

BEST PRACTICES

from the Environmental Implementation
Review 2019 across the EU 28 Countries



ENVIRONMENTAL PROTECTION AGENCY

The Environmental Protection Agency (EPA) is responsible for protecting and improving the environment as a valuable asset for the people of Ireland. We are committed to protecting people and the environment from the harmful effects of radiation and pollution.

The work of the EPA can be divided into three main areas:

Regulation: *We implement effective regulation and environmental compliance systems to deliver good environmental outcomes and target those who don't comply.*

Knowledge: *We provide high quality, targeted and timely environmental data, information and assessment to inform decision making at all levels.*

Advocacy: *We work with others to advocate for a clean, productive and well protected environment and for sustainable environmental behaviour.*

Our Responsibilities

Licensing

We regulate the following activities so that they do not endanger human health or harm the environment:

- waste facilities (*e.g. landfills, incinerators, waste transfer stations*);
- large scale industrial activities (*e.g. pharmaceutical, cement manufacturing, power plants*);
- intensive agriculture (*e.g. pigs, poultry*);
- the contained use and controlled release of Genetically Modified Organisms (*GMOs*);
- sources of ionising radiation (*e.g. x-ray and radiotherapy equipment, industrial sources*);
- large petrol storage facilities;
- waste water discharges;
- dumping at sea activities.

National Environmental Enforcement

- Conducting an annual programme of audits and inspections of EPA licensed facilities.
- Overseeing local authorities' environmental protection responsibilities.
- Supervising the supply of drinking water by public water suppliers.
- Working with local authorities and other agencies to tackle environmental crime by co-ordinating a national enforcement network, targeting offenders and overseeing remediation.
- Enforcing Regulations such as Waste Electrical and Electronic Equipment (WEEE), Restriction of Hazardous Substances (RoHS) and substances that deplete the ozone layer.
- Prosecuting those who flout environmental law and damage the environment.

Water Management

- Monitoring and reporting on the quality of rivers, lakes, transitional and coastal waters of Ireland and groundwaters; measuring water levels and river flows.
- National coordination and oversight of the Water Framework Directive.
- Monitoring and reporting on Bathing Water Quality.

Monitoring, Analysing and Reporting on the Environment

- Monitoring air quality and implementing the EU Clean Air for Europe (CAFÉ) Directive.
- Independent reporting to inform decision making by national and local government (*e.g. periodic reporting on the State of Ireland's Environment and Indicator Reports*).

Regulating Ireland's Greenhouse Gas Emissions

- Preparing Ireland's greenhouse gas inventories and projections.
- Implementing the Emissions Trading Directive, for over 100 of the largest producers of carbon dioxide in Ireland.

Environmental Research and Development

- Funding environmental research to identify pressures, inform policy and provide solutions in the areas of climate, water and sustainability.

Strategic Environmental Assessment

- Assessing the impact of proposed plans and programmes on the Irish environment (*e.g. major development plans*).

Radiological Protection

- Monitoring radiation levels, assessing exposure of people in Ireland to ionising radiation.
- Assisting in developing national plans for emergencies arising from nuclear accidents.
- Monitoring developments abroad relating to nuclear installations and radiological safety.
- Providing, or overseeing the provision of, specialist radiation protection services.

Guidance, Accessible Information and Education

- Providing advice and guidance to industry and the public on environmental and radiological protection topics.
- Providing timely and easily accessible environmental information to encourage public participation in environmental decision-making (*e.g. My Local Environment, Radon Maps*).
- Advising Government on matters relating to radiological safety and emergency response.
- Developing a National Hazardous Waste Management Plan to prevent and manage hazardous waste.

Awareness Raising and Behavioural Change

- Generating greater environmental awareness and influencing positive behavioural change by supporting businesses, communities and householders to become more resource efficient.
- Promoting radon testing in homes and workplaces and encouraging remediation where necessary.

Management and structure of the EPA

The EPA is managed by a full time Board, consisting of a Director General and five Directors. The work is carried out across five Offices:

- Office of Environmental Sustainability
- Office of Environmental Enforcement
- Office of Evidence and Assessment
- Office of Radiation Protection and Environmental Monitoring
- Office of Communications and Corporate Services

The EPA is assisted by an Advisory Committee of twelve members who meet regularly to discuss issues of concern and provide advice to the Board.

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Review 2019 across the EU 28 Countries

**A report commissioned by the
Environmental Protection Agency**

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ENVIRONMENTAL PROTECTION AGENCY

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Summary

Introduction

This report aims to distil out the best practices from the 28-Country EU Environmental Implementation Review 2019 (EIR).¹

It contains the “Examples of Good Practice” examples highlighted in the Commission reports, together with some additional good examples of best practice, as selected by the author from within the main body of the EIR reports. Where necessary, this has been supplemented with additional information from country sources in order to get a sense as to what each activity entails.

Overall observations

In summary, some of the most exciting areas of innovation that are emerging include in the areas of climate action and air quality (often both related), as well as in the areas of nature protection and green infrastructure. In relation to climate, for example, Denmark is aiming for a share of renewable electricity above 100% of consumption and no new petrol or diesel cars from 2030, or hybrids from 2035; Austria is developing renewable energy storage, abolishing subsidies that run counter to climate targets, and enabling household participation in energy supply; and the Dutch civil service pension fund reducing portfolio emissions by 7 million tonnes.

Sustainable consumption is another area with some innovative actions including an aim to reduce resource use and consumption by 30% of GDP in France and a national programme for sustainable consumption in Germany. Some countries feature strongly in terms of the circular economy, most often in the mature Member States.

Nature protection measures feature strongly, and there are also some good measures for green infrastructure being reported.

In general, lessons for others from those Member States that are advanced in areas such as climate action, the circular economy, and so on include the significant amount of resources committed to such and the mainstreaming of such significant environmental issues into government policies and programmes. In addition, the innovative use of existing EU funds also stands out for some Member States.

In terms of environmental taxation, it is interesting to note that some Member States are more progressive than others, and that this doesn't always fall according to older versus newer MSs. For example, both Estonia and Latvia are noted for their progressive, relatively high environmental taxes. This can act as a message for some of the older States.

In relation to the UN Sustainable Development Goals, there is a diversity of best practice responses in terms of how Member States are incorporating the SDGs into policy action, which would appear to be reflective of the different levels of ambition of the individual countries.

In terms of citizens engagement, all countries show a very strong agreement that an individual can play a role in protecting the environment (ranging from 73% to 97%), and this has either risen or stayed the same for well over two thirds of Member States since the last such Eurobarometer figures.

¹ http://ec.europa.eu/environment/eir/index_en.htm

Report structure

The report is structured in sections, as follows:

*Section A: **Selected good practice highlights***

65 selected highlights of good practice identified from those listed in Section B, and detailed in Section C.

*Section B: **List of good practice activities by theme***

Following the themes and titles used in the Commission documents, the relevant best practice activities for each Member State are listed. This includes the best practice activities identified by the authors of the Commission's EIRs, as well as additional best practices identified by the author of this report.

*Section C: **Detailed report on good practice activities***

A more in-depth review on a country-by-country basis. Highlighted 'good practice' activities and initiatives are briefly described. For each country, this starts with those highlighted by the Commission (usually two or three points), and where relevant, then include additional best practices highlighted by the author of this report.

The authors of the Commission EIR reports highlighted "Examples of Good Practice" for each Member State. The author of the current document have scrutinised the Commission reports and highlighted a number of additional activities and initiatives, deemed worthy of mention. These are the opinions of the authors, and other activities could also possibly have been selected. It should be noted that only positive activities have been selected.

It should also be noted that there is some variation in the detail and emphasis between different MS reports. It is assumed that this is related to the individuals from each country who supplied the basic information that was used in the compilation of the EIR reports.

Section A: Good practice highlights

Section A contains 65 selected examples of good practice that are considered to be highlights and have been selected from the good practices listed in sections B and detailed in C.

In the opinion of the author, these stood out as being particularly interesting, innovative, ambitious, or exciting, and offer examples to other Member States. There may of course be others.

Good Practice Highlights:

- 1 France FR1: Circular economy roadmap, including an aim to reduce resource use & consumption by 30% of GDP by 2030; 100% plastics recycling by 2025, and a reparability index for products.
- 2 Netherlands NL1: Continuing strong in the circular economy & building it into climate action plans; 'A circular economy in the Netherlands by 2050' is considered one of the most far-reaching in the EU.
- 3 Belgium BE3: Strong programmes in the 3 regions including: the Green Deal for Circular Procurement; a programme supporting experiments in social innovation; reparability criteria for energy using products; reuse centres.
- 4 France FR11: Agreements to develop greener production patterns with certain industrial sectors, e.g. construction; and tools to help public buyers and building professionals.
- 5 Austria AT1: Circular economy actions on reuse - further expansion of reuse networks, more collection and reuse of old electrical appliances, and other usable goods; developing insurance packages for reuse.
- 6 Spain ES4: High spend under the Circular Economy Strategy (€632 million) and water reuse a significant element.
- 7 Luxembourg LU3: Programmes to integrate the circular economy into SME innovation activities and to help companies become more resource efficient.
- 8 Finland FI11: Project on circular economy and reuse of construction materials, involving novel methods to produce recyclable and functional urban construction products.
- 9 Germany DE8: National programme for sustainable consumption.
- 10 Sweden SE1: High performance on eco-innovation; National Innovation Council; re-industrialisation strategy 'smart industry'; Swedish Cleantech, an export platform for companies.
- 12 Finland FI4: Deposit refund system and packaging tax in place collecting refillable glass and PET bottles and one-way cans, PET bottles and glass bottles. Achieved return rates from 89% to 95% for one-way packaging.
- 13 Lithuania LT1: A deposit-refund system for plastic/glass bottles and cans has achieved its 2020 objective of 90% collection rate early in 2017.
- 14 Sweden SE10: Extended producer responsibility scheme for pharmaceuticals.
- 15 Slovenia SL2: Already exceeded the 2020 municipal waste recycling target of 50%; a planned network of reuse and waste prevention centres.
- 16 Belgium BE9: Targets to reduce food losses and food waste & associated action programmes.
- 17 France FR7: Agriculture biodiversity measures including 15% organic farming by 2022, phasing out glyphosate within 5 years, halving pesticide use by 2025, and banning substances similar to neonicotinoids.
- 18 Cyprus CY5: A ban on the grazing of all animals in pastures of 'high nature value' in Natura 2000 areas.
- 19 Hungary HU7: The National Ecological Network, incorporating protected areas and Natura 2000 sites, along with other areas, accounts for 36% of the country.

- 20 Germany DE2: Baden-Württemberg pays farmers to manage species-rich grassland, thereby promoting grassland biodiversity.
- 21 Spain ES7: Spanish Business and Biodiversity Initiative, getting business to integrate natural capital protection into business and management policies.
- 22 Spain ES5: Strategic plan on nature and biodiversity tourism; set up a system for recognition of the sustainability of nature tourism in Natura 2000 sites.
- 23 Germany DE3: A Natura 2000 award for municipalities in Bavaria.
- 24 Spain ES6: Development of natural capital accounts.
- 25 Denmark DK6: Plan to phase out coal power; a share of renewable electricity above 100% of consumption; 90% of district heating consumption based on non-fossil sources by 2030; no new petrol and diesel cars from 2030, no hybrids from 2035.
- 26 Netherlands NL4: Largest Dutch pension fund (for civil servants) reducing portfolio CO₂ emissions by 7 million tonnes and increasing renewables investment by 25%.
- 27 Luxembourg: The Climate Pact for municipality action on climate change, with financial support and technical assistance.
- 28 Netherlands NL7: The number of local energy cooperatives for renewables now at 392 co-ops.
- 29 Sweden SE7: A support initiative 'The Industrial Leap' - SEK 300 million per year to be invested between 2018 and 2040 to support Swedish industry in the shift towards zero GHG emissions.
- 30 Slovenia SL6: Good electric recharging facilities in place — one public recharging point for every 1.64 electric vehicles. Tax exemptions and benefits and incentives to buy and use electric cars.
- 31 Sweden SE3: High use of alternative fuels in new passenger cars and in public transport; one of the few EU countries where more than 5% of new cars use alternative fuels.
- 32 France FR6: Biodiversity plan including aims for a 50% increase in green areas in cities by 2020; a 'Capital of Biodiversity' prize for municipalities, zero net soil sealing; and obligations to combat, limit and compensate for urban sprawl.
- 33 UK2: Central Scotland Green Network – largest green infrastructure project in EU.
- 34 Germany DE11: Federal €50 million support programme to improve urban green areas - 'green urban future'.
- 35 Sweden SE8: Green infrastructure investment by water companies including funding for cover crops to reduce nutrient leaching.
- 36 Italy IT3: Green roof installations shown to have potential to reduce flooding by half over a 10-year period.
- 37 UK8: Green Infrastructure measures in planning, building, agriculture, and forestry.
- 38 Belgium BE12: Soil remediation funds funded via a levy on fuel.
- 39 Denmark DK4: Clean air package 2018 to reduce air pollution in larger cities, phase out diesel and gasoline vehicles; phase out coal power; implement measures in agriculture, shipping, & greener residential heating; and to meet agreed air emission reduction targets.
- 40 France FR5: Display sticker for vehicle air quality certificate - Crit'air, for use in traffic management and parking in towns and cities.

- 41 Germany DE4: Clean air programme to electrify and retrofit public transport and taxi fleets.
- 42 Italy IT7: Air quality measures for diesel and biomass.
- 43 Poland PL5: Developing the market for electric, compressed natural gas (CNG) and liquid natural gas (LNG) cars; target for a million electric vehicles on the road by 2025.
- 44 Italy IT15: Reuse of urban wastewater.
- 45 UK7: legislation to tackle diffuse pollution under the Nitrates Directive.
- 46 Finland FI8: Finnish Sustainable Communities Network, FISU – a network of municipalities working towards becoming carbon neutral, waste-free and curbing overconsumption by 2050.
- 47 Free public transport in Tallinn, funded through residents' income tax (EE5); a free school transport scheme for all in Malta (MT1), and free public transport across Luxembourg from 2020 (LU4).
- 48 Finland FI10: Sustainable urban mobility and the personal carbon trade.
- 49 Sweden SE4: City initiatives on the environment and climate change - protected natural areas and green spaces; urban agriculture; action plan against traffic noise; fossil free energy districts.
- 50 Spain ES8: Sustainable and Integrated Urban Development funding initiative for urban regeneration, placing the emphasis on sustainability.
- 51 Denmark DK5: High environmental tax revenue, including an effective pesticide tax and an animal feed mineral-phosphorus tax.
- 52 Sweden SE5: Environmental taxes: air travel, NO_x (stationary sources), SO₂, and on chemicals in certain electronics; virtual removal of fossil fuel subsidies.
- 53 Croatia HR3: The 'Forest Public Benefit Function Fee' requiring all companies to financially contribute to forest management for maintaining, restoring and managing forests in Croatia.
- 54 France FR11: Bonus-malus system for vehicle taxation based on emissions.
- 55 Finland FI3: Various ambitious targets on green public procurement, which increase progressively over time and aim to achieve 100% GPP at the central level; a national competence centre for sustainable and innovative public procurement set up in 2018.
- 56 France FR13: Strong GPP actions – aim to have 25% of procurement take social aspects and 30% environmental aspects into account.
- 57 Germany DE6: GPP and mandatory use of life-cycle costing.
- 58 Italy IT13: A front runner on GPP - minimum environmental criteria mandatory regardless of the contract value; monitoring; GPP used in structural funds.
- 59 Netherlands NL2: A new green deal on circular procurement & exceeding Commission recommendations on GPP; a target to reduce 1 million tonne of CO₂ emissions per year by 2021 through GPP; a 'Circular Procurement Academy'.
- 60 UK6: One of the leaders on GPP - 'mandatory minimum' and 'voluntary best practice' criteria for about 60 products.
- 61 Austria AT10: Agri-environmental programme ÖPUL, 80% of farms participating covering agri-environment-climate measures, organic farming, animal welfare, and Natura 2000 and Water Framework Directive actions.

