



EUROPEAN  
COMMISSION

Brussels, 31.7.2019  
SWD(2019) 132 final/2

#### CORRIGENDUM

This document corrects document SWD(2019) 132 final of 04.04.2019  
Footnotes 6 and 37 modified  
The text shall read as follows:

### COMMISSION STAFF WORKING DOCUMENT

#### The EU Environmental Implementation Review 2019 Country Report - SPAIN

##### *Accompanying the document*

**Communication from the Commission to the European Parliament, the Council, the  
European Economic and Social Committee and the Committee of the Regions**

**Environmental Implementation Review 2019:  
A Europe that protects its citizens and enhances their quality of life**

{COM(2019) 149 final} - {SWD(2019) 111 final} - {SWD(2019) 112 final} -  
{SWD(2019) 113 final} - {SWD(2019) 114 final} - {SWD(2019) 115 final} -  
{SWD(2019) 116 final} - {SWD(2019) 117 final} - {SWD(2019) 118 final} -  
{SWD(2019) 119 final} - {SWD(2019) 120 final} - {SWD(2019) 121 final} -  
{SWD(2019) 122 final} - {SWD(2019) 123 final} - {SWD(2019) 124 final} -  
{SWD(2019) 125 final} - {SWD(2019) 126 final} - {SWD(2019) 127 final} -  
{SWD(2019) 128 final} - {SWD(2019) 129 final} - {SWD(2019) 130 final} -  
{SWD(2019) 131 final} - {SWD(2019) 133 final} - {SWD(2019) 134 final} -  
{SWD(2019) 135 final} - {SWD(2019) 136 final} - {SWD(2019) 137 final} -  
{SWD(2019) 138 final} - {SWD(2019) 139 final}

*This report has been written by the staff of the Directorate-General for Environment, European Commission. Comments are welcome, please send them to [ENV-EIR@ec.europa.eu](mailto:ENV-EIR@ec.europa.eu)*

*More information on the European Union is available at <http://europa.eu>.*

*Photographs: p. 9 — @iStock/vuk8691; p. 14 — @iStock/ELENA SANCHEZ; p. 20 — @gettyimages/Artur Bogacki; p. 21 — @iStock/MarioGuti; p. 25 — @iStock/rusm; p. 31 — @iStock/georgeclerk*

*For reproduction or use of these photos, permission must be sought directly from the copyright holder.*

*©European Union, 2019*

*Reproduction is authorised provided the source is acknowledged.*

## Table of Contents

<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>PART I: THEMATIC AREAS .....</b>	<b>5</b>
<b>1. TURNING THE EU INTO A CIRCULAR, RESOURCE-EFFICIENT, GREEN AND COMPETITIVE LOW-CARBON ECONOMY .....</b>	<b>5</b>
Measures towards a circular economy .....	5
Waste management .....	8
Climate change .....	10
<b>2. PROTECTING, CONSERVING AND ENHANCING NATURAL CAPITAL .....</b>	<b>13</b>
Nature and Biodiversity .....	13
Maintaining and restoring ecosystems and their services .....	15
Estimating Natural Capital .....	15
Invasive alien species .....	16
Soil protection .....	17
Marine protection .....	18
<b>3. ENSURING CITIZENS' HEALTH AND QUALITY OF LIFE .....</b>	<b>20</b>
Air quality .....	20
Industrial emissions .....	21
Noise .....	22
Water quality and management .....	23
Chemicals .....	26
Making cities more sustainable .....	27
<b>PART II: ENABLING FRAMEWORK: IMPLEMENTATION TOOLS .....</b>	<b>31</b>
<b>4. GREEN TAXATION, GREEN PUBLIC PROCUREMENT, ENVIRONMENTAL FUNDING AND INVESTMENTS .....</b>	<b>31</b>
Green taxation and environmentally harmful subsidies .....	31
Green Public Procurement .....	32
Environmental funding and investments .....	33
<b>5. STRENGTHENING ENVIRONMENTAL GOVERNANCE .....</b>	<b>38</b>
Information, public participation and access to justice .....	38
Compliance assurance .....	39
Effectiveness of environmental administrations .....	40
International agreements .....	42
Sustainable development and the implementation of the UN SDGs .....	43

## Executive summary

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

In the 2017 EIR report, the main challenges identified with regard to implementation of EU environmental policy and law in Spain were:

- Improving **water management**, including completing urban wastewater treatment;
- Improving **waste management** and developing the potential of the circular economy;
- Increasing **environmental taxation**, as well as reducing environmentally harmful subsidies.

Spain organised an **EIR National Dialogue** in Madrid on 8 March 2018 with a broad participation of public authorities and stakeholders. The EIR exercise and the main findings for Spain were discussed in a general debate, with a particular focus on two topics: circular economy and natural capital.

In 2017 the Commission launched the TAIEX-EIR Peer-to-Peer (**EIR-P2P**), a practical new tool enabling environmental authorities to learn from each other. Spain has already benefited from the EIR-P2P in the fields of waste, air quality, biodiversity and forests.

### Progress since the 2017 report in meeting challenges

The 2019 EIR report shows that for **water management** there has been **some progress**. Most of the second cycle River Basin Management Plans (RBMPs) drawn up pursuant to the Water Framework Directive (WFD), were adopted on time (with the notable exception of the seven RBMPs of the Canary Islands), improving many aspects from the first RBMPs. The Spanish Government also launched a process in 2017 to adopt a "National Pact on Water" which is still open. However, many challenges remain, including water governance and the need to close gaps in water investment, especially as regards wastewater. Following a ruling of the Court of Justice of the European Union of 25 July 2018, Spain has received for the first time pecuniary sanctions by the EU for failing to comply with the Urban Wastewater Treatment Directive (UWWTD).

**Substantial progress has been made on the circular economy.** As suggested in the 2017 EIR country report, Spain has now drawn up a National Strategy on Circular Economy which is still undergoing adoption. Many Autonomous Communities have also adopted or are drawing up regional strategies on the circular economy. A Pact for the Circular Economy was signed in Madrid on 18 September 2017 by a wide range of authorities, companies and relevant stakeholders. However, according to the Commission's 'Early Warning Report' (2018), Spain is still far from achieving the EU target of

recycling 50% of its municipal waste by 2020. Further efforts to improve **waste management** are therefore needed.

For **environmental taxation**, the Spanish Government is working to adopt new measures to increase environmental taxation and reduce environmentally harmful subsidies. However, Spain remains one of the Member States in the EU with the lowest rate of environmental taxes.

Personal transport exacerbates seasonal problems with **air quality** and traffic congestion in the major metropolitan areas in Spain, leading to health and economic costs. In the last two years the Spanish authorities have taken additional measures to tackle this issue, which have to be rigorously implemented.

Spain is an outstanding reference within the EU in terms of **natural capital**, which provides opportunities but implies a special responsibility too. Spain boasts a very rich biodiversity and contributes the largest terrestrial surface to the EU Natura 2000 network, covering around 27 % of its territory. Once the designation of sites is completed, the main challenge is to put in place the necessary measures to protect and manage the Natura 2000 network, providing sufficient resources. Also, Spain could further capitalise on its very valuable natural capital to promote green growth and job creation.

Spain is currently showing great interest in the 2030 Agenda and the achievement of the **Sustainable Development Goals** (SDGs). For this, it is taking administrative and political action, for example, appointing a High Commissioner for the 2030 Agenda.

There is room to improve and strengthen the coordination and cooperation among the different competent authorities in the field of the environment. Moreover, sustainable development could be further mainstreamed into other policy areas.

### Examples of good practice

In addition to the points of excellence mentioned in the 2017 EIR report, other good practices on environmental implementation can be highlighted in the case of Spain, for instance:

- In the field of environmental compliance assurance, and recognising the need for professional specialisation to effectively tackle environmental crime, Spain has created a police unit (SEPRONA – Guardia Civil) to combat environmental crime and a specialised Environmental Prosecution Authority. The two have already been successful in investigating and prosecuting organised environmental crime.

- The use of the LIFE Programme (LIFE project INDEMARES and LIFE integrated project INTEMARES) to designate a consolidated network of marine Natura 2000 sites managed in a demonstrative, effective and integrated way, with the active participation of the sectors involved and with research as a basic tool for decision-making.
- The recent creation by the Ministry for the Environment of a solid data-gathering system, which is very similar to the WISE-Water reporting tool and additionally integrates information related to the UWWTD. With this new system, it will be easier to send data from the regional to the national level and incorporate the data in the WISE system at EU level.

## Part I: Thematic Areas

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

#### Measures towards a circular economy

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

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

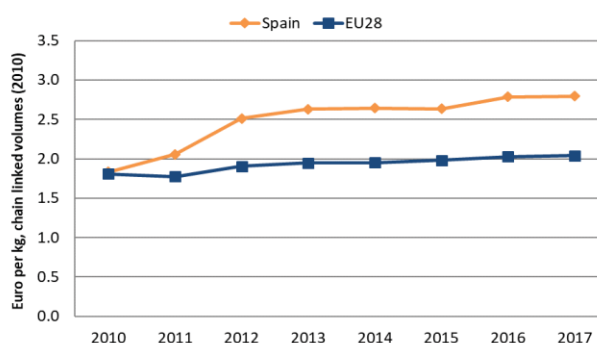
The circular economy monitoring framework tracks key trends and patterns to understand how the various elements of the circular economy are developing and whether enough action has been taken. The framework comprises 10 key indicators which cover each phase – production, consumption, waste management and secondary raw materials – and economic aspects (investments, jobs, gross value added and innovation.)

Among other key indicators, the circular (secondary) use of material in Spain was 8.2 % in 2016 (EU-28 average 11.7 %), down from 10.4 % in 2010. By contrast, Spain performs above the EU-28 average in terms of number of persons employed in the circular economy (2.02 % of total employment in 2016 compared to EU-28 average of 1.73 %).

In the 2017 Special Eurobarometer 468 on attitudes of EU citizens towards the Environment, 88 % of Spanish people said they were concerned about the effects of plastic products on the environment (EU-28 average 87 %). 93 % said they were worried about the impact of chemicals (EU-28 average 90 %)<sup>3</sup>. There appears to be very strong support for circular economy initiatives and environmental protection actions in Spanish society.

Figure 1 shows that in terms of resource productivity (how efficiently the economy uses material resources to produce wealth), Spain is performing better than average in the EU, with EUR 2.80 per kg (EU average 2.04) in 2017<sup>4</sup>. It has the 6<sup>th</sup> best resource productivity indicator in the EU, and its resource efficiency has significantly increased since 2009.

Figure 1: Resource productivity 2010-2017<sup>5</sup>



It is important to highlight that the transition to a green, circular and low-carbon economy holds the potential of opening up significant new sources of employment in Spain<sup>6</sup>.

The main policy outcome and long-term vision on the circular economy in Spain is the Spanish Strategy on Circular Economy. The first of its kind at national level in Spain. The preparation of the strategy was started in 2017 by the former Ministry for Agriculture and Fisheries, Food and Environment (MAPAMA) and is now continuing by the current Ministry for the Ecological Transition (MITECO). This was suggested in the EIR 2017 report. This national strategy is still in the process of being adopted.

The strategy includes an action plan for 2018-2020 and an investment of around EUR 632 million. Water reuse will be a major component, with 57 % of the budget earmarked for such actions. The strategy also aims at dealing with tax harmonisation among regions as an essential tool to encourage actions in line with the waste hierarchy. The plan will also update the rules on construction and demolition waste. Food waste is also

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

<sup>2</sup> COM(2018) 029.

<sup>3</sup> European Commission, 2017, [Special 486 Eurobarometer](#), 'Attitudes of European citizens towards the environment'.

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

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

<sup>6</sup> European Commission, [European Semester 2018, Country Report for Spain](#). SWD(2018) 207, of 7.3.2018.

being tackled in a specific strategy “More food, less waste” and the relevant norms to increase livestock have been amended to consider residues from agri-food industry as by-products.

Spanish regions have been very active in moving forward circular economy policies in Spain. Regional strategies on the circular economy are common in Spain and play a key role in supporting the circular transition on the ground<sup>7</sup>. For instance, the Basque Country, Catalonia, Andalusia and Extremadura have regional strategies. Many other regions are also preparing such regional strategies<sup>8</sup>.

Civil society and the business community have a crucial role to play in helping shaping the transition in Spain. On 18 September 2017, 55 Spanish stakeholders signed the ‘Pact for a Circular Economy’ in Madrid in the presence of the European Commissioner for the Environment. They committed to 10 points of action to promote the transition towards a circular economy. One of the commitments is ‘to prioritise the effective application of the hierarchy of waste principles, promoting the prevention of its generation, encouraging reuse, strengthening recycling and promoting traceability’. Currently, more than 300 stakeholder have signed the Pact for a Circular Economy.

The number of EU Ecolabel products and EMAS-licensed organisations (EMAS is the European Commission’s Eco-Management and Audit Scheme – a programme to encourage organisations to behave in a more environmentally sustainable way) in a country can give a rough measurement of the circular economy transition. These two indicators show to what extent this transition is engaging the private sector and other national stakeholders. They also show the commitment of public authorities to policies that support the circular economy.

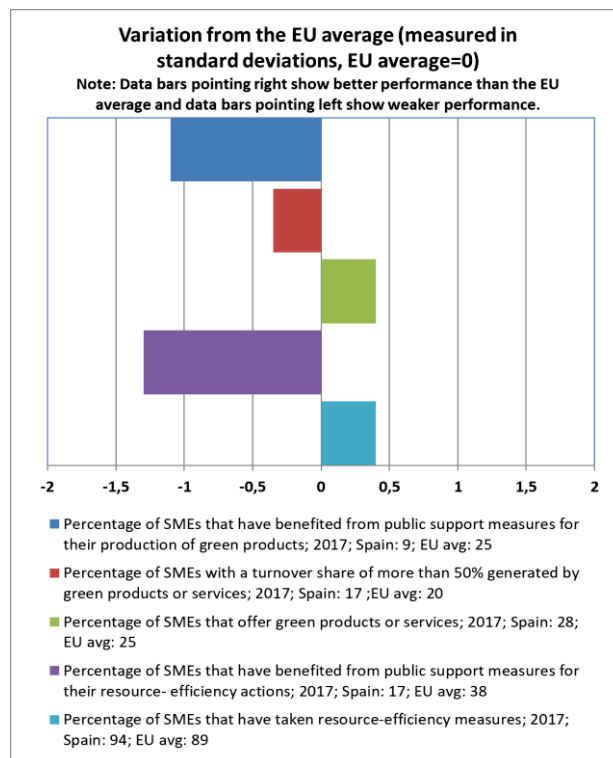
In September 2018, Spain had 30 488 products and 232 licences registered in the EU Ecolabel scheme. Spain is by far the country with the most EU Ecolabel products, i.e. 43.6 % of all EU Ecolabel products in Europe. Also, 821 organisations from Spain are registered in EMAS, making it the country with the third largest number of organisations registered in Europe, after Germany and Italy. This was highlighted as a point of excellence in the 2017 EIR.

### SMEs and resource efficiency

The ‘resource efficiency’ of Spanish SMEs continues to pose challenges. Spain continues to score clearly below the EU average in the environmental dimension of the

Small Business Act, as shown in Figure 2. The percentage of Spanish SMEs that took resource efficiency measures is above the EU average, and fewer companies benefit from public support for resource efficiency or to produce green products.

**Figure 2: Environmental performance of SMEs<sup>9</sup>**



By contrast, the latest Eurobarometer on ‘SMEs, resource efficiency and green markets’<sup>10</sup> asked companies in 2017 about both resource-efficiency actions they had taken and additional resource-efficiency actions they planned to take. In 7 of the 8 dimensions of resource efficiency, more Spanish companies are making efforts than the EU average — the exception being the predominant use of renewable energy — and the number who are doing so is strongly increasing in many domains.

For the next 2 years, Spanish SMEs have even higher ambitions, with 80 % (+16 % compared to 2015) intending to invest in energy saving and 64-69 % (+11-15 %) in water, minerals and waste reduction. This makes Spanish companies the most ambitious in the EU at the moment.

Some 28 % of Spanish companies (compared to the EU average of 22 %, in a range of 3 %-38 %) relied on external support in their efforts to be more resource-

<sup>7</sup> The 37<sup>th</sup> Seminar of the Spanish Network of Environmental Authorities, held in Bilbao in November 2016, was devoted to the Circular Economy.

<sup>8</sup> This was one of the topics discussed in the EIR dialogue with Spain on 8 March 2018, in Madrid.

<sup>9</sup> [2017-SBA factsheet](#): Spain.

<sup>10</sup> Flash Eurobarometer 456 ‘SME, resource efficiency and green markets’ January 2018. The 8 dimension were Save energy; Minimise waste; Save materials; Save Water; Recycle by reusing material internally; Design products easier to maintain, repair or reuse; Use renewable energy; Sell scrap materials to another company.



efficient. Private sector consultancy is by far the most significant area of external cooperation (mentioned by 61 % and increasing compared to only 9 % for public consultancy which is decreasing). Only 9 % benefited from public financial support in the form of grants, loans or guarantees.

The companies surveyed in the EU regard grants and subsidies as the most important form of help for a company to become resource-efficient (36 %). Of the companies surveyed, 20-23 % mention technical or financial consultancy, technology demonstration or better cooperation among companies as useful assistance.

Among Spanish companies, 42 % mention grants and subsidies as useful help; for these companies, the different types of financial and technical consultancy are considered more valuable (21-30 %) than the EU average (20-23 %). Technology demonstration and documentation of case studies, in particular, are assigned significantly more importance than in the past.

Spain has developed a consultancy market that is performing well, and companies are eager to invest in resource efficiency and the development of 'green products'. This is a good basis for becoming a leader in innovative green solutions and at the same time encouraging investment across the economy.

Designing financial instruments specifically for green purposes could attract even more private finance. The consultancy sector could be used more to address the major barrier of accessing funding that companies face.

## Eco-innovation

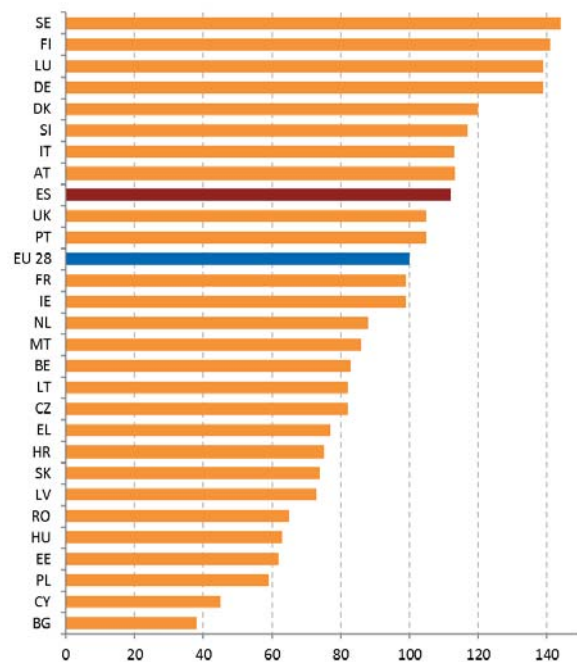
Spain ranked 16<sup>th</sup> in the 2018 European Innovation Scoreboard, up 7.5 % since 2010<sup>11</sup>.

However, Spain ranked 9<sup>th</sup> in the 2017 Eco-Innovation Scoreboard (see Figure 3). Despite keeping its performance high, Spain has lost three positions since the 2013 Eco-Innovation Scoreboard.

Spain remains an eco-innovation follower. However, as highlighted in the 2017 EIR, the economic crisis posed additional eco-innovation needs and challenges in Spain, and the effects of the crisis are still present.

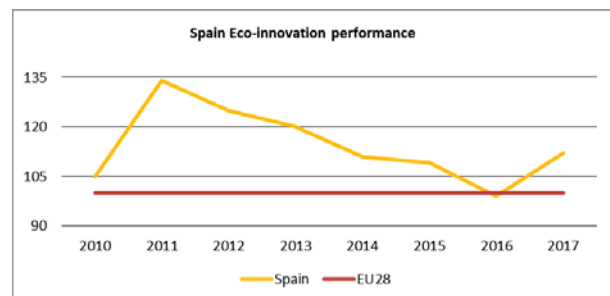
The strong level of decentralisation and high margin of manoeuvre of the Autonomous Communities in Spain heavily influence the country's performance.

