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Commission



**BELGIUM**

# The Environmental Implementation Review 2019

COUNTRY REPORT BELGIUM

Environment

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

*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**

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A Europe that protects its citizens and enhances their quality of life**

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## Executive summary

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

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

- **improve air quality**, in particular nitrogen dioxide levels, by reducing traffic congestion;
- continue to **address water pollution coming from urban wastewater and agricultural sources**;
- manage **the Natura 2000 network towards favourable conservation status** for all species and habitats.

In its **EIR National Dialogue** in March 2017, Belgium focused on traffic congestion, air pollution, human health and compliance assurance. The **federal structure** of Belgium means most environmental issues are a regional competence. Therefore, **effective coordination is needed within a system of multi-level governance**.

The Commission launched in 2017 the TAIEX-EIR Peer-to-Peer (**EIR P2P**), as a new practical tool facilitating peer-to-peer learning between environmental authorities. Belgium has participated in EIR P2P activities on circular economy, air and waste management.

### Progress since the 2017 report in meeting challenges

**The 2019 EIR report** shows that for **air quality** there has been **some progress** in reducing emissions. This was helped by planning measures such as low emission zones, technical improvements to vehicles and fiscal incentives. There was substantial progress on particulate matter, with no reports of Belgium exceeding limits in 2016 and some progress on nitrogen oxides emissions. Emissions were only marginally reduced and limit values continue to be exceeded, mainly due to the volume of road traffic in Belgium, which remains high with almost 80 % of trips by private car. Progress needs to continue on an effective company car system reform as well as on reducing congestion, maintaining parity between petrol and diesel fuel prices and investing in more sustainable modes of transport.

For **water quality**, there has been **substantial progress** in that all agglomerations (population centres or places of economic activity) comply with the Urban Wastewater Treatment Directive thanks to appropriate investment. Concentrations of nitrates in Walloon surface and ground waters have remained fairly steady and diffuse pollution agricultural pressures remain significant in Flanders. The effectiveness of the current measures against pollution from manure and fertilisers in Wallonia must therefore

continue to be assessed and in Flanders efforts to reduce nutrients pollution must continue.

In the area of **nature conservation**, thanks to an effective use of EU funding, several measures are under way to restore and manage Natura 2000 sites. Agricultural management measures have also been stepped up to protect species and habitats, although it is currently unclear if these measures are sufficient to counteract the negative trends in the wider countryside that are due to agricultural intensification and resulting eutrophication. An issue raised in this report is the need to ensure better implementation of the EU Timber Regulation.

Furthermore, Belgium continues to make efficient use of EU funds and loan opportunities in particular for supporting **circular economy**.

### Examples of good practice

- In 2018, Belgium issued its first **green bonds**.
- Regarding **circular economy**, the work in Flanders to examine sustainability transitions through its 'Vision 2050' initiative is noteworthy. Wallonia has introduced effective incentives for municipalities to increase separate waste collection. As for the Brussels, its efforts on the circular economy have been showcased in the European Circular Economy Platform. At 53.5 % (2016), Belgium's municipal waste recycling rate is among the highest in the EU.
- Several **green infrastructure** initiatives have taken shape. For example: (i) '*maillage vert et bleu*' which reconnects natural sites in the Brussels region; (ii) the restoration prioritisation framework in the Flanders region; and (iii) the Walloon Code for territorial development requiring ecological connectivity. Belgium has also done well in containing the expansion of the Asian hornet.
- Commendable actions in **public administration** include: (i) the interregional cooperation bodies and cooperation bodies between the regions and the federal state; (ii) the Sustainable Development Goals implementation report/task force; and (iii) the single information point on how to implement the Aarhus Convention/public participation.
- The Commission deems Belgium's action plan on green public procurement to be an EU example of good practice. Belgium has increased **training and development** supporting enforcement of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) such as the 'Africa Twix' and the African Elephant Fund.

## Part I: Thematic areas

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

#### Measures towards a circular economy

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

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

Based on the 10 indicators in the circular economy monitoring framework, Belgium is significantly above the EU average in circular (secondary) use of material (18.9 % in 2016 vs an EU average of 11.7 %). However, Belgium performs below the EU average for people employed in the circular economy (1.12 % of total employment in 2015 versus an EU average of 1.73 %<sup>3</sup>).

The 2017 Special Eurobarometer 468 on attitudes of EU citizens towards the environment shows that 86 % of Belgian citizens are highly concerned about the effects of plastic products on the environment (EU average 87 %) and about the impact of chemicals (92 % vs an EU average of 90 %<sup>4</sup>). Overall, Belgian society seems supportive of circular economy initiatives and environmental protection actions.

In 2016, the Federal ministries for economy and for public health and environment worked together to set up a roadmap supporting the transition towards a more circular economy<sup>5</sup>. Since then, partnerships have been

established with recyclers and technology companies. Another welcome development was a study on the reparability criteria adopted in mid-2018 which focused on two practical cases (dishwashers and vacuum cleaners)<sup>6</sup>.

As regards cross-EU cooperation, the Benelux countries cooperate on the circular economy<sup>78</sup> as a bloc and the European Regional Development Fund (ERDF) supports trans-frontier collaboration between Belgium and France on the RECY-COMPOSITE<sup>9</sup> waste project and with the Netherlands on the GrasGoed project for grass recycling<sup>10</sup>.

In Wallonia, resource efficiency and circular economy is one of the major political priorities as reflected in the Regional Policy Statement of 25 July 2018<sup>11</sup> and is part of several policies initiatives among which is the Marshall plan 4.0 (the regional development Plan 2015-2019 of the Walloon Government)<sup>12</sup>. The NEXT programme<sup>13</sup>, focusing on the effective management of resources across all sectors, is dedicated to the transition to a circular economy and is a means of strengthening the Walloon strategy for smart specialisation as it provides links with other key sectors and clusters. Furthermore, the Walloon Agency for Enterprise & Innovation has been supporting SMEs that want to be involved in circular economy since 2004<sup>14</sup>.

Wallonia also has an employment-environment alliance for sustainable construction<sup>15</sup>. The alliance is also based on an innovative governance dynamic: to mobilise and coordinate public authorities, households and private actors in the construction sector around concerted

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

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

<sup>3</sup> Eurostat, [Circular Economy Indicators](#).

<sup>4</sup> European Commission, 2017, [Special 486 Eurobarometer](#), 'Attitudes of European citizens towards the environment'.

<sup>5</sup> Federal Ministry for Energy, Environment and Sustainable Development, [Ensemble, faisons tourner l'économie](#), 2016.

<sup>6</sup> KU Leuven, VITO, Benelux, [Repairability criteria for energy related products](#), 2018.

<sup>7</sup> BENELUX, [Roundtable](#), 14.12.2015.

<sup>8</sup> Luxembourg Government, [Portail de l'environnement](#).

<sup>9</sup> 2018 ERDF Annual Implementation Report (citizens report), Belgium-France, p. 5.

<sup>10</sup> 2018 ERDF Annual Implementation Report (citizens report), Belgium-Netherlands, p. 4.

<sup>11</sup> Walloon government, 2018 [La Wallonie plus forte](#).

<sup>12</sup> Walloon government, Plan Marshall.

<sup>13</sup> Walloon government, [declaration of Regional Policy](#) (DPR), pp. 22, 24, 83, 90.

<sup>14</sup> Walloon government, [circular economy](#).

<sup>15</sup> European Environment Agency, 2016. [More for less — material resource efficiency in Europe](#). Belgium, Agence de stimulation économique, 2016, p. 9.

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actions to respond to the challenges related to energy transition, climate and employment.

The use of eco cheques was approved in July 2017 and the ERDF provided a budget for these of EUR 3 260 million from Wallonia's Operational Programme (OP). These eco cheques allow companies to use expert services in eco-conception and the development of sustainable goods.

In March 2016, Flanders approved 'Vision 2050' as one of the seven transitions to a circular economy<sup>16</sup>. The Flemish government approved a concept paper in February 2017<sup>17</sup> which focuses on the circular city, circular purchasing (for which a 'green deal' has already been launched) and circular businesses.

'Circular Flanders'<sup>18</sup> is another notable circular economy strategy. It is a space for networking and building public-private partnerships in the circular economy. It also serves as a policy lab, supporting partners in the circular economy and sharing knowledge among participants supported by a centre for policy research. Circular purchasing (or circular procurement) is one of the three strategic themes of Circular Flanders for the period 2017-2018, next to "circular cities" and "circular entrepreneurship". In 2017 a new subsidy programme was launched for supporting experiments in social innovation (such as new production and consumption models) towards circular economy.

Another programme, entitled 'Smart Flanders' which supports 13 cities wishing to become 'smart cities', will run to the end of 2019<sup>19</sup>. The standout project entitled 'Green Light Flanders' is a network for digitisation and sustainable LED-lighting'. Finally, the Flemish Environment Agency has published a 'system balance' report for 2017, looking at whether energy, mobility and food systems are in balance with the environment and what system changes are needed<sup>20</sup>.

In March 2016, the Brussels' regional government adopted a circular economy regional plan (Be Circular) with 111 measures<sup>21,22</sup> setting out a strategy to transition from a linear to a circular economy by 2025. Be Circular has won the regional innovation award (2016) organized by the Assembly of European Regions (AER), and the Eurocities award (2017) in the category "innovation". Be

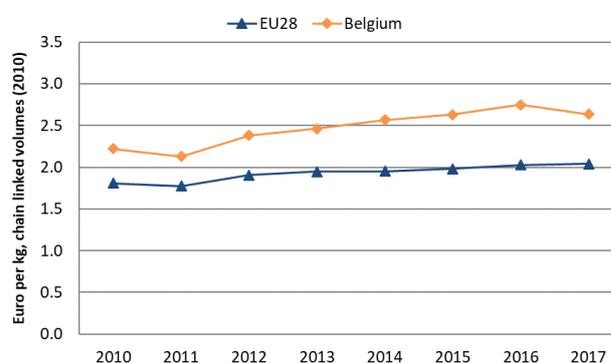
Circular is currently showcased on the European Circular Economy Stakeholder Platform's new website<sup>23</sup>.

Be Circular involves 3 regional ministries, 15 administrations, an advisory committee and more than 60 stakeholders (public and private). It provides a wide diversity of coaching, training and funding opportunities for Brussels-based businesses. After 18 months of implementation, the average rate of implementation of Be Circular measures is 45%; of the 111 measures of Be Circular, only 14 have not started yet. More than 20% of the measures are 100% complete, many of which are recurrent over time.

In Belgium, private investments, jobs and gross value added related to circular economy sectors increased from EUR 2 292.6 million in 2009 to EUR 2 843.5 million in 2015<sup>24</sup>.

Belgium performed slightly better than the EU average for resource productivity<sup>25</sup> (how efficiently the economy uses material resources to produce wealth), with 2.63 EUR/kg in 2017 (EU average: 2.04 EUR/kg<sup>26</sup>). Figure 1, which shows trends over time, indicates a slight but steady increase of resource productivity in Belgium since 2009, with the exception of a drop between 2016 and 2017.

Figure 1: Resource productivity 2010-2017<sup>27</sup>



The high number of EU Ecolabel products and of EMAS (European Commission's Eco-Management and Audit Scheme<sup>28</sup>) licensed organisations shows the commitment of public authorities to the circular transition and the engagement of many private-sector actors and national stakeholders. As of September 2018, a total of 2057 Belgian products and 49 licences are registered in the EU Ecolabel scheme of a total of 71 707 products and 2167

<sup>16</sup> Flemish government, [Vision 2050](#), 2016.

<sup>17</sup> Flemish government, [Transitie Circulaire Economie](#), 2017.

<sup>18</sup> Flemish government 2017 [Circular Flanders](#).

<sup>19</sup> [National Reform Programme 2018](#), p. 27.

<sup>20</sup> MIRA, [System Balance 2017](#).

<sup>21</sup> BCR, [Programme Régional en Economie Circulaire](#), March 2016.

<sup>22</sup> BCR, [Programme National de Réforme](#), April 2016, pp.55; 66-67.

<sup>23</sup> European Commission, [European Circular Economy Stakeholder Platform](#).

<sup>24</sup> Eurostat, [Private investments, jobs and gross value added related to circular economy sectors](#).

<sup>25</sup> Resource productivity is defined as the ratio between gross domestic product and domestic material consumption (DMC).

<sup>26</sup> European Commission, [Resource productivity](#).

<sup>27</sup> European Commission, [Resource productivity](#).

<sup>28</sup> European Commission, [Eco-Management and Audit Scheme](#).

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licences in the EU<sup>29</sup>. Moreover, 75 organisations from Belgium are currently registered in EMAS (April 2018) with 751 geographic sites.

An important event on 20 years of Belgian product policy in a wider sense took place on 4 December 2018.

Regarding the creation of a secondary raw materials market along with an awareness-raising campaign aimed at consumers, important actions have been taken in all three regions. For example, in Flanders, the waste agency OVAM is an important partner of 30 accredited Kringloop reuse centres and together they have formed a professional network to improve quality and learn from one another<sup>30</sup>. OVAM supports the industrial symbiosis platform for matching companies that produce side streams that can be used as a raw material in another company. A business example is 'Umicore', which has developed a closed loop business model focusing specifically on its products and services for the automotive sector<sup>31</sup>. The EIB is providing loan financing for port facilities for recycling shipboard hydrocarbon waste ('slops') in Antwerp.

In the province of Namur, concrete and bricks from demolished buildings are being turned into eco-friendly road surfaces.

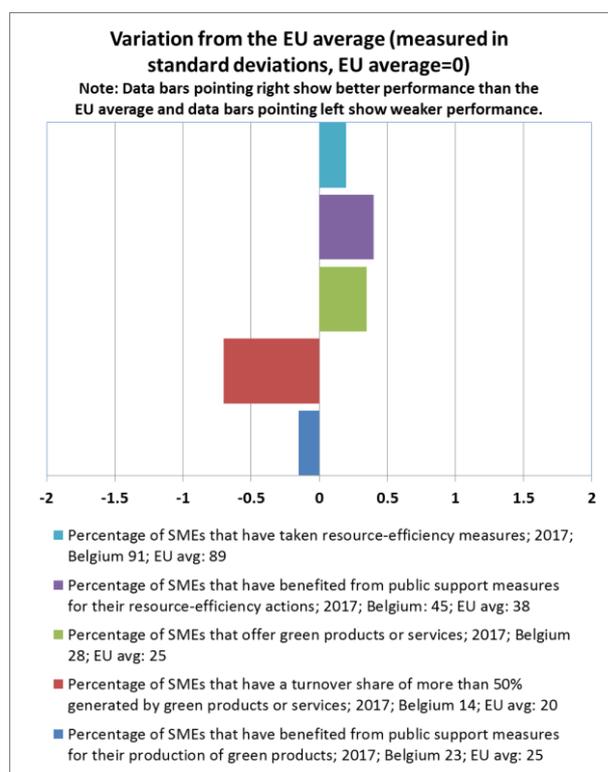
### SMEs and resource efficiency

The environmental performance of Belgium's small and medium sized enterprises (SMEs) continues to be in line with the EU average (see Figure 2). There was no change in these indicators between 2016 and 2017. The number of SMEs that have actually taken resource efficiency measures is above the EU average and more of them benefited from tax incentives and other types of subsidies than the EU average. The number of Belgian SMEs providing green products or services has also caught up with the EU average. However, the number of SMEs that get more than 50 % of their turnover from green products is below the EU average.

The latest Eurobarometer on 'SMEs, resource efficiency and green markets'<sup>32</sup> shows improvement on some of the main indicators. 51 % of Belgian SMEs have invested up to 5 % of their annual turnover to be more resource efficient (EU average 50 %), while 36 % claim to offer green products or services or say they are planning to do so in less than 2 years (EU average 33 %). Of Belgium's 'green' SMEs, 69 % are satisfied with the government's assistance (EU average 58 %). Nonetheless, there is still room for improvement. While the average number of

employees working in green jobs in SMEs in the EU is 4, in Belgium the average is 3.8.

**Figure 2: Environmental performance of SMEs<sup>33</sup>**



Belgian regions have introduced several significant measures to develop green businesses, make companies more sustainable and energy-efficient and support eco-innovation. The Brussels region offers through the Be Circular programme a one-stop shop for SMEs seeking information, support or funding. SMEs can for example benefit from coaching tools developed in the framework of the 'Resilient Web' project, supported by the ERDF. Another example is the Be Circular call for projects dedicated to businesses and entrepreneurs in the circular economy, with an annual budget of EUR 1.5 million. The two first editions of the call for projects allowed the financial support of 70 projects.

A Ghent-based project, entitled 'Bio Base NWE', won the RegioStars Award 2017 in the category 'Smart Specialisation for SME Innovation'<sup>34</sup>. Investment from the INTERREG IVB programme was a supportive factor: up to EUR 71 million leading to the creation of 320 new jobs in the bio based economy in north-west Europe.

Wallonia has introduced a new initiative, entitled 'SMART PARK II', for SMEs that promote energy efficiency and renewable energy production. The region also has support and financing schemes in place that make it

<sup>29</sup> European Commission, [Ecolabel Facts and Figures](#).

<sup>30</sup> Reuse centres, [De Kringwinkel](#).

<sup>31</sup> [Umicore](#).

<sup>32</sup> European Commission, [Flash Eurobarometer 456: SMEs, resource efficiency and green markets](#), 2018.

<sup>33</sup> European Commission, [2018 SBA fact sheet - Belgium](#), p. 14.

<sup>34</sup> European Commission, 2017 REGIOSTARS winner.

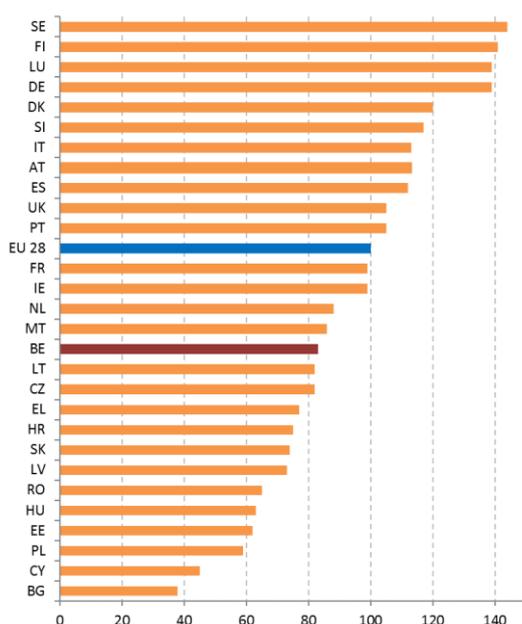
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possible for SMEs and VSMEs<sup>35</sup> to invest in energy efficiency and increase their production of renewable energy.

### Eco-innovation

Belgium ranked 8th on the European Innovation Scoreboard 2018, posting a 6.8 point increase since 2010<sup>36</sup>. However, with a total score of 83 in the overall Eco-Innovation Scoreboard 2017, Belgium ranked 16th on the list of EU countries (see Figure 3)<sup>37</sup>.

**Figure 3: 2017 Eco-Innovation Index (EU=100)**<sup>38</sup>



Between 2011 and 2016, Belgium's eco-innovation score dropped from 115 points to 82 points (see Figure 4)<sup>39</sup>. While the country's eco-innovation development did not slow down, its speed of progress is not as fast as that of other EU countries<sup>40</sup>.

Belgium must improve its performance for some of the index's main indicators if it is to reduce this gap. For example, only 1 167 Belgian organisations use the ISO 14001 standard on effective environmental management

<sup>35</sup> Very small and medium sized enterprises.

<sup>36</sup> European Commission, [European Innovation Scoreboard 2018](#), p. 15.

<sup>37</sup> European Commission, Eco-innovation Observatory: [Eco-Innovation Scoreboard 2017](#).

<sup>38</sup> European Commission, Eco-innovation Observatory: [Eco-Innovation Scoreboard 2017](#).

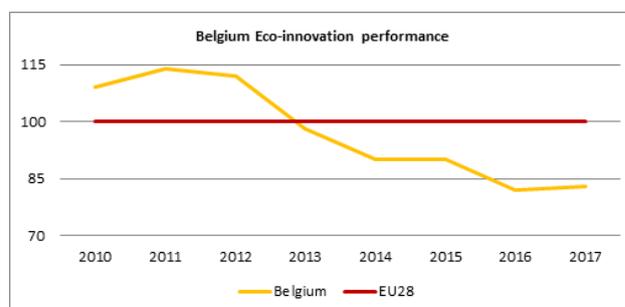
<sup>39</sup> This drop is mainly due to a lack of data supplied by Belgium. Thus the index was only based on only one out of three indicators, i.e. the indicator on ISO 14001 registrations among companies. And with regard to this indicator, Belgium did indeed perform low, causing a low overall score for this component.

<sup>40</sup> European Commission, Eco-Innovation Observatory: [EU Eco-Innovation Index 2017 Brief](#), 2018.

systems, putting the country in 18th place in the EU<sup>41</sup>, while employment in eco-industries and the circular economy accounts for only 1.16 % of total employment, compared with the EU average of 1.71 %<sup>42</sup>.

As mentioned in the 2017 EIR, there are several drivers of eco-innovation in Belgium. Firstly, eco-innovation and sustainability goals are fully integrated into industrial and economic policies since they are considered as valuable assets for business competitiveness. Secondly, Belgium has well developed technological capabilities, regulation and infrastructure. A clear government focus on sciences, tax incentives, strong R&D funding, human capital and other factors have helped to strengthen the knowledge base and put Belgian eco and other industries in a strong position. Thirdly, there is a growing demand among private consumers for green technology and products as well as from larger companies and governments dedicated to greening strategies.

