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**The EU Environmental Implementation Review  
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**

**The EU Environmental Implementation Review: Common Challenges and how to  
combine efforts to deliver better results**

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## Table of Content

EXECUTIVE SUMMARY .....	4
PART I: THEMATIC AREAS .....	5
1. TURNING THE EU INTO A CIRCULAR, RESOURCE-EFFICIENT, GREEN AND COMPETITIVE ECONOMY...	5
Developing a circular economy and improving resource efficiency .....	5
Waste management .....	8
2. PROTECTING, CONSERVING AND ENHANCING NATURAL CAPITAL.....	10
Nature and Biodiversity.....	10
Estimating Natural Capital.....	12
Green Infrastructure .....	13
Soil protection .....	14
Marine protection .....	15
3. ENSURING CITIZENS' HEALTH AND QUALITY OF LIFE .....	17
Air quality .....	17
Noise .....	18
Water quality and management .....	18
Enhancing the sustainability of cities .....	21
International agreements .....	23
PART II: ENABLING FRAMEWORK: IMPLEMENTATION TOOLS .....	24
4. MARKET BASED INSTRUMENTS AND INVESTMENT .....	24
Green taxation and environmentally harmful subsidies .....	24
Green Public Procurement .....	25
Investments: the contribution of EU funds .....	26
5. EFFECTIVE GOVERNANCE AND KNOWLEDGE.....	28
Effective governance within federal, regional and local government .....	28
Compliance assurance.....	30
Public participation and access to justice .....	31
Access to information, knowledge and evidence.....	32

## Executive summary

### About the Environmental Implementation Review

In May 2016, the Commission launched the Environmental Implementation Review (EIR), a two-year cycle of analysis, dialogue and collaboration to improve the implementation of existing EU environmental policy and legislation<sup>1</sup>. As a first step, the Commission drafted 28 reports describing the main challenges and opportunities on environmental implementation for each Member State. These reports are meant to stimulate a positive debate both on shared environmental challenges for the EU, as well as on the most effective ways to address the key implementation gaps. The reports rely on the detailed sectoral implementation reports collected or issued by the Commission under specific environmental legislation as well as the 2015 State of the Environment Report and other reports by the European Environment Agency. These reports will not replace the specific instruments to ensure compliance with the EU legal obligations.

The reports will broadly follow the outline of the 7th Environmental Action Programme<sup>2</sup> and refer to the 2030 Agenda for Sustainable development and related Sustainable Development Goals (SDGs)<sup>3</sup> to the extent to which they reflect the existing obligations and policy objectives of EU environmental law<sup>4</sup>.

The main challenges have been selected by taking into account factors such as the importance or the gravity of the environmental implementation issue in the light of the impact on the quality of life of the citizens, the distance to target, and financial implications.

The reports accompany the Communication *"The EU Environmental Implementation Review 2016: Common challenges and how to combine efforts to deliver better results"*, which identifies challenges that are common to several Member States, provides preliminary conclusions on possible root causes of implementation gaps and proposes joint actions to deliver better results. It also groups in its Annex the actions proposed in each country report to improve implementation at national level.

### General profile

Due to its federal structure most environmental issues in Belgium are a regional competence. Hence, effective co-ordination is needed within a system of multi-level

governance.

### Main Challenges

The main challenges with regard to implementation of EU environmental policy and law in Belgium are to:

- ❖ Maintain air quality where compliant (such as PM10) and achieve such compliance in the near future (NOx) through reducing traffic congestion and introducing disincentives for car use.
- ❖ Continue addressing water pollution from urban waste water and agricultural sources.
- ❖ Ensure that the Natura 2000 network is managed towards favourable conservation status for all species and habitats

### Main Opportunities

Belgium could perform better on topics where there is already a good knowledge base and good practices. This applies in particular to:

- ❖ Use the funding opportunities for EIB loans and environmental investment with the ESIF support and the EFSI in the sectors covered by the EIR.

### Points of Excellence

Where Belgium is a leader on environmental implementation, innovative approaches could be shared more widely with other countries. Good examples are:

- ❖ The extensive activities at federal and regional levels in promoting circular economy showing leadership to public and private stakeholders; using ERDF Operational Programmes to promote the circular economy.
- ❖ The BNIP Integrated LIFE project supporting the implementation of the Belgian Prioritised Action Framework for Natura 2000 sites which will improve governance, capacity building and collaboration between the Federal and regional authorities.
- ❖ Progress in improving recycling rates since the 1990s.

1 Communication "Delivering the benefits of EU environmental policies through a regular Environmental Implementation Review" ([COM/2016/316 final](#)).

2 Decision No. 1386/2013/EU of 20 November 2013 on a General Union Environmental Action Programme to 2020 "[Living well, within the limits of our planet](#)".

3 United Nations, 2015. [The Sustainable Development Goals](#)

4 This EIR report does not cover climate change, chemicals and energy.

## Part I: Thematic Areas

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

#### Developing a circular economy and improving resource efficiency

The 2015 Circular Economy Package emphasizes the need to move towards a lifecycle-driven 'circular' economy, with a cascading use of resources and residual waste that is close to zero. This can be facilitated by the development of, and access to, innovative financial instruments and funding for eco-innovation.

SDG 8 invites countries to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. SDG 9 highlights the need to build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation. SDG 12 encourages countries to achieve the sustainable management and efficient use of natural resources by 2030.

#### Measures towards a circular economy

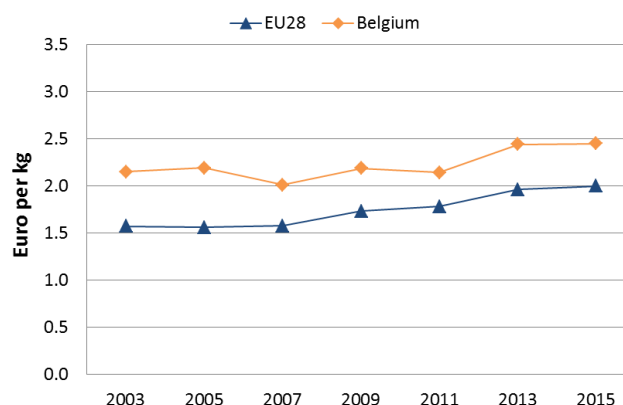
Transforming our economies from linear to circular offers an opportunity to reinvent them and make them more sustainable and competitive. This will stimulate investments and bring both short and long-term benefits for the economy, environment and citizens alike<sup>5</sup>.

Belgium is performing slightly better than average in the EU in terms of resource productivity<sup>6</sup> (how efficiently the economy uses material resources to produce wealth), with 2.45 EUR/kg (EU average is 2 EUR/kg) in 2015<sup>7</sup>. Figure 1 shows trends over time and indicates a slight but steady increase of resource productivity since 2007 in Belgium.

In 2014, the federal administration prepared a roadmap<sup>8</sup> that laid out proposals for action to transition towards a more circular economy. Furthermore, a number of relevant plans and programmes for circular economy have been initiated at the federal level. Most of these encompass measures that build the enabling institutional and market environment for eco-innovative solutions. The federal level develops 'instrumental' competences to provide support for the effective implementation or market translation of the regional objectives and initiatives (fiscal and quasi-fiscal provisions, taxation, competition rules, market structures, price regulation,

etc.). Currently there are plans to set up a knowledge centre to elaborate a federal strategy and a new roadmap.

Figure 1: Resource productivity 2003-15<sup>9</sup>



In 2016, 21 proposals were made by the Federal Ministry for Energy, Environment and Sustainable Development to promote a circular economy<sup>10</sup>. A study (by PwC) commissioned for this Ministry on the potential of the circular economy in Belgium, foresees an increase in the GDP between EUR 1-7 billion by 2030 with the creation of 15,000- 100,000 jobs<sup>11</sup>. There is also an audit to see which legislation is hindering the circular economy<sup>12</sup>. The Central Economic Council<sup>13</sup> adopted an opinion on the circular economy on 24.02.16 which focuses on recycling, and another opinion on 21.09.16 focusing on the Federal circular economy proposals. The Federal Development Council<sup>14</sup> also underlined importance of resource efficiency. Within BENELUX there is also cooperation on the circular economy<sup>15,16</sup>.

The Walloon Government has put a clear focus on resource efficiency and circular economy since the Marshall Plan 2 in 2009. In the Plan Marshall 4.0 that was presented on 29.05.15, promoting clean energy and

5 European Commission, 2015. [Proposed Circular Economy Package](#)

6 Resource productivity is defined as the ratio between gross domestic product (GDP) and domestic material consumption (DMC).

7 Eurostat, [Resource productivity](#), accessed October 2016

8 [Vers une Belgique Pionnière de l'Economie Circulaire](#)

9 Eurostat, [Resource productivity](#), accessed October 2016

10 [Ensemble, faisons tourner l'économie](#) & [Samen de economie doen draaien](#)

11 Oakdene Hollins, PwC and ICEDD [study on the Circular Economy in Belgium](#)

12 Media Planet, 2016. [3 questions à Marie-Christine Marghem](#)

13 [Conseil Central de l'économie](#) (CEE), 24.02.16 opinion mentioned in the [Programme National de Réforme](#), April 2016, p.185

14 Conseil Fédéral du Développement (FRDO), mentioned in the [Programme National de Réforme](#), April 2016, p.186

15 BENELUX, [Roundtable](#) 14.12.2015

16 Luxembourg Government, [Portail de l'environnement](#).

circular economy is one of 5 priority areas for action<sup>17</sup>. The NEXT programme<sup>18</sup> is fully dedicated to circular economy and it is a transversal axis for deepening the Walloon Strategy for Smart Specialization through linkages with other key sectors and clusters. Since 2004, the Agency for Enterprise & Innovation provides a support role for SMEs willing to be involved in circular economy<sup>19</sup>. The region has also an employment-environment alliance for sustainable construction<sup>20</sup>.

According to calculations, the circular economy can generate EUR 2.3 billion worth of added value for Flanders. In this regard, 27,000 new jobs would be created, which is equal to 1% of employment in Flanders<sup>21</sup>. In March 2016 Flanders approved 'Vision 2050' with circular economy as one of the seven transitions<sup>22</sup>. The transition policy is further shaped through a continuation of the Flemish Materials Programme as a circular economy platform focused on innovation incorporating and streamlining the different former initiatives. Flanders also has a Policy Research Center on Sustainable Materials Management (SuMMA) that does research on how to make the transition towards a sustainable use of materials. There is more policy focus on stepping up separate collection and finding new markets for recycled waste. Other policies that play an important role in the circular economy are the extended producer responsibility, improving ecodesign and enhancing the quality of recycled materials and their use. Work has also started on green economy covenants with industry, inspired by the Dutch example of green deals. Participating industries will benefit from advice to improve their material use throughout their production process. The approach in these covenants is to facilitate the evolution to a green economy by a partnership between industry, government, NGOs and the academic world, bring in additional 'benefits'. There is also more attention for supporting new circular business models, green public procurement. Furthermore, Flanders intends that material cycles be closed in the building and construction sector by 2020<sup>23</sup>. As an example of a good practice, the European Regional Development Fund (ERDF) has been used to encourage circular economy in the Flemish furniture industry<sup>24</sup>.

In March 2016 the regional government of Brussels adopted a Circular Economy Regional Plan<sup>25, 26</sup> laying out a strategy to transition from a linear to a circular economy by 2025 with a budget of more than EUR 12.8 million in 2016. The plan contains 111 measures in 4 fields (transversal, sectorial, territorial measures, governance) and is meant to be complemented every 18 months with new measures. Transversal measures concern legislative barriers, financial and methodological support, innovation, social economy, public procurement, employment, training. In addition to these transversal measures concerning all sectors, some specific sectoral measures were adopted for five sectors : construction, waste, transport, trade and food. Furthermore, the Brussels Region is supporting various initiatives to stimulate sustainable development (see the cities section for more details).

### SMEs and resource efficiency

Between 2009-14, the value-added of Belgian Small and Medium Sized Enterprises (SMEs) increased annually by 3.4%, compared to 1.2% for large enterprises. In terms of employment, SMEs saw growth of 12% over the same period versus 3% for large enterprises.

Around 57% of Belgium's SMEs have invested up to 5% of their annual turnover in resource efficiency actions (EU28 average 50%), 24% are currently offering green products and services (EU28 average 26%), 64% took measures to save energy (EU28 average 59%), 73% to minimise waste (EU28 average 60%), 47% to save water (EU28 average 44%), and 58% to save materials (EU28 average 54%)<sup>27</sup>. From a circular economy perspective, 39% took measures to recycle by reusing material or waste within the company (EU28 average 40%), 32% to design products that are easier to maintain, repair or reuse (EU28 average 22%) and 30% were able to sell their scrap material to another company (EU28 average 25%)<sup>28</sup>.

In Belgium, 65% of the SMEs taking resource efficiency actions are doing so for reasons of cost savings (EU average 68%). In fact resource efficiency actions undertaken allowed the reduction of production costs for 42% of Belgian SMEs<sup>29</sup>. In terms of green jobs around 27% of the SMEs in Belgium have one or more full time employee working in a green job at least some of the time (EU28 average 35%)<sup>30</sup>.

17 Walloon government, [Plan Marshall](#)

18 Walloon government, [declaration of Regional Policy](#) (DPR), p.22,24,83 & 90

19 Walloon government, [circular economy](#)

20 European Environment Agency, 2016. [More for less – material resource efficiency in Europe](#). Belgium, p.9; Agence de stimulation économique, 2016

21 [SuMMA](#), p.1

22 Flemish government, [Vision 2050](#)

23 European Environment Agency, 2016. *More for less – material resource efficiency in Europe*. [Belgium Report](#), p.19

24 European Commission, 2014. [SUSPRO3: Generating growth through sustainable production methods](#); called SUSPRO3 as three elements

– process, product & profit.

25 BCR, [Programme Régional en Economie Circulaire](#), March 2016

26 [Programme National de Réforme](#), April 2016, p.55; p.66-7

27 European Commission, 2015. [Flash 426 Eurobarometer](#) "SMEs, resource efficiency and green markets"

28 European Commission, 2015. [Flash 426 Eurobarometer](#) "SMEs, resource efficiency and green markets"

29 European Commission, 2015. [Flash 426 Eurobarometer](#) "SMEs, resource efficiency and green markets"

30 The Flash 426 Eurobarometer defines "green job" as a job that directly deals with information, technologies, or materials that

In Flanders in the period 2008-13 the growth in employment<sup>31</sup> for green companies was 2% (in contrast to decreasing industrial production) and specific for their green activities the growth was even more positive, up to 7%.<sup>32</sup> Indeed, the transition to a resource efficient economy would result in new jobs related to reuse, repair or recycling. It is estimated that 27,000 jobs could be created in Flanders alone<sup>33</sup>. Flanders launched its *Quick Win Ideas* scheme in 2012<sup>34</sup>.

Belgium has 74 EMAS registered organisations with 37 in Wallonia, 28 in Brussels and 9 in Flanders (on 31.08.16). Belgium holds 38 EU Ecolabel licenses

The Brussels Capital Region created in 1999 a label called *Entreprise écodynamique*. This is an official recognition for companies that internally implement environmental management. This label awards companies that have made progress in terms of waste prevention and management, efficient use of energy, mobility, etc. To date, 198 organizations are labeled *Entreprise écodynamique*.