**Figure 3: 2017 Eco-Innovation Index (EU=100)**<sup>12</sup>



Like in all previous scoreboards, the country's overall performance remains above average with a total score of 112 (see Figure 4).

**Figure 4: Spain's eco-innovation performance**



The main barriers for eco-innovation can be divided into four groups.

- First of all, there are the political and regulatory barriers, such as lack of support and stimulus from governments and a need to harmonise standards and definitions for all types of industries.
- Secondly, there is a lack of environmental awareness among providers and clients and a lack of knowledge among small and medium-sized enterprises.
- Thirdly, there are barriers to accessing finance: one of the main barriers preventing SMEs from adopting sustainable practices is the cost of new innovation and green business models. Given the current lack of public funding, alternative financing models are

<sup>11</sup> European Commission, [European innovation Scoreboard 2018](#).

<sup>12</sup> Eco-innovation Observatory: [Eco-Innovation scoreboard 2017](#).



needed that take into account the companies most committed to transparency and corporate social responsibility.

- Lastly, there are technological and infrastructure barriers like a lack of more specialised technical skills that are not currently present in the workforce.

But there are also some drivers to eco-innovation, like the first Spanish strategy on the circular economy mentioned earlier. Spain also continues to be very active on eco-design at EU level.

Spain sent the European Commission its 2017-2020 national action plan on energy efficiency, which gives continuity to the 2014-2020 plan. In this new version, Spain sets an energy efficiency target of 24.7 % for 2020 (112.6 Mtep), above the EU target of 20 %.

## 2019 priority action

- Spain should complete, adopt and implement the Spanish national Strategy on Circular Economy.

## Waste management

Turning waste into a resource is supported by:

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

This section focuses on management of municipal waste<sup>13</sup> for which EU law sets mandatory recycling targets<sup>14</sup>.

The amount of municipal waste<sup>15</sup> generated has gone down these past few years. The average amount in Spain in 2017 (462 kg/y/inhabitant) is below the EU average (487 kg/y/inhabitant).



Figure 5 provides a breakdown of how municipal waste is treated in Spain in kg and per capita. Treatment of municipal waste has not improved significantly these past few years.

Over half of this waste is still being landfilled (54 %), more than double the EU average (24 %). There has been marginal progress in recent years in decreasing landfilling. Incineration slightly increased since 2014 and remained at 13 % in 2017 (still below the EU average of around 28 %). Material recycling has improved only slightly to 18 % (compared to the EU average of 29 %) while 15 % of the waste was composted (compared to the EU average of 17 %).

The country is not taking full advantage of the opportunities to prevent and recycle waste. Figure 6 shows that Spain has increased its recycling rate only slightly since 2010. It must strongly invest in recycling and reduce landfilling in the next 2 years to reach the 2020 recycling target.

Based on its current overall recycling rate of 34 % (i.e. including recycling and composting), Spain needs to make a significantly bigger effort to reach the EU target of recycling 50 % of municipal waste by 2020<sup>16</sup>. There are big differences between regions.

In its 'Early Warning Report'<sup>17</sup>, the Commission identified Spain as one of the countries at risk of missing this target. The report sets out a set of detailed key priority actions that Spain needs to take. Also, for the post-2020 period, it will need to do even more to comply with the new recycling targets<sup>18</sup>.

<sup>13</sup> Municipal waste consists of mixed waste and separately collected waste from households and from other sources, where such waste is similar in nature and composition to waste from households. This is without prejudice to the allocation of responsibilities for waste management between public and private sectors.

<sup>14</sup> See Article 11.2 of [Directive 2008/98/EC](#). This Directive was amended in 2018 by [Directive \(EU\) 2018/851](#), and more ambitious recycling targets were introduced for the period up to 2035.

<sup>15</sup> 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.

<sup>16</sup> Member States may choose a different method than the one used by ESTAT (and referred to in this report) to calculate their recycling rates and track compliance with the 2020 target of 50% recycling of municipal waste.

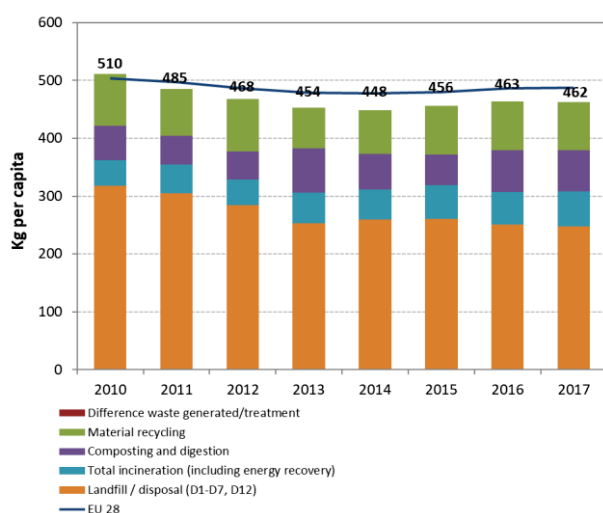
<sup>17</sup> European Commission, Report on the implementation of waste legislation, including the early warning report for Member States at risk of missing the 2020 preparation for re-use/recycling target on municipal waste, [SWD\(2018\)425](#) accompanying [COM\(2018\)656](#).

<sup>18</sup> [Directive \(EU\) 2018/851](#), [Directive \(EU\) 2018/852](#), [Directive \(EU\) 2018/850](#) and [Directive \(EU\) 2018/849](#) amend the previous waste legislation and set more ambitious recycling targets for the period up to

Illegal or sub-standard landfilling is still widespread in Spain. The European Commission is closely following the matter through several horizontal infringement procedures.

Spain has a valid national Waste Prevention Programme 2014-2020 and a national Waste Management Plan 2016-2022. Nevertheless, for the whole country to be covered, some regional waste management plans still have to be updated (the Canary Islands, the Balears, Madrid, Ceuta and Aragon)<sup>19</sup>.

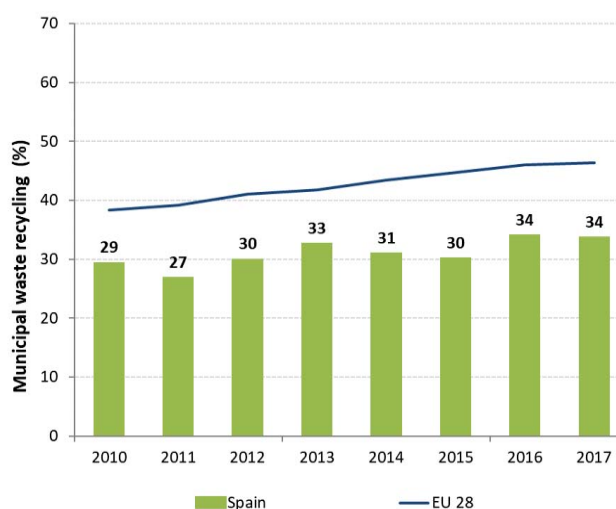
**Figure 5: Municipal waste by treatment in Spain 2010-2017**<sup>20</sup>



The 2016-2022 National Framework Plan for Waste Management (PEMAR)<sup>21</sup>, sets out the strategic guidelines for waste management and the measures needed to meet EU targets. The final objective is to replace linear models of production by circular models that bring waste materials back into the production line.

The national plan applies the waste hierarchy in EU waste legislation. This means that the regions should at least reach the same recycling targets set at national level and that these targets should be included in the regional waste management plans. However, the lack of national enforcement instruments has limited the national authorities' capacity to enforce this requirement. There is a gap between the regional and local level, since it has not been defined what specific contribution the local authorities are to make to implement the Waste Framework Directive.

**Figure 6: Recycling rate of municipal waste 2010-2017**<sup>22</sup>



There is no national obligation to collect food and garden waste separately. However, there is a proposal, in the process of being adopted to modify Spanish regulation, in order to make bio-waste separate collection mandatory before 2021, for municipalities with more than 5,000 inhabitants, and before 2024 for the rest of municipalities, as it is set in the revised Waste Framework Directive<sup>23</sup>.

The economic incentives to shift waste away from landfilling and incineration to recycling are not sufficient. Several regions have put in place landfill taxes on municipal waste (i.e. Catalonia, Castile & Leon, Extremadura and Navarra), although tax rates are low as compared to other EU Member States.

In addition, local waste charges are generally not linked to the amount of waste generated, the result being that the charges are not an incentive for enhanced separate collection and recycling. 'Bring' schemes where residents bring their waste to communal bins remains the most common system of collection in Spain. This includes the separate collection of light packaging, glass packaging and paper and cardboard, whereas residual waste is still collected with biowaste. A system of separate door-to-door collection has been applied only in a relatively small number of municipalities.

There is insufficient policy coordination between the national, regional and local levels (e.g. different landfill tax rates are applied, waste treatment capacities are not shared or jointly planned between regions, residual waste treatment centres are built in contradiction of national and regional targets).

However, some actions are being undertaken at the national or regional level. For example, to ensure

2035. These targets will be taken into consideration to assess progress in future Environmental Implementation Reports.

<sup>19</sup> The Commission has brought this case to the EU Court of Justice.

<sup>20</sup> Eurostat, [Municipal waste by waste operations](#).

<sup>21</sup> Plan Estatal Marco de Gestión de Residuos (PEMAR) 2016-2022.

<sup>22</sup> Eurostat, [Recycling rate of municipal waste](#).

<sup>23</sup> The Ministry of Environment, [the draft of new law on waste](#)

coherent planning at regional level, Spain has recently introduced specific plans for biowaste management within the regional waste management plans (and their coordinated updates). Also, the country has improved extended producer responsibility schemes (e.g. WEEE). In addition, some regions are considering deposit refund systems for beverage packaging while Navarra, Comunidad Valenciana and the Balearic Islands are discussing limitations on the single-use plastic items.

The ‘Early warning report for Spain’ identified some key actions for Spain to take to improve performance. These include better use of the economic instruments, improvements and extension of the separate collection, and improvements to the Extended Producer Responsibility (EPR) schemes. The report also highlighted the need to intensify co-operation between the regions to use waste treatment capacity more efficiently and to achieve the national recycling targets.

### 2019 priority actions

- Introduce a national landfill tax or harmonise regional taxes to phase out landfilling for recyclable and recoverable waste. Channel those revenues towards measures to improve waste management in line with the waste hierarchy.
- Improve and expand the separate collection of waste, including biowaste. Introduce minimum service standards for separate collection (e.g. frequency of collection, types of containers, etc.) in municipalities to ensure high capture rates of recyclable waste.
- Introduce mandatory municipal waste charges for inhabitants at an appropriate level to cover the costs of collection and treatment, e.g. via pay-as-you-throw.
- Improve the functioning of Extended Producer Responsibility Systems, in line with the general minimum requirements on EPR<sup>24</sup>.
- Complete missing regional Waste Management Plans in order to cover the whole territory.
- Close and rehabilitate the non-compliant landfills as a matter of priority.

### Climate change

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

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

For emissions not covered by the EU ETS, Member States have binding national targets under the Effort Sharing legislation.

Spain had lower emissions than its annual targets in each of the years 2013-2017. For 2020, Spain's national target under the EU Effort Sharing Decision is to reduce emissions by 10 % compared to 2005. For 2030, Spain's national target under the Effort Sharing Regulation is to reduce emissions by 26 % compared to 2005. With existing measures, Spain is set to overachieve its 2020 reduction target, but foresees a gap of 10 percentage points to be bridged to reach its 2030 targets. Additional efforts are therefore needed in all sectors, in particular in view of the current strong economic growth.

The current Spanish Strategy for Climate Change and Clean Energy, 2007-2012-2020<sup>25</sup> defines the objectives for designing policies and measures for the reduction of GHG emissions, according to the objectives set out in the European policies. The “Non-ETS sectors Roadmap 2020” assessed the emissions mitigation potential up to 2020; while it identifies the cost efficient path to achieve the objective, it is outside its scope to determine and design the mechanisms to implement the measures. Several sectoral plans and measures are also being implemented, such as the Infrastructure, Transport and Housing Plan (PITVI, 2014-2020) or the plans to promote the purchase of electric vehicles, the most recent plan dating from 2018.

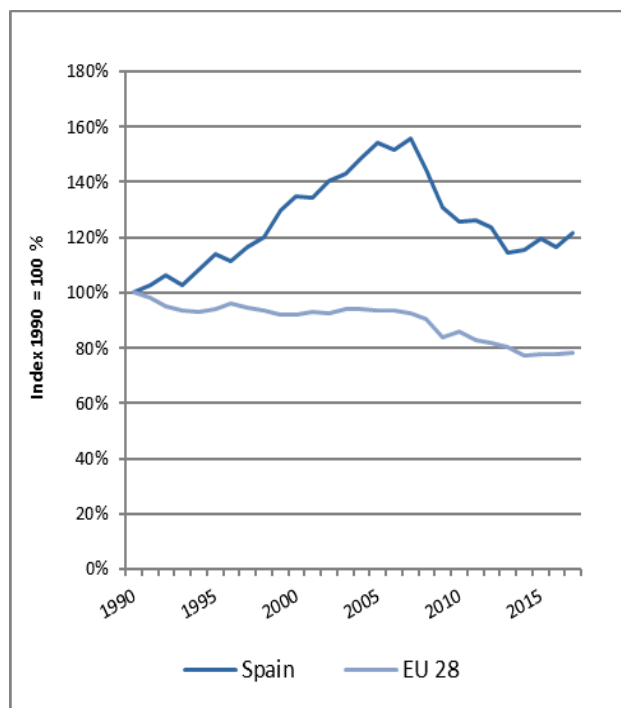
Spain is currently working on the strategies and objectives for 2030 and 2050, including updating the

<sup>24</sup> Set out in [Directive \(EU\) 2018/851](#) amending Directive 2008/98/EC.

<sup>25</sup> The Ministry of Environment, [Spanish Strategy for Climate Change and Clean Energy](#)

Non-ETS sectors Roadmap to cover the period until 2030. This roadmap includes sinks as well as sources of GHG and will consider the 2030 target of 26% emissions reductions compared to 2005 as set out in the Effort Sharing Regulation.

**Figure 7: Change in total greenhouse gas emissions 1990-2016 (1990=100%)<sup>26</sup>.**



The Spanish Government intends to present in this legislature a Law of Climate Change and Energy Transition. This law will define the guiding principles for future environmental and energy policies and the necessary mechanisms to comply with national commitments.

Transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. The transport sector has not seen the same steady decrease in GHG emissions as other sectors since 1990. Transport emissions in Spain increased by 8 % from 2013 to 2016.

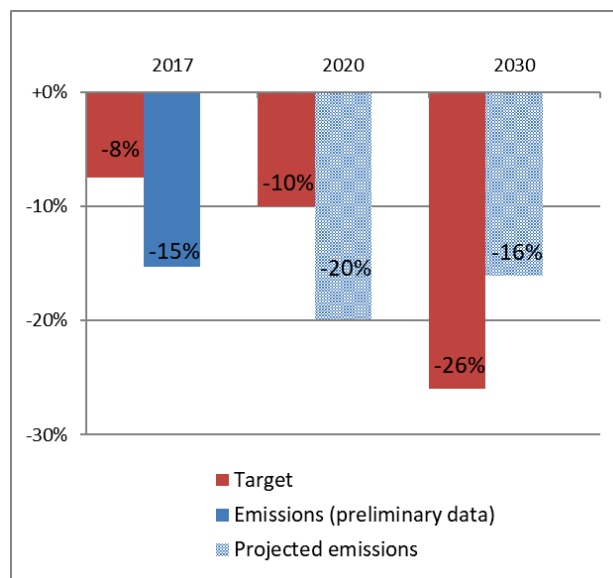
Under the F-gas Regulation Member States must implement training and certification programmes and rules for penalties and notify these measures to the Commission by 2017. Spain has notified both measures.

The accounting of GHG emissions and removals from forests and agriculture is governed by the Kyoto Protocol.

<sup>26</sup> Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](#)). Proxy GHG emission estimates for 2017Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

Under the Kyoto Protocol, reported quantities for Spain show net removals of, on average, -40.5 Mt CO<sub>2</sub>-eq for the period 2013 to 2016. In this regard Spain contributes with 10.5% to the annual average sink of -384.4 Mt CO<sub>2</sub>-eq of the EU-28. Preliminary accounting for the same period depicts net credits of, on average, -16.6 Mt CO<sub>2</sub>-eq, which corresponds to 14.3% of the EU-28 accounted sink of -115.7 Mt CO<sub>2</sub>-eq. Reported net removals show an increase which levels off and slightly decreases for 2016.

**Figure 8: Targets and emissions for Spain under the Effort Sharing Decision and Effort Sharing Regulation<sup>27</sup>.**



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

A National Adaptation Strategy, the PNACC, was adopted in 2006. Three working programmes have been adopted so far, in 2006 (WP1), 2009 (WP2) and 2013 (WP3). The following sectors were considered by the PNACC-WP3 to address adaptation actions during the period 2014-2020: biodiversity, forestry, water, soils, agriculture, fishing and aquaculture, tourism, health, finances/insurance, energy, industry, transport, urbanism and building, and finally hunting and inland fishing.

The Spanish authorities, at different level, are working on Adaptation to Climate Change<sup>28</sup>. Apart from Asturias and

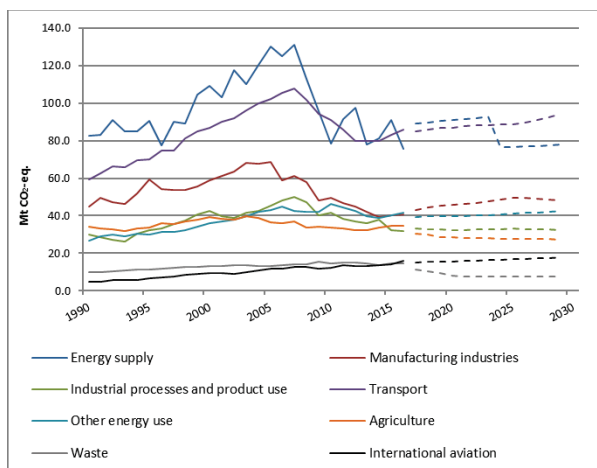
<sup>27</sup> Proxy GHG emission estimates for 2017Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

<sup>28</sup> The 40<sup>th</sup> Seminar of the Spanish Network of Environmental Authorities, held in Sevilla in April 2018, was devoted to the challenges on adaptation to climate change.



La Rioja, all Spanish regions have adopted regional action plans, or adaptation strategies. On a local level, 284 cities have declared their intention to develop local adaptation strategies through the Covenant of Mayors for Climate and Energy. A report on the assessment of the implementation of the PNACC is published every three years, the latest dating from 2014. Monitoring reports are structured according to the architecture of the PNACC and form the basis to follow up the progress in the implementation of the Strategy.

**Figure 9: Greenhouse gas emissions by sector (Mt. CO<sub>2</sub>-eq.). Historical data 1990-2016. Projections 2017-2030<sup>29</sup>.**



The total revenues from the auctioning of emission allowances under the EU ETS over the years 2013-2017 were EUR 2 024 million. 93 % of the auctioning revenues have been, or will be, spent on climate and energy purposes.

### 2019 priority action

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

<sup>29</sup> Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](#)). Proxy GHG emission estimates for 2017Approximated EU greenhouse gas inventory 2017 (European Environment Agency). Member States national projections, reviewed by the European Environment Agency.

## 2. Protecting, conserving and enhancing natural capital

### Nature and Biodiversity

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

#### Biodiversity Strategy

The Spanish Strategic Plan for Biodiversity and Natural Heritage, for the period 2011-2017, sets the overall objectives, targets and actions for the conservation and sustainable use of biodiversity and natural heritage in Spain. In the future, this plan might need to be completed, adapted or updated, taking into account the results of its implementation and the updated international and EU frameworks.

Spain boasts a very rich biodiversity. It covers four of the nine bio-geographical regions defined for the implementation of the Habitats Directive: Alpine, Atlantic, Mediterranean and Macaronesian, and three of the five marine regions: Atlantic, Mediterranean and Macaronesian. It has 117 natural habitats and 430 species of wild fauna and flora of Community interest protected under the Habitats Directive. Spain is also the Member State with the highest number of breeding birds, with a total of 379 bird species reported in its territory.