**Figure 4: Belgium's Eco-Innovation performance**



There are also various types of barriers to eco-innovation. Some are related to inter-regional coordination, integrated planning and decision making, where little attention is given to the dissemination of regional good practice and cooperation at national level. Another barrier is the lack of eco-innovation and circular economy related skills in SMEs<sup>43</sup>. The Federal ministry for public health and environment has commissioned a study to develop practical tools for enterprises to assess the switch from a sales business model to a business model based on products-as-a-service. A practical case is being tested with a larger SME. In both Flanders and Wallonia, the policy to improve the market value of innovations is organised around clusters, with close cooperation between industry, knowledge centres and regional governments.

In Flanders, there are two large demand-driven innovation clusters in the field of eco-innovation,

<sup>41</sup> International Organisation for Standardisation, [ISO Survey of Certifications](#), 2016.

<sup>42</sup> Eurostat, [Circular Economy Monitoring Framework](#), 2018.

<sup>43</sup> European Commission, Eco-Innovation Observatory: [Eco-innovation Country Profiles 2016-2017](#).

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specifically for energy<sup>44</sup> and sustainable chemistry<sup>45</sup>. I-cleantech is an organisation that encourages the uptake of eco-innovation by companies<sup>46</sup>. An innovation hub (Blue App) and incubator (BlueChem) are also about to be launched. These will focus on reusing waste and side streams and on developing renewable chemicals and sustainable materials. The project will cost over EUR 11 million and will be co-funded by the ERDF, the city of Antwerp and the Flanders region<sup>46</sup>.

Turning to Wallonia, in line with its smart specialisation strategy, the government has continued to implement the ‘competitiveness cluster policy’. Some clusters are active in the field of circular economy, such as: the Eco-Building cluster that promotes responsible buildings and construction techniques; CAP 2020 which focuses on the building industry and energy consumption reduction; TWEED<sup>47</sup> which focuses on renewable energies, climate impact and energy efficiency, and; GreenWin, which supports green chemistry, sustainable materials, and using landfills as a new source for raw materials. The related ‘EASYGREEN’ measure, launched in November 2017, aims to support Walloon SMEs that want to reduce their energy consumption or develop innovative projects that have a direct impact on CO<sub>2</sub> emissions (eco-innovation).

The ‘smart city’ approach is being rolled out throughout Belgium. Regional and sector-specific examples include: (i) the Flemish iMinds/imec smart cities programme; (ii) the smart city conference in Wallonia; (iii) the smart city e-platform at Brussels level; and (iv) the smart cities community established by the Belgian technology industry sector organisation (Agoria). In addition, the Smart Flanders programme mentioned previously provides solutions to reduce congestion, distribute goods to and from downtown in a sustainable way, improve air quality, promote health, ensure good parking policies and eliminate barriers for disadvantaged groups. Also of note is the ‘City of Things’ test bed in Antwerp, which is being used as an inter-operability lab. The European Investment Bank (EIB)-Belfius partnership also supports the development of smart cities in Belgium via 100 smart and sustainable projects<sup>48</sup>.

For the three 2017 EIR Suggested Actions in the fields of circular economy, SMEs and resource efficiency and eco-innovation, Belgium has made substantial progress as reflected in the above text. Furthermore, the Co-ordination Committee for International Environmental

Policy (CCIEP) facilitates the exchange of good practices between all Belgian bodies.

### Waste management

Turning waste into a resource is supported by:

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

This section focuses on management of municipal waste<sup>49</sup> for which EU law sets mandatory recycling targets<sup>50</sup>.

In 2017, municipal waste generation in Belgium remained below the EU average (409 kg/y/inhabitant compared to around 487 kg)<sup>51</sup> with a downward trend, but with considerable differences between regions. In 2016, waste generation was around 490kg/y/inhabitant in Flanders<sup>52</sup>, around 535 kg/y/inhabitant in Wallonia<sup>53</sup> and around 300 kg/y/inhabitant<sup>54</sup> in the Brussels region.

Figure 5 measures the municipal waste by treatment in Belgium in terms of kg per capita and shows that the split between treatment methods remains rather stable.

Belgium remains among the top performers in the EU on waste management, with a recycling rate of municipal waste of 54 % in 2017 (EU average 45 %), of which 20 % is composting (see Figure 6). However, there are differences between the regions, with the Brussels region performing the worst.

Belgium has already met the 50 % recycling target for 2020<sup>55</sup> and has eliminated landfilling of biodegradable waste<sup>56</sup>. However, further efforts will be needed to meet

<sup>49</sup> Municipal waste consists of mixed waste and separately collected waste from households and from other sources, where such waste is similar in nature and composition to waste from households. This is without prejudice to the allocation of responsibilities for waste management between public and private sectors.

<sup>50</sup> See Article 11.2 of Directive 2008/98/EC. This Directive was amended in 2018 by Directive (EU) 2018/851, and more ambitious recycling targets were introduced for the period up to 2035.

<sup>51</sup> Eurostat, [Municipal waste and treatment, by type of treatment method](#).

<sup>52</sup> OVAM, 2016, p. 12.

<sup>53</sup> Vivre la Wallonie No 35 - [Printemps 2017](#).

<sup>54</sup> Bruxelles Environnement.

<sup>55</sup> Member States may choose a different method than the one used by Eurostat (and referred to in this report) to calculate their recycling rates and track compliance with the 2020 target of 50 % recycling of municipal waste.

<sup>56</sup> National sources: in Flanders (OVAM 2015) over 70 % (2014) of the household waste was subject to some form of material recovery, while in Wallonia separate collection accounted for 60 % (2012). However,

<sup>44</sup> Flux50.

<sup>45</sup> Catalisti.

<sup>46</sup> [Enginneeringnet.be](#).

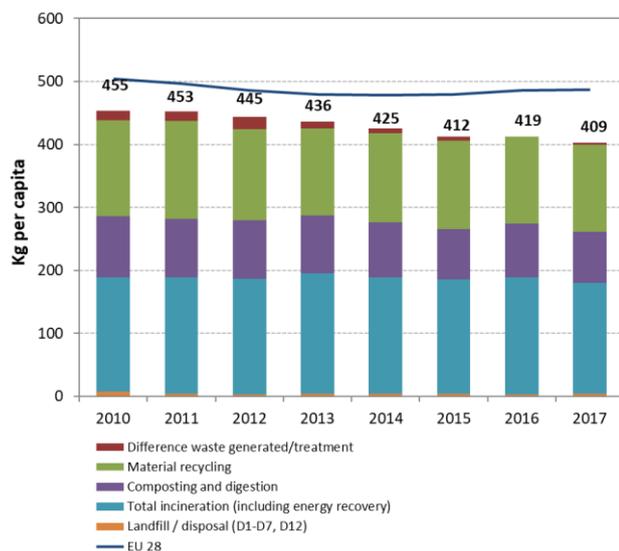
<sup>47</sup> Technology of Wallonia Energy, Environment and sustainable Development.

<sup>48</sup> EIB, [Smart Cities Financing](#).

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the recycling targets for the post-2020 period<sup>57</sup>. This will require particular efforts on reducing the incineration of municipal waste, which has not been on a downward trend<sup>58</sup>.

**Figure 5: Municipal waste by treatment in Belgium 2010-2017**<sup>59</sup>



**Figure 6: Recycling rate of municipal waste 2010-2017**<sup>60</sup>



Belgium has only one mechanical biological treatment plant in operation due to its separate collection of waste. Both Flanders and Wallonia report that around 70 % of their municipal waste is collected separately<sup>61</sup>, whereas the Brussels region report around 37%<sup>62</sup>. In 2017, the

these figures do not correspond with Eurostat figures.

<sup>57</sup> [Directive \(EU\) 2018/851](#), [Directive \(EU\) 2018/852](#), [Directive \(EU\) 2018/850](#) and [Directive \(EU\) 2018/849](#) amend the previous waste legislation and set more ambitious recycling targets for the period up to 2035. These targets will be taken into consideration to assess progress in future Environmental Implementation Reports.

<sup>58</sup> The incineration rate has slowly increased reaching 44.3 % in 2016 — a 0.6 % increase from 2014.

<sup>59</sup> Eurostat, [Municipal waste by waste operations](#).

<sup>60</sup> Eurostat, [Recycling rate of municipal waste](#).

<sup>61</sup> [OVAM](#), 2016, p. 12; *Vivre la Wallonie No 35 - Printemps 2017*.

<sup>62</sup> [OVAM](#), 2016, p. 12; *Vivre la Wallonie No 35 - Printemps 2017*.

Brussels region extended separate collection to include voluntary separate collection of kitchen waste in an attempt to improve its recycling rate. Furthermore, all three regions have recently banned the use of lightweight plastic bags. Belgium is the highest recycler of packaging in Europe (80 % according to Eurostat).

All three regions already have a system in place that taxes incinerated waste and they all encourage heat recovery from waste incineration.

Further progress could be made by introducing new economic instruments to prevent waste by avoiding incinerating reusable or recyclable waste — especially in the Brussels region — and by making the reuse and recycling of waste more economically attractive.

In Flanders, the 2016-2022 waste management plan for household waste and similar commercial and industrial waste sets new targets to further reduce the amount of residual waste by 10-15 % (equivalent to around 140 kg residual household waste per capita). On 20 July 2018, the Flemish government agreed a package of measures such as the prohibition of disposable plastic bags and the mandatory use of reusable cups in events. These measures will enter in force in 2019.

In addition, Flanders is running several pilot projects aimed at extended separate collection of plastics, as an average of 15 kg of plastics per inhabitant per year are still found in mixed household waste. Flanders is working on an action plan for plastics for 2019-2024, which will set out concrete measures to address the challenge of shifting towards a more circular economy in this area<sup>63</sup>.

The Walloon Waste-Resources Plan adopted by the Walloon Government on 22 March 2018 contains measures that have been developed and selected so that they can contribute to the most efficient application of the principles of the circular economy and the waste management hierarchy in Wallonia. The plan contains 157 measures of which 93 are closely linked to material resource efficiency and the development of a circular economy. The lack of the waste plan in Wallonia was subject of a Suggested Action in the 2017 EIR.

The Brussels Resources and Waste Management Plan aims to reduce waste generation by up to 20% before 2030 for households and non-household waste producers, increase recycling and preparation to reuse according to or above the European new objectives, develop reuse of building material, sustainable citizen consumption, and reduce single-use plastic consumption. Various measures target stakeholders (citizens, schools, professionals in various sectors including building, the green economy and the waste sector.) Food waste is

[Bruxelles Environnement](#).

<sup>63</sup> OVAM.

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another issue being dealt with by Flanders<sup>64</sup> and Wallonia. Wallonia has the 'Plan REGAL' 2015-2025 for food waste. Both regions intend to reduce food losses by 30% by 2025 compared to 2015. The cities of Liège, Charleroi and Verviers are also taking part in a number of sustainable food initiatives<sup>65</sup>.

On sustainable food, the Brussel Capital Region has been a lead partner in the URBACT Thematic Network 'Sustainable Food in Urban Communities'<sup>66</sup>, involving nine other European cities. It also adopted the 'Good food, towards a more sustainable food system in Brussels Capital Region' strategy in December 2015<sup>67</sup>, with a target of a 30% reduction in food waste by 2020). The mid-term evaluation shows that 1 out of 3 inhabitants of the Brussels region say they have changed their eating habits in the last 2 years.

Finally, the Belgian project 'Robin Food', which aims to prevent the waste of food that is approaching its sell-by date<sup>68</sup>, was a finalist in the green category of the 2018 StartUp Europe Awards.

The city of Leuven participated in a TAIEX-EIR PEER 2 PEER workshop in Galway, Ireland on 21 - 22 Feb 2018 where the cities from the Green Leaf network from Spain, Ireland, Belgium, Portugal and Sweden collaborated and share best practice on the Waste Management and the Green Economy in urban areas.

A TAIEX EIR Peer to Peer Study Visit of experts from Danish Municipal waste management to Belgium was organised on 24 – 25 September 2018 in order to learn about waste prevention, re-use – repair networks and recycling in Belgian regions and municipalities.

### 2019 priority action

- Shift reusable and recyclable waste away from incineration, including through economic instruments.

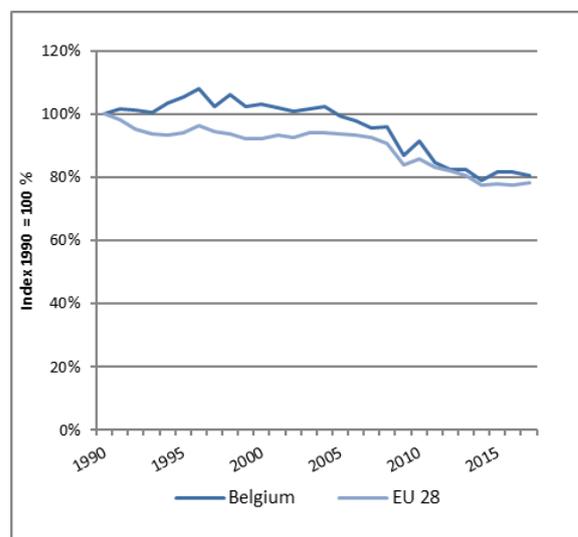
## Climate change

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

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

For emissions not covered by the EU Emission Trading Scheme (ETS), Member States have binding national targets under the Effort Sharing legislation. Belgium had lower emissions than the annual emission allocations (AEAs) for the years 2013-2015, while in 2016 emissions slightly exceeded the AEA. According to preliminary data, emissions in 2017 were slightly lower than the AEA (see Figure 7).

**Figure 7: Change in total GHG emissions 1990-2017 (1990=100 %)**<sup>69</sup>



<sup>64</sup> [Flemish government](#).

<sup>65</sup> [CATL](#); [Ceinture alimentaire](#) Charleroi Métropole; [RATav](#).

<sup>66</sup> The URBACT Thematic Network "[Sustainable Food in Urban Communities](#)".

<sup>67</sup> BCR, Stratégie [Good Food « Vers un système alimentaire plus durable en Région de Bruxelles-Capitale »](#); [Good Food Strategy](#).

<sup>68</sup> [StartUp Europe Awards 2018](#).

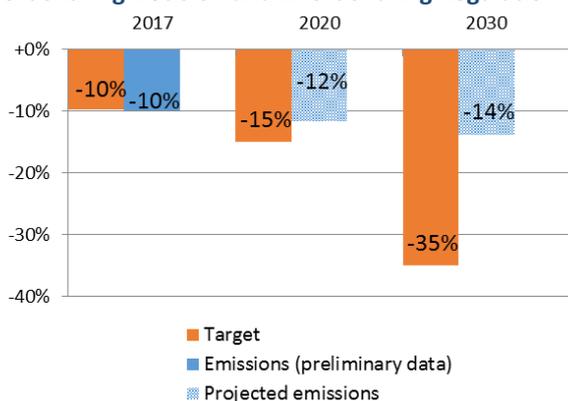
<sup>69</sup> Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](#)). *Proxy GHG emission estimates for 2017* [Approximated EU greenhouse gas inventory 2017](#) (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

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Belgium’s national target for 2020 under this decision is to reduce emissions by 15 % compared to 2005. A cooperation agreement on the internal burden sharing of Belgium’s climate and energy objectives for the 2013-2020 period was agreed in December 2015 and formally adopted in February 2018. This agreement focuses on greenhouse gas emissions (GHG) reduction targets for non-ETS sectors, the share of renewable energies in final energy consumption, and the contribution to international climate finance. For 2030, Belgium’s national target under the Effort Sharing Regulation will be to reduce emissions by 35 % compared to 2005 (see Figure 8).

In July 2013, a Federal Royal Decree put forward a long-term policy vision on sustainable development, which includes the commitment to reduce GHG by at least 80-95 % between 1990 and 2050, striving for carbon neutrality after that. The three regions have also included the 80-95% goal in their plans and/or legislation.

**Figure 8: Targets and emissions for Belgium under the Effort Sharing Decision and Effort Sharing Regulation<sup>70</sup>**



The Energy Pact concluded between the federal and regional energy ministers in December 2017 gives federal and regional energy ministers a longer term vision for energy transition. The federal government conditionally approved the Pact in 2018, as part of a broader federal energy strategy. This pact should be the basis for a set of concrete policy measures with a clearly-defined policy path, combining four separate energy visions (those of each of the three regions plus that of the federal level) in a compatible way. It also aims for a widely supported agreement following consultation of all stakeholders. The pact maintains the commitment to phase out nuclear power, and foresees the introduction of new interconnectors, an increase in renewable energy generation capacity (especially off-shore wind) and introduction of new energy norms. It provides the

framework for the transition of the energy sector towards a low carbon society by 2050.

The Energy Pact also includes *inter alia*, the following sectoral goals, to be reached by 2050:

- shifting electricity production to sustainable energy sources,
- entirely phasing out the use of fossil fuels for heating of buildings,
- increasing the uptake of renewable energy sources for thermal applications in the industry to 70 to 80%
- allocating 5 to 10 % of Research and Development budgets to projects related to climate and energy.

Under the Governance of the energy union and Climate Action Regulation, Member States are preparing integrated national energy and climate plans as well as long-term climate and energy strategies. A draft version of the national plan was submitted on 31 December 2018, containing a federal and three regional draft plans.

At regional level, the Parliament of the Walloon region adopted the ‘Walloon Climate Decree’ in 2014, setting reduction objectives for total GHG at -30 % between 1990 and 2020 and -80 % to -95 % between 1990 and 2050. The decree has been made operational through a new air-climate plan adopted in 2016 and running until 2030. It contains 142 measures to reduce GHG and other air pollutants from different economic sectors, improve air quality and adapt to the impacts of climate change. In September 2017, the Walloon Parliament also adopted a climate resolution which calls in particular for Wallonia to reduce emissions by -95 % by 2050. In December 2018 the Walloon Government approved its draft energy and climate plan for 2030.

The Flemish government launched the Flemish Climate Summit (“Klimaattop”) in April 2016 with the objective to stimulate all stakeholders of society to take concrete actions and measures that contribute to the Flemish GHG reduction targets. On 1 December 2016, the second Climate Summit was organised and the Flemish Climate and Energy Pact (“Vlaams Klimaat- en Energiepact”) was adopted. The Flemish Government also commits itself to establishing a clear, ambitious and broad-based Flemish Climate Vision for 2050 in consultation with the various stakeholders of society by 2018 (Flemish Government, 2016a). On 23 November 2016, the Flemish Parliament adopted a resolution with recommendations to the Flemish government for a strong long-term Flemish climate policy (Flemish Parliament, 2016). In line with these commitments, Flanders’ energy and climate plans are currently in process of adoption. Although the Flemish climate plan has a sectoral structure, transversal measures are also included such as advancing the transition to the circular economy, a climate friendly spatial planning and tax system. The city of Leuven

<sup>70</sup> Proxy GHG emission estimates for 2017 Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

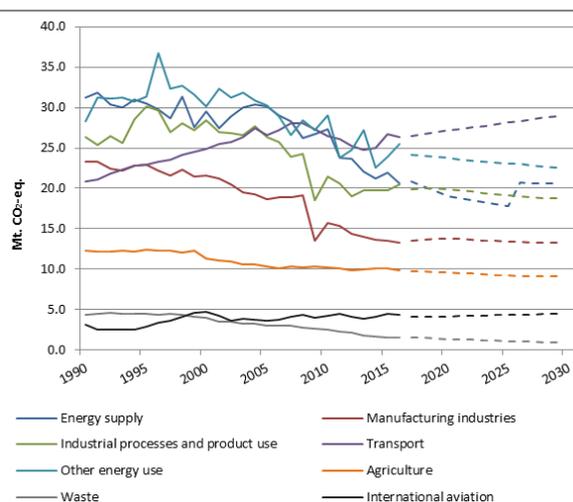
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developed its own climate action plan setting out an ambitious goal to become a climate neutral city by 2030. Energy use in Leuven's buildings will be reduced by 30 % by 2019 and new buildings will meet the passive standard<sup>71</sup>. Ghent<sup>72</sup> and Antwerp<sup>73</sup> also plan to be climate neutral by 2050.

Finally, the Brussels Capital Region has adopted its contribution to the first version (draft) of the national energy and climate plan (NECP) 2021 -2030 on 12 July 2018. Further work and consultations will take place early in 2019 to feed the final elaboration of the regional plan by mid-2019. In parallel, the Region will continue its work on its low-carbon strategy.

Transport represents almost a quarter of Europe's GHG and is the main cause of air pollution in cities. Transport emissions in Belgium increased by 5 % from 2012 to 2016 (figure 9).

**Figure 9: Greenhouse gas emissions by sector (Mt. CO<sub>2</sub>-eq.). Historical data 1990-2016. Projections 2017-2030<sup>74</sup>**



Belgium has notified the measures required by the 'MAC Directive' on air conditioning systems used in small motor vehicles, and the 'F-gas Regulation' which covers all key applications in which F-gases are used and gradually reduces the amount of hydrofluorocarbons that may be placed on the EU market.

Accounting of emissions and removals from forests and agriculture are governed by the Kyoto Protocol. Reported quantities under the Kyoto Protocol for Belgium show net

removals of, on average, -1.7 Mt CO<sub>2</sub>-eq for the period 2013 to 2016. In this regard Belgium contributes with 0.4% to the annual average sink of -384.4 Mt CO<sub>2</sub>-eq of the EU-28. Accounting for the same period depicts net debits of, on average, 0.8 Mt CO<sub>2</sub>-eq, which corresponds to a negative contribution of -0.7% of the EU-28 accounted sink of -115.7 Mt CO<sub>2</sub>-eq. Belgium is one of six EU Member States which show net debits in this preliminary accounting exercise. Reported net removals show no notable trend, while accounted net debits depict slight decreases.

