of measures; and (ii) the new priority substances. The assessment report for Czechia<sup>101</sup> shows that despite progress in reaching WFD objectives, it is not certain, if this progress is sufficient to fulfil the WFD obligations until 2021. Further investments will be

 <sup>&</sup>lt;sup>92</sup> WHO 2018, Environmental Noise Guidelines for the European Region.
 <sup>93</sup> For further information: European Environment Agency, Noise Fact Sheets 2021.

<sup>&</sup>lt;sup>94</sup> These figures are an estimation by the European Environmental Agency based on: (i) the data reported by Member States on noise exposure covered by Directive 2002/49/EC; (ii) ETC/ATNI, 2021, Noise indicators under the Environmental Noise Directive 2021: Methodology for estimating missing data, ETC/ATNI Report No 2021/06, European Topic Centre on Air Pollution, Transport, Noise and Industrial Pollution; (iii) <u>the methodology for health impact calculations</u>, ETC/ACM, 2018, Implications of environmental noise on health and wellbeing in Europe, Eionet Report ETC/ACM No 2018/10, European Topic Centre on Air Pollution and Climate Change Mitigation.

<sup>&</sup>lt;sup>95</sup> The <u>Water Framework Directive (2000/60/EC)</u>.

<sup>&</sup>lt;sup>96</sup> The <u>EU Water Policy</u>.

<sup>&</sup>lt;sup>97</sup> This includes the <u>Groundwater Directive (2006/118/EC)</u>, the Environmental Quality Standards Directive (2008/105/EC), the Floods Directive (2007/60/EC), the <u>Bathing Water Directive (2006/7/EC)</u>, the Urban Waste Water Treatment Directive (91/271/EEC), the new Drinking Water Directive (2020/2184/EC), the <u>Nitrates Directive</u> (91/676/EEC), the <u>Marine Strategy Framework Directive (2008/56/EC)</u>, the <u>Industrial Emissions Directive (2010/75/EU)</u> and the new <u>Regulation</u> on minimum requirements for water reuse (2020/741).

<sup>&</sup>lt;sup>98</sup> Detailed information can be found in the 5<sup>th</sup> Report from the Commission on the implementation of the Water Framework Directive and the Floods Directive, as well as in the 2019 EIR.

<sup>&</sup>lt;sup>99</sup> According to Czech authorities, as a part of the preparation of the 3<sup>rd</sup> RBMPs for the period 2021-2027, the status of surface water bodies and groundwater bodies was assessed based on monitoring data of the River Basin state enterprises and the Czech Hydrometoteorological Institute. This assessment is important for developing all RBMPs levels and formulating measures to achieve good chemical/ecological status/potential. Due to the application of the 'one out - all out' principle, only 32.5% of all surface water bodies reach good chemical status, and 5.9% reach good ecological status/potential. For groundwater, 93.1 % of all ground water bodies reach good quantitative status and only 26.4% reach good chemical status.

<sup>&</sup>lt;sup>100</sup> See the <u>6<sup>th</sup> Implementation Report of the WFD and FD</u>.

<sup>&</sup>lt;sup>101</sup> European Commission, Directorate-General for Environment, Assessment of Member States' progress in Programmes of Measures during the second planning cycle of the Water Framework Directive. Member State: <u>Czech Republic</u>, 2022.

needed for the 3<sup>rd</sup> round of RBMPs to improve the water status for remaining water bodies in all RBDs in Czechia.

Based on the 2<sup>nd</sup> RBMP report and data published in 2020<sup>102</sup>, 19.2% of all surface water bodies<sup>103</sup> in Czechia have reached good ecological status (with status unknown for 1.7%) and only 68.5% have reached good chemical status (unknown status for 0.4%). For groundwaters, 73% failed to achieve good chemical status and 9.8% are in poor quantitative status (unknown status for 21.3%).

Figure 25 shows the proportion of surface water bodies in Czechia and other European countries, which failed to achieve good ecological status.

Figure 25: Proportion of surface water bodies (rivers, lakes, transitional and coastal waters) in less than good ecological status per River Basin District<sup>104</sup>

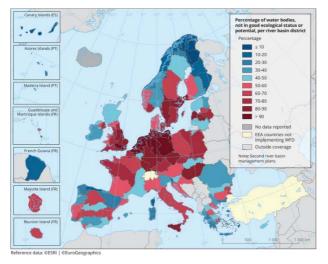
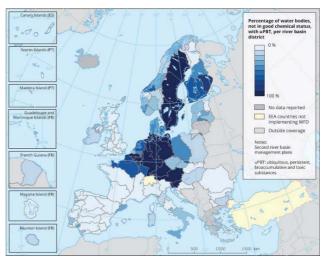


Figure 26presents the percentage of surface water bodies in Czechia and other European countries that failed to achieve good chemical status. For Czechia, the percentage is 31.1%, if one includes water bodies failing due to substances behaving as ubiquitous PBTs (Persistent, Bio-accumulative, Toxic). Without uPBTs, 28% of surface water bodies fail to achieve good chemical status. Figure 26: Percentage of surface water bodies not achieving good chemical status<sup>105</sup>



Under the IED framework, it should be stressed that Czechia showed a significant decrease in the last decade (48.9%) in industrial releases of heavy metals like Cd, Hg, Ni, Pb and (10.4%) in total organic carbon (TOC) to water<sup>106</sup>.

The total water abstracted in Czechia is 1,260,08 hm<sup>3</sup> a year (in line with the 2019 baseline) as shown in Figure  $27^{107}$ . Czechia uses a register to control water abstractions which is updated every quarter. The percentage of water abstraction per sector is 3.76% for agriculture, 49.24 % for public water supply, 28.54 % for electricity cooling, 15.63 % for manufacturing, 0.16% for manufacturing cooling and 2.67% for mining and quarrying. Abstractions exempted, according to Czech law, are not registered.

<sup>106</sup> European Environment Agency, June <u>2021</u>.

<sup>107</sup> Eurostat - Data Explorer (europa.eu)

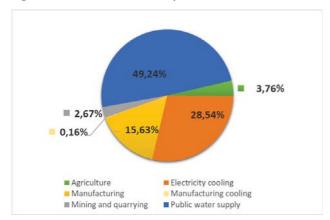
<sup>&</sup>lt;sup>102</sup> WISE Freshwater (europa.eu)

<sup>&</sup>lt;sup>103</sup> river, lake, transitional, coastal, territorial

<sup>&</sup>lt;sup>104</sup> European Environment Agency, 2021.

<sup>&</sup>lt;sup>105</sup> European Environment Agency, December 2019.

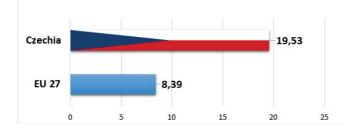
Figure 27: Water abstraction per sector in Czechia<sup>108</sup>



According to the water exploitation index plus  $(WEI+)^{109}$ , Czechia stands at 19.53%, only slightly less than the 20% that is generally considered as an indication of water scarcity<sup>110</sup>.

The bar below presents the WEI+ score in Czechia and other EU 27. Czechia is the 4th (from highest to lowest score) in the EU.

# Figure 28. Water exploitation index plus (WEI+) inside EU, 2017<sup>111</sup>



#### **Floods Directive**

As mentioned, the Commission published the 6<sup>th</sup> Implementation Report in December 2021, whichincludes, a review and update of the Preliminary Flood Risk Assessments (PFRA) during the second cycle (2016-2021).

The assessment report<sup>112</sup> showed that Czechia has developed a strong methodology for the analysis of historic floods and their potential to re-occur. However the report identified areas in the PFRA that could be further developed, notably recommending to include an assessment of past significant floods which, if repeated, could cause significant damage. Further work on the consideration of climate change, is also suggested.

Czechia has adopted and reported the second generation of Flood Risk Management Plans (FRMPs) under the Floods Directive. The Commission will assess progress since the adoption of the first FRMPs and publish a new report, as done in 2019.

#### **Drinking Water Directive**

On the Drinking Water Directive<sup>113</sup>, no new assessment of the quality of drinking water is available since the 2019 EIR. The quality of drinking water in Czechia has not been indicated as an area of concern.

The recast Directive<sup>114</sup> entered into force on 12 January 2021 and Member States have until 12 January 2023 to transpose it into national law However, the report identified areas in the PFRA that could be further developed, notably recommending to include an assessment of past significant floods which, if repeated, could cause significant damage. Czech Republic will have to comply with these reviewed quality standards.

#### **Bathing Water Directive**

Regarding the Bathing Water Directive, Figure 29 shows that in 2020, of Czechia's 153 bathing waters, 81.7% were of excellent quality<sup>115</sup>. Detailed information on Czechia's bathing waters is available on a national portal<sup>116</sup> and via an interactive map viewer of the European Environment Agency<sup>117</sup>.

<sup>&</sup>lt;sup>108</sup> European Environment Agency, <u>Water abstraction by source and</u> <u>economic sector in Europe</u>, 2022.

<sup>&</sup>lt;sup>109</sup> The Water Exploitation Index plus (WEI+) is a measure of total fresh water use as a percentage of the renewable fresh water resources (groundwater and surface water) at a given time and place. It quantifies how much water is abstracted and how much water is returned after use to the environment.

<sup>&</sup>lt;sup>110</sup> By May 2022, EEA will develop seasonal WEI+ at river basin and NUTS2 level, which provide a more complete picture of water stress and water scarcity for each Member State.

<sup>&</sup>lt;sup>111</sup> European Environment Agency (EEA), <u>Water exploitation Index Plus</u>, 2022.

<sup>&</sup>lt;sup>112</sup> European Commission, Directorate-General for Environment, Assessment of Second Cycle Preliminary Flood Risk Assessments and Identification of Areas of Potential Significant Flood Risk under the Floods Directive : Member State : <u>Czechia</u>, 2022

<sup>&</sup>lt;sup>113</sup> OJ L 330, 5.12.1998, p. 32–54.

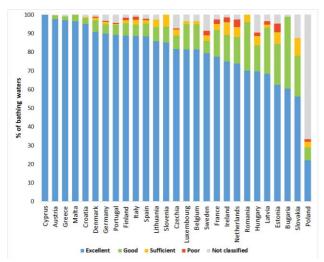
<sup>&</sup>lt;sup>114</sup> OJ L 435, 23.12.2020, p. 1**-62**.

<sup>&</sup>lt;sup>115</sup> European Environment Agency, 2021. <u>State of bathing water —</u> <u>European Environment Agency (europa.eu)</u>, p. 17.