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

Spain has 1 863 Natura 2000 sites, 647 Special Protection Areas (SPAs) under the Birds Directive and 1 467 Sites of Community Importance (SCIs) under the Habitats Directive. These cover 27.3 % of its land territory (EU average of 18.2 %), this makes Spain the Member State contributing the largest surface area to the Natura 2000 Network (more than 222 000 Km<sup>2</sup> in total, of which 138 330 Km<sup>2</sup> of terrestrial and 84 322 Km<sup>2</sup> of marine surface).

However, several terrestrial and marine habitats and species are still insufficiently covered by the Spanish SCIs network<sup>30</sup>.

<sup>30</sup> 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.



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

The 6-year deadline required by the Habitats Directive to designate Special Areas of Conservation (SAC) and to establish appropriate conservation objectives and measures has expired for more than 1 450 sites in Spain. However, Spain has not fulfilled this obligation for all the sites concerned.

Over the last few years, Spain has made progress in the designation SACs and the establishment of conservation measures for these sites. By April 2018, nearly 77 % of the sites designated under the Habitats Directive had been designated as SACs<sup>31</sup>. However, this task still needs to be urgently fulfilled for a significant number of sites, especially in certain regions where the percentage of designated SACs is particularly low, such as Aragon, Murcia, the Valencian Community, the Balearic Islands and Cantabria, and for marine sites under national competence. Moreover, the full development and implementation of the existing Natura 2000 management plans need to be ensured.

Natura 2000 management and nature protection is mainly the responsibility of the regions in Spain, except for the marine sites, which are under the competence of the national Administration if they do not have ecological continuity with adjacent terrestrial sites.

Overall, Spain's basic legislation transposing the Habitats Directive is appropriate. It requires management plans to be drawn up before sites can be designated as SACs. This ensures that the SAC designation triggers the adoption of conservation measures, as required under Article 6(1) of the Habitats Directive.

<sup>31</sup> Source: information provided by Spanish authorities in the framework of the ongoing infringement case 2015/2003, information in the Natura 2000 database provided by Spain and other official public information.

The Commission receives a high number of complaints about the implementation of the Nature Directives in Spain. These mainly concern the degradation of designated sites, inadequate management and the poor quality of appropriate assessments under Article 6(3) of the Habitats Directive. The degradation of protected water-dependent habitats within Natura 2000 is also a frequent concern.

There are also concerns about the implementation of the Birds Directive in Spain, particularly in relation to certain hunting models, e.g. the extensive use of trapping derogations for finches in several regions<sup>32</sup>.

The most relevant factors limiting achievement of the objectives of the Nature Directives are the lack of sufficient financial resources and scientific knowledge for some species and habitat types to support appropriate management. There is low use of the European Agricultural Fund for Rural Development to finance nature conservation measures and Natura 2000 priorities<sup>33</sup>. This is especially due to insufficient coordination between the relevant competent administrative authorities<sup>34</sup>.

Further efforts should be taken to promote a coherent integration of Natura 2000 in other policies and in the use of EU funds in Spain, including in the framework of the “Working Group on EU funding and biodiversity and nature conservation” under the Spanish Network of Environmental Authorities, the “Working Group on Spanish Rural Development programmes and Natura 2000 in Spain” launched by the Spanish Rural Network, as well as through the preparation of an updated Priority Action Framework (PAF) for the financing of the Natura 2000 Network, for the next financing period 2021-2027

The possibilities of developing sustainable or nature tourism should be further explored, including through implementation of the Spanish 2014-2020 strategic plan on nature and biodiversity tourism. In line with this strategic plan, Spain has developed good practice guidelines on wild watching certain protected species<sup>35</sup> and set up a system for recognition of the sustainability of nature tourism in Natura 2000 sites<sup>36</sup>.

The Ministry for the Ecological Transition of Spain and ISPRA (Italy) lead a Eionet project on Tourism and Environment (2018 – 2020). To fill the lack of information

about data and indicators regarding sustainable tourism is the main goal of this project. One of the challenges is to provide information about protected areas in order to prevent pressures and impacts by tourism activities

In conclusion, special attention should be paid to the potential for Spain to take advantage of its very valuable natural capital to create jobs. Spain makes the largest contribution to the EU Natura 2000 network. Therefore, jobs related to the protection of biodiversity, reforestation, green infrastructure and ecosystem services have an enormous potential in Spain that should not be ignored. This matter was already stressed in the 2017 EIR report and was part of the EIR dialogue with Spain.

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

Considering that Member States report every 6 years on the progress made under both Directives, no new information is available on the state of natural habitats and species, nor on progress in improving the conservation status of species and habitats in Spain, since the 2017 EIR.

As explained in the previous EIR report, only 12 % of the habitats’ biogeographic assessments and 22 % of the species assessments in Spain were favourable in 2013. Less than 10 % of the habitat types and 20 % of the species assessed in unfavourable conservation status are improving. Spain had the highest share of unknown assessments (around 25 %) among the EU Member States, even if important improvements have been achieved since the previous reporting period, which indicates important knowledge gaps for the implementation of the Nature Directives.

In 2017, the first phase of a project to draw up methodologies and procedures for monitoring the conservation status of the habitat types in Spain at national level and by biogeographic regions, promoted by the Ministry for the Environment, has concluded. Its results will feed the tasks of a Working Group on Monitoring of habitat types whose creation was agreed by the Protected Natural Areas Committee.

### **2019 priority actions**

- Urgently complete the designation process and put in place clearly defined conservation objectives and the necessary conservation measures for the sites, providing sufficient resources for their implementation in order to maintain/restore species and habitats of community interest to a favourable conservation status across their natural range.
- Strengthen the integration of biodiversity concerns into other policies (in particular in agriculture, but also in fisheries, urban and infrastructure planning

<sup>32</sup> The Commission has launched an infringement procedure against Spain on this matter.

<sup>33</sup> The Government of Spain, [Evaluación del grado de inclusión de las prioridades del MAP para la Red Natura 2000 en los programas de desarrollo rural 2014-2020 de España](#).

<sup>34</sup> Source: [Spanish Natura 2000 Priority Action Framework \(PAF\)](#).

<sup>35</sup> The Government of Spain, [Good Practices For The Observation Of Bear, Wolf And Lynx](#)

<sup>36</sup> The Government of Spain, [System for recognition of the sustainability of nature tourism in Natura 2000 sites](#)



and sustainable tourism) and the promotion of communication between actors.

- Ensure the appropriate enforcement of hunting bans for protected bird species.

### Maintaining and restoring ecosystems and their services

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

The EU has provided guidance on the further deployment of green and blue infrastructure in Spain<sup>37</sup> and a country page on the Biodiversity Information System for Europe (BISE)<sup>38</sup>. This information will also contribute to the final evaluation of the EU Biodiversity Strategy to 2020.

Spain's Natural Heritage and Biodiversity Law (2007)<sup>39</sup> was updated in 2015 and requires that the country develops a National Green Infrastructure (GI) Strategy by 2018, and then the Autonomous Communities develop their own regional strategies within three years. Work on the National Strategy on Green Infrastructure, Connectivity and Ecological Restoration has advanced over the last years but is still ongoing –it is expected to be approved in early 2019. Several other strategies and various regional laws address connectivity and the restoration of natural areas<sup>40</sup>.

The National Strategy approach is the integration of ecosystems and their services in territorial planning, and is based on eight main goals that must be replicated in the regional strategies. These goals are related to connectivity, ecological restoration, ecosystem services, nature-based solutions, climate change, governance and coordination at different administrative levels, implementation in sectorial policies (water and marine management, urban planning, infrastructures, forestry, etc.) and also communication, education and the involvement of the civil society.

Implementation is ongoing in several regions and municipalities. As highlighted in the 2017 EIR report, one of the outstanding examples of green infrastructure

development in the EU can be seen in the Basque capital of Vitoria-Gasteiz. There are also other good examples.

In 2016, the city of Burgos, with its green belt, celebrated 'more than 80 years of renaturalisation' in the city. This successful urban initiative represents a long history of supporting policies and legislation, using appropriate management measures and initiatives to ensure the continued territorial space and good ecological status of the green belt.

The municipality of Benaguasil won the 2016 Sustainable City Award in the category of the water cycle for its management of rainwater based on green infrastructure. The city has promoted a more sustainable management of rainwater by using sustainable drainage systems (SuDS), which are green infrastructure that encourages the retention, detention and infiltration of runoff.

The LIFE SEGURA RIVERLINK<sup>41</sup> demonstration project tested approaches to green infrastructure that remain relatively uncommon in the Mediterranean. The project includes monitoring activities and plans to validate three management measures for developing a green infrastructure approach to river basin management in an urban setting. The project should be an early step towards restoring permeability of the whole river and serve as a good example in the region.

Efforts to ensure that green infrastructure is a mainstream part of development are continuing. The working group on transport infrastructure has developed several guidelines, with examples of good practice, laws and regulations that help to reduce the fragmentation of habitats. Green infrastructure measures are considered to reach the goal of recovering the good state of Spanish waters and preventing flooding.

A major challenge implementing green infrastructure in Spain is the polarised approach to territorial planning, which has often resulted in social conflicts between conservation authorities and resource users. This has often had large negative consequences for biodiversity and ecosystem services. For example, natural areas under strict conservation programmes are often embedded in a broader matrix of intensely managed land uses (mostly for food production).

In conclusion, Spain is encouraged to complete, adopt and subsequently implement the Spanish national Strategy on Green Infrastructure, Connectivity and Ecological Restoration.

<sup>37</sup> European Commission, The [recommendations of the green infrastructure strategy review report](#) and the EU Guidance on a strategic framework for further supporting the deployment of EU-level green and blue infrastructure.

<sup>38</sup> [Biodiversity Information System for Europe](#).

<sup>39</sup> [Ecosystems for human well-being](#)

<sup>40</sup> The 38<sup>th</sup> Seminar of the Spanish Network of Environmental Authorities, held in Barcelona in May 2017, was devoted to Green Infrastructure.

<sup>41</sup> EU project, [The LIFE SEGURA RIVERLINK](#)

## Estimating Natural Capital

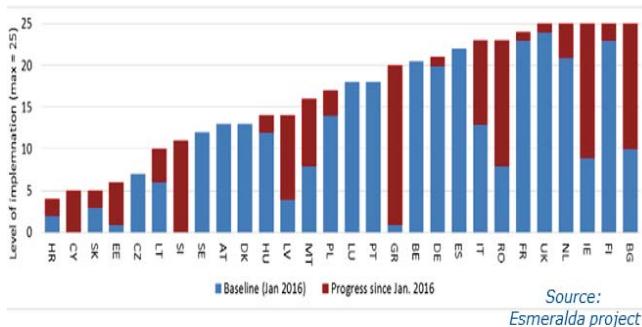
The EU biodiversity strategy calls on Member States to map and assess the state of ecosystems and their services<sup>42</sup> in their national territories by 2014, assess the economic value of such services and integrate these values into accounting and reporting systems at EU and national level by 2020.

Spain already implemented MAES (mapping and assessment of ecosystems) before 2016 through the national ecosystem assessments and since then has progressed on economic valuation and accounting. It has conducted: (1) a systematic review and meta-analysis studies of existing economic valuation studies in Spain; (2) a valuation of five ecosystem services using market-based methods and mapping those values captured by the market; and (3) a socio-economic valuation taking into account the use and non-use values of biodiversity and the plurality of valuation methods.

These results are contributing to the work on the National Strategy on Green Infrastructure, Connectivity and Ecological Restoration, in particular for maintaining and improving the provision of ecosystem services of the elements linked to the development of green infrastructure.

At the MAES working group meeting in Brussels in September 2018, it was noted that Spain had not provided updated information. Therefore, no progress has been recorded since January 2016 on the level of implementation of MAES (Figure 10), but mostly because the country already had a good level of implementation. This assessment was made by the ESMERALDA project<sup>43</sup>. It is based on 27 questions about implementation and updated every 6 months.

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



Although Spain has not provided any new information on its work on mapping and assessment of ecosystems and

<sup>42</sup> Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends.

<sup>43</sup> [EU project Esmeralda](#)

their services on the MAES webpage on BISE since 2015, different tasks have been ongoing.

Within the framework of the LIFE Integrated Project INTEMARES<sup>44</sup>, an assessment of the state of ecosystems and their services within the Natura 2000 marine network is currently ongoing. In this context, an economic valuation of four different services is being conducted. This valuation will contribute to improve the perception of services from marine ecosystems and advance in their integration in the policy on the marine strategy, the management of maritime space and compliance with Action 5 of the EU Biodiversity Strategy.

With regard to natural accounting, the Ministry for Ecological Transition in Spain and the Spanish National Statistical Office have supported the 'MAIA project: from Mapping and Assessment to Integrated ecosystem Accounting'. The project aims to develop and implement natural capital accounts following the methodology of the System of Environmental Economic Accounting (SEEA) – Experimental Ecosystem Accounting. The 2012 SEEA EEA framework and the forthcoming SEEA EEA Technical Recommendations will be used as a starting point to test ecosystem accounting. In addition, the project will test how experiences in the EU with mapping and modelling ecosystem services can be used in support of ecosystem accounting in the EU.

Business and biodiversity platforms, networks and communities of practice are key tools for promoting and facilitating natural capital assessments (NCA) among business and financial service providers, for instance via the Natural Capital Coalition's protocol<sup>45</sup>. The assessments contribute to the EU Biodiversity Strategy by helping private businesses to better understand and value both their impact and dependence on nature. Biodiversity platforms have been set up at EU level<sup>46</sup> and in a number of Member States.

The Spanish Business and Biodiversity Initiative<sup>47</sup> is led by the Biodiversity Foundation<sup>48</sup> (*Fundación Biodiversidad*), which depends on the Ministry for the Ecological Transition. It aims to involve the business sector more, to integrate natural capital protection into business and management policies, to achieve the international Aichi biodiversity targets.

<sup>44</sup> LIFE15 IPE/ES/000012 [LIFE-IP INTEMARES](#).

<sup>45</sup> Natural Capital Coalition, [Natural Capital Protocol](#)

<sup>46</sup> Business and Biodiversity, [The European Business and Biodiversity Campaign](#) aims to promote the business case for biodiversity in the EU Member States through workshops, seminars and a cross media communication strategy.

<sup>47</sup> [Spanish Business and Biodiversity Initiative](#)

<sup>48</sup> [Fundación Biodiversidad](#).

## Invasive alien species

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

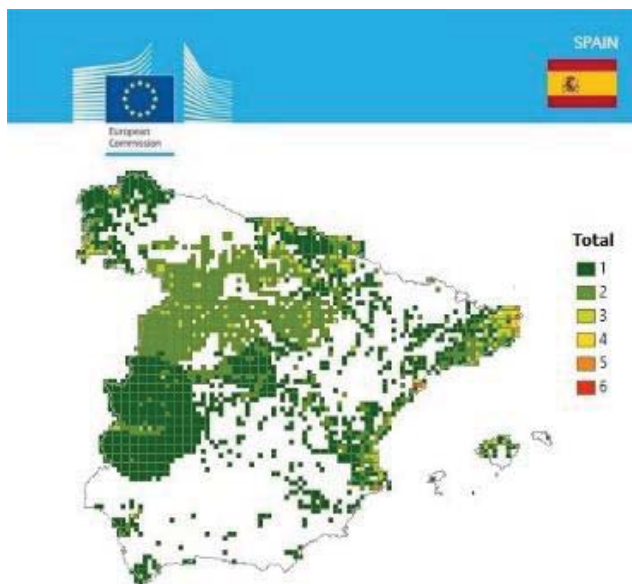
- (i) invasive alien species identified;
- (ii) priority species controlled or eradicated; and
- (iii) pathways managed to prevent new invasive species from disrupting European biodiversity.

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

Spain has been very active in developing the Union list of invasive alien species (IAS), proposing species for the first and second update of the list.

Spain has submitted 7 risk assessments and is congratulated for its active contribution to the development of the Union list.

**Figure 11: Number of IAS of EU concern, based on available georeferenced information for Spain**<sup>49</sup>



For the first update, it proposed pumpkinseed (*Lepomis gibbosus*), raccoon dog (*Nyctereutes procyonoides*), muskrat (*Ondatra zibethicus*), crimson fountaingrass (*Pennisetum setaceum*) and black bullhead (*Ameiurus melas*). The risk assessments of raccoon dog, muskrat and crimson fountaingrass received a positive opinion from the Scientific Forum. These species were subsequently considered compliant with the criteria for listing by the Committee and finally included in the first list update. The risk assessments on pumpkinseed and black bullhead did not obtain a positive opinion from the Scientific Forum. They were resubmitted for the second

list update, together with *Ameiurus nebulosus* and *Channa argus*. These risk assessments are currently under review by the Scientific Forum.

The report on the baseline distribution (Figure 11), for which Spain reviewed its country and grid-level data, shows that of the 37 species on the first Union list, 20 have already been observed in the environment in Spain. Of these, 18 are established, with red swamp crayfish (*Procambarus clarkii*) and signal crayfish (*Pacifastacus leniosculus*) being the most widespread.

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

As required by Article 24(2) of the IAS Regulation, Spain has notified the Commission of the competent authorities in Spain responsible for implementing the Regulation. It has communicated to the Commission the national provisions on penalties applicable to infringements as required by Article 30(4) of the IAS Regulation and has therefore fulfilled its notification obligations in this regard.

Spain has not notified the Commission of its list of invasive alien species of concern to the Canary Islands, as required under Article 6(4) of the IAS Regulation.

### 2019 priority action

- Spain is urged to notify the Commission of its list of invasive alien species of concern to the Canary Islands.

## Soil protection

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

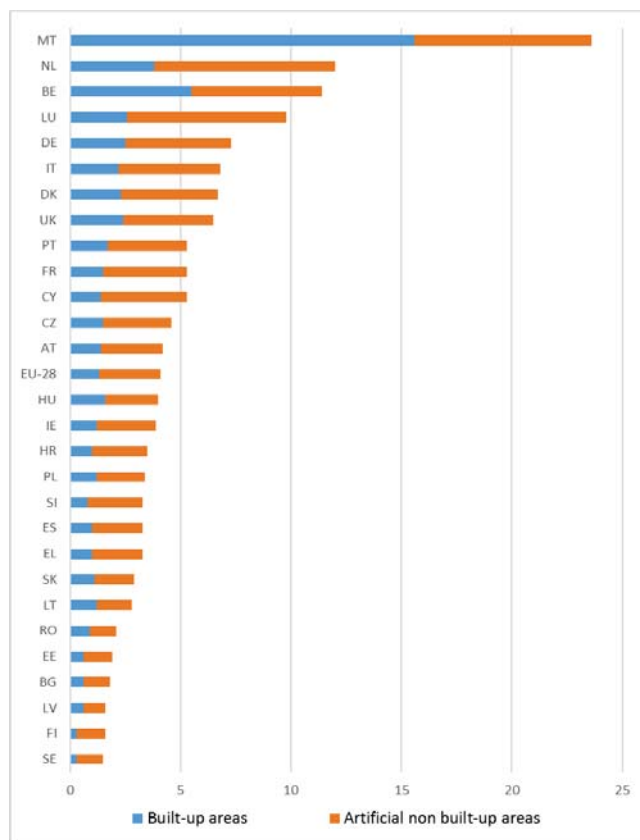
Soil is a finite and extremely fragile resource and is becoming increasingly degraded in the EU. The percentage of artificial land cover<sup>50</sup> (Figure 12) can be seen as a measure of the relative pressure on nature and

<sup>49</sup> Tsiamis K; Gervasini E; Deriu I; D'amico F; Nunes A; Addamo A; De Jesus Cardoso A. [Baseline Distribution of Invasive Alien Species of Union concern. Ispra \(Italy\): Publications Office of the European Union; 2017, EUR 28596 EN, doi:10.2760/772692.](#)

<sup>50</sup> Artificial land cover is defined as the total of roofed built-up areas (including buildings and greenhouses), artificial non built-up areas (including sealed area features, such as yards, farmyards, cemeteries, car parking areas etc. and linear features, such as streets, roads, railways, runways, bridges) and other artificial areas (including bridges and viaducts, mobile homes, solar panels, power plants, electrical substations, pipelines, water sewage plants, and open dump sites).

biodiversity and a measure of the environmental pressure on people living in urbanised areas. A similar measure is population density.

