

*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*](http://europa.eu)*.*

*Photographs: p. 11 — © iStock/serts; p. 12 — © gettyimages /Astrid860; p. 16 — © iStock/* *saiko3p; p. 23 — © iStock/bluejayphoto; p. 26 — © iStock/* *Leonsbox*

*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**

[**Executive summary** 3](#_Toc2066202)

[**Part I: Thematic areas** 4](#_Toc2066203)

[**1. Turning the EU into a circular, resource-efficient, green and competitive low-carbon economy** 4](#_Toc2066204)

[Measures towards a circular economy 4](#_Toc2066205)

[Waste management 7](#_Toc2066206)

[Climate change 8](#_Toc2066207)

[**2. Protecting, conserving and enhancing natural capital** 11](#_Toc2066208)

[Nature and biodiversity 11](#_Toc2066209)

[Maintaining and restoring ecosystems and their services 12](#_Toc2066210)

[Estimating natural capital 13](#_Toc2066211)

[Invasive alien species 13](#_Toc2066212)

[Soil protection 14](#_Toc2066213)

[**3. Ensuring citizen’s health and quality of life** 16](#_Toc2066214)

[Air quality 16](#_Toc2066215)

[Industrial emissions 17](#_Toc2066216)

[Noise 18](#_Toc2066217)

[Water quality and management 18](#_Toc2066218)

[Chemicals 20](#_Toc2066219)

[Making cities more sustainable 21](#_Toc2066220)

[**Part II: Enabling framework: implementation tools** 24](#_Toc2066221)

[**4. Green taxation, green public procurement, environmental funding and investments** 24](#_Toc2066222)

[Green taxation and environmentally harmful subsidies 24](#_Toc2066223)

[Green public procurement 24](#_Toc2066224)

[Environmental funding and investments 25](#_Toc2066225)

[**5. Strengthening environmental governance** 29](#_Toc2066226)

[Information, public participation and access to justice 29](#_Toc2066227)

[Compliance assurance 30](#_Toc2066228)

[Effectiveness of environmental administrations 31](#_Toc2066229)

[International agreements 32](#_Toc2066230)

[Sustainable development and the implementation of the UN SDGs 34](#_Toc2066231)

**Executive summary**

**Austria and the Environmental Implementation Review (EIR)**

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

* complete the process of designating sites for the Natura 2000 network; and
* improve air quality.

Austria has not yet organised an EIR national dialogue that would help it to address the above challenges.

In 2017, the Commission launched the TAIEX-EIR peer‑to‑peer (**EIR P2P**) tool to facilitate peer-to-peer learning between experts from national environmental authorities. Together with the European Commission, the Styrian Government organised a peer‑to‑peer workshop to exchange experience and good practice on air pollution reduction and the effectiveness of air quality plans in zones or agglomerations (i.e. population centres or places of economic activity) where the levels of pollutants in ambient air exceed limit or target values in 2018.

**Progress on meeting challenges since the 2017 EIR**

On **nature conservation**, **some progress** has been made in terms of **designating special areas of conservation as part of Natura 2000** and formulating measures and objectives for the protection of species and habitats depending on agricultural management. However, the degree of progress varied from one province (*Land*) to the next.

On **air quality**, there has been **some progress** in reducing emissions as a whole, but there are still seven zones that report concentrations above the NO2 target value. Austria should take effective and timely measures to close the compliance gap, by further lowering emissions from cars, in particular diesel cars in urban areas. Ammonia emissions are actually increasing and should be cut through the introduction of low‑emission agricultural techniques.

Austria is progressing in its transition towards a circular economy, with new initiatives springing up in the area of reuse. It has already reached the EU 2020 municipal waste recycling target. However, it is above the EU average as regards waste generation, which has fallen only marginally over the last few years. Austria is encouraged to implement and further develop **measures for waste prevention**, in particular as regards single-use plastics, and to make reuse and recycling more economically attractive. It remains one of the more advanced Member States as regards green public procurement. The number of companies exploiting markets for green products and services as their main business strategy is also growing strongly.

Austria is in conformity with EU urban wastewater treatment standards, and 95 % of bathing waters are of excellent quality. Austria is **slowly progressing towards reaching good ecological status for its surface and groundwater bodies**. The major challenges Austrian waters face are pressures resulting from changes to the physical shape of water bodies, mainly as a result of hydropower and efforts to regulate water flow.

In the context of the Timber Regulation, more checks should be carried out on operators to prevent illegally logged timber from being put on the market.

**Examples of good practice**

* Austria has developed a **digital channel for public services** and a single participation portal also covering **environmental policies**.
* Reuse of **construction waste**: a new business model for dismantling large buildings, allowing for the reuse of building components and high‑value recycling has been successfully piloted by the *BauKarussell* project.
* Substantial cross-border and urban **green infrastructure** initiatives have taken shape, e.g. Vienna’s updated urban development plan (STEP 2025) aims to build a dense network of high-quality green spaces and promotes innovative approaches for greening densely populated areas, including façade greening.

# 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[[1]](#footnote-2). 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[[2]](#footnote-3).

The circular (secondary) use of material in Austria was 10.6 % in 2016 (EU average 11.7 %) [[3]](#footnote-4). Furthermore, Austria employs fewer people in the circular economy than the EU-28 average (1.49 % of total employment in 2016, compared with the EU-28 average of 1.73 %).In the 2017 Special Eurobarometer 468 on *Attitudes of EU citizens towards the environment*, 87 % of Austrians said they were very concerned about the effects of plastic products on the environment (EU average: 87 %). 87 % said they were worried about the impact of chemicals (EU average: 90 %)[[4]](#footnote-5). Overall, there appears to be strong support in Austria for circular economy initiatives and action to protect the environment.

Efficient and environment‑friendly material use is a basic prerequisite for the sustainable management of renewable and, in particular, non-renewable raw materials, and for competitiveness in general. Austria is still below average in the EU in terms of resource productivity (how efficiently the economy uses material resources to produce wealth), with EUR 1.79/kg (EU average: EUR 2.04/kg) in 2017[[5]](#footnote-6). Figure 1 shows how the modest upward trend in resource productivity came to an end in 2016. Previously, resource productivity had grown more slowly than the EU average.

|  |
| --- |
| **Figure 1: Resource productivity 2010-2017[[6]](#footnote-7)** |

Austria has no overarching circular economy strategy. Nevertheless, a variety of measures have been implemented in different fields, from waste prevention to reduction of plastic bags, recycling of construction and demolition waste, promotion of reuse and repair, which contribute to the achievement of a circular economy.

It has a resource‑efficiency action plan, with a target of improving overall resource efficiency by 50 % by 2020 compared with 2008. The RESET2020 initiative, aimed at integrating resource efficiency into environmental technologies and sustainable production and consumption, remains a key programme for promoting the circular economy. Having started as a flexible initiative to respond to changing demands, its activities have since been aligned with the principles in the Commission’s circular economy package[[7]](#footnote-8).

**One new initiative is the Circular Futures platform**[[8]](#footnote-9)**, which was launched by several NGOs in March 2018 and is supported with national and EU funding. Its objective is to make** a success ofAustria**’s** transition to a circular economy. Functioning as a think tank and capacity builder, the platform seeks to bring stakeholders together, provide online information, organise knowledge events, coordinate local activities and strengthen regional networks.

A number of social enterprise initiatives are promoting reuse. The biggest, Repanet[[9]](#footnote-10), is a reuse and repair network, with 27 member organisations employing 1 800 people in 140 locations. It mostly handles textiles and electronic equipment. Tapping into the potential of the most voluminous waste stream (construction and demolition waste), Repanet and its partner organisations developed and successfully piloted the *BauKarussell* project[[10]](#footnote-11), which developed a business model for dismantling large buildings, allowing for the reuse of building components and high-value recycling.

Austria was quick to implement Directive[[11]](#footnote-12) (EU) 2015/720 on reducing consumption of light-weight plastic carrier bags through an agreement with the retail sector to charge for plastic bags. The initiative is called “*Pfiat di Sackerl*” (Goodbye plastic bag) and is accompanied by information campaigns for consumers. Initial results from the first annual monitoring report of 2017 are encouraging: annual consumption of all plastic carrier bags (including organic plastic carrier bags and plastic carrier bags made of recycled material) has fallen by more than 20% since 2014.

Austria’s ‘green jobs master plan’[[12]](#footnote-13) aims to create 100 000 new jobs in the environmental sector by 2020. It is implemented *inter alia* by the ‘green jobs’ portal[[13]](#footnote-14) and *klima:aktiv Bildungskoordination*[[14]](#footnote-15), a targeted qualification initiative. In 2017, a first assessment showed positive developments, including new jobs, but more efforts are needed to reach the goals in the master plan.

The number of EU Ecolabel products and EMAS‑licensed organisations[[15]](#footnote-16) in a country can give a rough measurement of this transition. These two indicators show to what extent the circular economy transition is engaging the private sector and other national stakeholders. These two indicators also show the commitment of public authorities to policies that support the circular economy. As of September 2018, Austria had 806 products and 186 licences registered in the EU Ecolabel scheme, out of a total of 71 707 products and 2167 licences in the EU, showing a low take-up of these licences[[16]](#footnote-17). Moreover, 290 organisations in Austria, representing 1 083 sites, were registered in EMAS[[17]](#footnote-18).

### SMEs and resource efficiency

Austria’s performance continues to be above EU average in this area (see Figure 2). There was a significant increase in the proportion of SMEs offering green products or services, from 35 % in 2012 to 43 % in 2015. The proportion of companies exploiting markets for green products and services as their main business strategy is significantly higher than in other countries. This may enable Austria to lead the growth of green markets in Europe.

|  |
| --- |
| **Figure 2: Environmental performance of SMEs[[18]](#footnote-19)** |
|  |

The latest Eurobarometer on *SMEs, resource efficiency and green markets*[[19]](#footnote-20) asked companies about both recent resource‑efficiency actions they had taken and additional resource‑efficiency actions they planned to take in the next two years. The Eurobarometer then compared these responses with responses given to the same questions in 2015. Austrian companies invest more often in resource efficiency than others. Investments in energy saving and the use of renewables are on the up, while investments in material efficiency are stagnant but at a high level. Across all dimensions, the proportion of companies that plan to invest more is growing faster than in earlier surveys. Only 21 % (EU: 19 %) have no plans for more investment, which represents a drop of 27 % from two years previously.

Every third company makes use of external support, which is also well above the EU average (22 %). Public funding sources (grants and subsidies) are more important than funding from banks or investment funds.

Austrian companies appreciate self-assessment tools, technology demonstration and reference databases much more than other countries’. Overall, companies seem to appreciate the diversity of high‑quality services.

### Eco-innovation

The country ranked 10th on the 2018 European Innovation Scoreboard and was the seventh fastest growing innovator (9.0 % increase since 2010)[[20]](#footnote-21). Austria holds eighth place in the EU Eco-innovation index.

|  |
| --- |
| **Figure 3: 2017 Eco-innovation index (EU=100)[[21]](#footnote-22)** |
|  |

As shown in Figure 4, Austria’s eco-innovation performance continues to exceed the EU average.

The main factors driving eco-innovation in Austria are:

* a flourishing environmental technology sector;
* high environmental standards;
* well-functioning environmental protection laws;
* various environment‑related financial incentives offered by the state; and
* increasing funds for enterprises conducting research in the area of eco-innovation.

|  |
| --- |
| **Figure 4: Austria’s eco-innovation performance** |
|  |

The small-scale, SME-dominated supply side of Austria’s environmental technologies industry represents one of the main barriers to eco-innovation. Limited financial and human resources often prevent strategic handling of the market, particularly as regards research and development. Another barrier is a lack of interconnectedness among environmental technology clusters and networks.

The following recent initiatives to promote eco‑innovation can be highlighted:

* The process of updating the 2007 environmental technology master plan (MUT) was launched in 2017. Its objective is to strengthen the development of Austria´s environmental technology industry through export promotion, research and qualification, financing, and stimulating the domestic market.
* In May 2017, the Environment Ministry launched a cooperative initiative, *EcoInnovation*, to foster sustainability and circular procurement through open innovation projects. The initiative is managed in cooperation with the Federal Procurement Agency’s Service Centre Austria for Innovation Procurement and facilitates the procurement of innovative and ecological products and services.

2019 priority actions

* Strengthen the existing policy framework to speed up the transition towards a circular economy.
* Further strengthen eco-innovation by improving, for example, the inerconnectedness among environmental technologies and networks.

## 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[[22]](#footnote-23) for which EU law sets mandatory recycling targets[[23]](#footnote-24).

|  |
| --- |
| **Figure 5: Municipal waste by treatment in Austria 2010‑2017[[24]](#footnote-25)** |
|  |

Municipal waste generation in Austria has remained at constant levels over the past years. However, it is still relatively high compared to the EU average (570 kg/y/inhabitant in 2017 as against around 487 kg).

Austria is among the top performers in the EU with regard to waste management. Figure 5, based on data from Eurostat, shows municipal waste by treatment in Austria in terms of kg *per capita*. The statistics show that its good performance has stagnated over the past few years. There have been some small increases in incineration, recycling and composting rates, and a significant fall in landfilling since the 2017 EIR report.

Also, as the graph shows, its municipal waste landfilling rate is very low (2 %) and far below the EU average (24 %). Austria remains the only Member State where the revenue from the landfill tax (around EUR 1.2 billion in total up to 2014) is used exclusively to clean up contaminated sites. It complies with the landfill diversion target thanks to the ban on the landfilling of biodegradable municipal waste that it introduced in 2009.

The municipal waste recycling rate (57.7 %, of which 32 % is composting) was well above the EU level in 2017. Figure 6 shows that Austria has already met the EU 2020 recycling target for municipal waste[[25]](#footnote-26).

|  |
| --- |
| **Figure 6: Recycling rate of municipal waste 2010-2017[[26]](#footnote-27)** |
|  |

Additional efforts will be needed to meet the new (post‑2020) recycling targets. Austria should now focus on prevention and diverting waste from incineration to recycling[[27]](#footnote-28).

In December 2017, Austria adopted a new federal waste management plan, updating the 2011 plan. The waste prevention programme provides for further expansion and consolidation of the reuse networks, more collection (for reuse) of old electrical appliances, and for other usable goods. With Flanders, Austria is considered to be among the front-runners in initiating reuse networks that offer high-quality second-hand products to consumers[[28]](#footnote-29).

The PET-to-PET recycling scheme has been showcased in the circular economy platform. Bottles which are part of this scheme contain a minimum of 30 % recycled content.