### Eco-innovation

With a total score of 97 in the overall Eco-Innovation Scoreboard 2015, Belgium ranked 15th on the list of EU countries, just below the EU average (Figure 2).

In both Flanders and Wallonia innovation policy is organised around clusters in close cooperation between industry, knowledge centres and the government, and whose aim is to improve the marketability of innovations. In Flanders specific subsidies can be obtained for innovations for SMEs that promote eco-innovation feasibility studies and projects<sup>35</sup>. The SME programme is managed by the Flemish Agency for Innovation and Entrepreneurship (VLAIO). In Flanders, there is also an Environmental Innovation Platform that makes companies invest in new products, processes and services to lower the impact on the environment through subsidies<sup>36</sup>. In the Walloon Region SMEs can get information on subsidies from the Gateway to Research and Technologies in Wallonia.<sup>37</sup> The Brussels Government supports eco-innovation amongst SME's by public-private partnerships aiming at offering them support in the fields of eco-conception, eco-design and eco-innovative start-ups. The aforementioned Brussels

preserves or restores environmental quality. This requires specialised skills, knowledge, training, or experience (e.g. verifying compliance with environmental legislation, monitoring resource efficiency within the company, promoting and selling green products and services).

31 In terms of Full Time Equivalents (FTE)

32 [Cleantech Report 2015](#)

33 [SuMMa](#), p.1

34 [Quick Win Ideas for SMEs](#)

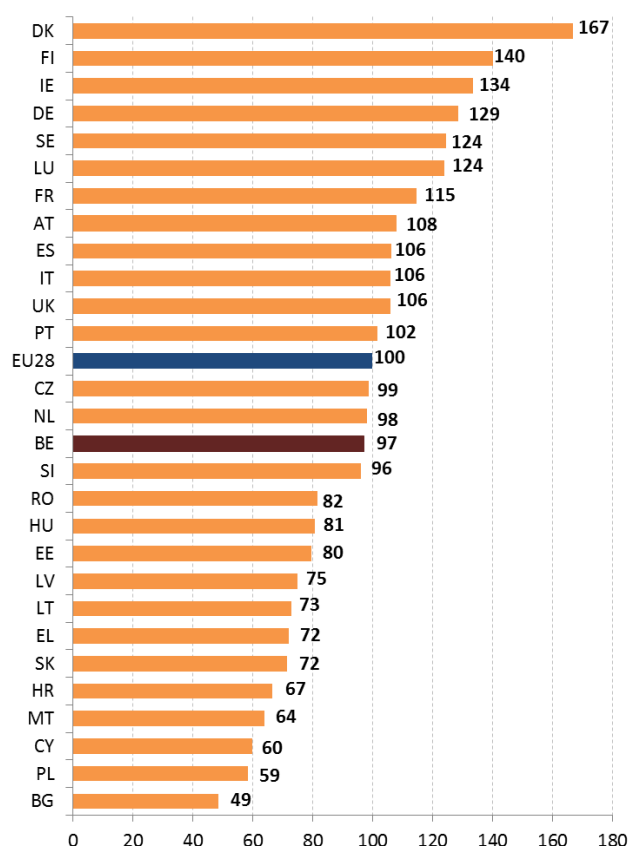
35 Flemish government, [Duurzame ontwikkeling](#)

36 [Milieu-Innovatie Platform \(MIP\)](#)

37 Walloon Government, [Gateway to Research and Technologies in Wallonia](#)

Circular Economy Regional Plan also contains different measures fostering eco-innovation amongst SME's.

Figure 2: Eco-Innovation Index 2015 (EU=100)<sup>38</sup>



Three drivers for eco-innovation can be identified in Belgium. Firstly, the integration of eco-innovation and sustainability goals into industrial and economic policies is promoted under the leadership or in coordination with the Federal Ministries of Economy and of Industry since they are considered as valuable assets for the competitiveness of businesses. Secondly, Belgium has well-developed technological capabilities, regulation and infrastructures. Clear government focus on sciences, tax incentives, strong R&D funding, human capital and other factors have helped to strengthen the knowledge base and bring the Belgian eco-and other industries to international leading positions. Thirdly, there is a growing demand for green technology and products coming from both private consumers as well as from larger companies and governments dedicated to greening strategies.

Barriers to eco-innovation in Belgium are of different natures. There are those related to inter-regional coordination, integrated planning and decision making where little attention is given to the dissemination of regional good practice at national level. Another barrier is the lack of eco-innovation and circular economy related skills in SMEs (even though SMEs score better

38 [Eco-innovation Observatory](#): Eco-Innovation scoreboard 2015



than the EU average). As most products entering the Belgian market are designed abroad there is limited control over product design for most products entering the market. Finally, there are limited markets for recycled products with competition with primary raw materials.

### Suggested action

- Facilitate exchange of good practices between all Belgian entities regarding circular economy and eco-innovation matters.
- Foster the uptake of a secondary raw materials market along with consumer oriented awareness raising campaign.
- Propose training for SMEs on eco-innovation and circular economy.

## Waste management

Turning waste into a resource requires:

- Full implementation of Union waste legislation, which includes the waste hierarchy; the need to ensure separate collection of waste; the landfill diversion targets etc.
- Reducing per capita waste generation and waste generation in absolute terms.
- Limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

SDG 12 invites countries to substantially reduce waste generation through prevention, reduction, recycling and reuse, by 2030.

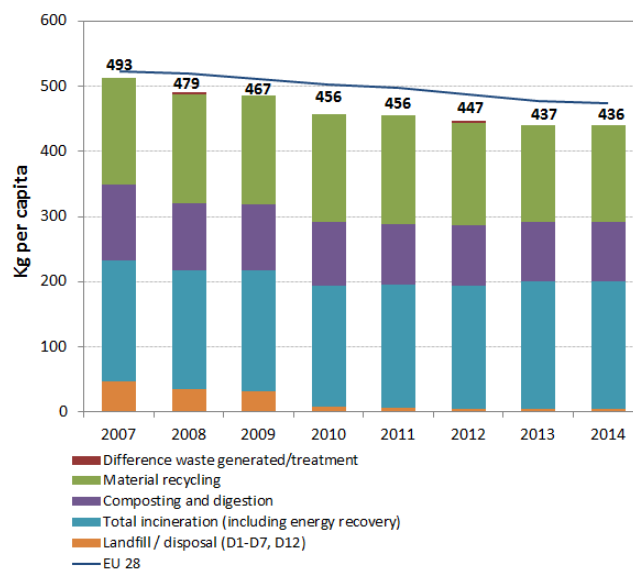
The EU's approach to waste management is based on the "waste hierarchy" which sets out an order of priority when shaping waste policy and managing waste at the operational level: prevention, (preparing for) reuse, recycling, recovery and, as the least preferred option, disposal (which includes landfilling and incineration without energy recovery). The progress towards reaching recycling targets and the adoption of adequate WMP/WPP<sup>39</sup> should be the key items to measure the performance of Member States. This section focuses on management of municipal waste for which EU law sets mandatory recycling targets.

In 2014, municipal waste generation<sup>40</sup> in Belgium remained slightly below the EU average (435 kg/y/inhabitant compared to around 475 kg)<sup>41</sup>. The latest available data for Flanders (2014) was around 432kg/y/inhabitant<sup>42</sup>. In Wallonia (2012) the figure was

around 460 kg/y/inhabitant<sup>43</sup> and in the Brussels-Capital Region (2012) around 405 kg/y/inhabitant.

Figure 3 depicts the municipal waste by treatment in Belgium in terms of kg per capita and shows that the split between treatment methods remains rather stable.

**Figure 3: Municipal waste by treatment in Belgium 2007-14<sup>44</sup>**



Belgium is among the top performers in the EU with regard to waste management with a recycling rate of municipal waste of 55% in 2014 (EU average 44% in 2014) as shown in Figure 4, with the Flanders region performing markedly higher at 70% in 2014<sup>45</sup>.

Belgium is already complying with the 50% recycling target for 2020<sup>46</sup> and has already eliminated landfilling of biodegradable waste<sup>47</sup>. Belgium has only one Mechanical Biological Treatment (MBT) plant in operation due to efficient separate collection.

Additional progress could be made by introducing new economic instruments to promote waste prevention, avoid incinerating reusable or recyclable waste, and make the reuse and recycling of waste more economically attractive. It should be noted that the three regions have a system in place that taxes the incinerated

2014. To this for the year 2014, one must subtract 59,62 kg/inhabitant/year (row 'bouw en sloopafval' = construction and demolition waste) resulting in 431,84 kg/inhabitant/year.

43 Wallon government, 2014. [Génération de déchets municipaux](#)

44 Eurostat, [Municipal waste and treatment, by type of treatment method](#), accessed October 2016

45 OVAM 2015, p.26

46 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.

47 National sources: 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, these figures do not fit with ESTAT figures.

39 Waste Management Plans/Waste Prevention Programmes

40 Municipal waste consists of waste collected by or on behalf of municipal authorities, or directly by the private sector (business or private non-profit institutions) not on behalf of municipalities.

41 Eurostat, [Municipal waste and treatment, by type of treatment method](#), accessed October 2016

42 OVAM, 2015, p.9 which cites a figure of 491.46 kg/yr/inhabitant in



waste and it is recognized that each region encourages heat recovery from waste incineration.

**Figure 4: Recycling rate of municipal waste 2007-14<sup>48</sup>**



A recent study has created scenarios for applying 'enhanced waste management' (EWM) practices at the Flemish Remo landfill site<sup>49</sup>. In the first scenario — without EWM — it was estimated to take 14 years for Flanders' remaining landfill capacity to be exhausted. In the second — when EWM practices were applied — only 4% of future waste would be landfilled and it would take over eight times as long (123 years) for remaining landfill capacity to be exhausted.

The revision of the WMP of the Walloon region (Horizon 2010, which expired in 2015), including elements of waste prevention, is delayed to 2017. Brussels and Flanders both have up to date WMPs/WPPs.

In Flanders, the new waste management plan 2016 -22 on household waste and similar commercial and industrial waste foresees new targets for further reducing the amount of residual waste with an additional 10 - 15 % (around 140 kg residual household waste per capita). Food waste is also an issue being dealt with by Flanders<sup>50</sup>. Wallonia has the Plan REGAL 2015-25 for food waste. For Brussels see the sustainability of cities section on this issue.

In the light of the on-going review of the recycling targets and landfill restrictions for municipal waste<sup>51</sup>, additional efforts will be needed to meet the proposed recycling target of 65% for 2030. However, to fully implement the waste hierarchy, future efforts should also be invested in

waste prevention.

According to a study<sup>52</sup>, moving towards the targets of the Roadmap on resource efficiency<sup>53</sup> could create over 3,100 additional jobs and increase the annual turnover of the waste sector by over EUR 330 million.

The ERDF co-financed 'Closing the Circle' project 2010-12 has examined the mining of old landfills and is now being taken forward with Horizon 2020<sup>54</sup>.

To conclude, Belgium has a generally well performing waste management system to deliver the EU waste targets.

#### Suggested action

- Complete and update the Waste Management Plan incorporating a Waste Prevention Programme for Wallonia.
- Shift reusable and recyclable waste away from incineration including through economic instruments.

48 Eurostat, [Recycling rate of municipal waste](#), accessed October 2016

49 Hoogmartens, R., Eyckmans, J. & Van Passel, S. 2016. [Landfill taxes and Enhanced Waste Management: Combining valuable practices with respect to future waste streams](#). Waste Management.

50 [Flemish government](#)

51 European Union, Proposal for a Directive on the landfill of waste, [COM/2015/0594](#)

52 Bio Intelligence service, 2011. [Implementing EU Waste legislation for Green Growth](#), study for European Commission. The breakdown per country on job creation was made by the consultant on Commission demand but was not included in the published document.

53 European Commission, Roadmap to a Resource Efficient Europe, [COM\(2011\) 571](#) [COM\(2011\) 571](#), which outlines how we can transform Europe's economy into a sustainable one by 2050.

54 Flemish government, 2010. [Closing the Circle, een demonstratie van Enhanced Landfill Mining](#)

## 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, restore ecosystems and their services in so far as feasible, and step up efforts to avert global biodiversity loss. The EU Birds and Habitats Directives aim at achieving favourable conservation status of protected species and habitats.

SDG 14 requires countries to conserve and sustainably use the oceans, seas and marine resources, while SDG 15 requires countries to protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss.

The 1992 EU Habitats Directive and the 1979 Birds Directive are the cornerstone of the European legislation aimed at the conservation of the EU's wildlife. Natura 2000, the largest coordinated network of protected areas in the world, is the key instrument to achieve and implement the Directives' objectives to ensure the long-term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin.

The adequate designation of protected sites as Special Areas of Conservation (SAC) under the Habitats Directive and as Special Protection Areas (SPA) under the Birds Directive is a key milestone towards meeting the objectives of the Directives. The results of Habitats Directive Article 17 and Birds Directive Article 12 reports and the progress towards adequate Sites of Community Importance (SCI)-SPA and SAC designation<sup>55</sup> both in land and at sea, should be the key items to measure the performance of Member States.

In Belgium, the regions and the federal governments have their own biodiversity strategies and/or plans. The National Biodiversity Strategy (2013-20) is a framework document that mainly builds on these existing plans, giving political orientation in order to improve the implementation of biodiversity commitments as well as create more coherence, fill gaps and integrate biodiversity concerns into the national and international levels.

The territory of Belgium includes areas in the Atlantic Region and the Continental Biogeographic Region. Both the National Biodiversity Strategy and the most recent reports submitted under Article 17 Habitats Directive and Article 12 Birds Directive identify a number of pressures

on biodiversity varying in intensity between the regions.

Land conversion (to urban, industrial, agricultural, transport or tourism purposes) and intensification of agriculture are causes of biodiversity loss, followed by ecological fragmentation and pollution as well as related eutrophication, acidification, soil degradation and noise perturbation<sup>56</sup>. Further threats include the direct and indirect overexploitation of natural resources including fish stocks, groundwater extraction and the drying up of wetlands. Disruption caused by invasive alien species increase the effect of the above drivers. Marine species and sea-bottom habitats are under heavy pressure from fishing bycatches and in particular from beam trawling, the most common fishing practice in Belgian marine waters. Overall fishing activities have resulted in a sharp decline in long-living and slowly reproducing species such as sharks and many habitat structuring species. In the Belgian coastal waters, invasive alien species also constitute a predominant proportion of the marine fauna.



The presence of a number of warm-temperate species has been increasing over the past decades, including in the North Sea, indicating increasing climate change impacts. Furthermore, there is growing recreational pressure on green areas (mainly in Brussels). Another pressure is the extraction of sand and gravel in marine waters and some river systems.