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

In 2010, Belgium adopted its national adaptation strategy. It then adopted a national adaptation plan (2017-2020) in April 2017 with a systematic and sector-by-sector approach. The plan identifies specific measures to be taken at a national level to strengthen the cooperation and synergies on adaptation. Having comprehensively assessed the risks and vulnerabilities and examined competence sharing between the different bodies involved, Belgium has identified a number of vulnerable sectors that will need to adapt. These include health, tourism, agriculture, forestry, biodiversity, ecosystems and water, coastal, marine and tidal areas and production systems, and physical infrastructure. Belgium continuously monitors the impacts of climate change. Even if the system is fragmented (monitoring at the regional level), the sum of the different monitoring covers the whole of Belgium. Meanwhile, a separate monitoring system has been developed to evaluate adaptation activities, with a midterm evaluation planned by the end of 2018.

Through the Covenant of Mayors for Climate and Energy, the EU seeks to promote local action on climate mitigation, adaptation and energy efficiency. In October 2018, 337 Belgian cities had signed up to the EU Covenant of Mayors.

In the years 2013-2017 Belgium received EUR 607 million in revenues from the auctioning of emission allowances under the ETS. In 2017, 92 % of the revenues were spent on climate relevant expenditures.

Energy policy choices can also have serious implications in areas such as nature and energy infrastructure<sup>75</sup>.

<sup>71</sup>European Commission, [Technical Assessment Synopsis Report European Green Leaf Award 2017](#), p. 12.

<sup>72</sup>European Commission, [Good Practice Report European Green Capital 2018](#), p. 16.

<sup>73</sup>[Antwerpenmorgen](#).

<sup>74</sup>Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](#)). Proxy GHG emission estimates for 2017 Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

<sup>75</sup>European Commission, [Energy Union 2017](#).

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However, in Belgium's case such impacts have not been brought to the Commission's attention.

### 2019 priority action

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

## 2. Protecting, conserving and enhancing natural capital

### Nature and biodiversity

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

### Biodiversity strategy

In Belgium, nature and biodiversity policy is mainly a regional competence, but only Flanders and the Brussels region have their own biodiversity strategies and plans. Some exceptions, such as marine, trade, development and taxation, are a federal competence. The national biodiversity strategy to 2020<sup>76</sup> provides a framework to improve consistency between different levels and sectors and to integrate national and international biodiversity commitments. It mainly builds on regional and federal plans giving political orientation to help regions meet their biodiversity commitments, and to ensure consistency, fill gaps and integrate biodiversity concerns at national and international level. It applies to all Belgian bodies.



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

The land and marine areas covered by Natura 2000 sites were presented in the 2017 EIR.

Belgium's relatively low coverage of Natura 2000 reflects its high population density, its high levels of urbanisation and the intensity of its land use, particularly in the central and northern parts of the country. For Flanders, considering its type of land use and the isolation of its sites, additional restoration efforts are clearly needed

<sup>76</sup> Biodiversity 2020, [Update of Belgium's National Biodiversity Strategy](#).

outside the Natura 2000 network for it to achieve favourable conservation status. In the Walloon region, the network is generally more interconnected. Therefore, the conservation and restoration objectives are more concentrated on the network of sites itself, which are still complementary to protection and restoration activities outside of the network.

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

In all three Belgian regions (Flanders, Wallonia and Brussels), significant progress has been made in recent years on legal land site designation. All 38 Habitats Directive land sites in Flanders, all 156 Habitats Directive sites in Wallonia and all three Habitats Directive sites in the Brussels region are now legally designated as special areas of conservation (SACs). Flanders and the Brussels region are exemplary, as all their SACs have quantified conservation objectives for individual sites. However, this is not the case for the Walloon region, where only regional-level conservation objectives are available so far and site-specific objectives still need to be set. In July 2018, the Brussels region joined together two Natura 2000 sites south of Brussels by designating a connecting site of 13 ha to improve species' connectivity<sup>77</sup>.

In Flanders, specific conservation objectives for special areas of protection (SPAs) under the Birds Directive had been adopted in 2014 where they overlap with SACs under the Habitats Directive. In 2017 specific site-level conservation objectives were also established for each of the remaining SPA<sup>78</sup>. For the last SPA (IJzervallei) the final adoption is in procedure.

Flanders should therefore establish specific site-level conservation objectives for the remainder of its SPA network. In the Walloon region, where SPAs and SACs have largely been merged, site-specific conservation objectives for bird species are also still missing and the Brussels region has no SPAs.

Conservation measures are integrated in the designation acts of the Walloon sites and are further developed under the LIFE integrated project. Flanders is taking a step-by-step approach to put in place site-specific conservation measures, taking into account the priority measures included in the designation acts. A new format for the nature management plan as well as a new law on

<sup>77</sup> Le Vif, [Elargissement de la zone Natura 2000 du sud de Bruxelles](#), 2.7.2018.

<sup>78</sup> Flemish government, [Designation acts including the conservation objectives and priority measures](#).

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subsidies for nature management measures were adopted end of 2017<sup>79</sup>. Technical and financial support is being offered to private land owners for developing management plans and for measures contributing to the implementation of the established site-specific conservation objectives<sup>80</sup>.

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

The 2017 EIR referred to the latest report, dated 2012, from the Member States on the conservation status of habitats and species; new data will be available for the next EIR.

Regarding the 2017 EIR Suggested Actions, some measures are being implemented to restore and manage Natura 2000 sites (notably as part of rural development and LIFE programmes), and these are likely to lead to further positive trends in the status of certain species and habitats in the coming years. Some progress is also noted on stepping up measures to protect species and habitats depending on agricultural management, but it is currently unclear if these are enough to counteract the overall negative trends in the wider countryside, which are due to widespread agricultural intensification and eutrophication, especially in low lying areas.

### 2019 priority actions

- Establish the missing SPA/SCI site-level conservation objectives at federal level and in Wallonia for marine sites, and for bird species (SPAs) also in Flanders. Finalise the establishment of the site-specific conservation measures, taking into due account external pressures and threats (such as atmospheric nitrogen emission).
- For those species and habitats that have not yet reached a favourable conservation status, take urgent actions to reach this favourable conservation status as well as invest in further restoration measures on the basis of the site-level objectives for species and habitats.

### Maintaining and restoring ecosystems and their services

The EU biodiversity strategy aims to maintain and restore ecosystems and their services by including green infrastructure in spatial planning and restoring at least 15 % of degraded ecosystems by 2020. The EU green infrastructure strategy promotes the incorporation of green infrastructure into related plans and programmes.

The EU has provided guidance on the further deployment of green and blue infrastructure<sup>81</sup> and a country page on the Biodiversity Information System for Europe (BISE)<sup>82</sup>. This information will also contribute to the final evaluation of the EU Biodiversity Strategy to 2020.



### Brussels Capital Region

The Brussels Capital Region's nature plan<sup>83</sup> aims to increase access to green spaces, reconnect natural areas and integrate nature considerations in plans and projects. Green and blue infrastructure (*'maillage vert et bleu'*<sup>84</sup>) reinforced by the Brussels ecological network is being developed to reconnect Natura 2000 sites. A network to connect inner city green areas (*'continuités vertes'*) is included in the regional sustainable development plan (PRDD), while a green walking path (*Promenade Verte*<sup>85</sup>) connects parks, semi-natural sites, nature reserves and woodlands in the area around the Brussels Region. By implementing the nature plan, the Brussels Region aims to analyse how to maximize and monitor multifunctionality and ecosystems services offered by green spaces. Two multifunctional management plans are currently on their way to be

<sup>81</sup> European Commission, The [recommendations of the green infrastructure strategy review report](#) and the [EU Guidance on a strategic framework for further supporting the deployment of EU-level green and blue infrastructure](#).

<sup>82</sup> [BISE page for Belgium](#)

<sup>83</sup> Bruxelles Environnement (2016). [Plan Nature: Plan régional nature 2016-2020 en Région de Bruxelles-Capitale](#)

<sup>84</sup> Bruxelles Environnement. [Les maillages](#).

<sup>85</sup> [Promenade Verte](#)

<sup>79</sup> Flemish government, 2017, [Natuurbeheerplan](#).

<sup>80</sup> Flemish government, [subsidies Natuurbeheerplan](#).

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approved (one for the Sonian forest and one for the natural reserve Zavelenberg). High quality green spaces and waterways within Brussels will be able to provide solutions to urban challenges, such as flooding, heat stress, drought, poor air quality and unemployment and will help also biodiversity to flourish.

### **Flanders Region**

The 2018 Strategic Vision of the Spatial Policy Plan of Flanders<sup>86</sup> refers to green infrastructure and its multiple benefits for climate adaptation, biodiversity and recreational activities. To improve the data availability for green infrastructure there are currently two important projects conducted by the Department of environment and spatial development. The GOBELIN project tries to map the green infrastructure in relation to ecosystem services and will guide local actors to use all the available tools. The GARMON project focusses on the potential of private gardens by developing a garden monitor.

In 2016, Flanders' Nature and Forest Agency and Spatial Planning Department issued guidelines to municipalities on how to design urban greenery and urban forestry according to the local vision<sup>87</sup>. The aim is to increase the area, quality and linkages of green spaces in urban and peri-urban areas, and to integrate green infrastructure in spatial planning. Financing for green infrastructure is available via funding instruments connected to nature and land planning regulations, in combination with EU funds. Through the call for proposals for 'Nature in your neighbourhood' the Flemish Government financially supports initiatives by local authorities that are specifically aimed at enlarging and improving the green infrastructure in the built environment. For example, In 2017 and 2018 together two big initiatives in cities were launched and 15 smaller scale initiatives in smaller cities and municipalities<sup>88</sup>.

In addition, the government of Flanders makes 'Green Deals'<sup>89</sup> with private partners to support joint applications for funding and overcome legislative bottlenecks that delay action on the environment.

Flanders also published its restoration prioritisation framework in 2016 to implement Action 6<sup>90</sup> of the EU biodiversity strategy.

The 1997 'Nature Decree' led, by 2003, to the establishment of a Flemish Ecological Network (VEN)<sup>91</sup> of

large natural units complemented by an integral connecting and supporting network, covering a total area of 125 000 ha. While the network does not fully overlap with Natura 2000, some Natura 2000 sites and other natural areas form its core. However, the development of the VEN has been slow and only 85 000 ha of already existing areas had been incorporated into the network by 2003. Since then, efforts have focused on Natura 2000 and progress on the integral connecting and supporting network, especially on agricultural land, has stalled. There is also another supportive network called IVON which focuses on ecological coherence and connectivity<sup>92</sup>,

Researchers in Flanders have shown that that woody networks in agricultural landscapes are a rich source of intrinsic and functional biodiversity and thus need protection<sup>93</sup>.

### **Walloon Region**

The regional policy statement 2014-2019<sup>94</sup> makes no reference to ecological networks, the Walloon government has pledged to put in place a 'Walloon nature network'<sup>95</sup> which sets out a range of voluntary measures to encourage nature on public buildings, restore wetland and riparian habitats, create municipal nature reserves and raise awareness on the importance of nature. The region is also in the process of concluding agreements with private companies to promote green infrastructure. The 'Forestry Code' aims to ensure the regeneration and protect the sustainability of forests, combat climate change and preserve biodiversity. Most authorisations for spatial and urban planning impose mitigation and/or offset measures as part of the permits. The Walloon Nature and Forest Department manages the nature budget, which is in addition to EU funding (e.g. agri-environmental measures), river contracts, environmental education activities and Natura 2000 subsidies. In 2017, Wallonia informed the Commission that it had developed a restoration prioritisation framework based on existing nature conservation frameworks. The framework itself does not set out any measures, activities or budgetary implications, as these are covered by existing instruments. It does, however, set

<sup>86</sup> Ruimte Vlaanderen (2018). [Beleidsplan Ruimte Vlaanderen Strategische Visie](#).

<sup>87</sup> Agentschap Natuur en Bos (2016). [Draaiboek Groenplan. Richtlijnen bij het opmaken van een lokale groenvisie](#).

<sup>88</sup> Agency for Nature & Forests, Government of Flanders, [neighbourhood subsidies](#) & [Pimpiespeelplaats](#) & [groenerand subsidies](#).

<sup>89</sup> Departement Omgeving (n.d.). [Wat is een Green Deal?](#)

<sup>90</sup> Agentschap Natuur en Bos (2016). Prioriteitenkader voor ecosysteemherstel in Vlaanderen. RPF Vlaanderen.

<sup>91</sup> Agentschap Natuur en Bos (n.d.). [Vlaams Ecologisch Netwerk an het Integraal Verwevings- en Ondersteundend Netwerk](#).

<sup>92</sup> Research Institute Nature and Forest, [IVON](#)

<sup>93</sup> Van Den Berge, S., Baeten, L., Vanhellefont, M., Ampoorter, E., Proesmans, W., Eeraerts, M., Hermy, M., Smagghe, G., Vermeulen, I & Verheyen, K. (2018). Species diversity, pollinator resource value and edibility potential of woody networks in the countryside in northern Belgium. *Agriculture, Ecosystems and Environment*, 259: 119– 126.

<sup>94</sup> Walloon Government (2014). [Déclaration de politique régionale 2014-2019](#).

<sup>95</sup> Service Public de Wallonie (2015). [Réseau Wallonie Nature: Catalogue d'Actions](#).

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out priorities for ecosystem restoration to be achieved with the existing tools.

### Resource mobilisation

Belgium has not yet reported to the Convention on Biological Diversity (CBD) on resource mobilisation. Reporting to the CBD on financial flows is important for the position of the EU and individual Member States in the CBD and helps encourage good practices among other countries.

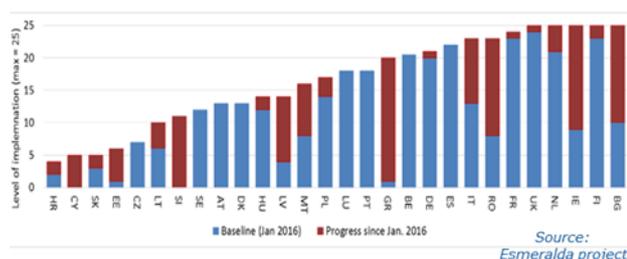
### Estimating natural capital

The EU biodiversity strategy calls on Member States to map and assess the state of ecosystems and their services<sup>96</sup> in their national territories by 2014, assess the economic value of such services and integrate these values into accounting and reporting systems at EU and national level by 2020.

Belgium continues to network and collaborate in the Benelux Mapping and Assessment of Ecosystems and their Services (MAES) initiative. Furthermore, the Belgian Ecosystems and Society community<sup>97</sup> continues to organise its successful annual Christmas market.

Flanders has completed its biophysical mapping and assessment and is one of the most advanced regions for MAES implementation. According to the Flanders' nature report — a regional ecosystem assessment (REA) — Flanders will develop, map and value alternative scenarios for green infrastructure by 2019. Furthermore, in 2018 Flanders started the Horizon2020 project 'MAIA: from Mapping and Assessment to Integrated ecosystem Accounting'.

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



The Brussels Capital Region is currently analysing how to use the MAES assessment in order to better measure and improve ecosystem services offered by the city. Brussels is also actively following the ESMERALDA project funded by the LIFE programme as this project will provide an integrated approach and friendly tool for policy makers.

The Walloon ecosystem services platform WAlES has been put on hold following a political decision to focus on concrete decision making tools.

Because of Wallonia's lack of progress, the MAES working group that met in Brussels in September 2018 announced the lack of progress of Belgium as a whole in implementing MAES since January 2016 (see Figure 10). This assessment, which is updated every 6 months, is underpinned by the ESMERALDA project<sup>98</sup>.

Belgium has established a business and biodiversity strategy (#BeBiodiversity) at federal level. It has also set up a Belgian Biodiversity Platform<sup>99</sup> which provides services to the scientific community involved in biodiversity research. The platform is also actively involved in projects.

### 2019 priority action

- The Walloon region is encouraged to mobilise resources to recommence its activities on mapping and assessing ecosystems and their services and to provide relevant information on the Biodiversity Information System for Europe platform for the final evaluation of the EU biodiversity strategy to 2020. Flanders is encouraged to share its experience with other Member States.

### Invasive alien species

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

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

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

Belgium contributed to the EU list of invasive alien species (IAS<sup>100</sup>) by submitting risk assessments for two species to the first list. These were the Amur sleeper (*Perccottus glenii*) and fox squirrel (*Sciurus niger*), both of which were put on the list.

The grid on Belgium's distribution of IAS (see Figure 11), shows that of the 37 species on the first EU list, 28 have already been observed in the environment and, of these, 19 IAS are well established in Belgium. Moreover, the total number of IAS is the highest of all EU countries and the number of established populations is the fifth highest in the EU after Germany, France, Italy and the Netherlands. The high number of IAS, in particular when

<sup>96</sup> Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

<sup>97</sup> [Belgian Biodiversity Platform](#).

<sup>98</sup> [Esmeralda project](#).

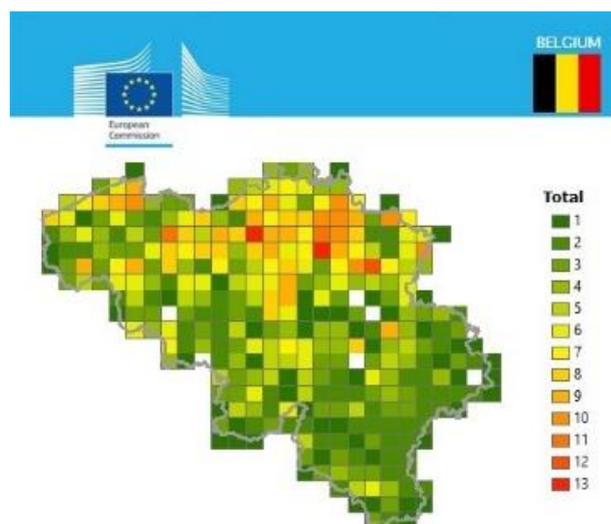
<sup>99</sup> [Belgian Biodiversity Platform](#).

<sup>100</sup> [European Commission, Invasive Alien Species](#).

considering the country's small surface area, is related to its central location, its intensive economic and transport activities.

Between the entry into force of the first EU list and 18 May 2018, Belgium has submitted five early detection notifications, as required under Article 16(2) of the IAS Regulation. Four of them were for new appearances of the Asian hornet (*Vespa velutina*), showing the high rate of invasion from France.

**Figure 11: Number of IAS of EU concern, based on available georeferenced information for Belgium<sup>101</sup>**



The fifth notification relates to two muntjac deer (*Muntiacus reevesi*), a male and a female that escaped from confinement. It is important that the eradication measures under way are successful, as on the European continent, muntjac deer have only been reported in a handful of member states<sup>102</sup>.

With regard to the IAS regulation, Belgium has notified the Commission of its competent authorities responsible for implementation (Article 24(2)) and the provisions on penalties applicable to infringements (Article 30(4)) for the federal level, Flanders and the Brussels region. However, the notification for the Walloon region is still pending.

### 2019 priority action

- Belgium is urged to swiftly complete its national legislation in the Walloon region for a system of penalties under the IAS regulation and notify the Commission in this regard.

<sup>101</sup> Tsiamis K; Gervasini E; Deriu I; D'amico F; Nunes A; Addamo A; De Jesus Cardoso A. [Baseline Distribution of Invasive Alien Species of Union concern. Ispra \(Italy\): Publications Office of the European Union](#); 2017, EUR 28596 EN, doi:10.2760/772692.

<sup>102</sup> BE DK IE NL DE FR.

### Soil protection

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

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

The percentage of artificial land<sup>103</sup> in Belgium (Figure 12) can be seen as a measure of the relative pressure on nature and biodiversity, as well as the environmental pressure on people living in urbanised areas. A similar measure is population density. When the share in both is high, it can be expected that the challenges to protect natural capital and to ensure well-being of people are also high, and adequate implementation of the relevant EU policy and law is a priority.

Belgium ranks considerably higher than the EU average as regards artificial land coverage with 11.4 % of artificial land (EU-28 average: 4.1 %). The population density is 372.1/km<sup>2</sup>, which is also above the EU average of 118<sup>104</sup>.

According to the RUSLE2015 model<sup>105</sup>, Belgium has an average soil loss rate by water of 1.22 tonnes per hectare per year (t ha<sup>-a</sup> yr<sup>-y</sup>) compared to a European mean average of 2.46 t ha<sup>-a</sup> yr<sup>-y</sup>, which indicates soil erosion is low on average.

Belgium has an average concentration of soil organic carbon of 41.3 g/kg (across all land cover types) compared to a European mean of 47 g/kg.

Contamination can severely reduce soil quality and threaten human health or the environment. A recent report of the Joint Research Centre of the Commission<sup>106</sup> estimated that potentially polluting activities have taken or are still taking place on approximately 2.8 million sites in the EU. 650 000 of these sites have been registered in national or regional inventories. 65 500 contaminated

<sup>103</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>104</sup> Eurostat, [Population density by NUTS 3 region](#).