Extended producer responsibility (EPR) systems are in place for various waste streams, but more could be covered, as in some other Member States. Incentive systems to favour prevention and participation in separate collection schemes (‘pay as you throw’ (PAYT) systems) are in place, but could be strengthened.

2019 priority actions

* Improve policy instruments, including economic ones to focus on prevention.
* Improve the functioning of Extended Producer Responsibility Systems by covering more waste streams.
* Shift reusable and recyclable waste away from incineration.

## 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. Austria’s emissions were below its annual emission allocations (AEAs) every year between 2013 and 2016. According to preliminary data, emissions were 3 percentage points higher than the AEAs in 2017. Austria’s national target under the EU Effort Sharing Decision is to reduce emissions by 16 % by 2020 compared to 2005. For 2030, its national target under the Effort Sharing Regulation will be to reduce emissions by 36 % compared to 2005.

Austria has projected that without additional measures it may miss its 2020 target (16% below 2005 levels) by 2 percentage points. It has also projected it may miss its 2030 target by 15 percentage points. Significant additional efforts will therefore be needed in all sectors. This concerns in particular the area of the road transport, which accounts for approx. 45% of total GHG emissions. Transport represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. Transport emissions in Austria increased by 8 % from 2012 to 2016.

|  |
| --- |
| **Figure 7: Change in total GHG emissions 1990-2017 (1990=100 %)[[29]](#footnote-30)** |
|  |

The Climate Change Act (*Klimaschutzgesetz*) establishes the administrative framework for climate policy in Austria, which includes a climate change committee, involving around 35 stakeholders from all parliamentary parties, relevant government ministries, the *Länder*, social partners and industry representatives. It also sets national GHG reduction targets by sector. All *Länder* have their own regional climate strategies and policies.

The Austrian Forest Strategy 2020+ (developed by stakeholders from the Austrian Forest Dialogue) incorporates a range of existing forest-related strategies, programmes and processes. It is intended to help safeguard the multifunctional services of the forest for present and future generations and is structured according to seven forest policy fields of action, including the contribution that Austria’s forests make to climate protection, in line with international and EU legislation related to forests and agricultural lands (see below). The measures are to be implemented in the period to 2020 and beyond.

|  |
| --- |
| **Figure 8: Targets and emissions for Austria under the Effort Sharing Decision and Effort Sharing Regulation[[30]](#footnote-31)** |
|  |

The Austrian Climate and Energy Strategy “#mission2030”, adopted by the Federal Government in May 2018, is the roadmap towards the Austrian climate and energy targets. It establishes tasks and flagship projects and serves as the basis for the development of the national energy and climate plan (NECP) as well as long-term climate and energy strategy, which have to be prepared by every Member State under the energy union initiative

The F-gas Regulation requires Member States to run training and certification programmes, introduce rules for penalties and notify these measures to the Commission by 2017. Austria has notified the Commission of both measures.

Special rules for accounting of emissions and removals from forests and agricultural lands have been developed within the frame of the Kyoto Protocol. Reported quantities under the Protocol for Austria show net removals of (on average) -5.0 Mt CO2-eq. in 2013‑2016. Austria thus contributed 1.3 % of the EU’s annual average sink of -384.4 Mt CO2-eq. Accounting for the same period shows net credits of (on average) ‑4.3 Mt CO2-eq., which corresponds to 3.7 % of the EU’s accounted sink of -115.7 Mt CO2-eq. Reported net removals are highest for 2014, after which they decreased slightly, while accounted net credits show no notable trend. In this preliminary simulated accounting exercise, potential credits by forest management of, on average, -2.79 Mt CO2-eq per year are capped at ‑2.76 Mt CO2-eq. per year. Austria could be one of eight Member States that exceed the cap of 3.5 % from emissions in the base year (1990), in case the current trend will continue.

|  |
| --- |
| **Figure 9: Greenhouse gas emissions by sector (Mt. CO2-eq.). Historical data 1990-2016. Projections 2017-2030[[31]](#footnote-32).** |
|  |

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.

The Federal Government of Austria adopted a National Adaptation Strategy (NAS) in October 2012 (the *Länder* in May 2013), which was revised based on latest findings and adopted in August 2017. The strategy contains two elements: A Strategic Framework, and an Action Plan (NAP). Based on a qualitative vulnerability assessment, adaptation options for the following 14 areas of action are presented: agriculture, forestry, water resources and water management, tourism, energy with focus on the electrical industry, construction and housing, protection from natural hazards, disaster management, health, ecosystems and biodiversity, transport infrastructure including aspects of mobility, spatial planning, business/industry/trade, and cities with a focus on urban green and open spaces. A monitoring and reporting system is in place and in 2015, the first progress report to assess the implementation of adaptation measures for these vulnerable sectors has been published.

Representatives from all *Länder* were actively involved in the development of both strateguy and action plan.. The *Länder* have either developed regional adaptation strategies (Oberösterreich, 2013; Steiermark, 2015; Vorarlberg, 2016; Salzburg, 2017), integrated adaptation and mitigation strategies (Tirol, 2015), or have integrated adaptation into existing climate mitigation strategies (Niederösterreich, 2011; Wien, 2009). Kärnten is in the process of preparing a climate adaptation strategy and published a draft in 2018. In Burgenland, adaptation measures are directly integrated into sectoral programmes and strategies. The *Länder* propose, enact and implement measures. For adaptation on the regional and local level the KLAR! funding programme for climate adaptation model regions was established in 2016, as well as an adaptation advisory service for municipalities supported by an online platform with tools and guidelines. To date, progress can be observed in the implementation and mainstreaming of adaptation in Austria.

In addition Austria is also closely engaged in macro regional adaptation work (Alpine and Danube macro regions) and in fostering synergies between climate change adaptation and disaster risk reduction (Placard project).

Total revenues from the auctioning of emission allowances under the EU ETS in 2013-2017 were EUR 405 million. Austria does not earmark auctioning revenues for specific uses, but reports that actual climate-related spending exceeds total revenues.

2019 priority action

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

# 2. Protecting, conserving and enhancing natural capital

## Nature and biodiversity

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

### Biodiversity strategy

Austria adopted its national Biodiversity Strategy Austria 2020+ in 2014[[32]](#footnote-33).

It has no federal legislation on nature conservation, so competence for implementing the Birds and Habitats Directives is entirely devolved to the *Länder*.

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

On the basis of the latest update, Austria’s terrestrial Natura 2000 network under the Birds and Habitats Directives is now considered to be complete.

By December 2017, 15.1 % of Austrian territory was covered by Natura 2000 (EU average: 18.1 %), with Birds Directive special protection areas (SPAs) covering 12.1 % (EU average: 12.4 %) and Habitats Directive sites of Community importance (SCIs) covering 11.0 % (EU average: 13.9 %). However, there are substantial variations among the nine *Länder* and two have coverages of only around 6 %.



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

On the basis of the information officially reported by Austria in relation to the proportion of habitats and species occurring in Natura 2000, its designation of Natura 2000 sites under the Habitats Directive must still be considered insufficient. This is currently the subject of an infringement procedure. The Commission has had bilateral contacts with each *Land* to address the outstanding issues on species and habitat types.

As competence for nature conservation is devolved to the *Länder*, Austria does not have a unified approach to setting site-level conservation objectives and measures. While it broadly complies with the formal special area of conservation (SAC) designation requirements that concern the SCIs that were proposed more than six years ago, there are still concerns about the way conservation objectives are established. Some *Länder* have established detailed and specific site-level conservation objectives that are appropriately tailored to the species and habitats for which the sites are designated, but others use only a generic standard sentence to define site‑level conservation objectives. Generic objectives are not useful as a baseline for Article 6(3) procedures, nor as a reference for setting conservation measures or estimating financing needs for the network.

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

Member States report only every six years on progress under both Directives, so no new information is available on the state of natural habitats and species, or on progress, as compared to the 2017 EIR country report.

Overall, reporting under Article 17 of the Habitats Directive indicates that the conservation status of a considerable proportion of species and habitats of Community importance is unfavourable and that the number of habitats and species for which it is deteriorating further far exceeds that of those showing positive trends. Austria will therefore have to seriously step up its level of investment in the protection and management of the Natura 2000 network and measures that could lead to a recovery of these features.



A particular aspect of Austria’s approach to Natura 2000 designation is that ‘contemporary agricultural and forestry practices’ are generally[[33]](#footnote-34) exempt from site protection requirements in the legal acts designating certain sites. For habitats and species that depend on specific agricultural practices, the exemptions mean that the legal protection of these sites is in practice non‑existent. There is strong growing evidence that they lead to widespread (and perhaps systematic) deterioration of agricultural and forest habitats and to the decline of the populations of many species for which sites have been designated.

2019 priority action

* Complete the SAC designation process, put in place clearly defined conservation objectives and the necessary conservation measures for the sites and provide adequate resources for their implementation in order to maintain/restore species and habitats of Community interest to a favourable conservation status across their natural range.

## 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 Austrian Biodiversity Strategy 2020+ includes actions to strengthen biotope connectivity, promote biodiversity in newly established settlements, trade and industry areas and preserve unfragmented areas and migration corridors.

While the Austrian Spatial Planning Strategy[[34]](#footnote-35) does not mention multifunctional use of land or the application of green infrastructure (GI), it does highlight zoning (for example) as the most important measure to preserve flood retention areas in the long term. As regards transport, wildlife corridors are mandatory for every third kilometre of new road or railway posing a barrier.

The EU has provided guidance on the further deployment of green and blue infrastructure in Austria[[35]](#footnote-36) and a country page on the Biodiversity Information System for Europe (BISE)[[36]](#footnote-37). This information will also contribute to the final evaluation of the EU Biodiversity Strategy to 2020.

Austria and Slovakia have long cooperated on cross‑border spatial planning and habitat management to establish a 120-km wide ecological corridor along the Alps-Carpathians passage (a major wildlife migration route).

Two Interreg projects submitted in 2017 aim to improve the connectivity of rivers in the Austrian-Slovak border region and to re-establish the Northern Limestone Alps - Czech Republic wildlife migration route.

Austria is also part of the European Green Belt, an ecological network that stretches along the former ‘iron curtain’. Several projects for the restoration of near‑natural river dynamics and floodplain habitats in Austria are financed under the EU LIFE programme. The Lower Austrian Nature Protection Strategy[[37]](#footnote-38) was updated in 2015 with the addition of a topic ‘green infrastructure – wildlife corridors – habitat connectivity’.

Some of Austria’s big cities are systematically developing green infrastructure. For example, Vienna aims to create a green network with a maximum mesh of 250 m in order to improve recreation, city structure, orientation and identity functions, and ecosystem services such as climate and water regulation, air purification, habitat and connectivity.

The thematic areas of the Austrian Forest Programme[[38]](#footnote-39) include forests’ contribution to climate mitigation and adaptation, health and sustainability, productivity, biodiversity, protection against disasters and extreme weather events, and social and economic aspects. About a fifth of Austria’s forests are protected for the purposes of natural hazard control, recreation and tourism, general socio-economic functions, etc. Without these ‘protection forests’, it has been estimated that an additional EUR 600 million would need to be invested in technical solutions every year to achieve the same level of protection against natural hazards, such as avalanches and rock slides. In the Tyrol, the value of the protective function of such forests has been estimated at EUR 100 000/ha.

At the EUSALP Ministerial Conference in October 2017, the Alpine states and regions adopted a declaration on Alpine green infrastructure[[39]](#footnote-40), expressing their commitment to:

* raising the profile of GI in European, national, regional and local policies;
* acting as ambassadors for other sectors;
* making the Alpine region a model for GI;
* mobilising resources; and
* intensifying transnational and cross-territorial cooperation.

Austria is encouraged to share its positive experience, e.g. in the integration of GI into urban planning.

## Estimating natural capital

The EU biodiversity strategy calls on Member States to map and assess the state of ecosystems and their services[[40]](#footnote-41) 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.

Austria has not yet provided updated information on its work on mapping and assessing ecosystems and their services on its MAES webpage on the BISE platform[[41]](#footnote-42) (see Figure 10), as the mapping of 15 ecosystem services has been completed only recently.

To help implement the Austrian Biodiversity Strategy 2020+, the *Lebensraumvernetzung* project[[42]](#footnote-43) has established a web portal with information and spatial data on ecological connectivity and habitat defragmentation. The extent of implementation and the methodology used vary by region. A proposal covering all regions was made in 2018[[43]](#footnote-44).

On the basis of the Interreg project Alps-Carpathians Corridor project, an action plan has been developed for re‑establishing the wildlife corridor from the Alps to the Carpathians and initial measures have been implemented[[44]](#footnote-45).

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

Business and biodiversity platforms, networks and communities of practice are key tools for promoting and facilitating natural capital assessments among business and financial service providers, e.g. via the Natural Capital Coalition’s protocol[[45]](#footnote-46). Austria has yet to establish such a platform at national level, but Lower Austria’s Energy and Environment Agency is running an initiative at *Land* level that seeks to promote cooperation and foster new initiatives with its member organisations committed to preserving ecological diversity.

2019 priority action

* Austria is encouraged to provide information about its progress on MAES.

## Invasive alien species

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

(i) invasive alien species identified;

(ii) priority species controlled or eradicated; and

(iii) pathways managed to prevent new invasive species from disrupting European biodiversity.

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

The report on the baseline distribution of invasive alien species (Figure 11), for which Austria is still reviewing its grid‑level data, shows that 13 of the 37 species on the first Union list have been observed in the environment in Austria; 11 are established. Austria is facing high invasion pressure from raccoon (*Procyon lotor*) from Germany.

Coypu (*Myocastor coypu*) is still at the early invasion stage and Austria is advised to attempt to eradicate it now to avoid long-term management costs.

Austria has fulfilled its notification obligations under the Regulation, but the respective competences of the regional and federal authorities with regard to implementing the IAS Regulation still need to be clarified.

|  |
| --- |
| **Figure 11: Number of IAS of EU concern, based on available georeferenced information for Austria[[46]](#footnote-47)** |
|  |

2019 priority action

* Austria is encouraged to clarify the respective legal competences of the regional and federal authorities with regard to the implementation of the IAS Regulation.

## Soil protection

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

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

Built-up land in Austria is regularly monitored on the basis of cadastre data. In 2015, such land amounted to 6.6 % of the national area. The high annual landtake rate (growth of artificial areas) was decreasing slightly in the latest available figures, from 8 150 ha in 2009‑2012 to 5 916 ha in 2012‑2015[[47]](#footnote-48).