 <sup>116</sup> http://www.apambiente.pt/index.php?ref=19&subref=906
 and

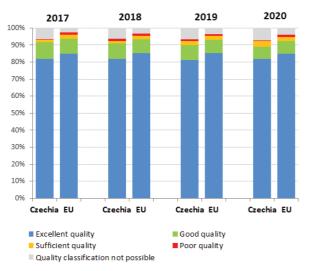
 http://snirh.apambiente.pt/index.php?idMain=1&idItem=2.1
 and

<sup>&</sup>lt;sup>117</sup> EEA, <u>State of bathing waters in 2020 — European Environment</u> <u>Agency (europa.eu)</u>



### Figure 29: Bathing water quality in Europe in the 2020 season<sup>118</sup>

Figure 30: Bathing water quality 2017-2020<sup>119</sup>



<sup>\*</sup>For 2017, 2018 and 2019, data about the UK bathing waters are included under the EU average.

#### **Nitrates Directive**

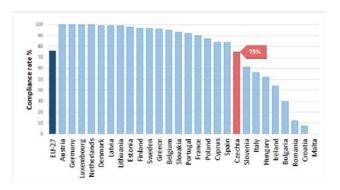
The latest Commission Report on the implementation of the Nitrates Directive<sup>120</sup> refers to the period 2016-2019<sup>121</sup>. This report warns that nitrates are still causing harmful pollution to water in the EU. Excessive nitrates in water are harmful to both human health and ecosystems, causing oxygen depletion and eutrophication. Where national authorities and farmers have cleaned up waters, it has had a positive impact on drinking-water supply and on biodiversity. It has also benefited the sectors – such as fisheries and tourism – that depend on biodiversity and on a good supply of drinking water. Nevertheless, excessive fertilisation remains a problem in many parts of the EU.

According to report on the implementation of the Nitrates Directive, in 2012-2015, groundwater quality slightly improved compared to the previous reporting period, with the percentage of stations reaching or exceeding 40 or 50 mg nitrate per L decreasing from 23.91% to 21.4% and from 20.4% to 17.9% respectively. The situation concernig nitrate concentrations in surface water is rather good and stable and some improvements were recorded in the reduction of eutrophication of surface water<sup>122</sup>.

#### **Urban Waste Water Treatment Directive**

Czechia has, over the years, encountered difficulties in meeting its obligations under the Urban Waste Water Treatment Directive. Overall, in Czechia, the compliance rate is 75% which is lower than the EU average in 2018.

Figure 31: Proportion of urban waste water that meets all requirements of the UWWTD (collection, biological treatment, biological treatment with nitrogen and/or phosphorus removal) in compliant urban areas of the UWWTD ('compliance rate'), 2018<sup>123</sup>



<sup>122</sup> According to the Czech authorities, the scale of vulnerable zones referring to 2015-2019 is almost equal in its total size than in the period 2012-2015. Six originally vulnerable zones, where the nitrate concentration on their measuring objects were below 25 mg/l, were removed from the vulnerable zone list. 14 zones, where the nitrate concentration was high (more 50 mg/l, or where there was also a rising concentration trend (the eutrophication influence is present), were classified newly as vulnerable ones. 16 zones were newly classified as potentially vulnerable zones to be monitored in next zones revision (period 2020-2023).

<sup>123</sup> European Commission, WISE Freshwater, 2021.

 <sup>&</sup>lt;sup>118</sup> European Environment Agency, Bathing Water Quality in 2020, 2022.
 <sup>119</sup> European Environment Agency, European Bathing Water Quality in 2017, 2018, 2019, 2020.

<sup>&</sup>lt;sup>120</sup> Implementation of the Nitrates Directive in the EU.

<sup>&</sup>lt;sup>121</sup> Last implementation report 2016-2019.

Despite improvements in compliance over the years, for which the use of EU funding has been fundamental, the incomplete implementation of the UWWTD has led to the opening of an infringement case against Czechia. The case is currently at the stage of Reasoned Opinion. According to the European Commission, 451 Czech agglomeration still do not comply with their obligations on the collection and/or their treatment of waste waters<sup>124</sup>.

#### 2022 priority actions

- Assess new physical modifications of water bodies in line with Article 4(7) of the Water Framework Directive. Considere alternative options and adequate mitigation measures in these assessments.
- Boost investments for the third round of RBMPs to improve the water status for remaining water bodies in all river basin districts (RBDs).
- Improve the coordination between water and nature policies.
- Esnure the compliance with the Urban Waste Water Treatment Directive in all agglomerations also by building up the necessary infrastructure.

#### Chemicals

The EU seeks to ensure that chemicals are produced and used in way that minimises any significant adverse effects on human health and the environment. In October 2020, the Commission published its chemicals strategy for sustainability - 'Towards a Toxic-Free Environment <sup>125</sup> which led to some systemic changes in EU chemicals legislation. The strategy is part of the EU's zero pollution ambition - a key commitment of the European Green Deal.

The EU's chemicals legislation<sup>126</sup> provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

Since 2007, the Commission has gathered information on the enforcement of the Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals ('the REACH Regulation') and the Regulation on Classification, Labelling and Packaging ('CLP Regulation'). In December 2020, the Commission assessed the Member States' reports on the implementation and enforcement of these Regulations<sup>127</sup>, in line with Article 117(1) of the REACH Regulation and Article 46(2) of the CLP Regulation. According to the latest available data, national enforcement structures have not changed much in recent years. However, it is apparent from this report that there are still many disparities in the implementation of the REACH and CLP Regulations, and notably in the area of law enforcement.

In August 2021, the Commission published a measurable assessment of the enforcement<sup>128</sup> of the two main EU Regulations on chemicals (the REACH Regulation and the CLP Regulation) using a set of indicators on different aspects of enforcement.

The recorded compliance levels seem to be quite stable over time, but with a worsening trend likely due to: 1) enforcement authorities being more effective in detecting noncompliant products/companies; and 2) more non-compliant products on the EU market.

Responsibility for enforcing compliance with both REACH and CLP Regulations in Czechia lies with the following authorities<sup>129</sup>:

- Czech Environmental Inspectorate
- Czech Customs Administration
- Regional Public Health Authorities
- Central Institute for Supervising and Testing in Agriculture
- State Labour Inspection Office

Czechia has drawn up and fully implemented enforcement strategies for both REACH and CLP<sup>130</sup>. These includes:

- General enforcement methodology updated every year, taking into account REF projects
- Main focus of enforcement activities: registration, safety data sheets, duty to communicate information on substances in articles, downstream user obligations and restrictions, as well as classification of substances and mixtures, labelling and packaging duties, notification C & L and ecommerce
- Choice of enforcement action left to inspectors
- Enforcement activities are monitored and annually evaluated
- Annual update of enforcement methodology based on monitoring and evaluation of

<sup>&</sup>lt;sup>124</sup> May infringements package: key decisions (europa.eu)

<sup>125</sup> COM(2020) 667 final

<sup>&</sup>lt;sup>126</sup> REACH: OJ L 396, 30.12.2006, p.1. - CLP: OJ L 252, 31.12.2006, p.1

 <sup>&</sup>lt;sup>127</sup> European Commission, Final Report, on the operation of REACH and CLP, <u>Final report REACH-CLP MS reporting 2020.pdf (europa.eu)</u>
 <sup>128</sup> European Commission, <u>REACH and CLP enforcement: EU level</u>

enforcement indicators

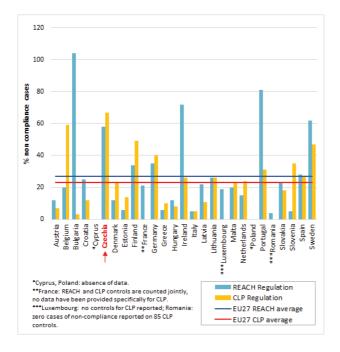
<sup>&</sup>lt;sup>129</sup> Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p.68

<sup>&</sup>lt;sup>130</sup> Final report REACH-CLP MS reporting 2020.pdf (europa.eu), p.76

#### enforcement activities

Czechia allocates only 11 staff members are to REACH and CLP enforcement<sup>131</sup>. At 300, the number of REACH controls remains well below the EU average in the (the 2019 reporting period). However, when submitting this data, the Czech competent authorities did not distinguish between the controls that were proactive (inspections) and those that were reactive/non-routine (investigations in response to complaints, accidents and referrals).. The actual level of expertise has increased since the last reporting period. Czechia is among the countries with the highest number of appeals against national enforcement decisions filed in 2015-2019, with no enforcement decisions overturned. The high number of noncompliance cases out of the total number of controls is far above the average<sup>132</sup>.

Figure 32: Percentage of non-compliance cases out of the total number of REACH and CLP controls during 2019 per Member State and compared to the EU average<sup>133</sup>



#### 2022 priority actions

Upgrade administrative capacities towards to enforce a zero tolerance approach to non-compliance.

<sup>&</sup>lt;sup>131</sup> European Commission, Final Report, on the operationof REACH and CLP, <u>Final report\_REACH-CLP MS reporting\_2020.pdf (europa.eu</u>), p. 75.

<sup>&</sup>lt;sup>132</sup> <u>Final report REACH-CLP MS reporting 2020.pdf (europa.eu)</u>, p.87-88.

<sup>&</sup>lt;sup>133</sup> European Commission, Final Report, on the operation of REACH and CLP, pp.87-88, 2022.

#### 4. Climate action

In line with the Paris Agreement and as part of the European Green Deal, the European Climate Law sets the EU target of reaching climate neutrality by 2050 and reducing greenhouse gas (GHG) emissions by 55% by 2030 compared to 1990. The law also limits the contribution that carbon removals can make towards emission reductions in 2030, to ensure a sufficient mitigation effort.

The EU and its Member States submitted updated Nationally Determined Contribution (NDC) to the UNFCCC in December 2020.

The EU is working across all sectors and policies to cut GHG emissions and make the transition to a climateneutral and sustainable economy, as well as addressing the unavoidable consequences of climate change. EU climate legislation incentivises emissions reductions from power generation, industry, transport, the maritime sector and fluorinated gases (F-gases) used in products. For road transport, current EU legislation requires the GHG intensity of vehicle fuels to be cut by 6% by 2020 compared to 2010<sup>134</sup> and sets binding GHG emission standards for different vehicle categories<sup>135</sup>. Under the Fgas Regulation, the EU's F-gas emissions will be cut by two-thirds by 2030 compared with 2014 levels. From 2021 emissions and removals of GHG from LULUCF have been included in the EU emission reduction efforts. The EU adaptation policy is an integral part of the European Green Deal.