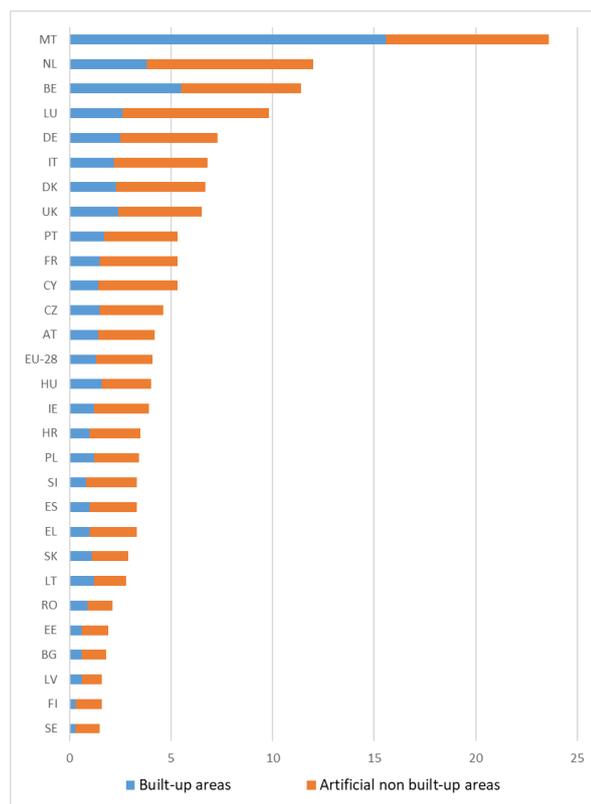
<sup>105</sup> Panagos, P., Borrelli, P., Poesen, J., Ballabio, C., Lugato, E., Meusburger, K., Montanarella, L., Alewell, C., The new assessment of soil loss by water erosion in Europe, (2015) Environmental Science and Policy, 54, pp. 438-447.

<sup>106</sup> Ana Paya Perez, Natalia Rodriguez Eugenio (2018), Status of local soil contamination in Europe: Revision of the indicator "Progress in the management Contaminated Sites in Europe"

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sites already have been remediated. Flanders has registered 68 000 sites where potentially polluting activities have taken or are taking place, and already has remediated or applied aftercare measures on 3 509 sites, while Wallonia has registered 3 796 and 1 593 sites respectively. Brussels has not reported the progress in the management of contaminated sites and brownfields to the working group of the European Environment Information and Observation Network (EIONET) that is responsible for this matter.

**Figure 12: Proportion of artificial land cover, 2015<sup>107</sup>**



With the help of ERDF co-financing, Wallonia is tackling the post-industrial conversion of contaminated soils including in urban areas. Furthermore, the European Fund for Strategic Investments (EFSI) has financed an equity fund entitled 'Ginkgo Fund II' for decontaminating industrial land (e.g. in Ottignies and Tournai) with a contribution of EUR 30 million<sup>108</sup>.

In Wallonia, the new Soil Decree, adopted in February 2018, is a significant achievement. This aims to improve soil quality and address the management of contaminated sites. Wallonia expects to have completed the remediation of all priority sites identified in the Marshal Plan by 2022.

In Flanders, the most important legislation for soils is the 2006 Decree on Soil Remediation and Soil Protection that replaced the 1995 Soil Remediation Decree. This mainly focuses on point source contamination, but also provides the legal basis for the 'Decision of the Flemish Government on Erosion Control'. The decree sets very strict investigation and remediation obligations based on a list of risk activities. The handover of a soil certificate to the buyer is mandatory for each real estate transaction. Flanders plans to clean up all historical contamination by 2036. To meet this target a new obligation was introduced in 2017, so that parcels which were not investigated before and could potentially be contaminated, will be investigated in the coming years.

In the Brussels Region, after 14 years of implementation, 588 Ha (out of 876 Ha) have been remediated and reassigned to other uses. The rest of the polluted land will be remediated around 2029-2030. To achieve this objective, a new legislation has been adopted (Decree of 23 June 2017) to simplify the study procedure and increase financial support. At the same time, Brussels Environment has started to work on a global strategy for soil protection which should be completed around 2024. The three regions and the federal state finally reached a political agreement in 2018 on the setting up and financing of a fund for the remediation of leaking fuel tanks. The fund will be financed with the remaining surplus of the successful BOFAS fund for contaminated petrol stations<sup>109</sup>, and then with a new levy on fuel oil. In this way, the remediation costs which can get very high, will be covered.

### Marine protection

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

The Marine Strategy Framework Directive (MSFD)<sup>110</sup> aims to achieve good environmental status of the EU's marine waters by 2020. To that end, Member States must develop a marine strategy for their marine waters, and cooperate with the EU countries that share the same marine (sub)region.

For Belgium, the Convention for the protection of the marine environment of the North-East Atlantic (the 'OSPAR Convention') is a significant contribution to achieving the goals required by the Marine Strategy Framework Directive. This strategy sets out a number of steps to be taken over six-year cycles. The latest step

<sup>107</sup> Eurostat, [Land covered by artificial surfaces by NUTS 2 regions](#).

<sup>108</sup> European Commission, 2016. The Investment Plan for Europe – state of play Belgium; [Ginkgo Advisor](#).

<sup>109</sup> [BOFAS npo – Fund for soil remediation around petrol stations](#).

<sup>110</sup> [Directive 2008/56/EC](#).

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meant that Member States had to establish their 'programme of measures' and report it to the Commission by 31 March 2016. The Commission is currently assessing whether Belgium's measures were appropriate to reach good environmental status (GES<sup>111</sup>). The measures reported are considered partially adequate to address the pressures in the country's seas. For example, new measures were introduced to address gaps (collecting floating litter in harbours and rivers, addressing recreational fisheries, etc.). However, a few activities and sources of pressure were not covered by the measures reported (such as aquaculture or nutrient input from agriculture).

Flanders adopted an action plan on marine litter in 2018, addressing all sources of marine litter (sea- and land-based). This action plan also includes concrete targets for the reduction of leakage of waste to the marine environment.

### 2019 priority actions

- Provide more information about measures to achieve GES, establish more that have a direct impact on pressures and quantify the expected reduction of pressure as a result.
- Ensure regional cooperation with Member States sharing the same marine (sub)region to address predominant pressures.

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<sup>111</sup> [COM\(2018\) 562](#) and [SWD\(2018\) 393](#).

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

#### Air quality

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

The EU has developed a comprehensive body of air quality legislation<sup>112</sup>, which establishes health-based standards and objectives for a number of air pollutants.

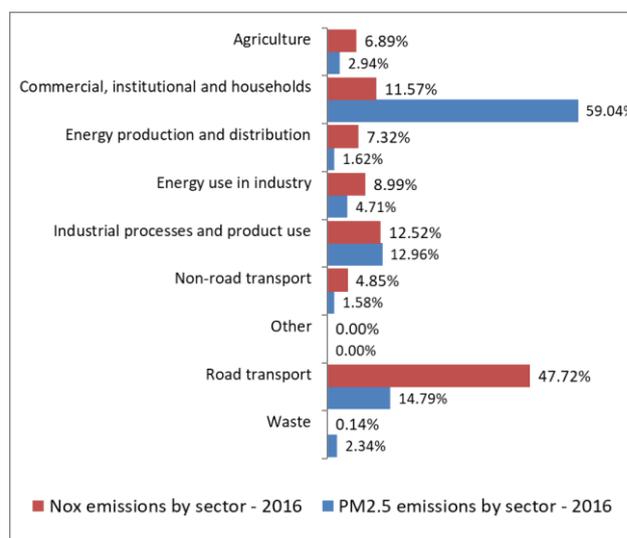
Emissions of several air pollutants have decreased significantly in Belgium<sup>113</sup>. The emission reductions between 1990-2014 mentioned in the previous EIR Reports, continued between 2014-2016 with emissions of methane (NH<sub>3</sub>) falling by 0.29%, emissions of nitrogen oxides (NO<sub>x</sub>) by 4.36 %, and emissions of volatile organic compounds (NMVOCs) by 1.95%. Meanwhile emissions of fine particulate matter (PM<sub>2.5</sub>) have increased by 15.16 % and emissions of sulphur dioxide (SO<sub>2</sub>) by 2.54 % between 2014 and 2016. Nevertheless, the emission levels for all these pollutants except for NO<sub>x</sub> are within the currently applicable national emission ceilings<sup>114</sup>. However, this exceedance of the ceiling for NO<sub>x</sub> does not apply to compliance checking as applications for the adjustment of inventories were accepted by the Commission. See also figure 13 on the total PM<sub>2.5</sub> and NO<sub>x</sub> emissions per sector.

Despite the emission reductions since 1990, additional efforts are needed to meet the emission reduction commitments (compared to 2005 emission levels) laid down in the new National Emissions Ceilings Directive<sup>115</sup> for the period 2020 to 2029, and for any year from 2030 on.

Indeed, air quality in Belgium continues to give a cause for concern. For 2015, the European Environment Agency estimated that about 7400 premature deaths were

attributable to fine particulate matter concentrations<sup>116</sup>, 220 to ozone concentrations<sup>117</sup> and 1500 to nitrogen dioxide<sup>118</sup> concentrations<sup>119</sup>.

Figure 13: PM<sub>2.5</sub> and NO<sub>x</sub> emissions by sector in Belgium<sup>120</sup>



For 2017<sup>121</sup>, limit values were reported as having been exceeded for nitrogen dioxide in two air quality zones: Brussels and Antwerp (see figure 14). Substantial progress was made in reducing particulate matter emissions with no exceedance of target values reported for 2017; this was a Suggested Action in the 2017 EIR report.

The persistent breaches of air quality requirements (for NO<sub>2</sub>), which have severe negative effects on health and environment, are being followed up by the European Commission through infringement procedures in all the Member States concerned, including Belgium. The aim is to ensure that adequate measures are put in place to bring all zones into compliance as soon as possible.

One example of good practice is in the air quality zone of Engis, where PM<sub>10</sub> limit values had not been met until the end of 2014. Here, a working group (bringing together authorities, main emitting plants and citizens) was

<sup>112</sup> European Commission, 2016. [Air Quality Standards](#)

<sup>113</sup> See [EIONET Central Data Repository](#) and [Air pollutant emissions data viewer \(NEC Directive\)](#).

<sup>114</sup> The current national emission ceilings have been mandatory since 2010 ([Directive 2001/81/EC](#)); revised ceilings for 2020 and 2030 have been set by [Directive \(EU\) 2016/2284](#) on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC.

<sup>115</sup> [Directive 2016/2284/EU](#).

<sup>116</sup> Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM<sub>10</sub> (PM<sub>2.5</sub>) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many human sources, including combustion.

<sup>117</sup> Low level ozone is produced by photochemical action on pollution.

<sup>118</sup> NO<sub>x</sub> is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NO<sub>x</sub> is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO<sub>2</sub>).

<sup>119</sup> European Environment Agency. [Air Quality in Europe – 2018 Report](#).

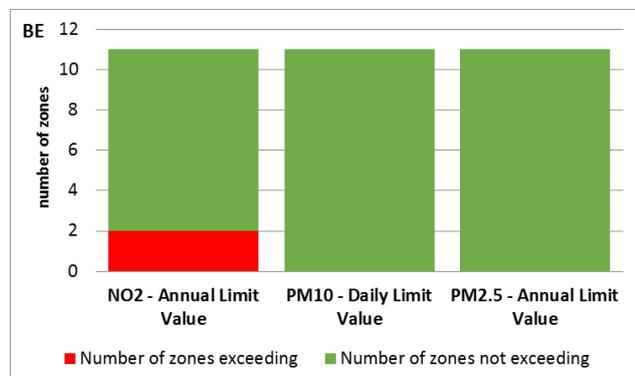
<sup>120</sup> 2016 NECD data submitted by Member State to the EEA.

<sup>121</sup> EEA, [EIONET Central Data Repository](#).

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established in 2015 to reduce the impact of the main industrial activities on the ambient air quality, especially on the particulate matter concentration (PM<sub>10</sub>).

**Figure 14: Air quality zones exceeding EU air quality standards in 2017<sup>122</sup>**



According to a special report from the European Court of Auditors (ECA)<sup>123</sup> EU action to protect human health from air pollution has not delivered its expected impact. There is notably a risk that air pollution is being underestimated in some instances because it may not always be monitored in the right places. Indeed, Member States are required to report both real-time and validated air quality data to the Commission. The report criticises the location of monitoring stations in Brussels. The Commission has already started (legal) discussions on monitoring of NO<sub>2</sub> by Belgium (Brussels and Antwerp agglomeration so far).

A national website on air pollution hosted by the Belgian Interregional Environment Agency (IRCEL — CELINE) is showing to assess non-compliance<sup>124</sup>. In addition, a mobile application ('Belair') with real-time monitoring of air pollution in the country has been developed by the Belgian Interregional Environment Agency<sup>125</sup>.

Many measures have been taken in all sectors contributing to the air pollution problem. The measures aim at both reducing emissions and reducing exposure. For the latter, the main policy response has been to establish low emission zones (LEZs) with putative fines in the Brussels Region (since 1 January 2018) and Antwerp (since 1 January 2017) and to extend pedestrianised areas. A similar zone is planned for Ghent for 2020. In Wallonia a legal framework allowing municipalities to propose the creation of LEZs is being prepared.

The Brussels Region has also announced further tightening of its LEZ for the period post-2025 in order to

further improve air quality and move closer to the WHO air quality guidelines. In this context, the Brussels government announced in 2018 its intention to ban diesel vehicles by 2030 and petrol vehicles at a later stage. To that end, the region started a large consultation of stakeholders to help assess the best way to implement this ban. The process runs until mid-2019 and includes a written consultation and the organisation of thematic roundtables with experts and stakeholders.

Other relevant regional measures in 2018 mentioned elsewhere in this EIR are: (i) fiscal initiatives; (ii) greening public transport; (iii) a new NEC plan; (iv) a new energy-climate plan; and (v) a new mobility plan. The Brussels region plans to be in full conformity with EU law between 2020 and 2025. In May 2018, the Brussels regional government approved emergency rules allowing commuters to use public transport free of charge during periods of high particulate matter.

The Brussels and Flemish regions are working towards developing alternative fuel infrastructure, which will benefit air quality in the medium-long run. The two regions are part of a Connecting Europe Facility project to deploy a network of charging stations for electric cars, natural gas and hydrogen refuelling stations, as well as onshore power supply points for inland navigation in Flanders, Brussels Capital region and the Netherlands (the BENEFIC project).



For Flanders, similar measures also detailed elsewhere in this EIR, plus a new NEC plan due for the end of 2018. The region has also implemented a 'green deal' to reduce emissions from wood burning (with a focus on particulate matter)<sup>126</sup>. Antwerp agglomeration may only fully comply after 2030.

The traffic congestion, air pollution and health connection was addressed in Belgium's EIR dialogue in March 2017. It was concluded that: (i) there is a problem; (ii) a package of measures is needed to deal with all

<sup>122</sup> EEA, [EIONET Central Data Repository](#). Data reflects the reporting situation as of 26 November 2018.

<sup>123</sup> European Court of Auditors, [Special report no 23/2018: Air pollution: Our health still insufficiently protected](#), see p.25 and p.27.

<sup>124</sup> CELINE, [database](#).

<sup>125</sup> Belgian Interregional Environment Agency, [Belair app](#).

<sup>126</sup> In Belgium binding measures are absent to deal with the environmentally harmful burning of wood burning.

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relevant issues related to transport and air pollution; and (iii) this package should be put in place at very short notice<sup>127</sup>.

Furthermore, Belgium received a country-specific recommendation (CSR) in 2018 under the European Semester to ‘Tackle the growing mobility challenges, in particular through investment in new or existing transport infrastructure and reinforcing incentives to use collective and low emission transport’.

The 2017 EIR detailed health-related external costs from air pollution. In the Brussels region, a project entitled ‘ExpAir’ is calculating the exposure of individuals to air pollution in Brussels<sup>128</sup>. A conference has been organised by the Federal Council on Sustainable Development on 12 October 2018 to discuss the effects of air pollution on health.

### 2019 priority actions

- Take, in the context of the National Air Pollution Control Programme (NAPCP), actions towards reducing the main emission sources - and meet all air quality standards.
- Accelerate the reduction of nitrogen oxide (NOx) emissions and nitrogen dioxide (NO<sub>2</sub>) concentrations. This will require, for example, a further reduction in transport emissions, particularly in urban areas (and may require proportionate and targeted urban vehicle access restrictions) and/or fiscal incentives.
- Upgrade and improve the air quality monitoring network, and ensure timely reporting of air quality data.

### Industrial emissions

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

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

To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the Industrial Emissions Directive<sup>129</sup> (IED).

<sup>127</sup> European Commission, [EIR Dialogue Report](#), 29.3.2018.

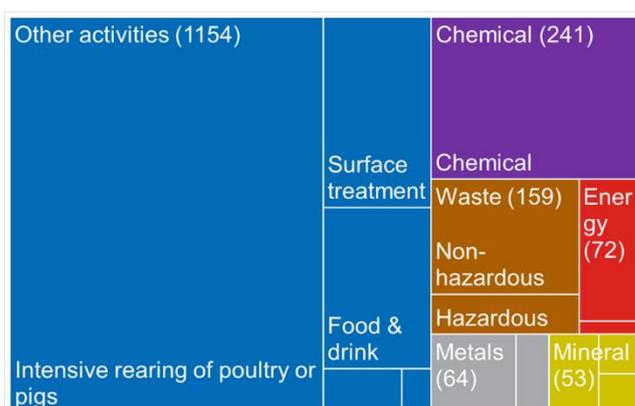
<sup>128</sup> [ExpAir](#).

<sup>129</sup> Directive 2010/75/EU covers industrial activities carried out above certain thresholds. It covers energy industry, metal production, mineral and chemical industry and waste management, as well as a wide range of industrial and agricultural sectors (e.g. intensive rearing of pig and poultry, pulp and paper production, painting and cleaning).

The below overview of industrial activities regulated by the IED is based on the ‘industrial emissions policy country profiles’ project<sup>130</sup>.

In Belgium, around 1745 industrial installations are required to have a permit based on the Industrial Emissions Directive (IED). The industrial sectors in Belgium with the most IED installations in 2015 were intensive rearing of poultry and pigs (49 %), chemicals (14 %) and waste management (9 %)<sup>131</sup> (see Figure 15).

**Figure 15: Number of IED industrial activities per sector (2015)**<sup>132</sup>



The breakdown of industrial sectors that place the largest burden on the environment in Belgium in terms of air emissions can be seen in Figure 16.

Regarding water emissions, metals, chemicals and ‘other activities’ are the most polluting sectors. The metal production, chemicals and waste management sectors are the main contributors to hazardous waste generation, whereas the ‘other activities’ and metal production sectors are the main contributors to non-hazardous waste generation.

The EU approach taken to enforcement under the IED creates strong rights for citizens to have access to relevant information and to participate in the permitting process. This empowers citizens, and NGOs, to ensure that permits are appropriately granted and their conditions respected.

The development of Best Available Techniques (BAT) Reference Documents (BREFs) and BAT Conclusions through the exchange of information involving Member States, Industrial associations, NGOs and the Commission ensures a good collaboration with stakeholders and enables a better implementation of IED.

<sup>130</sup> European Commission, Industrial emissions policy country profile – [Belgium](#).

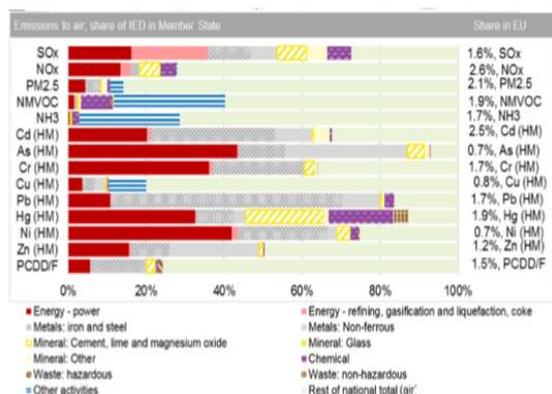
<sup>131</sup> European Commission, [Industrial emissions policy country profile – Belgium](#).

<sup>132</sup> European Commission, Industrial emissions policy country profile – [Belgium](#).

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The Commission relies on and welcomes the efforts of national competent authorities to implement the legally binding BAT conclusions and associated BAT emission levels in environmental permits, resulting in considerable and continuous reduction of pollution.

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



By way of example, the implementation of the recently adopted BAT associated emission levels for Large Combustion Plants will -on average and depending on the situation of individual plants- reduce emissions of sulphur dioxide with 25% to 81%, nitrogen oxide with 8% to 56%, dust with 31% to 78% and mercury with 19% to 71%.

Belgium is densely populated and industrial installations are often located close to inhabited areas. This causes frequent public complaints and subsequent investigations. This situation may, in some cases, result in a need to set stricter emission limit values than what would normally be required applying the best available techniques<sup>133</sup>.

The Commission has in particular welcomed the good cooperation with the administration to efficiently solve issues due to late implementation of the BAT conclusion prohibiting the use of the mercury cell technique by chlor-alkali plants by 11 December 2017<sup>134</sup>.

### 2019 priority actions

- Review of permits to comply with new BAT conclusions.
- Strengthen control and enforcement to ensure compliance with BAT conclusions.

<sup>133</sup> Under Article 18 of IED, stricter conditions than those achievable by the use of the best available techniques should be included in the permit if needed to address local environmental issues and/or to comply with other regulations (e.g. air or water quality standard).

<sup>134</sup> Under both the Mercury Regulation (EU 2017/852) and the BAT conclusions for chlor-alkali sector (Commission Decision 2013/732/EU).

## Noise

The Environmental Noise Directive<sup>135</sup> provides for a common approach to avoiding, preventing and reducing the harmful effects of exposure to environmental noise.

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU<sup>136</sup>.

Based on a limited set of data<sup>137</sup> from 2011, environmental noise causes at least around 200 premature deaths and 1 000 hospital admissions per year in Belgium. It also causes some 270 000 people to have disturbed sleep. The implementation of the Environmental Noise Directive<sup>138</sup> is significantly delayed. Based on the latest set of information that could be analysed, (2012 for noise maps and 2013 for action plans), the legal obligations have only been fully met by Flanders. The noise action plans for roads and railways for the Walloon region are still missing. As regards the action plan for the Brussels Capital Region (which also applies to noise from the Brussels airport) concerns exist over the lack of public consultation early 2014 over the review of the 2013 action plan; this is currently on-going with a view to adoption of a new action plan by the Brussels Government in 2019<sup>139</sup>. These instruments, adopted after public consultation, should include the measures to keep noise low or reduce it.