The annual landtake rate, as provided by CORINE Land Cover, was 947.5 ha/yr in 2006‑2012, i.e. 0.21 %, as compared with an EU average of 0.41 %[[48]](#footnote-49).

The percentage of artificial land cover[[49]](#footnote-50) (Figure 12) can be seen as a measure of the relative pressure on nature and biodiversity, and of the environmental pressure on people living in urbanised areas.

|  |
| --- |
| **Figure 12: Proportion of artificial land cover, 2015[[50]](#footnote-51)** |
|  |

Austria ranks around the EU average, with 4.2 % of artificial land cover (EU average: 4.1 %). The population density is 105.9/km2, just below the EU average (118/km2)[[51]](#footnote-52). However, only 39% of Austria’s surface is suitable for settlements due to its topography (risk of earth slides and avalanches)[[52]](#footnote-53) [[53]](#footnote-54).

In Austria land-take is closely linked to economic growth and is currently one of the biggest environmental concerns of the country. According to 2018 Statistics Austria[[54]](#footnote-55) report, land-take increased by 25 % between 2001 and 2017, while the population grew by 9.1 %. Soil protection and spatial planning are under the responsibility of the nine *Länder.*

Contamination can severely reduce soil quality and threaten human health or the environment. A recent report of the European Commission 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. Austria has registered 68 569 sites where potentially polluting activities have taken or are taking place, and has already remediated or applied aftercare measures on 203 sites.

Soil erosion by water is a natural process, but this natural process can be aggravated by climate change and human activities such as inappropriate agricultural practices, deforestation, forest fires or construction works. High levels of soil erosion can reduce productivity in agriculture and can have negative and transboundary impacts on biodiversity and ecosystem services, and on rivers and lakes (due to increased sediment volumes and transport of contaminants).

The soil erosion rate in Austria in 2009 was 3.8 tonnes per ha per year, some above the EU-28 average of 2.46 tonnes per ha. Not published modelling studies in 2012 and 2014 show similar results[[55]](#footnote-56): Soil protecting cultivation supported by the Austrian agri-environment-programme already lead to an increased humus content in Austria’s agricultural soils and as well to a lower soil erosion rate for 3.4 t ha−a yr−y.[[56]](#footnote-57) Relevant agri-environmental measures are employed to prevent soil erosion, soil compaction, the loss of organic substance as well as local and diffuse pollution.

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.

# 3. Ensuring citizen’s 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[[57]](#footnote-58), which establishes health-based standards and objectives for a number of air pollutants.

Emissions of several air pollutants have decreased significantly in Austria[[58]](#footnote-59). The reductions in 1990‑2014 (see previous EIR) continued in 2014-2016, with emissions of nitrogen oxides (NOx) decreasing by 4.62 %, fine particulate matter PM2.5 by 0.42 % and sulphur oxides (SOx) by 6.92 %. Meanwhile, emissions of ammonia (NH3) increased by 1.78 % and emissions of volatile organic compounds (NMVOCs) by 1.69 % (see also Figure 13 on total PM2.5 and NOx emissions per sector).



Despite these reductions, additional efforts are needed to meet the emission reduction commitments (compared with 2005 emission levels) laid down in the new National Emissions Ceilings Directive[[59]](#footnote-60) for the period 2020 to 2029 and any year from 2030.

The 2017 EIR detailed health-related external costs from air pollution. Air quality in Austria continues to give cause for concern. For 2015, the EEA estimated that about 5 900 premature deaths were attributable to fine particulate matter[[60]](#footnote-61) concentrations, 380 to ozone[[61]](#footnote-62) concentration and 1 200 to nitrogen dioxide[[62]](#footnote-63) concentrations[[63]](#footnote-64).

|  |
| --- |
| **Figure 13: PM2.5 and NOx emissions by sector in Austria[[64]](#footnote-65)** |
|  |

According to the European Court of Auditors (ECA)[[65]](#footnote-66), EU action to protect human health from air pollution has not delivered its expected impact. There is a risk that air pollution is being underestimated in some instances 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[[66]](#footnote-67).

For 2016, the daily target values for ozone and those for benzo(a)pyrene were exceeded in several air quality zones[[67]](#footnote-68). For 2017, exceedances related to the annual limit value for nitrogen dioxide (NO2) in 7 (out of 11) air quality zones (including in Salzburg, Linz, and Vienna). Exceedances have also been registered related to particulate matter (PM10) in 1 air quality zone (Graz). Furthermore, the target values regarding ozone and benzo(a)pyrene concentrations are not being met in some instances.. See also Figure 14 on the number of air quality zones with excessive levels of NO2, PM2.5, and PM10.

The Commission is following up persistent breaches of air quality requirements (for NO2), which have severe negative effects on health and the environment, through infringement procedures against all the Member States concerned, including Austria. The aim is to have suitable measures put in place to bring all zones into compliance.

|  |
| --- |
| **Figure 14: Air quality zones exceeding EU air quality standards in 2017 [[68]](#footnote-69)** |
|  |

The tax system can be used as an environmental policy tool while also generating revenue: further alignment and equal treatment of transport fuels (e.g. diesel) would lead to environmental improvements and incentives to reduce NO2 pollution.

2019 priority actions

* Take, in the context of the National Air Pollution Control Programme (NAPCP), actions towards reducing the main emission sources - and meet all air quality standards.
* Reduce ammonia (NH3) 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 nitrogen oxide (NOx) emissions and nitrogen dioxide (NO2) concentrations by further reducing transport emissions, in particular in urban areas. It may also require proportionate and targeted restrictions on vehicle access to urban areas and/or fiscal incentives.
* Accelerate reductions in particulate matter (PM2.5 and PM10) emissions and concentrations by reducing emissions from energy production and from heat generation using solid fuels. It will also require the promotion of 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[[69]](#footnote-70) (IED).

The below overview of industrial activities regulated by the IED is based on the ‘industrial emissions policy country profiles’ project[[70]](#footnote-71).

|  |
| --- |
| **Figure 15: Number of IED industrial installations by sector, Austria (2015)[[71]](#footnote-72)** |
|  |

In Austria, around 665 industrial installations are required to have a permit under the IED. The industrial sectors with the most IED installations in 2015 were non‑hazardous waste management (27 % of the total), chemicals (16 %), metals (9.8 %), minerals (7.3 %), hazardous waste management (6.8 %), surface treatment of metals and plastic (6.8 %) and energy/power (6.5 %).

The sectors contributing most to emissions to air (see Figure 16) are:

* energy/power for sulphur oxides (SOx), nitrogen oxides (NOx), heavy metals (cadmium (Cd), lead (Pb), mercury (Hg));
* energy-refining and coke for Cd;
* iron and steel production for heavy metals (Cd, Pb and Hg); and
* ‘other activities’ – in particular, coating applications for NMVOCs and manure management from intensive poultry and pig rearing for NH3.

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

The metals, energy/power, chemicals sectors and ‘other activities’ cause significant emissions to water, while the metals, chemicals and waste management sectors mainly contribute to hazardous waste generation.

The enforcement approach under the IED creates strong rights for citizens to access relevant information and participate in the licensing process for IED installations. This empowers NGOs and the general public to ensure that permits are granted as appropriate and their conditions respected.

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

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

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

2019 priority action

* Review permits and strengthen control and enforcement to ensure compliance with BAT conclusions.

## Noise

The Environmental Noise Directive[[72]](#footnote-73) 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[[73]](#footnote-74). Based on a limited set of data[[74]](#footnote-75), the EEA calculated in 2017 that environmental noise causes at least 500 premature deaths per year in Austria and is responsible for around 2 800 hospital admissions. Noise also disturbs the sleep of roughly 380 000 people in Austria[[75]](#footnote-76).

The noise mapping for the previous reporting round (reference year 2011) is complete, as are the action plans (reference year 2013). Austria has reported that the noise mapping for the current period, for 2017, is also complete.

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

## Water quality and management

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

The existing EU water legislation[[76]](#footnote-77) puts in place a protective framework to ensure high standards for all water bodies in the EU and addresses specific pollution sources (for example, from agriculture, urban areas and industrial activities). It also requires that the projected impacts of climate change are integrated into the corresponding planning instruments e.g. flood risk management plans and river basin management plans, including programme of measures which include the actions that Member States plan to take in order to achieve the environmental objectives.

**Water Framework Directive**

Austria has adopted and reported its second generation of river basin management plans (RBMP) under the Water Framework Directive, which have subsquently been assessed by the European Commission.

The **most significant pressure** on Austrian **surface water bodies** is atmospheric deposition (affecting all water bodies), followed by dams, barriers and locks (27 %). For **groundwater bodies the most significant known pressures are** agriculture.

Chemical pollution is the **most significant impact** on surface water bodies (affecting 100% of surface water bodies), followed by altered habitats due to morphological changes (43%).

A significantly higher number of rivers are now monitored for **ecological status in surface water bodies. The ecological status or potential of Austrian water is generally above EU-average, especially as regards lakes although the share of lakes with good or high quality has** fallen from 95% to 89 %. **As regards rivers, there is a slight improvement** as illustrated in figure 17. Many of the changes in ecological status or potential at the water body level were reported to be due to a significant change in monitoring (sites, methodology).

The major challenges facing Austrian waters are pressures resulting from changes to the physical shape of water bodies, mainly as a result of hydropower and efforts to regulate water flow.

None of the water bodies has good **chemical status** anymore. The reason for this deterioration is that mercury was assessed in biota in the second RBMP, which, however, reflects a more accurate assessment. All **groundwater bodies** have good **quantitative status.**

Reported improvements in the second RBMPs are modest. Notably, no improvements are expected for atmospheric deposition and mercury. The programmes of measures address the majority of pressures, although gap analyses have only been carried out for 2015 and 2021.

|  |
| --- |
| **Figure 17: Ecological status or potential of surface water bodies in Austria[[77]](#footnote-78)** |
|  |

Furthermore, the budget for programmes of measures has been reduced considerably compared to the first RBMP. Sufficient funding is a critical factor of success for implementation of the programme of measures.

Austria has used LIFE funding very well for river (renaturation) projects. For example, the *Untere March‑Auen* project (restoration of the Lower Morava floodplains to near-natural river dynamics and new land‑use practices). The LIFE+ Traisen (floodplain restoration) project aims to replenish the lively floodplain habitats of the River Traisen between Traismauer and Zwentendorf. The LIFE Lech project aims to conserve the natural dynamics of the River Lech system and surrounding riparian landscapes, along with its characteristic habitats and species.

**Nitrates Directive**

To implement the Nitrates Directive, Austria has decided to apply the nitrates action programme on its whole territory. A revised nitrates action programme entered into force in 2018 introducing stronger measures in designated areas. As regards nitrate concentrations in groundwater, the slight improvement observed in 2008-2011 was confirmed in 2012-2015. However, trends in terms of nutrients surplus, the nitrate concentration in groundwater in the agriculture-intensive north-east of Austria and eutrophication in inland waters, show the need for further improvements[[78]](#footnote-79).

In 2017, the Commission emphasised to Member States that both water and agriculture legislation must ensure the long-term goal of making EU agriculture sustainable while securing the good status of water bodies, as defined by the Water Framework Directive[[79]](#footnote-80).

**Urban Waste Water Treatment Directive**

Austria has excellent compliance rates on urban wastewater treatment[[80]](#footnote-81).

**Bathing Water Directive**

Similarly, Austria’s record on bathing water is excellent (see Figure 18). Of its 263 bathing waters, 95.1 % were of excellent quality, 3.8 % of good quality and 0.8 % of sufficient quality. In 2017, it had no bathing water of poor quality[[81]](#footnote-82). Detailed information on Austrian bathing waters is available via a national portal[[82]](#footnote-83) and an EEA interactive map viewer[[83]](#footnote-84).

|  |
| --- |
| **Figure 18: Bathing water quality, 2014–2017[[84]](#footnote-85)** |
|  |

**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.

Austria has adopted and reported its first flood risk management plans under the Directive.

In its assessment the European Commission found that good efforts were made in setting objectives and devising measures focusing on prevention, protection and preparedness. But Austria’s flood risk management plans, as those of other Member States, do not yet include concrete enough and clearly prioritised measures linked to the set objectives. The cost estimation and identification of specific sources of funding is not fully complete. In addition, there is scope for developing a more detailed methodology for assessing the overall cost effectiveness of measures.

2019 priority actions

* Ensure timely adoption of the third river basin management plans in accordance with the Water Framework Directive.
* Ensure that water pollution, by agriculture among other sectors, is effectively addressed under the Nitrates Directive.
* Take steps to develop a more detailed methodology for assessing the overall cost effectiveness of measures in relation to the floods risk management plans.

## Chemicals

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

The EU’s chemicals legislation[[85]](#footnote-86) provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

In 2016, the European Chemicals Agency (ECHA) published a report on REACH and the CLP Regulation[[86]](#footnote-87) that showed that enforcement activities are still evolving. Member States cooperate closely within the Forum for Exchange of Information on Enforcement[[87]](#footnote-88). This dialogue has shown that there is scope to increase the effectiveness of enforcement activities, particularly for registration obligations and safety data sheets where the level of non-compliance is still relatively high.

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

A 2015 Commission study already emphasised the importance of harmonised market surveillance and enforcement when implementing REACH at Member State level, deeming it to be a critical success factor in the operation of a harmonised single market[[88]](#footnote-89).

In March 2018, the Commission published an evaluation of REACH[[89]](#footnote-90). 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.

In Austria, the governors of the nine *Länder* are responsible for enforcing chemicals legislation, acting indirectly for the federal administration under the supreme authority of the the Federal Ministry for Sustainability and Tourism. The enforcement authorities and inspectors are located in the *Länder* government services[[90]](#footnote-91). Each *Land* has at least one inspection organ and one (at least part‑time) legal expert available for enforcement activities. Special inspection cases (companies, branches, products), on which the enforcement authorities focus their activities and measures, are selected on a regular basis. The competent authority cooperates with a number of institutions to raise awareness. The Austrian Economic Chamber (WKO) and the Austrian Chemical Industry Federation (FCIO) plays an active role in informing companies and helping them to meet their REACH and CLP obligations[[91]](#footnote-92).

In November 2018, Austria organised a stock‑taking event on the implementation of ECHA’s substitution strategy, which aims to encourage the replacement of harmful chemicals by boosting the availability and adoption of safer alternatives and technologies.

## 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 and this figure is projected to rise to just over 80% by 2050[[92]](#footnote-93). 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[[93]](#footnote-94), the Green Leaf Award[[94]](#footnote-95) and the Green City Tool[[95]](#footnote-96).