From 2021, Member States are required to report on their national adaptation policies<sup>136</sup>, As the EU Climate Law recognises adaptation as a key component of the long-term global response to climate change. Member States will be required to adopt national strategies, and the EU will regularly assess progress as part of its overall governance on climate action. The updated EU adaptation strategy, published in February 2021, sets out how the EU can adapt to the unavoidable impacts of climate change and become climate resilient by 2050.

#### Key national climate policies and strategies

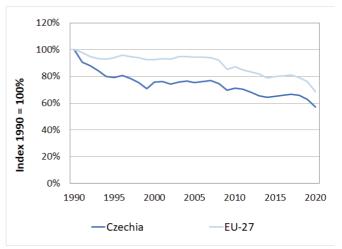
Czechia has an integrated National Energy and Climate Plan (NECP) for 2021-2030, consistent with its Long-term Strategy in this area. The national objective for 2030 is to reduce greenhouse gas emissions by 30 % compared to 2005 levels.

Czechia's RRP allocates 42% to climate objectives and outlines investments and some reforms to enable the transition to a more sustainable, low-carbon and climate-resilient economy.

In September 2021, the Czech government adopted updated Strategy National Action Plan on Adaptation to Climate Change. It identifies major climate change impacts. They set out an integrated approach for assessing the synergy of adaptation and mitigation measures, and for whether the proposed measures are suitabile for the individual components of the environment, the economy and the social sphere

The country's total greenhouse gas emissions decreased by 43% between 1990 and 2020 and they are projected to continue to decrease significantly in the years ahead. Nevertheless, the energy production, transport and building sectors in Czechia remain very carbon intensive.





#### **Effort sharing target**

For emissions not covered by the EU EU's emissions trading scheme (ETS), Member States have binding national targets under the Effort Sharing legislation<sup>137</sup>. Under EU legislation, Czechia has a target of limiting the increase by +9% by 2020 and reduction by 14% by 2030 compared to 2005. The country's Effort Sharing emissions in 2019 were very close to its 2020 target. Under its National Energy and Climate Plan, Czechia

<sup>&</sup>lt;sup>134</sup> The Fuel Quality Directive (Directive 98/70/EC) sets strict quality requirements for fuels used in road transport in the EU to protect human health and the environment, and to make road travel across the EU safer.

<sup>&</sup>lt;sup>135</sup> Regulation (EU) 2019/631

<sup>&</sup>lt;sup>136</sup> Article 29 of Regulation (EU) 2018/1999.

<sup>&</sup>lt;sup>137</sup> Regulation (EU) 2018/842

intends to achieve reductions in line with its current Effort Sharing target for 2030.

Figure 34: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation in Czechia, 2020 and 2030 as percentage change from 2005

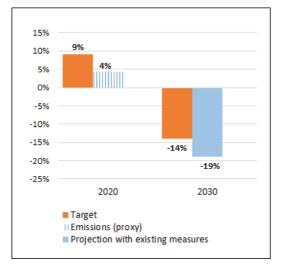
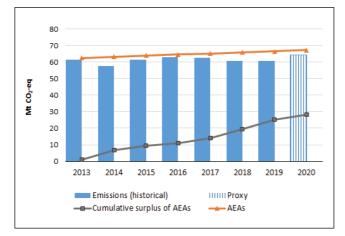


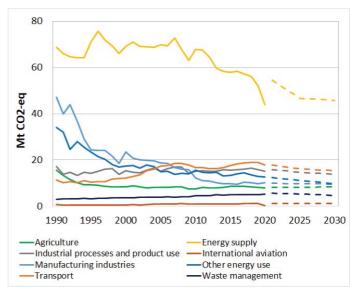
Figure 35: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision in Czechia, 2013-2020



#### **Key sectoral developments**

In road transport, the GHG intensity of vehicle fuels in Czechia fell by 3.1% from 2010 to 2019. The country needs to act swiftly to meet the current EU-wide target of reducing 6% by 2020. There are several types of action that Member States can take in this regard, for example: (i) further expanding the use of electricity in road transport; (ii) supporting the use of biofuels, and advanced biofuels in particular; (iii) incentivising the development and deployment of renewable fuels of non-biological origin; and (iv) reducing upstream emissions before refining processes.In 2019, road transport emissions in Czechia accounted 13% of the total GHG emissions. Emissions have increased by 10% compared to 2005.

Figure 36: Greenhouse gas emissions by sector<sup>138</sup> – historical emissions 1990-2020, projections 2021-2030<sup>139</sup>

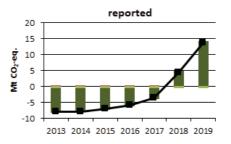


On buildings, using renewable energy and making energy savings is crucial. Czechia's district heating system still uses 56% hard coal and lignite and 31 % gas.

On agriculture, emissions have remained stable.

In the Land Use, Land Use Change and Forestry (LULUCF) sector, Czechia projects small net removals by 2030. Reported quantities under the Kyoto Protocol for the LULUCF sector in Czechia show net average annual removals of -2.1 Mt CO<sub>2</sub>-eq in 2013 to 2019. With this, Czechia contributes with 0.6% to the annual average sink of the 344.9 Mt CO<sub>2</sub>-eq for the EU-27.

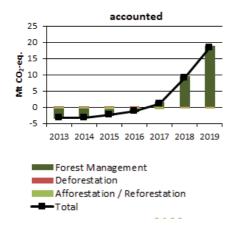




<sup>&</sup>lt;sup>138</sup> The sectors in the figure correspond to the following IPCC sectors: Energy supply: 1A1, 1B and 1C. Energy use in manufacturing industries: 1A2. Industrial processes and product use: 2. Transport: 1A3. Other energy use: 1A4, 1A5 and 6. Agriculture: 3. Waste: 5. International aviation: 1.D.1.a.

<sup>&</sup>lt;sup>139</sup> European Environmental Agency, <u>Total GHG trends and projections</u>.

<sup>&</sup>lt;sup>140</sup> The differences between reported and accounted emissions from LULUCF under the Kyoto Protocol are described in the '*explanatory note* on LULUCF – accounted and reported quantities under the Kyoto Protocol'.



# Use of revenues from the auctioning of EU ETS allowances

The total revenues from the auctioning of emission allowances under the EU ETS over 2013-2020 amounted to EUR 2.5 billion. In Czechia, revenues are not earmarked. Reporting spending represents the amounts allocated for climate change and energy projects in the national budget of each year (if this is higher than 100%, it is reported as 100% of revenues). In average, 76 % of the national budget of each year have been allocated for climate and energy projects.

#### 2022 priority actions

- Harness the potential of renewable energy and energy savings, especially in buildings
- Further decarbonise the transport sector, the fastest growing energy consuming sector. Stimulate the electrification by putting in place charging infrastructure and supporting alternative fuels. This will have a positive impact on Czechia's domestic transport industry and the developing batteries industry.
- Incentivise the use of renewables in the electricity sector, including by integrationg of intermittent renewable electricity into the distribution and transmission network and electricity charges. Incentivise the diversification of renewable sources.
- Ensure sustainable use of biomass. Current and planned use of biomass is close to its sustainability levels. In the longer-term, there is a need to develop alternatives.
- Foster action in the LULUCF sector by implementing additional measures and changes in land management practices.

#### Part II: Enabling framework: Implementation tools

#### 5. Financing

# Environmental investment needs in the European Union

Financing environmental measures is essential for their success. Although most financing comes from national sources, various EU funds contribute significantly, helping to close the financing gap between countries. Post-2020, environmental measures will also be supported by the EU's COVID-19 Recovery Fund (via the RRF) and the 'do no significant harm' (DNSH) principle which runs across the EU budget. The renewed commitments made at COP26 (Glasgow, Oct-Nov 2021) and the Biodiversity Convention (April-May 2022) will also be reflected in the EU budget <sup>141</sup>.

#### **Overall environmental investment gaps (EU27)**

The EU's investment needs for the green transition cover a range of interlinked areas. The additional investment needs over baselines (i.e. the gap between what is needed and what is forecast to be invested if no additional action is taken) for climate, energy and transport were estimated at EUR 390 billion per annum (EU27)<sup>142</sup>, with a further EUR 130 billion to deliver the EU's core environmental objectives<sup>143</sup>. The costs of climate-change adaptation can also be significant, reaching a total of EUR 35-62 billion (narrower scope) or EUR 158-518 billion (wider scope) per year<sup>144</sup>. Those investment needs reflect the implementation objectives to 2020 and to 2030 (except for climate-change adaptation, the costs of which are expected to last over a longer time horizon). A preliminary update of the EU's core environmental investment gap is provided in Table 1<sup>145</sup>. Almost 40% of the environmental investment gap relate to dealing with pollution, which accounts for nearly two-thirds of the total gap if combined with water management. The investment gap in circular economy and waste is estimated to range between EUR 13-28 billion a year, depending on levels of circularity implemented. The annual biodiversity financing gap is estimated at around EUR 20 billion.

Table1:EstimatedbreakdownoftheEU'senvironmentalinvestmentgaps,byenvironmentalobjective,2021-2030per annum146

Environmental	Estimated investment gap (EU-27, p.a.)			
objective	EUR billion	%		
Pollution prevention & control	42.8	39%		
Water management & industries	26.6	24%		
Circular economy & waste	13.0	12%		
Biodiversity & ecosystems <sup>147</sup>	21.5	20%		
R & D & I and other	6.2	6%		
Total	110.1	100%		

#### **Environmental investment needs in Czechia**

To tackle key environmental challenges, air quality, circular economy and water management (addressing

<sup>&</sup>lt;sup>141</sup> <u>The Convention on Biological Diversity (cbd.int); Post-2020 Global</u> <u>Biodiversity Framework | IUCN</u>

<sup>&</sup>lt;sup>142</sup> COM(2020) 562 final Stepping up Europe's 2030 climate ambition Investing in a climate-neutral future for the benefit of our people: <u>https://eur-lex.europa.eu/legal-</u>

content/EN/TXT/PDF/?uri=CELEX:52020DC0562&from=EN and SWD(2021)621, accompanying proposal COM(2021)557 to amend the REDII Directive (EU) 2018/2001.

<sup>&</sup>lt;sup>143</sup> SWD(2020) 98 final/2 Identifying Europe's recovery needs: Identifying Europe's recovery needs (europa.eu)

<sup>&</sup>lt;sup>144</sup> SWD(2018)292 Impact assessment accompanying the Proposal for the LIFE Regulation (COM(2018)385) https://ec.europa.eu/commission/sites/beta-political/files/budgetmay2018-life-swd en.pdf

<sup>&</sup>lt;sup>145</sup> With decreases due to Brexit and some reconciliation among the objectives. Source: DG Environment "Study supporting EU green investment needs analysis" (ongoing, 2021-2023) and DG Environment internal analysis "Environmental investment needs and financing in the EU's green transition" July 2020.