- 62 Finland FI6: ERDF funding to be targeted at innovation and research on innovative energy technology, including offshore energy production, energy efficiency, and smart buildings.
- 63 Italy IT11: BES (Wellbeing, Equal and Sustainable) indicator system to include environmental concerns in budgetary issues.
- 64 Portugal PT4: National Environmental Education Strategy to enhance environmental literacy, covering decarbonising society, making the economy circular, and valuing the territory.
- 65 Slovenia SL5: 2030 development strategy to achieve a high quality of life for all and a target of 20% reduction by 2030 for the indicator Ecological Footprint (EF).

Section B: List of good practice activities by theme

This section outlines both the handful of best practice activities identified by the authors of the Commission's Environmental Implementation Reviews, as well as additional best practices identified by the author of this report. These are outlined for each Member State following the themes and titles used in the Commission review documents.

Thus, for example, under headings such as 'circular economy', 'eco-innovation', 'waste management', and so on, this Section B provides an at-a-glance overview of what best practice activities are highlighted across the Member States. There is also a reference to the page number in Section C, where an explanation of each individual activity is provided.

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

Measures towards a Circular Economy

Country	Code	Item
Austria	AT1	Circular economy actions on reuse - further expansion of reuse networks, more collection and reuse of old electrical appliances, and other usable goods; developing insurance packages for reuse.
Austria	AT7	Resource Efficiency Action Plan and the Circular Futures platform (a think tank and capacity builder).
Austria	AT3	Successful pilot project for reuse of building components and high value recycling.
Austria	AT3	Reuse and Repair Network Austria (RepaNet) for textiles and electronic equipment.
Belgium	BE1	Strong programmes in the 3 regions including: the Green Deal for Circular Procurement; a programme supporting experiments in social innovation; reparability criteria for energy using products; reuse centres.
Denmark	DK7	16 circular economy initiatives funded by approx. €16 million in 2019-22.
Finland	FI1	Outstanding performance in the circular economy – by 2030 estimated will benefit economy by 2 to 3 billion euros in added-value; including circularity in university curricula.
Finland	FI5	Plan to start Europe's first 'environmental impact bond' project in 2019.
France	FR1	Ambitious circular economy roadmap, including an aim to resource use & consumption by 30% of GDP by 2030, 100% plastics recycling by 2025, and a reparability index for products.
France	FR11	Agreements to develop greener production patterns with certain industrial sectors, e.g. construction; and tools to help public buyers and building professionals.
Germany	DE7	ProgRes II resource efficiency programme – waste policy, sustainable building, sustainable urban development, and the resource efficiency of ICT products.
Greece	GR1	National circular economy action plan and forum.
Italy	IT4	Circular economy a clear priority in the 2018 budget; Italy one of the top performers for its circular-material use-rate; ERDF being used for circular economy; and the 'Made Green in Italy' scheme.
Lux	LU3	Programmes to integrate the circular economy into SME innovation activities and to help companies become more resource efficient.
Netherlands	NL1	Continuing strong in the circular economy & building it into climate action plans; 'A circular economy in the Netherlands by 2050' is considered one of the most far-reaching in the EU.
Portugal	PT	The GoodAfter online supermarket.

Slovakia	SK2	A new Slovak 2030 environment strategy and a 2030 economic policy, with an updated raw materials policy which covers circular economy principles.
Spain	ES4	High spend under the Circular Economy Strategy (€632 million) and water reuse a significant element.
Sweden	SE13	Sweden-India Innovation Partnership for a Sustainable Future will work together to develop and implement joint innovation projects, including on the circular economy.
Sweden	SE14	A plan to ban intentionally used microplastics nationally.
Sweden	SE15	Circular economy transition - a task force dealing with circular economy.
UK	UK5	Aim to double resource productivity by 2050; and work towards eliminating all avoidable waste by 2050 and all avoidable plastic waste by 2042. Various circular economy actions.

Industry/SME/Resource Efficiency

Country	Code	Item
Austria	AT8	'Green jobs master plan' aiming to create 100,000 new jobs in the environmental sector by 2020 - implemented by the 'green jobs' portal and a 'climate-active' qualification/skills initiative.
Austria	AT13	'Stock-take' of replacement of harmful chemicals under REACH.
Belgium	BE7	SME support for energy efficiency and renewables – financing in energy efficiency and increase SME/VSME production of renewable energy.
Estonia	EE6	Industry support including the Green Industry Innovation Estonia - to help develop green business ideas and new environmental technologies; grants for rural businesses to use renewable energy, organic raw materials and eco-friendly processes.
Finland	FI11	Project on circular economy and reuse of construction materials, involving novel methods to produce recyclable and functional urban construction products.
France	FR9	Industry and environment initiatives - networks of companies acting on environmental issues.
France	FR14	SME resource efficiency programme for saving costs.
Greece	GR4	National fund for business activities on sustainability, energy efficiency and renewable energy.
Hungary	HU1	Resource efficiency programme for companies providing information, advice and incentives.
Italy	IT9	Example of best practice in national-level governance of the REACH Regulation, and actions on hazardous chemicals substitution
Netherlands	NL10	An initiative to promote safe materials and products that can replace hazardous chemicals.

Slovenia	SL1	A circular economy project turning invasive plants into recycled paper, and a project collecting and reprocessing used nylons, mainly from fishing, into new material.
UK	UK1	Among best performing for company resource efficiency measures.

Eco-Innovation

Country	Code	Item
Belgium	BE4	Various including an innovation hub and incubator will on reusing waste and on developing renewable chemicals and sustainable materials; Smart Energy Region; and a competitiveness cluster policy.
Belgium	BE5	The Employment-Environment Alliance on developing economic industries related to the environment in he areas of sustainable construction ,water and waste.
Czech Republic	CZ2	National network of environmental education centres.
Denmark	DK2	Significantly higher percentage of SMEs with green products/services; support framework of export financing and assistance.
Germany	DE1	Strong performance on eco-innovation particularly in the fields of clean energy and water technology.
Germany	DE8	National programme for sustainable consumption.
Ireland	IE2	Very strong in environmental research and development in terms of researchers and green investment.
Netherlands	NL13	A national scheme in place is the Milieukeur, the environmental quality label for products and services.
Sweden	SE1	High performance on eco-innovation; National Innovation Council; re-industrialisation strategy 'smart industry'; Swedish Cleantech, an export platform for companies.

Waste Management

Country	Code	Item
Austria	AT15	PET-to-PET recycling scheme – bottles collected and used as secondary raw materials for new PET bottles, with 30% recycled content.
Belgium	BE8	Various - targets to reduce waste generation and reduce residual waste; mandatory use of reusable cups for festivals and events.
Belgium	BE9	Targets to reduce food losses and food waste & associated action programmes.
France	FR8	Actions on municipal waste recycling including segregation of biowaste for all companies, segregation of all household packaging, and a national campaign.
Cyprus	CY6	Extended Producer Responsibility initiative on non-packaging paper.

Finland	FI4	Deposit refund system and packaging tax in place collecting refillable glass and PET bottles and one-way cans, PET bottles and glass bottles. Achieved return rates from 89% to 95% for one-way packaging.
Finland	FI7	Plastics Roadmap for Finland including the possibility to introduce a tax on plastics, significantly increasing recovery of plastic waste, and investing in alternative solutions.
Italy	IT5	Reuse centres planned, and a tax credit for recycled plastics.
Lithuania	LT1	A deposit-refund system for plastic/glass bottles and cans has achieved its 2020 objective of 90% collection rate early in 2017.
Malta	MT3	An on-line waste game for good waste-management practices.
Malta	MT7	Planned beverage container refund system.
Netherlands	NL5	Actions on waste medicines collection from pharmacies.
Slovenia	SL2	Already exceeded the 2020 municipal waste recycling target of 50%; a planned network of reuse and waste prevention centres.
Sweden	SE10	Extended producer responsibility' scheme for pharmaceuticals.

2. Protecting, conserving and enhancing natural capital

Nature, biodiversity, and natural capital

Country	Code	Item
Austria	AT14	Reduced soil erosion rates through soil protecting cultivation using relevant agri-environmental measures.
Belgium	BE15	Citizen science - volunteers to commit to gardening pesticide-free and planting wild flowers for pollinators; elsewhere volunteers to collect information on air pollution.
Croatia	HR3	The 'Forest Public Benefit Function Fee' requiring all companies to financially contribute to forest management for maintaining, restoring and managing forests in Croatia.
Croatia	HR2	Nature protection strategy and action plan 2017-2025 lays down long-term objectives, guidelines and methods for conserving biological, geological and landscape diversity.
Cyprus	CY1	Effective use of LIFE funds for implementing the Natura 2000 network and to implement conservation measures at specific sites.
Cyprus	CY5	A ban on the grazing of all animals in pastures of 'high nature value' in Natura 2000 areas.
Czech Republic	CZ3	Programmes to revitalise watercourses and water retention in the landscape.
Denmark	DK10	Various sustainability measures under the Danish RDP – resource efficient equipment for farms, wetland creation, afforestation, nature friendly training.
Denmark	DK10	The 'Biodiversity Now' project uses citizen volunteers to track biodiversity in Denmark via a mobile app.

Estonia	EE2	One of the most complete prioritised action frameworks, which helped secure EU funding for Natura 2000 sites.
Estonia	EE10	A strong planning process in Tallinn in relation to biodiversity, with good mapping based on survey work for species and habitats and backed by bio-data inventories and research.
Finland	FI2	Habitat banking in Finland is developing and piloting the principles of ecological compensation and a new market-based mechanism for biodiversity conservation.
France	FR2	Biodiversity plan including aims for a 50% increase in green areas in cities by 2020; a 'Capital of Biodiversity' prize for municipalities, zero net soil sealing; and obligations to combat, limit and compensate for urban sprawl.
France	FR6	Large expansion of the marine nature network covered by Natura 2000, trebling in size from 41,683 km ² to 123,540 km ²
France	FR7	Agriculture biodiversity measures including 15% organic farming by 2022, phasing out glyphosate within 5 years, halving pesticide use by 2025, and banning substances similar to neonicotinoids.
Germany	DE2	Baden-Württemberg pays farmers to manage species-rich grassland, thereby promoting grassland biodiversity.
Germany	DE3	A Natura 2000 award for municipalities in Bavaria.
Germany	DE9	A project restoring ecological corridors across forests, agricultural areas and transboundary watercourses.
Hungary	HU7	The National Ecological Network, incorporating protected areas and Natura 2000 sites, along with other areas, accounts for 36% of the country.
Ireland	IE1	Publicly available, on-line geographical information system (GIS) on ecosystems & their services.
Italy	IT2	Effective promotion of LIFE projects.
Italy	IT16	Measures to reduce seabird by-catch in fishing.
Latvia	LV2	A good example project for protection and management of coastal habitats.
Lithuania	LT2	Successful LIFE programmes on wetlands.
Lithuania	LT4	Forest management plans must take biodiversity features into account.
Luxembourg	LU10	A comprehensive National Nature Protection Plan.
Malta	MT10	Rural policy and design guidance to protect eco-system landscape features and ecological corridors.
Netherlands	NL3	Good examples of water-related and nature restoration projects.
Netherlands	NL9	Various nature measures: farmer subsidies in areas with high potential to increase natural value; the National Green Fund; the online 'Naturalcapital.community' platform for businesses; and the Leaders for Nature network.

Poland	PL3	Project on rights and obligations for nature conservation, aimed at authorities and the public.
Portugal	PT5	Coalition for Green Growth, with private and public partners, and the "Green Growth Commitment" covering nature-based solutions against the risk of natural disasters, implementing the Business and Biodiversity Strategy, and promoting sustainable agro-industry practices.
Romania	RO1	The LIFE project 'Connect Carpathians'.
Slovakia	SK1	Improvements in the status of species and habitats following the enlargement of the country's terrestrial Natura 2000 network under the Birds and Habitats Directives.
Slovakia	SK4	Two Slovak LIFE nature/information projects among the 28 best projects
Slovakia	SK6	Citizens' initiative 'we are the forest' to fight against deforestation in protected areas.
Spain	ES2	LIFE projects for designating a network of marine Natura 2000 sites.
Spain	ES5	Strategic plan on nature and biodiversity tourism; set up a system for recognition of the sustainability of nature tourism in Natura 2000 sites.
Spain	ES6	Development of natural capital accounts.
Spain	ES7	Spanish Business and Biodiversity Initiative, getting business to integrate natural capital protection into business and management policies.
Sweden	SE2	A high level of expertise in restoring habitats and various restoration activities are giving good results..
Sweden	SE6	RDP for Sweden focuses on restoring, preserving and improving ecosystems related to agriculture and forestry
UK	UK2	Central Scotland Green Network – largest green infrastructure project in EU.
UK	UK4	Tools for practitioners in a form that supports everyday decision making for the sustainable management of natural resources.