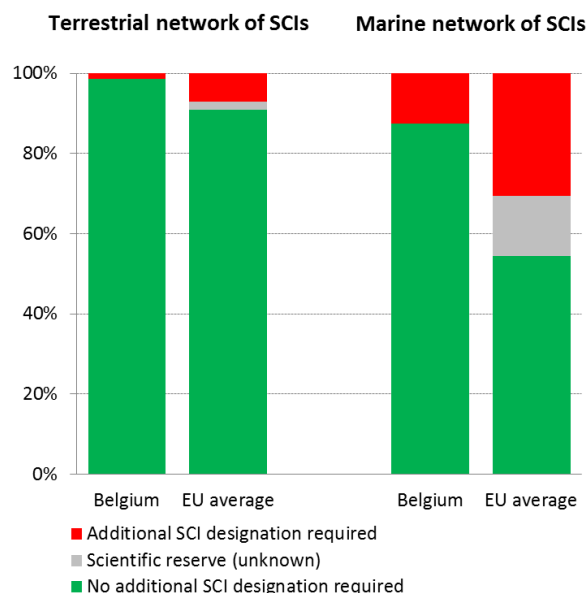
By late 2016, the Belgian Natura 2000 terrestrial network is considered to be largely complete: 12.7 % of the national land area of Belgium is covered by Natura 2000 sites (EU average 18.1 %), with Birds Directive SPAs covering 10.4 % of the national territory (EU average 12.3 %) and Habitats Directive SCIs covering 10.7% (EU average 13.8 %).

<sup>55</sup> Sites of Community Importance (SCIs) are designated pursuant to the Habitats Directive whereas Special Areas of Protection (SPAs) are designated pursuant to the Birds Directive; figures of coverage do not add up due to the fact that some SCIs and SPAs overlap. Special Areas of Conservation (SACs) means a SCI designated by the Member States.

<sup>56</sup> Belgian National Focal Point to the Convention on Biological Diversity, 2013. [Biodiversity 2020 – Update of Belgium's National Biodiversity Strategy](#). Royal Belgian Institute of Natural Sciences, Brussels

However, the latest assessment<sup>57</sup> of the Sites of Community Importance (SCIs) part of the Natura 2000 network showed that, by early 2014, there were still insufficiencies in designation for the marine components of the network as shown in Figure 5<sup>58</sup>.

**Figure 5: Sufficiency assessment of SCI networks in Belgium based on the situation until December 2013 (%)**<sup>59</sup>



In terms of SAC designation, Flanders is outstanding in having all 38 SCIs designated as SACs, with quantified conservation objectives being set both at regional level and at the level of each individual SAC.

The situation with SAC designation depicted in Figure 5 has improved considerably elsewhere in Belgium.

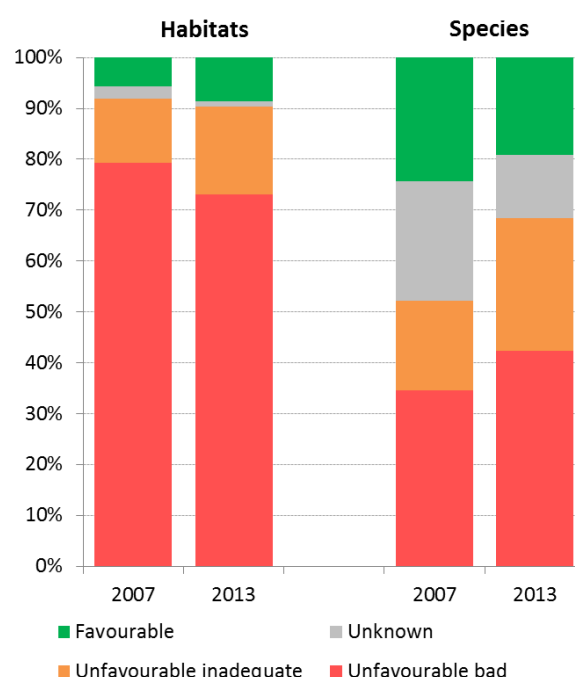
By the end of 2016, all 240 SCIs in Wallonia have been designated as SACs<sup>60</sup>. Detailed management prescriptions

foreseen for each SAC should lead to an improvement of the conservation status. The Walloon regional Government also adopted a legal act defining conservation objectives at biogeographic regional level.

All three SCIs of the Brussels-Capital Region have now also been designated as SAC, with conservation objectives set at the level of each individual SCI.

The Belgian authorities have informed the Commission that a Federal decree will be issued in early 2017 for designating the marine SCI "Vlaamse Banken" as a SACs, covering around 30% of the Belgian part of the North Sea.

**Figure 6: Conservation status of habitats and species in Belgium in 2007/2013 (%)**<sup>61</sup>



According to the latest report on the conservation status of habitats and species covered by the Habitats Directive<sup>62</sup>, 8.6% of the habitats' biogeographic assessments were favourable in 2013 in Belgium (EU 27: 16 %). Furthermore, 17 % are considered to be unfavourable-inadequate<sup>63</sup> (EU27: 47%) and 73 % are unfavourable – bad (EU27: 30%). As for the non-bird

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

58 The percentages in Figure 5 refer to percentages of the total number of assessments (one assessment covering 1 species or 1 habitat in a given biogeographical region with the Member State); if a habitat type or a species occurs in more than 1 Biogeographical region within a given Member State, there will be as many individual assessments as there are Biogeographical regions with an occurrence of that species or habitat in this Member State.

59 European Commission internal assessment.

60 [Libre Belgique](#), notification 01.12.16, not yet published in the Belgian Official Journal. N.B. Wallonia has many more sites compared to Flanders as it opted for a more fine-grained network of SCIs, including a few larger sites and many smaller sites.

61 These figures show the percentage of biogeographical assessments in each category of conservation status for habitats and species (one assessment covering 1 species or 1 habitat in a given biogeographical region with the Member State), respectively. The information is based on Article 17 of the Habitats Directive reporting - [national summary of Belgium](#)

62 The core of the 'Article 17' report is the assessment of conservation status of the habitats and species targeted by the Habitats Directive.

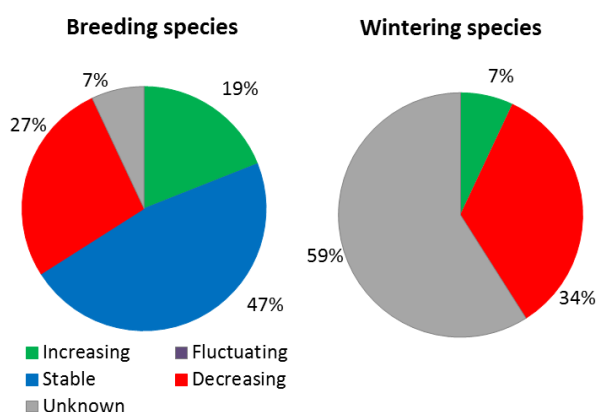
63 Conservation status is assessed using a standard methodology as being either 'favourable', 'unfavourable-inadequate' and 'unfavourable-bad', based on four parameters as defined in Article 1 of the Habitats Directive.

species, 19.2 % of the assessments were favourable in 2013 (EU 27: 23%) 26 % at unfavourable-inadequate (EU27: 42%) and 42% unfavourable-bad status (EU27: 18%). This is depicted in Figure 6<sup>64</sup>. Moreover, 27% and 29.7 % of the unfavourable assessments respectively for species and habitats were showing a positive trend in 2013.

For the period 2007-13, the Habitats Directive's Article 17 conservation status report for the Region of Wallonia<sup>65</sup> indicated rapid area losses for two grassland habitat types, even inside Natura 2000 sites. On the other hand, the same report also indicated measurable improvements for less widespread but important habitat types in terms of biodiversity conservation, mostly attributable to LIFE-funded habitat restoration projects in the Ardennes region.

As far as birds are concerned, 66 % of the breeding species showed short-term increasing or stable population trends (for wintering species this figure was only 7 %) as shown in Figure 7.

**Figure 7: Short-term population trend of breeding and wintering bird species in Belgium in 2012 (%)**<sup>66</sup>



High emission levels of farm-based nitrogen into Natura 2000 sites remains an issue of concern, particularly in the lowland parts of Belgium<sup>67</sup>. A strategic nitrogen abatement programme is scheduled to be launched in Flanders, and is expected to lead to a progressive reduction of nitrogen emissions into Natura 2000 sites over the coming decades.

Compared to the EU average, the number of complaints

<sup>64</sup> Please note that a direct comparison between 2007 and 2013 data is complicated by the fact that Bulgaria and Romania were not covered by the 2007 reporting cycle, that the 'unknown' assessments have strongly diminished particularly for species, and that some reported changes are not genuine as they result from improved data / monitoring methods.

<sup>65</sup> Walloon government, [La biodiversité en Wallonie](#)

<sup>66</sup> Article 12 of the Birds Directive reporting - [national summary of Belgium](#)

<sup>67</sup> Flemish government, [Programmatiese Aanpak Stikstof](#)

related to the EU Nature Directives is rather low in all Belgian regions.

Belgium has benefited from EU funding under LIFE-Nature, thanks to a strong network of Nature NGOs and public authorities pursuing a strong restoration agenda. Conservation strategies in Belgium are strongly based on land purchase and habitat restoration.

In early 2016, a LIFE Belgian Nature Integrated Project (BNIP) was granted, to support the implementation of the Prioritised Action Framework (PAF) of Flanders, Wallonia and the Federal Marine Division. This project will be focussing on measures aimed at the management of the Natura 2000 network, through improved governance, capacity building and collaboration between the Flemish, Walloon and Federal authorities. It also aims to improve stakeholder involvement, and to implement specific objectives such as developing integrated site management plans, monitoring<sup>68</sup> and database systems.

Due to the extensive range of Natura 2000 sites restoration measures carried out since 2003 in the frame of six coordinated LIFE projects covering several thousands of hectares of peat bogs and wetlands in the Belgian Ardennes<sup>69</sup>, the Belgian authorities were able to report, in 2013, significant positive trends in the conservation status of a dozen different habitat types and associated species protected by the EU Habitats Directive<sup>70</sup>.

#### Suggested action

- Make further efforts to ensure that the Natura 2000 network is managed towards favourable conservation status of protected habitats and species, especially by reducing the pressures from agriculture.

#### Estimating Natural Capital

The EU Biodiversity Strategy to 2020 calls on the Member States to map and assess the state of ecosystems and their services in their national territory by 2014, assess the economic value of such services, and promote the integration of these values into accounting and reporting systems at EU and national level by 2020.

The Belgian MAES (Mapping and Assessment of Ecosystems and their Services) Working Group<sup>71</sup> contributes to the work on an integrated system for Natural Capital Accounting, in the framework of a Knowledge Innovation Project on Natural Capital Accounting (MAES KIP-INCA). Belgium is networking and collaborating within a BENELUX MAES initiative. At the end of 2014 the first BEES (Belgium Ecosystem Services

<sup>68</sup> European Commission, [BNIP - Belgian Nature Integrated Project](#)

<sup>69</sup> Walloon government, [Haut Ardennne restoration](#)

<sup>70</sup> Walloon government, [Habitats Directive Article 17 reporting](#)

<sup>71</sup> Belgian Biodiversity Platform, 2013-14. [Belgian MAES Working Group](#)



Network) Christmas market was organized with great success and repeated in 2015 in collaboration with the EU MAES Working Group<sup>72</sup>. The BEES network is now merging with other related processes and networks into the BEES International Working Group.

The Flanders' Nature Report, a regional ecosystem assessment (REA), was presented to the Flemish government in February 2015<sup>73</sup>, including an interactive mapping tool with GIS data. Flanders REA stage II should have been completed by the end of 2016 under the theme 'Co-operating with Landscapes'. Stage III will develop a map and evaluate alternative scenarios for Green Infrastructure by 2018. On a smaller scale in Flanders, the Nature Value Explorer has been set up to help estimate change in ecosystem service delivery caused by land use change in rural and recently also in urban areas. This web tool is being updated and expanded regularly<sup>74</sup>.

The Walloon ecosystem services platform has developed an integrated assessment framework, typologies for ecosystems and ecosystem services<sup>75</sup> and a common shared information system including a database for ecosystem mapping and biophysical valuation. The Brussels Nature Plan 2016-20 foresees that the Brussels-Capital Region will continue to sustain research on urban nature and more particularly work on the mapping and assessment of urban ecosystem services.

Work on natural capital accounting is at an initial stage of development with efforts focused on improving the knowledge base. The 4 year research project ECOPLAN is developing spatially explicit information and tools for the assessment of ecosystem services<sup>76</sup>.

### Suggested action

- Engage all Belgian entities and relevant institutions and continue support for the mapping and assessment of ecosystems and their services and valuation work and develop natural capital accounting systems.

## Green Infrastructure

The EU strategy on green infrastructure<sup>77</sup> promotes the incorporation of green infrastructure into related plans and programmes to help overcome fragmentation of habitats and preserve or restore ecological connectivity, enhance ecosystem resilience and thereby ensure the continued provision of ecosystem services.

Green Infrastructure provides ecological, economic and social benefits through natural solutions. It helps to understand the value of the benefits that nature provides to human society and to mobilise investments to sustain and enhance them.

Many actions to promote green infrastructure are ongoing in the Belgian regions both inside and outside Natura 2000 sites<sup>78</sup>. For example, the "Nature in your neighbourhood" programme in Flanders promotes greening elements in urban and residential areas, research on improvement of local life through public & private green areas, cooperation projects with private sector and business to promote greening of industrial zones (e.g. the Port of Antwerp, quarries in Flanders and Wallonia), campaigns and subsidies from local authorities promoting the greening of the urban environment, e.g. for green roofs, and NGO activities for nature areas. Since 2000, the regional programme Green Neighbourhoods (Quartiers Verts – Groene Wijken) has supported more than 200 local greening initiatives in the Brussels-Capital Region. It concerns the greening of public space through small scale citizens' initiatives.

The Hoge Kempen National Park is Belgium's only national park. Innovative approaches to developing the park's infrastructure have helped balance economic and biodiversity objectives, providing 400 jobs within and around the park area, and direct annual economic benefits of EUR 20 million<sup>79</sup>. The park thus contributes to social cohesion and the regeneration of a former coal mining region that was at risk of economic decline.

The Walloon Region has launched the *Réseau Wallonie Nature* (Wallonia Nature Network)<sup>80</sup> to foster voluntary nature conservation measures across the region, and the BIODIBAP<sup>81</sup> initiative has promoted numerous actions to enhance biodiversity around public buildings such as municipalities and schools. The *Plans Communaux de Développement de la Nature* (Municipal Nature

72Gembloux Agro-Bio Tech - Université de Liège, 2014. [Le BEES Christmas Market en vidéo](#)

73Flemish government, [Flanders Regional Ecosystem Assessment - State and Trends Synthesis Report](#). (See in [Dutch](#))

74 [Nature Value Explorer](#)

75Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

76University of Antwerp, [ECOPLAN](#)

77 European Union, Green Infrastructure — Enhancing Europe's Natural Capital, [COM/2013/0249](#)

78Belgium, 2014. [Fifth National Report to the CBD](#)

79Schweitzer J-P., Mutafoğlu K., ten Brink P., Paquel K., Illes A., Gitti G., Kettunen M., Twigger-Ross C., Baker J., Kuipers Y., Emonts M., Tyrväinen L., Hujala T., and Ojala A., 2016. [The Health and Social Benefits of Nature and Biodiversity Protection: Annex 1: 20 Cases.](#) Report for the European Commission, Institute for European Environmental Policy, London/Brussels

80Walloon government, [Réseau Wallonie Nature](#)

81BIODIBAP

Development Plans) include actions to protect biodiversity, such as delayed mowing and river contracts. The Region has also made agreements with the private sector (e.g. quarries, electricity companies, railroad companies) to promote green infrastructure.