<sup>&</sup>lt;sup>146</sup> European Commission, DG Environment, 'Study supporting EU green investment needs analysis' (ongoing, 2021-2023) and DG Environment internal analysis 'Environmental Investment needs and financing in the EU's green transition', July 2020.

<sup>&</sup>lt;sup>147</sup> To meet the needs of the 2030 biodiversity strategy (Natura 2000, green infrastructure), at least EUR 20 billion a year should be unlocked for nature (COM/2020/380 final) while to fully cover the strategy (including restoration) EUR 30-35 billion may be needed, indicating a gap of EUR 10-20 billion a year compared to current baseline expenditure.

floods and droughts) stand out as major areas for environmental investment.

#### **Pollution prevention & control**

The EU's first Clean Air Outlook<sup>148</sup> under the clean air programme estimated that the total air pollution control costs for Czechia to reach the NECD emission reduction requirements <sup>149</sup> by 2030 amount to EUR 2 billion per year, including EUR 1.3 billion for capital investment (assuming the 2030 climate and energy targets are met).

The second EU's Clean Air Outlook<sup>150</sup> suggests that the EU would largely achieve the reductions of air pollutant emissions that correspond to the obligations under the NEC Directive for 2030 if: (i) all relevant legislation adopted up to 2018 is implemented (including all air pollution legislation and the 2030 climate and energy targets set in 2018); and (ii) Member States also implemented the measures announced in their national air pollution control programmes. The only exception is for ammonia for 15 Member States, excluding Czechia.

#### Water management

Significant investment is still needed in Czechia to accelerate compliance with the WFD and the Floods Directive. Preparedness for droughts needs to be improved in light of climate change. In addition to further developing the monitoring network, the focus should be shifted to land management. This will entail using nature-based solutions and landscape features, minimising soil sealing and restoring wetlands to enable a more natural hydromorphology of surface water bodies affected by artificial flow regulation, safeguarding soil and preventing land from desertification. Measures are needed to reduce water abstractions pressures and to reduce diffuse agricultural pollution (nutrients particularly nitrate in groundwater, chemicals and and organic pollution) to both surface water groundwater which prevent the achievement of WFD objectives.

According to the Commission's assessment of Czechia's RBMP<sup>151</sup>, the level of ambition in the programme of measures is low and little progress is expected to be made on meeting the objectives by end of the second

cycle. EU funding has accounted for a significant share of total public funding over the past decade.

An OECD study assessed the investment needs of the EU water industry (to meet the legal requirement for drinking water and sanitation ), and found that the cumulative expenditure needed for Czechia will reachs EUR 5.7 billion by 2030, including EUR 2.4 billion in capital expenditure. This suggests that Czechia will need an average of EUR 500 million a year in financing, with around half of that (EUR 240 million) dedicated to investments (in physical assets)<sup>152</sup> of which close to 90% relate to wastewater. Moreover, the recent 6<sup>th</sup> Water Directive and Floods Framework Directive Implementation Report<sup>153</sup> and the financial - economic study<sup>154</sup> accompanying it, are also a relevant source of information in this domain.

#### Waste & circular economy

Accelerating the transformationto a circular economy and opening it up to mainstream economic actors (rather than today's front-runners) is a major challenge for Czechia under the Green Deal. Czechia has the potential to go beyond the 'narrow' understanding of circular economy. For this, it needs to direct funding to the entire lifecycle of products: including their design, circular industrial processes, sustainable consumption, waste management and secondary raw materials.

Additional investment needs (over baselines) to comply with the revised waste proposals (WFD, landfill and packaging waste directives) by 2030<sup>155</sup> include:

- EUR 519 million to reach the EU recycling targets for municipal and packaging waste by 2035;
- EUR 297 million in capital investments for municipal and packaging waste for 2021-2027

This suggest an average annual investment need of around EUR 35-40 million for Czechia's waste sector, to improve collection, biowaste treatment, recycling reprocessors, waste sorting facilities and waste registry digitalisation. However, this does not include tackling key waste streams (plastics, textiles, furniture) or additional

<sup>&</sup>lt;sup>148</sup> Progress towards the achievement of the EU's air quality and emissions objectives (europa.eu)

<sup>&</sup>lt;sup>149</sup> Covering the reductions of and the emission ceilings for 5 atmospheric pollutants, SOx, NOx, PM2.5, NH3 and VOC by 2030, compared to 2005. Requirements are based on <u>Directive (EU)</u> 2016/2284.

<sup>&</sup>lt;sup>150</sup> COM(2021) <u>3 final</u>. International Institute for Applied Systems Analysis (IIASA), <u>Support to the development of the</u> <u>Second Clean Air Outlook</u>, 2020 and <u>Annex</u>

 <sup>151</sup> https://eur-lex.europa.eu/legal 

 content/EN/TXT/PDF/?uri=SWD:2019:35:FIN&qid=1551205988853&fro
 m=EN

<sup>&</sup>lt;sup>152</sup> OECD, <u>financing-water-supply-sanitation-and-flood-protection-</u> country-fact-sheet-czech-republic.pdf (oecd.org)

<sup>&</sup>lt;sup>153</sup> <u>WFD and FD Implementation Reports</u> – DG Environment – European Commission.

<sup>&</sup>lt;sup>154</sup> European Commission, Directorate-General for Environment, Economic data related to the implementation of the WFD and the FD and the financing of measures, Final report. Publications Office, 2021.

<sup>&</sup>lt;sup>155</sup> European Commision, <u>Study on investment needs in the waste</u> sector and on the financing of municipal waste management in Member <u>States</u>, 2019.

investment needs that may arise from an increased uptake of circular economy processes across sectors.

#### **Biodiversity & ecosystems**

Prioritised action frameworks (PAFs) adopted by the Member States according to Article 8 of the Habitats Directive present: (i) the conservation priorities for the Natura 2000 network and its supporting green infrastructure; (ii) the costs of these conservation priorities; and (iii) planned funding sources for biodiversity and ecosystems in the period corresponding to the current multiannual financial framework (MFF) for 2021-2027.

According to Czechia's PAF, EUR 1.05 billion will be needed for nature conservation, including the management of the Nature 2000 network, in the 2021-2027 programming period , amounting to EUR 150 million per year on average<sup>156</sup>. This excludes additional costs to implement the biodiversity strategy to 2030, including on increased protection and restoration.

#### EU environmental funding 2014-2020

The MFF for 2014-2020 allocated almost EUR 960 billion (in commitments, 2011 prices)<sup>157</sup> for the EU to spend over this period. This commitment in this 2014-2020 MFF to the green transition included a 20% climate spending target. It also included funding opportunities for the environment, in particular, under the European Structural and Investment (ESI) Funds<sup>158</sup>. The 2014-2020 MFF budget was subsequently topped up with over EUR 50 billion (in current prices) from the REACT-EU programme for cohesion policy action against the COVID-19<sup>159</sup>.

Czechia received EUR 25.46 billion from the ESI Funds over 2014-2020 to invest in job creation and a sustainable and healthy European economy and environment. The planned direct environmental investment amounted to EUR 2.36 billion with a further 1.91 billion identified as indirect environmental investment value, totaling EUR 4.27 billion. Figure 39 shows an overview of (planned) individual ESI Funds earmarked for Czechia (EU amounts, without national amounts).

<sup>157</sup> Council Regulation (EU, Euratom) No 1311/2013.

Figure 38: ESI Funds allocated to Czechia, including environmental investments, 2014-2020<sup>160</sup>

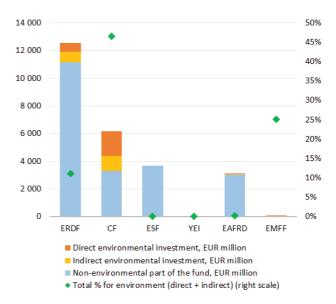


Table 2: Direct and indirect environmental investments
under the ESI Funds in Czechia, 2014-2020 <sup>161</sup>

Instrument	Allocations for the environment (EUR million)
Under Cohesion policy (ERDF + CF)	4 256.9
Direct environmental investments	<u>2 344.0</u>
water	576.9
waste	320.3
air quality	569.3
biodiversity and nature	405.8
land rehabilitation	115.5
climate and risk management	356.3
Indirect environmental investments	<u>1 912.9</u>
renewable energy	34.0
energy efficiency	590.8

<sup>&</sup>lt;sup>160</sup> European Commission, DG Environment - Data analysis based on ESI Funds Open Data Portal (cohesiondata.ec.europa.eu), Integration of environmental concerns in Cohesion Policy Funds (COWI, 2017), Regulation (EU) No 1303/2013, Regulation (EU) 2021/1060 and Implementing Regulation (EU) No 215/2014. Environmental investments here are captured via the combined use of intervention fields and coefficients under the Regulation (EU) No 1303/2013 and Regulation (EU) 2021/1060 allowing for a more precise identification and valuation of relevant environmental investments. N.B. Indirect environmental investments are valued using the Annex I environmental coefficients of the Regulation (EU) 2021/1060 (as opposed to full value). <sup>161</sup> European Commission, DG Environment - Data analysis. The values of environmental investments identified here in the specific environmental areas may differ from the tracking values at cohesiondata.ec.europa.eu, e.g. for clean air or biodiversity due to two factors: the set of environmental coefficients used and the range of funds assessed. DG Environment's analysis here covered the full range of ESI Funds. See also previous footnote.

<sup>&</sup>lt;sup>156</sup> The N2K Group, Strengthening investments in Natura 2000 and improving synergies with EU funding instruments report to the European Commission, 2021.

<sup>&</sup>lt;sup>158</sup> The European Structural and Investment (ESI) Funds include the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF) with the Youth Employment Initiative (YEI), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF).

<sup>&</sup>lt;sup>159</sup> <u>Regulation (EU) 2020/2221</u>.

other energy <sup>162</sup>	42.4
sustainable transport	1 175.7
business development, R&I	70.0
Under EAFRD/rural development	7.7
Direct environmental investments	<u>7.2</u>
climate and risk management	7.2
Indirect environmental investments	<u>0.5</u>
renewable energy	0.5
Under EMFF	7.8
Direct environmental investments	<u>7.8</u>
environment protection & resource efficiency	7.8
Under ESI Funds total	4 272.4
Direct environmental investments	2 359.0
Indirect environmental investments	1 913.4

It is not yet possible to fully report on the 2014-2020 programming period. Nevertheless, current data suggests that the implementation of ESI Funds is on a track in Czechia<sup>163</sup>. This also applies to spending on environmental protection, resource management, climate change adaptation and on risk prevention. The estimated EU financing in 2014-2020 for Czechia may reach EUR 4.6 billion in total.