**Figure 12: Proportion of artificial land cover, 2015** <sup>51</sup>



Spain ranks below the EU average for artificial land coverage with 3.3 % of artificial land (EU-28 average is 4.1 %). The population density is 92.5/km<sup>2</sup>, which is also below the EU average of 118<sup>52</sup>.

As the OECD highlights, significant environmental pressures remain in Spain. These are driven by land conversion that occurred during the construction boom of the early 2000s and the population increase which has been significant in some coastal areas<sup>53</sup>.

Contamination can severely reduce soil quality and threaten human health or the environment. A recent report of the European Commission<sup>54</sup> estimated that potentially polluting activities have taken or are still taking place on approximately 2.8 million sites in the EU. At EU level, 650 000 of these sites have been registered

in national or regional inventories. 65 500 contaminated sites already have been remediated. Spain has registered 43 092 sites where potentially polluting activities have taken or are taking place, and already has remediated or applied aftercare measures on 157 sites.

Soil erosion by water is a natural process, which can be aggravated by climate change and human activities, such as inappropriate agricultural practices, deforestation, forest fires or construction works. High levels of soil erosion can reduce productivity in agriculture and have negative and transboundary impacts on biodiversity and ecosystem service and on rivers and lakes (increased volume of sediments, transport of contaminants). According to the RUSLE2015 model<sup>55</sup>, Spain has an average soil loss rate by water of 3.94 tonnes per hectare per year (t ha<sup>-a</sup> yr<sup>-y</sup>) compared to a European mean average of 2.46 t ha<sup>-a</sup> yr<sup>-y</sup>, which indicates soil erosion is medium on average. It is important to note that these figures are the output of a model run at EU level and therefore should not be considered as values measured in-situ. The actual soil loss rate can vary widely within the Member State depending on local conditions.

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

## Marine protection

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

The Marine Strategy Framework Directive (MSFD)<sup>56</sup> aims to achieve good environmental status of the EU's marine waters by 2020. To that end, Member States must develop a marine strategy for their marine waters, and cooperate with the EU countries that share the same marine (sub)region.

For Spain, the Convention for the protection of the marine environment of the North-East Atlantic (the OSPAR Convention) and the Convention for the Protection of the Marine Environment and the Coastal Region of the Mediterranean (the Barcelona Convention) play an important role in achieving the Directive's goals. These conventions provide marine strategies with different steps to be developed and implemented over six-year cycles. The latest step required Member States to set up their Programme of Measures and report it to

<sup>51</sup> Eurostat, [Land covered by artificial surfaces by NUTS 2 regions](#).

<sup>52</sup> Eurostat, [Population density by NUTS 3 region](#).

<sup>53</sup> OECD [Environmental Performance Review: Spain 2015](#)

<sup>54</sup> Ana Paya Perez, Natalia Rodríguez Eugenio (2018), Status of local soil contamination in Europe: Revision of the indicator "Progress in the management Contaminated Sites in Europe"

<sup>55</sup> Panagos, P., Borrelli, P., Poesen, J., Ballabio, C., Lugato, E., Meusburger, K., Montanarella, L., Alewell, C., The new assessment of soil loss by water erosion in Europe, (2015) Environmental Science and Policy, 54, pp. 438-447.

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



the Commission by 31 March 2016. The Commission has assessed whether Spanish measures were appropriate to reach good environmental status<sup>57</sup>.

Spain's Programme of Measures includes a large number of measures based on legal acts and regulations already in place. After a thorough analysis, Spain has also defined many new measures for aspects not sufficiently covered by the existing measures. These new measures are specifically designed to comply with the Marine Strategy Framework Directive.



A large number of Spanish measures will directly address pressures. Several measures also refer to scientific research, which will help to fill gaps in knowledge on the marine environment and achieve good environmental status. For example, for biodiversity, Spain has adopted a measure (i.e. a common roadmap) to improve and secure coordination between Spain and Portugal for the implementation of the Marine Strategy Framework Directive in the North-East Atlantic and Macaronesian subregions. For marine litter, some measures directly address the pressure. For example, there are measures dealing with port activities that promote the installation of specialised equipment and fishing docks for the selective gathering of marine debris collected at sea. Other measures aim to increase knowledge and regional coherence in approaches to tackle marine litter<sup>58</sup>.

Although the measures address almost all pressures and targets, they do not cover every activity and associated impact. For example, there are limited gaps for underwater noise, as the measures do not appear to cover noise input from port operations, marine hydrocarbon extraction and solid waste disposal sources. Nevertheless, these recent years it has been establish a high level of marine protection from hydrocarbons exploration projects through environmental impact

assessment procedures. Marine seismic acquisition projects in Mediterranean sea have been submitted to a thorough impact evaluation procedures, whose primary focus have been to guarantee cetacean, turtle and bird conservation.

Overall, the Spanish Programme of Measures partially addresses the requirements of the Marine Strategy Framework Directive.

### 2019 priority actions

- Determine the timelines for achieving good environmental status when these have not been reported.
- Provide more information about the measures, establish more measures that have a direct impact on the pressures and quantify the expected level of reduced pressure as a result of the measures.
- Ensure regional cooperation with Member States sharing the same marine (sub)region to address predominant pressures.
- Ensure reporting of the different elements under the Marine Strategy Framework Directive by the set deadline.

<sup>57</sup> European Commission, [Commission Report assessing Member States' programme of measures under the MSFD – SWD\(2018\) 393 final](#), of 31.07.2018.

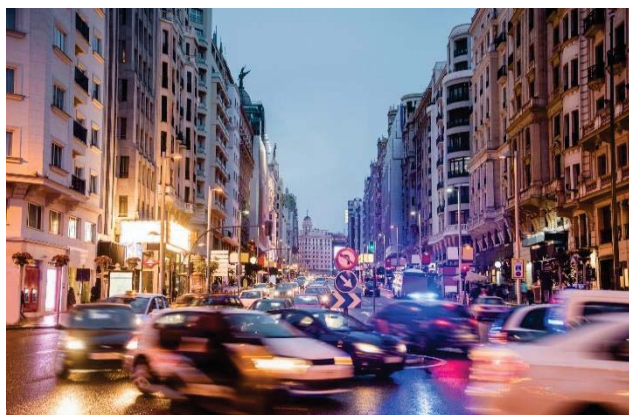
<sup>58</sup> The 39<sup>th</sup> Seminar of the Spanish Network of Environmental Authorities, held in Santiago de Compostela in November 2017, was devoted to 'Marine litter and EU funds'.

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

#### Air quality

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

The EU has developed a comprehensive body of air quality legislation<sup>59</sup>, which establishes health-based standards and objectives for a number of air pollutants.



Most of the emissions of several air pollutants have decreased significantly in Spain<sup>60</sup>. The emission reductions between 1990-2014 mentioned in the previous EIR continued between 2014-2016 with emissions of sulphur oxides (SOx) falling by 12.68 %, emissions of nitrogen oxides (NOx) by 4.47 %, and emissions of fine particulate matter PM<sub>2.5</sub> by 1.01 %. Meanwhile, emissions of volatile organic compounds (NMVOCs) have increased by 4.63 % and emissions of ammonia (NH<sub>3</sub>) by 6.13 % between 2014 and 2016. Most of the emissions of these pollutants are within the national emission ceilings. However, emissions of ammonia are currently exceeding applicable ceilings<sup>61</sup>.

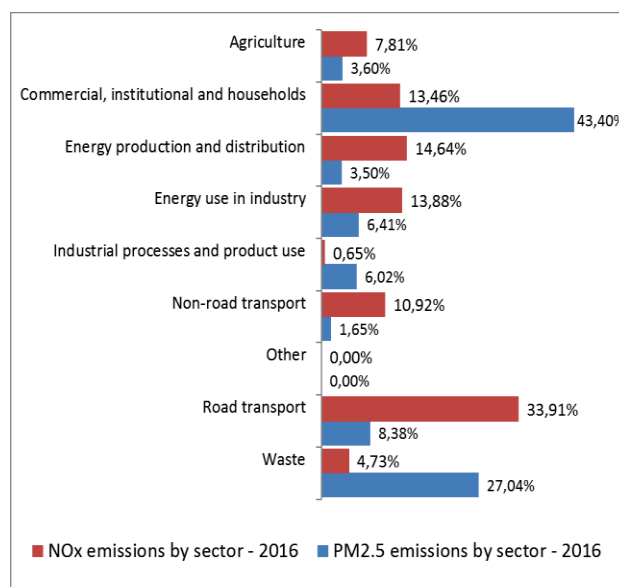
<sup>59</sup> European Commission, 2016. [Air Quality Standards](#)

<sup>60</sup> See [EIONET Central Data Repository](#) and [Air pollutant emissions data viewer \(NEC Directive\)](#)

<sup>61</sup> The current national emission ceilings have been mandatory since 2010 ([Directive 2001/81/EC](#)); revised ceilings for 2020 and 2030 have been set by [Directive \(EU\) 2016/2284](#) on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC.

See also Figure 13 on the total PM<sub>2.5</sub> and NO<sub>x</sub> emissions per sector.

Figure 13: PM<sub>2.5</sub> and NO<sub>x</sub> emissions by sector in Spain<sup>62</sup>



Despite these reductions in emissions, additional efforts are needed to attain the emission reduction commitments (compared to 2005 emission levels) laid down in the new National Emissions Ceilings Directive<sup>63</sup> for 2020-2029 and for any year from 2030.

At the same time, air quality in Spain continues to give cause for concern. For 2015, the European Environment Agency estimated that about 27 900 premature deaths were attributable to fine particulate matter concentrations, 1 800 to ozone concentration and over 8 900 to nitrogen dioxide concentrations<sup>64</sup>.

For 2017<sup>65</sup>, exceedances related to the annual limit value for nitrogen dioxide (NO<sub>2</sub>) were registered in 7 (out of 127) air quality zones (including Madrid, Barcelona and Granada). Exceedances have also been registered related to particulate matter (PM<sub>10</sub>) in 5 (out of 131) air quality zones (including Aviles and Granada)<sup>66</sup>. Furthermore, the target values for ozone were exceeded. See also Figure 14 on the number of air quality zones in exceedance for NO<sub>2</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>.

<sup>62</sup> 2016 NECD data submitted by Member State to the EEA.

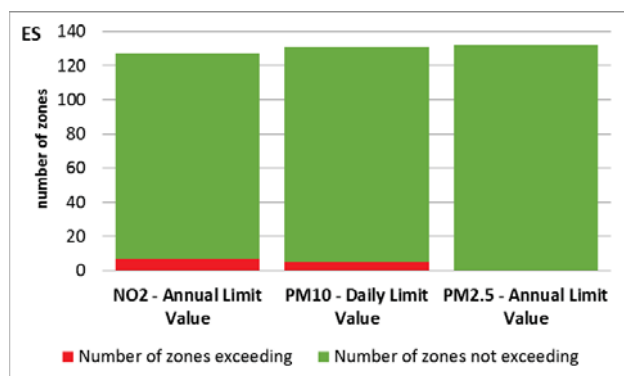
<sup>63</sup> [Directive 2016/2284/EU](#)

<sup>64</sup> EEA, [Air Quality in Europe – 2018 Report](#), p. 64. Please see details in this report as regards the underpinning methodology).

<sup>65</sup> EEA, [EIONET Central Data Repository](#).

<sup>66</sup> EEA, EIONET Central Data Repository.

**Figure 14: Air quality zones exceeding EU air quality standards in 2017<sup>67</sup>**



According to a special report by the European Court of Auditors<sup>68</sup>, EU action to protect human health from air pollution has not had its expected impact. There is a risk that air pollution is being underestimated in some instances because it may not always be monitored in the right places. Member States are now required to report both real-time and validated air quality data to the Commission<sup>69</sup>.

The persistent breaches of air quality requirements (for PM<sub>10</sub> and NO<sub>2</sub>), which have severe negative effects on people's health and the environment, are being followed up by the European Commission through infringement procedures covering all the Member States concerned, including Spain.

On the exceedance of NO<sub>2</sub>, the measures Spain is putting in place or planning appear capable of appropriately tackling the identified gaps, if correctly implemented. For this reason, the European Commission will continue to closely monitor implementation of these measures and their effectiveness in redressing the situation as soon as possible. The aim is to put in place appropriate measures to bring all zones into compliance.

### 2019 priority actions

- In the context of the forthcoming national air pollution control programme (NAPCP), reduce the main emission sources through targeted actions, including the priority actions stated below.

<sup>67</sup> [EEA, EIONET Central Data Repository](#). Data reflects the reporting situation as of 26 November 2018.

<sup>68</sup> European Court of Auditors, Special report no 23/2018, [Air pollution: Our health still insufficiently protected](#), p.41.

<sup>69</sup> Article 5 of [Commission Implementing Decision 2011/850/EU](#) of 12 December 2011 laying down rules for [Directives 2004/107/EC](#) and [2008/50/EC](#) of the European Parliament and of the Council as regards the reciprocal exchange of information and reporting on ambient air quality (OJ L 335, 17.12.2011, p. 86) requires Member States to provide Up-To-Date data.

- Accelerate reductions in nitrogen oxide (NO<sub>x</sub>) emissions and nitrogen dioxide (NO<sub>2</sub>) concentrations; this will require, for example, further reducing transport emissions — in particular in urban areas (and may require proportionate and targeted restrictions on the access of vehicles to these areas).
- Reduce ammonia (NH<sub>3</sub>) emissions to comply with currently applicable national emission ceilings, for example by introducing or expanding the use of low-emission agricultural techniques.
- Accelerate reductions in particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>) emissions and concentrations; this will require, for example, further reducing emissions from energy production and heat generation using solid fuels, or promoting efficient and clean district heating.

### Industrial emissions

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

- (i) protect air, water and soil;
- (ii) prevent and manage waste;
- (iii) improve energy and resource efficiency; and
- (iv) clean up contaminated sites.

To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the Industrial Emissions Directive<sup>70</sup> (IED).

The overview of industrial activities regulated by IED below is based on the country profile on Spain's Industrial Emissions policy<sup>71</sup>.

In Spain, around 5 770 industrial installations are required to have a permit based on the IED. The industrial sectors in Spain with the most IED installations in 2015 were intensive poultry and pig farming (50 %), followed by minerals (10 %), waste (9 %) and the chemicals sector (7 %).

The sectors identified as contributing the largest burden to the environment for emissions to air were:

- the energy-power sector for sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), cadmium (Cd), arsenic (As), chromium (Cr), copper (Cu), lead (Pb), mercury (Hg), nickel (Ni), zinc (Zn) and polychlorinated

<sup>70</sup> [Directive 2010/75/EU](#) covers industrial activities carried out above certain thresholds. It covers energy industry, metal production, mineral and chemical industry and waste management, as well as a wide range of industrial and agricultural sectors (e.g. intensive rearing of pig and poultry, pulp and paper production, painting and cleaning).

<sup>71</sup> European Commission, [Industrial emissions policy country profile – Spain](#)

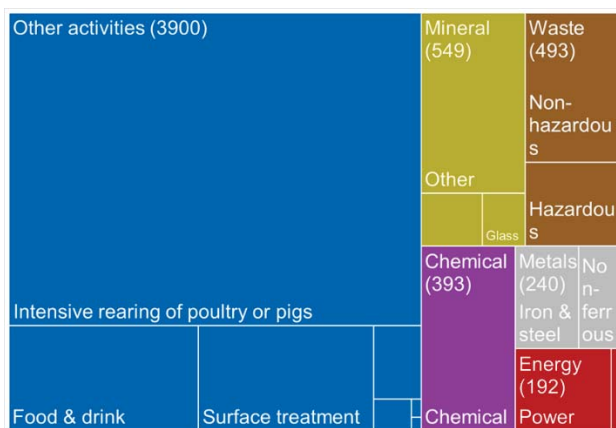


dibenzodioxins and polychlorinated dibenzofurans (PCDD/F),

- 'other activities' (mostly intensive rearing of poultry or pigs and surface treatment) for non-methane volatile organic compounds (NMVOCs) and ammonia (NH<sub>3</sub>),
- the iron and steel sector for Cd, Hg, and PCDD/F, and
- the hazardous waste management sector for PCDD/F.

The breakdown is shown in the bar chart on Figure 16.

**Figure 15: Number of IED industrial installations by sector, Spain (2015)**



The sectors of metal production, energy-power, energy-refining and 'other activities' were identified as having a significant environmental burden on emissions to water. Metal production, chemicals and waste management mainly contribute to the generation of hazardous waste. Waste management, energy-power, metal production and 'other activities' mostly contribute to the generation of non-hazardous waste.

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

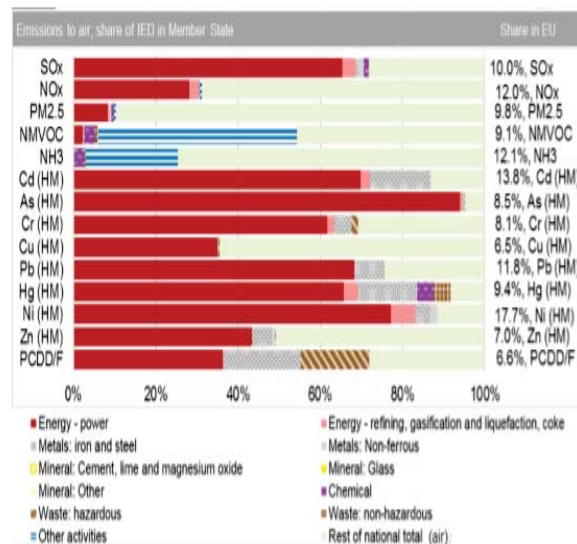
Best available techniques (BAT) reference documents (BREFs) and BAT conclusions are developed through the exchange of information between Member States, industrial associations, NGOs and the Commission. This ensures good collaboration with stakeholders and enables a better implementation of the IED.

The Commission relies on and welcomes the efforts by national competent authorities to implement the legally binding BAT conclusions and associated BAT emission levels in environmental permits. This results in a considerable and steady reduction of pollution.

By way of example, implementing the recently adopted BAT associated emission levels for large combustion plants will —on average and depending on the situation

of individual plants — reduce emissions of sulphur dioxide by 25 % to 81 %, nitrogen oxide by 8 % to 56 %, dust by 31 % to 78 % and mercury by 19 % to 71 %.

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



The challenges identified were certain air and water pollutant emissions and the odour from plants engaged in the 'intensive rearing of poultry or pigs', air pollution from coal-fired power generation plants and the co-incineration of waste in cement plants.

## 2019 priority actions

- Review permits to ensure compliance with newly adopted BAT conclusions.
- Introduce stricter monitoring and enforcement to ensure compliance with BAT conclusions.
- Address air and water pollutant emissions and the odour from plants engaged in the intensive rearing of poultry or pigs and tackle air pollution from coal-fired power generation plants and from the co-incineration of waste in cement plants.

## Noise

The Environmental Noise Directive<sup>72</sup> provides for a common approach to avoiding, preventing and reducing the harmful effects of exposure to environmental noise.

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU<sup>73</sup>.

<sup>72</sup> Directive 2002/49/EC.

<sup>73</sup> WHO/JRC, 2011, Burden of disease from environmental noise, Fritsch, L., Brown, A.L., Kim, R., Schwela, D., Kephelopoulou, S. (eds),

Based on a limited set of data<sup>74</sup>, environmental noise causes at least 1 100 premature deaths and 4 100 hospital admissions per year in Spain. Also, some 2 300 000 people have trouble sleeping.

Implementation of the Environmental Noise Directive has been significantly delayed in Spain. Based on the most recent full set of information that could be analysed (i.e. 2012 for noise maps and 2013 for action plans), the noise mapping for urban agglomerations, roads and railways has not been completed yet. Also, the action plans for almost all the agglomerations, airports and most major roads and major railways are still missing. These instruments, adopted after a public consultation had been carried out, should include the measures to keep noise low or reduce it.

### 2019 priority actions

- Complete missing noise mapping
- Complete action plans for noise management.