Actions on Climate

Country	Code	Item
Austria	AT5	Aiming to move from 72% to 100% renewable electricity by 2030. Actions include measures for developing energy storage, adjusting network tariff structure to push smart meters and allow household/business participation in electricity supply; abolishing tax on private electricity generation; establishing a list of subsidies that run counter to climate and energy targets with a view to abolition; GHG reduction targets by sector.
Austria	AT6	Funding programme for climate adaptation; an adaptation advisory service for municipalities supported by an online platform with tools and guidelines.
Belgium	BE10	80-95% goal by 2050; phasing out fossil fuel building heating, increasing thermal renewable energy in industry to 70 to 80%, allocating 5-10% of R&D to climate and energy.
Bulgaria	BG6	Plans for energy efficient homes that can cater for the needs of medium- and low-income families
Denmark	DK6	Plan to phase out coal power; a share of renewable electricity above 100% of consumption; 90% of district heating consumption based on non-fossil sources by 2030; no new petrol and diesel cars from 2030, no hybrids from 2035.
Estonia	EE12	Planned network of hydrogen refueling stations, and attempting to mobilise the demand for hydrogen vehicles.
France	FR4	Carbon budgets and targets covering all sectors.
Germany	DE13	Service centre helps municipalities with climate change mitigation (and, to some extent, adaptation) projects.
Greece	GR2	New vehicles amongst most environmentally friendly in EU.
Latvia	LV4	By law, revenues from EU emission allowance auctions to be spent on climate.
Lux	LU5	Mandatory passive house standard introduced for all residential buildings.
Lux	LU8	The Climate Pact for municipality action on climate change, with financial support and technical assistance.
Netherlands	NL4	Largest Dutch pension fund (for civil servants) reducing portfolio CO ₂ emissions by 7 million tonnes and increasing renewables investment by 25%.
Netherlands	NL7	The number of local energy cooperatives for renewables now at 392.
Netherlands	NL8	New climate policy to reduce GHG emissions by at least 49% in 2030 compared to 1990.
Slovakia	SK5	An action plan for development of electro-mobility and a strategy for low carbon development to 2030
Slovenia	SL6	Good electric recharging facilities in place — one public recharging point for every 1.64 electric vehicles. Tax

		exemptions and benefits and incentives to buy and use electric cars.
Sweden	SE3	High use of alternative fuels in new passenger cars and in public transport; one of the few EU countries where more than 5% of new cars use alternative fuels.
Sweden	SE7	A support initiative 'The Industrial Leap' - SEK 300 million per year to be invested between 2018 and 2040 to support Swedish industry in the shift towards zero GHG emissions.
Sweden	SE11	Sweden had lower emissions than its allocations for 2013- 2017 and has cancelled its spare units, rather than banking them, in order to enhance the environmental integrity of the system.
Sweden	SE12	Extensive work on climate change adaptation
UK	UK3	Increase of alternative fuel passenger cars and a zero diesel differential.

Green Infrastructure

Country	Code	Item
Austria	AT4	Substantial urban green infrastructure initiatives including networks of high-quality green spaces, and aims for more grassland in urban areas.
Austria	AT11	The Austrian Forest Strategy 2020+ aims to safeguard the multifunctional services of forests - climate mitigation & adaptation, health & sustainability, productivity, biodiversity, protection against disasters and extreme weather events, and social and economic aspects.
Belgium	BE3	Various, including networks to connect city green areas, and to integrate it into planning.
Denmark	DK3	Recognition for green infrastructure efforts – making urban trees a priority; the Nature Programme; the 'nature map'; promoting green infrastructure in agriculture.
Germany	DE11	Federal €50 million support programme to improve urban green areas - 'green urban future'.
Hungary	HU4	'Green City' – a green infrastructure initiative through 'green city' calls.
Hungary	HU8	The Hungarian Partnership Agreement includes natural water retention measures and nature-based solutions for flooding.
Ireland	IE4	Investment in increasing forest area
Italy	IT3	Green roof installations shown to have potential to reduce flooding by half over a 10-year period.
Italy	IT6	Nature-based solutions for flood-risk management.
Latvia	LV1	A good example project for protection and enhancement of green infrastructure across a lowland rivers landscape.
Malta	MT11	Malta has upgraded several parks and green belts which are seen as best practice; and community initiatives to safeguard urban biodiversity.

Poland	PL1	Green infrastructure projects to slow down water outflow for flood and drought prevention.
Portugal	PT6	Lisbon green infrastructure activities aiming for regeneration, adaptation to climate change, reducing traffic, and green connectivity.
Sweden	SE8	Green Infrastructure measures in planning, building, agriculture, and forestry.
UK	UK8	Green infrastructure investment by water companies including funding for cover crops to reduce nutrient leaching.

Soil Protection

Country	Code	Item
Belgium	BE12	Soil remediation funds funded via a levy on fuel.

3. Ensuring citizens' health and quality of life

Air Quality

Country	Code	Item
Belgium	BE1	Progress on improving air quality through low-emission zones, technical improvements to vehicles, fiscal incentives, alternative fuel infrastructure, and plans to ban diesel.
France	FR5	Display sticker for vehicle air quality certificate - Crit'air, for use in traffic management and parking in towns and cities.
Czech Republic	CZ1	Solid fuel boiler replacement scheme for 80,000 old household boilers.
Denmark	DK4	Clean air package 2018 to reduce air pollution in larger cities, phase out diesel and gasoline vehicles; implement measures in agriculture, shipping, & greener residential heating; and to meet agreed emission reduction targets.
Germany	DE4	Clean air programme to electrify and retrofit public transport and taxi fleets.
Greece	GR6	A project on alternative fuels in the shipping sector.
Italy	IT7	Air quality measures for diesel and biomass.
Poland	PL2	LIFE project on implementation of an air quality plan.
Poland	PL5	Developing the market for electric, compressed natural gas (CNG) and liquid natural gas (LNG) cars; target for a million electric vehicles on the road by 2025.

Water quality and management

Country	Code	Item
Denmark	DK8	Nitrogen and pesticide use – decreases in nitrogen load and decrease in higher impact pesticide use.

Germany	DE10	An extensive programme of measures to address the Marine Strategy Framework Directive including measures targeting shipping, fisheries, industry, offshore activities, and tourism.
Germany	DE14	Project on agricultural practices in relation to pesticides and nitrogen and drinking water.
Italy	IT15	Reuse of urban wastewater.
Latvia	LV7	Annual seminars for farmers on sustainable use of plant protection products and fertilisers.
Spain	ES3	Good data gathering on the waste water Directive.
UK	UK7	New legislation to tackle diffuse pollution under the Nitrates Directive.

Making cities sustainable

Country	Code	Item
Austria	AT9	Sustainable transport measures - innovative traffic management systems for car sharing, car rental and e-taxis; research on sustainable transport with urban mobility labs
Denmark	DK1	Cycling accounting for 20% of all trips and public transport servicing 13% of commuters.
Estonia	EE5	Free public transport in Tallinn, funded through an annual share of income tax of registered residents, which covers lost ticket revenue and additional funds to improve quality.
Estonia	EE8	Tallinn's 'Fix the facades' project to make apartment buildings more energy efficient.
Estonia	EE9	Real-time noise displayed on boards in Tallinn city.
Finland	FI8	Finnish Sustainable Communities Network, FISU – a network of municipalities working towards becoming carbon neutral, waste-free and curbing overconsumption by 2050.
Finland	FI10	Sustainable urban mobility and the personal carbon trade.
Italy	IT8	Good practices on noise management including an acoustic zoning plan and acoustic mitigation actions.
Italy	IT12	A reported increase in car sharing schemes.
Latvia	LV9	Baltic Biogas Bus project and a 9 municipality project to balance aesthetics, ecology and functionality of green areas.
Luxembourg	LU4	Free public transport across Luxembourg from 2020, and introduction of electric buses.
Luxembourg	LU7	Promoting people and companies to use electric cars and bikes; public purchase of electric vehicles; and a new sustainable mobility strategy.
Malta	MT1	A free school transport scheme for all and tax incentives for electric vehicles
Spain	ES8	Sustainable and Integrated Urban Development funding initiative for urban regeneration, placing the emphasis on sustainability.

Sweden	SE4	City initiatives on the environment and climate change - protected natural areas and green spaces; urban agriculture; action plan against traffic noise; fossil free energy districts.
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4. Enabling Framework

Green taxation, environmental charges

Country	Code	Item
Bulgaria	BG2	Electric vehicles exempted from vehicles tax; pilot scheme encouraging electric vehicles in public administration.
Bulgaria	BG3	Water abstraction charges since 2001, based on amounts and sources; revenue redistributed to environmental projects.
Cyprus	CY2	Above average environment-related tax revenue; consumption and environmental tax revenues are high.
Denmark	DK5	High environmental tax revenue, including an effective pesticide tax and an animal feed mineral-phosphorus tax.
Estonia	EE1	Environmentally relevant taxes remains among the highest in the EU, including mineral resource extraction charges and hunting and fishing fee system, which goes to research, conservation and awareness.
France	FR10	Groundwater abstraction charges.
France	FR11	Bonus-malus system for vehicle taxation based on emissions.
Greece	GR7	High revenue from environmental taxes.
Hungary	HU3	Air pollution load charge that has helped reduce air pollution somewhat.
Hungary	HU6	Preferential taxes for electric and hybrid company cars.
Ireland	IE5	Fiscal measures to support purchase of electric & hybrid vehicles.
Italy	IT10	Tax on pesticide products, with funds going to organic farming.
Latvia	LV5	Relatively higher environmental taxes and a Natural Resource Tax.
Lithuania	LT5	New products added to tax on environmental pollution (tyres, accumulators, batteries, fuel and oil filters, air intake filters, shock absorbers and mercury lamps).
Malta	MT8	A national scheme of water supply and water metering fees has been adopted.
Netherlands	NL6	Tax advantage schemes for resource efficiency to bring environment-friendly products and entrepreneurs to bring innovative products to market more rapidly.
Romania	RO2	A fleet renewal scheme which includes incentive bonuses for scrappage, and for buying electric and hybrid vehicles and vehicles with CO ₂ emissions lower than 98 g/km.
Slovenia	SL4	One of the highest shares of environmental tax revenues in the EU.
Slovenia	SL7	Eight pollution and resources taxes.

Sweden	SE5	Environmental taxes: air travel, NO _x (stationary sources), SO ₂ , and on chemicals in certain electronics; virtual removal of fossil fuel subsidies.
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Green Public Procurement

Country	Code	Item
Austria	AT12	Austria among the most advanced for GPP training and information, cooperation, product group databases, tender models and monitoring activities.
Belgium	BE4	Frontrunner; Flanders won 'Sustainable Procurement of the Year'; public-private network; setting up monitoring systems.
Bulgaria	BG4	Requires GPP to be used for the Climate Investment Programme.
Cyprus	CY7	Green criteria used in more than 50% of procurement procedures in selected categories; in 90% of product and services purchases, such as office IT and imaging equipment; in 100% of road sign, public fountain and toilet cistern purchases; and in 95% of indoor lighting purchases.
Denmark	DK9	Frontrunner on GPP. Total cost of ownership tools are now available for 13 different product groups
Finland	FI3	Various ambitious targets on green public procurement, which increase progressively over time and aim to achieve 100% GPP at the central level. a national competence centre for sustainable and innovative public procurement set up in 2018.
France	FR13	Strong GPP actions – aim to have 25% of procurement take social aspects and 30% environmental aspects into account.
Germany	DE6	GPP and mandatory use of life-cycle costing.
Italy	IT13	A front runner on GPP - minimum environmental criteria mandatory regardless of the contract value; monitoring; GPP used in structural funds.
Luxembourg	LU6	New public procurement law means attention paid to criteria other than lowest price.
Malta	MT9	Mandatory GPP checklist before publishing calls for tender.
Netherlands	NL2	A new green deal on circular procurement & exceeding Commission recommendations on GPP; a target to reduce 1 million tonne of CO ₂ emissions per year by 2021 through GPP; a 'Circular Procurement Academy'.
Portugal	PT3	Target to integrate environmental criteria in 60% of contracts and 60% of procurement value by 2020; a programme for dematerialisation of government procedures.
Romania	RO3	European Investment Bank loan to a PET Fibre recycling plant, will increase the amount of waste collected and processed by over 50,000 tonnes per year.
Slovenia	SL3	A new 2018 decree on GPP which has extended the product and service categories for which GPP is mandatory to 20 and defined objectives for each product or service.

Spain	ES9	Second national plan for GPP includes 20 products, works and services groups. It also includes a series of general environmental criteria for procurement, of a voluntary nature.
UK	UK6	One of the leaders on GPP - 'mandatory minimum' and 'voluntary best practice' criteria for about 60 products.

Environmental funding and investments

Country	Code	Item
Austria	AT10	Agri-environmental programme ÖPUL, 80% of farms participating covering agri-environment-climate measures, organic farming, animal welfare, and Natura 2000 and Water Framework Directive actions.
Belgium	BE13	National Pact for Strategic Investment to include funding of circular economy programmes; Belgian sovereign green bond to finance environmental and clean energy initiatives.
Belgium	BE14	Belgium one of two EU countries that uses the Youth Employment Initiative (YEI) for environmental purposes.
Estonia	EE2	The National Environmental Investment finances environmental activities and investment projects across a range of areas.
Estonia	EE11	Estonia's European Maritime and Fisheries Fund will improve the fishing fleet energy efficiency by replacement and modernisation of engines, and conserve or rehabilitate 9,000 hectares of terrain.
Finland	FI6	ERDF funding to be targeted at innovation and research on innovative energy technology, including offshore energy production, energy efficiency, and smart buildings.
Germany	DE5	Diverse use of ERDF funding – e.g. recovery of phosphorous from sewage sludge, financing urban green infrastructure, & supporting nature protection and rehabilitation.
Hungary	HU5	RDP spend on resource efficiency and climate in agriculture, food processing and afforestation.
Ireland	IE3	Good use of environmental co-financing, including LIFE and EIB.
Luxembourg	LU1	A large percentage of land will come under the agricultural management contracts for better water and soil management, and supporting biodiversity.
Netherlands	NL11	Funding in relation to sustainability – EIB loans for farmers' biogas and for rail renewable electricity; Green Metropole Fund for Amsterdam; Limburgs Energie Fonds for SME sustainability; the Green Funds tax incentive scheme; the Dutch National Fund for Green Investments.
Poland	PL4	National fund for spending income from environmental fees and penalties GHG allowance sales, etc., on environmental projects.
Portugal	PT2	The Environmental Funding Programme with projects related to climate change, circular economy, nature conservation and environmental awareness.
Portugal	PT7	Portugal has a Permanent Forest Fund (FFP) to finance sustainable forest management.

Portugal	PT9	'Sustainability and Efficiency in the Use of Resources' funding programme.
Slovakia	SK3	New compliance check to verify projects for EU co-financing.
Slovenia	SL9	One third of Slovenian farmland under RDP contracts to improve biodiversity and water and soil management.
Spain	ES10	National operational programme for Sustainable Growth.
Sweden	SE9	Reducing fishing by-catches.