Funding for the environment from the ESI Funds has also been supplemented by other EU funding programmes available to all Member States, such as, the LIFE programme, Horizon 2020 and some European Investment Bank (EIB) loans. The LIFE programme<sup>164</sup> is entirely dedicated to environmental and climate objectives. It finances demonstration and best practice actions for green solutions to be deployed. In 2014-2020, Czechia received EU support for 10 LIFE projects with EUR 30.5 million from the LIFE programme for nature and environmental projects (out of 1 028 EU-27 LIFE projects with a total EU contribution of EUR 1.74 billion)<sup>165</sup>.

In 2014-2020, Horizon 2020 allocated about EUR 10.6 million for Czechia for the environment (in particular for circular economy, reseach and innovation, climate action and water) - 2.1% of its total allocation of EUR 501.6 million<sup>166</sup>. From the European Fund for Strategic Investments (EFSI), Czechia received a total of EUR 76.8

million, though no projects were dedicated to the environment<sup>167</sup>. Environment-related EIB loans to Czechia amounted to EUR 300 million (supporting water and sewerage), of a total of EUR 6.2 billion in EIB lending to Czechia during the same period.<sup>168</sup> The country ranks 13th in size in terms of total EIB lending.

In 2020, the EIB provided EUR 24.2 billion in funding across Europe to fight climate change, 37% of its total financing. It also provided EUR 1.8 billion (3% of its financing) for environmental lending<sup>169</sup>.

#### EU environmental funding 2021-2027

The 2020 European Green Deal investment plan calls for EUR 1 trillion in green investments (public and private) to be made across the EU by 2030. The 2021-2027 MFF and the NextGenerationEU spending programme will mobilise EUR 2.018 trillion (in current prices) to support the recovery from COVID-19 and the EU's long-term including environmental protection.<sup>170</sup> priorities, Following the EU Green Deal's<sup>171</sup> pledge to 'do no harm' and the Interinstitutional Agreement on the 2021-2027 MFF<sup>172</sup>, 30% of the EU budget in 2021-2027 will support climate efforts, while biodiversity will receive 7.5% of the EU budget as of 2024 and 10% as of 2026 that requires increased programming of financial resources for biodiversity, specifically under the 2021-2027 Cohesion policy and the 2023-2027 CAP to reach those targets.

Sustainable finance significantly increases transparency on environmental sustainability (a goal promoted by the EU Taxonomy)<sup>173</sup>. It also strengthens non-financial reporting requirements and facilitates the issuance of green bonds (by developing the EU green bond standard<sup>174</sup>). Reinforced by the renewed sustainable finance strategy (2020)<sup>175</sup>, sustainable finance will increase investment flows to climate and environment.

<sup>170</sup> European Commission, <u>2021-2027 long-term EU budget &</u> <u>NextGenerationEU</u>.

<sup>171</sup> COM/2019/640 final.

<sup>&</sup>lt;sup>162</sup> Intelligent energy distribution systems (smart grids) and high efficiency co-generation and district heating, based on intervention field 53 and 54 respectively (with 40% environmental coefficients) of REGULATION (EU) 2021/1060, Annex I.

<sup>&</sup>lt;sup>163</sup> Open Data Portal for the European Structural Investment Funds -European Commission | Data | European Structural and Investment Funds (europa.eu) March 2022: 115% allocated and 70% spent overally <sup>164</sup> European Commission, <u>LIFE Programme</u>.

<sup>&</sup>lt;sup>165</sup> Cinea, <u>LIFE (europa.eu)</u>.

<sup>&</sup>lt;sup>166</sup> Source: <u>https://sc5.easme-web.eu/</u>.

<sup>&</sup>lt;sup>167</sup> Approved and signed EFSI financing - EIB, 2015-2020: Source: <u>https://www.eib.org/en/products/mandates-</u> partnerships/efsi/index.htm.

<sup>&</sup>lt;sup>168</sup> EIB loans in EU countries in 2014-2020. Source: EIB Open Data Portal: https://www.eib.org/en/infocentre/eib-open-data.htm

<sup>&</sup>lt;sup>169</sup> EIB 2020 Activity Report. The EIB Group jointly works with the European Commission in implementing several programs that finance environmental implementation: InvestEU, the successor of EFSI, Pillar II and III of the Just Transition Mechanism. The EIB Group stands as a key implementing partner for InvestEU with responsibility for managing 75% of the overall budgetary capacity of the mandate.

<sup>&</sup>lt;sup>172</sup> Interinstitutional Agreement, OJ L 433I.

https://ec.europa.eu/info/business-economy-euro/banking-and-finance/sustainable-finance/eu-taxonomy-sustainable-activities\_en
 <sup>174</sup> EU Green Bond Standard - 2021/0191 (COD).

 $<sup>^{175}</sup>$  COM (2021) 390 Final - European Commission, Strategy for Financing the Transition to a Sustainable Economy.

The new strategy on adaptation to climate change<sup>176</sup>can help to close the insurance protection gap, which currently leaves many risks from climate-related events uninsured<sup>177</sup>. The EIB will align 50% of its lending for climate and environment projects<sup>178</sup> with an EUR 250 billion contribution to the Green Deal investment plan by 2027.

Table	3:	Кеу	EU	funds	allocated	to	Czechia	(current
prices)	, 2	021-2	2027	,				

Instrument	Country funding allocation (million EUR)
Cohesion policy	Total: 19.8 <sup>179</sup>
ERDF	10 426.2
CF	6 365.3 <sup>180</sup>
ESF+	2 701.2
ETC (ERDF)	311.1 <sup>181</sup>
Just Transition Fund	<b>1 641.5</b> <sup>182</sup>
EAFRD/rural development under CAP Strategic Plans 2023-2027 <sup>183</sup>	1 295.9 <sup>184</sup>
European Maritime, Fisheries and Aquaculture Fund (EMFAF)	EUR 30.0 <sup>185</sup>
Recovery and Resilience Facility (RRF) 2021 – 2026 <sup>186</sup>	EUR 7 035.7 <sup>187</sup> (grants)

In Czechia, the programming for most EU funds (cohesion policy funds, EAFRD and EMFAF) is ongoing. However, negotiations have been concluded under the RRF.

In Czechia's national recovery and resilience plan (RRP), 41.7% of the budget is allocated to climate-related measures<sup>188</sup>, with a focus on climate mitigation, adaptation, protection of biodiversity and natural resources. Investments in renewable energy sources, modernising district heating distribution networks, replacing coal-fired boilers and improving the energy efficiency of residential and public buildings are expected. Investments in sustainable transport are also expected, with the aim of improving railway and clean mobility infrastructure, including electro-mobility.

The biggest contributors to the climate target are measures to improve energy efficiency in buildings and the acquisition of boilers based on RES, followed by measures to support sustainable and clean transport and mobility, and measures to support climate adaptation and environmental protection, namely reforestation and flood prevention. A fourth part of the plan contributes to the green transition and to some degree to the protection of the environment by promoting circular economy and waste.

The plan sets out conditions to ensure that the DNSH principle is respected. For example, biomass-related investments for the production of electricity and heat must be underpinned by an assessment of the trajectories of sustainable use of bioenergy and supply of biomass in Czechia and its impacts on Land Use, Land-Use Change and Forestry (LULUCF) sinks, biodiversity and air quality in 2020-2030<sup>189</sup>.

On the budget per policy area in 2021-2027, Czechia allocates 34.5% for 'a greener, lowcarbon transitioning towards a net zero carbon economy'- (Policy Objective 2 in the draft Partnership Agreement<sup>190</sup>); 23.7% for 'a more social and inclusive Europe' (Policy Objective 4); and 21.9% for 'a more connected Europe by enhancing mobility' (Policy Objective 3). The draft Partnership Agreement covers all relevant environmental sectors, but in the European Green investments Deal's decorbanisation and zero pollution objectives take precedence. According to the biodiversity tracking methodology for MFF 2021-2027, biodiversity-related funding accounts for around 7.5% under the Partnership Agreement with Czechia.

Czechia must also fulfil the enabling conditions on satisfactory waste management plans in order to fund

<u>EUR-Lex - 52021SC0211 - EN - EUR-Lex (europa.eu)</u> <sup>190</sup> <u>DotaceEU - Příprava období 2021-2027</u>

<sup>&</sup>lt;sup>176</sup> COM(2021) 82 final.

<sup>&</sup>lt;sup>177</sup> The strategy would support improved insurance gap coverage including through the natural catastrophe markets as reflected with the EIOPA (the Association for European Insurance and Occupational Pension Authorities) dashboard on insurance protection gap for natural catastrophes. See: The pilot dashboard on insurance protection gap for natural catastrophes | Eiopa (europa.eu).

<sup>&</sup>lt;sup>178</sup> EIB Climate Bank Roadmap 2021-2025, November 2020

<sup>&</sup>lt;sup>179</sup> European Commission, <u>2021-2027 Cohesion policy EU budget</u> <u>allocations</u>.

 $<sup>^{\</sup>rm 180}$  The transfer to the Connecting Europe Facility (Transport) is not included.

<sup>&</sup>lt;sup>181</sup> Interreg initial allocations per Member State including ETC transnational and ETC cross-border cooperation.

<sup>&</sup>lt;sup>182</sup> European Commission, <u>2021-2027 Cohesion policy EU budget</u> <u>allocations</u>.

<sup>&</sup>lt;sup>183</sup> European Commission, CAP strategic plans.

<sup>&</sup>lt;sup>184</sup> Regulation (EU) 2021/2115, Annex XI.

<sup>&</sup>lt;sup>185</sup> Regulation (EU) 2021/1139, Annex V.

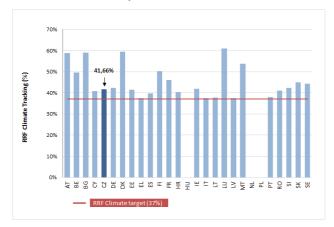
<sup>&</sup>lt;sup>186</sup> The actual reforms and investments under the RRF have to be implemented by 31 December 2026.

<sup>&</sup>lt;sup>187</sup> Council Implementing Decision, FIN 637.

<sup>188</sup> State of play in May 2022, but it is likely that Czechia will receive additional allocations.