**Financing greener cities**

Austria has assigned EUR 26.8 million, or 5 % of its allocation under the European Regional Development Fund (ERDF), for sustainable urban development (Vienna and Upper Austria) to help resolve use conflicts in cities and urban areas. Support will be given to measures such as CO2 reduction strategies, sustainable mobility strategies, integrated sustainable development and efficient use of resources.

Austria participates in the European Urban Development Network[[96]](#footnote-97), which includes more than 500 cities across the EU responsible for taking integrated action based on sustainable urban development strategies financed by the ERDF in 2014-2020.

**Participation in EU urban initiatives and networks**

Austrian municipalities are actively involved in EU environment protection and climate change initiatives.

Six Austrian municipalities are take part in the URBACT initiative to support sustainable urban development through nine different thematic networks[[97]](#footnote-98). Austrian cities lead three of the networks currently. The city of Weiz is the lead partner of the *Active Travel Network*,whichaims to tackle transport problems caused by solo car use in small/medium‑sized cities by encouraging walking/cycling. Graz led the *CityRegion.Net* project on integrated city planningto identifybest practices for improving multilevel governance and counteracting urban sprawl.

Several Horizon 2020 network projects have contributed to the sustainability of Austrian cities. For example, the CIVITAS network, of which several Austrian cities (Friesach, Graz, Klagenfurt, Krems, Leoben, Villach) are members, is committed to introducing an ambitious, sustainable urban transport policy.

The EU-funded STREFOWA project[[98]](#footnote-99) is raising awareness of the need for better food waste management practices along the supply chain, including among consumers, local authorities, restaurants, retailers, teachers and waste facilities. Lower Austria, Tyrol and Vienna are part of this initiative.

Austrian cities are also actively involved in initiatives such as Eurocities and the EU Covenant of Mayors. In all, 26 Austrian cities were signed up to the latter in June 2018[[99]](#footnote-100).

These urban initiatives and networks may contribute to a better urban environment. In 2017, 15.8 % of Austrian city-dwellers said the area where they lived was affected by pollution, grime or other environmental problems (16 % in 2016 and 16.2 % in 2015). These figures are below the EU-28 average (20 % in 2017, 18.9 % in 2016 and 19.2 % in 2015)[[100]](#footnote-101).

|  |
| --- |
| **Figure 19: Proportion of Natura 2000 network in Functional Urban Areas (FUA)[[101]](#footnote-102)** |
|  |

**Nature and cities**

More than 24 % of the Natura 2000 network in Austria is to be found in functional urban areas[[102]](#footnote-103), well above the EU average of 15 % (see Figure 19). This represents huge potential, as cities can and must play a stronger role in the management of vulnerable ecosystems and biodiversity.

In (high‑density) urban areas, green spaces are important for recreation and ecological compensation. Austria’s Biodiversity Strategy includes targets for more grassland in urban areas, abandoned buildings and the provision of features that promote biodiversity in newly established green areas.

As part of its updated urban development plan (STEP 2025)[[103]](#footnote-104), Vienna has a detailed programme for developing GI and open spaces. By building a network of high-quality green and open spaces, it aims to ensure that inhabitants are never more than 250 m away from a green space. The plan also covers innovative approaches to greening densely populated areas, including façade greening – measures also important for climate adaptation.

*Grünes Netz Graz* is a green network within and around the city of Graz with multiple functions: ecological and climate and air quality regulating functions, green along roads, bike and walking routes, recreation and a safe and comfortable route to recreation areas, and aesthetic and identity functions[[104]](#footnote-105). Some measures have also received EU Structural Funds support (Stadt Graz, *Stadtbaudirektion*, 2006).

**Urban sprawl**

Austria had a weighted urban proliferation (WUP) of 1.70 UPU/m2 in 2009, compared to a European (EU‑28+4) average of 1.64 UPU/m2; this represents an increase of 5 % from 2006‑2009[[105]](#footnote-106)[[106]](#footnote-107).

**Traffic congestion and urban mobility**

The total number of cars in Austria keeps growing, reaching 4.9 million in 2017, i.e. 555 vehicles per 1 000 inhabitants on average, up from 547 in 2014. However, there are large regional variations. In Vienna, the rate is 371per 1 000 inhabitants[[107]](#footnote-108) (now the lowest in Austria), thanks to the excellent public transport system.

This development has translated into a rise in the number of hours spent annually in road congestion, from 27.03 per person in 2014 to 27.21 in 2016[[108]](#footnote-109).

According to the International Association of Public Transport[[109]](#footnote-110), public transport demand in Austria has grown relatively fast since 2003, by over 2 % per year, surpassing the growth in the number of urban residents. As a result, the country had the third highest level of public transport demand *per capita* in 2014, after the Czech Republic and Hungary.



Among the main challenges observed in this report, air quality (to an extent related to traffic congestion) in particular requires priority action at local level.

Innovative traffic management solutions are being developed and tested. An example from Graz (Styria) is ‘tim’, an innovative mobility model involving car sharing, car rental and e-taxis. All rental locations can be reached easily by bike or public transport in order to ensure environment‑friendly mobility. Once registered, users can rent vehicles by the hour. Also, private e-cars can be charged for free at tim locations. In 2017, tim was awarded the state prize for mobility.

Through *Mobilität der Zukunft*[[110]](#footnote-111) (the current research programme on sustainable transport), EUR 15-20 million is made available for sustainable mobility each year to 2020. Urban mobility labs are being set up to test different urban mobilty solutions.

The proportion of cars with alternative‑fuelled engines is still well below the EU average. Despite Austria’s efforts to reduce CO2 emissions, transport fuel taxation is still comparatively low. Austria could use environmental taxes to encourage progress on reducing emmissions and improving air quality and Incentives exist for electric vehicles, but those for other alternative fuels could be more systematic.

**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.

Austria’s revenue from environmentally relevant taxes remains close to the EU average. Environmental taxes stood at 2.39 % of GDP in 2017 (EU-28 average: 2.4 %), as shown in Figure 20, and energy taxes at 1.5 % of GDP, against an EU average of 1.84 %. In the same year, the environmental tax came to 5.64 % of total revenues from taxes and social security contributions (slightly below the EUaverage of 5.97 %).

Labour tax continues to account for a high proportion of total tax revenues in Austria’s taxation structure; it was the third highest in the EU in 2016 (55.7 %)[[111]](#footnote-112). The tax burden on labour was also the third highest in the EU (41.2 %)[[112]](#footnote-113). Consumption taxes remained relatively low (27.5 %), pointing to considerable potential for shifting taxes from labour to consumption (in particular, environmental) taxes.

In 2015, Austria enacted a comprehensive reform of its tax system, mainly to reduce the tax wedge on labour. However, it did not use the opportunity to overhaul its environmental taxes; the only environment-related measures were an increase in the taxable income from the private use of company cars from 1.5 % to 2 % of the total acquisition cost of the car, and the introduction of a right to deduct tax for CO2 emission‑free cars. No measures were taken to reduce the preferential tax treatment of diesel fuel, which is unjustified from the environmental point of view[[113]](#footnote-114). Diesel is taxed at a lower rate than petrol (EUR 397/1 000 l vs EUR 482/1 000 l)[[114]](#footnote-115), even though it emits more air pollutants, in particular NOx. Energy tax rates have remained unchanged in recent years, which weakens their environmental incentive effect.

|  |
| --- |
| **Figure 20: Environmental tax revenues as % of GDP, 2017[[115]](#footnote-116)** |
|  |

## 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[[116]](#footnote-117).

Austria’s national action plan (NAP) for GPP[[117]](#footnote-118) requires the Federal Procurement Agency, by instruction from the Ministry of Finance, to implement national GPP requirements for 14 products for which criteria were established.

In addition, the *Länder* passed a resolution in 2016 recommending that the GPP criteria in the NAP be used as a basis for minimum requirements for all municipalities and provinces. In Vorarlberg, Tyrol and Lower Austria, local public procurers have access to a procurement service to bundle procurements and foster sustainability (*nachhaltiges Beschaffungsservice*).

A specific platform including a helpdesk[[118]](#footnote-119) has been established to facilitate the exchange of experience between procurement officers at different levels of government (federal, regional and local).

A European Parliament study shows that Austria has achieved the best results in implementing the NAP[[119]](#footnote-120). Austria is among the most advanced Member States as regards training and information, cooperation, product group databases, tender models and monitoring activities. However, it lacks a systematic approach when it comes to linking procurement and the circular economy.

## Environmental funding and investments

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

Achieving sustainability involves mobilising public and private financing sources[[120]](#footnote-121). Use of the European Structural and Investment Funds (ESIFs)[[121]](#footnote-122) is essential if countries are to achieve their environmental goals and integrate these into other policy areas. Other instruments such as Horizon 2020, the LIFE programme[[122]](#footnote-123) and the European Fund for Strategic Investments (EFSI)[[123]](#footnote-124) may also support the implementation and spread of good practices.

According to the latest Eurobarometer on environmental attitudes, 86 % of Austrians support greater EU investment in environmental protection (EU average: 85 %).

**European Structural and Investment Funds 2014-2020**

In 2014-2020, Austria is receiving ESIF funding of EUR 4.9 billion[[124]](#footnote-125), for three national programmes and a common regional programme. Of this, EUR 536.3 million (10.9 %) is from the ERDF, EUR 3 938.0 million (80.0 %) from the European Agricultural Fund for Rural Development (EAFRD), EUR 7.0 million (0.1 %) from the European Maritime and Fisheries Fund (EMFF) and EUR 442.1 million (9.0 %) from the European Social Fund (ESF).

In total, EUR 1.2 billion is dedicated to thematic objective (TO) 6 – environment protection and resource efficiency (EUR 1.24 billion through the EAFRD programme; EUR 4.9 million through ERDF programme, EUR 2.3 million through the EMFF). In addition, EUR 214 million is earmarked for TO4 – low carbon economy (EAFRD, ERDF and EMFF) and EUR 1.2 billion for TO5 – climate change adaptation and risk prevention (EAFRD only).

Figure 21 shows the 2014-2020 ESIF budget allocation for Austria.

**Cohesion policy**

EU funds are a key instrument in protecting the environment in Austria[[125]](#footnote-126). Funding is provided for research and development on low-carbon technologies, increasing energy efficiency and the use of renewable energies in enterprises, CO2 reduction strategies, as well as sustainable mobility concepts. There is also support for sustainable urban (in Vienna and Upper Austria) and urban-rural development (in Styria), based on integrated, place-based strategies looking at environmental, economic and social aspects. In Vienna, the Danube Rver Research Management Centre fostering knowledge transfer between science and river management, will be supported with EUR 26 million EU funds.

It is too early to draw meaningful conclusions as regards the use of ESIFs and results for 2014-2020, as the relevant operational programmes are still being implemented.

|  |
| --- |
| **Figure 21: ESIF 2014-2020 – EU allocation by theme, Austria (EUR billion)[[126]](#footnote-127)** |
|  |

**Rural development**

The total amount for the approved national rural development programme (RDP) is EUR 3 937.6 million. Planned spending on priority 4 (ecosystems) is EUR 2 478 million, i.e. 63 % of the total EU envelope.

EUR 1 048 million, or 27 % of the budget, is dedicated to agri-environment-climate measures. EUR 398.5 million (10 %) is allocated to organic farming measures, under Austria’s agri-environment programme. EUR 874.4 million, or 22.2 % of the total budget is dedicated to payments to areas facing natural or other specific constraints. As a result, the RDP allocates a very large part of the total budget to enhancing natural resources and the environment.

In 2017, around 80% of farms (approx. 93 000) and 80% of the agricultural area (approx. 1.85 million ha) participated in the agri-environmental programme ÖPUL, through which Austria positioned itself as one of the leading EU Member States. ÖPUL consists of 24 different measures covering the following rural development measures: (1) agri-environment-climate measure, (2) organic farming, (3) animal welfare, and the (4) Natura 2000 and Water Framework Directive.

Austria has elaborated and implemented further actions to improve the design and effectiveness of the environmental measures (including more attention to training, advice and cooperation). It should continue this approach in order to generate the best environmental value for money in the implementation of the NRP and make it fully coherent with identified environmental needs and the RDP strategy.

Austria’s direct payments envelope for 2015-2020 is EUR 4.15 billion, 30 % of which (EUR 1.25 billion) is allocated to greening practices beneficial for the environment. An environmentally ambitious implementation of first‑pillar greening would clearly help to improve the environmental situation in areas not covered by rural development, including intensive area, and, if appropriate, Austria could review its implementation of this.



**European Maritime and Fisheries Fund**

Although Austria is a landlocked country, itreceives around EUR 7 million in co-financing from the EMFF[[127]](#footnote-128), mainly to improve aquaculture production.

**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, Austria had signed agreements for EUR 755 million for projects under the CEF[[128]](#footnote-129).

**Horizon 2020**

Austria has benefited from Horizon 2020 funding since the programme started in 2014. As of January 2019, 956 participants have been granted a maximum amount of EUR 311.2 million for projects from the Societal Challenges work programmes dealing with environmental issues[[129]](#footnote-130) [[130]](#footnote-131).

In addition to the abovementioned work programmes, climate and biodiversity expenditure is present across the entire Horizon 2020. In Austria, projects accepted for funding in all Horizon 2020 working programmes until December 2018 included EUR 319 million destined to climate action (28.7 % of the total Horizon 2020 contribution to the country) and EUR 29 million for biodiversity-related actions (2.6 % of the Horizon 2020 contribution to the country)[[131]](#footnote-132).

A number of Horizon 2020 projects in Austria (or with Austrian participation) are designed to have positive environmental impacts. For example, the eCAIMAN project[[132]](#footnote-133) aims to develop a new high-voltage lithium-ion battery for electric vehicles and the CHEM21 project[[133]](#footnote-134) is exploring environment-friendly chemistry processes for drug manufacturing.

**LIFE programme**

Since the launch of the LIFE programme in 1992, a total of 110 projects have been co-financed in Austria, generating total investment of EUR 305 million, of which EUR 133 million has come from the EU. For 2014-2017, the EU allocated EUR 16 million to Austrian projects[[134]](#footnote-135), including LIFE Sterlet, a project for the restoration of sterlet populations in the Austrian Danube, with a requested EU contribution of over EUR 6 million[[135]](#footnote-136).

To date, the LIFE priority ‘environment and resource efficiency’, which is aimed at developing, testing and demonstrating best practices, solutions and integrated approaches to environmental challenges, has co-financed 49 projects in Austria, representing a total investment of EUR 107 million, of which EUR 38.5 million has come from the EU.