## Water quality and management

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

The existing EU water legislation<sup>75</sup> puts in place a protective framework to ensure high standards for all water bodies in the EU and addresses specific pollution sources (for example, from agriculture, urban areas and industrial activities). It also requires that the projected impacts of climate change are integrated into the corresponding planning instruments e.g. flood risk management plans and river basin management plans, including programme of measures which include the actions that Member States plan to take in order to achieve the environmental objectives.

<sup>74</sup> World Health Organisation, [Regional Office for Europe](#), Copenhagen, Denmark.

<sup>75</sup> European Environment Agency, [Noise Fact Sheets 2017](#).

<sup>75</sup> This includes the [Bathing Waters Directive \(2006/7/EC\)](#), the [Urban Waste Water Treatment Directive \(91/271/EEC\)](#) (on discharges of municipal and some industrial wastewaters), the [Drinking Water Directive \(98/83/EC\)](#) (on potable water quality), the [Water Framework Directive \(2000/60/EC\)](#) (on water resources management), the [Nitrates Directive \(91/676/EEC\)](#) and the [Floods Directive \(2007/60/EC\)](#).

### Water Framework Directive

Spain has 25 River Basin Management Plans (RBMPs) in accordance to the Water Framework Directive (WFD), related to the correspondent River Basin Districts.

Spain has adopted its second cycle RBMPs<sup>76</sup>, although the seven RBMPs of the Canary Islands have been adopted with a great delay<sup>77</sup>. Moreover, in the case of the Canary Islands RBMPs the deadline for public consultation provided by the WFD has been shortened.

The European Commission has assessed the status and the development since the adoption of the first cycle RBMPs, taking also into consideration the suggested actions included in the 2017 EIR.

The most significant pressures on surface water bodies in Spain was point urban waste water (37% of surface water bodies), followed by diffuse agriculture (34%), abstraction or flow diversion for agriculture (22%). 16% of surface water bodies were affected by abstraction or flow diversion for public water supply and 20% by introduced species and diseases and 15% by dams, barriers and locks for irrigation.

The most significant pressures on groundwater bodies in terms of proportion of groundwater bodies affected at the national level was diffuse agricultural pollution (56% of groundwater bodies), abstraction or flow diversion for agriculture (32%), and abstraction or low diversion for public water supply (27%).

The most significant impact on surface water bodies in Spain in terms of the proportion of water bodies was altered habitats due to morphological changes (36% of water bodies) followed by nutrient pollution (33%) and organic pollution (24%).

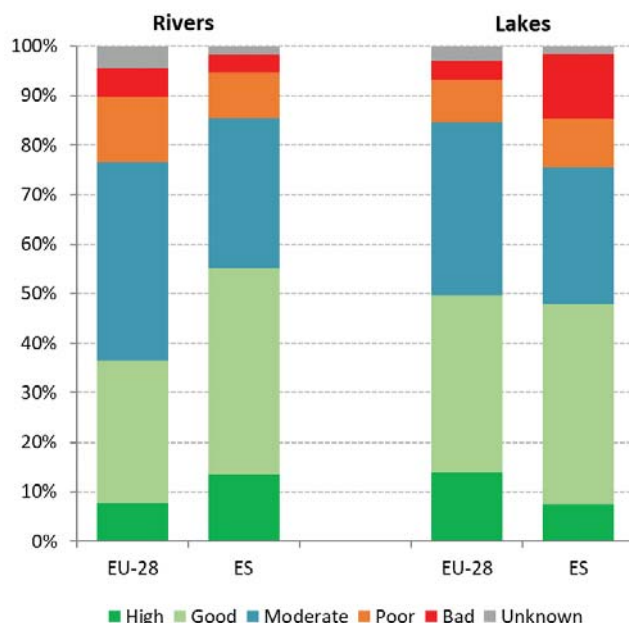
The most significant impact on groundwater bodies was nutrient pollution (affecting 39% of groundwater bodies) followed by chemical pollution (27%) and abstraction exceeding available groundwater resources (22%).

In general in Spain, ecological monitoring is undertaken at more sites and in more water bodies than for chemical monitoring in all water categories. In terms of surveillance monitoring of ecological status, there was a decrease in the numbers of sites in most districts for all relevant water categories (39% reduction in the number of surveillance sites and 18% reduction in the numbers of operational sites).

Ecological status or potential of surface water bodies are illustrated below in Figure 17. The proportion of water bodies with unknown ecological status has decreased from 20% to 2% for rivers and lakes and from around 15% to 5% for coastal and transitional waters.

<sup>76</sup> According to the WFD, the deadline was December 2015.

<sup>77</sup> The first in September 2018 and the last one in January 2019.

**Figure 17: Ecological status or potential of surface water bodies in Spain<sup>78</sup>**

Between the first and second RBMPs there was a large increase in the proportion of surface water bodies with good chemical status from 58% to 87% and a small increase in the proportion failing to achieve good chemical status. Furthermore, the proportion with unknown status has reduced from 37% to 6%. 54% of water bodies were classified by monitoring, 45% by expert judgement and less than 1% by grouping.

The chemical status situation in ground water bodies has not improved and 31 % of the total groundwater body area is still failing good chemical status. The number of groundwater bodies failing good quantitative status has declined slightly and 75% are now in good quantitative status and 25% are failing good status.

Significant progress seems to have been achieved regarding the development of RBMPs included focus on significant pressures for each River Basin District, mapping of national measures as well as Key Type of Measures to tackle pressures. In addition, gap analyses for 2015, 2021 and 2027 have been reported for most significant pressures in 18 River Basin Districts.

Spain has reported that some measures from the first Programme of Measures has been completed but there are still obstacles regarding implementation related to delays, governance, lack of finance and lack of mechanisms.

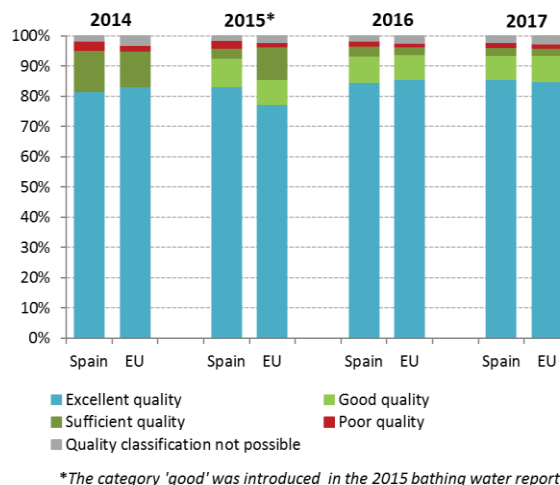


### Nitrates Directive

Regarding the implementation of the Nitrates Directive, 2012-2015 data on the regional action programmes and the current designation of nitrate vulnerable zones have shown possible shortcomings, with intensive livestock production still putting relevant pressure on the quality of water resources<sup>79</sup>.

### Drinking Water Directive

On the Drinking Water Directive, no new data are available since the previous 2017 EIR report<sup>80</sup>.

**Figure 18: Bathing water quality 2014 – 2017<sup>81</sup>**

### Bathing Water Directive

On the Bathing Water Directive, Figure 18 shows that in 2017, out of the 2 219 Spanish bathing waters, 85.5 % were of excellent quality, 8 % of good quality and 2.7 %

<sup>78</sup> EEA, [WISE dashboard](#).

<sup>79</sup> The Commission has launched in 2018 a new horizontal infringement procedure against Spain on the Nitrates Directive.

<sup>80</sup> Compliance with the Drinking Water Directive microbiological and chemical parameters as last reported was very high.

<sup>81</sup> European Environment Agency, 2018. [European bathing water quality in 2017](#), p. 21.

of sufficient quality (84.6 %, 8.8 % and 3.2 % respectively in 2015). In 2017, 38 bathing waters were of poor quality in Spain<sup>82</sup>. Detailed information on Spanish bathing waters is available on a national portal<sup>83</sup> and via an interactive map viewer of the European Environment Agency<sup>84</sup>.

### Urban Waste Water Treatment Directive

Spain has encountered difficulties implementing the Urban Waste Water Treatment Directive (UWWTD).

The Commission has five different infringement procedures currently open against Spain. For the most advanced case (normal areas), the EU Court of Justice issued a second ruling on 25 July 2018, imposing for the first time in the environmental sector pecuniary sanctions to Spain<sup>85</sup>.

On collection and treatment rates in Spain overall, 96.9 % of the wastewater is collected, and 84.1 % of the load collected undergoes secondary treatment. Finally, 66.8 % of the wastewater load collected receives more stringent treatment.

The estimated investment needed to ensure appropriate collection and treatment of the remaining agglomerations is EUR 10 billion<sup>86</sup>. According to this last report, the final projects are expected to be completed by 2027-2030, far beyond the final deadline of 2005 set up by Directive 91/271/EEC.

The Spanish Government has recently announced the new Plan DSEAR<sup>87</sup>, which include water investments in the entire Spanish territory, in three pillars: i) wastewater, ii) water efficiency and iii) water reuse.

For the agglomerations in breach of the Directive, Spain must finalise those projects as soon as possible. It should be noted that above 700 Spanish agglomerations are covered by the five infringement procedures mentioned above.

### Floods Directive

The Floods Directive established a framework for the assessment and management of flood risks, aiming at the

reduction of the adverse consequences associated with significant floods.

Spain has adopted and reported its first Flood Risk Management Plans (except for the Canary Islands) under the Directive. The Commission's assessment found that good efforts were made with positive results in setting objectives and devising measures focusing on prevention, protection and preparedness. The assessment also showed that, as was the case for other Member States, Spain's Flood Risk Management Plans do not yet include a baseline to assess the progress achieved in implementing measures (by extension the objectives too) and better integration with the National Climate Change Adaptation Strategy. In addition, there is scope for clarifying the method for selecting and prioritising measures, including the use of cost/benefit analysis.

Certain areas of Spain are water-stressed<sup>88</sup>, meaning that water demand exceeds the available water resources under sustainable conditions. Spanish RBMPs include, by legal requirement, water balances at the scale of water exploitation systems. In water-stressed areas, water reuse and desalination are part of the mix of available resources.

Decoupling economic growth from water use remains a challenge in Spain<sup>89</sup>. Sectors like agriculture, tourism and energy are heavily dependent on the water supply. An adequate water-pricing policy to recover the cost of water services, together with greater transparency of prices and subsidies, promotion of wastewater reuse, modernisation of irrigation systems, as well as better control of water abstraction, could all harness water saving potential, especially in the agriculture sector, the major consumer of water.

As the 2017 EIR country report pointed out, there is scope for a more efficient use of water supply infrastructures. For example, desalination plants built primarily on the Mediterranean coast, some of them with EU funding, have been underused, although they increased their use during the last drought period that Spain has suffered until end-2017. Measures to improve water governance could also be envisaged.

Spain faces investments gaps on water supply and wastewater infrastructures<sup>90</sup>. Further infrastructure investment is needed to improve water management, e.g. to treat wastewater, reduce of leaks in the networks and improve water supply. This would bring

<sup>82</sup> European Environment Agency, 2017. [European bathing water quality in 2016](#), p. 17.

<sup>83</sup> Information system [NAYADE](#).

<sup>84</sup> EEA, [State of bathing waters](#).

<sup>85</sup> A lump sum of EUR 12 million and a penalty payment of almost EUR 11 million per six-month period of delay.

<sup>86</sup> European Commission, Ninth Report on the Implementation Status and the Programmes for Implementation of the Urban Waste Water Treatment Directive ([COM\(2017\)749](#)) and Commission Staff Working Document accompanying the report ([SWD\(2017\)445](#)).

<sup>87</sup> It has been submitted to public consultation during 3 months, from October 2018 to January 2019.

<sup>88</sup> [European Commission, 2016. EU Resource Efficiency Scoreboard 2015](#)

<sup>89</sup> Study 'Potential for Growth and Job Creation through the Protection of Water Resources'. DG ENV 2015.

<sup>90</sup> European Commission, Country Report Spain 2018 in the framework of the European Semester ([SWD\(2018\) 78 final](#)), of 7.3.2018.



environmental, economic and social benefits to Spain<sup>91</sup>.

To address the main water management challenges in Spain, the Ministry for Agriculture, Fisheries, Food and Environment launched a process in 2017 to reach a "National Pact on Water" (*Pacto Nacional por el Agua*). However, this process is still not completed.

Finally, flooding is a recurrent problem in Spain. However, natural water retention measures to prevent flooding are often disregarded, even though they are sometimes more cost-effective than hard infrastructure. Such measures also cost less than what it costs to recover from a flood<sup>92</sup>.

### 2019 priority actions

- Ensure that the next RBMPs are adopted on time, respecting the requirements concerning public consultation.
- Make more use of flow meters, to ensure that all abstractions are metered and registered, and that permits are adapted to available resources, and ensure that users report regularly to river basin authorities on the volumes actually abstracted, especially in those river basin districts, which present significant abstraction pressures, ensuring implementation of environmental e-flows.
- Spain shall ensure appropriate designation of nitrate vulnerable zones and reinforce action programmes in order to address nutrients pollution and improve water quality over time (groundwater, fresh and saline surface waters) in these zones.
- Urgently complete implementation of the UWWTD for all agglomerations, by building up the necessary wastewater infrastructure.
- Adopt urgently the FRMPs for the Canary Islands and ensure that the next FRMPs are adopted on time.
- Take steps to clarify the method for selecting and prioritising measures, including the use of cost/benefit analysis in the Flood Risk Management Plans.

### Chemicals

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

The EU's chemicals legislation<sup>93</sup> provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

The 2016 European Chemicals Agency (ECHA) report on the operation of REACH and CLP<sup>94</sup> showed that enforcement activities are still evolving. The Forum for Exchange of Information on Enforcement has shown, through its coordinated enforcement projects<sup>95</sup>, that there is room for more effective enforcement. This is especially the case for registration obligations and safety data sheets where a relatively high level of non-compliance has been found.

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

A 2015 Commission study already highlighted the importance of harmonised market surveillance and enforcement when implementing REACH in Member States. This was seen as a critical factor in the successful operation of a harmonised single market<sup>96</sup>.

In March 2018, the Commission published an evaluation of REACH<sup>97</sup>. The evaluation concludes that REACH delivers on its objectives, but that progress made is slower than anticipated. In addition, the registration dossiers often are incomplete. The evaluation underlines the need to enhance enforcement by all actors, including registrants, downstream users and in particular for importers, to ensure a level playing field, meet the objectives of REACH and ensure consistency with the actions envisaged to improve environmental compliance and governance. Consistent reporting of Member State enforcement activities was considered important in that respect.

<sup>91</sup> European Semester 2018, Commission's proposal of CSRs for Spain, recital 17, [COM\(2018\) 408 final](#), 23.5.2018.

<sup>92</sup> RPA, 2014. Study on Economic and Social Benefits of Environmental Protection and Resource Efficiency Related to the European Semester. Study for the European Commission, [Annex 1: Country fiches](#)

<sup>93</sup> Principally for chemicals: REACH (OJ L 396, 30.12.2006, p.1.); for Classification, Labelling and Packaging, the CLP Regulation (: OJ L 252, 31.12.2006, p.1.), together with legislation on biocidal products and plant protection products.

<sup>94</sup> European Chemicals Agency, [Report on the Operation of REACH and CLP 2016](#).

<sup>95</sup> ECHA, on the basis of the projects [REF-1](#), [REF-2](#) and [REF-3](#).

<sup>96</sup> European Commission. (2015). Monitoring the Impacts of REACH on Innovation, Competitiveness and SMEs. Brussels: European Commission.

<sup>97</sup> [COM\(2018\) 116](#).

As defined in the Spanish Sanctions Regime Law, the responsibility for enforcing REACH/CLP in Spain lies with the regional authorities. Each Autonomous Community has its own legal arrangements to organise enforcement.

At the central level, there are two competent authorities for REACH/CLP responsible for two aspects of implementing REACH/CLP: protection of the environment and protection of human health. These two authorities help coordinate all Spanish enforcement authorities.

The Ministry for the Ecological Transition coordinates the work of the environmental inspection authorities. The Ministry runs a technical coordination group where the regional inspection authorities can share information, knowledge and experiences.

The Ministry of Health, Consumption and Social Welfare coordinates the work of the regional public health authorities through a public health inspectors' coordination group. The Ministry has established a Rapid System on Information Exchange on Chemicals (SIRIPQ), which allows regional public health inspectors to exchange information on cases of non-compliance<sup>98</sup>.

Spain is involved in the 'R4R-European chemical regions for resource efficiency' project which brings together research institutes, industry and regions in six countries<sup>99</sup>.

### Making cities more sustainable

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

Europe can be seen as a union of cities and towns. Around 75 % of the EU population live in urban areas<sup>100</sup> and that figure is projected to rise to just over 80% by 2050<sup>101</sup>. Urban areas pose particular challenges for the environment and human health, but they also provide opportunities for using resources more efficiently. The EU encourages municipalities to become greener through initiatives such as the Green Capital Award<sup>102</sup>, the Green Leaf Award<sup>103</sup> and the Green City Tool<sup>104</sup>.

### Financing greener cities

Spain initially earmarked around EUR 1 362 million of the 2014-2020 European Regional Development Fund (ERDF) (6.58 %) for sustainable urban development<sup>105</sup>, more than the mandatory 5 % of allocations under the ERDF and the European Social Fund (ESF) in this programming period. With the mid-term technical review, this rate has been put even higher.

In the previous programming periods, Spain used ERDF funding for outstanding large-scale initiatives to promote sustainable urban development and urban regeneration across many cities and towns (i.e. URBAN initiatives).

In the current EU funding period 2014-2020, Spain has also designed a comprehensive initiative for local administrations to promote Sustainable and Integrated Urban Development. This ambitious initiative called EDUSI<sup>106</sup> has been launched by the Ministry for Finance using the ERDF 2014-2020 in favour of the local administrations (municipalities and provinces). It continues the tradition in Spain of using EU funding for urban regeneration in many cities and towns, while placing the emphasis on sustainability. The EDUSI can be considered as a good practice, which have involved plenty of Spanish local administrations and stakeholders, although they need to be implemented properly and in due time.

At EU level, within the Urban Development Network initiatives, the ERDF is supporting Urban Innovative Actions (UIA) to test new and unproven solutions to urban challenges. The UIA has a total ERDF budget of EUR 372 million for the period 2014-2020. Spain has obtained funding in the first two calls for projects in Bilbao, Fuenlabrada, Madrid, Velez-Malaga and Viladecans<sup>107</sup>.

### Participation in EU urban initiatives and networks

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

In the case of Spain, it should be highlighted that Vitoria-Gasteiz (in the Basque Country) was one of the first winners, receiving the EU Green Capital Award in 2012<sup>108</sup>.

<sup>98</sup> ECHA, [National Inspectorates - Spain](#)

<sup>99</sup> European Commission, [Improving resource efficiency in SMEs](#), December 2017, p. 43.

<sup>100</sup> European Commission, [Urban Europe, 2016](#).

<sup>101</sup> European Commission, Eurostat, [Urban Europe](#), 2016, p.9.

<sup>102</sup> European Commission, [European Green Capital](#).

<sup>103</sup> European Commission, [European Green Leaf Award](#).

<sup>104</sup> European Commission, [Green City Tool](#).

<sup>105</sup> Government of Spain, [Partnership Agreement 2014-2020](#), 2014.

<sup>106</sup> Under the national ERDF OP 2014-2020, there have been three calls for proposals of the EDUSI (*Estrategias de Desarrollo Urbano Sostenible e Integrado*).

<sup>107</sup> European Commission, [Urban Innovative Actions](#).

<sup>108</sup> European Commission, [Green Capital](#)

In addition, Mollet del Vallès (in Catalonia) was also one of two cities that won the inaugural EU Green Leaf in 2015<sup>109</sup>.

Another Spanish city, Cornellà de Llobregat (also in Catalonia) has won the 2019 European Green Leaf Award, jointly with Horst aan de Maas in the Netherlands<sup>110</sup>. Cornellà was commended for its commitment to transforming itself into a genuinely sustainable high-density metropolitan area that could be a role-model for other compact urban areas. The jury was particularly impressed by its traffic calming measures and the promotion of sustainable transport modes.

Spanish municipalities are generally involved in EU environmental protection and climate change initiatives.