5. Strengthening environmental governance

Effectiveness of environmental governance

Country	Code	Item
Austria	AT1	Austria has developed a digital channel for public services and a single participation portal which also covers environmental policies.
Bulgaria	BG1	Streamlining environmental assessments.
Cyprus	CY3	A 'first rate' air quality information portal.
Cyprus	CY4	High rate of imported timber checks.
Estonia	EE4	An annual 'partnering event' to involve stakeholders and the public in environmental issues, where the annual workplan and priorities are presented and discussed.
France	FR3	The single environmental permit - to save time and ensure compliance with tighter deadlines while protecting the fundamental interests covered by the applicable legislation.
Greece	GR3	Progressive approach on access to justice.
Hungary	HU2	Good environmental information system web portal.
Ireland	IE6	Second highest in the EU-28 for public participation in transposition measures.
Italy	IT14	Best practice on SEA monitoring indicators.
Latvia	LV3	Very broad access to justice in environmental cases.
Latvia	LV6	An NGO representative Board to aid environmental decision-making.
Lux	LU2	Good example of public access to information, including mobile apps.
Malta	MT6	A proposal to enshrine environmental protection in the Constitution.
Portugal	PT1	Good examples in environmental governance – single platform for inspection and monitoring in the areas of agriculture, sea and environment; a platform for information accompanying waste shipments; and the single environmental permitting platform.
Romania	RO4	Mobile app for reporting of cases that might affect protected habitats and species.

Compliance assurance

Country	Code	Item
Bulgaria	BG5	National network of prosecutors specialised in environmental cases.
Italy	IT1	Specialised environmental police forces.
Lithuania	LT3	Ministry of Environment complaints hotline.
Spain	ES1	A police unit to combat environmental crime and a specialised Environmental Prosecution Authority.

Sustainability & UN Sustainable Development Goals

Country	Code	Item
Belgium	BE11	SDG-indicator system, a set of indicators to report on the progress.
Denmark	DK11	Plan to incorporate the assessment of the consequences of new legislation and major initiatives for the SDGs.
Finland	FI9	Inclusion of SDG implementation in the 2019 budget for short and medium-term objectives.
France	FR15	Sustainable development has been included in the French Constitution since 2005; The 110 statistical indicators developed by the National Institute of Statistics and Economic Studies to monitor progress in implementing the SDGs could help to inform decision-making
Germany	DE12	Germany publishes regular updates and indicators on implementation of the SDGs
Greece	GR5	Wide stakeholders' involvement in SDG implementation process.
Italy	IT11	BES (Wellbeing, Equal and Sustainable) indicator system to include environmental concerns in budgetary issues.
Latvia	LV8	Latvia's main long-term planning document, 'Latvia 2030', can be considered a social contract, following broad public discussions.
Luxembourg	LU9	The Luxembourg Sustainable Development Finance Platform; the Forestry and Climate Change Fund; a campaign for projects by public institutions and civil society.
Netherlands	NL12	Since 2018, SDG monitoring is integrated under the wider Quality of Life Monitor.
Portugal	PT4	National Environmental Education Strategy to enhance environmental literacy, covering decarbonising society, making the economy circular, and valuing the territory.
Portugal	PT8	Sustainable Cities 2020 Strategy - a roadmap on urban sustainability.
Slovenia	SL5	2030 development strategy to achieve a high quality of life for all and a target of 20% reduction by 2030 for the indicator Ecological Footprint (EF).
Slovenia	SL8	Tourism is a big industry in Slovenia. Green tourism and sustainable development are at the core of Slovenia's 2017-2021 sustainable growth tourism strategy.

Spain	ES11	A national Action Plan for the 2030 Agenda was adopted by the Government in June 2018. The post of High Commissioner for the 2030 Agenda reports directly to the President.
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Public participation and access to justice

Country	Code	Item
Denmark	DK2	Good implementation of public participation in environmental decision-making, including three independent appeal boards.

Access to information, knowledge and evidence

Country	Code	Item
Austria	AT5	Austria's performance on the implementation of the INSPIRE Directive as an enabling framework to actively disseminate environmental information to the public is good.

Section C: Detailed report on good practice activities

A more in-depth review of the good practice activities listed in Section B, on a country-by-country basis. Highlighted good practice activities and initiatives are briefly described. For each country, this starts with those highlighted by the Commission (usually two to four points), and where relevant, then includes additional best practices highlighted by the author of this report.

Austria

Austria ²		
<i>Examples of good practice noted in EIR summary report</i>		<i>Key themes/ categories</i>
AT1	Circular economy actions on reuse	Circular economy
AT2	Digital public services	e-Government
AT3	Successful pilot project for reuse of building components and high value recycling	Circular economy
AT4	Urban green infrastructure initiatives	Green infrastructure
Other favourable points in the report		
AT5	Actions on climate	Climate
AT6	Climate adaptation	Climate
AT7	Resource Efficiency Action Plan and the Circular Futures platform	Resource efficiency
AT8	Green jobs masterplan	Circular economy
AT9	Sustainable transport measures	Urban mobility
AT10	Environmental measures in agriculture	Environmental funding
AT11	Austrian Forest Strategy 2020+	Green infrastructure
AT12	GPP	GPP
AT13	'Stock-take' of replacement of harmful chemicals under REACH	Chemicals
AT14	Reduced soil erosion rates through soil protecting cultivation	Soil protection
AT15	PET-to-PET recycling scheme	Waste management
AT16	Reuse and Repair Network Austria (RepaNet)	Circular economy

AT1 – Circular economy actions on reuse

Austria has new initiatives in the area of reuse. Austria has already reached the EU's 2020 municipal waste recycling target, as already noted in the 2017 EIR.

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. Work Austria is carrying out in this area includes: developing insurance packages for reuse organisations, establishing a reuse and service centre — R.U.S.Z. — that provides an inexpensive service to repair electrical appliances, improve energy efficiency, prepare items for reuse and distribute them to socially vulnerable people, and developing guidelines for the reuse of WEEE (as reported in an EEA report on reuse).

The country also scores well on eco-innovation and resource efficiency.

² http://ec.europa.eu/environment/eir/pdf/report_at_en.pdf

In 2017, the Environment Ministry launched a cooperative initiative, Ecolnnovation, 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.

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.

AT2 – Digital public services

Austria has developed a digital channel for public services and a single participation portal which also covers environmental policies.

AT3 – Successful pilot project for reuse of building components and high value recycling

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. In cooperation with large Viennese developers, through demolition preparatory dismantling, reusable components are made available for reuse in new construction or conversion, as well as recovery of materials for recycling. This work is carried out by workers from social economy companies. BauKarussell was awarded the City of Vienna's Environmental Prize in 2018 and the "Phoenix Waste Prevention" in 2018.

AT4 – Urban green infrastructure initiatives

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. Vienna aims to create a green network with a maximum mesh of 250m, so that inhabitants are never more than 250 m away from a green space. This is 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. Austria's Biodiversity Strategy includes targets for more grassland in urban areas and the provision of features that promote biodiversity in newly established green areas. Graz has a series of attractive green paths, Grünes Netz Graz, as green infrastructure and for facilitating walking/cycling.

AT5 – Actions on climate

Austria's Climate Change Act sets national GHG reduction targets by sector. The Austrian Climate and Energy Strategy "#mission2030", adopted by the Federal Government in May 2018, is the roadmap towards Austria's climate and energy targets. It establishes tasks and flagship projects, including:

- All climate and energy measures must ensure that overall government spending is cost-effective. If a new measure will put additional strain on the public purse, cuts must be made elsewhere, preferably to expenditure running counter to climate and energy objectives. The cost of taking no action must also be considered. Climate change is costing the Austrian economy as much as €8.8 billion per year.
- A list of subsidies that run counter to climate and energy targets, is being prepared by the Ministry of Finance, among others. This list will be used as a starting point for abolishing counterproductive incentives and funding.

- Plans for targeted adjustment of the funding and tax system to achieve climate and energy targets. This includes abolishing tax on private electricity generation.
- Adjusting the network tariff structure to push smart meters and 'prosumer' network tariffs for households and businesses, to allow their participation in electricity supply.
- Measures for developing energy storage are being focused on (pumped storage, hydrogen production, synthetic natural gas production, electrochemical storage, etc.), as Austria is aiming to move from an already high 72% renewable electricity to a target of 100% renewable electricity by 2030.
- Synthetic methane from renewable power sources.

AT6 – Climate adaptation

Austria adopted a National Adaptation Strategy (NAS) in 2012, which was revised based on latest findings in 2017. Based on a qualitative vulnerability assessment, adaptation options for 14 different areas are presented: spanning agriculture, tourism, health, biodiversity, etc.. A monitoring and reporting system is in place and 2015 saw the first progress report assessing implementation of measures for these vulnerable sectors.

Representatives from all Länder were actively involved in the development of the strategy and action plan. The Länder have either developed regional adaptation strategies, integrated adaptation and mitigation strategies, or have integrated adaptation into existing climate mitigation 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.

AT7 – Resource Efficiency Action Plan and the Circular Futures platform

As reported in the previous 2017 EIR, Austria has a Resource Efficiency Action Plan to improve overall resource efficiency by 2020 by 50% compared to 2008.

One new initiative is the Circular Futures platform, launched by several NGOs in 2018 and supported by national and EU funding. 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.

AT8 – Green jobs masterplan

Austria's 'green jobs master plan' aims to create 100,000 new jobs in the environmental sector by 2020. It is implemented by the 'green jobs' portal and a 'climate-active' qualification/skills initiative (klima:aktiv Bildungskoordination). In 2017, a first assessment showed positive developments, including new jobs, but more efforts are needed to reach the goals in the master plan.

AT9 – Sustainable transport measures

Innovative traffic management solutions are being developed and tested. An example from Graz 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. Once registered, users can rent vehicles by the hour. Also, private e-cars can be charged for free at tim locations.

Through Mobilität der Zukunft, the current research programme on sustainable transport, €15-20 million is made available for sustainable mobility each year to 2020. Urban mobility labs are being set up to test different urban mobility solutions.

AT10 – Environmental measures in agriculture

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. 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.

In addition, the Rural Development Programme allocates a very large part of the total budget to enhancing natural resources and the environment.

AT11 – Austrian Forest Strategy 2020+

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 forests 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 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.

AT12 – GPP

A European Parliament study shows that Austria has achieved the best results in implementing the national action plan (NAP) for GPP. Austria is among the most advanced Member States as regards training and information, cooperation, product group databases, tender models and monitoring activities. As reported in the previous 2017 EIR, a specific GPP platform including a helpdesk has been established to facilitate the exchange of experience between procurement officers at different levels of government (federal, regional and local).

AT13 – 'Stock-take' of replacement of harmful chemicals under REACH

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.

AT14 – Reduced soil erosion rates through soil protecting cultivation

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 per yr. Soil protecting cultivation supported by the Austrian agri-environment programme has led to an increased humus content in Austria's agricultural soils and as well to a lower soil erosion rate of 3.4 t per ha per yr. Relevant agri-environmental measures are employed to prevent soil erosion, soil compaction, the loss of organic substance as well as local and diffuse pollution.

AT15 – PET-to-PET recycling scheme

The PET-to-PET recycling scheme, where bottles that are part of this scheme contain a minimum of 30% recycled content. For 2018, the organisation involved reported that over one billion PET bottles (25,000 t PET) have been used as secondary raw materials for new PET bottles.

AT16 – Reuse and Repair Network Austria (RepaNet)

A number of social enterprise initiatives are promoting reuse in Austria. The biggest, Repanet, is a reuse and repair network, with 27 member organisations employing 1,800 people in 140 locations. It mostly handles textiles and electronic equipment.

Belgium

<i>Examples of good practice noted in EIR summary report³</i>		<i>Key themes/ categories</i>
BE1	Progress on improving air quality through various measures	Air quality
BE2	Circular economy measures	Circular economy
BE3	Green infrastructure initiatives	Green infrastructure
BE4	Green Public Procurement	GPP
Other favourable points in the report		
BE5	Eco-innovation	Eco-innovation
BE6	The Employment-Environment Alliance	Eco-innovation
BE7	SME support for energy efficiency and renewables	Industry
BE8	Waste & Resource Management	Waste management
BE9	Food waste	Waste management
BE10	Climate actions	Climate
BE11	Sustainable development	Sustainable development
BE12	Soil and remediation funds	Soil protection
BE13	Environmental investment and green bonds	Environmental investment
BE14	Youth Employment Initiative for environmental purposes	Environmental investment
BE15	Citizen science measures	Nature

BE1 – Progress on improving air quality through various measures

There has been progress on improving air quality. Measures such as low-emission zones, technical improvements to vehicles and fiscal incentives have contributed to reducing emissions. There has been substantial progress on particulate matter, with no reports of Belgium exceeding limits since 2016, and some progress on nitrogen oxide emissions.

The Brussels Capital Region is 'greening' its road tax by placing a higher tax on diesel-powered vehicles and encouraging electric vehicles since 2018.

In order to improve air quality, the Brussels government announced in 2018 its intention to ban diesel vehicles by 2030 and petrol vehicles at a later stage. To that end, the region started a large consultation of stakeholders to help assess the best way to implement this ban.

In 2018, the Brussels regional government approved emergency rules allowing commuters to use public transport free of charge during periods of high particulate matter.

In the air quality zone of Engis, where PM10 limit values had not been met until the end of 2014, a working group (bringing together authorities, main emitting plants and citizens) was

³ http://ec.europa.eu/environment/eir/pdf/report_be_en.pdf

established in 2015 to reduce the impact of the main industrial activities on the ambient air quality, especially for PM10.

Flanders has implemented a 'green deal' to reduce emissions from wood burning (with a focus on particulate matter).

The federal government grants a tax credit of 30% for the purchase of an electric vehicle.

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

BE2 – Circular economy measures

Flanders is examining sustainability transitions through its 'Vision 2050' initiative. 'Circular Flanders' is a circular economy strategy, creating a space for networking and building public-private partnerships in the circular economy. Circular purchasing (or circular procurement) is one of the three strategic themes of Circular Flanders for the period 2017- 2018, next to "circular cities" and "circular entrepreneurship". In 2017 a new subsidy programme was launched for supporting experiments in social innovation (such as new production and consumption models) towards circular economy.

Circular Flanders' launched the Green Deal for Circular Procurement (GDPC) in 2017. Purchasers are still reluctant in changing to allow reuse of, or recycled content in, products and in accepting new 'circular' contracts. The GDPC aims to take away the uncertainty and help buyers to change via pilot initiatives. In return the purchasers share their experiences in a learning network and through pilots with the participants.

In 2016, the Brussels' regional government adopted a circular economy regional plan, Be Circular, with 111 measures, setting out a strategy to transition from a linear to a circular economy by 2025. It includes training and funding opportunities for Brussels-based businesses. It has won an Assembly of European Regions award and a Eurocities award.

In 2016, the Federal ministries for economy and for public health and environment worked together to set up a roadmap supporting the transition towards a more circular economy. Since then, partnerships have been established with recyclers and technology companies. The Benelux countries cooperate on the circular economy as a bloc. There was a Benelux study on reparability criteria for energy using products, adopted in 2018. The criteria are in accordance with the ongoing CEN-CELEC initiative on standardisation of reparability.