Completed projects have dealt mainly with sustainable building, water, the sustainable use of demolition waste, air quality, noise abatement, wastewater treatment and the reduction of GHGs in the construction sector. There are two ongoing projects:

* the first, carried out by the City of Vienna, is developing strategies to reduce the vulnerability of the ‘Old Danube’ (*Alte Donau*) to the effects of climate change and anthropogenic pressures; and
* the second seeks to demonstrate innovative building approaches that significantly reduce CO2 emissions and contain a minimum of grey energy over their entire lifecycle.

The ‘Demonstration and dissemination of climate and environment‑friendly renovation and building with renewable resources and ecological materials’ (RENEW BUILDING) project successfully demonstrated that the use of renewable and sustainable construction materials for the renovation of existing buildings can lead to impressive savings in terms of CO2 emissions and waste.

To date, the LIFE ‘nature and biodiversity’ component has co-financed 50 projects in Austria. These represent a total investment of EUR 186 million, of which EUR 88 million was contributed by the EU.

Projects have focused on the protection, management and restoration of habitats and species. One project specifically aimed to demonstrate possible ways to strike a balance between ecological improvement and water management guidelines in the River Gail area. The Gail water development project, an integrated model for Natura 2000 (LIFE+ Gail), selected three pilot stretches totalling 2 km of stream length along the Gail Valley and between existing flood dykes, to demonstrate the best solutions for ecological improvement. The project contributed to nature-based flood protection and retained existing flood prevention dams.

There are 10 ongoing LIFE Nature projects in Austria. These aim *inter alia* to:

* improve and restore river habitats;
* improve the structural diversity of forests; and
* restore sterlet populations in the Austrian Danube.

There is one ongoing biodiversity project, which aims to reintroduce the critically endangered northern bald ibis into Europe and establish a pattern of migration that will ensure the survival of the species.

**European Investment Bank**

In 2018 alone, the EIB group (the European Investment Bank and the European Investment Fund)[[136]](#footnote-137) loaned Austrian businesses and public institutions EUR 1.25 billion.

Figure 22 shows that EUR 443.8 million (36 % of the total) was invested directly in environment-related projects.

|  |
| --- |
| **Figure 22: EIB loans to Austria in 2018[[137]](#footnote-138)** |
|  |

Support is being given to a wind farm project in the small town of Bruck, where 12 turbines with a total power of 36 MW produce clean energy for 27 000 households. This innovative cooperative project involves 52 local investors and has created about 20 jobs.

The latest deal is financed with a loan backed by the Investment Plan for Europe, the EIB‑implemented scheme intended to trigger EUR 315 billion in additional investment over three years. The plan allows the EIB to make investments it might not have made in the past. In this case, it is able to take on a larger portion of the deal. ‘This is the first Investment Plan project that we’ve financed in Austria,’ says Melchior Karigl, a renewable energy expert at the EIB. ‘As it’s a clean energy investment, we were able support the project with a higher amount of EIB financing – almost 75 % of the total project cost.’

**European Fund for Strategic Investments**

The EFSI is an initiative to help overcome the current investment gap in the EU. By January 2019, it had mobilised over EUR 1.4 billion in Austria, which was expected to trigger secondary investment of over EUR 4.3 billion[[138]](#footnote-139).

The nine approved projects account for EUR 822 million in EIB financing under the EFSI, EUR 40 million from ESIF support investments in resource efficiency measures and the same amount in the area for renewable energy.

**National environmental financing**

Austria spent EUR 1.41 billion on environmental protection in 2016, an increase of 21 % from 2015[[139]](#footnote-140). Of this:

* 12.4 % was allocated to waste management activities (EU average: 49.7 %);
* EUR 404.2 million (28.6 % of the total) to wastewater management;
* EUR 464.4 million (33 %) to pollution abatement; and
* EUR 80.6 million (5.7 %) to the protection of biodiversity and the landscape.

Between 2012 and 2016, general government funding for environmental protection came to EUR 7.3 billion[[140]](#footnote-141).

Since 1985, several programmes have been developed to finance projects connected to environmental protection.

As it was mentioned in the water quality and management section, the budget for programmes of measures has been reduced considerably compared to the first river basin management plans. Sufficient funding is essential for successful implementation of these programmes. The section on nature protection points to the importance of green infrastructure, in particular, protective forests. Although green infrastructure is integrated in several policy areas, continued investment is necessary given their essential role for climate mitigation and adaptation, and, protection against disasters and extreme weather events.

2019 priority actions

* Secure continuity, effectiveness and appropriate funding in implementing the measures needed for the timely achievement of the WFD objectives. Particular focus should be devoted to measures aimed to reduce the significant amount of hydromorphological pressures.
* Ensure adequate funding for green infrastructure, , e.g. through effective integration within priority action frameworks and agri-environment measures, public and private funding sources.

# 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[[141]](#footnote-142). 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[[142]](#footnote-143). It includes the right to bring legal challenges (‘legal standing’)[[143]](#footnote-144).

### Environmental information

The country’s environmental information can be found on the website of the Ministry of Sustainability and Tourism[[144]](#footnote-145), which holds most of the legal information, reports and assessments.

The majority of the data and services are available through the INSPIRE geoportal[[145]](#footnote-146), the national open data portal[[146]](#footnote-147) and the website of the Austrian environment agency[[147]](#footnote-148). Links between the Ministry’s site and the other portals are provided for some domains, especially water, while for other topics links are either hard to find or non-existent. The open data portal and a separate INSPIRE geoportal are not properly linked with the EIS. There are links to some data services, but not for all environmental domains. The same is the case for historical and monitoring datasets. INSPIRE data are usually available, but there is no link from the main portal. Some thematic viewing services are available, but some are not easy to find. Some data are available for download on the main portal. While the site is largely accessible and there is an English version available, only part of the content has been translated.

Austria’s performance in implementing the INSPIRE Directive is good. It has been reviewed on the basis of its 2016 implementation report[[148]](#footnote-149) and most recent (2017) monitoring data[[149]](#footnote-150). However, additional efforts are needed to prioritise environmental datasets in the implementation, in particular those identified as high‑value spatial datasets for the implementation of environmental legislation[[150]](#footnote-151).

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

### Public participation

Austria has implemented the Aarhus Convention and related European legislation to allow for environmental impact and strategic environmental assessment. As regards EIA, the procedures allow for public participation in two stages:

* when a project and the environmental impact assessment report is announced; and
* after the environmental impact assessment expertise by the authority has been issued.

Austria has issued standards and guidelines for public participation. Also, efforts have been made to modernise administration – also via e-government, e-participation and citizen-service facilities, e.g. through a website[[151]](#footnote-152) that provides information on participation in Austria. Hence, it is not surprising that the Eurobarometer figures from 2017 show that many respondents (83 %) agree that individuals can play a role in protecting the environment. This is an improvement compared with 2014. Austria’s single portal providing information on standards and procedures for public participation, and an initiative on e-participation can be considered a good practice.

**Access to justice**

There is no website information on access to justice at the *Länder* level whereas at federal level, a number of websites provide partial information[[152]](#footnote-153). However, there is no information on how to bring legal challenges in the context of nature and air pollution cases.

Access to justice has traditionally been very restrictive in Austria. However, in autumn 2018, the Austrian Parliament (National and Federal Council) passed the so- called “*Aarhus-Beteiligungsgesetz 2018*” which aims to improve access to justice in environmental matters for environmental NGOs and individuals in the areas of waste, water and air quality[[153]](#footnote-154). A few *Länder* have started preparations for draft laws amending their nature protection rules.

Prior to this, the Austrian courts have recognised individuals’ and NGOs’ right to bring legal challenges with regard to air pollution[[154]](#footnote-155) and Austrian case-law appears to support NGOs’ standing in nature cases[[155]](#footnote-156). The willingness of Austrian courts to uphold Court of Justice case-law on legal standing in air pollution and nature cases is a good practice example.

2019 priority actions

* Improve access to spatial data and services by making stronger linkages between the federal INSPIRE website and regional portals, identify and document all spatial datasets required for the implementation of environmental law[[156]](#footnote-157), 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, especially 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[[157]](#footnote-158). It includes support measures provided by the authorities, such as:

(i) compliance promotion[[158]](#footnote-159);

(ii) inspections and other checks that they carry out, i.e. compliance monitoring[[159]](#footnote-160); and

(iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement[[160]](#footnote-161).

Citizen science and complaints enable authorities to focus their efforts better. Environmental liability[[161]](#footnote-162) ensures that the polluter pays to remedy any damage.

**Compliance promotion and monitoring**

Online information is given to farmers on how to comply with obligations on nitrates and nature. The quality of this information is an indicator of how actively authorities promote compliance in subject areas with serious implementation gaps. The Ministry for Sustainability and Tourism regularly publishes guidelines for appropriate fertilisation of arable land and on grassland on its website written and updated by the Advisory Body for Soil Fertility and Soil Protection, a forum composed of federal and *Länder* experts, scientists, experts from the Chamber of Agriculture etc.[[162]](#footnote-163) These recommendations are the basis for the nitrates action programme. Lower Austria has set up the nitrate information service (NID) as a fertilization consulting service for farmers.[[163]](#footnote-164) The Ministry for Sustainability and Tourism gives very general information on Natura 2000 that does not explain to landowners their related obligations.[[164]](#footnote-165)

Major industrial installations can present serious pollution risks. Public authorities are required to have plans to inspect these installations and to make individual inspection reports available to the public[[165]](#footnote-166). The Ministry for Sustainability and Tourism publishes the national environmental inspection plan[[166]](#footnote-167) and the provinces’ environmental inspection programmes[[167]](#footnote-168) on its EDM portal (which provides documentation and reporting on environmental protection). On the same website, it publishes annual environmental inspection reports[[168]](#footnote-169) for each province.

**Citizen science and complaint handling**

Engaging the general public through citizen science can promote knowledge about the environment and help the authorities in their work. No information has been found on the use of citizen science in Austria.

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. In Austria, complaint handling is decentralised. The Administrative Procedures Act gives citizens the right to file a complaint[[169]](#footnote-170). The competent district authorities usually have a contact form or contact information that can be used for complaints and criticism in all areas[[170]](#footnote-171).

In 2017, Vienna launched an app (*Sag’s Wien*[[171]](#footnote-172)) that enables citizens to file complaints. Environmental crimes can be reported to the Federal Criminal Police Office[[172]](#footnote-173).

**Enforcement**

When monitoring identifies problems, a range of responses may be appropriate. While inspection reports are published via the EDM portal, information is missing on the issuing of warnings, the application of sanctions and the achievement of compliance after follow-up measures and enforcement action. The Ministry of the Interior publishes annual safety reports that provide statistical information on environmental crimes in Austria, noting seven convictions in 2016[[173]](#footnote-174). Published information is lacking on responses to cross-compliance breaches on nitrates and nature.

Tackling waste, wildlife crimes and other environmental offences is especially challenging. It requires close cooperation between inspectors, customs authorities, police and prosecutors. No information on formal or informal cooperation arrangements could be found on the provinces’ websites.

**Environmental liability**

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

2019 priority actions

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

## Effectiveness of environmental administrations

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

### Administrative capacity and quality

Legislative competence is shared between the federal and the regional level, and implementation is spread over the federal, regional, district and municipal levels. All levels must work effectively with each other within a system of multi-level governance. Compliance performance on the environment is generally good, but experience from certain infringements shows that there are few mechanisms to encourage under‑performing regional authorities to reach the level of those demonstrating best practice.

Austria ranks eighth out of 180 in the 2018 Environmental Performance Index[[174]](#footnote-175).

### Coordination and integration

As mentioned in the 2017 EIR, the transposition of the revised Environmental Impact Assessment (EIA) Directive[[175]](#footnote-176) provides an opportunity for countries to further streamline their regulatory framework on environmental assessments. Austria was late with full transposition, but the law revising the Austrian EIA law (*Umweltverträglichkeitsprüfungsgesetz 2000)* wasfinally adopted in November 2018.[[176]](#footnote-177)Following notification the Commission is carrying out conformity checking.

The Commission encourages the streamlining of environmental assessments to reduce duplication and avoid overlaps in environmental assessments for projects. Streamlining helps to reduce unnecessary administrative burden. It also accelerates decision‑making, without compromising the quality of the environmental assessment procedure[[177]](#footnote-178).

As Austria is a federal state and competence for many environmental issues is spread over various administrative levels, a ‘one-stop shop’ principle is difficult to implement. However, Austria has introduced a streamlined procedure for the EIA, Habitats and Water Framework Directives.

For many issues, although authorisation procedures are conducted at local level, information is bundled at federal level. Examples include web portals on EIA[[178]](#footnote-179), SEA[[179]](#footnote-180) and sustainable public procurement[[180]](#footnote-181).

The e-governance strategy includes several new initiatives to develop one-stop shops, e.g. electronic data management (EDM), a central system through which companies and administrative bodies can apply and report on issues regarding waste management and the environment[[181]](#footnote-182).

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

Austrian public authorities are increasingly adopting and using electronic services to interact with public or regulated entities online. For Digital Public Services, Austria had a score of 0.73/1 based on Europe's Digital Progress Report 2017, this is higher than the EU28 average (0.55/1)[[182]](#footnote-183). In the DESI Report 2018, Austria had a score of 67 out of 100 on digital public services, higher than the EU average of 58[[183]](#footnote-184).

Austria has been dealing with digitalisation for over two decades. In 2017, a national e‑governance strategy was developed[[184]](#footnote-185) under the responsibility of the Federal Chancellery[[185]](#footnote-186).

It is increasingly possible to conduct administrative procedures online. Citizens and companies can fill in, sign and submit forms online[[186]](#footnote-187). The EDM system enables companies and administrative bodies to apply and report on waste management and environmental issues[[187]](#footnote-188). The internet and new technologies are increasingly used for stakeholder participation processes[[188]](#footnote-189).

### Enabling financing and effective use of funds

Twice a year, the Ministry of Sustainability and Tourism issues a magazine (*Ökoprojekt*) with information on public funding of environmental initiatives[[189]](#footnote-190). There is an extensive web portal on funding opportunities under the European Structural and Investment Funds[[190]](#footnote-191).

2019 priority action

* Austria 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[[191]](#footnote-192). 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. Austria has signed and in July 2018 ratified the Nagoya Protocol[[192]](#footnote-193), which was established to ensure the fair and equitable sharing of benefits arising from the utilisation of genetic resources. It has neither signed nor ratified the African-Eurasian Migratory Waterbird Agreement, which aims to stop the decline of migratory waterbird species and their habitats in the geographical area covered by the Agreement.