The country participates in the European Urban Development Network<sup>111</sup>, which includes more than 500 cities across the EU responsible for implementing integrated actions based on sustainable urban development strategies financed by the ERDF.

Spanish municipalities (23 in total) are also involved in the URBACT initiative which supports sustainable urban development through 19 different thematic networks<sup>112</sup>. Four of these networks are currently led by Spanish cities:

- Igualada coordinates *4 D Cities* to give a boost to innovation and knowledge economy in the health sector;
- Baena manages *AGRI-URBAN*, based on a multi-dimensional concept of sustainability which includes environmental, social and economic objectives, and *INT-HERIT* to revitalise local cultural heritage;
- Burgos, with *Gastronomic Cities*, works towards integrated policies to promote sustainable gastronomy; and
- Bilbao is leading *In Focus* to improve the competitiveness and job creation capability of cities.

Several Horizon 2020 network projects have also contributed to the sustainability of Spanish cities. *CIVITAS* includes 30 municipalities representing Spain in a common effort to achieve cleaner and better transport in cities<sup>113</sup>. Public authorities and research organisations are part of the Socialcar project to incorporate carpooling into existing mobility systems<sup>114</sup>. Spanish cities are also participating in FosterReg to increase the public sector's

capacity to plan, finance and manage integrated urban regeneration for sustainable energy uptake<sup>115</sup>.

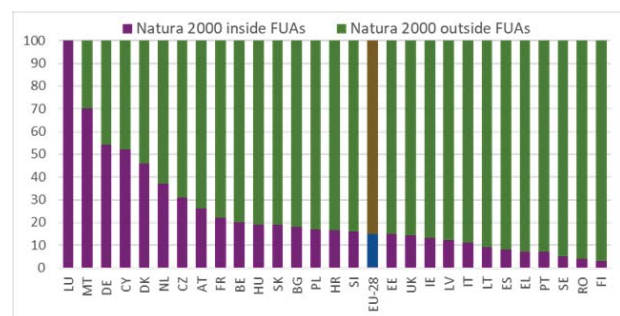
Spanish cities are actively involved in initiatives such as Eurocities and the EU Covenant of Mayors. By June 2018, some 1826 Spanish cities had signed up to the EU Covenant of Mayors, under the coordination of several provincial and regional authorities. Catalonia and Andalusia are among the regions with the highest number of commitments signed<sup>116</sup>.

These urban initiatives and networks should be welcomed and encouraged, as they contribute to a better urban environment. In 2017, 10.8 % of those living in Spanish cities considered that their residential area was affected by pollution, grime or other environmental problems, up from 13.5 % in 2016. These figures are lower than the EU-28 levels (20 % in 2017 and 18.9 % in 2016.) and those of neighbouring countries in particular (15.4 % for Portugal and 18 % for France in 2017)<sup>117</sup>.

## Nature and cities

Around 8 % of the Natura 2000 network in Spain is in a functional urban area<sup>118</sup>, below the EU average of 15 % (see Figure 19).

**Figure 19: Proportion of Natura 2000 network in Functional Urban Areas (FUA)<sup>119</sup>**



The Natural Heritage and Biodiversity Law is one of the main instruments for maintaining the Natura 2000 areas in Spain. The regional authorities are responsible for this network on land, while the national government is responsible for marine sites. Despite cuts in both national and regional budgets and resources, significant advances have been made recently in completing the network in Spain.

Several nature-cities projects are currently underway. Some municipalities have been included in Natura 2000

<sup>109</sup> European Commission, 2015. [Mollet del Vallès wins inaugural European Green Leaf 2015](#)

<sup>110</sup> European Commission, [Winners of the 2020 European Green Capital and 2019 European Green Leaf Award](#)

<sup>111</sup> European Commission, [The Urban Development Network](#).

<sup>112</sup> URBACT, [Associated Networks by country](#).

<sup>113</sup> European Commission, [Horizon 2020 Civitas Project](#).

<sup>114</sup> European Commission, [Horizon 2020 Socialcar Project](#).

<sup>115</sup> European Commission, [Horizon 2020 FosterReg Project](#).

<sup>116</sup> Covenant of Mayors for Climate and Energy, [Country signatories](#).

<sup>117</sup> European Commission, Eurostat, [Pollution, grime or other environmental problems by degree of urbanisation](#).

<sup>118</sup> European Commission, [Definition of Functional Urban Areas](#).

<sup>119</sup> European Commission, [the 7th Report on Economic, Social and Territorial Cohesion](#), 2017, p. 121.



sites, enabling them to benefit from national and international green tourism<sup>120</sup>.

An awareness-raising project to improve the understanding of Natura 2000 in Spain won a Natura 2000 Award in 2018<sup>121</sup>. Among the project's actions, 37 workshops were held to explain to people living and working in Natura 2000 sites that cover urban areas the opportunities that such sites could bring to them<sup>122</sup>.

## Urban sprawl

Spain had a relatively low weighted urban proliferation (WUP) with 0.75 UPU/m<sup>2</sup> in 2009 compared to a European average (EU28+4) of 1.64 UPU/m<sup>2</sup>, a 17 % increase from 2006 to 2009<sup>123</sup>.

## Traffic congestion and urban mobility

Traffic congestion is an important environmental issue for some urban areas in Spain. Many subjects addressed in this report are to some extent related to traffic congestion, especially air quality and noise.

The total number of passenger cars in Spain rose to 22.8 million in 2016<sup>125</sup>, while the rate of passenger cars per 1 000 inhabitants increased from 474 in 2014 to 492 in 2016<sup>126</sup>. The total number of vehicles (including lorries, buses, motorcycles and any other type of vehicles) amounted to 32 million in 2016. This increase has led to more hours spent annually in road congestion, from 26.5 in 2014 to 27 in 2016, ranking Spain as the country with the 14<sup>th</sup> highest figure in the EU<sup>127</sup>.

The traffic intensity and congestion differs widely per region and road type. The national average use for highways is 12 826 vehicles/day/km<sup>128</sup>. The higher traffic intensity is found in the main metropolitan areas such as Madrid and Barcelona, mainly due to the presence of daily commuters; and in the main interregional and international highways, where heavy transport also plays a decisive role<sup>129</sup>. For example, the M-40 (Madrid) has an average traffic intensity of 106 000 vehicles/day; and the A-3 (Madrid-Valencia) around 167 000 vehicles/day; while on the A-11 (Valladolid-Soria) only 3 452 vehicles transit per day<sup>130</sup>.

Overall, Spanish cities have medium-low levels of traffic congestion. Barcelona, Palma de Mallorca, Las Palmas and Granada are the most congested cities in Spain, with levels ranging from 26 to 31 %; while Madrid, Seville, Valencia, Zaragoza and 14 other cities have levels between 15 and 25 %<sup>131</sup>. In comparison with cities in other European countries (including non-EU countries, such as Russia), Barcelona is the 44<sup>th</sup> most congested city (out of 215 cities), Seville 93<sup>rd</sup>, Madrid 104<sup>th</sup>, Valencia 131<sup>st</sup> and Zaragoza 157<sup>th</sup>. Vitoria is the least congested city in Spain, ranking 214<sup>th</sup> in Europe.

On urban mobility, around 63 % of Spanish employees commute to work<sup>132</sup>. Around 837 000 people worked in the public transport sector in over 62 000 companies in 2015<sup>133</sup>. The use of public transport, especially buses and trams, has increased in recent years. In 2016, 12.7 million trips were made using public transport everyday (2.3 % more than in 2015)<sup>134</sup>. These last few years have seen a progressive increase in the use of urban public transport, with 7.8 million daily users of buses and 3.12 million daily users of metro systems. The use of interurban public transport has also increased, with 1.6 million people using the train on a daily basis and 1.9 million using the bus and 27 000 using maritime transport<sup>135</sup>.



In 2016, the modal split of passenger transport<sup>136</sup> shows that in Spain passenger cars accounted for 81.4 % of inland passenger transport (EU28 83.4 %), with buses and trolley buses accounting for around 11.9 % (EU28 9.1 %) and trains 6.7 % (EU28 7.6 %)<sup>137</sup>. Cars are still the favourite mode of transportation for longer distances.

<sup>120</sup> EFE, [Las ciudades comienzan a rentabilizar la protección de sus recursos naturales](#), LIFE INFONATUR 2000.

<sup>121</sup> European Commission, [Activa Red Natura](#).

<sup>122</sup> European Commission, [2018 Communication Award](#).

<sup>123</sup> Urban Permeation Units measure the size of the built-up area as well as its degree of dispersion throughout the region.

<sup>124</sup> EEA, [Urban Sprawl in Europe, Annex I](#), 2014, pp.4-5.

<sup>125</sup> Dirección General de Tráfico, [Parque de vehículos](#).

<sup>126</sup> Eurostat, [Passenger cars per 1 000 inhabitants](#), 2018.

<sup>127</sup> European Commission, [Hours spent in road congestion annually](#).

<sup>128</sup> Ministerio de Fomento, [Tráfico en 2016](#).

<sup>129</sup> Statistics Netherlands (CBS), [Traffic Intensity 2017](#), 21 February 2018.

<sup>130</sup> Ministerio de Fomento, [Tráfico en la Red de Carreteras del Estado](#), datos definitivos de 2016.

<sup>131</sup> TOMTOM, [TOMTOM Traffic Index](#).

<sup>132</sup> PageGroup, [El 40% de los trabajadores en España considera estresante el transporte público](#), 2016.

<sup>133</sup> Ministerio de Fomento, [Los transportes y las infraestructuras](#), Informe anual 2015, p. 43.

<sup>134</sup> Instituto Nacional de Estadística, [España en Cifras 2017](#), p. 50.

<sup>135</sup> Instituto Nacional de Estadística, [España en Cifras 2017](#), p. 51.

<sup>136</sup> The relation between mode of transport and kilometres travelled (excluding bicycles and other alternative methods).

<sup>137</sup> Eurostat, [Passenger transport Statistics by modal split](#).

Personal transport exacerbates seasonal problems with air quality and traffic congestion in the major metropolitan areas in Spain, leading to health and economic costs. A comprehensive approach is needed to tackle this matter, bringing environmental as well economic and social benefits.

Among the main challenges observed in this report, air quality — to an extent related to traffic congestion — especially requires priority actions at the local level. Innovative solutions for traffic management are being developed and tested in a number of Spanish cities<sup>138</sup>.

The EU also stimulate the adoption of measures in this field, for instance, through the European Mobility Week Awards for towns, in two categories: one smaller municipalities under 50,000 inhabitants and one for larger municipalities. In the case of Spain, León and Murcia have been winners of the European Mobility Week Awards in the 2006 and 2015 editions, respectively, and in all editions, there are Spanish cities in the shortlist.

Permanent Measures have been a requirement established by the Spanish Coordination of the Project since 2001, arriving in the 2018 edition to 33.039 permanent measures on sustainable mobility, implemented by the Spanish municipalities. The permanent measures have been revealed as a fundamental tool to involve not only the municipalities in the objectives of the European Mobility Week, but also citizens and civil society, which also bet on the implementation of good practices of sustainable mobility, mobility actions within the framework of this European Project.

---

<sup>138</sup> In many cities large areas of the historic centre have been progressively limited to pedestrian use only, e.g. Pontevedra.

## Part II: Enabling framework: implementation tools

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

#### Green taxation and environmentally harmful subsidies

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

Increasing environmental taxation and reducing environmentally harmful subsidies is one of the three main environmental challenges facing Spain that was singled out in the 2017 EIR country report.

In Spain, revenues from environmental taxes as a proportion of GDP remain among the lowest in the EU. According to 2017 data (see Figure 20), Spain has the fifth lowest share in the EU. Revenues from environmentally related taxes amounted to only 1.83 % of GDP against an EU average of 2.40 %. Moreover, Spain is the sixth with the lowest share of environmental taxation in revenues from taxes and social contributions (5.32 % of GDP in 2017, EU average of 5.97 %).

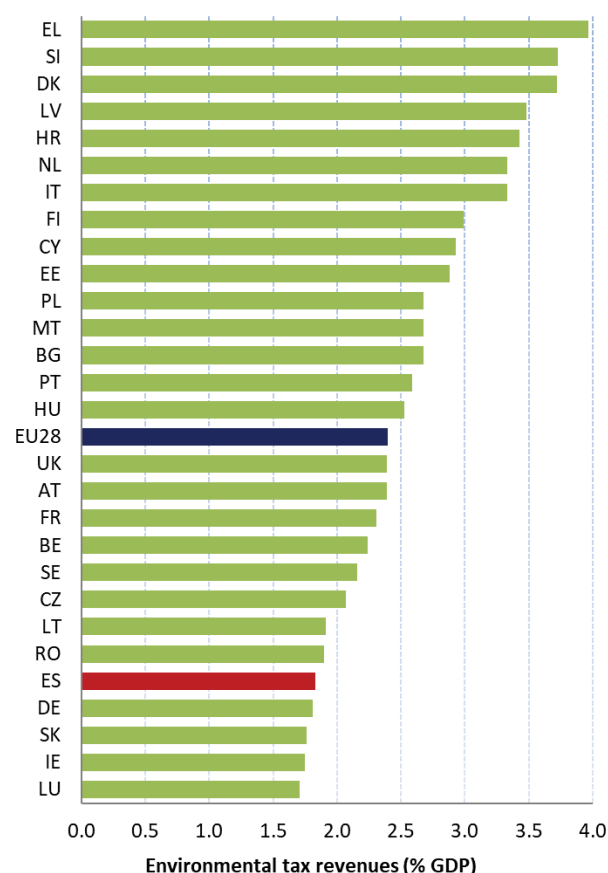
Shifting taxation away from labour towards taxes less harmful to growth was proposed a country-specific recommendation (CSR) to Spain between 2012 and 2014 as part of the annual European Semester exercise. The Commission has repeatedly stressed in the European Semester that there is potential to increase certain environmental taxes, e.g. taxes on transport, which only yield half as much revenue in Spain as the EU average (0.2 % compared with 0.5 % of GDP)<sup>139</sup>.

Environmental tax reform can play a significant role in sustaining economic growth. Taxing pollution and the use of resources would bring in additional revenues and at the same time help to discourage activities generating additional cost in the future for clean-up, health costs, etc. This additional revenue could also make up for cuts in spending.

A few measures have been taken in Spain in recent years, mainly in the energy sector. A tax on fluorinated greenhouse gases was introduced in 2013 (Law 16/2013) and gradually phased in, becoming fully applicable in

2016<sup>140</sup>. Since 2013 (Law 15/2012), Spain has been taxing the production of electric energy<sup>141</sup>, the production of radioactive fuel and the storage of radioactive waste. Moreover, Spain approved in 2015 a new tax regarding the extraction of hydrocarbons (gas and oil). However, the practical effects of this new tax are likely insignificant.

**Figure 20: Environmental tax revenues as % of Gross Domestic Product in 2017**<sup>142</sup>



Therefore, there is clearly room to review environmental taxes, mainly in the transport and energy sectors, but also for pollution and the use of resources. For instance, municipal road taxes do not always reflect the environmental performance of the vehicles being taxed. Also, new options in the waste and water sectors could be explored. Landfill taxes may be a supportive tool for

<sup>139</sup> European Commission, [European Semester Country Report Spain 2018](#), p. 27.

<sup>140</sup> Institute for European Environmental Policy, Case Studies on Environmental Fiscal Reform, [Tax on Fluorinated Gases in Spain](#)

<sup>141</sup> The Spanish Government has recently suspended the tax on the production of electric energy in order to reduce the electricity tariffs.

<sup>142</sup> Eurostat, [Environmental tax revenues, 2019](#).

the treatment of municipal waste. A new approach is needed for Spain's water pricing policy, which needs to be revised to improve water management, a key issue in the country.

As indicated in the 2017 EIR report, a 2016 study suggests that there is considerable potential for additional revenue from environmental taxes in Spain<sup>143</sup>.

In the same vein, the report issued in February 2014 by the Committee of Experts on reforming Spain's tax system (*Lagares report*) provided a complete and helpful analysis of the matter. The Committee proposed specific recommendations to harmonise and improve the performance of environmental taxes in Spain, increasing revenues in a more logical and sustainable way. However, although this work was commissioned by the Spanish Government, the measures were not part of the national tax reform that was approved in Spain at the end of 2014 (Law 26/2014) to address the EU's country-specific recommendation.

This report and the study mentioned above also show that many environmental taxes on waste management, water abstraction, water pollution, wastewater, and air pollution are adopted and implemented at regional and even at local level, with a high normative dispersion and different approaches. This uneven situation may lead to market fragmentation and economic inefficiencies.

In its 2017 National Reform Programme, Spain announced that an inter-ministerial working group had been created to study how to increase environmental taxation. However, their results are unknown. The Spanish Government has recently expressed its intention to tackle this matter and take effective measures.

Therefore, Spain should consider the full potential of environmental taxation and consider implementing a consistent approach across the country to obtain environmental, economic and social benefits.

The reduction of environmentally harmful subsidies (EHS) is another key challenge. Spain has no overall strategy to eliminate EHS, although moving away from EHS can deliver economic, social and environmental benefits, allow for improved competitiveness and support budget consolidation<sup>144</sup>. It is important to ensure that energy tax rates become more consistent across fuels and uses and that the tax system does not unduly favour fossil-based solutions. Therefore, developing a national strategy for phasing out environmentally harmful subsidies would be a positive approach for Spain.

In any case, it is fair to recognise that fossil fuel subsidies showed a considerable decrease in the past decade, mainly because of the reduction in public programmes supporting coal production and consumption. Other subsidies to support electricity capacity have also been limited, while most of the existing exemptions, reductions and refunds for fossil fuels continue the steady decline that started in 2007<sup>145</sup>. These exceptions added up to EUR 3000 million in 2016 (over EUR 2.3 billion in 2007), and the budgetary transfers for coal, electricity capacity and demand-side response (DSR) went over EUR 1 billion (around EUR 1.2 billion in 2007).

The use of alternative fuels in new passenger cars sold in Spain has been increasing over the past few years. The share of new passenger cars using alternative fuels was five times higher in 2016 than in 2011<sup>146</sup>. New fiscal measures were passed in the Plan Movalt in 2017 and continued in the Plan Movea and the future Plan Vea. The tax treatment of company cars is not really a cause for concern in Spain<sup>147</sup>.

Some progress has also been made on reducing the "diesel differential" (difference in the price of diesel versus petrol). In 2013 there was still a 27.7% gap between petrol and diesel tax rates, while in 2018 the gap is reduced to 25.1%. From 2018 on, Excise tax rates levied on petrol and are set at EUR 0.506 per liter for petrol and EUR 0.379 for diesel.

CO<sub>2</sub>-based motor vehicle taxes are in place in the country. The special tax on certain means of transport is based on CO<sub>2</sub> emissions with rates varying from 4.75 to 14.75 %, depending on pollution levels<sup>148</sup>. Incentives to encourage the purchase of cars with lower CO<sub>2</sub> emissions were extended in 2017 and 2018. These are incentives linked to annual circulation taxes, road tolls and congestion or low emission zone charges but also to the acquisition of cleaner vehicles or the use of public infrastructure<sup>149</sup>. New vehicles purchased in Spain are among the most environmentally friendly in the EU, with average CO<sub>2</sub> emissions of 114.4 grams per kilometre, below the EU average of 118 grams in 2016<sup>150</sup>.

<sup>143</sup> Economía Research and Consulting, IEEP, Aarhus University, ENT, 2016. [Study on Assessing the Environmental Fiscal Reform Potential for the EU28](#).

<sup>144</sup> 2020 Milestone on phasing out EHS in the Roadmap to a Resource Efficient Europe ([COM\(2011\) 571](#)).

<sup>145</sup> OECD, [Inventory of Support Measures for Fossil Fuels](#), 2018.

<sup>146</sup> European Commission, [Transport in the European Union Current Trends and Issues](#), 2018, pp.27-28.

<sup>147</sup> European Commission, [Taxation of commercial cars in Belgium](#), 2017, p.3.

<sup>148</sup> ACEA, [CO<sub>2</sub> based motor vehicle taxes in Europe](#).

<sup>149</sup> European Environmental Agency, [Appropriate taxes and incentives do affect purchases of new cars](#), 18 May 2018.