In Wallonia, resource efficiency and circular economy is one of the major political priorities as reflected in the Regional Policy Statement of July 2018 and is part of several policies initiatives among which is the Marshall plan 4.0 (the regional development Plan 2015-2019 of the Walloon Government). The NEXT programme, focusing on the effective management of resources across all sectors, is dedicated to the transition to a circular economy.

In Flanders, Kringloop reuse centres are social enterprises which sell reusable goods including second-hand household goods, furniture, books, toys, etc.. They receive reusable items or collect them for free, and sort/repair them, collecting 78,000 tonnes of goods every year, with more than half of them finding a new home. The waste agency OVAM and 30 accredited Kringloop reuse centres have formed a professional network to improve quality and learn from one another.

Latvia has signed a 2018-2021 co-operation programme with Flanders, Belgium, which also covers the circular economy.

As noted in the previous EIR, at 53.5% in 2016, Belgium's municipal waste recycling rate is among the highest in the EU, with the Flanders region even higher. Wallonia has introduced effective incentives for municipalities to increase separate waste collection.

BE3 – Green Infrastructure

The Brussels Capital Region's nature plan aims to increase access to green spaces, reconnect natural areas and integrate nature considerations in plans and projects. Green and blue infrastructure reinforced by the Brussels ecological network is being developed to reconnect Natura 2000 sites. A network to connect inner city green areas is included in the regional sustainable development plan, while a green walking and cycling path (la promenade verte) connects parks, semi-natural sites, nature reserves and woodlands in a complete loop around the Brussels Region.

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

The Flanders Department of environment and spatial development's GARMON project, in developing a garden monitor, focuses on the potential of private gardens to contribute to green infrastructure.

Flanders is one of the most advanced regions for implementation of Mapping and Assessment of Ecosystems and their Services (MAES), having completed its mapping and assessment. According to the Flanders' nature report — a regional ecosystem assessment (REA) — Flanders will develop, map and value alternative scenarios for green infrastructure by 2019.

Flanders has championed the 'BetonStop' approach for reducing the amount of grey (concrete) infrastructure prohibiting all kinds of urbanisation of open spaces by 2040 ('Betonstop'). By 2025, there will only be 3 hectares of open space per day sacrificed to buildings. In 2040, this figure must drop to zero. Ghent is transforming its canal banks into green walkways and improving water management in its dock areas. The city has also created a scorecard of its natural capital.

The SIGMA II plan for the Scheldt estuary is noted as 'a particularly good example' of using green infrastructure for flood protection and nature restoration.

In Flanders, projects to increase innovation by companies also aim to create more biodiversity on industrial estates through a 'green in construction' knowledge centre and to promote use of a care system.

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

Belgium is strongly committed to its Natura 2000 obligations in the areas of agri-environment and climate. For instance, Wallonia has allocated €40 million including €15 million EAFRD grants to implement them.

Flanders and the Brussels region are noted as 'exemplary', as all their SACs have quantified conservation objectives for individual sites.

Subsidies for nature management measures were adopted in 2017 for Natura 2000 sites in Flanders. Technical and financial support is being offered to private land-owners for developing management plans and for measures contributing to the implementation of the established site-specific conservation objectives.

BE4 – Green Public Procurement

The action plan on green public procurement is an example of good practice, while all three regions have taken concrete steps, for example on circular procurement. A study by the European Parliament has shown Belgium to be a frontrunner in the implementation of its national action plan on GPP.

As reported in the previous EIR, the Flemish region has set itself a target of reaching 100% SPP (sustainable public procurement) by 2020. It has also set itself targets of procuring 100% green electricity for the Flemish regions' buildings and of increasing the environmental performance of vehicles, including electric/low emission cars. The government of Flanders won 'Sustainable Procurement of the Year' at the 2018 Ecoprocura conference.

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

BE5 – Eco-innovation

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

An innovation hub (Blue App) and incubator (BlueChem) will focus on reusing waste and side streams and on developing renewable chemicals and sustainable materials.

Flux50 is the membership organization that helps Flanders gain international recognition as a Smart Energy Region. Flux50 facilitates cross-sector collaboration between energy, IT and building companies to enhance the competitiveness of the Flemish smart energy industry in the transition towards low carbon systems.

Belgium is also doing a lot of work in the area of smart cities, which can provide environmental benefits, e.g. the Flemish imec smart cities programme.

Wallonia's 'competitiveness cluster policy' includes: the Eco-Building cluster that promotes responsible buildings and construction techniques; CAP 2020 which focuses on the building industry and energy consumption reduction; TWEED which focuses on renewable energies, climate impact and energy efficiency; and GreenWin, which supports green chemistry, sustainable materials, and using landfills as a new source for raw materials. The related

'EASYGREEN' measure, launched in 2017, aims to support SMEs to reduce their energy consumption or develop innovative projects that have a direct impact on CO₂ emissions.

BE6 – The Employment-Environment Alliance

The Employment-Environment Alliance is an initiative of the Brussels-Capital Region Authorities. This is one of five priority areas identified in the Sustainable Urban Growth Pact. It exemplifies the attempts of regional authorities to support the supply side of passive building, in response to exploding demand. The Alliance mobilises and coordinates the activities of public, private, and non-governmental actors along a shared goal: the development of economic industries related to the environment; to bring together the stakeholders and foster a real collective and individual commitment to working together to achieve shared objectives, namely the development of economic industries relating to the environment and create quality jobs. Sustainable construction is one of the three major work axes of the Alliance, together with water and waste.

BE7 – SME support for energy efficiency and renewables

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

BE8 – Waste & Resource Management

The Flemish government has agreed a package of measures on waste including the mandatory use of reusable cups for festivals and events. Due enter force in 2019.

Flanders has an average of 15 kg of plastics per inhabitant per year still found in mixed household waste. Flanders is working on an action plan for plastics for 2019-2024, which will set out concrete measures to address the challenge of shifting towards a more circular economy in this area.

In Flanders, the 2016-2022 waste management plan for household waste and similar commercial and industrial waste sets new targets to further reduce the amount of residual waste by 10-15% (equivalent to around 140 kg residual household waste per capita).

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

Water investments are financed through tariffs which aim to recover the costs in full.

BE9 – Food waste

Both Flanders and Wallonia intend to reduce food losses by 30% by 2025 compared to 2015. Flanders has taken measures to quantify food losses and reduce it. The Flanders food supply chain roadmap on food losses consists of 9 action programmes with 57 actions, covering food losses from farm to fork. The action programmes are:

1. Supporting companies in reducing food losses
2. Collaboration in the food supply chain
3. Awareness-raising, inspiration and commitment at company level
4. Training employees to promote food loss reduction
5. Awareness-raising, inspiration and commitment at consumer level
6. Building new business models for collaboration between regular and social economy
7. Promoting and facilitating donation of food surpluses
8. Investing in research
9. Monitoring for knowledge

Food loss mapping showed an estimated 3,485,000 tonnes of food waste in 2015 from harvest to consumption in the Flemish agri-food chain. This is the total of the (edible) food losses and the (inedible, unavoidable) residues. 92% of all food waste is valorised. The largest proportion as animal feed (43%), followed by anaerobic digestion (21%) and soil (17%). The cascade index of the Flemish agri-food chain in total is 8.2 (score between 0 and 10). 74% of food waste is inedible residues. This equates to 2,578,000 tonnes of residues and 907,000 tonnes of food losses across the entire chain.

The Flanders department of Agriculture published a study on the impact of cosmetic quality standards on food losses in the Flemish fruit and vegetable sector among 300 horticulturists, showing a sales loss of about 10% and with 2/3 of all farmers affected. The research found more than half of all misshapen fruit and vegetables, nearly 120,000 tonnes, disappears from the human food chain.

Wallonia has the 'Plan REGAL' 2015-2025 for food waste. The cities of Liège, Charleroi and Verviers are also taking part in a number of sustainable food initiatives like the Charleroi Métropole food belt that brings together farmers, associations, researchers, businesses, traders, processors, artisans, citizens, consumers, and local elected officials to promote local, organic, affordable food.

The Brussels region adopted the 'Good food, towards a more sustainable food system in Brussels Capital Region' strategy in 2015, with a target of a 30% reduction in food waste by 2020. The mid-term evaluation shows that 1 out of 3 inhabitants say they have changed their eating habits in the last 2 years.

BE10 – Climate actions

In 2013, a Federal Royal Decree put forward a long-term policy vision on sustainable development, which includes the commitment to reduce GHG emissions by at least 80-95% between 1990 and 2050, striving for carbon neutrality after that. The three regions have also included the 80-95% goal in their plans and/or legislation. A 2017 pact maintains the

commitment to phase out nuclear power, and foresees the introduction of new interconnectors, an increase in renewable energy generation capacity (especially off-shore wind) and introduction of new energy norms, entirely phasing out the use of fossil fuels for heating of buildings, increasing the uptake of renewable energy sources for thermal applications in industry to 70 to 80%, and allocating 5-10% of Research and Development budgets to projects related to climate and energy.

Leuven aims to become a climate neutral city by 2030, with Ghent and Antwerp also planning to be climate neutral by 2050.

The Brussels region is part of the 'Freight TAILS' initiative dedicated to sustainable urban logistics.

BE11 – Sustainable development

Within the Inter-federal Institute for Statistics, Belgium has set-up a specific SDG working group with the mandate to further the use of an optimal SDG-indicator system in the Belgian context. At the outset of this initiative, the review of the official list of SDG indicators found that around half of them are already available for Belgium

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

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

For ERDF programmes, the project selection criteria in Flanders include sustainable development.

Ghent's 'REFILL' network is a concept for the temporary use of vacant buildings and land.

BE12 – Soil and remediation funds

In Flanders, the 2006 Decree on Soil Remediation and Soil Protection focuses on point source contamination, but also provides the legal basis for the 'Decision of the Flemish Government on Erosion Control'.

The three regions and the federal state reached a political agreement in 2018 on setting up and financing a fund for the remediation of leaking fuel tanks. The fund will be financed with the remaining surplus of a successful fund for contaminated petrol stations (BOFAS), and then with a new levy on fuel oil. In this way, the remediation costs will be covered.

BE13 – Environmental investment and green bonds

The National Pact for Strategic Investment will be used to promote structural reform and address the deficit in public investment (transport, energy, etc.) with €150 billion earmarked by 2030. Environment is not explicitly included, but an inter-federal taskforce has been established to strengthen the relation between the National Pact for Strategic Investment and circular economy programmes.

In 18, Belgium issued its first sovereign green bond worth €4.5 billion, to help it finance environmental and clean energy initiatives. The Belgian Debt Agency will raise the size of the bond in the coming years to reach 12 billion. The bonds mature in 15 years (April 2033).

BE14 – Youth Employment Initiative

Belgium is one of only two EU countries that uses the Youth Employment Initiative (YEI) for environmental purposes.

BE15 – Citizen science measures

Flanders uses 20,000 citizen science volunteers to collect information on air pollution, the Brussels Region has got almost 300 citizens to collect information on black carbon (air pollution – ExpAIR project). Wallonia has got 1000 citizens to commit to gardening pesticide- free and planting wild flowers to help bees and other pollinators.

Bulgaria

<i>Examples of good practice noted in EIR summary report⁴</i>		<i>Key themes/ categories</i>
BG1	Streamlining environmental assessments	Environmental governance
Other favourable points in the report		
BG2	Electric vehicles exempted from vehicles tax; pilot scheme encouraging electric vehicles in public administration	Environmental taxation
BG3	Water abstraction charges	Environmental taxation
BG4	GPP	GPP
BG5	National network of prosecutors specialised in environmental cases	Compliance assurance
BG6	Plans for energy efficient homes that can cater for the needs of medium- and low-income families	Climate

BG1 – Streamlining environmental assessments

Bulgaria has taken steps to provide for streamlined environmental assessments by incorporating the appropriate assessment under the Habitats Directive, the integrated pollution prevention and control (IPPC) permitting process and the ‘Seveso’ process for chemical safety in its EIA procedures.

BG2 – Electric vehicles exempted from vehicles tax

Electric vehicles are exempted from vehicle tax in Bulgaria. In 2016 the National Trust Ecofund started a pilot scheme encouraging the use of electric and plug-in hybrid vehicles in the public administration. The scheme is in the framework of the ongoing Investment Climate Programme.

BG3 – Water abstraction charges

Bulgaria has had water abstraction charges since 2001. The price charged is based on amounts and sources. The revenue from the charges is collected by the Enterprise for Management of Environmental Protection Activities (EMEPA) and is then redistributed to environmental projects and initiatives.

BG4 – GPP

Bulgaria is aiming to step up the use of green public procurement criteria in funding from national and EU sources. Therefore, under the Climate Investment Programme of the national trust Ecofund, when selecting a supplier it requires EU GPP criteria to be met for costs to qualify as eligible. It has also approved Guidelines for Integration of the Environmental and Climate Change Policies in European Structural and Investment Funds (ESIF). The Guidelines set general and specific criteria for evaluating project proposals relevant to specific environmental policies. A specific criterion requiring the inclusion of GPP is included.

Monitoring is carried out on the basis of statistical data from the national procurement register (PPR). The electronic register for public procurement kept by the Public Procurement Agency allows enquiries to be made concerning GPP for specific product groups.

⁴ http://ec.europa.eu/environment/eir/pdf/report_bg_en.pdf

BG5 – National network of prosecutors specialised in environmental cases

The establishment of a national network of prosecutors specialised in environmental cases is a useful step towards building stronger enforcement capacity.

BG6 – Plans for energy efficient homes that can cater for the needs of medium- and low-income families

Yugozapaden Region is part of the Mild Home initiative, where partners from seven countries have joined forces to develop workable plans for energy efficient homes and an eco-village concept that can cater for the needs of medium- and low-income families. Sofia (Oborishte) is one of the three STACCATO project European capital districts to demonstrate sustainable energy concepts in existing, representative, residential areas.

Croatia

<i>Examples of good practice noted in EIR summary report⁵</i>		<i>Key themes/ categories</i>
HR1	The island of Krk – water and waste water project	Environmental investment
HR2	Nature protection strategy and action plan	Natural capital
Other favourable points in the report		
HR3	The 'Forest Public Benefit Function Fee' requiring companies to financially contribute to forest management	Environmental funding

HR1 – The island of Krk – water and waste-water project

The EU-supported project 'Collection of waste water and waste water treatment on the island of Krk' will connect the local population to a modernised drinking water supply and waste water collection and treatment system. This will ensure continuous access to safe and clean drinking water and minimise the risk of uncontrolled discharge of untreated waste water.

HR2 – Nature protection strategy and action plan

The 'Nature protection strategy and action plan for 2017-2025' lays down long-term objectives and guidelines for conserving biological, geological and landscape diversity. It also sets out methods for implementing this as part of Croatia's overall economic, social and cultural development.