<sup>&</sup>lt;sup>189</sup> Analysis of Czechia's RRP accompanying the document Proposal for a CID on the approval of the assessment of the RRP for Czechia, SWD/2021/211 final:

investments in waste management and the circular economy. An updated planning for investments in water and wastewater sectors as well as in the PAF to support investments in nature and biodiversity.



#### Table 39: Climateexpenditure in RRPs, 2021-2026<sup>191</sup>

Under NextGenerationEU, the Commission will issue up to EUR 250 billion of EU green bonds (one third of all bonds issued under NextGenerationEU) until 2026 that will comply with the general spirit of the 'do no significant harm' (DNSH) principle. However, this EUR 250 billion in green bonds will not be subject to the currently developed delegated acts related to the EU Taxonomy and will not fully align with the proposed EU standard for green bonds.

In addition to EU funds earmarked specifically for Czechia in 2021-2027, there are other EU-level funding programmes open to all Member States. These include the LIFE programme<sup>192</sup> (EUR 5.4 billion), Horizon Europe (EUR 95.5 billion)<sup>193</sup>, the Connecting Europe Facility<sup>194</sup> (EUR 33.7 billion)<sup>195</sup> and the funds to be mobilised via the InvestEU<sup>196</sup> programme. These other sources of funding will also support the green transition, including through research and innovation activities for environmental protection (Horizon Europe)<sup>197</sup>, clean transport and

energy (the Connecting Europe Facility)<sup>198</sup> or sustainable infrastructure (InvestEU)<sup>199</sup>.

# National environmental protection expenditure

Total national expenditure on environmental protection (including all relevant current and capital expenditure )<sup>200</sup> in the EU-27 was EUR 272.6 billion in 2020, representing 2% of EU-27 GDP. This percentage has remained quite stable over time. Although the largest absolute amounts of expenditure are concentrated in a few countries, most countries spend 1-2% of their GDP on environmental protection, with Czechia spending 2.7%.

Of this spending, the EU-27's capital expenditure (Capex) on environmental protection (i.e. investment) amounted to EUR 56.3 billion in 2018, falling to EUR 54.5 billion in 2020, representing around 0.4% of EU-27 GDP. Most Member States invested 0.2-0.5% of their GDP in environmental protection, while Czechia dedicated 0.8%. In 2014-2020, this amounted to around EUR 10.6 billion in environmental investment in Czechia (EU-27 total: EUR 376 billion).

<sup>&</sup>lt;sup>191</sup> European Commission. The contributions to climate objectives have been calculated using Annex VI of the RRF Regulation (EU) 2021/241.

<sup>&</sup>lt;sup>192</sup> European Commission, <u>LIFE Programme</u>.

<sup>&</sup>lt;sup>193</sup> European Commission, <u>Multiannual financial framework 2021-2027</u> (in commitments) - Current prices.

<sup>&</sup>lt;sup>194</sup> The CEF (Transport) includes EUR 11.3 billion transferred from the Cohesion Fund. 30 % of the transferred amount will be made available, on a competitive basis, to all Member States eligible for the Cohesion Fund. The remaining 70% will respect the national envelopes until 31 December 2023. Any unspent amount, by that date, under national envelopes will support all Cohesion Fund's Member States.

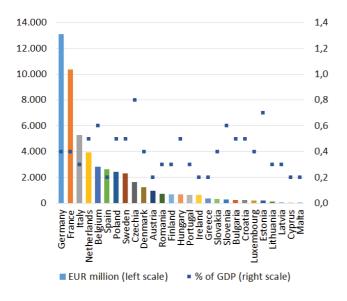
<sup>&</sup>lt;sup>195</sup> Regulation (EU) 2021/1153.

<sup>&</sup>lt;sup>196</sup> The InvestEU Fund is expected to mobilise over EUR 372 billion of investment through an EU budget guarantee of EUR 26.2 billion to back the investment of financial partners such as the European Investment Bank (EIB) Group and others.

<sup>&</sup>lt;sup>197</sup> European Commission, <u>Horizon Europe</u>.

 <sup>&</sup>lt;sup>198</sup> European Commission, <u>Connecting Europe Facility</u>.
 <sup>199</sup> European Union, <u>InvestEU</u>.

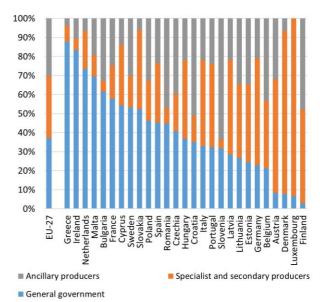
<sup>&</sup>lt;sup>200</sup> At economy level, including final consumption, intermediate consumption and capital expenditure of households, corporations and governments related to environmental protection goods and services. It excludes EU funds, while may include some international expenditure beyond domestic. Data source: Environmental Protection Expenditure Accounts (EPEA), Eurostat. EPEA accounts are based on the <u>CEPA 2000</u> classification, excluding climate, energy and circular economy."



# Figure 40: Environmental protection investments in the EU-27 (EUR million and % of GDP), 2018<sup>201</sup>

By institutional sector, based on the reported data, Czechia's general government and businesses provided around 40% each of the country's environmental protection investments while specialist producers of environmental protection services (e.g. waste and water companies) provided 20%. At EU level, 37% comes from governments, 33% from specialist producers and 30% from industry (business).





A breakdown of investment by environmental topic is only available at institutional sector level (rather than at economy level), due to different reporting patterns<sup>203</sup>. At general government level in Czechia in 2018, 68% of environmental protection investments were for wastewater, 16% for biodiversity protection and 11% for waste management. For the country's specialist producers, the focus was on waste management (86%), with water and soil protection receiving 10% and wastewater 4%. For the business sector, the main concern was air pollution, which received 54% of environmental protection investments, while wastewater attracted 13%.

The annual European green bond issuance<sup>204</sup> in 2020 amounted to USD 156 billion (EUR 137 billion<sup>205</sup>), up from USD 117 billion (EUR 105 billion) in 2019 (these figures also include some non-EU European countries). For EU-

<sup>201</sup> Environmental protection expenditure accounts (europa.eu)

<sup>&</sup>lt;sup>202</sup> Environmental protection expenditure accounts (europa.eu)

<sup>&</sup>lt;sup>203</sup> Data reporting is different for the 3 institutional sectors, leading to aggregation difficulties. Specialist companies provide comprehensive data across all environmental areas (CEPA 1-9), while this is less the case for general government and industry that often report (the non-obligatory) data in merged categories only (with difficulty to split) or not at all.

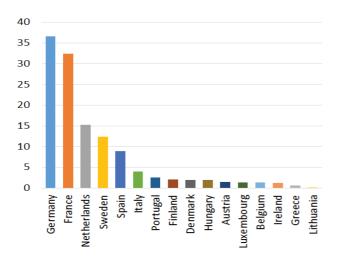
<sup>&</sup>lt;sup>204</sup> Green bonds were created to fund projects that have positive environmental and/or climate benefits. The majority of green bonds issued are green "use of proceeds" or asset-linked bonds. The very first green bond was issued in 2007 with the AAA-rated issuance from multilateral institutions, the European Investment Bank (EIB) and the World Bank.

<sup>&</sup>lt;sup>205</sup> At Eurostat's annual average EUR/USD exchange rates.

27, the 2020 green bond issuance came to EUR 124 billion, but Czechia was not among the issuers.

In 2014-2020, 83% of the green bonds issued by European countries went towards energy, buildings or transport objectives, 8% supported water and waste and 6% supported sustainable land use (with links to ecosystem conservation and restoration). These data are based on Climate Bonds Taxonomy, which is broadly similar to EU Taxonomy<sup>206</sup>.

Figure 42: Annual EU green bond issuance in 2020 (EUR billion)<sup>207</sup>



#### Green budget tools

#### Green taxation and tax reform

Czechia's revenue from environmental taxes accounted for 1.93% of GDP in 2020, below the EU average of 2.24%, as shown in Figure 43. Of this amount, energy taxation accounted for the highest share (94% compared to an EU average of 77.5%). The share of transport taxes within the total environmental tax revenues stood at 5.7%, while pollution and resource taxes stayed under 1% (0.7%), both being much lower than the respective EU average.

<sup>206</sup> Interactive Data Platform at <u>www.climatebonds.net</u>. Further information on Climate Bonds Taxonomy: <u>https://www.climatebonds.net/standard/taxonomy</u>

<sup>207</sup> Climate Bonds Initiative, 2022.

 $\begin{array}{c} 60,000 \\ 50,000 \\ 40,000 \\ 30,000 \\ 20,000 \end{array}$ 

Left scale: Total environmental taxes (EUR million)

• Right scale: % of gross domestic product (GDP)

♦ Right scale: % of total revenues from taxes & social contributions

10,000

average

EU-27

Figure 43: Environmental taxes in the EU-27, 2020<sup>208</sup>

The 2019 European Green Deal underlines that welldesigned tax reforms can boost economic growth and resilience, foster a fairer society and a just transition. Tax reforms can contribute to this, by sending the right price signals and incentives to economic actors. The Green Deal creates the context for broad-based tax reforms, the removel of fossil fuels and a shift in the tax burden from labour to pollution. It achieves this while simultaneously taking account of social considerations.<sup>209</sup>. The Green Deal promotes t the 'polluter pays principle' (PPP)<sup>210</sup> which stipulates that polluters should bear the cost of measures to prevent, control and remedy pollution. The polluter pays principle is facilitated by the EU Commission's Technical Support Instrument (TSI) project on greening taxes.

A recent assessment of economic instruments in Czechia shows that there is scope to increase their use to to make polluters pay in some sectors, for example nitrogen fertiliser tax and a water consumption charge<sup>211</sup>.

#### **Environmentally-harmful subsidies**

Addressing and removing environmentally harmful subsidies is a further step towards wider fiscal reforms<sup>212</sup>.

<sup>&</sup>lt;sup>208</sup> Eurostat, Environmental taxes accounts (env\_eta).

<sup>&</sup>lt;sup>209</sup> European Commission, The European Green Deal, COM (2019/640 final), p.17

<sup>&</sup>lt;sup>210</sup> Article 191(2) of the Treaty on the Functioning of the European Union: 'Union policy on the environment (...) shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay'.