The Brussels Capital Regional Nature Plan 2016-20, adopted in April 2016<sup>82</sup> foresees the development and implementation of plans for the multifunctional management of green spaces, for ensuring access to nature for all citizens, due consideration of nature and ecological connectivity in plans and projects, as well as a Blue Network Programme for the management of open waterways in Brussels.

In this context, an action plan for the implementation of the Brussels ecological network is under development. Regional and local authorities will cooperate to draw up general guidelines and concrete conditions in order to consolidate the green and blue network, to reinforce the protection status of green spaces, to ecologically manage green spaces under their jurisdiction and increase biodiversity.

Green infrastructure and actions to protect and restore habitats at the regional and federal level also help with the protection of pollinators such as domestic and wild bees. Schools and cities are encouraged to implement small scale initiatives on wild bees; efforts are increased to address the causes of domestic bee mortality, and the importance of pollinators in terms of high value ecosystems services is being addressed at all levels.

## Soil protection

The EU Soil Thematic Strategy highlights the need to ensure a sustainable use of soils. This requires the prevention of further soil degradation and the preservation of its functions, as well as the restoration of degraded soils. The 2011 Road Map for Resource-Efficient Europe, part of Europe 2020 Strategy provides that by 2020, EU policies take into account their direct and indirect impact on land use in the EU and globally, and the rate of land take is on track with an aim to achieve no net land take by 2050.

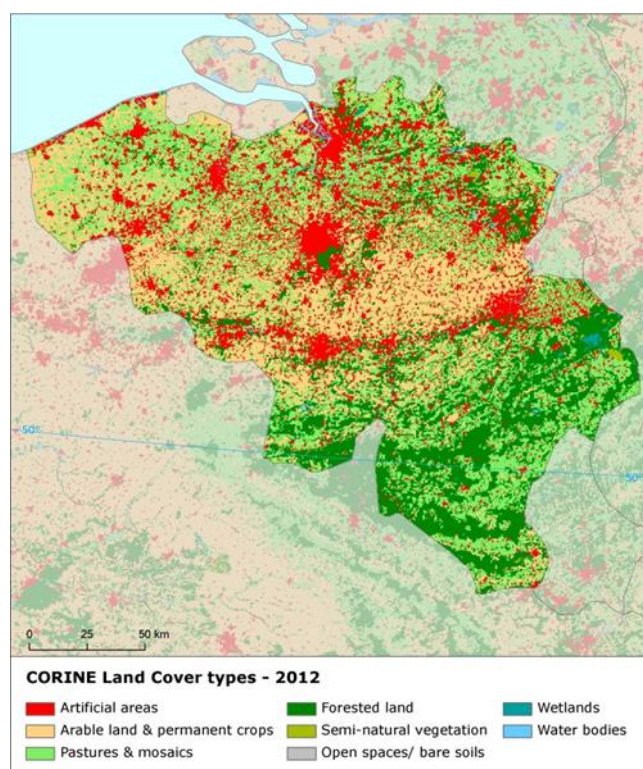
SDG 15 requires countries to combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land-degradation-neutral world by 2030.

Soil is an important resource for life and the economy. It provides key ecosystem services including the provision of food, fibre and biomass for renewable energy, carbon sequestration, water purification and flood regulation, the provision of raw and building material. Soil is a finite

and extremely fragile resource and increasingly degrading in the EU. Land taken by urban development and infrastructure is highly unlikely to be reverted to its natural state; it consumes mostly agricultural land and increases fragmentation of habitats. Soil protection is indirectly addressed in existing EU policies in areas such as agriculture, water, waste, chemicals, and prevention of industrial pollution.

Figure 8 shows the different land cover types in Belgium in 2012, showing sharp contrasts in land use between the three regions.

**Figure 8: Land Cover types in Belgium in 2012<sup>83</sup>**



Artificial land cover is used for settlements, production systems and infrastructure. It may itself be split between built-up areas (buildings) and non-built-up areas (such as linear transport networks and associated areas).

The annual land take rate (growth of artificial areas) as provided by CORINE Land Cover was 0.10% in Belgium over the period 2006-12, well below the EU average (0.41%), Flanders showing a slightly higher land take rate than Wallonia. It represented 614 hectares per year and was mainly driven by industrial and commercial sites as well as housing, services and recreation<sup>84</sup>. However, the Belgian authorities suggest that the figure may be largely

<sup>82</sup> BCR, [Plan régional nature 2016-2020 en Région de Bruxelles-Capitale](#).

<sup>83</sup> European Environment Agency. Land cover 2012 and changes country analysis [publication forthcoming]

<sup>84</sup> European Environment Agency [Draft results of CORINE Land Cover \(CLC\) inventory 2012](#); mean annual land take 2006-12 as a % of 2006 artificial land.

underestimated<sup>85</sup>.

In line with the higher population density (370.3 persons/km in 2014<sup>86</sup>), the percentage of built up land in 2009 for Belgium was 7.39%, well above the EU average (3.23%)<sup>87</sup>, with a strong discrepancy between Flanders and the Walloon region – as clearly depicted in Figure 8.

To stimulate the reconversion of brownfields, to prevent urban sprawl and the further artificialization of scarce green fields (Brussels-Capital Region and Wallonia), and to (re)connect and indirectly enhancing green corridors (Brussels-Capital Region), each region<sup>88</sup> has worked out (or is currently updating) its own Neighbourhood Sustainability Assessment Tool. These regional tools help public and private neighbourhood planners in localizing the construction sites with less environmental impact and in the design and build of future sustainable neighbourhoods.

The soil erosion rate in 2010 was 1.22 tonnes per ha per year, below EU-28 average (2.46 tonnes per ha per year)<sup>89</sup>.

It has been estimated that in Brussels 21% of soils are contaminated<sup>90</sup> leading to a clean-up programme since 2009; 80% of this amount has an unknown owner or an owner that does not possess the economic means to clean-up. A soil inventory<sup>91</sup> and a soil map<sup>92</sup> were finalized end of 2015. Approximately 14,700 plots are listed in this inventory which corresponds to about 3000 ha (18.6% of the area of the Region). 14% of these plots are potentially contaminated, the rest is either clean or polluted with no risks or polluted under treatment. Since 2004, about 1,580 ha were examined of which 472<sup>93</sup> ha were treated and reassigned to residential, economic and recreational activities. According to the current data and if policy remains unchanged, the remaining plots will be examined by 2029 (and about 400 ha will still be treated and reassigned).

Wallonia is dealing with post-industrial conversion of contaminated soils including in urban areas with ERDF co-financing.

The European Fund for Strategic Investments (EFSI) has

financed an equity fund called Ginkgo Fund II for decontaminating industrial land (e.g. in Ottignies and Tournai) with a contribution of EUR 30 million<sup>94</sup>.

There are still not EU-wide datasets enabling the provision of benchmark indicators for soil organic matter decline, contaminated sites, pressures on soil biology and diffuse pollution.

An updated inventory and assessment of soil protection policy instruments in Belgium and other EU Member States is being performed by the EU Expert Group on Soil Protection.

## Marine protection

The EU Coastal and Marine Policy and legislation require that by 2020 the impact of pressures on marine waters is reduced to achieve or maintain good environmental status and coastal zones are managed sustainably.

SDG 14 requires countries to conserve and sustainably use the oceans, seas and marine resources for sustainable development.

The Marine Strategy Framework Directive (MSFD)<sup>95</sup> aims to achieve Good Environmental Status (GES) of the EU's marine waters by 2020 by providing an ecosystem approach to the management of human activities with impact on the marine environment. The Directive requires Member States to develop and implement a marine strategy for their marine waters, and cooperate with Member States sharing the same marine region or subregion.

As part of their marine strategies, Member States had to make an initial assessment of their marine waters, determine GES<sup>96</sup> and establish environmental targets by July 2012. They also had to establish monitoring programmes for the on-going assessment of their marine waters by July 2014. The next element of their marine strategy is to establish a Programme of Measures (2016). The Commission assesses whether these elements constitute an appropriate framework to meet the requirements of the MSFD.

Belgian waters are part of the North-East Atlantic Ocean marine region, but cover a small part (0.5%) of the North Sea. Belgium is part of the Convention for the protection of the marine environment of the North-East Atlantic (OSPAR Convention). The North Sea is one of the busiest maritime areas, with exploitation of oil and gas reserves also occurring in parallel to the important maritime

85 The Belgian authorities have informed the Commission that for Wallonia in the [Tableau de Bord de l'Environnement 2014](#) for Wallonia the figure is 17 km<sup>2</sup>/an (1700 ha) with an increase in built-up land of 37,6% over 28 years.

86 Eurostat, [Population Density](#)

87 European Environment Agency, 2016. [Imperviousness and imperviousness change](#)

88 [Duurzaamheidsmeter Wijken Vlaanderen](#), 2016 / Appel à projet [Quartiers Nouveaux Wallonie 2016](#) / [Mémento des quartiers durables Bruxelles 2009](#), update ongoing

89 Eurostat, [Soil water erosion rate](#), Figure 2, accessed November 2016

90 European Commission, [ERDF OP Brussels 2014-20](#), p.8

91 BCR, [Soil inventory](#)

92 BCR, [Soil map](#)

93 BCR 2016, [Etat de l'environnement rapport](#)

94 European Commission, 2016. The Investment Plan for Europe – state of play Belgium ; [Ginkgo Advisor](#)

95 European Union, [Marine Strategy Framework Directive 2008/56/EC](#)

96 The MSFD defines Good Environmental Status (GES) in Article 3 as: "The environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive"



traffic. In addition, overfishing and bottom-trawling constitute potential threats to the biodiversity. Indeed, the indicator for sustainable fishing in Belgian waters is showing an unfavourable trend<sup>97</sup>.

Belgium's determination of GES under the MSFD was done at a fairly high-level. In particular, the definition of GES proposed by Belgium for "marine litter" was considered inadequate<sup>98</sup>.

It is therefore too early to say whether Belgian waters are in a good state as there were weaknesses in identifying what "a good environmental status" is in the first place.

Belgium also established a monitoring programme of its marine waters in 2014. However it seems that its monitoring programmes for descriptors apart from contaminants, contaminants in seafood and marine litter need further refinement and development to be considered appropriate. In addition, part of the monitoring programme will not be fully operational before 2018 for a few of the descriptors (marine litter, underwater noise, seabed and mammals)<sup>99</sup>.

Belgian marine protected areas covered 1272.9 square kilometres of its marine waters in the Greater North Sea including the Kattegat and the English Channel<sup>100</sup>.

In its reports on the implementation of the MSFD<sup>101</sup>, the Commission provided guidance to assist Belgium.

### Suggested action

- Continue to improve the definitions of GES, including through regional cooperation by using the work of the relevant Regional Sea Convention.
- Identify and address knowledge gaps;
- Ensure that all of its monitoring programme is implemented without delay and is appropriate to monitor progress towards its GES;
- Continue to integrate existing monitoring programmes required under other EU legislation and to implement

joint monitoring programmes developed at (sub)regional level, for instance by the Regional Sea Convention (OSPAR).

- Enhance comparability and consistency of monitoring methods within the Belgian marine region.
- Further develop approaches assessing (and quantifying) impacts from the main pressures in order to lead to improved and more conclusive assessment results for 2018 reporting.

97FBP, 2016. [Progrès vers les objectifs de développement durable de l'ONU](#)

98 Commission Staff Working Document Accompanying the Commission Report on "The first phase of implementation of the Marine Strategy Framework Directive (2008/56/EC) - The European Commission's assessment and guidance" ([SWD\(2014\) 049 final](#) and [COM\(2014\)097 final](#))[SWD\(2014\) 049 final](#) and [COM\(2014\)097 final](#))

99 . Commission Staff Working Document Accompanying the Commission Report assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3 and SWD(2017)1 final)

100 2012 Data provided by the European Environmental Agency to the European Commission – Not published

101 Commission Staff Working Document Accompanying the Commission Report on "The first phase of implementation of the Marine Strategy Framework Directive (2008/56/EC) - The European Commission's assessment and guidance" ([SWD\(2014\) 049 final](#))[SWD\(2014\) 049 final](#) &. Commission Staff Working Document Accompanying the Commission Report assessing Member States' monitoring programmes under the Marine Strategy Framework Directive (COM(2017)3 and SWD(2017)1 final)

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

#### Air quality

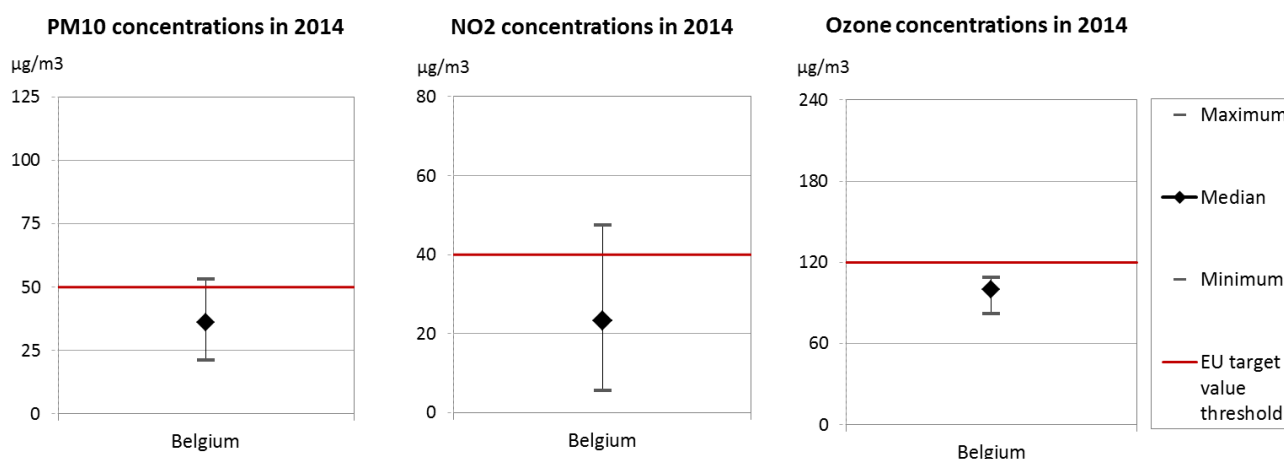
The EU Clean Air Policy and legislation require that air quality in the Union is significantly improved, moving closer to the WHO recommended levels. Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with Union air quality legislation and defining strategic targets and actions beyond 2020.

The EU has developed a comprehensive suite of air quality legislation<sup>102</sup>, which establishes health-based standards and objectives for a number of air pollutants.

nitrogen oxides, even if significant emission reductions have been recorded (-52%), emissions for this pollutant are still 7% above current ceilings. It should be noted that the exceedance of the current ceilings for nitrogen oxides is partly due to the actual driving emissions of these pollutants from diesel vehicles.