HR3 – The 'Forest Public Benefit Function Fee' requiring companies to financially contribute to forest management

Croatia has a Forest Public Benefit Function Fee, which requires companies to contribute financially to forest management. The 'forest public benefit function fee' is a charge paid by companies and other business associations once a year, in place since 1983. It requires companies to contribute 0.0265% of their total annual income to maintaining, restoring and managing forests in Croatia. Aside from managing the restoration of forests in karst regions, funds are also spent on de-mining activities (10%), firefighting (5%) and scientific work (5%). It is a mechanism comparable to payments for ecosystem services.

⁵ http://ec.europa.eu/environment/eir/pdf/report_hr_en.pdf

Cyprus

<i>Examples of good practice noted in EIR summary report⁶</i>		<i>Key themes/ categories</i>
CY1	Effective use of LIFE funds for implementing Natura 2000 network and conservation measures	Natural capital
CY2	Above average environment-related tax revenue	Green taxation
CY3	A 'first rate' air quality information portal	Air quality
CY4	A high rate of imported timber checks	International agreements
Other favourable points in the report		
CY5	A ban on the grazing of all animals in pastures of 'high nature value' in Natura 2000 areas	Natural capital
CY6	An extended Producer Responsibility initiative on non-packaging paper	EPR
CY7	Good implementation of GPP	GPP

CY1 – Effective use of LIFE funds for Natura 2000 network and conservation measures

Cyprus has used LIFE funds effectively to establish its Natura 2000 network which now covers 28.8% of the land area (EU average 18.1%) and to implement conservation measures at specific sites.

CY2 – Above average environment-related tax revenue

Cyprus' revenue from environment-related taxes remains above the EU average. Environmental taxes accounted for 2.93% of GDP in 2017 (EU-28 average 2.4%) and energy taxes for 2.25% of GDP (EU average 1.84%). Meanwhile, fossil fuel post-tax subsidies were almost zero in 2015. Consumption and environmental tax revenues are high, making Cyprus' tax structure relatively growth and environment-friendly. Considerable progress has been made on reducing the 'diesel differential' (the price of diesel vs. petrol). In 2016 there was still a 6% gap between petrol and diesel tax rates, while in 2005 it was 23%.

CY3 – A 'first rate' air quality information portal

On environmental information, the first-rate air quality portal sets an example for other environmental areas.

CY4 – High rate of imported timber checks

On the Timber Regulation, between March 2015 and February 2017, Cyprus performed more checks on operators concerning both domestic and imported timber than was originally planned and carried out the most checks by any Member State during that period.

CY5 – A ban on the grazing of all animals in pastures of 'high nature value' in Natura 2000 areas

Cyprus has recently adopted a new agri-environmental commitment to ban the grazing of all animals in pastures of 'high nature value' and located in Natura 2000 areas.

⁶ http://ec.europa.eu/environment/eir/pdf/report_cy_en.pdf

CY6 – Extended Producer Responsibility initiative on non-packaging paper

Cyprus has an Extended Producer Responsibility initiative on non-packaging paper that entered into force in 2017.

CY7 – Good implementation of GPP

According to the latest survey, Cypriot authorities used green criteria in more than 50% of procurement procedures in selected categories. GPP was used in 90% of product and services purchases, such as office IT and imaging equipment. It was used in 100% of road sign, public fountain and toilet cistern purchases and in 95% of indoor lighting purchases.

Czech Republic

<i>Examples of good practice noted in EIR summary report⁷</i>		<i>Key themes/ categories</i>
CZ1	Solid fuel boiler replacement scheme	Air quality
CZ2	National network of environmental education centres	
Other favourable points in the report		
CZ3	Programmes to revitalise watercourses and water retention in the landscape	Water

CZ1 – Solid fuel boiler replacement scheme

A national scheme, supported by EU funding, has replaced around 80,000 old and poor-quality household boilers, out of 300,000 households using solid fuel.

CZ2 – National network of environmental education centres

A national network of environmental education centres, which is a unique network of more than 100 non-governmental centres, has been set up over the last 20 years in all regions of the country.

CZ3 – Programmes to revitalise watercourses and water retention in the landscape

There are a number of programmes that support the revitalisation of watercourses, water retention in the landscape and the recovery of landscape structures that strengthen the water regime. A document of revitalisation and re-naturalisation of waterways is expected for 2020.

⁷ http://ec.europa.eu/environment/eir/pdf/report_cz_en.pdf

Denmark

<i>Examples of good practice noted in EIR summary report⁸</i>		<i>Key themes/ categories</i>
DK1	Cycling accounting for 20% of all trips and public transport servicing 13% of commuters	Urban mobility
DK2	Significantly higher percentage of SMEs with green products/services	SMEs and resource efficiency
DK3	Recognition for green infrastructure efforts	Ecosystems & their services
DK4	Clean air package 2018	Air quality
Other favourable points in the report		
DK5	High environmental tax revenue, including an effective pesticide tax	Environmental taxes
DK6	Climate actions	Climate
DK7	Circular economy activities	Circular economy
DK8	Nitrogen and pesticide use	Natural capital
DK9	GPP frontrunner	GPP
DK10	Sustainability measures under the Rural Development Programme (RDP)	Rural development
DK11	Action plan to implement the UN Sustainable Development Goals	UN SDGs
DK12	'Biodiversity Now' app for volunteers	Biodiversity

DK1 – Cycling accounting for 20% of all trips and public transport servicing 13% of commuters

Private vehicles are the most frequently used mode of transport in Denmark, as is the case in most Member States. However, cycling is also extremely popular, accounting for more than 20% of all trips. Public transport is also strong, providing transport for 13% of Danish commuters.

DK2 – Significantly higher percentage of SMEs with green products/services

The percentage of SMEs providing green products or services, as well as the share of Danish companies that generate most of their income from green products and services is significantly higher than the EU average.

Technology and services for green energy has been a strong driver of eco-innovation in Danish exports. Denmark has a strong support framework of export financing and assistance to help companies internationalise their innovations and other commercial activities. In 2016 Danish companies exported around €10 billion worth of energy technology and around €1 billion worth of energy services.

DK3 – Recognition for green infrastructure efforts

Denmark has been recognised for its efforts to create liveable urban areas in which green infrastructure plays an important role. The Copenhagen Municipality has adopted a policy for the period 2016 to 2025 to make trees a greater priority in the city.

⁸ http://ec.europa.eu/environment/eir/pdf/report_dk_en.pdf

Measures have been noted in the previous 2017 best practice report such as the Nature Programme on natural forests, which continues, and the 'nature map' which provides information about the distribution of threatened and vulnerable species and an overview of high-value natural areas. Work continues on promoting green infrastructure in agriculture, with 4,500 ha of carbon-rich organic soils to be set aside by 2020 to restore/improve natural habitats for biodiversity and climate-change mitigation.

DK4 – Clean air package 2018

The government launched a clean air package in October 2018 to reduce air pollution in larger cities, phase out diesel and gasoline vehicles, and to meet the agreed emission reduction targets. It has committed to no new diesel or gasoline cars sold by 2030; no hybrid cars by 2035; cleaner transportation in urban and rural areas; more environment friendly shipping at sea and in harbours; an effective and modern agricultural sector; and greener residential heating.

Emissions of several air pollutants (NO_x and SO_x) have declined in Denmark since the 2017 EIR; emissions of fine particulate matter also fell between 2000 and 2016. Denmark has committed under the 2018 package to achieve the reduction commitments made for 2020-2029 under the national emissions ceilings Directive.

DK5 – High environmental tax revenue, including an effective pesticide tax

Denmark's revenues from environmentally relevant taxes remain among the highest in the EU. Environmental taxes accounted for 3.72% of GDP in 2017 (EU-28 average: 2.4%). In the same year, energy taxes accounted for 2% of GDP against an EU average of 1.84%. Environmental tax revenues in 2017 were 7.98% of total revenues from taxes and social-security contributions (higher than the EU-28 average of 5.97%).

One of the most effective environmental taxes in the country is noted in the EIR report as being the pesticide tax, which has helped reduce the load of pesticides on the environment and human health by 40% between 2011 and 2016 (albeit they are reportedly rising again – see below). Another environmentally beneficial tax is the animal feed mineral-phosphorus tax, which has helped reduce the consumption of mineral phosphate in animal feeds by 15% since 2005. However, the EIR report notes that the tax on phosphorus might have been environmentally and economically more effective if it applied to all sources, including mineral fertilisers.

DK6 – Climate Actions

In June 2018 the Danish government and Parliament signed an energy agreement for the period after 2020. The plan will phase out coal-based power and give Denmark a share of renewable energy in electricity above 100% of consumption, while ensuring that at least 90% of district heating consumption is based on energy sources other than coal, oil or gas by 2030. Funding has been agreed that sets a course towards a share of renewable energy of ~55% by 2030. In accordance with the Paris Agreement, Denmark will work towards net zero emissions in the EU and Denmark by 2050 at the latest.

In October 2018, the Government presented a climate and air proposal "Together for a greener future" to ensure that Denmark continues to enjoy access to clean air and a stable climate. The proposal includes 38 concrete initiatives to spur the green transition in Denmark towards 2030. These include a stop on the sale of new petrol and diesel cars in 2030 and plug-in-hybrid cars in 2035 – and other initiatives for cleaner transport in cities and the countryside, a more efficient and modern agriculture, more environmentally-friendly shipping, and a green transition in housing and industry.

DK7 – Circular economy activities

The Danish Advisory Board for Circular Economy was set up in 2017. The Board has proposed 27 recommendations to promote the circular economy in Denmark. In September 2018, the Danish government followed up on the recommendations with its Strategy for circular economy, which was followed by a supporting political agreement in October 2018. The strategy and the political agreement include 16 initiatives funded by approx. €16 million (DKK 116 million) in 2019-22.

Eco-innovation programmes mentioned in the previous 2017 EIR report continue, such as the independent state loan fund, the Danish Green Investment Fund.

DK8 – Nitrogen and pesticide use

The nitrogen load has decreased in recent years. Although the use of pesticides has been increasing since 2014, pesticides with a higher impact on health and the environment have been substituted for pesticides with a lower impact.

Marine habitats in Denmark are still being affected by nutrients supplied from surface water and from atmospheric deposition. However, in recent years there have been good efforts to limit emissions.

DK9 – GPP frontrunner

As reported in the previous EIR, GPP continues to be well imbedded in Danish public procurement. Total cost of ownership tools are now available for 13 different product groups. A study on GPP by the European Parliament shows that Denmark is amongst the frontrunners in the EU on the implementation of its GPP national action plan.

DK10 – Sustainability measures under the RDP

There are various sustainability measures under the Danish RDP (Rural Development Programme):

- At farm level, support is available for the installation of new, more resource-efficient equipment for animal production, such as more precise feeding of animals; lower electricity and water consumption; reduced emissions; and better animal welfare. Support is also provided for new farm machinery that allows for more precise (and therefore reduced) application of fertiliser and pesticides. Machinery with lower fuel consumption (and therefore lower emissions) is also eligible for support. In total, there are plans to support 2,400 projects during the RDP programming period.
- Creation of 1000 wetlands (both on individual farms and in municipal/landowner groups) and afforestation are also covered under the RDP.
- Support for organic farming with 250,000 ha being organically farmed in 2017, an increase of 100,000 ha in 10 years (note: Ireland has ~72,000 ha organically farmed as of the end of 2018). The support is provided for conversion to organic farming and for maintaining organic farming practices.
- More than 1,600 people have received training in management of nature and nature friendly farming methods in the period 2015-2018.

DK11 – Action plan to implement the UN Sustainable Development Goals

In 2017 the government published an action plan to implement the SDGs. The action plan contains 37 national targets that are largely measurable and quantifiable. As part of the action plan to implement the SDGs, the government will in future assess the consequences of new legislation and major initiatives for the SDGs in case the impact is significant. Denmark already

assesses new legislative proposals in terms of their economic, environmental and gender equality consequences.

Following the publication of the action plan in 2017, the government will publish annual progress reports on the 37 targets, which will be sent to the Danish parliament. Every four years, the progress report will be replaced by a more comprehensive status report, which will also contain initiatives for achieving the SDGs and possible changes to the action plan.

The Ministry of Finance is responsible for the coordination of the national implementation of the SDGs and the government's action plan. However, government ministries are responsible for integrating the SDGs in policy.

In 2017, a Nordic Council working group prepared a report on the most relevant SDGs and their state of implementation in the Nordic countries. The Nordic Council is encouraging the integration of the SDGs into its own work, and across the countries of the region.

DK12 – 'Biodiversity Now' app for volunteers

The 'Biodiversity Now' project uses citizen volunteers to track biodiversity in Denmark via a mobile app.

Estonia

<i>Examples of good practice noted in EIR summary report⁹</i>		<i>Key themes/ categories</i>
EE1	Environmentally relevant taxes remains among the highest in the EU	Environmental taxation
EE2	The National Environmental Investment Fund	Environmental investment/enabling financing
EE3	One of the most complete prioritised action frameworks, which helped secure EU funding	Natural capital
EE4	An annual 'partnering event' to involve stakeholders and the public in environmental issues	Public participation
Other favourable points in the report		
EE5	Free public transport in Tallinn city	Traffic congestion and urban mobility
EE6	Industry support for environmental measures and eco-innovation	SMEs and resource efficiency, eco-innovation
EE7	Climate Policy 2050	Climate
EE8	Tallinn's 'Fix the facades' project to make apartment buildings more energy efficient	Climate
EE9	Real-time noise displayed on boards in Tallinn city	Noise
EE10	Biodiversity and planning in Tallinn	Nature and cities
EE11	Actions under the European Maritime and Fisheries Fund	Environmental funding
EE12	Hydrogen refueling stations	Climate

EE1 - Environmentally relevant taxes remains among the highest in the EU

Estonia's revenue from environmentally relevant taxes remains among the highest in the EU.

Estonia has a mineral resource extraction charge imposed since 1991 on state-owned peat, phosphate and rock, based on the quantity of extracted resources.

Revenues from Estonia's hunting and fishing fee system are used for research, conservation actions for a wide range of species and habitats, and awareness raising. Revenues are transferred to the Environmental Investment Centre, which then distributes grants for specific projects. In 2015, revenues from fishing fees were €1.57 million from which 77% was earmarked for conservation purposes. It is noted that while it is challenging to quantify the environmental effectiveness of the fees, the earmarking system seems to provide a positive impact on biodiversity, creates a stable system, and provides effective engagement of stakeholders through transparency and communication as to how the revenues are used.

EE2 – The National Environmental Investment Fund

The National Environmental Investment Fund finances environmental activities and investment projects through EU and national funds. Funding is available for: energy and reduction of air emissions; the circular economy; waste; fisheries; environmental education; environmental management systems; environmental monitoring and surveillance; nature conservation; mineral resources; marine environment; forestry; and water.