<sup>150</sup> European Environment Agency, [Average CO<sub>2</sub> emissions from new passenger cars sold in EU-28 Member States plus Norway, Iceland and Switzerland in 2016](#).



## Green Public Procurement

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

The purchasing power of public procurement amounts to around EUR 1.8 trillion in the EU (approximately 14% of GDP). A substantial proportion of this money goes to sectors with a high environmental impact such as construction or transport. Therefore, green public procurement (GPP) can help to significantly lower the negative impact of public spending on the environment and can help support sustainable innovative businesses. The Commission has proposed EU GPP criteria<sup>151</sup>.

In Spain, a National Action Plan for green public procurement was adopted in 2008, with targets of between 25 % and 100 % of GPP, depending on the product group and phase of implementation. The GPP criteria are developed at national level for the following product groups: construction and maintenance, energy, transport, office equipment, paper and publications, furniture, cleaning products and services, and events.

Spain has adopted two reports, one in 2011 and one in 2015, on the state of green public procurement in the State General Administration.

The Interministerial Commission for the incorporation of ecological criteria in public procurement was created in January 2018 by Royal Decree 6/2018<sup>152</sup>.

The second national Plan for green public procurement in the central public administration for the period 2018-2025 has been approved by the Council of Ministers on 7 December 2018<sup>153</sup>). This new Plan includes 20 products, works and services groups, among which stand out the construction and management of buildings, the construction and maintenance of roads, supply of electricity, printing equipment and computers, cleaning products and services, air conditioning systems and transport. It also includes a series of general environmental criteria for procurement, of a voluntary nature, which may be incorporated into the tender documents as selection criteria, award criteria, technical

specifications and special conditions for contract performance.

Some regions have also implemented measures in this respect, e.g. Catalonia and the Basque Country, with GPP policies based on the EU GPP criteria. Others regions are also working on their action plans.

## Environmental funding and investments

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

Achieving sustainability requires mobilising public and private financing sources<sup>154</sup>. The EU can certainly contribute to this<sup>155</sup>. Using the European Structural and Investment Funds (ESIF)<sup>156</sup> is essential to achieve the environmental goals and integrate these into other policy areas. Other instruments such as Horizon 2020, the LIFE programme<sup>157</sup> and the European Fund for Strategic Investments (EFSI)<sup>158</sup> may also support implementation and spread of best practice.

According to the 2017 Special Eurobarometer 468 on EU citizens' attitudes towards the environment, 88 % of Spaniards support greater EU investment in environmental protection (EU-28 average is 85 %).

## European Structural and Investment Funds 2014-2020

Since Spain joined the EU in 1986, EU funds have helped to transform it. During the last decades, the support of the EU funding has also significantly contributed to improve the implementation of the EU environmental law and policy in Spain.

## Cohesion Policy

In absolute terms, Spain is traditionally a very major beneficiary of the EU Cohesion Policy<sup>159</sup>.

<sup>151</sup> In the Communication 'Public procurement for a better environment' ([COM \(2008\) 400](#)) the Commission recommended the creation of a process for setting common GPP criteria. The basic concept of GPP relies on having clear, verifiable, justifiable and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base.

<sup>152</sup> The Government of Spain, [The Interministerial Commission for the incorporation of ecological criteria in public procurement](#)

<sup>153</sup> It has been published in the State Official Journal of 4 February 2019.

<sup>154</sup> European Commission, [Action Plan on Financing Sustainable Growth](#).

<sup>155</sup> European Union, [Invest EU portal](#)

<sup>156</sup> ESIF comprises five funds – the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD), and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF together form the EU Cohesion Policy funds.

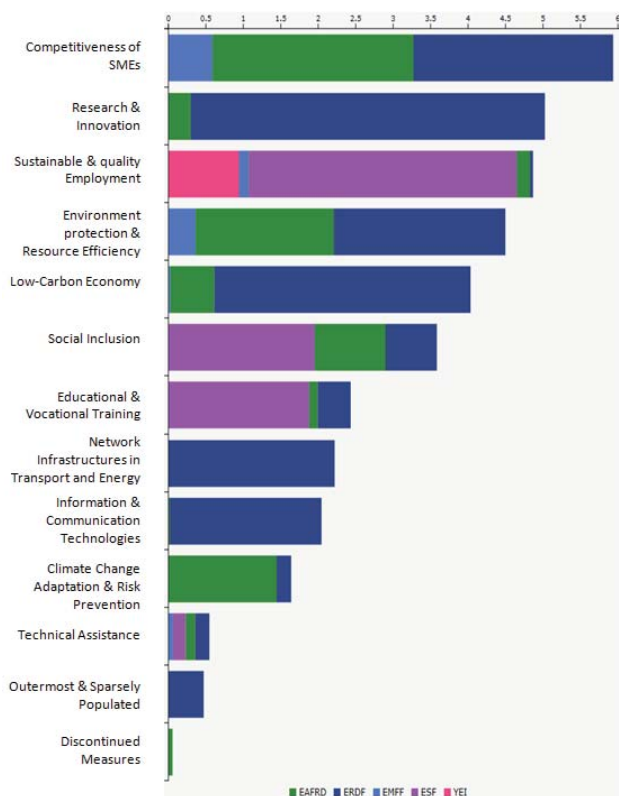
<sup>157</sup> European Commission, 2017 [LIFE Spain Sheet](#).

<sup>158</sup> European Investment Bank, 2016 [European Fund for Strategic Investments](#)

<sup>159</sup> In absolute terms, Spain was the main beneficiary until the period 2000-2006; the second in 2007-2013 and the third in 2014-2020.

Spain will receive EUR 28.56 billion<sup>160</sup> in total from the EU Cohesion Policy funding over the programming period 2014-2020 (ERDF and ESF, including European Territorial Cooperation funding and the allocation for the Youth Employment Initiative). As a consequence of the mid-term review, these figures have been increased by around EUR 1.8 billion<sup>161</sup>, taking Spain over the EUR 30 billion mark for the current programming period.

**Figure 21: ESIF 2014-2020 – EU allocation by theme, Spain (EUR billion)**<sup>162</sup>



In the period 2014-2020, 13 of the 19 Spanish regions have the status of ‘more developed’ and therefore receiving less EU funding. Also, the Cohesion Fund is no longer available to Spain. Environmental investments have to follow the new design of the EU Cohesion Policy and the main priorities reflected in the thematic concentration (Innovation, ICT, SMEs and Low Carbon Economy). Nevertheless, the direct environmental investments are still significant and represent around 11 % of the ERDF (EUR 2.3 billion).

The environmental sectors of priority in Spain for the ERDF in 2014-2020 are: wastewater (around EUR 1.1 billion), rehabilitation of industrial sites and

contaminated land (EUR 265 million), biodiversity and Natura 2000 (EUR 225 million) and adaptation to climate change (EUR 195 million).

Initially, Spain had a national operational programme for Sustainable Growth, which had the largest allocation from the ERDF (around EUR 5.5 billion). The programme had four priority axes: Low carbon economy, Sustainable urban development, Water quality, and Sustainable transport. It also concentrated a substantial part of the environmental investments. In 2017, this programme was merged with the operational programme for Smart Growth. This resulted in a national ERDF operational programme whose budget is very significant, with around EUR 10 billion from the ERDF managed by the central administration. Moreover, many regional ERDF operational programmes, managed by the regional authorities, have allocated environmental investments.

Spain also participates in various operational programmes of territorial cooperation (transnational and cross-border cooperation) under the ERDF where the environmental investments carry considerable weight.

The environmental integration has been ensured in the Partnership Agreement 2014-2020 and the different Operational Programmes for the four ESIF through the application of the SEA Directive and by other means.

The Spanish Network of Environmental Authorities, with the participation of the Commission services, plays an important role to foster environmental integration into the EU funding in Spain<sup>163</sup>.

The general environmental *ex ante* conditionality (EAC) on EIA/SEA (looking into the legal framework and the effective arrangements to comply with the environmental impact assessment rules) was considered fulfilled. This took into consideration the commitments undertaken by the Spanish authorities.

The thematic environmental *ex ante* conditionalities on Water and Waste were only partially fulfilled by Spain. Therefore, action plans were agreed with the Spanish authorities to comply with all the criteria by the end of 2016.

These EACs have played a major role in accelerating the implementation of EU environmental policy and promoting dialogue with the national competent authorities. The EAC Waste was already considered as fulfilled. However, the EAC on Water has not been completely met yet. This is due to the delayed adoption of the second cycle River Basin Management Plans for the Canary Islands.

<sup>160</sup> Current prices, November 2011. These figures do not include the results of the MFF mid-term review.

<sup>161</sup> Again current prices 2011.

<sup>162</sup> European Commission, [European Structural and Investment Funds Data By Country](#)

<sup>163</sup> The Spanish Network of Environmental Authorities, a technical forum created in 1997 that it is performing quite well, was highlighted as a good practice in the 2017 EIR (country report and general Communication).

### Rural development

Regarding the integration of environmental concerns into the Common Agricultural Policy (CAP), the two key areas for Spain (as for all Member States) are: i) using rural development funds to pay for environmental land management and other environmental measures, while avoiding financing measures which could damage the environment; ii) ensuring the effective application of cross-compliance, a compulsory horizontal measure affecting the first pillar of the CAP and the agri-environmental measures of the second pillar, as well as the "greening" measure of the first pillar of the CAP.

Maintaining and strengthening this environmentally ambitious implementation of 1<sup>st</sup> pillar greening slightly contributes to improve the environmental situation in areas not covered by rural development, including intensive area.

One of the measures of the greening is the maintenance of the permanent grassland. The modification of the definition of 'permanent grasslands' in 2017 through the 'Omnibus Regulation' has offered an opportunity to improve the eligibility of valuable sylvo-pastoral systems such as the *dehesas* to receive CAP payments. The Spanish competent authorities have already done various studies for the application of the new definition in this type of pasture and from 2019 more *dehesas* will be eligible for the payments.

Some EUR 8.29 billion have also been allocated to Spain for rural development (European Agricultural and Rural Development Fund - EARDF), shared in national and regional Rural Development Programmes. Of this amount, approximately EUR 863 million are for agri-environmental commitments, EUR 532 million for organic farming, and EUR 35 million for obligations resulting from Natura 2000. The region of Aragon also compensates for obligations under the Water Framework Directive.

To promote a more coherent integration of Natura 2000 in rural development policies and funds in the country, Spain has created a working group of authorities responsible for Natura 2000 and EAFRD. A number of needs arising from Natura 2000 protection which require sufficient funding were identified at a Seminar in Madrid in September 2017 together with the Commission.

### European Maritime and Fisheries Fund

Through the European Maritime and Fisheries Fund (EMFF), Spain will receive EUR 1.16 billion for its fisheries and maritime sector. In absolute terms, Spain is the main beneficiary of the EMFF for 2014-2020. This EU support will promote the Blue Economy, including the sustainability aspects.

### The Connecting Europe Facility (CEF)

The CEF is a key EU funding instrument developed specifically to direct investment towards European transport, energy and digital infrastructure to address identified missing links and bottlenecks and promote sustainability.

By the end of 2017, Spain had signed agreements for EUR 976 million for projects under the CEF<sup>164</sup>. Among the projects co-funded, environmental studies for the development of energy connections and for the improvement of railway connections can be mentioned.

### Horizon 2020

Spain has benefited from Horizon 2020 funding since the programme started in 2014. As of January 2019, 3 385 participants have been granted a maximum amount of EUR 1.08 billion for projects from the Societal Challenges work programmes dealing with environmental issues<sup>165 166</sup>.

In addition to the abovementioned work programmes, climate and biodiversity expenditure is present across the entire Horizon 2020. In Spain, projects accepted for funding in all Horizon 2020 working programmes until December 2018 included EUR 1.1 billion destined to climate action (30.8 % of the total Horizon 2020 contribution to the country) and EUR 145 million for biodiversity-related actions (4.1 % of the Horizon 2020 contribution to the country)<sup>167</sup>.

Several successful projects in this field already took place in Spain within the 7<sup>th</sup> EU Framework Programme of Research. For instance, the RECARE project<sup>168</sup> has developed a methodology to assess the state of soil degradation as a starting point for finding effective solutions to protect and restore soils across Europe. The TURAS project has demonstrated ways to transform stressful urban areas into more liveable and sustainable spaces where local communities can thrive<sup>169</sup>.

In the context of Horizon 2020, some projects with very interesting objectives and results are currently under

<sup>164</sup> European Commission, [European Semester Country Report for Spain](#), 2018, p. 15.

<sup>165</sup> European Commission [own calculations based on CORDA \(COmmon Research DAta Warehouse\)](#). A maximum grant amount is the maximum grant amount decided by the Commission. It normally corresponds to the requested grant, but it may be lower.

<sup>166</sup> i.e. (ii) Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy; (iii) Secure, clean and efficient energy; (iv) Smart, green and integrated transport; and (v) Climate action, environment, resource efficiency and raw materials.

<sup>167</sup> European Commission [own calculations based on CORDA \(COmmon Research DAta Warehouse\)](#).

<sup>168</sup> European Commission, [RECARE project](#).

<sup>169</sup> European Commission, [TURAS project](#).



implementation in Spain, such as: SOLIMPACT, NAIAD, UrbanGreenUP, ConnectinGEO, RECREATE, R2Pi or S2S4E.

### LIFE programme

The LIFE programme is an EU financial instrument solely devoted to the environment. Since its launch by the Commission in 1992, a total of 738 projects have been financed in Spain. Of these, 458 have focused on environmental innovation and demonstration, 261 on nature conservation and wildlife biodiversity and 9 on information and communication. Since 2014, 8 Climate Action projects are also being co-funded by LIFE. These projects represent a total investment of EUR 1.2 billion, of which EUR 573 million in EU funding.

For 2014-2017, the EU has allocated EUR 130 million in funding for Spanish projects<sup>170</sup>. The LIFE OSO COUREL is among these projects. The project is helping to promote the expanded settlement of the Cantabrian brown bear in new territories in Serra do Courel (Galicia, Spain), with an EU contribution of more than EUR 1 million<sup>171</sup>.

The success rate of Spanish projects is not expected to be affected by the abandonment of national allocations in 2018, since there have always been enough Spanish applications of high merit<sup>172</sup>.

The 2017 EIR highlighted as a point of excellence the long experience and excellent performance of Spain in preparing and managing projects co-financed by the LIFE Programme.

Spain has always been one of the countries with the highest number of proposals submitted to the LIFE programme, and Spanish projects have traditionally been successful in achieving their objectives. Spanish LIFE projects have, for example, managed to increase the marine areas protected in Spain from less than 1 % to more than 8 % of the country's marine territory. The projects have improved the status of the most endangered feline worldwide, the Iberian lynx, from 'critically endangered' to 'endangered', and they have substantially raised awareness in Spain of the socio-economic advantages of Natura 2000 and sustainable resource management.

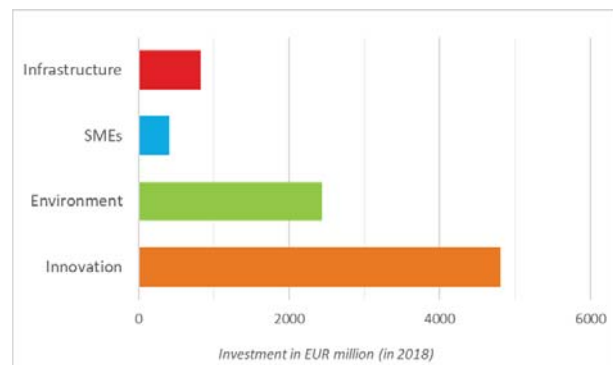
### European Investment Bank

Spain is currently the main beneficiary of European Investment Bank (EIB) loans, covering a very wide range of sectors. This trend has been consolidated in the last few years. In 2018 alone, the EIB Group (the European Investment Bank and the European Investment Fund)<sup>173</sup> loaned Spanish businesses and public institutions EUR 8.5

billion, as shown in Figure 22. Of this amount, more than EUR 2.4 billion (29 %) were directly invested in environment-related projects.

Climate action was one of the priorities of the Investment Plan for Europe in Spain for 2017. Here, the focus was on supporting energy generation using renewable sources, securing more environmentally friendly modes of transport, facilitating investment in sustainable production processes, and helping to renovate homes to improve their energy efficiency<sup>174</sup>.

Figure 22: EIB loans to Spain in 2018<sup>175</sup>



### European Fund for Strategic Investments

The European Fund for Strategic Investments (EFSI) is an initiative to help overcome the current investment gap in the EU. This investment plan has raised a lot of interest in Spain. A large number of applications have been submitted in a wide range of sectors, including the environmental sector.

By January 2019, the EFSI had mobilised more than EUR 8.1 billion in Spain, and the secondary investment triggered by those funds is expected to be more than EUR 46.2 billion<sup>176</sup>.

### National environmental financing

Spain spent EUR 9.2 billion on environmental protection in 2016, down 2 % from 2015<sup>177</sup>. Of these payments, 59 % were allocated to waste management activities (the average in the EU is 49.7 %). EUR 1.4 billion were allocated to wastewater management (16 % of total) and EUR 306 million to pollution abatement (3 % of total). Some 10 % of environmental expenditure was allocated to protect biodiversity and the landscape (EUR 943 million). Between 2012 and 2016, the general

<sup>170</sup> Commission services based on data provided by EASME.

<sup>171</sup> European Commission, [LIFE Corredores del Oso Pardo](#).

<sup>172</sup> To know more about the LIFE Programme and Spain, see the [LIFE Spain country factsheet](#).

<sup>173</sup> The EIB Group includes EIB and EFSI investments and loans.

<sup>174</sup> European Investment Bank, [2017 EIB Group activity in Spain](#), p. 2.

<sup>175</sup> EIB, [Spain and the EIB](#), 2018..

<sup>176</sup> European Investment Bank, [The EIB in Spain, what we do](#).

<sup>177</sup> Eurostat, [General Government Expenditure by function](#), 2018.

government funding for environmental protection totalled EUR 45.5 billion<sup>178</sup>.

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

### 2019 priority actions

- Spain should take advantage of the ESIF available for 2014-2020 to improve compliance with EU environmental law and policy and to use the potential of the green economy for competitiveness and job creation.
- Provide more financial resources for nature conservation, particularly by using more funding from the European Regional Development Fund (ERDF) and the European Agricultural and Rural Development Fund (EARDF) and by further developing the financial incentives to promote nature conservation activities provided for in the basic legislation.

---

<sup>178</sup> Eurostat, [General Government Expenditure by function](#), 2018.

## 5. Strengthening environmental governance

### Information, public participation and access to justice

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

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

It is of crucial importance to public authorities, the public and business that environmental information is shared efficiently and effectively<sup>179</sup>. Public participation allows authorities to make decisions that take public concerns into account. Access to justice is a set of guarantees that allows citizens and NGOs to use national courts to protect the environment<sup>180</sup>. It includes the right to bring legal challenges (‘legal standing’)<sup>181</sup>.

#### Environmental information

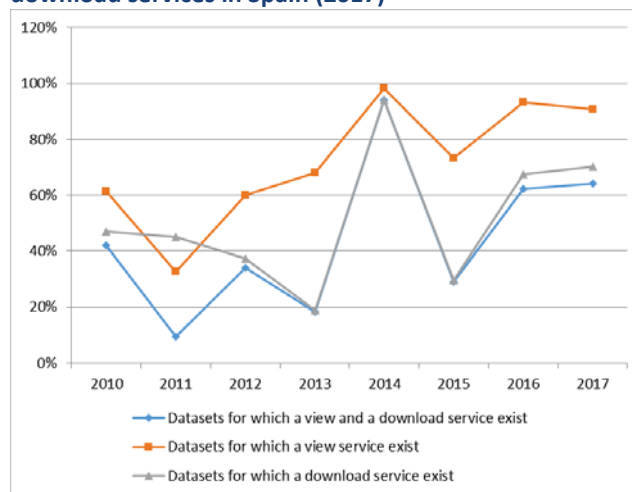
The first requirement of the Aarhus Convention is that public authorities must provide access to information on environmental matters.