In 2015, 54 % of people living in Brussels, about 68% of people in Liège and 74% in Antwerp said they were satisfied with the level of noise in their city<sup>140</sup>. Finalist in 2015 for the Green Capital Award, the exemplarity of Brussels was underlined as it ranked second for the noise. An example of good practice is an inventory of quiet areas in Ghent<sup>141</sup>.

### 2019 priority action

- Complete missing noise action plans for Wallonia and ensure proper review of the action plan for Brussels agglomeration.

<sup>135</sup> [Directive 2002/49/EC](#).

<sup>136</sup> WHO/JRC, 2011, Burden of disease from environmental noise, Fritschi, L., Brown, A.L., Kim, R., Schwela, D., Kephelopoulou, S. (eds), [World Health Organisation, Regional Office for Europe](#), Copenhagen, Denmark.

<sup>137</sup> N.B. the figures cited here are from a 2017 unpublished fact sheet for Belgium from the European Environment Agency.

<sup>138</sup> The Noise Directive requires Member States to prepare and publish, every 5 years, noise maps and noise action plans for agglomerations with more than 100 000 inhabitants, and for major roads, railways and airports.

<sup>139</sup> [Brussels Environment](#)

<sup>140</sup> European Commission, 2017, [The 7<sup>th</sup> Report on Economic, Social and Territorial Cohesion](#), p. 120.

<sup>141</sup> European Commission, [EGCA 2019 Good Practice Factsheets](#).

## Water quality and management

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

The existing EU water legislation<sup>142</sup> puts in place a protective framework to ensure high standards for all water bodies in the EU and addresses specific pollution sources (for example, from agriculture, urban areas and industrial activities). It also requires that the projected impacts of climate change are integrated into the corresponding planning instruments e.g. flood risk management plans and river basin management plans, including programme of measures which include the actions that Member States plan to take in order to achieve the environmental objectives.

### Water Framework Directive

Belgium has adopted and reported the second generation of RBMPs under the Water Framework Directive and the European Commission has assessed the status and the development since the adoption of the first RBMPs, including suggested actions in the EIR report 2017.

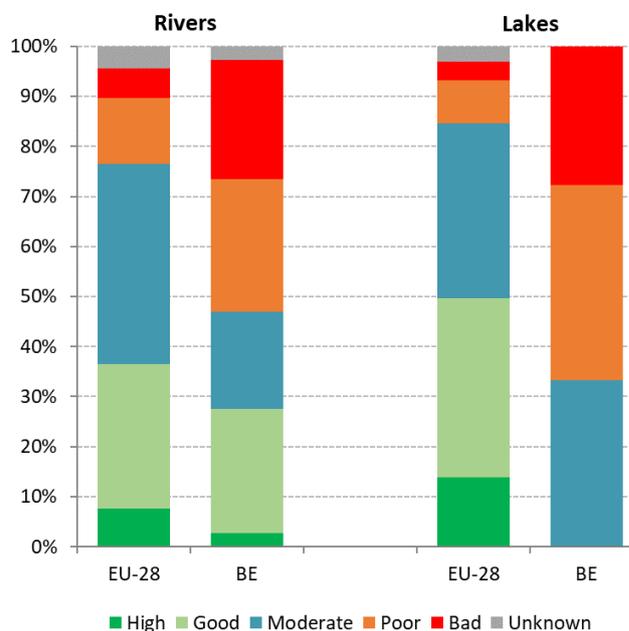
The **most significant pressures on rivers** in Belgium is from diffuse agricultural sources, atmospheric deposition and point source pressures from urban waste water. For **groundwater bodies the most significant pressure** is agriculture and industrial emissions.

Nutrient pollution was the **most significant impact** on all surface water categories (65% of surface water bodies) and on groundwater (44% of groundwater bodies) in Belgium. Chemical pollution was also significant in surface and groundwaters.

Overall, there appears to have been a reduction in surveillance monitoring and an increase in operational monitoring regarding the **ecological status in surface water bodies**. The ecological status/potential is still less than good for more than 70% of all classified river water bodies as illustrated in Figure 17. This shows that Belgium

has a long way to go to achieve the good status/potential objectives set down in the Water Framework Directive.

**Figure 17: Ecological status or potential of surface water bodies in Belgium<sup>143</sup>**



Between the first and second RBMPs there was a large decrease in the proportion of surface water bodies with **good chemical status** from 35% to 2% and a significant increase in the proportion that fails to achieve good chemical status from 30% to 98% which can be linked to the fact that the proportion with unknown status was reduced from 35% to less than 1%. The monitoring situation of quantitative status of groundwater bodies has improved. The number of monitored groundwater bodies increased and the number of groundwater bodies failing good status almost halved from 15 to 8.

Most significant pressures are identified in the RBMPs and addressed by measures (key type of measures) but there is no financial commitment for the implementation of Programmes of Measures from all relevant sectors in any of the River Basin Districts. No gap analyses were carried out, except for a few diffuse pressures in one of the river basin districts, which makes it difficult to judge progress or expected progress in achieving the objectives of the Water Framework Directive and the calculation and internalisation of environmental and resource costs in relation to water pricing varies across Belgium.

### Drinking Water Directive

As regards **drinking water**, no new data is available since the 2017 EIR<sup>144</sup>.

<sup>142</sup> This includes the [Bathing Waters Directive \(2006/7/EC\)](#), the [Urban Waste Water Treatment Directive \(91/271/EEC\)](#) (on discharges of municipal and some industrial wastewaters), the [Drinking Water Directive \(98/83/EC\)](#) (on potable water quality), the [Water Framework Directive \(2000/60/EC\)](#) (on water resources management), the [Nitrates Directive \(91/676/EEC\)](#) and the [Floods Directive \(2007/60/EC\)](#).

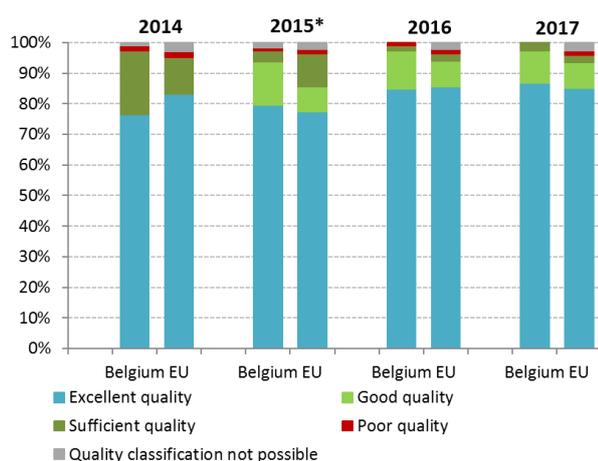
<sup>143</sup> EEA, [WISE dashboard](#).

## Environmental Implementation Review 2019 – Belgium

### Bathing Water Directive

Figure 18 shows that in 2017, out of the country's 113 bodies of **bathing water**, 86.7 % were of excellent quality, 10.64 % of good quality and 2.7 % of sufficient quality (compared to 85 %, 12.4 % and 1.8 % respectively in 2016). No bathing water was either of poor quality or non-compliant<sup>145</sup>. Detailed information on Belgian bathing waters is available on national web portals<sup>146</sup> and on an interactive map viewer designed by the European Environment Agency<sup>147</sup>.

**Figure 18: Bathing water quality 2014-2017**<sup>148</sup>



\*The category 'good' was introduced in the 2015 bathing water report

### Urban Waste Water Treatment Directive

Belgium has had difficulties with implementing the **Urban Waste Water Treatment Directive** (UWWTD) on time and infringement cases were opened. However since mid-2018 the last agglomerations targeted (in the Walloon region and for which Belgium received a Suggested Action in the 2017 EIR) reported compliance.

Close to 98 % of all waste water is collected in Belgium, and 96.8 % of the load collected undergoes secondary treatment, with 91.1 % undergoing more stringent treatment in 2014<sup>149</sup>.

On waste water treatment, Brussels agglomeration

(which had been fined in 2013 for non-compliance) has continued using EIB loans to further improve water quality, rehabilitate sewers, renovate distribution lines and construct storm water ponds<sup>150 151</sup>.

An ongoing 2018 Commission-OECD study shows that if Belgium continues as it does right now (namely follow a business as usual or BAU scenario), the total expenditures for compliance with the UWWTD and the proposal for a new drinking water directive and costs for reaching higher efficiency levels are estimated to be around EUR 3 billion in 2030.

Belgium participates in the ERDF co-financed NEREUS project which aims to boost the development of the green economy and the transformation of waste water into a valuable source of water, nutrients (e.g. cellulose, nutrients) and energy<sup>152</sup>.



### Nitrates Directive

The **Nitrates Directive** is implemented at regional level. There are challenges to the agricultural use of nutrients throughout the Belgian territory, except for in the Brussels Capital Region where conventional agricultural activities are rather marginal.

The improvement in nitrates concentration observed in the past continued in the 2012-2015 period. However, agricultural pressures on water in Flanders remain high, with eutrophication affecting most waters. The region has therefore decided to apply the measures of its nitrates action programme to the whole territory, adding measures in targeted areas where the water quality has not improved sufficiently. Flanders has a derogation from the Nitrates Directive<sup>153</sup> relating to the maximum amount

<sup>144</sup> Compliance with the Drinking Water Directive microbiological and chemical parameters as last reported was very high.

<sup>145</sup> European Environment Agency, 2018. [European bathing water quality in 2017](#), p. 21.

<sup>146</sup> [Wallonian portal for bathing waters](#) (Wallonia) and [Flemish portal for bathing waters](#) (Flanders) [Wallonian portal for bathing waters](#) (Wallonia) and (Flanders) [Wallonian portal for bathing waters](#) (Wallonia) and (Flanders) [Wallonian portal for bathing waters](#) (Wallonia) and (Flanders).

<sup>147</sup> viewer Interactive [map viewer](#).

<sup>148</sup> European Environment Agency, 2018. [European bathing water quality in 2017](#), p. 21.

<sup>149</sup> European Commission, Ninth Report on the Implementation Status and the Programmes for Implementation of the Urban Waste Water Treatment Directive (COM(2017) 749) and Commission Staff Working Document accompanying the report (SWD(2017) 445).

<sup>150</sup> EIB, [SBGE — Brussels South waste water treatment plant](#), 2014.

<sup>151</sup> EIB, [Brussels Capital sewerage system](#), 2010.

<sup>152</sup> [NEREUS](#) project.

<sup>153</sup> [Commission Implementing Decision \(EU\) 2015/1499 of 3 September 2015 granting a derogation requested by Belgium with regard to the region of Flanders pursuant to Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources \(notified under document C\(2015\) 6058\)](#).

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of nitrogen from livestock manure that can be applied on land until 31 December 2018.

In Wallonia, the concentration of nitrates in water was stable during the 2012-2015 period. However, water quality is still a challenge in some areas of the region. Around 69 % of the agricultural area in use has been designated a 'nitrate vulnerable zone' and concerns persist on whether the nitrates action programme is enough to further lower harmful concentrations in water.

In 2017, the Commission emphasised to Member States that water and agriculture legislation must ensure the long-term goal of making European agriculture sustainable while securing the good status of water bodies as defined by the Water Framework Directive<sup>154</sup>.

In Flanders, researchers have developed the 'AquaCrop-Hydro' model which shows how agricultural practices impact on water availability in the Plankbeek stream catchment<sup>155</sup>. The model found that about two thirds of rainfall in the Plankbeek catchment evaporated or was used by crops, while 27 % reached the groundwater or river. Surface run-off accounted for 7.5 % and 0.2 % was stored in the soil.

### Floods Directive

Floods do appear to be a significant risk in Belgium with 24% (16% in Wallonia) of the population affected, and the value of assets at risk over 3 times<sup>156</sup>. A specific risk in Belgium is due to flooding of enclosed water courses in urban areas (e.g. Senne River in Brussels). Efforts to restore natural hydromorphology should help to mitigate such risks. Climate change is seen as a significant factor in causing flooding in Belgium in terms of expected damage to urban assets, people affected and GDP<sup>157</sup>.

The Floods Directive established a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences associated with significant floods. Belgium has adopted and reported its first FRMPs under the Directive and the European Commission conducted an assessment.

The Commission's assessment found that good efforts were made with positive results in setting objectives and devising measures focusing on prevention, protection and preparedness. The assessment also showed that, as was the case for other Member States, Belgium's FRMPs

do not yet include an as complete as possible estimation of the cost of measures with identification of specific sources of funding. In addition, there is scope for expanding the use of cost-benefit analysis for the prioritisation of measures that lend themselves to this.

The Flemish Knowledge Water Centre has established a project on rational water management in cities and municipalities to save water in buildings. Indeed, the leakage rate in Belgium is high (50 % or 17,9% in Flanders in 2016)<sup>158</sup>. A survey that was conducted in spring 2018 as part of the project, showed among other things that 97 % of respondents are prepared to minimise water consumption during a long-term drought and 90 % are prepared to keep rain water on their own property rather than direct it to the sewage system<sup>159</sup>.

The SIGMA II plan for the Scheldt estuary is a particularly good example of using green infrastructure for flood protection and nature restoration. Another project entitled 'IRMA', co-financed by the EDF, helped Belgium and neighbouring countries deal with the flooding of the Meuse-Maas river.

### 2019 priority actions

- Ensure that water pollution by agriculture, among other sectors, is addressed effectively both under the Nitrates and the Water Framework Directives.
- Take steps to tackle chemical pollution, by developing a more substance-specific approach both in surface and in groundwater, with focus on Priority Substances, river-specific and groundwater-specific pollutants.
- Take steps to expand the use of cost-benefit analysis for the prioritisation of measures that lend themselves to this, in relation to the Floods Risk Management Plans.

### Chemicals

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

The EU's chemicals legislation<sup>160</sup> provides baseline protection for human health and the environment. It also

<sup>154</sup> European Commission 2017, [Staff Working Document, p. 3](#).

<sup>155</sup> Willems, P. (2014) Parsimonious rainfall-runoff model construction supported by time series processing and validation of hydrological extremes — Part 1: step-wise model-structure identification and calibration approach. *Journal of Hydrology*, 510: 578-590.

<sup>156</sup> Secondary data synthesised in, European Commission-OECD, Belgian fiche, Assessing member states' investment needs and financing capacities for water supply, sanitation and flood protection, 2018.

<sup>157</sup> Powerpoint presentation, slide 66, Workshop 18.05.2018.

<sup>158</sup> European Commission-OECD, Belgian fiche, Assessing member states' investment needs and financing capacities for water supply, sanitation and flood protection, 2018.

<sup>159</sup> Vlakwa, [Waterenquête 2018 bij burgers](#).

<sup>160</sup> Principally for chemicals: REACH (OJ L 396, 30.12.2006, p.1.); for Classification, Labelling and Packaging, the CLP Regulation (: OJ L 252,

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ensures stability and predictability for businesses operating within the internal market.

The 2016 European Chemicals Agency (ECHA) report on the operation of REACH and CLP<sup>161</sup> showed that enforcement activities are still evolving. In the Forum for Exchange of Information on Enforcement, coordinated enforcement projects<sup>162</sup> have shown that the effectiveness of the enforcement activities can still be improved, in particular regarding registration obligations and Safety Data Sheets where a relatively high level of non-compliance has been found.

Whilst improving, there is room for further improvement of national enforcement activities as regards harmonisation throughout the Union, including controls on imported goods. It is also clear that enforcement is still weak in some Member States in particular with respect to control of imports and supply chain obligations. The architecture of enforcement capabilities continues to be complex in most EU countries. The enforcement projects also revealed some differences among Member States (e.g. some tend to systematically report higher compliance than the EU average and others lower).

A 2015 Commission study highlighted already the importance of harmonisation in the implementation of REACH at Member State level, in terms of market surveillance and enforcement, as a critical success factor in the operation of a harmonised single market<sup>163</sup>.

In March 2018, the Commission published an evaluation of REACH<sup>164</sup>. The evaluation concludes that REACH delivers on its objectives, but that progress made is slower than anticipated. In addition, the registration dossiers often are incomplete. The evaluation underlines the need to enhance enforcement by all actors, including registrants, downstream users and in particular for importers, to ensure a level playing field, meet the objectives of REACH and ensure consistency with the actions envisaged to improve environmental compliance and governance. Consistent reporting of Member State enforcement activities was considered important in that respect.

Belgium put in place for the implementation of the REACH regulation a cooperation agreement (21 December 2012) between the federal and regional

authorities<sup>165</sup>. This agreement put in place three committees involved in the REACH tasks (Belgium REACH committee, scientific committee and national forum, and; an enforcement committee). This enforcement structure is composed of several federal and regional authorities acting on their own competency. Direct surveillance of compliance and law enforcement is executed by inspection services and legal authorities while indirect enforcement of compliance is executed by permitting authorities. Enforcement authorities, including Customs, liaise via a national forum to maximize the useful effect of enforcement initiatives while minimizing the efforts required from public authorities and from legal persons.<sup>166</sup>

Belgium has established, among others, an annual National Control Policy Plan drafted by the inspectorates and adopted by the policy makers. Awareness raising activities include leaflets and newsletters, articles in industry magazines, and information via website and social media. The Belgian authorities are working actively with ECHA to implement the legislation on the authorisation, evaluation and restriction processes. Belgium already evaluated more than 10 substances with endocrine disruptors or PBT/vPvB concerns.

The chemicals cluster in Flanders is mentioned earlier in this report. The port of Antwerp is home to Europe's largest — and the world's second largest — petrochemical cluster. It is said to be the first port in the EU joining the 'zero-pellet loss' initiative which aims to reduce the leakage of plastic into the environment<sup>167</sup>.

Belgium has improved cooperation between enforcement authorities and customs and inspection services to make implementation more effective. A system of sanctions is in place for infringements of REACH and CLP. There are regular controls and routine inspections of CLP, but it is considered unrealistic to monitor all substances covered by REACH. As with most EU countries, Belgium has a national helpdesk to help SMEs, in particular, receive quick and helpful answers to their REACH-related enquiries.

Finally, LIFE projects have been used to investigate chemical issues, including in the port of Antwerp<sup>168</sup>.

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31.12.2006, p.1.), together with legislation on biocidal products and plant protection products.

<sup>161</sup> European Chemicals Agency, [Report on the Operation of REACH and CLP 2016](#).

<sup>162</sup> ECHA, on the basis of the projects [REF-1](#), [REF-2](#) and [REF-3](#).

<sup>163</sup> European Commission, [Monitoring the Impacts of REACH on Innovation, Competitiveness and SMEs, Final Report](#), 2015.

<sup>164</sup> [COM\(2018\) 116](#).

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<sup>165</sup> [Belgian Cooperation Agreement on REACH](#)

<sup>166</sup> [ECHA](#)

<sup>167</sup> [Essenscia](#), p. 57.

<sup>168</sup> For example, [LIFERECYSITE & Purifying fertiliser rich water through complete recycling of all components](#).

### Making cities more sustainable

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

Europe can be seen as a union of cities and towns. Around 75 % of the EU population live in urban areas<sup>169</sup> and that is projected to rise to just over 80% by 2050<sup>170</sup>. Urban areas pose particular challenges for the environment and human health, but they also provide opportunities for using resources more efficiently. The EU encourages municipalities to become greener through initiatives such as the Green Capital Award<sup>171</sup>, the Green Leaf Award<sup>172</sup> and the Green City Tool<sup>173</sup>.

### Financing greener cities

Belgium has directed EUR 141.9 million or 15 % of its available ERDF funding to sustainable urban development. The OP for Brussels is entirely included in this amount, while the OPs for Flanders and Wallonia contain urban axes.

Belgium participates in the Urban Development Network<sup>174</sup>.

The ERDF supports urban innovative actions (UIA) for the 2014-2020 period to test new and unproven solutions to address urban challenges. The UIA has a total ERDF budget of EUR 372 million for this period and Belgium has obtained actions in the first two calls for projects in Ghent and Antwerp<sup>175</sup>.

### Participation in EU urban initiatives and networks

The 2018 European Green Leaf Award was jointly awarded to the Belgian city of Leuven and the Swedish city of Växjö. In 2011, Leuven set the ambitious goal to become a climate neutral city by 2030, and in 2013, it was nominated for the 'most sustainable municipality' in Belgium<sup>176</sup>. Two other Belgian cities were unsuccessful candidates for European awards: Mechelen for the European Green Leaf 2019 and Ghent for the European Green Capital 2020. Leuven is also one of the finalists European innovation capital 2018.

Belgian cities are also involved in 22 URBACT thematic networks to promote sustainable urban development<sup>177</sup>. Within URBACT, Antwerp is a lead partner of the 'Sub>urban' network which aims to make the existing 20th century urban fabric attractive and rich in quality again. The Brussels region is part of the 'Freight TAILS' initiative dedicated to sustainable urban logistics. Ghent leads two networks: 'REFILL', a concept for the temporary use of vacant buildings and land; and 'Stay tuned', targeting the high rates of early school leaving in cities and towns. Belgian cities are involved in various EU-supported initiatives related to smart cities, especially ones on energy<sup>178</sup>.



In Flanders, projects to increase innovation by companies also aim to create more biodiversity on industrial estates through a 'green in construction' knowledge centre and to promote use of a care system<sup>179</sup>. Flanders has also championed the 'BetonStop' approach for reducing the amount of grey (concrete) infrastructure<sup>180</sup> prohibiting all kind of urbanisation of open spaces by 2040 ('Betonstop'). By 2025, there will only be 3 hectares of open space per day sacrificed to buildings. In 2040, this figure must drop to zero. Ghent is transforming its canal banks into green walkways and improving water management in its dock areas<sup>181</sup>. The city has also created a scorecard of its natural capital<sup>182</sup>. Belgian cities are also actively involved in initiatives such as Eurocities and the EU Covenant of Mayors (the latter is mentioned earlier in this report).