⁹ http://ec.europa.eu/environment/eir/pdf/report_ee_en.pdf

EE3 - One of the most complete prioritised action frameworks, which helped secure EU funding

Estonia has one of the most complete prioritised action frameworks in the EU, which was successfully used to secure funding for Natura 2000 sites from various EU funds. This was also noted in the 2017 EIR.

EE4 – An annual ‘partnering event’ to involve stakeholders and the public in environmental issues

The Ministry of Environment organises an annual ‘partnering event’, which is considered to be a good example of how to involve stakeholders and the public in environmental issues. At the event, the Ministry of Environment introduces its annual workplan and priorities and leads a discussion of current hot topics. Participation in this event has been increasing each year, with 120 people at the most recent event.

EE5 – Free public transport in Tallinn

Tallinn City Council decided to introduce free public transport in order to increase social inclusion, boost the local economy and contribute to protecting the environment. This increased the number of passengers by 6% in 2013 compared with 2012. In October 2013, Tallinn made people’s train fares for trips within city borders free. The number of train journeys within the city increased 2.3 times in 2014 compared to 2012. The system is funded through the municipality getting a €1,000 annual share of the income tax of every registered resident. It is reported that this allows the city to cover both lost ticket revenue and additional funds to improve the quality of the service. Equipment for a public transport priority system has been installed at 31 intersections, which makes it possible to lengthen the duration of the green lights or shorten that of the red lights.

EE6 – Industry support for environmental measures and eco-innovation

The Green Industry Innovation Estonia is part of a Nordic programme to help develop green business ideas and new environmental technologies.

There have been support grants provided in Estonia for agricultural, processing and non-farming rural businesses to use renewable energy, organic raw materials and eco-friendly processes.

In 2016, the Estonian government put in place several measures that support R&D, including i) a specific development programme for companies with distinctively high growth potential; ii) more tailored and effective support for public procurement of innovation; iii) a more active engagement of financial instruments; and iv) an industrial policy green book.

EE7 – Climate Policy 2050

The Estonian low-carbon strategy, ‘General Principles of Estonian Climate Policy until 2050 (Climate Policy 2050)’ was adopted by the Parliament in 2017. The strategy presents a long-term vision of Estonia’s climate policy and actions to be implemented by 2050. According to the guidelines, Estonia will aim to create a competitive low-carbon economy and reduce greenhouse gas emissions in the energy, transportation, industry, agriculture, forestry and waste management sectors by at least 80% by 2050, compared to 1990 levels. Estonia also has interim goals for 2030 (reduction by 70% compared to 1990) and for 2040 (reduction by 72% compared to 1990). The strategy’s targets and guidelines will be implemented with the help of sector-specific development plans.

EE8 – Tallinn’s ‘Fix the facades’ project to make apartment buildings more energy efficient

Since 2010, Tallinn has been implementing the fix the facades project, with a view to helping apartment associations make their buildings more energy efficient through insulation of facades and roofs, replacement of doors and windows, and replacement or reconstruction of heating and ventilation systems. The scheme supports apartment associations in applying for building renovation loans by covering the necessary self-financing.

EE9 – Real-time noise displayed on boards in Tallinn city

Tallinn displays real-time noise levels on noise boards in the city. In addition, an environmental information screen has been set up in Tallinn’s city centre to inform people about the status of ambient air, the most recent noise map and the changing PM10 levels.

EE10 – Biodiversity and planning in Tallinn

In terms of biodiversity, Tallinn is reported to have a particularly strong planning process, starting with good mapping based on survey work for species and habitats and backed by bio-data inventories and research. Furthermore, the city has a good organisational structure, overseen by overall strategic plans (the Tallinn Environmental Strategy to 2030 and the Tallinn Environmental Protection Plan 2013-2018) and local action plans, with shared objectives throughout.

EE11 – Actions under the European Maritime and Fisheries Fund

Under Estonia’s European Maritime and Fisheries Fund, the energy efficiency of the fishing fleet will be improved with the replacement and modernisation of 140 engines. Other actions will also help reduce greenhouse gas emissions and conserve or rehabilitate 9,000 hectares of terrain.

EE – Hydrogen refueling stations

€15 million in EU-funding under the Connecting Europe Facility (CEF) is going to the deployment of a network of hydrogen refueling stations, and attempting to mobilise the demand for hydrogen vehicles.

Finland

<i>Examples of good practice noted in EIR summary report¹⁰</i>		<i>Key themes/ categories</i>
FI1	Outstanding performance in the circular economy; including circularity in university curricula	Circular economy
FI2	The Habitat Bank of Finland	Biodiversity
FI3	Ambitious targets on green public procurement	GPP
Other favourable points in the report		
FI4	Deposit refund system and packaging tax	Waste management
FI5	Plan to start Europe's first 'environmental impact bond' project in 2019	Circular economy
FI6	ERDF funding targeted at innovation and research on innovative energy	Funding
FI7	Plastics Roadmap for Finland	Waste management
FI8	Finnish Sustainable Communities Network, FISU	Sustainable cities
FI9	Inclusion of SDG implementation in 2019 budget	Sustainable development
FI10	Sustainable urban mobility and the personal carbon trade	Sustainable cities
FI11	Project on circular economy and reuse of construction materials	Circular economy

FI1 – Including circularity in university curricula

Education plays an important role in developing experts in the circular economy; Finland is including circularity in university curricula. Sitra is currently cooperating with 11 universities, 14 universities of applied sciences, and 12 vocational colleges to bring circularity into higher education. Finland's target is to train 60,000 future circular economy experts in 2018.

In general, Finland is noted in the EIR for its outstanding performance in the circular economy. It is estimated that by 2030 this will benefit Finland's overall national economy with a volume of 2 to 3 billion euros in added-value potential.

FI2 – The Habitat Bank of Finland

Habitat banking in Finland may help to protect biodiversity and compensate for losses. The 'Habitat Bank of Finland' project, which analyses, develops and pilots the principles of ecological compensation, is aiming to develop a new market-based mechanism for biodiversity conservation to complement the existing policy instrument mix. The Bank will operate as an intermediary for those requiring and supplying ecological compensations.

FI3 – Ambitious targets on green public procurement

Finland has introduced a national strategy on green public procurement and set ambitious specific targets for central, regional and local government. Targets have also been set which increase progressively over time and aim to achieve 100% GPP at the central level. Finland is aiming for near-zero energy building after 2017 in the new construction of public buildings. The percentage of new motive power solutions used (e.g. electric, ethanol, natural gas or hybrid) must account for at least 30% of all vehicles in use. In addition, 10% of the food served in public institutions must be organic by 2015 and 20% by 2020.

¹⁰ http://ec.europa.eu/environment/eir/pdf/report_fi_en.pdf

To support the strategic use of public procurement, Finland set up a national competence centre for sustainable and innovative public procurement in 2018. Core services include implementing innovative procurement strategies, piloting Green Deals, sustaining a national network for change and creating pathways to international procurements and funding.

FI4 – Deposit refund system and packaging tax

The EIR notes it is worth mentioning that Finland's deposit refund system and packaging tax are considered very successful thanks to close cooperation between the parties concerned – the beverage industry and retailers. Systems are in place collecting refillable glass and PET bottles and one-way cans, PET bottles and glass bottles. Deposit amounts are laid out in Government decrees and range from EUR 0.10 to EUR 0.40 per container. The largest deposit refund system operator PALPA, achieved return rates from 89% to 95% for one-way packaging in 2015. Government targets for recycling and reuse are now 90% for all returnable packaging materials, metal beverage cans, and other one-way packaging. PALPA is owned 50% by retailers and 50% by the beverage industry.

FI5 – Plan to start Europe's first 'environmental impact bond' project in 2019

In the 2017 circular economy action plan, the Finnish Innovation Fund, Sitra, and the relevant ministries pledged to examine to what extent 'impact investing' and 'social impact bonds' were suitable for attaining the goals set for the circular economy. The aim is to start Europe's first 'environmental impact bond' project in 2019.

FI6 – ERDF funding targeted at innovation and research on innovative energy

ERDF funding is to be particularly targeted at innovation and research on innovative energy technology, including offshore energy production and energy efficiency, smart buildings, wood construction technology, the development of models and processes and pilot projects. ERDF funding will focus on new, low-carbon products and services, which will also become available on the market through the low-carbon strategies of towns and cities. SMEs will improve their energy efficiency through new energy-efficient innovations and investments that support sustainable growth. In particular, this will open up opportunities for new types of energy services, promote business activities in rural areas, and help find solutions for decentralised energy production.

FI7 – Plastics Roadmap for Finland

The Plastics Roadmap for Finland, published in September 2018 is the first step towards a new, sustainable plastic economy. Of the more than 100 proposals made, the roadmap now presents a set of key actions to find solutions to challenges caused by plastics. Proposals for measures include to:

- Avoid unnecessary consumption
- Study the possibility to introduce a tax on plastics
- Increase significantly the recovery of plastic waste
- Improve the identification of plastics in buildings and sorting of plastic waste at construction sites
- Promote the recycling and replacement of plastics in agriculture and horticulture
- Introduce diverse recycling solutions for recovered plastic
- Invest in a big way in alternative solutions and set up a New Plastics knowledge network
- Export expertise and solutions

FI8 – Finnish Sustainable Communities Network

As mentioned in the previous EIR, FISU (Finnish Sustainable Communities) is a network of Finnish municipalities committed to working towards becoming carbon neutral and waste-free and curbing overconsumption by 2050. Today, the network consists of 11 municipalities.

FI9 – Inclusion of SDG implementation in 2019 budget

The inclusion of SDG implementation in the budget is planned for 2019. The government aims to identify short and medium-term objectives that are tangible for inclusion in the budget planning of Finland's various administrative branches.

FI10 – Sustainable urban mobility and the personal carbon trade

A UIA project (CitiCAP, with a budget of €3.8 million) is running in Lahti and deals with sustainable urban mobility. Its aim is to find the most inspiring ways of getting more people to walk, cycle and use public transportation. Through CitiCAP, Lahti will develop a completely new public incentive, the personal carbon trade, that it hopes will revolutionise people's participation in climate change mitigation.

FI11 – Project on circular economy and reuse of construction materials

A UIA project (EUR 3.4 million budget) is being undertaken in Lappeenranta and deals with what is called the urban infra revolution. It concerns circular economy materials and the development of novel methods to produce recyclable and functional urban construction products. The hope is that its circular economy and low-carbon solution will revolutionise urban construction engineering. The side streams from industry are utilised in urban construction by combining them to produce a high-value material to replace concrete. CO₂ emissions are reduced by avoiding the use of cement and preferring local sources for materials.

France

<i>Examples of good practice noted in EIR summary report¹¹</i>		<i>Key themes/ categories</i>
FR1	Ambitious circular economy roadmap	Circular Economy
FR2	Biodiversity plan putting nature protection on the same footing as combating climate change	Biodiversity
FR3	The single environmental permit	Effectiveness of environmental governance
Other favourable points in the report		
FR4	Actions on climate	Climate
FR5	Display sticker for vehicle air quality certificate - Crit'air	Air quality
FR6	Large expansion of marine nature network	Biodiversity
FR7	Agricultural actions on biodiversity	Biodiversity
FR8	Actions on municipal waste recycling	Waste management
FR9	Industry and environment initiatives	Industry
FR10	Groundwater abstraction charges	Green taxation
FR11	Bonus-malus system for vehicle taxation based on emissions	Green taxation
FR12	Agreements to develop greener production patterns with certain industrial sectors	Industry
FR13	Strong GPP actions	GPP
FR14	SME resource efficiency programme	Resource efficiency
FR15	Measures on sustainable development	Sustainable development

FR1 – Ambitious circular economy roadmap

The roadmap for the circular economy, adopted in April 2018, sets out some of the steps needed to progress towards an economy based on sustainable design, reuse, repair and recycling. It is designed to cut resource use and consumption as a proportion of GDP by 30% by 2030 (compared to 2010), halve the amount of non-hazardous waste landfilled by 2025 (compared to 2010), introduce an ambitious target of 100% plastics recycling by 2025, and create 300,000 new jobs. Extended producer responsibility (EPR) schemes will be introduced and producers will be required to inform consumers about products' lifespan, repairability in terms of a specific new index. In 2017, France adopted a series of 10 indicators that cover the lifecycle of the products.

The circular (secondary) use of material in France was 19.5% in 2016, the highest Europe's figure (the EU-28 average was 11.7%).

Policy measures supporting eco-industries, eco-innovation and the circular economy complement existing support schemes including some designed to promote innovation in general rather than solely eco-innovation.

In March 2018, France's Ministry for Solidarity and Ecology Transition set up the Green Transition Accelerator (AcTE), a think tank that brings together companies, training centres and representatives of employers' organisations and trade unions. AcTE aims to promote

¹¹ http://ec.europa.eu/environment/eir/pdf/report_fr_en.pdf

green growth, support innovation, make the circular economy a reality and ensure climate plans are implemented.

Policies and action supporting the transition to a circular economy are becoming increasingly popular in the regions, complementing government action. Following the 2015 reorganisation of France's regions, 14 of the 18 regions have made support for the circular economy one of the priorities of their innovation strategies.

France has made the industries of the future (digitalisation, IoT, robotics, 3D-printing, energy efficiency, etc.) a national priority through the national industrial policy (Nouvelle France Industrielle — NFI). It sets priorities for both public and private organisations, seeking to focus public and private funding on supporting the emergence of a set of innovative solutions within the next 5 years. It includes a specific focus on eco-innovation and the circular economy, including the use of new resources, sustainable cities and green industries.

FR2 – Biodiversity plan putting nature protection on the same footing as combating climate change

France has now adopted a biodiversity plan, which makes nature protection and the prevention of biodiversity loss central to government priorities and on the same footing as combating climate change.

France's recognition that existing provisions (including a 2016 law) cannot prevent national biodiversity from declining rapidly (as shown by several recent studies) led to the adoption of a new biodiversity plan in July 2018. This aims to speed up the implementation of priority measures to achieve the objectives set by the national strategy for biodiversity.

The plan includes developing the natural environment in cities. It highlights the role played by nature in cities in helping to mitigate the urban heat island effect, improving quality of life and preventing floods. The plan aims to achieve the following:

- one tree per 100 inhabitants,
- a 40% increase in green areas in cities and
- a 50 % increase in green areas as a proportion of the overall surface area in cities by 2020.

Local authorities will be encouraged to promote biodiversity in cities and to support innovative actions. Since 2010, France has had a 'Capital of Biodiversity' prize to honour municipalities that improve and promote the protection of biodiversity at local level in urban areas. Participation is open to municipalities of all sizes, including small villages.

According to the biodiversity plan, 66,000 hectares of agricultural soil or natural areas are sealed every year. The plan aims to reduce net soil sealing to zero and to ensure that French legislation includes an obligation for the local authorities to combat, limit and compensate for urban sprawl.