At the same time, air quality in Belgium continues to give rise to human health concerns. For the year 2013, the European Environment Agency estimated that about 10,050 premature deaths were attributable to fine particulate matter concentrations<sup>105</sup>, 210 to ozone concentration<sup>106</sup> and 2,320 to nitrogen dioxide<sup>107</sup> concentrations.<sup>108</sup> This is due also to exceedances above

**Figure 9: Attainment situation for PM10, NO2 and O3 in 2014**



**Note:** These graphs show concentrations as measured and reported by the Member State at different locations; specifically they show, (a) for PM10, the 90.4 percentile of daily mean concentration, which corresponds to the 36th highest daily mean, (b) for NO2, the annual mean concentration, and (c) for O3, the 93.2 percentile of maximum daily 8-hour mean concentration values, which corresponds to the 26th highest daily maximum. For each pollutant they depict both the lowest and highest concentration reported, as well as the median values (i.e. note that 50% of the stations report lower concentrations than the respective median value, the other 50% report higher concentrations). The air quality standards as set by EU legislation are marked by the red line.

As part of this, Member States are also required to ensure that up-to-date information on ambient concentrations of different air pollutants is routinely made available to the public. In addition, the National Emission Ceilings Directive provides for emission reductions at national level that should be achieved for main pollutants.

The emission of several air pollutants has decreased significantly in Belgium<sup>103</sup>. Reductions between 1990 and 2014 for sulphur oxides (-88%), ammonia (-44%), as well as volatile organic compounds (-63%) ensure air emissions for these pollutants are within the currently applicable national emission ceilings<sup>104</sup>. Regarding

[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>105</sup> Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 (PM2.5) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many human sources, including combustion.

<sup>106</sup> Low level ozone is produced by photochemical action on pollution and it is also a greenhouse gas.

<sup>107</sup> NOx is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NOx is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO2).

<sup>108</sup> European Environment Agency, 2016. [Air Quality in Europe – 2016 Report](#). (Table 10.2, p.60, please see details in this report as regards the underpinning methodology). The newspaper *Le Soir* noted (30.04-01.05.2016) that the deaths from NO2 of 2300 per year were almost four times the number from fatal road accidents.

<sup>102</sup> European Commission, 2016. [Air Quality Standards](#)

<sup>103</sup> See [EIONET Central Data Repository](#) and [Air pollutant emissions data viewer \(NEC Directive\)](#)

<sup>104</sup> The current national emission ceilings apply since 2010 ([Directive](#)

the EU air quality standards such as shown in Figure 9<sup>109</sup>.

For the year 2015, exceedances of binding limit values were reported for nitrogen dioxide (NO<sub>2</sub>) in two air quality zones (Antwerp and Brussels). Furthermore, in 2015 for several air quality zones the long-term objectives regarding ozone concentration are not being met.

The persistent breaches of these limit values (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 covering all the Member States concerned, including Belgium since these breaches have severe negative effects on health and environment. The aim is that adequate measures are put in place to bring all zones into compliance as soon as possible.

In the air quality zone of Engis, where PM<sub>10</sub> limit values were not complied with up to 2014 included, a working group has been set up in 2015 (bringing together authorities, main emitting plants and citizens) with the objective to reduce the impact of the main industrial activities on the ambient air quality, especially on the particulate matter concentration (PM<sub>10</sub>).

It has been estimated that the health-related external costs from air pollution in Belgium are above EUR 8 billion/year (income adjusted, 2010), which include not only the intrinsic value of living a full health life but also direct costs to the economy. These direct economic costs relate to 2.5 million workdays lost each year due to sickness related to air pollution, with associated costs for employers of EUR 401 million/year (income adjusted, 2010), for healthcare of above EUR 32 million/year (income adjusted, 2010), and for agriculture (crop losses) of EUR 37 million/year (2010)<sup>110</sup>.

#### Suggested action

- Maintain downward emissions trends of air pollutants in order to achieve full compliance with currently applicable national emission ceilings and air quality limit values - and reduce adverse air pollution impacts on health, environment and economy.
- Reduce nitrogen oxide (NO<sub>x</sub>) emissions to comply with currently applicable national emission ceilings<sup>111</sup> and/or to reduce nitrogen dioxide (NO<sub>2</sub>) (and ozone concentrations), inter alia, by reducing transport related emissions - in particular in urban areas.

- Reduce PM<sub>10</sub> emission and concentration, inter alia, by reducing emissions related to energy and heat generation using solid fuels, to transport and to agriculture.

#### Noise

The Environmental Noise Directive provides for a common approach for the avoidance, prevention and reduction of harmful effects due to exposure to environmental noise.

Excessive noise is one of the main causes of health issues<sup>112</sup>. To alleviate this, the EU *acquis* sets out several requirements, including assessing the exposure to environmental noise through noise mapping, ensuring that information on environmental noise and its effects is made available to the public, and adopting action plans with a view to preventing and reducing environmental noise where necessary and to preserving the acoustic environment quality where it is good.

Belgium's implementation of the Environmental Noise Directive<sup>113</sup> is significantly delayed. The noise mapping for the most recent reporting round, for the reference year 2011, has only been completed for Flanders. The noise mapping for Brussels and the Walloon region has not been fully completed yet. With regard to action plans for noise management for the current period, these have been adopted for some agglomerations and part of Brussels Airport but many are still missing.

#### Suggested action

- Complete missing noise action plans and maps

#### Water quality and management

The EU water policy and legislation require that the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters) is significantly reduced to achieve, maintain or enhance good status of water bodies, as defined by the Water Framework Directive; that citizens throughout the Union benefit from high standards for safe drinking and bathing water; and that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

SDG 6 encourages countries to ensure availability and sustainable management of water and sanitation for all.

109 Based on European Environment Agency, 2016. [Air Quality in Europe – 2016 Report](#). (Figures 4.1, 5.1 and 6.1)

110 All figures in this paragraph are based on the [Impact Assessment](#) for the European Commission Integrated Clean Air Package (2013)

111 Under the provisions of the revised National Emission Ceilings Directive, Member States now may apply for emission inventory adjustments. Pending evaluation of any adjustment application, Member States should keep emissions under close control with a view to further reductions.

112 WHO/JRC, 2011, Burden of disease from environmental noise, Fritsch, L., Brown, A.L., Kim, R., Schwela, D., Kephelopoulou, S. (eds), [World Health Organization, Regional Office for Europe](#), Copenhagen, Denmark

113 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.

The main overall objective of EU water policy and legislation is to ensure access to good quality water in sufficient quantity for all Europeans. The EU water *acquis*<sup>114</sup> seeks to ensure good status of all water bodies across Europe by addressing pollution sources (from e.g. agriculture, urban areas and industrial activities), physical and hydrological modifications to water bodies) and the management of risks of flooding.

River Basin Management Plans (RBMPs) are a requirement of the Water Framework Directive and a means of achieving the protection, improvement and sustainable use of the water environment across Europe. This includes surface freshwaters such as lakes and rivers, groundwater, estuaries and coastal waters up to one nautical mile.

Belgium has provided information to the Commission from its second generation of RBMPs. The 2nd RBMP's have been approved by Flanders on 18.12.15 and by Wallonia on 28.04.16. However, as the Commission has not yet been able to validate this information for all Member States it is not reported here. Plans are still missing for the Brussels Region and Belgian coastal waters.

In its first generation of RBMPs under the Water Framework Directive Belgium reported the status of 534 rivers, 18 lakes, 6 transitional, 2 coastal and 80 groundwater bodies. Only 38% of natural surface water bodies achieve a good or better ecological status<sup>115</sup> and none of the heavily modified or artificial water bodies achieved a good or high ecological potential. Furthermore, 50% of surface water bodies (while the status of 29% is unknown), 14% of heavily modified and artificial water bodies<sup>116</sup> (45% unknown) and 45.0% of groundwater bodies achieved good chemical status<sup>117</sup>. It is estimated that 81% of groundwater bodies are in good quantitative status<sup>118</sup>.

The main pressure on the Belgian surface waters is

diffuse pollution that affects 72% of water bodies<sup>119</sup>. Flow regulation and morphological alterations affect 47% followed by point sources of pollution that affect 44% of water bodies. There are some regional differences, e.g. diffuse sources of pollution affect all water bodies in the Flemish Scheldt river basin district but only 43% in the Walloon Meuse river basin district.

The Belgian RBMPs have certain deficiencies, such as on coordination between the regions. The Belgian RBMPs have certain deficiencies as in particular the methods for status assessment are not fully developed<sup>120</sup>. A number of exemptions were applied. The planned measures are expected to result in improvement of ecological and chemical status of surface water bodies by 15% and 21%, respectively. The measures should also bring improvement of ecological potential of artificial and heavily modified water bodies by 8% and chemical status by 3%. The chemical status of groundwater is expected to improve by 3% and quantitative status by 1%.

Belgium makes intensive use of its available resources, which is partly due to the high input of cooling water for electricity production; this water is returned afterwards to the rivers.

As regards drinking water, Belgium reaches very high compliance rates of 99-100 % for the microbiological, chemical and indicator parameters laid down in the Drinking Water Directive<sup>121</sup>.

As shown in Figure 10, in 2015, in Belgium out of 113 bathing waters, 79.6% were of excellent quality, 14.2% of good quality and 3.5% of sufficient quality. One bathing water was of poor quality or non-compliant while it was not possible to assess the remaining two bathing waters<sup>122</sup>.

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

115 Good ecological status is defined in the Water Framework Directive, referring to the quality of the biological community, the hydrological characteristics and the chemical characteristics.

116 Many European river basins and waters have been altered by human activities, such as land drainage, flood protection and building of dams to create reservoirs.

117 Good chemical status is defined in the Water Framework Directive referring to compliance with all the quality standards established for chemical substances at European level.

118 For groundwater, a precautionary approach has been taken that comprises a prohibition on direct discharges to groundwater, and a requirement to monitor groundwater bodies.

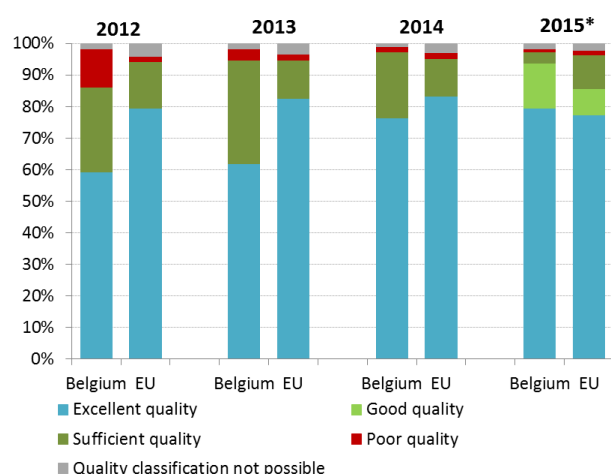
119 Diffuse pollution comes from widespread activities with no one discrete source, e.g. acid rain, pesticides, urban run-off, agricultural nutrients, etc.

120 More information on the implementation status and more specific recommendations can be found at European Commission, [Water Framework Directive Implementation Reports](#)

121 Commission's [Synthesis Report on the Quality of Drinking Water in the Union examining Member States' reports for the 2011-2013 period](#), foreseen under Article 13(5) of Directive 98/83/EC; COM(2016)666

122 European Environment Agency, 2016. [European bathing water quality in 2015](#), p. 26



**Figure 10: Bathing water quality 2012 – 2015<sup>123</sup>**

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

Belgium has encountered difficulties with the timely implementation of the Urban Waste Water Treatment Directive. Although the large cities now comply, concerns continue for small agglomerations in the Walloon region. Overall in Belgium, 98% of the waste water is collected, and 97.3% of the load collected is subject to secondary treatment. Finally, 82% of the waste water load collected is subject to more stringent treatment. The estimated investment needed to ensure adequate treatment of the remaining agglomerations is EUR 73 million<sup>124</sup>.

The implementation of the Nitrates Directive is done at regional level. The challenges relating to the agricultural use of nutrients are present on the whole Belgian territory, except in the Brussels-Capital Region where conventional agricultural activities are rather marginal.

Although improvement has been made, agricultural pressures on water in Flanders remains high with eutrophication affecting most surface waters. In Flanders, intensive animal rearing (poultry, pigs and cows) has resulted in increasing agricultural pressures on water. Therefore, Flanders has decided to apply the measures of its Action Programme to all the territory, extended with additional measures in focus areas where water quality monitoring shows a lack of sufficient improvement. Flanders benefits from derogation in the context of the Nitrates Directive<sup>125</sup>, relating to the

maximum amount of nitrogen from livestock manure that can be applied on land.



In Wallonia, the agricultural pressures slightly decreased in the recent years, as both manure use and mineral fertilizers use decreased. However water quality is still a challenge in some areas of the region. Around 76% of the total land area has been designated a Nitrate Vulnerable Zone (NVZ). Concerns subsist as to the sufficiency of the Nitrates Action Programme in further lowering harmful concentrations in water.

Between 2002 and 2013 10 floods were recorded<sup>126</sup>; Flood protection is well established with most notably the SIGMA Plan II (includes a list of over 50 projects to manage flood protection and nature restoration of the Scheldt Estuary). In Flanders the LATIS tool has been developed with damages in an average year being an average of EUR 50-60 million. Detailed statistics on flooding in Belgium are available<sup>127</sup>.

### Suggested action

- Improve methods for status assessment and in particular the ecological status of surface waters. Exemptions should be better explained and justified in

<sup>123</sup> European Environment Agency, [State of bathing water country reports - Belgium](#), 2016

<sup>124</sup> European Commission, Eighth Report on the Implementation Status and the Programmes for Implementation of the Urban Waste Water Directive ([COM \(2016\)105 final](#))([COM \(2016\)105 final](#)) and Commission Staff Working Document accompanying the report ([SWD\(2016\)45 final](#))([SWD\(2016\)45 final](#)).

<sup>125</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)

<sup>126</sup> [RPA 2013](#)

<sup>127</sup> [Service Public Federal Intérieure](#), 2013

the RBMP<sup>128</sup>. Improve coordination between water management authorities of the three administrative regions.

- Ensure that the smaller agglomerations in Wallonia have adequate collection and wastewater treatment.
- Ensure that water pollution, *inter alia* by agriculture, is effectively addressed both under the Nitrates and the Water Framework Directive.

## Enhancing the sustainability of cities

The EU Policy on the urban environment encourages cities to implement policies for sustainable urban planning and design, including innovative approaches for urban public transport and mobility, sustainable buildings, energy efficiency and urban biodiversity conservation.

SDG11 aims at making cities and human settlements inclusive, safe, resilient and sustainable.

Europe is a Union of cities and towns; around 75% of the EU population are living in urban areas.<sup>129</sup> The urban environment poses particular challenges for the environment and human health, whilst also providing opportunities and efficiency gains in the use of resources.

The Member States, European institutions, cities and stakeholders have prepared a new Urban Agenda for the EU (incorporating the Smart Cities initiative) to tackle these issues in a comprehensive way, including their connections with social and economic challenges. At the heart of this Urban Agenda will be the development of twelve partnerships on the identified urban challenges, including air quality and housing<sup>130</sup>.

The European Commission will launch a new EU benchmark system in 2017.<sup>131</sup>

The EU stimulates green cities through awards and funding, such as the EU Green Capital Award aimed at cities with more than 100,000 inhabitants and the EU Green Leaf initiative aimed at cities and towns, with between 20,000 and 100,000 inhabitants.