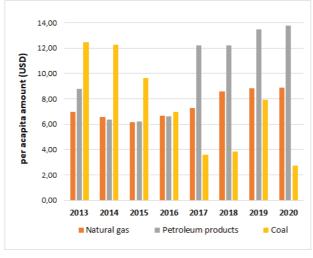
<sup>&</sup>lt;sup>211</sup> Factsheet\_Polluters\_pay\_Czech Republic\_V1.pdf (europa.eu)

<sup>&</sup>lt;sup>212</sup> European Commission, 'Study on assessing the environmental fiscal reform potential for the EU28', January 2016 https://ec.europa.eu/environment/integration/green semester/pdf/Eu nomia%20EFR%20Final%20Report%20MAIN%20REPORT.pdf

Fossil fuel subsidies are costly for public budgets and make it difficult to achieve the Green Deal objectives. In many cases these subsidies also deincentivise green investments, not contributing to levelling the playing field. Annual fossil fuel subsidies varied around EUR 55 billion in the EU since 2015. They rose by 4% between 2015 and 2019, although some countries (such as Latvia, Lithuania Sweden, Greece and Ireland), managed to decrease them in this period. At EU level, subsidies on petroleum products, in sectors such as transport and agriculture, continued to increase in 2015-2019. However subsidies on coal and lignite decreased, due to the diminishing role of solid fuels in electricity generation. As a share of GDP, fossil fuel subsidies ranged from 1.2% in Hungary to less than 0.1% in Malta in 2019 (being 0.4% on EU average). Czechia spent EUR 1.4 billion on fossil fuel subsidies in 2019, 0.63% of its GDP (above the EUaverage).

In 2020, the EU27's total fossil fuel subsidies decreased to EUR 52 billion (due to falling consumption trends amid the COVID-19-related restrictions). Without Member State actions, are likely to rebound as economic activity picks up from 2020<sup>213</sup>.

## Figure 44: Trends in natural gas, petroleum products and coal subsidies in Czechia<sup>214</sup>



% GDP	2013	2014	2015	2016	2017	2018	2019	2020
Natural gas	0.03	0.03	0.03	0.04	0.04	0.04	0.04	0.04
Petroleum	0.04	0.03	0.03	0.04	0.06	0.05	0,06	0.06
Coal	0.06	0.06	0.05	0.04	0.02	0.,0	0.03	0.01

<sup>213</sup> State of the Energy Union report, <u>COM(2021) 950 and Annex</u>
 <sup>214</sup> OECD, <u>Fossil Fuel Subsidy Tracker</u>.

#### **Current green budgeting practices**

Green budgeting encompasses various climate and environmental tagging and tracking practices in budgets. Some EU Member states already use certain green budgeting practices<sup>215</sup>. Green budgeting helps identify and track green expenditure and green revenues to increase transparency on the environmental implications of budgetary policies. This is aimed at improving policy coherence and supporting green policies (including climate and environmental objectives)<sup>216</sup>.

The Commission has also drawn up climate-proofing and sustainability-proofing guidance as tools to assess project eligibility and a project's compliance with environmental legislation and criteria<sup>217</sup>. The EU Commission developed a green budgeting reference framework<sup>218</sup> and launched a TSI project on green budgeting in 2021 to help Member States develop national green budgeting frameworks to improve policy coherence and support the green transition. Czechia participates in the Commission's green budgeting TSI, which started in 2021.

#### Overall financing compared to the needs

The EU's overall financing for environmental investments is estimated to have been 0.6-0.7% of GDP in 2014-2020, comprising both major EU funds and national financing. This ranged from 0.3% (Ireland) to 1.91% (Bulgaria), depending on the level of environmental challenges in different Member States. In 2021-2027, it is estimated that the overall EU environmental investment needs will range between 0.9-1.5% of the projected GDP (of 2021-2027), suggesting a potential environmental financing gap of 0.6-0.8% of GDP at EU level, compared to previous financing levels<sup>219</sup>.

<sup>&</sup>lt;sup>215</sup> European Commission, <u>Green Budgeting Practices in the EU: A First</u> <u>Review</u>, 2021.

<sup>&</sup>lt;sup>216</sup> European Commission, <u>European Commission Green Budgeting</u> <u>Reference Framework.</u> European Commission, <u>Green Budgeting in the</u> <u>EU Key insights from the 2021 Commission survey</u>.

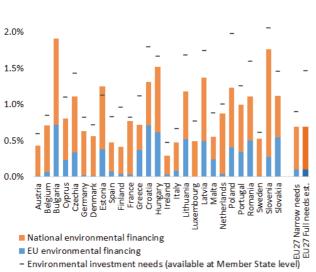
<sup>&</sup>lt;sup>217</sup> European Commission, <u>Technical guidance on sustainability proofing</u> <u>for the InvestEU Fund.</u>

<sup>&</sup>lt;sup>218</sup> European Commission, Green Budgeting Reference Framework, based on the review of the OECD Paris Collaborative on Green Budgeting initiative, 2017.

<sup>&</sup>lt;sup>219</sup> DG Environment data analysis. EU financing sources covered: ESI Funds (ERDF, CF, ESF, YEI, EAFRD, EMFF), Horizon 2020, LIFE, EFSI (EU amount), EIB loans. National financing: total national environmental protection capital expenditure (investments) - source: Eurostat EPEA dataset. Cut-off date for data: end 2021. N.B. The total financing may be higher, in particular through further indirect investments, requiring further analysis in the future.

#### Figure 47: Overall environmental financing baseline (2014-2020) and estimated needs (2020-2030) in the EU-27 (% of GDP)<sup>220</sup>

2.5%



Czechia's environmental financing for investments was estimated at 1.11% of GDP per year in 2014-2020 (double the EU-average), relying on national financing in over two thirds of cases. In 2021-2027, the country's environmental investment needs are estimated to reach over 1.43% of GDP (with partial information, available at country level), suggesting an environmental financing gap of at least 0.32% of GDP. This is likely to be higher when also accouting for needs currently estimated only at EU level (e.g. water protection, circularity, biodiversity strategy etc.). This can only be addressed through continued strong commitment to the environment, and through the mobilisation of additional financing for the country's remaining implementation priorities.

#### 2022 priority actions

In the 2019 EIR, Czechia had one priority action, which was to improve the capacity to use EU funds. In general, Czechia is on track to use the funding available for 2014-2020. However, in its RRP and draft cohesion programmes for 2021-2027, the budget allocated to the European Green Deal's 'decarbonisation" and 'zero pollution' objectives is not balanced. Also, synergies between policies are not always explored. Therefore, the folowing priority actions are recommended:

 Tackle the main environmental challenges affecting the country by ensuring adequate funding. This includes mobilising investments and using EU funds (30% of which are reserved for environmental objectives). • Enhance the use of economic instruments to make sure polluters pay.

<sup>&</sup>lt;sup>220</sup> Eurostat, ESI Funds Open Data, 2021.

#### 6. 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

(iii) access to justice in environmental matters.

It is of crucial importance to public authorities, the public and businesses that environmental information is shared efficiently and effectively<sup>221</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>222</sup>. It includes the right to bring legal challenges ('legal standing')<sup>223</sup>.

#### **Environmental information**

Czechia's implementation of the INSPIRE Directive could be better. Its performance has been reviewed based on its 2021 country factsheet<sup>224</sup>. Data identification and documentation has progressed slowly, and implementation levels have improved. However, more efforts are needed to:

- make the data more widely accessible;
- prioritise environmental datasets in implementation, especially those identified as high-value spatial datasets for implementing environmental legislation<sup>225</sup>.

<sup>224</sup> https://inspire.ec.europa.eu/INSPIRE-in-your-Country/CZ.

Table 4: Country dashboard on the implementation ofthe INSPIRE Directive, 2016-2020226

2016 2020	Legend
Effective coordination and data sharing	Implementation
Ensure effective coordination	of this provision is well advanced or (nearly) completed. Outstanding issues
Data sharing without obstacle	are minor and can be addressed easily. Percentage: >89%
INSPIRE performance indicators	Implementation
i. Conformity of metadata	of this provision has started and made
ii. Conformity of spatial data sets <sup>227</sup>	some or substantial progress but is still not close to be complete.
iii. Accessibility of spatial data sets through view and download services	Percentage: 31–89% Implementation of this provision is falling significantly behind. Serious efforts are necessary
iv. Conformity of network services	to close implementation gap. Percentage: <31%

#### **Public participation**

Detailed information and documentation on Environmental Impact Assessment (EIA) and on Strategic Environmental Assessment (SEA) is available in the EIA/SEA information system<sup>228</sup>. However, the website provides faulty links to the relevant documents, and does not facilitate or encourage public participation.

<sup>&</sup>lt;sup>221</sup> The Aarhus Convention, the Access to Environmental Information Directive (Directive 2003/4/EC) and the INSPIRE Directive, (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 the INSPIRE Directive's implementation.

<sup>&</sup>lt;sup>222</sup> These guarantees are explained in the Commission Notice on access to justice in environmental matters, OJL 275, 18.8.2017 and a related Citizen's Guide.

<sup>&</sup>lt;sup>223</sup> This EIR focuses on the means used by Member States to guarantee rights of access to justice, legal standing and to overcome other major barriers to bringing cases on nature and air pollution.

<sup>&</sup>lt;sup>225</sup> European Commission, List of high value spatial data sets.

<sup>&</sup>lt;sup>226</sup> INSPIRE knowledge base, 2021.

<sup>&</sup>lt;sup>227</sup> The deadlines for implementation of the spatial data interoperability were in 2016 still in the future: 23/11/2017 for Annex I data and 21/10/2020 for Annex II and III data. It must be also considered that this conformity indicator will in many cases never reach 100% conformity as majority of the countries provide as-is-data sets in addition to the INSPIRE harmonised data sets.

<sup>228</sup> https://portal.cenia.cz/eiasea/view/eia100 cr

Information on how to participate is, however, provided by NGOs and the Frank Bold law firm.

As no data is published on participation in EIA and SEA decision-making, it is difficult to assess if whether public is becoming more or less engaged. The Ministry of the Environment's annual statistical publication<sup>229</sup> includes results of a survey, one of whose questions asks respondents if they had tried to influence in any way the decisions of authorities on environmental issues. The percentage of positive answers declined from 10% in 2008 to 7% in 2018.

A priority action addressed to Czechia in the 2019 EIR was to facilitate public participation in the implementation of EU environmental legislation. However, Czechia has made limited progress in this area since.

#### Access to justice

NGOs can have the right to legal standing only when they can prove that their rights are concerned, but requests are easily accepted. There are however, some difficulties in challenging plans and programmes. There is a system of regular supervision of legally binding acts but it is barely accessible for the members of the public and NGOs. They can only call cases to the attention of those bodies or officials who are entitled to initiate an extraordinary supervision procedure. Laws which regulate plans and programmes that are specifically required by EU legislation do not provide for specific rules for an administrative or judicial review. The effectiveness of access to justice in the national courts increased following by the change in national case law, according to which environmental NGOs can challenge both the substantive and the procedural legality general environmental emasures and protect the right of their members to a favourable environment.