**Forests: EU Timber Regulation (EUTR) / Forest Law Enforcement, Governance and Trade (FLEGT) Regulation**[[193]](#footnote-194)

The EU Timber Regulation is designed to ensure that only legally sourced timer is sold on the EU internal market. As required under the Regulation, Austria carries out checks on timber operators, but the number of checks remains low compared to the estimated number of operators placing timber on the EU market for the first time in Austria[[194]](#footnote-195). Between March 2015 and February 2017, Austria performed 88 % of the planned 979 checks on operators for domestic timber and 56 % of the 50 checks planned for imported timber. Between March and November 2017, it checked only seven of the more than 4 100 operators responsible for EUR 483.5 million worth of timber imports in 2016.

The risk-based approach to checks seems appropriate. Four of the seven timber importers checked were found to have an inappropriate due diligence system. Investigations were still ongoing at the end of the reporting period. To date, no interim measures or penalties for breaches of the EUTR have been reported as regards importers.

However, substantiated concerns were raised as regards a number of Austrian traders[[195]](#footnote-196) and Romanian law enforcement bodies took action against some. Austria had not conducted any checks on these traders and their compliance with the EUTR traceability obligation, since risks of illegality had been deemed very low.

The Austrian authorities regularly exchange data with other competent authorities and engage in various awareness‑raising activities. They have also provided voluntary contributions on EUTR overviews of checks and are actively involved in forming a central and eastern European network of competent authorities.

**Genetic resources: Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising (ABS)[[196]](#footnote-197)**

Austria has identified its competent authorities, but adoption of the formal act is still pending. No due diligence declaration has been submitted and it has still not laid down rules for penalties.

**International wildlife trade: the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)[[197]](#footnote-198)**

To implement the CITES Regulation[[198]](#footnote-199), which transposes into EU law the major obligations stemming from the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), Austria has established national authorities and processes (requests for) import, (re-)export and intra-EU trade documents on a regular basis. Reports of seizures of illegal shipments, in particular those sent every six months to TRAFFIC under its contract with DG ENV and those exchanged through the EU-TWIX platform, testify to the customs authorities’ activity.

To ensure full implementation of the EU Wildlife Action Plan[[199]](#footnote-200) and better detection of illegal activities, Austria has published national guidelines for enforcement officers, in particular to help them identify protected species, and set up specific training and workshops. It is contributing to European coordinated action, e.g. the ‘Pannon Eagle’ LIFE project[[200]](#footnote-201), which aims to improve the protection of the eastern imperial eagle against illegal killing, trapping and trading. Furthermore, Austria has set up a national taskforce, which also comprises enforcement officers involved in investigative work. It focuses on a number of national priority objectives within the action plan.

2019 priority action

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

## Sustainable development and the implementation of the UN SDGs

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

The Federal Government adopted its first sustainable development strategy in 2002[[201]](#footnote-202) and this was renewed in 2010.[[202]](#footnote-203) The 2010 strategy is the first example of a federal European country addressing the national and regional level at the same time[[203]](#footnote-204).

The main mechanism for implementing the SDGs in Austria is their mainstreaming into the existing policy framework. All federal ministries have been instructed to mainstream the principles of Agenda 2030 and the SDGs into their relevant programmes and strategies, and where necessary to draft specific action plans involving stakeholders. An inter-ministerial working group for the implementation of Agenda 2030 under the lead of the Federal Chancellery and the Federal Ministry for Europe, Integration and Foreign Affairs (BMEIA) is in charge of monitoring and reporting progress. Public awareness is raised through a new central website[[204]](#footnote-205) and events, including parliamentary debates on SDGs.

Every two years, Austria publishes an indicator report on the monitoring of sustainable development. The last report is from 2015[[205]](#footnote-206) and no new report has been published since the SDG reporting scheme started.

Along with Bulgaria, Austria is one of two Member States that have not yet submitted to the UN, or announced (for 2019), a voluntary national review on the SDGs.