Indeed, the Brussels-Capital Region was among the four cities shortlisted as finalists in the 2015 competition and is a member of the Green Capital Network. The URBACT programme aims to promote sustainable integrated urban development and contribute to the delivery of the Europe 2020 strategy. In the framework of the programme URBACT II, the Brussels-Capital Region has

been lead partner of an URBACT Thematic Network *Sustainable Food in Urban Communities*<sup>132</sup>, in which 9 other European cities were involved.

Belgium has allocated EUR 141.9 million or 15% of its ERDF allocation excluding technical assistance to sustainable urban development. The Operational Programme (OP) for Brussels is entirely included in this amount, while the OPs for Flanders and Wallonia contain urban axes.

Belgium is Europe's most congested country in terms of hours wasted or delays especially around Antwerp and Brussels<sup>133, 134</sup>. Road congestion generates higher fuel consumption and contributes to air pollution. In 2013, 78.5% of transport in Belgium was by private car<sup>135</sup>. In Flanders 75% of commuters still use private car<sup>136</sup>. This has led to some mobility sharing mostly in Antwerp, Gent and Leuven<sup>137</sup>. Indeed, in Flanders several initiatives are taken to support cities become more sustainable<sup>138</sup>. Gent is proposing to extend further its pedestrianized zone in 2017.

In several cases, the intention to tackle congestion announced in the Federal and Regional government agreements still needs to be turned into tangible measures, even if some measures to improve the situation were taken, such as the kilometre-charge for lorries on all Belgian roads, and the extension of the car-free zone in central Brussels, and the green COBRACE<sup>139</sup> tax regarding excessive parking lots in office buildings.

Brussels has seen a modal shift in favour of public transport and bicycling with a reduction in use of private cars. Since 2000, car possession per household slightly decreased and is estimated at 0.7 per household. 35% of Brussels households have no car. Use of the metro increased by 69% between 2000-12<sup>140</sup>. However, much passenger movement in Brussels is due to commuter traffic (56 % of the 650,000 jobs in Brussels), and 55% of this movement is by car (154, 000 cars)<sup>141</sup>. This problem is being mainly addressed by investments in the RER and cycle-RER projects around the capital, park and ride schemes, and compulsory company mobility plans.

With a strategic plan, Brussels develops a specific approach to optimize freight traffic and reduce

128 The full set of recommendations in relation to the WFD are [here](#).

129 European Environment Agency, [Urban environment](#)

130 <http://urbanagendaforthe.eu/>

131 The Commission is developing an [Urban Benchmarking and Monitoring \('UBaM'\) tool](#) to be launched in 2017. Best practices emerge and these will be better disseminated via the app featuring the UBaM tool, and increasingly via e.g. EUROCITIES, ICLEI, CEMR, Committee of the Regions, Covenant of Mayors and others.

132 BCR, [URBACT network](#), September 2015

133 INRIX, 2015. [Key Findings: INRIX 2015 Traffic Scoreboard](#)

134 Christidis, P., Ibáñez Rivas, J.N., 2012. Measuring road congestion, JRC technical notes, EC JRC-IPTS,

135 FBP, 2016. [Progrès vers les objectifs de développement durable de l'ONU](#)

136 European Commission, [OP Flanders ERDF 2014-20](#), p.5-6

137 Flemish government, [Autodelen](#)

138 Stadsontwikkelingsprojecten; duurzaamheidsmeter; natuur in je buurt

139 Code Bruxellois de l'Air, du Climat et de la Maîtrise de l'Energie

140 BCR, [Mobilité et transports](#)

141 European Commission, [ERDF OP Brussels 2014-20](#), p.13

emissions. Bel RTL mentioned that according to the Belgian Interregional Environment Agency (IRCEL), the number of soot particles in the air emitted by diesel engines had halved after the car-free day in Brussels on 18.09.16<sup>142</sup>. The Trilogiport in Liege linked with the Albert Canal to Antwerp has brought environmental benefits.



Regarding urban green space, the Flemish ERDF OP foresees development of green urban infrastructure<sup>143</sup>. Antwerp has the least urban green areas in Flanders<sup>144</sup>. Actions are being taken to remedy this situation with, for example, the development of Park Spoor Noord in Antwerp co-financed by the ERDF<sup>145</sup>. The Antwerp Port Authority has an objective for further economic development, achieving conservation objectives for species and habitats at the same time. Brussels itself possess large areas of green space, albeit concentrated in the south-east of the city, with little in the city centre. However, in application of the Brussels Nature Plan 2016-20, several projects that are using natural solutions for enhancing the urban environment are being implemented or under preparation, especially in the most dense areas of the city.

A consequence of energy use and traffic is on airborne particulate matter and nitrogen oxides. In Brussels between November 2009 and the end of March 2013, the annual limit values for PM10 have been exceeded every year<sup>146</sup>. Whilst there have been improvements in PM levels in Brussels (compliance since 2014), NO2 however is a cause for concern. Since June 2016, the Brussels Region has had an Air-Climate-Energy Plan<sup>147</sup> which addresses NO2 and PM, and greenhouse gases emissions (but also climate change adaptation). This plan defines 64 measures in all related sectors (building, transport, economy, etc.). One of the most important measures of the plan, regarding air quality is the

implementation of a low emission zone on the territory of Brussels-Capital Region as from 2018. It will help the Region to reach the EU NOx standards. Flanders has three plans, one for the whole territory, as well as more specific plans for the harbour and city of Antwerp and the Ghent region. The Walloon Region has its *Plan Air-Climat-Energie* 2016-22. In both Flanders and Wallonia steps are being taken in certain cities (e.g. Antwerp) for introducing low emission zones.

In the Brussels region, more than 137,000 tonnes of municipal waste were collected in view of reuse or recycling in 2014 at a rate of 40%<sup>148</sup>. The EUR 5 million ERDF supported Ecopôle project in Brussels has targeted the creation of a social economy centre in the area of waste recovery<sup>149</sup>.

There have been several innovative projects to improve sustainability of cities. The Flemish Inter-Municipal Company for Water Supply (TMVW) on behalf of Gent reoriented its supplier's configuration and intake patterns. Furthermore, the climate adaptation plan 2011-13 includes actions to reduce water supply such as the application of the water hierarchy in public areas, use of alternative grey water systems, and collecting rainwater<sup>150</sup>. Antwerp is preventing flooding due to heavy rain by measures to construct buffer basins and clearing water courses, such as the Strategic Plan for Water Balance in the port area. The city also implemented a Green Building Code with green roofs, rain wells and segregated systems<sup>151</sup>.

Regarding wastewater treatment, Brussels for many years did not have adequate wastewater treatment facilities. This is now financed with an European Investment Bank (EIB) loan<sup>152</sup>.

The ERDF co-financed Brussels Greenbizz project, an "eco-friendly business incubator" aiming to support the circular economy, the renovated Brussels abattoir including a pilot project on urban agriculture with a rooftop vegetable garden and the Charleroi Urban Distribution Centre where goods can be dropped off by heavy vehicles before being redistributed by light electric or less polluting vehicles, have all been shortlisted as a REGIOSTAR 2016 finalists<sup>153</sup>.

Regarding sustainable food, the government of the Brussels-Capital Regional adopted a strategy entitled "Good food, towards a more sustainable food system in

142 Bel RTL: "La présence dans l'air de particules de suie a diminué ..." info: Journal parlé 13h, 19.09.16

143 European Commission, [OP Flanders ERDF 2014-20](#), p.94

144 Flemish government, [Bodembezetting naar functie](#)

145 Vlaamse overheid, [Bodembezetting naar functie](#)

146 BCR, [Occurrence des pics de pollution hivernaux en Région bruxelloise](#)

147 BCR, [Plan régional Air, Climat, Energie](#), June 2016.

148 BCR 2016, [Etat de l'environnement rapport](#)

149 European Commission, [European Green Capital Good practice report 2014](#), p.23

150 European Commission, [European Green Capital Good practice report 2014](#), p.24

151 European Commission, [European Green Capital Good practice report 2014](#), p.24

152 EIB, 2014. [SBGE – Brussels South waste water treatment plant](#)

153 European Commission, [2016 REGIOSTARS](#) finalists



Brussels Capital Region"<sup>154</sup> in December 2015. The main priorities consist in developing local food production while respecting the environment and encouraging the innovation; raising awareness of citizens; reducing food waste, and; developing actions while taking into account social and multicultural specificities of the Brussels-Capital Region.

The project *Boeren Brussel Paysans*<sup>155</sup>, supported by the ERDF, aims at encouraging the transition of the Brussels-Capital Region towards a more sustainable food system by providing production, transformation and distribution spaces and infrastructure for fruit and vegetables grown on-site.

## International agreements

The EU Treaties require that the Union policy on the environment promotes measures at the international level to deal with regional or worldwide environmental problems.

Most environmental problems have a transboundary nature and often a global scope and they can only be addressed effectively through international co-operation. International environmental agreements concluded by the Union are binding upon the institutions of the Union and on its Member States. This requires the EU and the Member States to sign, ratify and effectively implement all relevant multilateral environmental agreements (MEAs) in a timely manner. This will also be an important contribution towards the achievement of the SDGs, which Member States committed to in 2015 and include many commitments contained already in legally binding agreements.

The fact that some Member States did not sign and/or ratify a number of MEAs compromises environmental implementation, including within the Union, as well as the Union's credibility in related negotiations and international meetings where supporting the participation of third countries to such agreements is an established EU policy objective. In agreements where voting takes place it has a direct impact on the number of votes to be cast by the EU.

Currently, Belgium has signed but not yet ratified the Protocol on Strategic Environmental Assessment to the Espoo Convention.

<sup>154</sup> BCR, Stratégie [Good Food « Vers un système alimentaire plus durable en Région de Bruxelles-Capitale](#)

<sup>155</sup> [Boeren Brussel Paysans](#)

## Part II: Enabling Framework: Implementation Tools

### 4. Market based instruments and investment

#### Green taxation and environmentally harmful subsidies

The Circular Economy Action Plan encourages the use of financial incentives and economic instruments, such as taxation to ensure that product prices better reflect environmental costs. The phasing out of environmentally harmful subsidies is monitored in the context of the European Semester and in national reform programmes submitted by Member States.

Taxing pollution and resource use can generate increased revenue and brings important social and environmental benefits.

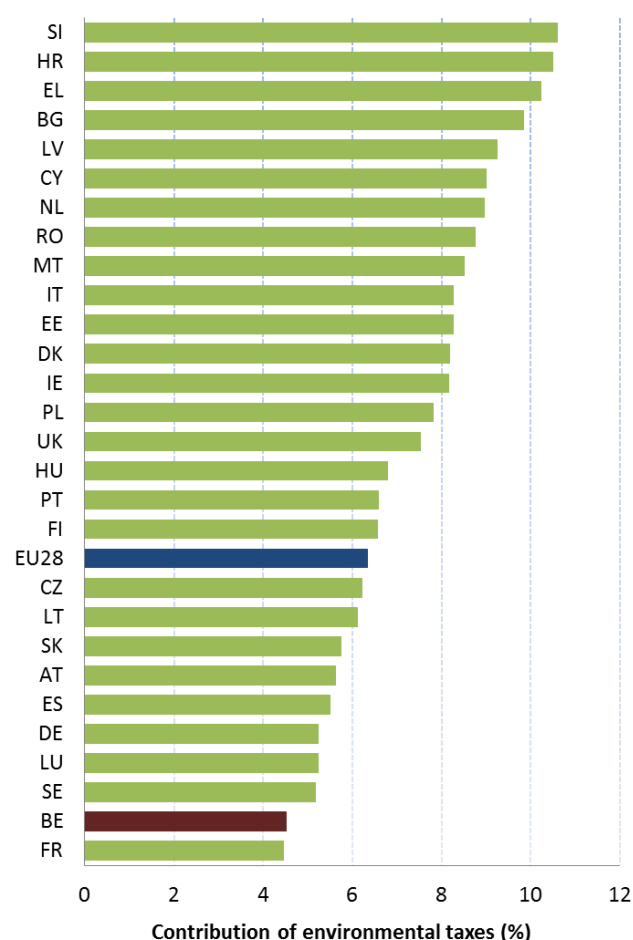
Belgium's revenues from environmentally related taxes are among the lowest in the EU. Environmental taxes amounted to 2.05% of GDP in 2014 against an EU average of 2.46% and energy taxes to 1.23% of GDP against an EU average of 1.88%.<sup>156</sup> In the same year environmental tax revenues accounted for 4.53% of total revenues from taxes and social-security contributions (EU 28 average: 6.35%) as shown in Figure 11.

A 2016 study suggests that there is considerable potential for shifting taxes from labour to environmental taxes<sup>157</sup>. Under a good practice scenario<sup>158</sup> these could generate an additional EUR 3.45 billion by 2018, rising to EUR 6.96 billion by 2030 (both in real 2015 terms). This is equivalent to an increase by 0.8% and 1.35% of GDP in 2018 and 2030, respectively. The largest potential source of revenue would come from increases in vehicle taxation. The suggested increase of vehicle taxation could account for EUR 3.25 billion of additional revenue by 2030 (real 2015 terms), equivalent to 0.63% of GDP. The next largest contribution could come from proposed amendments to the taxes on transport fuels. This could account for EUR 1.36 billion of additional revenue in 2030 (real 2015 terms), equivalent to 0.27% of GDP. In 2015 the Flemish government conducted a study showing a so

called 'double dividend' as a result of greening of taxes and shifting the tax burden away from labour: environmental gains were made in combination with economic gains<sup>159</sup>.

The Brussels-Capital Region took some measures to adapt its fiscal policy as a tool for regional sustainable development of circular economy (e.g. fund to promote business model of circular economy for enterprises target). It plans to move further in that direction.

**Figure 11: Environmental tax revenues percentage of total revenues from taxes and social contributions (excluding imputed social contributions) in 2014<sup>160</sup>**



Shifting taxation away from labour towards taxes less harmful to growth remains a key challenge in Belgium, and has been recommended as a country specific recommendation (CSR) in 2012, 2013, 2014 and 2015 in the context of the European Semester. The tax-shift

<sup>156</sup> Eurostat, [Environmental tax revenues](#), accessed June 2016

<sup>157</sup> Eunomia Research and Consulting, IEEP, Aarhus University, ENT, 2016. [Study on Assessing the Environmental Fiscal Reform Potential for the EU28](#). N.B. National governments are responsible for setting tax rates within the EU Single Market rules and this report is not suggesting concrete changes as to the level of environmental taxation. It merely presents the findings of the 2016 study by Eunomia *et al* on the potential benefits various environmental taxes could bring. It is then for the national authorities to assess this study and their concrete impacts in the national context. A first step in this respect, already done by a number of Member States, is to set up expert groups to assess these and make specific proposals.

<sup>158</sup> The good practice scenario means benchmarking to a successful taxation practice in another Member State.

<sup>159</sup> Flemish Government, [study](#)

<sup>160</sup> Eurostat, [Environmental tax revenues](#), accessed June 2016

enacted by Belgium in 2015 has only partially exploited the opportunities for environmental tax reform and removal of environmentally-harmful subsidies (EHS). The most important positive changes have been the introduction of a kilometre-charge for lorries in all Belgian regions and changes to vehicle circulation and road taxes in Flanders. All three regions have measures in place or planned to dissuade the purchase of the most polluting cars. Flanders has ordered a study to examine the possibility of introducing a kilometre-charge for passenger cars.