There is some information available on access to justice, usually in Czech, maintained by the government. However, this information needs to be searched for.

**The amended EIA Directive** has still not been correctly transposed into national law <sup>230</sup>. Several shortcomings have recently been remedied by by amending national EIA Act. This is part of the Building Act re-codification package which should accelerate permitting procedures for projects, although it restricts environmental

229

protection and may affect the rights of public and public concerned granted under the EIA Directive<sup>231</sup>. For example, the amendment of the Administrative Court procedure Code which is part of the package introduces a possibility to impose a fine for a submission that follows an obvious abuse of rights which might clash with the requirement that certain judicial procedures not be prohibitively expensive, laid down by Article 9(4) of the Convention on access to information, public participation in decision-making and access to justice in environmental matters and by the EIA Directive. The whole legislation package should take effect in July 2023 but the Czech government has already proposed additional amenments before this date. The Commission will carefully assess the conformity of the legislative package with EU law once all modifications are finalised and will take further action if the EU standards are breached.

#### 2022 priority actions

- Supplement the information available on the EIA information system with links and detailed information on how the public can participate.
- Collect and publish data on public participation in the EIA and SEA processes, and take action to address any reduction in engagement.
- Improve access to courts by the public concerned when it comes to challenging administrative or regulatory decisions and omissions also in the planning context, in particular on water, nature and air quality.
- Better inform the public about their access to justice rights, in particular by providing links on judicial and administrative portals to the Commission's eJustice fact sheets on access to justice in environmental matters<sup>232</sup>.
- Complete transposition of the revised EIA Directive
- Make spatial data more widely accessible and prioritise the environmental datasets of the INSPIRE Directive, especially high-value spatial datasets for implementing environmental legislation.

#### **Compliance assurance**



https://www.mzp.cz/cz/statisticka rocenka zivotniho prostredi publik ace

<sup>&</sup>lt;sup>230</sup> Impact Assessment: Commission urges CZECHIA and CYPRUS to correct their systems of environmental impact assessment: <u>May</u> <u>infringements package: key decisions (europa.eu)</u>

industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste<sup>233</sup>.
It includes support measures provided by the authorities such as:
(i) compliance promotion <sup>234</sup>;
(ii) inspections and other checks that they carry out, i.e. compliance monitoring <sup>235</sup>;
(iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement<sup>236</sup>.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability<sup>237</sup> ensures tat the polluter pays to remedy any damage.

#### **Compliance promotion and monitoring**

Information on the website of the Ministry of the Environment about the Habitats and Birds Directives is not specifically targeted at land managers but does contain details of specific actions which would be beneficial to individual species. If farmers were searching for such information they would be able to find it, but they are not proactively supplied with it. For the Nitrates Directive, the Ministry of Agriculture provides detailed information on cross-compliance requirements, but does not have much information on specific further actions that would be beneficial. In any event there is a specific website<sup>238</sup> with practical information, and including on trainings.

As noted in the 2019 EIR, the Czech Inspectorate of Environment publishes yearly inspection plans<sup>239</sup>, as well as annual reports<sup>240</sup> which contain summary data on inspections performed, including the list and description of the most significant instances of non-compliance in with national law. However, there is little detailed information on the follow-up to breaches, or repeated cases of non-compliance. Data is aggregated and

structured by sector, with details provided only for selected cases.

#### **Complaint handling and citizen science**

While the Ministry of the Environment's website does not contain details of complaint procedures, a webpage of the Czech Inspection of Environment titled 'Submitting suggestions and complaints'<sup>241</sup> provides clear instructions on how to submit a complaint about environmental nuisances or environmental damage, with general information and contacts for local offices. The website of the State Agriculture and Food Inspection contains a short section<sup>242</sup> on complaints and suggestions.

There is limited material available on government websites encouraging citizens to provide information or reporting how such information is used. The complaints pages referred to above say that citizens must expressly state if they want to be informed about how their complaint or information is dealt with. There does not appear to be any structured information about the use of complaints or citizens' reports of environmental infringements. Some NGOs provide more specific information on how to pursue complaints.

#### Enforcement

The Czech Police publish data<sup>243</sup> on the numbers of identified and successfully investigated environmental crimes, as part of its wider reporting on its activities. The Ministry of Justice also publishes data on environmental crimes which have been brought to trial, as well as on the outcomes of criminal proceedings<sup>244</sup>.

A 2018 evaluation report on the Czechia's implementation of European policies aimed at preventing and combating environmental erime<sup>245</sup> found that "No single strategic document setting out a comprehensive policy and establishing a coordinated national approach and relevant priorities in respect of actions against environmental crime has been developed in Czechia yet." In response, the government has adopted a Strategy for 2021-2023 to prevent and fight against waste-related crime<sup>246</sup>, which sets out steps to improve coordination

<sup>233</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>&</sup>lt;sup>234</sup> This EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

<sup>&</sup>lt;sup>235</sup> This EIR focuses on inspections of major industrial installations.

<sup>&</sup>lt;sup>236</sup> This EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime.

<sup>&</sup>lt;sup>237</sup> The Environmental Liability Directive, 2004/35, creates the framework.

<sup>238</sup> http://www.nitrat.cz

<sup>239</sup> https://www.cizp.cz/Plany-cinnosti

<sup>240</sup> https://www.cizp.cz/Vyrocni-zpravy

<sup>&</sup>lt;sup>241</sup> https://www.cizp.cz/Podavani-podnetu-stiznosti

<sup>&</sup>lt;sup>242</sup> https://www.szpi.gov.cz/clanek/kontakty-pro-verejnost.aspx

<sup>&</sup>lt;sup>243</sup> www.policie.cz/statistiky-kriminalita.aspx

https://cslav.justice.cz/InfoData/prehledy-statistickych-listu.html
 https://www.mvcr.cz/soubor/evaluation-report-on-the-8th-roundof-mutual-evaluations-the-practical-implementation-and-operation-ofeuropean-policies-on-preventing-and-combating-environmental-crimereport-on-the-cz.aspx, Council document 14129/18.

<sup>&</sup>lt;sup>246</sup> <u>https://www.mvcr.cz/soubor/strategy-to-prevent-and-combat-</u> waste-related-crime-for-the-years-2021-2023.aspx

and the sharing of information - although they are still under implementation.

#### **Environmental Liability Directive**

Czechia manages a national register of environmental damages called SEKM<sup>247</sup>, in which individual cases of environmental damages and suspected environmental damages are recorded. SEKM is a system established by the Ministry of the Environment. The Czech Inspectorate of Environment website states (page last updated 2018) that to date there have been no cases falling within the scope of the Czech Environmental Liability Act. A 2020 report for the Commission<sup>248</sup> states that financial security for most environmental liability risks is widely available.

#### 2022 priority actions

- Improve the material available to farmers and land managers on measures to help them to implement Nature and Nitrates Directives.
- Provide public access to detailed information on the follow-up to breaches or repeated cases of non-compliance identified during inspections.
- Provide more detailed and up-to-date information on environmental damages, including by setting up a central database or registry with data on environmental incidents or ELD cases and encourage citizens to report on environmental damages.
- Follow through on measures to improve coordination among public authorities h responsibile for tackling environmental crime and publish relevant information on agreements and coordination arrangements timely.
- Facilitate the right to complain about environmental damages or problems of compliance by providing visible and userfriendly information in relevant authorities' websites and encourage NGOs or individuals to submit citizen science information when reporting on cases of environmental damage or infringements.

# 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

Czechia ranks 20 out of 180 countries in the 2020 Environmental Performanceia are mainly driven by EU directives and regulations, and the relevant EU rules are generally transposed in time. At present, the number of complaints and infringements in the environmental field can be considered to be around the EU average.

#### **Coordination and integration**

As mentioned in the 2017 EIR, the transposition of the revised EIA Directive<sup>249</sup> provides an opportunity to streamline the regulatory framework on environmental assessments. Despite missing the transposition deadline (May 2017), Czech ia has transposed the revised EIA Directive. The results of the conformity check by the Commission services are mentioned in the access to justice section.

The Commission encourages the streamlining of the environmental assessments to reduce duplication and avoid overlaps in environmental assessments applicable to projects. Moreover, streamlining helps to reduce unnecessary administrative burden and accelerates decision-making, provided it is done without compromising the quality of the environmental-assessment procedure <sup>250</sup>. Czechia has already introduced the streamlining of the environmental assessments under the EIA and Habitats Directives prior the revision of the EIA Directive.

Czechia made significant changes to simplify its permitting procedures at the end of 2021. The legislation is yet to fully enter into force while yet another complete reshuffling of the system has not been also excluded amid the controversies over the reform. This reform is also included in the national RRP (notably the

<sup>&</sup>lt;sup>247</sup> https://www.sekm.cz

<sup>&</sup>lt;sup>248</sup> Improving financial security in the context of the Environmental Liability Directive: study for Czech Republic": <u>https://ec.europa.eu/environment/legal/liability/pdf/Annex-I Czech-Republic.pdf</u>

<sup>&</sup>lt;sup>249</sup> Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

<sup>&</sup>lt;sup>250</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.

digitalisation segment). However, any further streamlining of the permitting system in Czechia should not lower the level of environmental protection but rather use the flexibilities offered by the EU environmental legislation.

# Reforms through the Commission's Technical Support Instrument

The Commission supports environmental implementation and the green transition, not only through the EU financing programmes, but also granting technical assistance such as the TSI.

Under the 2019 TSI, the Commission supported two environmental projects in Czechia: (i) preparation of the new national circular economy strategic framework including a new waste management strategy, and (ii) analysis, recommendations and legislative proposals for a Building Act reform in the area of spatial planning. Under the 2022TSI, Czechia developed a methodology for applying the 'Do No Significant Harm principle' (DNSH) at national level.

#### **TAIEX EIR Peer to Peer Project**

The TAIEX EIR Peer-to-Peer tool has been launched by the Commission to facilitating peer-to-peer learning between environmental authorities<sup>251</sup>. During the reporting period, Czechia participated in a study visit on Successful Bio-Waste Recycling in Austria (2019) and benefited from an expert mission on Circular Procurement (2019). Czechia also participated in four multi country workshops on the inclusion of green criteria in public procurement (2020), on Sustainable Finance (2020), on Ammonia reducing technology and measures (2021) and on zero pollution (2022)

<sup>&</sup>lt;sup>251</sup> <u>TAIEX - Environmental Implementation Review - PEER 2 PEER -</u> <u>Environment - European Commission (europa.eu)</u>