1. European Commission,  [Circular Economy Package](http://ec.europa.eu/environment/circular-economy/index_en.htm), 2018. [↑](#footnote-ref-2)
2. [COM(2018) 029](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:29:FIN). [↑](#footnote-ref-3)
3. [COM (2018) 029](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1516265440535&uri=COM:2018:29:FIN). [↑](#footnote-ref-4)
4. European Commission, [Special Eurobarometer 486, *Attitudes of European citizens towards the environment*](https://data.europa.eu/euodp/data/dataset/S2156_88_1_468_ENG), 2017. [↑](#footnote-ref-5)
5. European Commission, [Resource productivity](http://ec.europa.eu/eurostat/web/environment/material-flows-and-resource-productivity/database). [↑](#footnote-ref-6)
6. European Commission, [Resource productivity](http://ec.europa.eu/eurostat/web/environment/material-flows-and-resource-productivity/database). [↑](#footnote-ref-7)
7. RESET 2020, [Die neue Ressourceneffizienz-Initiative](https://www.bmlfuw.gv.at/umwelt/nachhaltigkeit/ressourceneffizienz/aktionsplan_ressourceneffizienz_reset/reset2020_initiative.html). [↑](#footnote-ref-8)
8. Circular Futures, [Platform Kreislaufwirtschaft Österreich](https://www.circularfutures.at/) [↑](#footnote-ref-9)
9. [Repanet](http://www.repanet.at/). [↑](#footnote-ref-10)
10. Repanet, [Baukarussell](http://www.repanet.at/themen/projekte-2/baukarussell/). [↑](#footnote-ref-11)
11. [Directive (EU) 2015/720](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32015L0720). [↑](#footnote-ref-12)
12. Ministry of Sustainability and Tourism, [*Masterplan 'green jobs'*](https://www.bmlfuw.gv.at/greentec/green-jobs/masterplan/masterplan_greenjobs.html), 2010. [↑](#footnote-ref-13)
13. Ministry of Sustainability and Tourism, [*Karriereportal green jobs*](http://www.green-jobs.at/). [↑](#footnote-ref-14)
14. Ministry of Sustainability and Tourism, [*klimaaktiv Bildungskoordination*](http://www.klimaaktiv.at/bildung.html). [↑](#footnote-ref-15)
15. EMAS is the European Commission’s Eco‑Management and Audit Scheme – a programme to encourage organisations to behave in a more environmentally sustainable way). [↑](#footnote-ref-16)
16. European Commission, [*Ecolabel facts and figures*](http://ec.europa.eu/environment/ecolabel/facts-and-figures.html). [↑](#footnote-ref-17)
17. European Commission, [Eco-management and audit scheme](http://ec.europa.eu/environment/emas/emas_registrations/statistics_graphs_en.htm). [↑](#footnote-ref-18)
18. European Commission, [2018 SBA fact sheet - Austria](https://ec.europa.eu/growth/smes/business-friendly-environment/performance-review_en), p. 14*.* [↑](#footnote-ref-19)
19. Flash Eurobarometer 456, *SMEs, resource efficiency and green markets* (January 2018). The eight dimensions 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’ and ‘sell scrap materials to another company’. [↑](#footnote-ref-20)
20. European Commission, [European innovation Scoreboard 2018](https://ec.europa.eu/growth/industry/innovation/facts-figures/scoreboards_en). [↑](#footnote-ref-21)
21. Eco-innovation Observatory: [Eco-Innovation scoreboard 2017](https://ec.europa.eu/environment/ecoap/indicators/index_en). [↑](#footnote-ref-22)
22. 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. [↑](#footnote-ref-23)
23. See Article 11.2 of [Directive 2008/98/EC](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32008L0098). This Directive was amended in 2018 by Directive (EU) 2018/851, and more ambitious recycling targets were introduced for the period up to 2035. [↑](#footnote-ref-24)
24. Eurostat, [Municipal waste by waste operations](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=env_wasmun&lang=en). [↑](#footnote-ref-25)
25. Member States may choose a method that differs from that used by Eurostat (and referred to in this report) to calculate their recycling rates and track compliance with the 2020 target of 50 % recycling of municipal waste. [↑](#footnote-ref-26)
26. Eurostat, [Recycling rate of municipal waste](http://ec.europa.eu/eurostat/tgm/refreshTableAction.do?tab=table&plugin=1&pcode=t2020_rt120&language=en). [↑](#footnote-ref-27)
27. [Directive (EU) 2018/851](https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32018L0851&from=EN), [Directive (EU) 2018/852](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529413058624&uri=CELEX:32018L0852), [Directive (EU) 2018/850](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529413058624&uri=CELEX:32018L0850) and [Directive (EU) 2018/849](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529413058624&uri=CELEX:32018L0849) amend the previous waste legislation and set more ambitious recycling targets for the period to 2035. These targets will be taken into consideration to assess progress in future Environmental Implementation Reports. [↑](#footnote-ref-28)
28. European Environment Agency, [Waste prevention in Europe — policies, status and trends in reuse in 2017](https://www.eea.europa.eu/publications/waste-prevention-in-europe-2017), 2018. [↑](#footnote-ref-29)
29. Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-viewer)). *Proxy GHG emission estimates for 2017. Approximated EU greenhouse gas inventory 2017* (European Environment Agency)*.* Member States national projections, reviewed by the European Environment Agency. [↑](#footnote-ref-30)
30. *Proxy GHG emission estimates for 2017.Approximated EU greenhouse gas inventory 2017* (European Environment Agency)*.* Member States national projections, reviewed by the European Environment Agency. [↑](#footnote-ref-31)
31. Annual European Union greenhouse gas inventory 1990–2016 ([EEA greenhouse gas data viewer](https://www.eea.europa.eu/data-and-maps/data/data-viewers/greenhouse-gases-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. [↑](#footnote-ref-32)
32. Bundesministerium für Land- und Forstwirtschaft, Umwelt und Wasserwirtschaft (BMLFUW), [Biodiversitätsstrategie Österreich 2020+](https://www.bmlfuw.gv.at/dam/jcr:7dd9ff6f-1a39-4f77-8c51-6dceaf6b195f/Biodiversit%C3%A4tsstrategie2020_dt.pdf), 2014. [↑](#footnote-ref-33)
33. In Tryol several regulations are in place to ensure that these exemptions are applicable under very specific conditions only. The Lower Austrian nature protection law (*Naturschutzgesetz)* does not foresee an exemption for those practices according to the *Land's* site designation act (*Verdordnung über die Europaschutzgebiete).* [↑](#footnote-ref-34)
34. Oerok, [The Austrian Spatial Development Concept 2001.](https://www.oerok.gv.at/fileadmin/Bilder/5.Reiter-Publikationen/Schriftenreihe_Kurzfassung/OEROK_schriftenreihe163_kurzfassung_e.pdf) [↑](#footnote-ref-35)
35. The [recommendations of the green infrastructure strategy review report](http://ec.europa.eu/environment/nature/ecosystems/docs/green_infrastructures/GI%20Final%20Report.pdf) and the EU Guidance on a strategic framework for further supporting the deployment of EU-level green and blue infrastructure. [↑](#footnote-ref-36)
36. [Biodiversity Information System for Europe.](https://biodiversity.europa.eu/) [↑](#footnote-ref-37)
37. [Naturschutzkonzept Niederösterreich](http://www.noe.gv.at/noe/Naturschutz/Naturschutzkonzept_Februar_2015.pdf). [↑](#footnote-ref-38)
38. Federal Ministry of Agriculture, Forestry, Environment and Water Management, [The Austrian Forest Programme.](http://www.bmnt.gv.at/dam/jcr:92241cef-ade8-446d-8464-817b3547c267/WD_Kurzf_engl_screen.pdf) [↑](#footnote-ref-39)
39. EUSALP, [1st EUSALP Conference on Alpine Green Infrastructure.](https://www.alpine-region.eu/news/first-eusalp-environmental-ministers-conference-alpine-green-infrastructure-2) [↑](#footnote-ref-40)
40. Ecosystem services are benefits provided by nature such as food, clean water and pollination on which human society depends. [↑](#footnote-ref-41)
41. BISE, [MAES country fiches: Austria.](https://biodiversity.europa.eu/maes/maes_countries/austria) [↑](#footnote-ref-42)
42. Bundesministerium für Nachhaltigkeit und Tourismus, [Lebensraumvernetzung.](http://www.lebensraumvernetzung.at) [↑](#footnote-ref-43)
43. Bundesministerium für Nachhaltigkeit und Tourismus, [Lebensraumvernetzung –About.](http://www.lebensraumvernetzung.at/de/about) [↑](#footnote-ref-44)
44. [Alpen-Karpaten-Korridor.](http://www.alpenkarpatenkorridor.at/) [↑](#footnote-ref-45)
45. Natural Capital Coalition, [Natural capital protocol](https://naturalcapitalcoalition.org/protocol/). [↑](#footnote-ref-46)
46. 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](http://publications.jrc.ec.europa.eu/repository/bitstream/JRC104969/kj-na-28596-en-n.pdf), Ispra (Italy), Publications Office of the European Union; 2017, EUR 28596 EN, doi:10.2760/772692. [↑](#footnote-ref-47)
47. Austrian Environment Agency, [*Flächeninanspruchnahme*](http://www.umweltbundesamt.at/umweltsituation/raumordnung/rp_flaecheninanspruchnahme/). [↑](#footnote-ref-48)
48. EEA, [Draft results of CORINE land cover (CLC) inventory 2012](http://land.copernicus.eu/pan-european/corine-land-cover/lcc-2006-2012/view); mean annual landtake in 2006-2012 as a percentage of 2006 artificial land. [↑](#footnote-ref-49)
49. 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). [↑](#footnote-ref-50)
50. European Commission, [Land covered by artificial surfaces by NUTS 2 regions](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=lan_lcv_art&lang=en). [↑](#footnote-ref-51)
51. Eurostat, [Population density by NUTS 3 region](https://data.europa.eu/euodp/data/dataset/GnGfvPQmfu5n6aKVXQkPw). [↑](#footnote-ref-52)
52. ÖROK Atlas, [Anteil des Dauersiedlungsraumes.](http://project2.geo.univie.ac.at/oerok/files/summaries/74.pdf) [↑](#footnote-ref-53)
53. Eurostat, [Population density by NUTS 3 region](https://data.europa.eu/euodp/data/dataset/GnGfvPQmfu5n6aKVXQkPw). [↑](#footnote-ref-54)
54. Statistik Austria, [Wie geht es Österreich](https://www.statistik.at/web_de/statistiken/wohlstand_und_fortschritt/wie_gehts_oesterreich/was_ist_wie_gehts_oesterreich/index.html)?, Report 2018, p. 122. [↑](#footnote-ref-55)
55. wpa, 2009: Abschätzung des Bodenabtrags in Österreich und Integration der Daten in die INVEKOS-Datenbank. Beschreibung der Berechnungsmethode und Ergebnisse für die Jahre 2007 und 2008. wpa Beratende Ingenieure GmbH, Wien; and: wpa, 2010: Abschätzung des Bodenabtrags in Österreich. Ergänzende Berechnungen für das Jahr 2009. wpa Beratende Ingenieure GmbH, Wien. [↑](#footnote-ref-56)
56. AGES, [Bodenschutz durch umweltgerechte Landwirtschaft](http://www.ages.at/fileadmin/AGES2015/Service/Landwirtschaft/Boden_Datein/Broschueren/AGES_Bodenbroschuere_Web.pdf), 2011 p. 9. [↑](#footnote-ref-57)
57. European Commission, 2016. [Air Quality Standards](http://ec.europa.eu/environment/air/quality/standards.htm). [↑](#footnote-ref-58)
58. See [EIONET Central Data Repository](http://cdr.eionet.europa.eu/) and [Air pollutant emissions data viewer (NEC Directive)](http://www.eea.europa.eu/data-and-maps/data/data-viewers/emissions-nec-directive-viewer). [↑](#footnote-ref-59)
59. [Directive (EU) 2016/2284](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.344.01.0001.01.ENG&toc=OJ:L:2016:344:TOC). [↑](#footnote-ref-60)
60. Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 (PM2.5) refers to particles with a diameter of 10 (2.5) micrometres or less. PM is emitted from many human sources, including both combustion and non-combustion sources. [↑](#footnote-ref-61)
61. Low‑level ozone is produced by photochemical action on pollution. [↑](#footnote-ref-62)
62. NOx is emitted during fuel combustion, e.g. from industrial facilities and the road transport sector. It is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO2). [↑](#footnote-ref-63)
63. EEA, [*Air quality in Europe – 2018 report*](https://www.eea.europa.eu/publications/air-quality-in-europe-2018). See details in this report as regards the underpinning methodology. [↑](#footnote-ref-64)
64. 2016 NECD data submittes by Member State to the EEA. [↑](#footnote-ref-65)
65. European Court of Auditors, Special report no 23/2018, [Air pollution: Our health still insufficiently protected](https://www.eca.europa.eu/en/Pages/DocItem.aspx?did=46723), p.41. [↑](#footnote-ref-66)
66. Article 5 of Commission Implementing Decision 2011/850/EU (OJ L 335, 17.12.2011, p. 86) requires Member States to provide up‑to‑date data. [↑](#footnote-ref-67)
67. EEA, [EIONET Central Data Repository](http://cdr.eionet.europa.eu/). [↑](#footnote-ref-68)
68. [EEA, EIONET Central Data Repository. Data reflects the reporting situation as of 26 November 2018.](http://cdr.eionet.europa.eu/) [↑](#footnote-ref-69)
69. 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). [↑](#footnote-ref-70)
70. [European Commission, Industrial emissions policy country profile](https://circabc.europa.eu/ui/group/06f33a94-9829-4eee-b187-21bb783a0fbf/library/b67c76eb-91f5-4ffd-8903-c209835fb715/details) – Austria. [↑](#footnote-ref-71)
71. [European Commission, Industrial emissions policy country profile](https://circabc.europa.eu/ui/group/06f33a94-9829-4eee-b187-21bb783a0fbf/library/b67c76eb-91f5-4ffd-8903-c209835fb715/details) – Austria. [↑](#footnote-ref-72)
72. [Directive 2002/49/EC](https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=celex:32002L0049). [↑](#footnote-ref-73)
73. WHO/JRC, 2011, Burden of disease from environmental noise, Fritschi, L., Brown, A.L., Kim, R., Schwela, D., Kephalopoulos, S. (eds), [World Health Organisation, Regional Office for Europe](http://www.euro.who.int/en/media-centre/sections/press-releases/2011/03/new-evidence-from-who-on-health-effects-of-traffic-related-noise-in-europe), Copenhagen, Denmark. [↑](#footnote-ref-74)
74. EEA, [Noise fact sheets 2017](https://www.eea.europa.eu/themes/human/noise/noise-fact-sheets). [↑](#footnote-ref-75)
75. European Environment Agency, [Noise Fact Sheets 2017](https://www.eea.europa.eu/themes/human/noise/noise-fact-sheets). - Austria [↑](#footnote-ref-76)
76. This includes the [Bathing Waters Directive (2006/7/EC)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1481623908600&uri=CELEX:32006L0007), the [Urban Waste Water Treatment Directive (91/271/EEC)](http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX%3A31991L0271) (on discharges of municipal and some industrial wastewaters), the [Drinking Water Directive (98/83/EC)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31998L0083) (on potable water quality), the [Water Framework Directive (2000/60/EC)](http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1481624135097&uri=CELEX:32000L0060) (on water resources management), the [Nitrates Directive (91/676/EEC)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A31991L0676) and the [Floods Directive (2007/60/EC)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32007L0060). [↑](#footnote-ref-77)
77. EEA, [WISE dashboard](https://www.eea.europa.eu/data-and-maps/dashboards/wise-wfd). [↑](#footnote-ref-78)
78. European Commission, Report on the implementation of Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources based on Member State reports for the period 2012–2015 ([COM(2018) 257](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1529073275159&uri=CELEX:52018DC0257)) and staff working document SWD(2018) 246. [↑](#footnote-ref-79)
79. SWD(2017) 153, p. 3. [↑](#footnote-ref-80)
80. [COM(2016) 105](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52016DC0105) and [SWD(2016) 45](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52016SC0045). [↑](#footnote-ref-81)
81. EEA (2017), [European bathing water quality in 2016](https://www.eea.europa.eu/publications/european-bathing-water-quality-in-2016), p. 17. [↑](#footnote-ref-82)
82. [Bathing waters national portal](https://www.bmlfuw.gv.at/wasser/wisa/wasserkarten/sonstige_themen/badegewaesser_oesterreich.html). [↑](#footnote-ref-83)
83. EEA, [State of bathing waters](http://www.eea.europa.eu/themes/water/interactive/bathing/state-of-bathing-waters). [↑](#footnote-ref-84)
84. EEA, [European bathing water quality in 2017](https://www.eea.europa.eu/publications/european-bathing-water-quality-in-2017), 2018, p. 21. [↑](#footnote-ref-85)
85. 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. [↑](#footnote-ref-86)
86. European Chemicals Agency, [2016 report on the operation of REACH and CLP](https://echa.europa.eu/documents/10162/13634/operation_reach_clp_2016_en.pdf). [↑](#footnote-ref-87)
87. ECHA, On the basis of the projects [REF-1, REF-2 and REF-3](https://echa.europa.eu/about-us/who-we-are/enforcement-forum/forum-enforcement-projects). [↑](#footnote-ref-88)
88. European Commission, [Monitoring the Impacts of REACH on Innovation, Competitiveness and SMEs, Final Report](http://ec.europa.eu/DocsRoom/documents/14581/attachments/1/translations/en/renditions/native), 2015. [↑](#footnote-ref-89)
89. [COM(2018) 116](https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=COM:2018:0116:FIN). [↑](#footnote-ref-90)
90. ECHA, [National Inspectorates – Austria.](https://echa.europa.eu/view-article/-/journal_content/b1284a69-e2f2-4049-9a7e-730222a7252c) [↑](#footnote-ref-91)
91. European Commission, [Member States Reporting under REACH art. 117 / CLP art.46.](http://ec.europa.eu/environment/chemicals/reach/pdf/reports_2015/Austria.pdf) [↑](#footnote-ref-92)
92. European Commission, Eurostat, [Urban Europe](https://ec.europa.eu/eurostat/documents/3217494/7596823/KS-01-16-691-EN-N.pdf), 2016, p.9. [↑](#footnote-ref-93)
93. European Commission, [European Green Capital](http://ec.europa.eu/environment/europeangreencapital/index_en.htm). [↑](#footnote-ref-94)
94. European Commission, [European Green Leaf Award](http://ec.europa.eu/environment/europeangreencapital/europeangreenleaf/). [↑](#footnote-ref-95)
95. European Commission, [Green City Tool](https://webgate.ec.europa.eu/greencitytool/home/). [↑](#footnote-ref-96)
96. European Commission, [The Urban Development Network](http://ec.europa.eu/regional_policy/en/policy/themes/urban-development/network). [↑](#footnote-ref-97)
97. URBACT, [Associated networks by country](http://urbact.eu/interactive-map). [↑](#footnote-ref-98)