Two EHS stand out as being substantial in terms of their level and significance in their environmental impacts. They are the "diesel differential" (difference in the price of diesel versus petrol) and subsidies through the income or corporation tax treatment of company cars. The diesel differential in Belgium is around 70% (as a benchmark the UK has a figure of 100% meaning the same level of taxation for petrol and diesel cars, i.e. no diesel differential)<sup>161</sup>. Excise duty on diesel was increased from November 2015<sup>162</sup>. The intention of the government is to increase excises on diesel and reduce those on petrol between 2016 and 2018 achieving parity<sup>163</sup>.

Despite past measures to further align the tax base for company cars to CO2 emissions, the private use of these vehicles continues to be heavily subsidized. Based on country tax systems and different benchmark estimates, the favourable tax treatment represents almost EUR 3.75 billion in terms of revenue foregone. Of all OECD countries the total annual subsidy per car is highest in Belgium, at EUR 2,763 per year per car<sup>164</sup>. The OECD has picked up on this weakness in its November 2015 economic forecast for Belgium<sup>165</sup> as impeding further progress to tackle congestion, air pollution and greenhouse gas emissions. A recent report indicates that in Belgium company cars are driven an extra 6,000 km a year and that the loss of welfare is EUR 905 million, representing 0.23% of GNP<sup>166</sup>. Recently, the Federal Government has decided on a number of changes to the company car system, which should enter into force by April 2017. The new framework will allow employees whose pay package includes a company car to opt (after

agreement of their employer) for a mobility budget or an additional net pay instead. The environmental gains are also uncertain, but the government has expressed the will to see a substantial reduction in the number of salary cars. Related to this, the government has also decided for less favourable tax deductions for employers of tank cards (up to 250 euros per card).

In March 2016, the Federal Minister for Energy, the Environment and Sustainable development announced the launch of a national debate on the role carbon taxation can play in promoting emission reductions and redirecting financial flows towards a low-carbon climate-resilient society, as well as on the flanking measures that could be implemented to accompany a carbon tax. This initiative should run through 2016 and 2017 and aims at delivering concrete policy recommendations.

## Green Public Procurement

The EU green public procurement policies encourage Member States to take further steps to reach the target of applying green procurement criteria to at least 50% of public tenders.

Green Public Procurement (GPP) is a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life-cycle when compared to goods, services and works with the same primary function that would otherwise be procured.

The purchasing power of public procurement equals to about EUR 1.8 trillion in the EU (approximately 14% of GDP). A substantial part of this money is spent on sectors with high environmental impact such as construction or transport, so GPP can help to significantly lower the impact of public spending and foster sustainable innovative businesses. The Commission has proposed EU GPP criteria<sup>167</sup>.

In Belgium, since 2014 a detailed worked out strategy on sustainable public procurement (SPP) for the federal departments has been established, combining green and social aspects. Further specific regulations in the context of SPP exist for wood (2005), vehicles (2009 & 2010) and energy efficiency (2013). Specific policy documents exist in the three Belgian regions<sup>168</sup> and at federal level.

GPP criteria are developed at the Federal and Flemish level through initiatives by several departments. In most of the cases the EU GPP criteria<sup>169</sup> are the start of the

161 Update by European Commission, 2015 based on Harding M., 2014. [The Diesel Differential: Differences in the Tax Treatment of Gasoline and Diesel for Road Use](#). OECD Taxation Working Papers, No. 21; European Environment Agency 2016, [Environmental taxation and EU environmental policies](#), Table 4.3 on p.24

162 [Programme National de Réforme](#), April 2016, p.7

163 European Environment Agency 2016, [Environmental taxation and EU environmental policies](#), p.27

164 Harding M. 2014. [Personal Tax Treatment of Company Cars and Commuting Expenses – Estimating the Fiscal and Environmental Costs](#). OECD Taxation Working Papers, No. 20, p.28

165 OECD, 2016. Belgium – [Economic forecast summary \(June 2016\)](#)

166 Bureau fédéral du Plan, 2016. [L'avantage fiscal sur les voitures de société influence significativement les comportements de mobilité, avec des coûts sociétaux considérables](#)

167 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.

168 European Commission, 2015. [Documentation on National GPP Action Plans](#)

169 In the Communication "Public procurement for a better

discussion at national level with the stakeholders. Federal GPP/sustainable criteria have been developed for about 70 product- and service groups.<sup>170</sup>

In Flanders there is a target of reaching 100% SPP at the level of the Flemish Region by 2020. The region has furthermore established a target to have procurement of 100% green electricity for the regions' buildings and also targets for the environmental performance of vehicles including electric/low emission cars.

In the Brussels Capital Region targets are defined every third year. Targets by 2017 are: 20% of financial volume of public procurements, and 20% of the (number of) public procurement with environmental clauses.<sup>171</sup> For vehicles, Brussels has had a ban on diesel (cars and MPV), and targets for procurement of electric cars (minimum 15% for the local and 25% for the regional authorities) since 2015).

According to a 2011 survey, Belgian authorities included at least one of the EU core green criteria in 81% of the GPP-relevant contracts, and 55% of the contracts included all the relevant EU core green criteria. Belgium was the best performer for both indicators<sup>172</sup>.

### Investments: the contribution of EU funds

European Structural and Investment Funds Regulations provide that Member States promote environment and climate objectives in their funding strategies and programmes for economic, social and territorial cohesion, rural development and maritime policy, and reinforce the capacity of implementing bodies to deliver cost-effective and sustainable investments in these areas.

Making good use of the European Structural and Investment Funds (ESIF)<sup>173</sup> is essential to achieve the environmental goals and integrate these into other policy areas. Other instruments such as the Horizon 2020, the LIFE programme and the EFSI<sup>174</sup> may also support implementation and spread of best practice.

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.

170 European Commission, 2015. [Documentation on National GPP Action Plans](#)

171 European Commission, 2015. [Documentation on National GPP Action Plans](#)

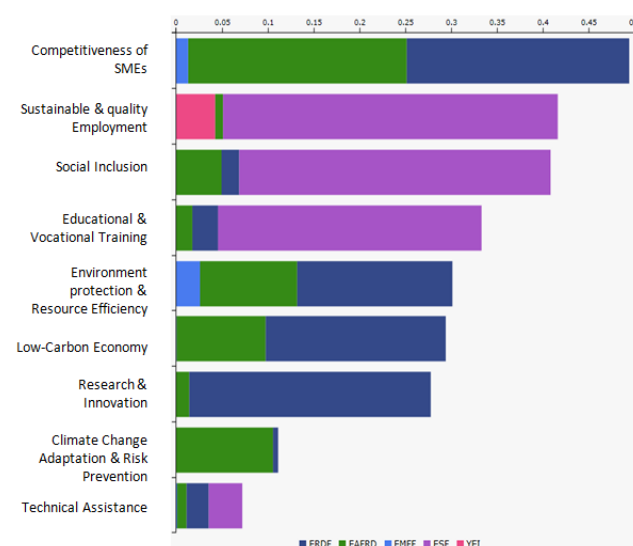
172 CEPS, 2012. [Monitoring the Uptake of GPP in the EU27](#)

173 ESIF comprises five funds – the European Regional Development Funds (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 together form the Cohesion Policy funds.

174 European Investment Bank, 2016 [European Fund for Strategic Investments](#)

Belgium receives just over EUR 2 billion in total Cohesion Policy<sup>175</sup> funding over 2014-20 period (current prices, including European Territorial Cooperation funding and the allocation for the Youth Employment Initiative, see Figure 12). Belgium also receives EUR 648 million for rural development and EUR 42 million for fisheries and the maritime sector. Cohesion policy is fully devolved to the Belgian regions. Part of Wallonia has transitional status and therefore receives a higher intensity of EU co-financing compared to the rest of the country. Environmental infrastructure cannot be financed from the ERDF in Belgium as it is a relatively rich country; however, EIB loans can be used for this purpose. National public funds in Belgium for economic development are EUR 3.3 billion.

**Figure 12: EU Structural and Investment Funds 2014-2020: Budget Belgium by theme, EUR billion**<sup>176</sup>



As mentioned earlier in this Country Report, Belgium faces environmental pressures in rural areas from on air, biodiversity and soil. The contribution of the two rural programmes is very diverse to cover environmental pressures. There is a high ambition level for Natura 2000 in the agri-environment and climate measures. However in Belgium, measures to reduce nitrates and phosphate need to be reinforced to tackle Water Framework Directive issues.

Belgium has three ERDF OPs and four European Social Fund (ESF) OPs. There are also two European Agricultural Fund for Rural Development (EAFRD) and one European Maritime and Fisheries Fund (EMFF) OPs, making a total of 10 OPs for the ESIF.

With regard to estimation for specific environmental

175 [European Regional Development Fund & European Social Fund](#)

176 European Commission, [European Structural and Investment Funds Data By Country](#) European Commission, [European Structural and Investment Funds Data By Country](#): <https://cohesiondata.ec.europa.eu/countries/BE#>

related categories of expenditure, the ERDF allocation is EUR 169 million which is over 17.7% of the total ERDF allocation.

For Wallonia, the ERDF will be used to encourage an industrial transition towards green growth, eco-innovation, management of environmental performance, urban environmental improvement, reducing air and noise pollution, rehabilitation of contaminated land and reduction in soil sealing.

For Flanders, the ERDF will be used for reducing air and noise pollution, rehabilitation of contaminated land and the re-use of old landfills (so called 'urban mining'). In addition there is horizontal objection for the better use of space by stimulating multi-functional use and rehabilitation of underused land. Eco-innovation is covered including circular economy.

For the Brussels Region, the ERDF is to be used for supporting the development of a circular economy and a rational use of resources, encouraging the development of renewable energy, rehabilitating contaminated land, and improving the energy performance of buildings.

## 5. Effective governance and knowledge

SDG 16 aims at providing access to justice and building effective, accountable and inclusive institutions at all levels. SDG 17 aims at better implementation, improving policy coordination and policy coherence, stimulating science, technology and innovation, establishing partnerships and developing measurements of progress.

Effective governance of EU environmental legislation and policies requires having an appropriate institutional framework, policy coherence and coordination, applying legal and non-legal instruments, engaging with non-governmental stakeholders, and having adequate levels of knowledge and skills<sup>177</sup>. Successful implementation depends, to a large extent, on central, regional and local government fulfilling key legislative and administrative tasks, notably adoption of sound implementing legislation, co-ordinated action to meet environmental objectives and correct decision-making on matters such as industrial permits. Beyond fulfilment of these tasks, government must intervene to ensure day-to-day compliance by economic operators, utilities and individuals ("compliance assurance"). Civil society also has a role to play, including through legal action. To underpin the roles of all actors, it is crucial to collect and share knowledge and evidence on the state of the environment and on environmental pressures, drivers and impacts.

Equally, effective governance of EU environmental legislation and policies benefits from a dialogue within Member States and between Member States and the Commission on whether the current EU environmental legislation is fit for purpose. Legislation can only be properly implemented when it takes into account experiences at Member State level with putting EU commitments into effect. The Make it Work initiative, a Member State driven project, established in 2014, organizes a discussion on how the clarity, coherence and structure of EU environmental legislation can be improved, without lowering existing protection standards.

### Effective governance within federal, regional and local government

Those involved in implementing environment legislation at Union, national, regional and local levels need to be equipped with the knowledge, tools and capacity to improve the delivery of benefits from that legislation, and the governance of the enforcement process.

#### Capacity to implement rules

<sup>177</sup> The Commission has work ongoing to improve the country-specific knowledge about quality and functioning of the administrative systems of Member States.

It is crucial that federal, regional and local administrations have the necessary capacities and skills and training to carry out their own tasks and co-operate and co-ordinate effectively with each other, within a system of multi-level governance.

Being a federal country, environment to a large extent is the responsibility of the three regions (Flemish, Walloon and Brussels-Capital). The federal government only has specific powers for environmental matters in marine areas under Belgian jurisdiction, military domains and railway embankments. The federal state remains responsible for all competences which have not been explicitly devolved to the Regions (the so-called "residual competences"). It also has specific environmental competences in the field of product standards, radiation protection, CITES<sup>178</sup> (trade in non-indigenous species); other competences related to the environment (development cooperation, finance, economy, etc.), as well as action levers (public procurements, taxation, energy production and transmission, railways, etc.)<sup>179</sup>.

In order to prepare the coherent participation of Belgium in processes at EU and international level the federal authority and the Regions work intensively together within the Coordination Committee for International Environment Policy (CCIEP-CCPIE-CCIM)<sup>180</sup>, which is managed by the federal administration.

The federal state being liable for Belgium respecting its obligations under European and international law, has the power to substitute itself for the regions if those fail to comply with these obligations under international or European law<sup>181</sup>. However that possibility has exceptionally been used so far.

Federal and regional powers being exclusive by nature, and not subject to any mutual hierarchy, matters of mixed competence, i.e. relating to the competences of multiple authorities (federal and/or regional) (which is often the case in policy areas such as climate change) and for policy tools (public participation, indicators, SEA) are to a large extent also dealt with through 'Cooperation Agreements', agreed between the Federal and/or Regional Governments and subsequently enacted by federal and regional parliamentary assemblies. All four levels have an environment minister. Implementation

<sup>178</sup> CITES, 1975. [Convention on International Trade in Endangered Species of Wild Fauna and Flora](#)

<sup>179</sup> Belgian National Focal Point to the Convention on Biological Diversity, 2013. [Biodiversity 2020 – Update of Belgium's National Biodiversity Strategy](#). Royal Belgian Institute of Natural Sciences, Brussels

<sup>180</sup> Service public fédéral, 2016 [Coordination Committee for International Environmental Policy](#)

<sup>181</sup> Belgian Constitution, art. 169; Loi spéciale relative à la Sixième Réforme de l'Etat, art. 39.



measures which need a common approach or distinct but coherent actions on the different levels are discussed within and decided by the Interministerial Conference for the Environment, which meets regularly.

The environmental agenda of the three regions and the federal government is dominated by the transposition and implementation of various recent EU Directives. One reason for some implementation delays is the evolving institutional framework and the coordination burden that this brings with the regions and the federal level.



Experience with enforcing the EU *acquis* shows that Walloon and Brussels regions are relatively often asked to speed up their implementation efforts. This is maybe due to lacking administrative capacity. However, it does not mean that the environmental ambition of these regions is any less as seen in their policy statements. The European Commission noted in the 2014 European Semester country report that cooperation and coordination between different levels is key for efficient public administration and that implementing the 6<sup>th</sup> state reform is an opportunity and a challenge<sup>182</sup>.

Several measures have been presented at the different levels to simplify administrative procedures and reduce the reporting burden on businesses, particularly small ones. A regulatory impact assessment (RIA), including an 'SME test', has been made mandatory for all federal draft regulations<sup>183</sup>. The RIA also tests for regulatory impacts on sustainable development, including on air quality, biodiversity, climate change (mitigation and adaptation), mobility, energy, and natural resources<sup>184</sup>.

In some of the environmental cases where individuals or NGOs have gained access before the national courts over the past years, the Belgian judges referred several requests for preliminary rulings to the EU Court of Justice. This represented a valuable contribution to the development of EU environment law, since preliminary rulings enable the Court of Justice to give a coherent

interpretation of the EU law.