These efforts are worth encouraging, as in 2017 slightly more than 22.7 % of people in Belgian cities said that their area was affected by pollution, grime or other environmental problems (EU average 20 %)<sup>183</sup>.

<sup>169</sup> European Commission, [Urban Europe, 2016](#).

<sup>170</sup> European Commission, Eurostat, [Urban Europe](#), 2016, p.9.

<sup>171</sup> European Commission, [European Green Capital](#)

<sup>172</sup> European Commission, [European Green Leaf Award](#).

<sup>173</sup> European Commission, [Green City Tool](#).

<sup>174</sup> European Commission, [The Urban Development Network](#).

<sup>175</sup> [UIA Initiative](#).

<sup>176</sup> European Commission, [Good Practice Report European Green Leaf 2017](#), 2016, p. 12.

<sup>177</sup> [URBACT](#).

<sup>178</sup> [EU Smart Cities Information System](#).

<sup>179</sup> [Departement Omgeving](#).

<sup>180</sup> decision of the Flemish government of 27.07.2018

<sup>181</sup> <sup>181</sup> European Commission, [Good Practice Report European Green Capital 2018](#), p. 31, p. 56.

<sup>182</sup> European Commission, [EGCA 2019 Good Practice Factsheets](#).

<sup>183</sup> European Commission, Eurostat, [Pollution, grime or other environmental problems by degree of urbanisation](#).

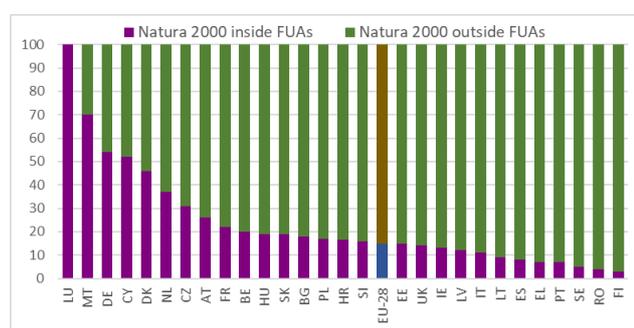
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The EU funded PASTA project compared citizen concerns about air pollution in 7 European cities. The results revealed that, on average, 58% of participants were worried about the health effects of air pollution with the figure for Antwerp being 78%<sup>184</sup>.

### Nature and cities

More than 20 % of Belgium's Natura 2000 network is in urban areas (EU average 15 %<sup>185</sup>) (see Figure 19). Wallonia reported that 101 out of 262 municipalities have launched municipal plans for nature development (PCDN)<sup>186</sup> which included the mapping of their local ecological network. A noteworthy example of green infrastructure in the country is the LIFE Belini project for the rivers in the Scheldt basin district 2017-2024. In the Walloon section alone, 10 temporary immersion zones will be created, and three existing ones will be returned to nature, with a focus on biodiversity and ecosystem services. The entire Charleroi-Brussels canal is also part of the LIFE project<sup>187</sup>. In Brussels the Senne will be daylighted in a specific urban area and a temporary immersion zone is planned. In Flanders, similar measures are being taken in Sint-Pieters-Leeuw and Leuven zones plus the construction of a fish ladder on the Dyle.

**Figure 19: Proportion of Natura 2000 network in Functional Urban Areas (FUA)<sup>188</sup>**



For the Brussels region, its 2016-2020 nature plan is directly linked to its regional soil plan<sup>189</sup>, and aims to reinforce nature in public spaces and the implementation of the Brussels ecological network (REB)<sup>190</sup>, in particular, to protect sites of high natural value.

<sup>184</sup> Dons, E., Laeremans, M., AnayaBoig, E. et al. (2018). Concern over health effects of air pollution is associated to NO<sub>2</sub> in seven European cities. *Air Quality, Atmosphere & Health* 11(5), 591-599.

<sup>185</sup> European Commission, 2017, [The 7<sup>th</sup> Report on Economic, Social and Territorial Cohesion](#), p. 121.

<sup>186</sup> *Plans Communaux de la Nature*.

<sup>187</sup> [LIFE Belini](#).

<sup>188</sup> European Commission, [Definition of Functional Urban Areas](#).

<sup>189</sup> *Plan Régional d'Affectation des Sols*.

<sup>190</sup> *Réseau écologique bruxellois*.

### Urban sprawl

In 2009, Belgium had the highest weighted urban proliferation with 6.59 UPU/m<sup>2</sup><sup>191</sup> compared to an EU average (EU28+EEA4) of 1.64 UPU/m<sup>2</sup>, with an increase of 1.7 % from 2006 to 2009<sup>192</sup>.

As an example of good practice, Ghent is encouraging — through the use of subsidies — the temporary use of disused sites for economic, cultural and participative activities through land-use planning<sup>193</sup>.

### Traffic congestion and urban mobility

The average number of hours per year spent in traffic jams, rose from 35.84 in 2014 to 38.82 in 2016, making Belgium one of the worst performers in the EU<sup>194</sup>, with Brussels coming top in Belgium with 39 hours<sup>195</sup>. The cost of traffic congestion is spelled out in the Belgian 2017-2020 stability programme; assessments by the Commission, the OECD and the IMF put the likely costs at 1-2 % of GDP or EUR 4.3-8.6 billion (2017)<sup>196</sup>.

Turning to car ownership, in 2016 Belgium had 503 passenger cars per thousand inhabitants, more or less in line with the EU average (505 passenger cars<sup>197</sup>). In the same year, 78.5 % of transport in Belgium was by private car<sup>198</sup> and 64 million vehicles crossed the River Scheldt in Antwerp — 65 % more than the current capacity<sup>199</sup>. In Wallonia, 95 % of land transport of people in 2009 was by road, of which 81 % was by private car<sup>200</sup>. In Flanders, 75 % of commuters still use a private car<sup>201</sup>.

In Brussels, around 350 000 commuters travel within the city by car every day. However, mobility trends are changing in the capital. Trips by car within Brussels fell to 32 % in 2010 (compared with 49.6 % in 1999) and the use of public transport increased to 25.9 % in the same year (from 14.7 % in 1999)<sup>202</sup>. Metro use increased by 69 % between 2000-2012 and there are currently 130 million users per year<sup>203 204</sup>. Bike lanes in Brussels increased by

<sup>191</sup> Urban Permeation Units measure the size of the built-up area as well as its degree of dispersion throughout the region.

<sup>192</sup> EEA, [Urban Sprawl in Europe](#), Annex I, pp.4-5.

<sup>193</sup> European Commission, [Good Practice Report European Green Capital 2018](#), p. 28.

<sup>194</sup> European Commission, [Hours spent in road congestion annually](#).

<sup>195</sup> INRIX [Global Traffic Scorecard](#), p. 13 p. 17.

<sup>196</sup> Het stabiliteitsprogramma van België — Le Programme de Stabilité de la Belgique, 2017-2020, p. 48.

<sup>197</sup> Eurostat, [Passenger cars per 1 000 inhabitants](#), 2018.

<sup>198</sup> FBP, 2016. [Progrès vers les objectifs de développement durable de l'ONU](#).

<sup>199</sup> [Stability Programme for Belgium](#), 2018-2021, p. 47.

<sup>200</sup> Wallonia region. [Etat de l'Environnement](#), p. 83.

<sup>201</sup> European Commission, [OP Flanders ERDF 2014-2020](#), p. 5-6.

<sup>202</sup> Pers. Comm. Céline Brandeleer. Université Saint Louis Bruxelles. 29.11.2017.

<sup>203</sup> BCR, [Mobilite et transports](#).

<sup>204</sup> [Stability Programme for Belgium](#), 2018-2021, p. 52.

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65 % between 2005 and 2014 and in 2014, pavements and footpaths covered 36.9 % of total street surface<sup>205</sup>.

At national level, 48 % of people living in cities walk every day (EU average 68 %), and 57 % use a car every day (EU average 50 %). Use of public transport is in line with the EU average, with 16 % of urban Belgians using it daily. However, in 2012, 50.1 % of the population in rural areas, 15.9 % in towns and suburbs and 5.2 % in cities considered it difficult or very difficult to access public transport<sup>206</sup>.

Regarding travel by bicycle, 15 % of people in Belgium say they cycle at least once a day (EU average 12 %<sup>207</sup>). Between 2009 and 2015, travelling to work by bicycle increased from 3.9 % to 6 % in Brussels and from 28.5 % to 39 % in Antwerp. In Liège, however, it fell from 6.1 % to 5 %<sup>208</sup>. The proportion of people walking to work rose sharply in Belgium's three main cities: from 8.9 % to 38 % in Brussels; from 3.1 % to 33 % in Antwerp; and from 7.5 % to 40 % in Liège<sup>209</sup>.

Belgium has responded to the Commission's call to make sustainable urban mobility plans (SUMP) in 2013. For example, the Brussels region developed a plan for freight transport which won it the award for SUMP in European Mobility Week 2016<sup>210</sup>. The current mobility plan is IRIS2. The plan is about to be revised, with new measures giving a central role to active transport modes (walking, cycling) and public transport. The revision includes a large consultation of stakeholders and will cover set out the targets until 2030. This participatory process has been called 'Good Move' and has already been launched<sup>211</sup>.

In 2017, the Flemish government launched the 'multimodaal.vlaanderen' initiative to promote a mobility shift. Flanders is also rolling out its new concept of basic mobility, aiming to tackle personal mobility issues at the level of 'mobility regions' which consist of a number of cities and communities. Flanders is preparing to build a light rail network (Brabantnet) in the region. There has also been an increase in car sharing<sup>212</sup>, Leuven being the number one car sharing city in Belgium with 1.5 cars shared per 100 inhabitants. Ghent has introduced alternatively-fuelled cars and developed a logistics

platform that distributes freight sustainably<sup>213</sup>. Antwerp has been using an 'urban data scan' including air and noise data<sup>214</sup> to invest in its smart city strategy which aims to make it a walkable city with healthy, liveable neighbourhoods. The Commission's Structural Reform Support Service is also investing in the improvement of logistics at Antwerp's port, which will have environmental benefits<sup>215</sup>. The 'smart cities' initiatives are mentioned earlier in this report.

The Walloon investment plan for 2019-2024, adopted in January 2018, plans investment in mobility (EUR 600 million for car sharing, bike and pedestrian infrastructures, public transport and an intelligent transport system and EUR 530 million for multimodality). The Walloon government also adopted its 'FAST vision — mobility 2030' in November 2017. There are also commune-level mobility plans, which include measures to reduce pressure from too many cars. An EIB loan should enable Liège to create an electric tram line, which will replace around 80 buses and reduce the number of cars travelling to the city centre by 2022<sup>216</sup>. Another initiative is the 'Cycling Wallonia 1.0 Plan'<sup>217</sup>.

At national level, the waterway network has a significant role in the shift away from road haulage and reducing congestion. The work on the Seine-Scheldt link in both Flanders and Wallonia will be completed in 2025 and other projects are ongoing on the country's inland waterway network and on several sea and inland locks, supported by the Connecting Europe Facility.

In its railway investment plan, Belgium will give priority to the completion of the Regional ExpressNet (GEN/RER) around Brussels and the improvement of the AnGeLiC (Antwerp, Ghent, Liège, Charleroi) service. The Oosterweel project around Antwerp is necessary to alleviate road congestion. In Brussels, a third metro line (North-South) will be completed by 2025 and will be combined with improvements to tunnels, bridges and viaducts. Furthermore, the Brussels Chamber of Commerce published 22 mobility solutions<sup>218</sup> and the Belgian Enterprise Federation made 15 recommendations<sup>219</sup>.

Co-ordination of transport policy occurs between the different levels of government with the Executive Committee of Ministers for Mobility (ECMM) currently devising an inter-federal transport strategy and through specific cooperation agreements.

<sup>205</sup> Pers. Comm. Céline Brandeleer. Université Saint Louis Bruxelles. 29.11.2017.

<sup>206</sup> Eurostat, [Difficulty in accessing public transport by level of difficulty and degree of urbanisation](#).

<sup>207</sup> European Commission, Special Eurobarometer 406, [Attitudes of Europeans towards urban mobility](#), pp.7-10.

<sup>208</sup> Eurostat, [Perception survey results](#), 2018.

<sup>209</sup> Eurostat, [Perception survey results](#), 2018.

<sup>210</sup> European Mobility Week 2016, [SUMP Award](#).

<sup>211</sup> Good Move, [website](#).

<sup>212</sup> Flemish government, [Autodelen](#).

<sup>213</sup> European Commission, [Expert Panel Technical Assessment Synopsis Report European Green Capital Award 2020](#), 2018, p. 14.

<sup>214</sup> European Territorial Cooperation programme [URBACT](#).

<sup>215</sup> European Commission, [SRSS](#).

<sup>216</sup> EIB, [Tram de Liège](#).

<sup>217</sup> [Wallonie mobilité](#).

<sup>218</sup> Chamber of Commerce of Brussels, [Mémorandumbeci Mobilité](#).

<sup>219</sup> [FEB/VBO](#).

## Part II: Enabling framework: implementation tools

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

#### Green taxation and environmentally harmful subsidies

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

Belgium's revenue from environment-related taxes remains among the lowest in the EU. Environmental taxes accounted for 2.24 % of the country's GDP in 2017 (EU average 2.4 %) (see Figure 20) and energy taxes for 1.45 % of GDP (EU average 1.84 %). In the same year, environmental tax revenues accounted for 4.74 % of total revenues from taxes and social security contributions (EU average 5.97 %).

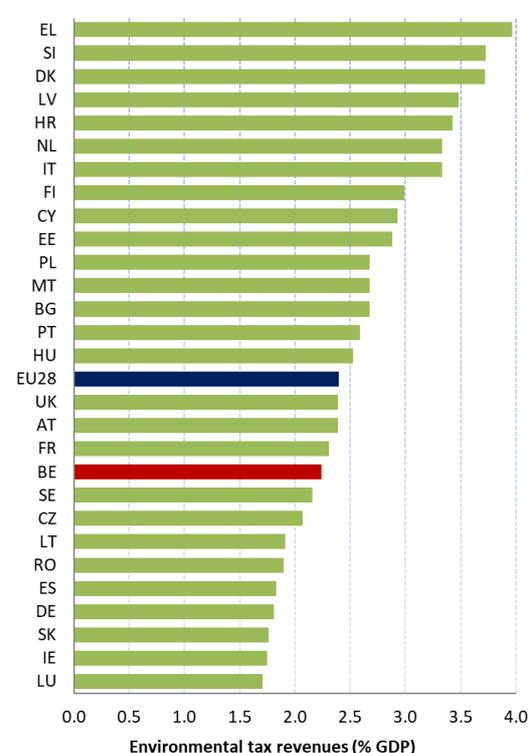
The tax structure in Belgium results in a high share of revenues from labour tax in the total tax income. At 51.9 % this was the seventh highest in the EU in 2016 and at 43.6 %, the implicit tax burden on labour (42.4 %) was the second highest<sup>220</sup>. Consumption taxes remained relatively low, showing that there is considerable potential for shifting taxes from labour to consumption, particularly for environmental taxes. Indexation of excise duties on energy products came into force on 1 January 2018<sup>221</sup>.

Since 2015, Belgium has made some progress in reforming its tax system, notably by shifting taxes from labour to other tax bases. With a relatively low share of consumption and environmental taxes in total tax revenues, there is considerable potential for a 'green' tax shift. This has been raised repeatedly in the European Semester process, including in the 2017 and 2018 country-specific recommendations.

The most significant improvements to date are the introduction of a charge per kilometre for lorries in all Belgian regions and changes to vehicle circulation and road taxes, reflecting environmental considerations, in

Flanders. The Walloon and the Flemish regions have increased the share of their road network for which a toll has to be paid. All three regions have measures planned or already in place to dissuade people from buying the most polluting cars. The Flemish region has extended the system of the 'eco boni and mali' to light commercial vehicles that are not leased.

**Figure 20: Environmental tax revenues as % of GDP (2017)**<sup>222</sup>



The Brussels Capital Region is 'greening' its road tax by placing a higher tax on diesel-powered vehicles and encouraging electric vehicles from June 2018. The region is also revising its car scrappage subsidy scheme. The Walloon region is planning to amend its motor vehicle tax to take environmental criteria into account<sup>223</sup>. Meanwhile, the federal government grants a tax credit of 30 % for the purchase of an electric vehicle.

<sup>220</sup> European Commission, 2017, [Taxation Trends Report](#).

<sup>221</sup> European Commission, [Taxation Trends in the European Union](#), 2018, p.59.

<sup>222</sup> Eurostat, [Environmental tax revenues, 2018](#).

<sup>223</sup> [National Reform Programme 2018](#), p. 3.

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Meanwhile, fossil fuel subsidies have not decreased in the past decade and have even risen slightly in the last year<sup>224</sup>. In December 2018, the Belgian government decided not to index petrol and diesel prices in January 2019.

The use of alternative fuels in new passenger cars sold in Belgium has increased over the past few years. However, it is still relatively low, with only 2.1 % of the market share in 2016. At just under 4 % in 2015<sup>225</sup>, Belgium is still far from reaching the 2020 goal for renewable energy share in transport (10 %).

The Flemish region is studying the effectiveness of introducing a smart kilometre charge (tax or fee) for light vehicles and of introducing a road charging instrument<sup>226</sup> to shift the burden from labour to the environment.

The favourable tax rate for company cars comes at a high budgetary cost. This policy causes Belgium to lose around EUR 3.75 billion in revenue (accounting for 0.9 % of GDP in 2016) every year<sup>227</sup>. One report indicates that company cars in Belgium are driven an extra 6 000 km a year compared to privately owned cars and that the corresponding loss in income is EUR 905 million or 0.23 % of GNP<sup>228</sup>. In March 2018, the federal government introduced a mobility allowance (known as the ‘cash for car’ allowance) and a parallel mobility budget, back-dated to 1 January 2018.

Progress has also been made on reducing the ‘diesel differential’. Parity was reached in July 2018, ahead of the Belgian government’s target to reach it by the end of 2018<sup>229, 230</sup>. In 2018, new car sales of diesel cars dropped to 35 % of total sales, from 46 % in 2017<sup>231</sup>.

Its overall objective is to create (voluntary) alternatives to company cars. In the meantime, the policy that gives businesses strong tax incentives to provide company cars remains in place and the impact of the new scheme on congestion and pollution remains to be seen.

<sup>224</sup> OECD, 2015 [Inventory of Support Measures for Fossil Fuels](#).

<sup>225</sup> European Commission, ‘[Transport in the European Union Current Trends and Issues](#), 2018’, pp.27-28.

<sup>226</sup> [National Reform Programme 2018](#), p. 64, results due spring 2019.

<sup>227</sup> European Commission, Directorate-General for Economic and Financial Affairs, ‘Taxation of Company Cars in Belgium- Room to Reduce their Favourable Treatment’, by Savina Princen.

<sup>228</sup> Bureau fédéral du Plan, [L’avantage fiscal sur les voitures de société influence significativement les comportements de mobilité, avec des coûts sociétaux considérables](#), 2016.

<sup>229</sup> European Environment Agency 2016, [Environmental taxation and EU environmental policies](#), p. 27.

<sup>230</sup> European Commission, [Taxation Trends in the European Union, 2018](#), p.59.

<sup>231</sup> FleetEurope and FEBIAC, [Press release](#).

A study published at the end of 2017, based on a survey in Flanders, looked into public support for environmental taxation, both in theory and in practice. It showed that people tend to support tax on broad categories such as education, income and the environment, over specific ‘niche’ categories. The study further set out a ‘ladder of acceptability of revenue recycling options’, which showed that environmental spending receives the most support<sup>232</sup>.

The third and final phase of the tax shift in 2019-2020 is an opportunity to ‘green’ the system further. Implementing a carbon price in the Belgian non-ETS sector would be a powerful tool to support the low-carbon transition in Belgium and be the cornerstone of a ‘green tax shift’. . Furthermore, the Higher Council of Finance is expected to report back in early 2019 on options for environmental taxation and removal of environmentally-harmful subsidies.

### Green public procurement

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

The purchasing power of public procurement amounts to around EUR 1.8 trillion in the EU (approximately 14% of GDP). A substantial proportion of this money goes to sectors with a high environmental impact such as construction or transport. Therefore, green public procurement (GPP) can help to significantly lower the negative impact of public spending on the environment and can help support sustainable innovative businesses. The Commission has proposed EU GPP criteria<sup>233</sup>.

In Belgium, a detailed strategy on sustainable public procurement (SPP) is in place for the federal departments since 2014, combining green and social aspects of public procurement. Specific regulations in the context of SPP were adopted for wood (2005), vehicles (2009 & 2010) and energy efficiency (2013), with specific policy documents in the country’s three regions<sup>234</sup> and at federal level.

<sup>232</sup> Kris Bachus, 2017, [The use of taxation as a regulatory policy instrument](#).

<sup>233</sup> In the Communication ‘Public procurement for a better environment’ ([COM \(2008\) 400](#)) the Commission recommended the creation of a process for setting common GPP criteria. The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

<sup>234</sup> European Commission, [Documentation on National GPP Action](#)

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GPP criteria have been developed by Flanders and at federal level thanks to initiatives by several departments. In most cases, the EU GPP criteria<sup>235</sup> is the basis for national-level discussions with stakeholders. To date, federal GPP/sustainable criteria have been developed for about 70 product and service groups<sup>236</sup>.