Spain has a central environmental portal. On this portal, information on all the national and European legislations on each of the environmental topics can be found. The portal also has publications, including links to environmental impact procedures and to the more theme-specific data portals, which are run independently and a State of the Environment report, which is published yearly in Spanish and English. The page contains a Geoportal with a lot of relevant data and displays the geographical information on a map. Users can view the metadata and — where available — download this geographical or related monitoring data. Resources for viewing and downloading services and a metadata search for different environmental categories are provided.

Spain has performed well in its implementation of the INSPIRE Directive<sup>182</sup>. Its performance has been reviewed

based on Spain's 2016 implementation report<sup>183</sup> and its most recent monitoring data from 2017<sup>184</sup>. However, additional efforts are needed to further improve data accessibility through services, to improve the conditions for data reuse and to prioritise environmental datasets in implementation. This is especially the case when the spatial data sets are identified to be of high-value for the implementation of environmental legislation<sup>185</sup>.

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



#### Public participation

In Spain, access to participation in environmental matters is guaranteed with the 27/2006 Act<sup>186</sup>, as a horizontal regulation. The Ministry competent for the Environment (currently MITECO) publishes relevant information on environmental assessments related to projects, plans and programmes in order to ensure good compliance with the obligation to guarantee the right of the public to participate<sup>187</sup>.

Moreover, the level of public participation is heightened through the ‘Environment Advisory Council’ (CAMA), the G5 (the Group of the 5 biggest NGO’s) or other participation platforms like the Spanish Green Growth Group, that aim to bring together the social and

<sup>179</sup> The Aarhus Convention, the Access to Environmental Information Directive 2003/4/EC and the INSPIRE Directive 2007/2/EC together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on INSPIRE.

<sup>180</sup> The guarantees are explained in Commission Notice on access to justice in environmental matters, OJL 275, 18.8.2017 and a related Citizen’s Guide.

<sup>181</sup> This EIR looks at how well Member States explain access to justice rights to the public, and at legal standing and other major barriers to bringing cases on nature and air pollution.

<sup>182</sup> European Commission, INSPIRE.

<sup>183</sup> INSPIRE ES country sheet 2017.

<sup>184</sup> INSPIRE monitoring dashboard

<sup>185</sup> List of high value spatial data sets

<sup>186</sup> Ley 27/2006, de 18 de julio, por la que se regulan los derechos de acceso a la información, de participación pública y de acceso a la justicia en materia de medio ambiente (incorpora las Directivas 2003/4/CE y 2003/35/CE).

<sup>187</sup> The Government of Spain, information on environmental assessments

economic sectors and have them participate. Their participation is relevant to decision-making for environmental measures at national level. This work is complemented by several actions and initiatives at the regional level.

The Eurobarometer figures from 2017 show that in Spain, there is strong agreement (89 % of respondents) that an individual can play a role in protecting the environment. This is unchanged from the 2014 Eurobarometer results.

## Access to justice

When it comes to practical information on access to justice in Spain, it is necessary to look at both the national and regional level. At State level, the website of the Ministry for the Ecological Transition contains a user-friendly guide on the Aarhus Convention. However, it is too short and does not provide clear and precise information on access to justice rights. The situation in the Autonomous Communities is very diverse. Two Autonomous Communities were particularly looked at: Asturias and Andalusia. Asturias provides clear access-to-justice information in “*Guía para la aplicación del Convenio de Aarhus en el Principado de Asturias*”. However, Andalusia only provides information on access to information.

In addition to general provisions on legal standing, Spain has adopted specific legislation on access to justice with regard to the Aarhus Convention, also through the 27/2006 Act. It gives individuals the right to information and the right to public participation. For public interest litigation that goes beyond such rights, non-profit legal persons who fulfil certain set criteria can bring challenges under this law. It would therefore appear that NGOs who meet the set criteria can bring legal challenges in both nature and air cases, and individuals can bring a case on air pollution in relation to public participation. However, it could be that Spain is not fully aligned with the case law of the EU Court of Justice on the right of individuals to go to court on air pollution based on the harm to their health.

## 2019 priority actions

- Improve access to spatial data and services by better linking the national INSPIRE website and regional portals, identify and document all spatial datasets required to implement environmental law, and make the data and documentation at least accessible ‘as is’ to other public authorities and the public through the digital services provided for in the INSPIRE Directive.
- Better inform the public about their access to justice rights, notably in relation to air pollution and nature.

## Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste<sup>188</sup>. It includes support measures provided by the authorities, such as:

- (i) compliance promotion<sup>189</sup>;
- (ii) inspections and other checks that they carry out, i.e. compliance monitoring<sup>190</sup>; and
- (iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement<sup>191</sup>.

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability<sup>192</sup> ensures that the polluter pays to remedy any damage.

## Compliance promotion and monitoring

The quality of online information given to farmers on how to comply with obligations on nitrates and nature is an indicator of how actively the authorities promote compliance in areas with serious gaps in implementation. In Spain, these areas are under the responsibility of the Autonomous Communities. Two were particularly examined: Castilla-La-Mancha and Murcia. Neither has guidance targeted at farmers on nature. Murcia has produced a brief document on nitrates, explaining the measures to be implemented.

Major industrial installations pose serious pollution risks. The public authorities are required to have plans to inspect them and must make individual inspection reports available to the public<sup>193</sup>. This is also a responsibility of the Autonomous Communities. Castilla-La-Mancha publishes its annual plan but Murcia publishes out-of-date information.

## Citizen science and complaint handling

Engaging citizens, including through science, can deepen their knowledge about the environment and help the authorities in their work. An example is an app for marine

<sup>188</sup> The concept is explained in detail in the Communication on ‘EU actions to improve environmental compliance and governance’ [COM\(2018\)10](#) and the related Commission Staff Working Document, [SWD\(2018\)10](#).

<sup>189</sup> This EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

<sup>190</sup> This EIR focuses on inspections of major industrial installations.

<sup>191</sup> This EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime.

<sup>192</sup> [The Environmental Liability Directive 2004/35/EC](#), creates the framework.

<sup>193</sup> Article 23, [Industrial Emissions Directive, 2010/75/EU](#).



biodiversity run by the Government of the Canary Islands<sup>194</sup>.

The availability of clear online information about how to make a complaint is an indicator of how responsive authorities are to complaints from the public.

Complaint handling is mainly the responsibility of the Spanish Autonomous Communities, and it is relatively easy for people to obtain information online on how to complain.

### Enforcement

When monitoring identifies problems, a range of responses may be appropriate. Neither of the two Autonomous Communities examined (Castilla-La-Mancha and Murcia) publishes information on the administrative follow-up to detected non-compliance. Furthermore, there is no published information on responses to cross-compliance breaches on nitrates and nature. Statistics on environmental crime are published.

More generally, the Commission's own enforcement experience shows that Spanish administrative enforcement of environmental legislation is not always effective. Unlawful activities continue or the environmental damage is not addressed for years despite the intervention of the competent administrative authorities. By way of contrast, Spain has taken more effective steps to combat environmental crimes through a system of special environmental prosecutors and environmental police (SERPONA).

Tackling waste, wildlife crimes and other environmental offences is especially challenging. It requires close cooperation and coordination between inspectors, customs authorities, police and prosecutors. The annual report of the environmental public prosecutor's office refers to cooperation with police<sup>195</sup>. With regard to co-operation between inspectors through the IMPEL network, the Ministry for the Ecological Transition is in charge of the IMPEL national coordination. The main challenge is to encourage inspectors from the Autonomous Communities to get involved in IMPEL projects (training) and to engage with the specialist environmental police force, SEPRONA.

### Environmental liability

The Environmental Liability Directive (ELD) establishes a framework based on the 'polluter pays' principle to prevent and remedy environmental damage. The 2017 EIR focused on gathering better information on

environmental damage, financial security and guidance. The Commission is still collecting evidence on the progress made.

It is worth to mention that Spain has published in October 2018 a document with updated information on the cases of environmental damage dealt with under Law 26/2007<sup>196</sup>, from 2007 until 2017, as well as other elements to evaluate the implementation of the law.

In addition, an action protocol and an administrative procedure to apply in case of environmental damage, and a document for drafting remedial measures projects have been also published<sup>197</sup>.

### 2019 priority actions

- Better inform the public about compliance promotion, monitoring and enforcement and what is being done to promote compliance by at least ensuring availability of online information to Spanish farmers about how to comply with obligations on nitrates and nature. Provide more up-to-date information online on inspection plans and reports on industrial inspections.
- Publish information on the result of administrative enforcement action and improve this type of enforcement action. Also publish the follow-up given to cross-compliance breaches on nitrates and nature.
- Further develop and structure the information on incidents causing environmental damage and publish this information<sup>198</sup>.

### Effectiveness of environmental administrations

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

### Administrative capacity and quality

The Spanish Constitution (1978) provides for the exclusive competence of the State (national Parliament and Government) to approve basic legislation for environmental protection without detriment to the competence of the Autonomous Communities to establish additional protection measures and to develop the basis legislation.

Spain's public administration is highly decentralised. This

<sup>194</sup> Spain is also active in the Citizen Science Interest Group within the network of European environment agencies. This network has a project on air quality citizen science in which Spain takes part.

<sup>195</sup> Spain, Public Prosecutor office, [annual report](#)

<sup>196</sup> Law 26/2007 on environmental liability, transposing Directive 2004/35/EC into the Spanish legal system.

<sup>197</sup> The Spanish Government, [action protocol and an administrative procedure to apply in case of environmental damage](#)

<sup>198</sup> In line with Commission proposal (Article 3 of [COM\(2018\) 381](#)).

is illustrated by the proportion of spending managed by regional and local governments. This is even more accentuated in the field of the environment.

Most of the environmental implementation competences belong to the regions, although the central administration has still important powers in fields like water management in rivers flowing through different regions and coastal protection. The local authorities also play an important role in fields like waste management, air quality or sustainable urban development.

Environmental policy developments in Spain are mainly driven by EU Directives and Regulations. During the last decade, there has been progress in transposing EU environmental Directives faster. The Commission has traditionally received a very high number of environmental complaints against Spain. Overall, the Spanish authorities cooperate closely with the Commission to solve the pending issues concerning the implementation of environmental law<sup>199</sup>. The number of infringements has decreased during the last few years. However, significant gaps in implementation remain in sectors such as wastewater and waste.

During the last years, there has been some progress in Spain to streamline and improve the efficiency of the different public administrations. At the same time, because of the economic crisis, the public sector has suffered large cuts in resources, which have affected the environmental sector as well.

The various public administrations involved in implementing environmental law have different levels of financial and human resources at their disposal to undertake their tasks.

It can be highlighted as a good and innovative practice the exercise conducted by the Autonomous Community of the Basque Country that has carried out the evaluation report on the implementation of the regional environmental strategy 2020, following the model of the Commission's 2017 EIR. This has also stimulated the knowledge and the debate on the ground about environmental implementation issues<sup>200</sup>.

### Coordination and integration

As mentioned in the 2017 EIR, the transposition of the revised EIA Directive<sup>201</sup> provides an opportunity for countries to streamline their regulatory framework on

<sup>199</sup> The last 'Package meeting' with Spain on infringement procedures and enforcement of EU environmental law took place in Madrid on 23-24 November 2017.

<sup>200</sup> This [Euskadi EIR report](#) was presented to the civil society in a public Seminar on environmental policies organised on 8 June 2018 in Donostia-San Sebastián.

<sup>201</sup> [Directive 2014/52/EU](#) of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment.

environmental assessments. Spain was delayed in this transposition<sup>202</sup>. Spain has finally notified the transposing national measures in December 2018<sup>203</sup>.

The Commission encourages the streamlining of environmental assessments to reduce duplication and avoid overlaps in environmental assessments applicable to projects. Streamlining helps to reduce unnecessary administrative burden. It also accelerates decision-making without compromising the quality of the environmental assessment procedure<sup>204</sup>. Spain has already introduced the streamlining of environmental assessments under the EIA and Habitats Directives.

Spain's highly decentralised administration creates coordination challenges, namely in policy areas such as the environment. The Spanish legal system provides for some mechanisms of political and technical cooperation and coordination, mainly between the State Administration and the Autonomous Communities. This is the case of the Sectoral Conference on Environment and some technical and participatory commissions, like the National Council on Water and the Environment Advisory Council.

Spain has also created some coordination technical committees on various environmental matters, for instance: on climate, waste, environmental quality, environmental damage, genetically modified organisms, biosafety, natural heritage and biodiversity, etc.

However, there is clear room to improve the efficiency and strengthen these cooperative actions. Some progress has been made in recent years, for instance to prepare the draft Spanish strategy on the circular economy.

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

The Spanish public authorities are increasingly adopting and using electronic services to interact with the public or regulated entities online. Based on Europe's 2017 Digital Progress Report, the country has a score of 0.72/1 for digital public services, higher than the EU-28 average of 0.55/1<sup>205</sup>.

Spain is one of the EU countries with the highest online interaction between the authorities and the public. The reason for the good results in open data is linked to the

<sup>202</sup> The deadline expired on 16 May 2017. The Commission had to launch an infringement procedure against Spain.

<sup>203</sup> Law 9/2018 of 5 December, published in the State Official Journal of 6 December 2018.

<sup>204</sup> The Commission issued a guidance document in 2016 regarding the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA Directive, Habitats Directive, Water Framework Directive, and the Industrial Emissions Directive, OJ C 273, 27.7.2016, p. 1.

<sup>205</sup> European Commission, [Europe's Digital Progress Report \(EDPR\) 2017 Country Profile Spain](#), p. 10.

18/2015 Law which ensures data reuse and data transparency<sup>206</sup>. It is also thanks to the solid base provided by the Aporta project that was established in 2009 and has promoted an open data culture in the Spanish public sector<sup>207</sup>. In 2017, Spain performed better than in the previous year for pre-filled forms (72 out of 100) and the completion of eGovernment information (94 out of 100)<sup>208</sup>.

### Enabling financing and effective use of funds

The Spanish national and regional authorities have long experience in the management of EU funding, and no major problems have arisen in this respect.

However, environmental projects sometimes suffer delays, and in the end money is allocated to other areas. For instance, this has happened with the national ERDF OP 2014-2020 (POPE), which has been amended at the end of 2018 and the allocation of the Thematic Objective 6 (environment) has been decreased in around EUR 118 million that were initially devoted to wastewater investments.

### 2019 priority actions

- Spain should address regional and local fragmentation by developing better environmental coordination mechanisms.
- Spain can further improve its overall environmental governance (such as transparency, citizen engagement, compliance and enforcement, as well as administrative capacity and coordination).

### International agreements

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

The EU is committed to strengthening environmental law and its implementation globally. It therefore continues to support the Global Pact for the Environment process, which was launched by the United Nations General Assembly in May 2018<sup>209</sup>. The EIR is one of the tools to ensure that the Member States set a good example by respecting European Union environmental policies and laws and international agreements.

Spain has signed and ratified almost all multilateral environmental agreements. It has signed but not yet

ratified the Offshore Protocol of the Barcelona Convention.

### Forests: EU Timber Regulation (EUTR)<sup>210</sup> / Forest Law Enforcement, Governance and Trade (FLEGT) Regulation<sup>211</sup>

In accordance with the European Timber Trade Regulation (EUTR), which prohibits placing illegally harvested timber on the EU market, the competent authorities in the Member States must conduct regular checks on operators and traders and apply penalties in case of non-compliance.

Between March 2015 and February 2017, Spain conducted 87 % of the 75 checks that were planned on operators of domestic timber, and 51 % of the 425 checks planned for operators importing timber. These numbers remain low compared to the estimated number of operators who place timber for the first time on the EU market in Spain<sup>212</sup>. Spain reported on enforcement actions launched against operators who infringed the due diligence requirement and prohibition; however, no penalty has been imposed so far.

On cooperation (Article 12 EUTR), Spain reported collaborating with various Spanish government institutions and other EU competent authorities, mainly through its participation in the FLEGT/EUTR Expert Group meetings and the Ad Hoc Expert Group on FLEGT. Spain is also involved in building up the EUTR Mediterranean network<sup>213</sup>.

### Genetic resources: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising (ABS)<sup>214</sup>

In accordance with the EU ABS Regulation, which transposes into the EU legal order the required compliance measures under the Nagoya Protocol, Spain has designated competent authorities and enacted sanctions for infringements of the Regulation. No due diligence declaration has been submitted so far and no

<sup>206</sup> With support of the Royal Decree 1495/2011 dealing with general Authorisation regime.

<sup>207</sup> The Government of Spain, [Open data portal](#)

<sup>208</sup> European Commission, [Digital Economy and Society Index \(DESI\)](#)

<sup>209</sup> [2018 Country Report](#) Spain, pp. 10-11.

<sup>209</sup> [UN General Assembly Resolution 72/277](#) and [Organizational session of the ad hoc open-ended working group](#).

<sup>210</sup> [Regulation \(EU\) No 995/2010 of the European Parliament and of the Council of 20 October 2010](#)

<sup>211</sup> [Regulation \(EC\) No 2173/2005](#) of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community.

<sup>212</sup> Based on customs' data, it was estimated that 1'000 Spanish operators placed domestic timber on the EU market for the first time and 11'000 imported timber.

<sup>213</sup> Under the EIR-P2P, a Workshop has been organised to strengthen cooperation among eight Mediterranean EU Member States, as well as to improve and harmonise implementation of the EUTR in the Mediterranean region.

<sup>214</sup> [Regulation \(EU\) No 511/2014](#) of the European Parliament and of the Council of 16 April 2014 on compliance measures for users from the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilisation in the Union Text with EEA relevance.

penalties applied. Spain submitted their first report to the Commission on implementation of the EU ABS Regulation (end 2017).

### International wildlife trade: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)<sup>215</sup>

Spain has established relevant national authorities and is processing (requests for) import, (re-) export and intra-EU trade documents on a regular basis. This is pursuant to the obligations laid down in the Basic Regulation<sup>216</sup> which transposes the major obligations of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) into EU law,

Reports on seizures of illegal shipments, like those exchanged through the EU-TWIX platform, testify to the activity of customs authorities.

To ensure full implementation of the EU Wildlife Action Plan (2016), Spain has been working on enforcement cooperation with Mexico, in particular on exotic bird trafficking. In 2017, Spain also collaborated with CEPOL to organise training activities for law enforcement officials involved in combating wildlife crime.

### 2019 priority action

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

## Sustainable development and the implementation of the UN SDGs

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

Sustainable development links environmental, social and economic policies into a coherent framework and is therefore an important enabler of environmental implementation.

The Spanish Government approved the Spanish Sustainable Development Strategy (SDS) in 2007. The idea of sustainability re-emerged with the Sustainable Economy Law adopted in 2011. As explained in the 2017 EIR country report, there was no close monitoring of and follow-up to these initiatives and actions.

However, Spain has attached special importance to the Sustainable Development Goals (SDGs). Thus, a High

Level Working Group for the 2030 Agenda was set up in September 2017 with the participation of the relevant ministries. This forum has also convened regional and local administrations, developing different initiatives and tasks, including dialogue with the relevant partners and stakeholders. As a result, a national Action Plan for the Implementation of the 2030 Agenda has been drawn up and was adopted by the Spanish Government on 29 June 2018. The Plan will cover a transition from the urgent launch of the Agenda's implementation to the formulation of a long-term sustainable development strategy for Spain. Many regional and local authorities have also adopted action plans inspired by the SDGs.

For the new Government that came to power in June 2018 the 2030 Agenda is a priority. It has created the post of High Commissioner for the 2030 Agenda who reports directly to the President of the Government, and also a High Commissioner for Child Poverty. It has also created a Ministry for the Ecological Transition, responsible for energy, the environment, and climate change. Compliance with the Paris Agreement on climate change is a key priority too.

In July 2018, Spain submitted a National Voluntary Review on the implementation of the SDGs to the UN<sup>217</sup>. The review states that: 'It is absolutely vital that Spain's commitment to the Agenda be reflected in basic agreements between the political, economic, and social powers, acknowledging the necessity for a long-term vision and the promotion of sustainability in its broadest sense.'

<sup>215</sup> [The Convention on International Trade in Endangered Species of Wild Fauna and Flora \(CITES\)](#).

<sup>216</sup> Council [Regulation \(EC\) No 338/97](#) on the protection of species of wild fauna and flora by regulating trade therein.

<sup>217</sup> UN, SDGs: [Spain's Report For The 2018 Voluntary National Review](#)