98. [STREFOWA project](http://ec.europa.eu/regional_policy/en/projects/austria/hacking-away-at-the-food-waste-cycle). [↑](#footnote-ref-99)
99. [Covenant of Mayors](https://www.covenantofmayors.eu/about/covenant-initiative/covenant-in-figures.html). [↑](#footnote-ref-100)
100. European Commission, Eurostat, [Pollution, grime or other environmental problems by degree of urbanisation](http://data.europa.eu/euodp/data/dataset/VrbbG2kP6U8YElh5oRUw). [↑](#footnote-ref-101)
101. European Commission, [the 7th Report on Economic, Social and Territorial Cohesion](http://ec.europa.eu/regional_policy/en/information/cohesion-report/), 2017, p. 121. [↑](#footnote-ref-102)
102. European Commission, [Definition of Functional Urban Areas](https://ec.europa.eu/eurostat/web/gisco/geodata/reference-data/administrative-units-statistical-units/urban-audit#ua11-14). [↑](#footnote-ref-103)
103. Stadt Wien, [Step 2025](https://www.wien.gv.at/stadtentwicklung/strategien/step/step2025/fachkonzepte/). [↑](#footnote-ref-104)
104. Stadt Graz, [Grünes Netz Graz](https://www.graz.at/cms/beitrag/10295906/8115447/Online_Karte_Gruenes_Netz_Graz_GNG.html). [↑](#footnote-ref-105)
105. Urban Permeation Units measure the size of the built-up area as well as its degree of dispersion throughout the region. [↑](#footnote-ref-106)
106. EEA, [Urban Sprawl in Europe, Annex I](https://www.eea.europa.eu/publications/urban-sprawl-in-europe/annexes-120135-urban-sprawl-in-europe/view), 2014, pp.4-5. [↑](#footnote-ref-107)
107. [Statistik Austria,](http://www.statistik.at/web_de/statistiken/energie_umwelt_innovation_mobilitaet/verkehr/strasse/kraftfahrzeuge_-_bestand/index.html) Kraftfahrzeuge - Bestand. [↑](#footnote-ref-108)
108. European Commission, [Hours spent in road congestion annually](https://ec.europa.eu/transport/facts-fundings/scoreboard/countries/austria/energy-union-innovation_en). [↑](#footnote-ref-109)
109. International Association of Public Transport (UITP), [*Statistics brief on local public transport in the European Union*](http://www.uitp.org/sites/default/files/cck-focus-papers-files/UITP_Statistics_PT_in_EU_DEF_0.pdf), 2016. [↑](#footnote-ref-110)
110. Bundesministerium für Verkehr, Innovation und Technologie, [Mobilität der Zukunft](https://www.bmvit.gv.at/service/publikationen/innovation/mobilitaet/downloads/programmbroschuere_mobilitaet_der_zukunft.pdf), 2012. [↑](#footnote-ref-111)
111. Eurostat, [Shares of environmental and labour taxes in total tax revenues (sdg\_17\_50).](https://ec.europa.eu/eurostat/cache/metadata/en/sdg_17_50_esmsip2.htm) [↑](#footnote-ref-112)
112. European Commission, [Taxation Trends in the European Union](https://ec.europa.eu/taxation_customs/sites/taxation/files/taxation_trends_report_2017.pdf), 2018. [↑](#footnote-ref-113)
113. European Commission, based on Harding M., [The diesel differential: differences in the tax treatment of gasoline and diesel for road use](http://www.oecd-ilibrary.org/docserver/download/5jz14cd7hk6b.pdf?expires=1467378122&id=id&accname=guest&checksum=AFD304D4C89711ABEED530E1AA7CCD17), OECD Taxation Working Papers, 2015, No. 21. [↑](#footnote-ref-114)
114. European Commission (2018), Excise duty tables (situation as of 1 January 2018). [↑](#footnote-ref-115)
115. Eurostat, [Environmental tax revenues](http://ec.europa.eu/eurostat/en/web/products-datasets/-/T2020_RT320), 2018. [↑](#footnote-ref-116)
116. In the Communication ‘Public procurement for a better environment’ [(COM (2008) 400)](http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0400http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52008DC0400) 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. [↑](#footnote-ref-117)
117. [Aktionsplan zur nachhaltigen öffentlichen Beschaffung](http://www.nachhaltigebeschaffung.at/), 2010. [↑](#footnote-ref-118)
118. Ministry of Sustainability and Tourism, [National GPP helpdesk](http://www.nachhaltigebeschaffung.at/help-desk). [↑](#footnote-ref-119)
119. European Parliament, [Green public procurement and the action plan for the circular economy](http://www.europarl.europa.eu/RegData/etudes/STUD/2017/602065/IPOL_STU(2017)602065_EN.pdf), 2017, pp. 79-80. [↑](#footnote-ref-120)
120. See, for example, Action plan on financing sustainable growth ([COM(2018) 97](https://ec.europa.eu/info/publications/180308-action-plan-sustainable-growth_en)). [↑](#footnote-ref-121)
121. i.e. the European Regional Development Fund (ERDF), the Cohesion Fund (CF), the European Social Fund (ESF), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF). The ERDF, the CF and the ESF are referred to as the ‘cohesion policy funds’. [↑](#footnote-ref-122)
122. European Commission, [LIFE programme](http://ec.europa.eu/environment/life/). [↑](#footnote-ref-123)
123. European Investment Bank, [European Fund for Strategic Investments](http://www.eib.org/efsi/), 2016. [↑](#footnote-ref-124)
124. European Commission, [ESIF country data for Austria](https://cohesiondata.ec.europa.eu/countries/AT). [↑](#footnote-ref-125)
125. See Article 8 of [Regulation (EU) No 1303/2013](http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32013R1303&from=EN): ‘The objectives of the ESI Funds shall be pursued in line with the principle of sustainable development and with the Union's promotion of the aim of preserving, protecting and improving the quality of the environment, as set out in Article 11 and Article 191(1) TFEU, taking into account the polluter pays principle’. [↑](#footnote-ref-126)
126. European Commission, [ESIF data by country](https://cohesiondata.ec.europa.eu/countries). [↑](#footnote-ref-127)
127. European Commission, [EMFF fact sheet - Austria](https://ec.europa.eu/fisheries/sites/fisheries/files/docs/body/op-austria-fact-sheet_en.pdf). [↑](#footnote-ref-128)
128. European Commission, [European Semester Country Report for Austria](https://ec.europa.eu/info/sites/info/files/2018-european-semester-country-report-austria-en.pdf), 2018, p. 14. [↑](#footnote-ref-129)
129. 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. [↑](#footnote-ref-130)
130. 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. [↑](#footnote-ref-131)
131. European Commission own calculations based on CORDA (COmmon Research DAta Warehouse). [↑](#footnote-ref-132)
132. [eCAIMAN project](http://ec.europa.eu/research/infocentre/article_en.cfm?&artid=47978&caller=other). [↑](#footnote-ref-133)
133. [CHEM21 project](http://ec.europa.eu/research/infocentre/article_en.cfm?&artid=46737&caller=other). [↑](#footnote-ref-134)
134. Commission services, based on data provided by EASME. [↑](#footnote-ref-135)
135. European Commission, [LIFE Sterlet](http://ec.europa.eu/environment/life/project/Projects/index.cfm?fuseaction=search.dspPage&n_proj_id=5309). [↑](#footnote-ref-136)
136. The EIB Group includes EIB and EFSI investments and loans. [↑](#footnote-ref-137)
137. EIB, [Austria and the EIB](http://www.eib.org/en/projects/regions/european-union/austria/index.htm), 2018. [↑](#footnote-ref-138)
138. European Investment Bank, [EFSI project map](http://www.eib.org/en/efsi/map/index.htm). [↑](#footnote-ref-139)
139. Eurostat, [General government expenditure by function](http://ec.europa.eu/eurostat/statistics-explained/index.php/Government_expenditure_by_function_%E2%80%93_COFOG), 2018. [↑](#footnote-ref-140)
140. *Ibid*. [↑](#footnote-ref-141)
141. The Aarhus Convention, the Access to Environmental Information Directive, 2003/4/EC and the INSPIRE Directive, 2007/2 together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on INSPIRE. [↑](#footnote-ref-142)
142. The guarantees are explained in Commission Notice on access to justice in environmental matters, [OJL 275](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2003:275:TOC&toc=OJ:L:2017:043:FULL), 18.8.2017 and a related Citizen's Guide. [↑](#footnote-ref-143)
143. 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. [↑](#footnote-ref-144)
144. [Bundesministerium für Nachhaltigkeit und Tourismus.](https://www.bmnt.gv.at/) [↑](#footnote-ref-145)
145. INSPIRE [Österreich.](http://www.inspire.gv.at/) [↑](#footnote-ref-146)
146. data.gv.at [↑](#footnote-ref-147)
147. [Umweltbundesamt.](http://www.umweltbundesamt.at/) [↑](#footnote-ref-148)
148. [INSPIRE country sheet - Austria](https://inspire.ec.europa.eu/sites/default/files/inspirecountryficheaustria_2016.pdf), 2017. [↑](#footnote-ref-149)
149. [INSPIRE monitoring dashboard](https://inspire-dashboard.eea.europa.eu/#/dashboard?url=%2Fdashboard%2Fapp%2Fkibana%3F%23%2Fdashboard%2F89b2d4a0-2c25-11e7-8cd9-338183f2da0f%3F_g%3D(time:(from:now-5y,mode:quick,to:now))%26embed). [↑](#footnote-ref-150)
150. European Commission, [2016.5 Priority list of data sets for eReporting.](https://ies-svn.jrc.ec.europa.eu/projects/2016-5/wiki/) [↑](#footnote-ref-151)
151. [Partizipation](http://www.partizipation.at). [↑](#footnote-ref-152)
152. Unternehmens Service portal, [Allgemeines zum Zugang zu Gerichten in Umweltangelegenheiten.](https://www.usp.gv.at/Portal.Node/usp/public/content/umwelt_und_verkehr/oeffentlichkeitsbeteiligung_umweltbereich/allgemeines_zugang_gerichte_umweltangelegenheiten/41481.html) [↑](#footnote-ref-153)
153. The law seeks to amend the corresponding environmental laws at federal level, the Waste Management Act (Abfallwirtschaftsgesetz 2000), the Water Right Act (Wasserrechtsgesetz 1959) and the Air Pollution Control Act (Immissionsschutzgesetz-Luft). On air quality, provisions on access to justice are also part of the corresponding legislative proposal for a recast of the National Air Emissions Act (Emissionsgesetz-Luft 2018). [↑](#footnote-ref-154)
154. See VwGH, judgment of 28 May 2015, Zl. Ro 2014/07/0096-8 and VwGH, judgment of 19 February 2018, Ra 2015/07/0074-6. [↑](#footnote-ref-155)
155. LVwG *Niederösterreich*, judgment of 9 April 2018, LVwG-AV-751/001-2017. [↑](#footnote-ref-156)
156. European Commission, [2016.5 Priority list of data sets for eReporting.](https://ies-svn.jrc.ec.europa.eu/projects/2016-5/wiki/) [↑](#footnote-ref-157)
157. 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. [↑](#footnote-ref-158)
158. This EIR focuses on the help given to farmers to comply with nature and nitrates legislation. [↑](#footnote-ref-159)
159. This EIR focuses on inspections of major industrial installations. [↑](#footnote-ref-160)
160. This EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime. [↑](#footnote-ref-161)
161. The Environmental Liability Directive, 2004/35, creates the framework. [↑](#footnote-ref-162)
162. Bundesministerium für Nachhaltigkeit und Tourismus, [Richtlinie für die sachgerechte Düngung im Ackerbau und Grünland.](https://www.bmnt.gv.at/land/produktion-maerkte/pflanzliche-produktion/boden-duengung/Richtlinie-f-r-die-sachgerechte-D-ngung-im-Ackerbau-und-Gr-nland.html) [↑](#footnote-ref-163)
163. Nid, [Nitratinformationsservice Niederösterreich.](http://www.nid.at/) [↑](#footnote-ref-164)
164. Bundesministerium für Nachhaltigkeit und Tourismus, [Natura 2000](https://www.bmnt.gv.at/umwelt/natur-artenschutz/natura-2000.html). [↑](#footnote-ref-165)
165. Article 23, [Directive, 2010/75/EU.](https://eur-lex.europa.eu/legal-content/en/TXT/?uri=CELEX:32010L0075) [↑](#footnote-ref-166)
166. Bundesministerium für Nachhaltigkeit und Tourismus, [Umweltinspektionsplan](https://secure.umweltbundesamt.at/edm_portal/cms.do?get=/portal/informationen/ie-richtlinie-und-ippc-anlagen/Inspektionsplan.main). [↑](#footnote-ref-167)
167. Bundesministerium für Nachhaltigkeit und Tourismus, [Umweltinspektionsprogramm.](https://secure.umweltbundesamt.at/edm_portal/cms.do?get=/portal/informationen/ie-richtlinie-und-ippc-anlagen/Programme-L-nder.main) [↑](#footnote-ref-168)
168. Bundesministerium für Nachhaltigkeit und Tourismus, [Umweltinspektionsberichte.](https://secure.umweltbundesamt.at/edm_portal/cms.do?get=/portal/informationen/ie-richtlinie-und-ippc-anlagen/inspektionsberichte.main) [↑](#footnote-ref-169)
169. § 13 *Allgemeines Verwaltungsverfahrensgesetz*. [↑](#footnote-ref-170)
170. See as one example the contact form of Kufstein, a district in Tirol: Tirol, [Beratungs- und Beschwerdestelle.](https://www.tirol.gv.at/kufstein/service/beschwerden/) [↑](#footnote-ref-171)
171. Stadt Wien, [Sag's Wien - Die App für Ihre Anliegen an die Stadt.](https://www.wien.gv.at/sagswien/index.html) [↑](#footnote-ref-172)
172. Bundeskriminalamt, [Meldestellen.](https://www.bundeskriminalamt.at/602/start.aspx) [↑](#footnote-ref-173)
173. Bundesministerium Inneres, [Sicherheitsbericht.](https://www.bmi.gv.at/508/start.aspx) [↑](#footnote-ref-174)
174. Yale Center for Environmental Law & Policy, [Environmental Performance Index](https://epi.envirocenter.yale.edu/downloads/epi2018policymakerssummaryv01.pdf)*,*2018, p. 4 [↑](#footnote-ref-175)
175. [Directive 2014/52/EU](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0052). [↑](#footnote-ref-176)
176. Publication in Federal Law Gazette expected December. [↑](#footnote-ref-177)
177. 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, Habitats, Water Framework and the Industrial Emissions Directive (OJ C 273, 27.7.2016, p. 1). [↑](#footnote-ref-178)
178. Umweltbundesamt, [UVP – Umweltverträglichkeitsprüfung.](http://www.umweltbundesamt.at/umweltsituation/uvpsup/uvpoesterreich1/) [↑](#footnote-ref-179)
179. [Strategische Umweltprüfung.](http://www.strategischeumweltpruefung.at/) [↑](#footnote-ref-180)
180. Österreichischer Aktionsplan zur nachhaltigen öffentlichen Beschaffung, [NaBe-Aktionsplan.](http://www.nachhaltigebeschaffung.at/) [↑](#footnote-ref-181)
181. Bundesministerium für Nachhaltigkeit und Tourismus, [Willkommen im Elektronischen Datenmanagement – Umwelt.](https://secure.umweltbundesamt.at/edm_portal/home.do) [↑](#footnote-ref-182)
182. European Commission,[*Europe's Digital Progress Report (EDPR) 2017 Country Profile Austria*](https://ec.europa.eu/digital-single-market/en/scoreboard/austria), 2017, p.9, [↑](#footnote-ref-183)
183. European Commission, [Digital Economy and Society Index Report 2018, Digital Public Services](http://ec.europa.eu/newsroom/dae/document.cfm?doc_id=52244). [↑](#footnote-ref-184)
184. Federal Chancellery, [*Behörden im Netz - das österreichische E-Government ABC*](https://www.digitales.oesterreich.gv.at/documents/22124/30428/E-Government-ABC.pdf/b552f453-7ae9-4d12-9608-30da166d710b), 2017. [↑](#footnote-ref-185)
185. Digitales Oesterreich, [Was ist E-Government?](https://www.digitales.oesterreich.gv.at/was-ist-e-government-). [↑](#footnote-ref-186)
186. Digitales Oesterreich, [Was ist E-Government?](https://www.digitales.oesterreich.gv.at/was-ist-e-government-). [↑](#footnote-ref-187)
187. [Elektronischen Datenmanagement – Umwelt](https://secure.umweltbundesamt.at/edm_portal/home.do). [↑](#footnote-ref-188)
188. Digitales Oesterreich, [Was ist E-Government?](https://www.digitales.oesterreich.gv.at/was-ist-e-government-). [↑](#footnote-ref-189)
189. [ÖKO- PROJEKT.](https://www.umweltfoerderung.at/fileadmin/user_upload/media/publicconsulting/O__koprojekt_1-2017.pdf) [↑](#footnote-ref-190)
190. https://www.oerok.gv.at/esi-fonds-at/ [↑](#footnote-ref-191)
191. [UN General Assembly Resolution 72/277](http://www.un.org/en/ga/72/resolutions.shtml) and [Organizational session of the ad hoc open-ended working group](https://www.un.org/pga/72/2018/09/05/towards-a-global-pact-for-the-environment/). [↑](#footnote-ref-192)
192. Protocol to the Convention on Biological Diversity: Access to genetic resources and the fair and equitable sharing of benefits arising from their utilisation. [↑](#footnote-ref-193)
193. [Regulation (EC) No 2173/2005](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1541433582220&uri=CELEX:32005R2173). [↑](#footnote-ref-194)
194. UN, [Overview of Competent Authority EU Timber Regulation checks](https://www.unep-wcmc.org/system/dataset_file_fields/files/000/000/519/original/Overview_of_CA_checks_June-Nov2017__FINAL_30_04_2018.pdf?1525181749) - It is estimated that 140 000 Austrian operators place domestic timber on the EU market and 4 100 ‑ 6 000 import timber. June – November 2017. [↑](#footnote-ref-195)
195. Neslen, A. [Romania breaks up alleged €25m illegal logging ring](https://www.theguardian.com/environment/2018/may/31/romania-breaks-up-alleged-25m-illegal-logging-ring). *The Guardian*. May, 2018. [↑](#footnote-ref-196)
196. [Regulation (EU) No 511/2014](https://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1541433676085&uri=CELEX:32014R0511). [↑](#footnote-ref-197)
197. [The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)](http://ec.europa.eu/environment/cites/index_en.htm). [↑](#footnote-ref-198)
198. [Regulation (EC) No 338/97.](https://eur-lex.europa.eu/legal-content/en/ALL/?uri=CELEX%3A31997R0338) [↑](#footnote-ref-199)
199. European Commission (2016), [EU action plan against wildlife trafficking](https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=COM:2016:87:FIN). [↑](#footnote-ref-200)
200. [Brief summary of the Pannon Eagle LIFE project goals.](https://rm.coe.int/brief-summary-of-the-pannon-eagle-life-project-goals/1680730d25) [↑](#footnote-ref-201)
201. [The Austrian Strategy for Sustainable Development.](http://sdgtoolkit.org/wp-content/uploads/2017/02/The-Austrian-Strategy-for-Sustainable-Development_en.pdf) [↑](#footnote-ref-202)
202. [Österreichische Strategie Nachhaltige Entwicklung](https://www.bmdw.gv.at/Aussenwirtschaft/nachhaltigkeit/Nachhaltigkeitspolitik/Documents/Bund-L%C3%A4nder-Nachhaltigkeitsstrategie%20(%C3%96STRAT)%202010.pdf) (ÖSTRAT). [↑](#footnote-ref-203)
203. European Sustainable Development Network, [*Austria country profile*](https://www.sd-network.eu/?k=country%20profiles&s=single%20country%20profile&country=Austria). [↑](#footnote-ref-204)
204. [www.sdg.gv.at](http://www.sdg.gv.at) [↑](#footnote-ref-205)
205. BMLFUW, [*Indikatoren-Bericht MONE 2015: Auf dem Weg zu einem nachhaltigen Österreich*](https://www.bmnt.gv.at/dam/jcr:20b6b212-798f-455f-b3a5-318910f9bc3a/MONE_Bericht_2015.pdf.), 2015. [↑](#footnote-ref-206)