The Flemish region has set itself a target of reaching 100 % SPP by 2020. It has also set itself targets of procuring 100 % green electricity for the Flemish regions' buildings and of increasing the environmental performance of vehicles, including electric/low emission cars. The government of Flanders has won the award of Sustainable Procurement of the Year at the 2018 Ecoprocure conference<sup>237</sup> recognising the outstanding environmental, social and economic impacts of the procurement.

The Brussels Capital Region has a framework with three levels: development of references e.g. for clean vehicles and sustainable buildings construction and renovation; providing information, training sessions and helpdesk advice; establishing a mandatory framework for the public authorities dependent on the Brussels region. In February 2017, the Walloon government adopted its action plan on responsible public buying (2017–2019).

Belgium has stepped up international cooperation and has had close exchanges with the Netherlands and France on circular procurement.

The government of Flanders has established a public-private network to facilitate circular procurement projects. Participants will develop, share and distribute knowledge about circular procurement and boost the circular economy through their procurement policies. As of October 2018, more than 150 organisations had signed commitments in this respect. Since the start of the initiative more than 100 circular procurement pilot projects have started, half of which by government organizations<sup>238</sup>. Both the Flemish and federal governments are setting up monitoring systems to provide a clearer picture on the uptake of GPP in 2018.

Finally, a study by the European Parliament has shown Belgium to be a frontrunner in the implementation of its national action plan<sup>239</sup>.

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[Plans](#), 2017.

<sup>235</sup> Eurostat, [Perception survey results](#), 2018.

<sup>236</sup> European Commission, [Documentation on National GPP Action Plans](#), 2017.

<sup>237</sup> [Procura](#).

<sup>238</sup> [Flemish Green Deal circular](#).

<sup>239</sup> European Parliament, [Green Public Procurement and the Action Plan for the Circular Economy](#), 2017, pp. 79-80.

## Environmental funding and investments

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

Achieving sustainability involves mobilising public and private financing sources<sup>240</sup>. Use of the European Structural and Investment Funds (ESIFs)<sup>241</sup> is essential if countries are to achieve their environmental goals and integrate these into other policy areas. Other instruments such as Horizon 2020, the LIFE programme<sup>242</sup> and the European Fund for Strategic Investments (EFSI)<sup>243</sup> may also support the implementation and spread of good practices.

According to the latest Eurobarometer on Environmental attitudes, 92 % of Belgians support greater EU investment to protect the environment (EU average 85 %).

### European Structural and Investment Funds 2014-2020

Through 10 regional programmes, Belgium has been allocated EUR 2.741 billion from ESIF funds for the period 2014-2020 (see Figure 21). This means that together with its national contribution of EUR 3.347 billion, Belgium has a total budget of EUR 6.09 billion.

Other funding sources such as the Horizon 2020, the Connecting Europe Facility (CEF), the LIFE programme<sup>244</sup>, EIB loans and the EFSI<sup>245</sup> may also support environmental implementation and the spreading of best practices.

### Cohesion policy

Belgium receives just over EUR 2 billion from EU sources in total cohesion policy<sup>246</sup> funding for the 2014-2020 period (current prices, including European territorial cooperation funding and the allocation for the Youth Employment Initiative (YEI)); this is around 0.57% of the total EU cohesion policy 2014-2020.

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<sup>240</sup> See, for example, [Action plan on financing sustainable growth \(COM\(2018\) 97\)](#).

<sup>241</sup> i.e. the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF are referred to as the 'cohesion policy funds'.

<sup>242</sup> European Commission, [LIFE programme](#).

<sup>243</sup> European Investment Bank, [European Fund for Strategic Investments, 2016](#).

<sup>244</sup> European Commission, [LIFE Belgium Sheet](#), 2017.

<sup>245</sup> European Investment Bank, [European Fund for Strategic Investments, 2016](#).

<sup>246</sup> [European Regional Development Fund](#) and [European Social Fund](#).

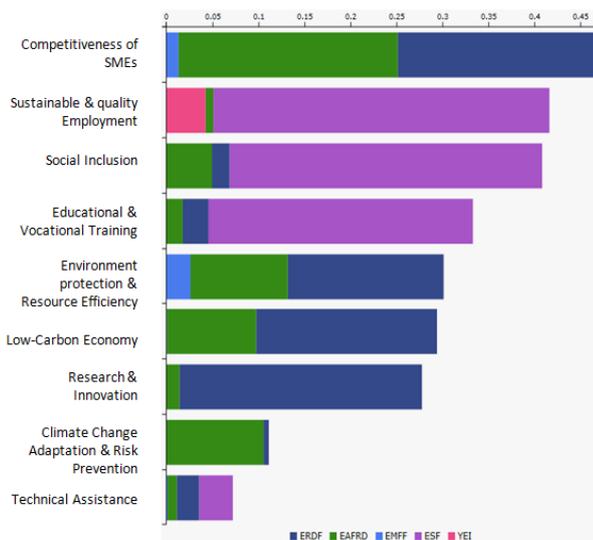
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Belgium is one of only two EU countries that uses the YEI for environmental purposes. The cohesion policy is fully devolved to the Belgian regions. The co-financing rate is 40 % across the territory, except for in the Brussels region where it is 50 %. Environmental infrastructure (water, waste) is not a priority for the ERDF in Belgium as it is a relatively rich country. However, EIB loans can be used for such purposes.

In Wallonia, the ERDF is being used to encourage an industrial transition towards green growth, eco-innovation, management of environmental performance, urban environmental improvement, reducing air and noise pollution, rehabilitating contaminated land and reducing soil sealing.

In Flanders, the ERDF is being used for reducing air and noise pollution, rehabilitating contaminated land and reusing old landfills (known as ‘enhanced landfill mining’). In addition there is an overarching objective to make a better use of space by using land in a multi-functional way and rehabilitating underused land. Eco-innovation, including circular economy, is also covered.

**Figure 21: ESIF 2014-2020 – EU allocation by theme, Belgium (EUR billion)**<sup>247</sup>



In the Brussels region, the ERDF is used to help develop a circular economy and ensure the wise use of resources, to encourage the development of renewable energy, to rehabilitate contaminated land and to improve the energy performance of buildings. In terms of past spending, land rehabilitation has been a key focus throughout the country. Indeed, there was a 15 % reallocation towards land rehabilitation in the 2007-2013 period. The private sector also played a key role in financing land rehabilitation offering 75 % co-

financing in Flanders and 25% from the ERDF. An example is the 2010 REGIOSTARS winning ‘C-mine’ project in Genk, which received EUR 3.2 million in 2000-2006 and 2007-2013<sup>248</sup>.

In terms of the overall ERDF allocation to direct environmental priorities, there was an increase of 16% between 2008 and 2016 in the Belgian 2007-13 OPs, from EUR 61.48 million to EUR 71.47 million<sup>249</sup>. Current data suggest that the EU funds for the 2007-2013 period were almost fully spent (94.32 %)<sup>250</sup>. In the 2014-2020 period, an ERDF contribution of EUR 43.5 million is planned for direct environmental priorities, with around EUR 390 million planned from ERDF and ESF for indirect environmental priorities.

For the ERDF programmes, the project selection criteria in Flanders include sustainable development, while Wallonia has prepared a sustainable development vade mecum. There is also an elaborate environmental monitoring system for the Belgium-France ERDF cooperation programme.

### Rural development

Belgium receives EUR 648 million from the European Agricultural Fund for Rural Development (EAFRD) for rural development for the 2014-2020 period. Belgium’s rural areas face environmental pressures from water, air, biodiversity and soil. The two rural development programmes contribute to covering a wide range of environmental pressures. Around EUR 173 million supports agro-environmental commitments and organic farming. Belgium is strongly committed to its Natura 2000 obligations in the areas of agri-environment and climate. For instance, Wallonia has allocated EUR 40 million including EUR 15 million EAFRD grants to implement them<sup>251</sup>.

### European Maritime and Fisheries Fund

Belgium receives just below EUR 42 million from EU and national sources under the fisheries and the maritime fund, which includes around EUR 26 million for the environment. Various projects that benefit the environment have received financing, such as ones on engine replacement and new fishing gear<sup>252</sup>.

<sup>247</sup> European Commission, [European Structural and Investment Funds Data By Country](#).

<sup>248</sup> COWI-MILIEU, [Study on the integration of environmental concerns in the Cohesion Policy funds \(ERDF, ESF, CF\)](#), 2017, p. 105; p. 107; p. 109; European Commission, [Reusing Brownfield Sites and Buildings](#), 2010, p. 16.

<sup>249</sup> COWI-MILIEU, [Study on the integration of environmental concerns in the Cohesion Policy funds \(ERDF, ESF, CF\)](#), 2017, p.242.

<sup>250</sup> European Commission, [SF 2007-2013 Absorption Rate](#), 2018.

<sup>251</sup> European Commission, [cohesion policy database](#).

<sup>252</sup> European Commission, [Belgian EMFF Fact Sheet](#).

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### The Connecting Europe facility

The Connecting Europe Facility (CEF) has provided EUR 482 million for projects to promote sustainable transport (for examples see the urban section). Projects in the field of energy have aimed to promote Liquefied Natural Gas (LNG)<sup>253</sup>.

### Horizon 2020

Belgium has benefited from Horizon 2020 funding since the programme started in 2014. As of January 2019, 1 662 participants have been granted a maximum amount of EUR 473.2 million for projects from the Societal Challenges work programmes dealing with environmental issues<sup>254 255</sup>.

In addition to the abovementioned work programmes, climate and biodiversity expenditure is present across the entire Horizon 2020. In Belgium, projects accepted for funding in all Horizon 2020 working programmes until December 2018 included EUR 474 million destined to climate action (25.8 % of the total Horizon 2020 contribution to the country) and EUR 49 million for biodiversity-related actions (2.7 % of the Horizon 2020 contribution to the country)<sup>256</sup>.

### LIFE programme

Over a 25-year period (1992-2017), the LIFE programme has spent a total of EUR 640 million, which includes an EU contribution of EUR 281 million. For the period 2014-2017 EUR 24 million has been allocated to Belgian projects by the EU<sup>257</sup>.

Notable Belgian LIFE projects (which are mentioned throughout this report) are the LIFE integrated projects Belini for improving water quality in the Scheldt river basin and BNIP<sup>258</sup> for Natura 2000. Another in terms of size is the LIFE NARD-US project which favours the restoration and conservation of semi-natural and natural habitats in eastern Ardennes (Belgium), with a EU requested contribution of more than EUR 3 million<sup>259</sup>. Furthermore, the new LIFE Climate project SPARC - Space for Adapting the River Scheldt to Climate Change for development of natural flooding areas and

giving more space to the river by integrating climate adaptation and nature objectives, has received an EU contribution of more than EUR 4 million<sup>260</sup>.

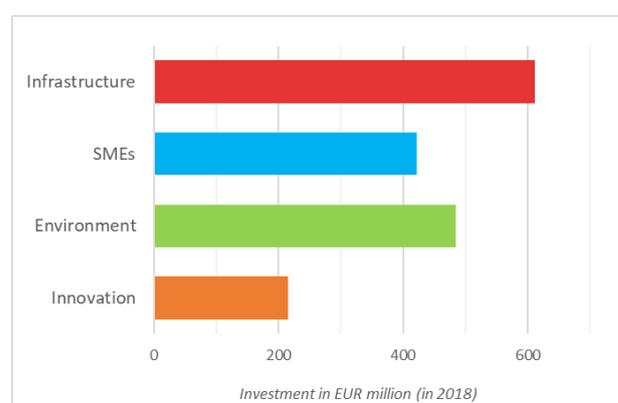
### European Investment Bank

In 2018 alone, the EIB group (the European Investment Bank and the European Investment Fund) invested EUR 1.73 billion in the Belgian economy. Of this, 27.9 % went to environmental projects, 12.4 % was invested in innovation and skills, 24.4 % in Belgian SMEs and 35.2 % in infrastructure (see Figure 22).

### European Fund for Strategic Investments

The EFSI aims to bridge the current investment gap in the EU and support economic growth. Under the EFSI, the amount of financing approved for Belgium has reached EUR 1.8 billion until January 2019 for 39 projects<sup>261</sup>. Secondary investments triggered by the EFSI account for more than EUR 8 billion<sup>262</sup>. EFSI investments in the environmental sector have notably gone towards brownfield development, as mentioned earlier in this report<sup>263</sup>. The fund also encourages projects by SMEs for the circular economy, for example by granting a 2018 midcaps loan to 'De Lage Landen Circularity' (Netherlands-Belgium).

Figure 22: EIB loans to Belgium in 2018<sup>264</sup>



### National environmental financing

In addition to co-financing EU projects, Belgium's environmental protection spending (for 2013) was EUR 6 784 million<sup>265</sup>. This is made up of EUR 3 219 million for corporations, EUR 1 597 million for government and EUR 1 967 million for households. In

<sup>253</sup> European Commission, [Connecting Europe Facility](#).

<sup>254</sup> European Commission [own calculations based on CORDA \(Common Research Data Warehouse\)](#). A maximum grant amount is the maximum grant amount decided by the Commission. It normally corresponds to the requested grant, but it may be lower.

<sup>255</sup> i.e. (ii) Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy; (iii) Secure, clean and efficient energy; (iv) Smart, green and integrated transport; and (v) Climate action, environment, resource efficiency and raw materials.

<sup>256</sup> European Commission [own calculations based on CORDA \(Common Research Data Warehouse\)](#).

<sup>257</sup> Commission services based on data provided by EASME.

<sup>258</sup> Belgian Nature Integrated Project.

<sup>259</sup> European Commission, [LIFE Nardus](#).

<sup>260</sup> LIFE project [SPARC](#).

<sup>261</sup> European Commission, [European Semester Country Report 2018 Belgium](#), p. 35.

<sup>262</sup> European Investment Bank, [EFSI project map](#).

<sup>263</sup> [EFSI](#).

<sup>264</sup> EIB, [Belgium and the EIB](#), 2018.

<sup>265</sup> Eurostat, [Environmental Expenditure](#).

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terms of green jobs, there were 81 649 full-time equivalent jobs in 2015<sup>266</sup>.

There is no central data hub with information on funds available for environmental investment in Belgium, apart from a mention of green economy support activities on the ‘Invest in Belgium’ website<sup>267</sup>. The role of national bodies for environmental investments in the water and waste sectors is to guarantee EIB and other loans (e.g. for SBGE in Wallonia and Hydrobru<sup>268</sup>). Environmental infrastructure is not a category of expenditure within the National Pact and Wallonia Plan (see the ‘enabling financing and absorption of funds’ section).

Water investments are financed through tariffs which aim to recover the costs in full<sup>269</sup>. Belgium has a higher proportion of debt financing than other Member States.

The National Pact for Strategic Investment will be used to promote structural reform and address the deficit in public investment (transport, energy, etc.) with EUR 150 billion earmarked by 2030. Wallonia has also recently adopted its investment plan, earmarking EUR 1 450 million for 2019-2021 for that process. Environment is not explicitly included in either the National Pact or Wallonia’s plan. An intergovernmental taskforce has been established to strengthen the relation between the National Pact for Strategic Investment and circular economy programmes. Cross-cutting conditions, mainly through regulation are possible such as inverse logistics for the return of recyclable waste. Public-private partnerships have been successful in Belgium but mainly in the transport field (e.g. the Diablo airport link to Brussels airport).

### Green bonds

In February 2018, Belgium issued its first sovereign green bond worth EUR 4.5 billion, to help it finance environmental and clean energy initiatives<sup>270</sup>. EUR 4.5 billion was allocated (which is the maximum possible issuance size, given the identified covered pool of Green Eligible Expenditures for the Belgian Federal State). The Belgian Debt Agency will raise the size of the bond in the coming years to reach 12 billion. The bonds mature in 15 years (April 2033) and carry a coupon of 1.25 %. Barclays, BNP Paribas Fortis, Credit Agricole, ING Groep NV and JPMorgan Chase & Co

were hired as joint book running managers of the transaction. In terms of sustainable financing, another initiative is the labelling of products by Febelfin<sup>271</sup> and Beama<sup>272</sup>.

### Overall environmental financing

In Belgium the annual total public environmental expenditure as a percentage of GDP is estimated at around 1.1%<sup>273</sup>.

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<sup>266</sup> Eurostat, [Employment in the environmental goods and services sector](#).

<sup>267</sup> [Investir en Belgique, économie verte](#).

<sup>268</sup> [Stability Programme for Belgium](#), 2018-2021, p. 34.

<sup>269</sup> European Commission-OECD, Belgian fiche, ‘Assessing member states’ investment needs and financing capacities for water supply, sanitation and flood protection, 2018’.

<sup>270</sup> Belgian Debt Agency, 2017 [Green Olo Framework](#).

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<sup>271</sup> Belgian Financial Sector Federation.

<sup>272</sup> Belgian Asset Managers Association.

<sup>273</sup> EC annualized estimate based on ESIF, H2020, EIB and EFSI loans, LIFE and national public environmental expenditures 2014-2020.

## 5. Strengthening environmental governance

### Information, public participation and access to justice

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

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

It is of crucial importance to public authorities, the public and business that environmental information is shared efficiently and effectively<sup>274</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>275</sup>. It includes the right to bring legal challenges (‘legal standing’)<sup>276</sup>.

#### Environmental information

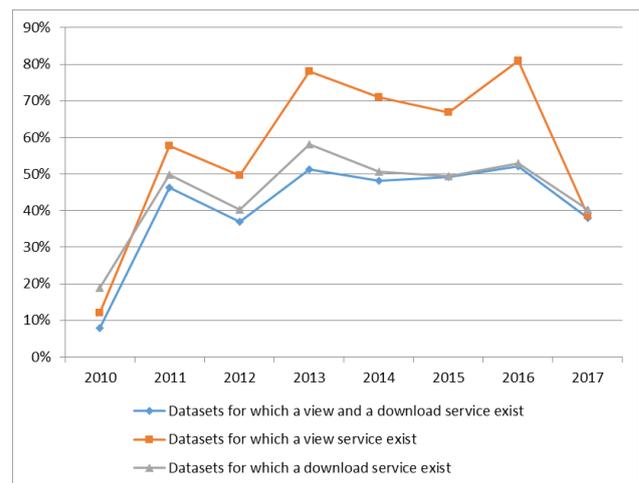
For the dissemination of environmental data, each of the three regions as well as the federal government has put in place an Environmental Information System.<sup>277</sup> Other national portals also exist independently. For most environmental data the federal site refers to the regional sites.

The three regions and the federal level publish on a regular basis environmental and sustainable development reports. In addition, the access to environmental information is also organised at regional level. Checking the accessibility of online information in diverse policy domains there seem to be some improvements in the chemicals and waste sector, whereas the best performing domains are water and air.

Belgium's performance on the implementation of the INSPIRE Directive leaves room for improvement. The performance has been reviewed based on their 2016 implementation report<sup>278</sup> and their most recent

monitoring data from 2017<sup>279</sup>. Good progress and implementation levels exist for coordination, data policies, dataset identification and documentation of data. Additional efforts are needed for making the data accessible through services, improve the conditions for data reuse and prioritise environmental datasets in the implementation in particular those identified as high-value spatial data sets for the implementation of environmental legislation<sup>280</sup>. There are currently 182 conditions applying to the access and use of data and 39 limitations on public access documented in metadata published by Belgium. An initial evaluation in May 2018 of the online availability of high-value environmental data sets in Belgium shows some progress (213 high-value data sets identified, of which 146 are downloadable). Figure 23 shows access to spatial data.

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



#### Public participation

Belgian authorities have transposed their obligations under the Aarhus Convention, including obligations under the EIA and SEA directives, and provide opportunities for participation in the drafting of policies. The Belgium website for the implementation of the Aarhus convention<sup>281</sup> provides a one-stop platform describing how public engagement is organised across the country, including information on public consultations on plans or programmes that are organised at federal and/or regional level.. However, in practice Belgian authorities in particular at federal level fail to obtain sufficient response rates. The Brussels Capital

<sup>274</sup> The Aarhus Convention, the Access to Environmental Information Directive, 2003/4/EC and the INSPIRE Directive, 2007/2 together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on INSPIRE.

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

<sup>276</sup> This EIR looks at how well Member States explain access to justice rights to the public, and at legal standing and other major barriers to bringing cases on nature and air pollution.

<sup>277</sup> The main federal portal for this purpose is: [Ministry of Health, Food Chain Safety and Environment](#).

<sup>278</sup> INSPIRE BE [country sheet](#) 2017.

<sup>279</sup> INSPIRE [monitoring dashboard](#).

<sup>280</sup> European Commission, [List of high value spatial data sets](#).

<sup>281</sup> Ministry of Health, Food Chain Safety and Environment, [Aarhus Implementation](#).

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Region and Wallonia could further facilitate participation by better communicating public participation opportunities with their citizens and stakeholder organisations.

The Eurobarometer figures from 2017 show that in Belgium, there is a relatively strong agreement (80% of respondents) that an individual can play a role in protecting the environment. This is an improvement compared to 2014 Eurobarometer results. A good practice is the single Aarhus and public participation portal.

### Access to justice

A Belgian national portal provides some information on access to justice in environmental matters as well as on how challenges can be brought. However, the information is quite limited, as is the online information provided at the regional level.

NGOs are active at national and regional level in challenging non-compliance with EU environmental law. With regard to air quality litigation, in 2018 a Belgian court submitted important preliminary reference to the Court of Justice of the European Union (CJEU) concerning the rights of the public to challenge the location of air pollution monitoring stations in Brussels. On 10 October 2018, a national court ordered the Flemish authorities to send additional information on air quality monitoring to the Commission. A similar case is pending regarding the Walloon region on air quality monitoring. As for nature conservation, the Flemish Council on Permit Disputes accepted an NGO claim and annulled a decision by the Flemish authorities to approve a development in a Natura 2000 site.