The 2013 European Quality of Government Index gives Belgium a ranking 8th out of the 28 Member States with Flanders higher placed than Brussels and Wallonia<sup>185</sup>.

### Coordination and integration

In certain areas the regions and the federal level must conclude cooperation arrangements for implementing EU Directives (Seveso, REACH, EMAS, etc.). These agreements are effective cooperation tools. The aforementioned CCIEP provides co-ordination between the four Belgian entities competent for environment since 1995 under the auspices of the Federal Environment ministry and organises also meetings with civil society and stakeholders. Coordination between the three regions is not always simple but there are also specific arrangements/structures like the Belgian Interregional Environment Agency (CELINE – IRCEL) and the Interregional Packaging Commission.

The Interministerial Conference for the Environment<sup>186</sup>, composed of regional and federal ministers whose portfolios include environment and nature, takes decisions in cases that require a joint decision. The special act of 08.08.1980 on Institutional Reform lists specific topics in its remit.

There are sustainable development strategies for each of the regions and at the federal level. The national sustainable development strategy is also being updated by the inter-ministerial conference on sustainable development (IMCSD). This inter-ministerial conference was established in 2012 and is now revitalized due to the need of a coherent approach when implementing the 2030 Agenda on Sustainable Development. It gathers relevant ministers from the federal, regional and community levels and was mandated to follow-up the implementation of the sustainable development agenda in Belgium. Technical working groups on 'public procurements', 'international policy', and of course the 'national sustainable development strategy' are set-up to prepare its decisions. The IMCSD ensures coherence and integration at vertical and horizontal levels.

With regard to the federal level, there is also an administrative structure aimed at promoting sustainable development (the Interdepartmental Commission for Sustainable Development (ICSD) grouping the sustainable development units of each administration). As regards the civil society, their representatives are grouped in the Federal Council for Sustainable Development.

The Federal Planning Bureau (FPB) publishes regularly

182 European Commission. [Belgium Country Report 2014](#), p.27

183 European Commission, 2016. [Belgium Country Report 2016](#), p.31

184 Wet van 15 december 2013 houdende diverse bepalingen inzake administratieve vereenvoudiging

185 Charron N., 2013. [European Quality of Government Index \(EQI\)](#)

186 Federal government, [Interministerial Conference for the Environment](#)



reports to evaluate the progress towards sustainable development and to examine scenarios for the future. There is also a Federal Long-term Vision on Sustainable Development<sup>187</sup>, with 55 objectives, adopted by the federal government in 2013.<sup>188</sup> The 2016 assessment<sup>189</sup> focused on measuring progress towards the set of 17 SDG goals 2000-15 on the basis of 31 indicators, some of which are mentioned earlier in this Country Report.

Furthermore, there are various environment plans: in Flanders an Environmental Policy Plan (MINA 4), in Wallonia and Brussels there are distinct Plans on Air-Climates-Energy, Waste etc. At the federal level there are plans on Biodiversity, Pesticide Reduction etc.

The transposition of the revised EIA Directive<sup>190</sup> will be an opportunity to streamline the regulatory framework on environmental assessments. The Commission encourages the streamlining of the environmental assessments because this approach reduces duplication and avoids unnecessary overlaps in environmental assessments applicable for a particular project. Moreover, streamlining helps reducing unnecessary administrative burden and accelerates decision-making, without compromising the quality of the environmental assessment procedure. The Commission has issued a guidance document in 2016<sup>191</sup> 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.

## Compliance assurance

EU law generally and specific provisions on inspections, other checks, penalties and environmental liability help lay the basis for the systems Member States need to have in place to secure compliance with EU environmental rules.

Public authorities help ensure accountability of duty-holders by monitoring and promoting compliance and by taking credible follow-up action (i.e. enforcement) when breaches occur or liabilities arise. Compliance monitoring can be done both on the initiative of authorities themselves and in response to citizen complaints. It can

involve using various kinds of checks, including inspections for permitted activities, surveillance for possible illegal activities, investigations for crimes and audits for systemic weaknesses. Similarly, there is a range of means to promote compliance, including awareness-raising campaigns, use of guidance documents and online information tools. Follow-up to breaches and liabilities can include administrative action (e.g. withdrawal of a permit), use of criminal law<sup>192</sup> and action under liability law (e.g. required remediation after damage from an accident using liability rules) and contractual law (e.g. measures to require compliance with nature conservation contracts). Taken together, all of these interventions represent "compliance assurance" as shown in Figure 13.

Best practice has moved towards a risk-based approach at strategic and operational levels in which the best mix of compliance monitoring, promotion and enforcement is directed at the most serious problems. Best practice also recognises the need for coordination and cooperation between different authorities to ensure consistency, avoid duplication of work and reduce administrative burden. Active participation in established pan-European networks of inspectors, police, prosecutors and judges, such as *IMPEL*<sup>193</sup>, *EUFJE*<sup>194</sup>, *ENPE*<sup>195</sup> and *EnviCrimeNet*<sup>196</sup> is a valuable tool for sharing experience and good practices.

**Figure 13: Environmental compliance assurance**



Currently, there exist a number of sectoral obligations on inspections and the EU directive on environmental liability (ELD)<sup>197</sup> provides a means of ensuring that the "polluter-pays principle" is applied when there are accidents and incidents that harm the environment. There is also publically available information giving insights into existing strengths and weaknesses in each

187 Loi du 5 mai 1997 relative à la coordination de la politique fédérale de développement durable

188 Arrêté royal du 18 juillet 2013 portant fixation de la vision stratégique fédérale à long terme de développement durable

189 FBP, 2016. [Progrès vers les objectifs de développement durable de l'ONU](#)

190 The transposition of Directive 2014/52/EU is due in May 2017

191 European Commission, 2016. Commission notice — [Commission guidance document on streamlining environmental assessments conducted under Article 2\(3\) of the Environmental Impact Assessment Directive \(Directive 2011/92/EU of the European Parliament and of the Council, as amended by Directive 2014/52/EU\)](#).

192 European Union, [Environmental Crime Directive 2008/99/EC](#)

193 [European Union Network for the Implementation and Enforcement of Environmental Law](#)

194 [European Union Forum of judges for the environment](#)

195 [The European Network of Prosecutors for the Environment](#)

196 [EnviCrimeNet](#)

197 European Union, [Environmental Liability Directive 2004/35/CE](#)

## Member State.

For each Member State, the following were therefore reviewed: use of risk-based compliance assurance; coordination and co-operation between authorities and participation in pan-European networks; and key aspects of implementation of the ELD based on the Commission's recently published implementation report and REFIT evaluation<sup>198</sup>.

In Belgium, several important evidence-gathering and other measures have been taken to underpin a risk-based approach to compliance assurance:

- Publication of detailed annual activities reports by the regional inspection bodies as well as annual environmental enforcement reports and priority notes on prosecution policy by the Flemish High Council of Environmental Enforcement, including a general evaluation of the regional environmental enforcement and recommendations for its improvement based on statistical data on inspections and prosecutions as well as on available resources<sup>199</sup>;
- Adoption of an annual “program of inspection”, in accordance with the Recommendation of the European Parliament and Council no. 2001/331/EC of 04/04/2001<sup>200</sup>.
- Use of protocols, model letters, electronic databases and agreements between different authorities to ensure uniform approach and coordination<sup>201</sup>;
- Establishment of central unit within the federal judicial police specialised on combating serious environmental crime<sup>202</sup>.
- Adoption of a 2016-19 National Security Plan with a specific chapter on Environment<sup>203</sup>.
- Adoption of a new legislation about the liability, inspection, prevention, identification and punishment of environmental offences by the Government of the Brussels-Capital Region in 2014, and related work to support its application including

preparation of a *vade mecum* for inspection officials, economic operators and other professionals and the general public.

Up-to-date information is lacking in relation to the following:

- The extent to which risk-based methods are used to direct compliance assurance in relation to specific problem-areas highlighted elsewhere in this Country Report, i.e. the threats to protected habitat types and species, air quality breaches, the pressures on water quality from diffuse pollution<sup>204</sup> and the deficit in urban waste-water treatment infrastructure in Wallonia.

Belgium very actively contributes to the work of IMPEL, EUFJE and ENPE.

Although the Belgian authorities have carried out training on the ELD, little use has been made of it, with only one notification of environmental damage between 2007 and 2013. As regards financial security (to pay for remediation if an operator cannot), the available information indicates that there is little or no take-up of insurance.

## Suggested action

- Improve transparency on organisation and functioning of compliance assurance system and on how significant risks are addressed in particular in Wallonia and Brussels.
- Step up efforts in the implementation of the Environmental Liability Directive (ELD) with proactive initiatives, in particular by setting up a national register of ELD incidents. It should moreover take further steps to ensure an effective system of financial security for environmental liabilities (so that operators not only have insurance cover available to them but actually take it up).

## Public participation and access to justice

The Aarhus Convention, related EU legislation on public participation and environmental impact assessment, and the case-law of the Court of Justice require that citizens and their associations should be able to participate in decision-making on projects and plans and should enjoy effective environmental access to justice.

Citizens can more effectively protect the environment if they can rely on the three "pillars" of the Convention on

198 [COM\(2016\)204 final](#) and [COM\(2016\)121 final](#) of 14.4.2016. This highlighted the need for better evidence on how the directive is used in practice; for tools to support its implementation, such as guidance, training and ELD registers; and for financial security to be available in case events or incidents generate remediation costs.

199 The reports and the priority notes are available at the [VHRM website](#) and translated into English.

200 [Article 5 & 6 of the Brussels ordinance](#)

201 See for details VHRM [Priority Note on prosecution policy for environmental law 2012](#); Faure M., and Stas A., 'The Flemish High Council of Environmental Enforcement: the role of an environmental enforcement network in a new coordinated environmental enforcement landscape within the Flemish region, 2009-2014', in Faure M., De Smedt P., & Stas A. (eds.), 2015. Environmental Enforcement Networks', EE Elgar 2015, p.490

202 Geysels F., 'Enforcement of environmental legislation by the Belgian police', *Environmental Enforcement Networks*, in Faure M., De Smedt P., & Stas A. (eds.), 2015. Environmental Enforcement Networks', EE Elgar 2015, p. 482f.

203 Belgian Police, [National Security Plan Synthesis \(en\)](#)

204 The Belgian Court of Auditors observed that the Walloon administration had not used to the full extent its power to change farmers' behaviour in relation to nitrogen management and pointed out some effectiveness issues of the environmental compliance system, including the lack of proper follow-up to detected non-compliance. Source: EUROSAI WGEA.

Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ("the Aarhus Convention"). Public participation in the administrative decision making process is an important element to ensure that the authority takes its decision on the best possible basis. The Commission intends to examine compliance with mandatory public participation requirements more systematically at a later stage.

Access to justice in environmental matters is a set of guarantees that allows citizens and their associations to challenge acts or omissions of the public administration before a court. It is a tool for decentralised implementation of EU environmental law.

For each Member State, two crucial elements for effective access to justice have been systematically reviewed: the legal standing for the public, including NGOs and the extent to which prohibitive costs represent a barrier.

The Belgian law provides for a number of judicial procedures which are available to individuals and NGOs to challenge acts and omissions of public authorities which contravene provisions of national and EU law relating to the environment. The interpretation of legal standing conditions by the courts for NGOs was now widened in accordance with the findings of the Aarhus Convention Compliance Committee (Belgium ACCC/2005/11). Henceforth, the Council of State would no longer require the organisation to have a well-defined geographical area and an objective more specific than the general interest of environmental protection to admit appeals of administrative acts with corresponding scopes. Under civil procedures the courts have reflected this development, which may matter for possible applications for interim reliefs against decisions contravening the law. This jurisprudence might reduce the serious obstacles NGOs faced in the past when they wished to challenge acts or omissions of public authorities which contravene environmental law in Belgium<sup>205</sup>.

### Suggested action

- Consolidate the standing of environmental NGOs to challenge acts or omissions of a public authority in all sectoral EU environmental laws, in full compliance with EU law as well as the Aarhus Convention, along the path opened by the Council of State.

## Access to information, knowledge and evidence

The Aarhus Convention and related EU legislation on access to information and the sharing of spatial data require that the public has access to clear information on the environment, including on how Union environmental law is being implemented.

It is of crucial importance to public authorities, the public and business that environmental information is shared in an efficient and effective way. This covers reporting by businesses and public authorities and active dissemination to the public, increasingly through electronic means.

The three regions and the federal level publish on a regular basis environmental and sustainable development reports<sup>206</sup>.

The Aarhus Convention<sup>207</sup>, the Access to Environmental Information Directive<sup>208</sup> and the INSPIRE Directive<sup>209</sup> together create a legal foundation for the sharing of environmental information between public authorities and with the public. They also represent the green part of the ongoing EU e-Government Action Plan<sup>210</sup>. The first two instruments create obligations to provide information to the public, both on request and actively. The INSPIRE Directive is a pioneering instrument for electronic data-sharing between public authorities who can vary in their data-sharing policies, e.g. on whether access to data is for free. The INSPIRE Directive sets up a geoportal which indicates the level of shared spatial data in each Member State – i.e. data related to specific locations, such as air quality monitoring data. Amongst other benefits this data-sharing instrument can facilitate the public authorities' reporting obligations.

For each Member State, the accessibility of environmental data (based on what the INSPIRE Directive envisages) as well as data-sharing policies ('open data') have been systematically reviewed.

Belgium's performance on the implementation of the INSPIRE Directive as enabling framework to actively disseminate environmental information to the public leaves room for improvement. Belgium has indicated in the 3-yearly INSPIRE implementation report<sup>211</sup> that the necessary data-sharing policies allowing access and use

205 European Commission, [2012/2013 access to justice in environmental matters 2012/2013](#)

206 [MIRA, RFE, Tableau de bord de l'environnement wallon, Etat de l'environnement Bruxellois](#)

207 UNECE, 1998. [Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters](#)

208 European Union, [Directive 2003/4/EC on public access to environmental information](#)

209 European Union, [INSPIRE Directive 2007/2/EC](#)

210 European Union, EU eGovernment Action Plan 2016-2020 - Accelerating the digital transformation of government [COM\(2016\) 179](#) final

211 European Commission, [INSPIRE reports](#)

of spatial data by national administrations, other Member States' administrations and EU institutions without procedural obstacles are not fully available or implemented. Belgium has no common model for data sharing for the different administrative levels. Efforts and progress have been made on the different levels. Most regional data has been made accessible under regional open data licenses, but the national coordination of the different data-sharing policies still remains an obstacle. Assessments of monitoring reports<sup>212</sup> issued by Belgium and the spatial information that Belgium has published on the INSPIRE geoportal<sup>213</sup> indicate that not all spatial information needed for the evaluation and implementation of EU environmental law has been made available or is accessible. The identification of the missing spatial information and the links with environmental data required to be made available under the existing reporting and monitoring regulations of EU environmental law is under way.

#### Suggested action

- Critically review the effectiveness of Belgium's data policies and amend them, taking 'best practices' into consideration.
- Identify and document all spatial data sets required for the implementation of environmental law, 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.

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212 [Inspire indicator trends](#)

213 [INSPIRE Resources Summary Report](#)