A good practice is the willingness of Belgian courts to seek guidance from, and uphold case-law of, the CJEU on legal standing in air pollution and nature cases.

### 2019 priority actions

- Improve access to spatial data and services by making stronger linkages between the Federal INSPIRE website and regional portals, identify and document all spatial datasets required for the implementation of environmental law<sup>282</sup>, and make the data and documentation at least accessible 'as is' to other public authorities and the public through the digital services foreseen in the INSPIRE Directive.
- Facilitate public participation in the implementation of EU environmental law.
- Better inform the public about their access to justice rights, especially in relation to air pollution and nature.

<sup>282</sup> European Commission, [MIG](#).

### Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste<sup>283</sup>. It includes support measures provided by the authorities, such as:

- (i) compliance promotion<sup>284</sup>;
- (ii) inspections and other checks that they carry out, i.e. compliance monitoring<sup>285</sup>; and
- (iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement<sup>286</sup>.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability<sup>287</sup> ensures that the polluter pays to remedy any damage.

### Compliance promotion and monitoring

The quality of online information to farmers on how to comply with obligations on nitrates and nature is an indicator of how actively authorities promote compliance in subject-areas with serious implementation gaps. Wallonia and Flanders have made a significant effort<sup>288</sup>.

Major industrial installations present serious pollution risks. Public authorities are required to have plans to inspect them and to make individual inspection reports available to the public<sup>289</sup>. However, it is not possible to access these directly from official websites in Flanders and Wallonia. For the Brussels Capital Region, information about the annual inspection programme is available on the website, as well as the inspection reports of the IED establishments<sup>290</sup>.

### Citizen science and complaint handling

Engagement of citizens, including through citizen science, can deepen knowledge about the environment and help the authorities in their work. Flanders uses 20,000 citizen science volunteers to collect information on air pollution, the Brussels Region has got almost 300 citizens to collect information on black carbon (air pollution – ExpAIR project) as mentioned earlier in this Report, and Wallonia

<sup>283</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>284</sup> This EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

<sup>285</sup> This EIR focuses on inspections of major industrial installations.

<sup>286</sup> This EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime.

<sup>287</sup> The Environmental Liability [Directive 2004/35/EC](#), creates the framework.

<sup>288</sup> Websites 'PROTECT'eau' and of Natagriwal.

<sup>289</sup> Article 23, Industrial Emissions [Directive 2010/75/EU](#).

<sup>290</sup> Brussels Capital Region, [Annual Inspection Plans & IED Inspections](#).

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has got 1000 citizens to commit to gardening pesticide-free and planting wild flowers to help bees and other pollinators<sup>291</sup>. The availability of clear online information about how to make a complaint is an indicator of how responsive authorities are to complaints from the public. Flanders and Wallonia perform well, but there is some room for improvement in Brussels. Although there is still some room for improvement in Brussels, the “Noise” Portal makes it easier to introduce a complaint about noise pollution (+ 70% of complaints).

### Enforcement

When monitoring identifies problems, a range of responses may be appropriate. Flanders publishes annual reports<sup>292</sup> but published information is generally missing for Wallonia and Brussels on issue of warnings, application of sanctions and achievement of compliance after follow-up measures and enforcement action has been taken. And information on responses to cross-compliance breaches on nitrates and nature are lacking for all of Belgium.

Tackling waste, wildlife and other environmental crimes is especially challenging and requires close co-operation and co-ordination arrangements between inspectors, customs authorities, police and prosecutors. The Environment Cell of the Federal Judicial Police has a specialist capacity and is part of a broad network of individuals and organisations dealing with environmental crime. However, it is not clear that this includes prosecutors.

### Environmental liability

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

### 2019 priority actions

- Better inform the public about compliance promotion, monitoring and enforcement by, at least ensuring availability of online information to farmers in Flanders about how to comply with obligations on nitrates and nature, and providing more online information on inspection plans and reports on industrial inspections in all three Belgian regions.
- Publish information on outcomes of enforcement action in Wallonia and Brussels and of the follow-up to detected cross-compliance breaches on nitrates and nature in all of Belgium;

- Ensure more information on how professionals dealing with environmental crime work together;
- Improve financial security for liabilities and ELD-guidance and publish information on environmental damage.

### Effectiveness of environmental administrations

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

### Administrative capacity and quality

Belgium has a well-developed institutional and legal system in place to protect the environment, and environmental governance is increasingly embedded in spatial planning policy.

The country’s administrative capacity has been reduced since the 2008 financial crisis due to recruitment freezes. This was visible for example in the insufficient management of the Timber Regulation system, although this has improved over the last 2 years.

Overlapping responsibilities in environmental matters should not affect Belgium’s governance in theory, but in practice ‘it is difficult to avoid interference of policies of one government on the other’<sup>293</sup>.

The lack of a hierarchy of legislative acts reduces the effectiveness and efficiency of environmental policy making in Belgium. For instance, a recent study suggests that ‘there is no national Belgian climate change policy’, despite the adoption of a national plan in this field; instead ‘there are three regional policies and one federal policy’. According to the authors of the study, the inter-governmental relationships are generally ‘heavy and time-consuming’. Even in the case of international representation, the need for unanimity makes reaching decisions difficult<sup>294</sup>. The need to improve coherence and integration of climate policy in Belgium has been highlighted in several reports or advice from different bodies<sup>295</sup>. Political calls for reconsidering the attribution of competences to the federal level are regularly reported on by the national media. In order to further

<sup>293</sup> Von Dooren, W. et al., Public administration characteristics in Belgium (EU PACK project), 2017.

<sup>294</sup> Misonne, D., Hannon, E., [Gouvernance Energie-Climat: où va la Belgique?](#), 24.4.2017.

<sup>295</sup> For example, the 2016 [Senate Information Report](#) on Belgian policy-making processes regards the ‘burden-sharing agreement’, the 2018 [Resolution on Belgian climate policy](#) agreed by federal and regional parliaments in the context of the “inter-parliamentary dialogue on climate”, [Advice on governance as regards climate policy](#) by the Federal Council on Sustainable Development.

<sup>291</sup> Walloon government, [Biodiversity in Wallonia](#).

<sup>292</sup> Flemish government, [2016 annual enforcement report](#).

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contribute to reflections on the issues, Université Saint-Louis – Bruxelles (USLB) organised in the course of 2018 a series of academic seminars on climate governance in Belgium, with the support of the Federal Public Service Health, Food Chain Safety & Environment. The results of these seminars were presented at a ‘national debate’ on 27 November 2018. As mentioned in the EIR 2017, coordination of policy making between the federal and regional governments is done through the ‘Inter-Ministerial Conference’ for the Environment, a committee composed of representatives of regional and federal environment ministers. Regarding the international dimension of Belgium’s environmental policy, the federal government and the three regions entered into a separate cooperation agreement in May 1995. The agreement is put into action by the Coordination Committee for International Environmental Policy (CCIEP), which ensures that Belgium ‘speaks with one voice in the international arena’<sup>296</sup>. Other specific coordination structures include the Belgian Interregional Environmental Agency (CELINE — IRCEL), the National Climate Commission and the Interregional Packaging Commission.

The regions’ powers in environmental matters have been increasing since the 1980s (reinforcing the bottom-up nature of environmental governance in Belgium). In parallel, the country’s environmental governance has been shaped by EU environmental law and policy (top-down processes). Overall, environmental governance in Belgium has been under the influence of two parallel processes — regionalisation and Europeanisation<sup>297</sup>.

Collaboration between the regions and municipalities is necessary to achieve environmental investment. Furthermore, intercommunale entities exist for environment, water and waste services to improve economies of scale. The rate of self-financing of investments is higher for waste than water<sup>298</sup>.

On 1 April 2017, the Flemish departments of the Environment, Nature and Energy and of Spatial Planning merged into one Department of Environment & Spatial Development to better integrate spatial planning and environmental policy<sup>299</sup>.

EU policy and the country’s international environment commitment seem to be the main drivers of Belgium’s environmental policy. Conflicts between governments

are usually sparked by ‘asymmetric political configurations’ in sensitive sectors such as transport.

Belgium scored 80.15 in the 2016 Environmental Performance Index<sup>300</sup>.

The 2017 European Quality of Government Index gave Belgium an overall ranking of 0.614 (EU28 benchmark = 0), with Flanders at 1.014, Wallonia at 0.167 and the Brussels region at 0.201<sup>301</sup>.

Cities and municipalities are often associated in ‘unions of cities and municipalities’ such as the Union des Villes et Communes de Wallonie, Brulocalis and the Vereniging voor Vlaamse Steden en Gemeenten. One of the objectives of these associations is to promote sustainable development, for example Brulocalis (association of the city and municipalities of Brussels) organises a forum for sustainable development.

To ensure effective environmental governance, staff working in environmental authorities need to have the appropriate administrative and technical knowledge and skills. With the EIR 2017, the Commission introduced the TAIEX-EIR PEER 2 PEER tool to help peer learning between experts from environmental authorities in different Member States. Belgium has already used this tool to explore the topic of tropical timber (see below).

Environmental NGOs seem to be well represented in stakeholder meetings organised both at federal level (the stakeholder dialogues) and at regional level.

### Coordination and integration

As mentioned in the 2017 EIR, the transposition of the revised EIA Directive<sup>302</sup> provides an opportunity to streamline the regulatory framework on environmental assessments.

The Commission encourages the streamlining of the environmental assessments in order to reduce duplication and avoid overlaps in environmental assessments applicable to projects. Moreover, streamlining helps reducing unnecessary administrative burden and accelerates decision-making, without compromising the quality of the environmental assessment procedure.<sup>303</sup> Belgium is a federal state. For

<sup>296</sup> Federal Public Service [Health food chain and environment](#).

<sup>297</sup> Vanhaeren, S. et autres (2013), La gestion de la qualité de l’air en Belgique: une gouvernance multiniveau entre incertitudes politiques et techniques, *Télescope*, vol. 19, No 1, p. 115-134.

<sup>298</sup> Investissements et répartition des résultats des intercommunales belges, 2017, BelfiusResearch, p.5 onwards.

<sup>299</sup> Departement Omgeving (2017). [Departement Omgeving binnen het domein Omgeving. Opdrachten basis voor de organisatiestructuur](#).

<sup>300</sup> YCELP, Global Metrics for the environment, [The Environmental Performance Index ranks countries’ performance on high-priority environmental issues](#), 2016, p. 18.

<sup>301</sup> European Commission, [The 7th Report on Economic, Social and Territorial Cohesion](#), 2017, p. 140.

<sup>302</sup> [Directive 2014/52/EU](#).

<sup>303</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.

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the Flanders region, the procedure is streamlined for EIA, Habitats Directive and Industrial Emissions Directive.

Within Flanders, the need for a multimodal approach to transport is studied in the preparatory phase of the major infrastructure projects on the basis of Strategic Environmental Assessment (SEA), EIA and Cost Benefit Analysis (CBA). SEA, EIA and CBA examine the effects of the proposed measures compared to a business as usual scenario. Two examples are R0-project and Brabantnet, and the Oosterweel project in Antwerp. EIA is integrated in spatial planning legislation and all projects with possible impact are subject to an EIA.

EIA in Flanders Region is integrated in the licensing procedure. The public consultation is communicated by means of publication on the websites of the municipalities, of the project promoter, by posting at the town hall and by a publication in at least one regional newspaper. Moreover an information meeting is organised during the public participation. The latest revision to the Flemish legislation includes some changes to participation procedures in EIA which makes it impossible for citizens/NGOs to object to permits unless they filed a complaint during the 30 days of public consultation. Exception is made in case of circumstances beyond one's control.

Nevertheless, a group of seven NGO's have brought a case to the Belgian Constitutional Court<sup>304</sup>. A recent NGO assessment on implementation of the EU Birds- and Habitats Directives in Belgium found that opportunities for public participation and transparency in decision making impacting on nature are lacking<sup>305</sup>.

Even though with the federal structure and important role of Provinces and municipalities in spatial planning one cannot really speak of a One-Stop-Shop. But at least the Flemish region has made some significant improvements in further integrating environmental governance, for example by developing a single environmental permit replacing urban planning-, subdivision- and environmental permits and simplifying enforcement bodies and access to justice.

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

In the 2015 Digital Scoreboard, Belgium scored 84.9 for the eGovernment indicator 'online service completion', slightly above the EU average of 80.6. Data from 2017 shows that 55.1 % people in the 16-74 age group interacted online with public services in the last 12 months, compared with the EU average of 48.8 %<sup>306</sup>. In

2018, Belgium had a score of 59 out of 100 on digital public services, similar to the EU average of 58<sup>307</sup>.

With a score of 6.0/10 for domestic adaptability and 7.0 for international adaptability on the sustainable governance indicator prepared by Bertelsmann Stiftung<sup>308</sup>, Belgium ranked 19th out of 41 countries. This indicator measures how much the government cooperates with other states, while adapting to new developments at home.

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

Belgium receives very little in the way of ESIF funds, and the preconditions for environmental funding under the cohesion policy have been met. As shown in section 4, there are no difficulties with using these funds.. Furthermore, environmental infrastructure is mainly financed through the EIB and other loans and tariffs.

However, Belgium appears to lag behind other countries on the quality of its public infrastructure and its ability to support the competitiveness of the economy.

### **2019 priority actions**

- Continue making efforts of streamlining environmental assessment procedures and ensuring efficient public participation.
- Belgium can further improve its overall environmental governance (such as transparency, citizen engagement, compliance and enforcement, as well as administrative capacity and coordination).

### **International agreements**

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

The EU is committed to strengthening environmental law and its implementation globally. It therefore continues to support the Global Pact for the Environment process, which was launched by the United Nations General Assembly in May 2018<sup>309</sup>. The EIR is one of the tools to ensure that the Member States set a good example by respecting European Union environmental policies and laws and international agreements.

Furthermore, specific new issues have come to light regarding tropical timber and genetic resources.

<sup>304</sup> DeMorgen, [Zeven milieuorganisaties naar rechter tegen beperking inspraak van burgers](#), 29-11-17.

<sup>305</sup> WWF, [Nature Score card Belgium](#).

<sup>306</sup> European Commission, [Digital Scoreboard — Data & Indicators](#).

<sup>307</sup> European Commission, [Digital Economy and Society Index Report 2018, Digital Public Services](#).

<sup>308</sup> [Sustainable Governance Indicators](#).

<sup>309</sup> [UN General Assembly Resolution 72/277](#) and [Organizational session of the ad hoc open-ended working group](#).

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### **Forest: EU Timber Regulation (EUTR)/ Forest Law Enforcement, Governance and Trade (FLEGT) Regulation<sup>310</sup>**

Between March 2015 and February 2017, Belgium did not provide an estimate on the number of operators placing domestic or imported timber onto the EU market. Neither did it plan or perform checks on operators for domestic timber. The same applies to traders, on which Belgian authorities have not reported conducting any checks. However, Belgium has performed 19 checks on operators for imported timber in the last 2 years. Meanwhile additional personnel seems to have been found and the rate of inspections and knowledge of key concepts of the Timber Regulation should further increase.

Belgium has collaborated with other competent authorities and institutions in EU countries in this area, including through its participation in the EIR peer-to-peer programme in October 2018.

### **Genetic resources: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising (ABS)<sup>311</sup>**

Belgium is in the process of adopting the regional and federal pieces of law that are necessary to implement the EU ABS Regulation and the Nagoya Protocol. The competent authorities have been identified and the formal designating acts are in procedure or have been adopted (as for Flanders).

### **International wildlife trade: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)<sup>312</sup>**

Belgium has one competent authority competent for (amongst others) the issuance of an increasing amount of import, (re)export and intra-EU trade documents on a regular basis. Reports confirm the activity of the Belgian customs authorities. To ensure full implementation of the EU wildlife action plan (2016) and improve the rate of detection of illegal activities within the national territory, Belgium has reported an increase in the number of inspectors to enforce CITES rules. It has also increased its training and development activities to support enforcement agencies in third countries. Examples include the establishment of 'Africa Twix' in Central Africa and Belgium's financial contribution — together with other EU countries such as Germany, France and the Netherlands — to the African Elephant Fund. Funding was also provide to strengthen the work of ETIS

(Elephant Trade Information System), which plays an important role in detecting countries with illegal ivory trade.

### **2019 priority action**

- Increase efforts to be party to relevant multilateral environmental agreements, by signing and ratifying the remaining ones.

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

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

Sustainable development is included in Article 7a of the Belgian constitution, which states that “in the exercise of their respective competences, the federal state, communities and regions pursue the objectives of sustainable development in its social, economic and environmental dimensions, taking into account intergenerational solidarity”. Sustainable development is therefore anchored in the Belgian institutional context and recognized as a general policy objective to which the federal state, the communities and regions must contribute.

At national level, the Interministerial Conference for Sustainable Development has approved a National Strategy for Sustainable Development in spring 2017, composed of a comprehensive framework text with a common vision for translating the SDGs in the Belgian context and priority themes for joint action.

Within the Interfederal Institute for Statistics – bringing together Statistics Belgium; the National Bank of Belgium; the Federal Planning Bureau; the Flemish statistics authority; the Walloon Institute for Evaluation, Prospective and Statistics; and the Brussels Institute of Statistics and Analysis - Belgium has set-up a specific SDG working group with the mandate to further the operationalization of an optimal SDG-indicator system in the Belgian context. At the outset of this initiative, the review of the official list of SDG indicators found that around half of them are already available for Belgium

In 2017, Belgium submitted a voluntary national review on the SDGs to the UN.

At the federal level the Law on the coordination of the federal sustainable development policy includes, since 1997, a federal strategy implemented through a five-year policy learning cycle ('report-plan-do-check-act'). This consists of a periodic planning and reporting mechanism and a consultative process by way of the federal sustainable development plan and the federal

<sup>310</sup> [Regulation \(EC\) No 2173/2005.](#)

<sup>311</sup> [Regulation \(EU\) No 511/2014.](#)

<sup>312</sup> [The Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\).](#)

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sustainable development report<sup>313</sup>. Three institutions play key roles in preparing, adopting, implementing and improving the policies. These are: (i) the Interdepartmental Commission for Sustainable Development, which is in charge of the planning and monitoring part of the process; (ii) a task force within the Federal Planning Bureau, which reports on the current situation and makes policy evaluations and forecasts; and (iii) the Federal Council for Sustainable Development, an advisory stakeholders' council. A 2010 Revision of the 1997 Law defines a federal Long Term Vision (LTV) on sustainable development. It contains 55 long terms (2050) objectives and proposes a set of indicators to report on the progress towards reaching these objectives. The LTV is the reference framework for the federal Strategy on SD and the activities of the institutions defined in this Act. The three regions also have their own sustainable development strategies.

There are also sustainable development strategies for the three regions. The 2nd Walloon Sustainable Development Strategy adopted in July 2016<sup>314</sup>. The action plan therein includes 3 priorities: food, energy and resources (resource efficiency, circular economy).

A Flemish decree of 18 July 2008 on the promotion of sustainable development stipulates that sustainable development policy should be inclusive, coordinated and participatory. For each parliamentary term, a strategy is established to: (i) evaluate the implementation of the previous Flemish strategy paper; (ii) analyse the current situation and set out the expected social developments, trends and risks related to sustainable development; (iii) set out a long-term vision and objectives for sustainable development policy; and (iv) set out operational short-term goals and priority policy options and measures for the government's term. The aforementioned Vision 2050 has sustainable development as guiding principle, subscribes the SDGs and is the third Flemish strategy on sustainable development. Furthermore, in 2016 the Flemish government established an SDG implementation agenda<sup>2</sup> with 7 components<sup>315</sup>. The execution of the agenda is an ongoing process.

The Walloon government is committed<sup>316</sup> to providing a user-oriented and easily accessible administrative service. In addition, the administration in the French-speaking community focuses on sustainable consumption, improved waste management and

awareness and aims to progressively integrate sustainable development related issues into its public contracts and purchasing policies<sup>317</sup>.

In 2013, the Walloon Parliament adopted a decree which provides for the adoption of one new sustainable development strategy per parliamentary term. Such strategies are defined as documents containing 'guidance and actions to encourage initiatives and consistency in the field of sustainable development in the public policies of the Walloon Region' (Décret relatif à la stratégie wallonne de développement durable, Art. 2 §2.). A new administrative structure for sustainable development has been put in place in the Secretariat-General of the Walloon Public Service.

Since 2004, the Brussels Urban Planning Code requires the Brussels Capital Region government to adopt a regional development plan. The regional development plan is an instrument for the overall planning of regional development in the context of sustainable development (art.17). By approving the PRDD on 12 July 2018, the Brussels Government defines its territorial vision by 2040. Its ambition is to provide the adequate answers to the challenges that Brussels is experiencing as an urban territory. These include population growth and access to housing, economic redeployment and access to employment, functional and social diversity, various mobility and environmental issues<sup>318</sup>.

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<sup>313</sup> Federal government, [Pathways to Sustainable Development](#), 'First Belgian National Voluntary Review on the Implementation of the 2030 Agenda', United Nations High Level Political Forum, New York, July 2017.

<sup>314</sup> Walloon government, 2016, [sustainable development strategy](#).

<sup>315</sup> Implementatie van Sustainable development goals in Vlaanderen, mededeling aan de Vlaamse Regering, October 2016.

<sup>316</sup> Contrat d'administration 2016-2020.

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<sup>317</sup> Sustainable development plan of the French-speaking community (2010-2015); Déclaration de politique communautaire 2014-2019.

<sup>318</sup> Perspective Brussels, [Le Plan Régional de Développement \(PRD\) fixe les objectifs et priorités de développement de la Région, en fonction des besoins économiques, sociaux, environnementaux et de mobilité](#).