FR3 – The single environmental permit

The single environmental permit represents a major simplification. The reform should help save time and ensure compliance with tighter deadlines while protecting the fundamental interests covered by the applicable legislation.

In March 2017, France has introduced a single environmental permit for projects as part of the government's initiative to modernise environmental regulations. The single environmental permit simplifies and streamlines the procedures and allows a better overview of all environmental aspects of a project.

The single environmental permit applies to: projects that implement the legislation on industrial installations, and relevant projects that implement the French Water Act ('Loi sur l'eau'). Projects that are likely to include measures to avoid, reduce or offset harmful effects on the environment do not need a permit but they do require an environmental assessment.

The permit application is submitted to a single contact — the prefect ('préfet'), a local representative of the State. The procedure has been reduced to three stages (review, public inquiry and decision) and there are simplified formalities and requirements for a single permit.

Author's comment: while this was noted in the EIR as an example of good practice, single permitting has been in place in other EU countries for some time.

FR4 – Actions on climate

France has developed a robust and well elaborated low carbon strategy, where the key element are carbon budgets covering all sectors. Sectoral GHG reduction targets are defined, as well as sectoral policies. The Climate Plan, adopted in July 2017, sets carbon neutrality as the long term objective, to be met by 2050.

FR5 – Display sticker for vehicle air quality certificate - Crit'air

The air quality certificate Crit'air is a tool for improving air quality. It enables towns and cities to adjust their parking and traffic policy to encourage the use of the least polluting vehicles. It allows a ban on the most polluting vehicles in certain areas during pollution peaks.

An air quality certificate is mandatory for driving in restricted traffic areas (French low-emission zones) designated by the authorities, such as inside the Paris ring road, or if an emergency scheme has been introduced during pollution episodes. The certificate also confers certain benefits made available by local authorities.

The certificate is a round sticker displayed in a prominent position on the vehicle. There are six different types of certificates, corresponding to different categories of vehicle, classed by air pollutant emissions.

FR7 – Large expansion of marine nature network

France's marine nature network was subject to an ambitious wave of designation undertaken in December 2017 beyond the territorial sea (the marine metropolitan surface covered by Natura 2000 increased from 41,683 km² to 123,540 km²).

FR7 – Agricultural actions on biodiversity

The Ministry of Agriculture has launched an agro-ecology project at both national and regional level. The biodiversity plan includes:

- A target of 15% of farming area under organic farming by 2022,
- Reducing pesticide use during the transition period, including phasing out all uses of glyphosate within 5 years, and halve pesticide use by 2025
- More effective protection for pollinators (a ban on active substances similar to neonicotinoids).

FR8 – Actions on municipal waste recycling

France has recently adopted a decree stating that firms must separate materials into paper, glass, plastic, metal and wood. The separate collection of bio-waste has been mandatory for big producers since 2012 and the Green Growth Act has extended it to all companies. The separate collection of household packaging waste is extended progressively to cover every

type of packaging waste to be put in a yellow bin, with the exception of glass collected separately. By 2022, all households will be covered by these new rules. A €3.6 million national mass-media campaign on the benefits of recycling was launched in October 2018. The project is co-financed by 13 extended producer responsibility schemes.

FR9 – Industry and environment initiatives

'Entreprises pour l'environnement' (EpE) brings together 40 large international and French companies from different sectors which are seeking to integrate environmental considerations into their corporate strategies. The 'Plateforme Entreprises et Biodiversité' (Orée) brings together public and private stakeholders in Paris to share best environmental practices and key information on biodiversity protection.

FR10 – Groundwater abstraction charges

Water abstraction charges (Redevances pour prélèvement sur la ressource en eau) have existed for over 50 years and are payable for extracting water from a ground source (with some exemptions).

FR11 – Bonus-malus system for vehicle taxation based on emissions

France has CO₂-based motor vehicle taxes. Under the bonus-malus system in place, vehicles emitting 20 g/km or less of CO₂ receive a bonus of €6,000. Vehicles emitting more than 120 g/km, on the other hand, pay a malus of €50-€10,500, depending on the level of emissions. Additional bonuses are granted when vehicles over 15 years old are scrapped.

FR12 – Agreements to develop greener production patterns with certain industrial sectors

Since 2017, a series of agreements ('Engagements pour la croissance verte' — ECV), designed to develop greener production patterns and to support the implementation of a circular economy, have been signed with the construction industry (recycling or waste from public works, recycling of plaster) and other industrial sectors. In the context of the ECVs, France is developing tools to help public buyers and building trade professionals move towards the circular economy.

FR13 – Strong GPP actions

A European Parliament study shows that France has achieved better results than any other EU country in implementing its GPP strategy. However, according to a French Economic, Social and Environmental Committee study, the social and environmental progresses do not reach the policy objectives initially defined.

The National Action Plan for Sustainable Public Procurement, France's GPP strategy, was adopted and published in 2015. It aims to increase the extent to which social and environmental aspects are taken into consideration in public procurement (respectively 8,6% and 13,4% in 2016 in tenders above € 90,000 ex tax). The Action plan's objective is to reach, by 2020, 25% and 30% for social and environmental aspects.

FR14 – SME resource efficiency programme

A programme aiming at helping SMEs to save costs through resource efficiency strategies (« TPE & PME gagnantes sur tous les coups ») is on-going.

FR15 – Measures on sustainable development

Sustainable development has been included in the French Constitution since March 2005 when the Environmental Charter was adopted. The 110 statistical indicators developed by the National Institute of Statistics and Economic Studies to monitor progress in implementing the SDGs could help to inform decision-making.

In 2016, 10 of the 15 major cities made a deal with the government to support innovation in energy, environmental transition, smart cities and transport.

Germany

<i>Examples of good practice noted in EIR summary report¹²</i>		<i>Key themes/ categories</i>
DE1	Strong performance on eco-innovation	Eco-innovation
DE2	Biodiversity payments to farmers	Biodiversity
DE3	A Natura 2000 award for municipalities	Biodiversity
Other favourable points in the report		
DE4	Clean air programme to electrify and retrofit public transport and taxi fleets	Air quality
DE5	Diverse use of ERDF funding	Funding
DE6	GPP and mandatory use of life-cycle costing	GPP
DE7	ProgRess II resource efficiency programme	Circular economy
DE8	National programme for sustainable consumption	Eco-innovation
DE9	Restoring ecological corridors	Green infrastructure
DE10	An extensive programme of measures to address the Marine Strategy Framework Directive	Water
DE11	Federal support programme for sustainable urban development - 'green urban future'	Green infrastructure
DE12	Implementation of SDGs	Sustainable development
DE13	Service centre helps municipalities with climate change mitigation projects	Climate
DE14	Project on agricultural practices in relation to pesticides and nitrogen	Water

DE1 - Strong performance on eco-innovation

Germany's strong performance on eco-innovation has helped to develop a successful and highly competitive environmental goods industry, particularly in the fields of clean energy and water technology. Eco-innovation is strongly encouraged by government policy and attracts public research funding. Germany ranks third in the 2017 Eco-innovation index and its performance has been well above the EU average since 2010. It is noted in the EIR that the German population is "highly receptive to environment-friendly consumption, its dependency on imported resources drives efforts to better use secondary resources, and it engages in extensive inter- and trans-disciplinary research relating to social-ecological challenges".

DE2 – Biodiversity payments to farmers

Baden-Württemberg's agro-environment measure pays farmers who manage species-rich grassland with at least four wildflower species on their grassland, thereby promoting grassland biodiversity. The programme has been extended to six species for 2014-2020, with increased payment rates. Another good example is biodiversity offsetting, which aims to avoid net losses of biodiversity and certain ecosystem services through compensation.

DE3 – A Natura 2000 award for municipalities

Bavaria's Natura 2000 award for municipalities, supported by an EU LIFE project, is an example of good practice in awareness raising.

DE4 – Clean air programme to electrify and retrofit public transport and taxi fleets

¹² http://ec.europa.eu/environment/eir/pdf/report_de_en.pdf

Through the 'immediate action programme clean air' 2017-2020, the Federal Government made funding of €1 billion available for municipalities to electrify and retrofit public transport and taxi fleets. This amount was increased to €1.5 billion in December 2018. In 2017, it made €300million available over four years to promote the installation of new standard and high-speed charging stations for electric vehicles, and to extend existing infrastructure.

DE5 – Diverse use of ERDF funding

The Länder are using ERDF funding for very diverse projects, from circular economy projects such as pilot testing processes and plants for the recovery of phosphorous from sewage sludge (Baden-Württemberg) to projects to finance Green Infrastructure in urban areas as part of integrated sustainable urban development (North Rhine-Westphalia) and programmes supporting nature protection and rehabilitation (several Länder).

DE6 – GPP and mandatory use of life-cycle costing

Germany's integrated energy and climate protection programme includes a national GPP strategy that sets mandatory targets for all federal-level authorities to use lifecycle costing in their procurement procedures, in order to ensure energy-efficient and environment-friendly public procurement. Guidelines, criteria lists and vendor questionnaires have been drawn up for various products and services.

A number of GPP targets in some product groups (textiles, recycling, paper, car fleet) are binding for Federal Government authorities. The proportion of electric vehicles purchased by the Federal Government is to reach at least 20% by 2019.

DE7 - ProgRess II resource efficiency programme

A key programme to promote the transition to a circular economy in Germany is the 2016-2019 ProgRess II resource efficiency programme, which is now in its second phase. In addition to waste policy, its 123 measures cover sustainable building and sustainable urban development, and the resource efficiency of ICT products.

DE8 - National programme for sustainable consumption

The national programme for sustainable consumption, introduced in 2016, seeks to give consumers more information on the impacts of their consumption, while mapping alternatives to increase efficiency and sustainable consumption. The programme sets out action in six areas to help Germany achieve its sustainable consumption objectives. Also, a national network for sustainable consumption has been set up.

DE9 - Restoring ecological corridors

The BioCorridors project is a transborder green infrastructure project supported by the LIFE programme. It aims to secure ecological continuity and conserve biodiversity in the Vosges du Nord-Pfälzerwald transboundary biosphere reserve on the French-German border. The reserve covers over 3000 km and comprises forests, agricultural areas and important transboundary watercourses. The project focuses on restoring ecological corridors as a means to safeguard biodiversity in forests, water and open environments.

DE10 - An extensive programme of measures to address the Marine Strategy Framework Directive

Germany is noted as having an extensive programme of measures to address the requirements of the Marine Strategy Framework Directive. The measures are noted as

addressing most relevant pressures and targets. For example, macro- and micro-marine litter is tackled through measures targeting shipping, fisheries, industry and tourism. Offshore activities in the North Sea are also targeted. Other measures address heat and set legal limits for noise.

DE11 - Federal support programme - 'green urban future'

In 2017, the Federal Government launched its first support programme for sustainable urban development, 'green urban future'. A total of 130 municipalities applied for a share of the €50 million funding for measures to improve urban green areas. The 10 fields for action cover a variety of measures to make German cities greener and will help to implement the UN SDGs.

DE12 – Implementation of SDGs

Germany adopted its first national sustainable development strategy (NSDS) in 2002 and has updated it on a regular basis, most recently in 2016 to align it with the SDGs. There are several mechanisms by which the NSDS feeds into public policymaking. The joint rules of procedure for federal ministries require the ministries to subject new laws to a sustainability impact assessment. A Parliamentary Advisory Council for Sustainable Development 190 monitors the Government's sustainability policies and makes recommendations. Germany publishes regular updates and indicators on implementation of the SDGs.

DE13 – Service centre helps municipalities with climate change mitigation (and, to some extent, adaptation) projects

The German BMU also operates a web portal with information on the national climate initiative and associated funding opportunities. In this context, a service centre helps municipalities to initiate and implement municipal climate change mitigation (and, to some extent, adaptation) projects.

DE14 – Project on agricultural practices in relation to pesticides and nitrogen

The FAIRWAY Horizon 2020 project, which explores agricultural practices as regards the use of pesticides and nitrogen in order to address major environmental and health challenges. The project has actions specifically in relation to protecting drinking water supplies from pesticides and nitrogen.

Greece

<i>Examples of good practice noted in EIR summary report¹³</i>		<i>Key themes/ categories</i>
GR1	National circular economy action plan and forum	Circular economy
GR2	New vehicles amongst most environmentally friendly in EU	Air quality
GR3	Progressive approach on access to justice	Governance
Other favourable points in the report		
GR4	National fund for business activities on sustainability, energy efficiency and renewable energy	Environmental funding
GR5	Actions on the UN SDGs	SDGs
GR6	Alternative fuels in the shipping sector	Air quality
GR7	High revenue from environmental taxes	Environmental taxation

GR1 – National circular economy action plan and forum

To promote the circular economy, a national circular economy action plan and a recycling law were adopted. Greece also launched a circular economy forum promoting dialogue between businesses, SMEs, researchers, social entrepreneurs, etc., to encourage circular business models and innovations.

GR2 – New vehicles amongst most environmentally friendly in EU

There are incentives to encourage the purchase of cars with lower CO₂ emissions. New vehicles bought in Greece are among the most environmentally friendly in the EU with average CO₂ emissions of 106.3 grams per kilometre (EU average 118 g/km in 2016).

GR3 – Progressive approach on access to justice

The Council of State takes a progressive approach to access to justice on environmental matters. In addition, all administrative processes, including environment-related ones, have become significantly more transparent thanks to a 'Clarity' transparency programme.

GR4 – National fund for business activities on sustainability, energy efficiency and renewable energy

The National Fund for Entrepreneurship and Development (ETEAN) will prioritise supporting the sustainability, energy efficiency and renewable energy related activities of businesses.

GR5 – Actions on the UN SDGs

The 2018 VNR (National Voluntary review of the implementation of the SDGs) report of Greece covers all 17 Goals through eight National Priorities for adapting the SDGs to national needs and circumstances, also in line with the recently adopted National Growth Strategy. These eight overarching National Priorities have been defined in an open dialogue within all government units and with a wide array of stakeholders, through an in-depth mapping exercise carried out in 2017. With regard to stakeholders' involvement, the GSG encourages and facilitates consultation with multiple stakeholders actively engaged in the SDGs implementation process, including regional and local authorities. In particular, an ongoing dialogue is taking place with some of the major national stakeholders, through the platform

¹³ http://ec.europa.eu/environment/eir/pdf/report_gr_en.pdf

provided by the Economic and Council of Greece (ESC), the constitutionally recognized institution for conducting social dialogue in Greece. The ESC is working, following the model of the European Economic and Social Committee (EESC), on the basis of a tripartite structure representing the interests of three main groups involved, directly and indirectly, in achieving the SDGs at different levels: (i) employers entrepreneurs; (ii) public and private sector employees; and (iii) other categories of interests groups such as farmers, self-employed people, professionals, consumers, environmental agencies, disabled people's confederation, gender equality and multi-child associations, and regional and local government.

GR6 – Alternative fuels in the shipping sector

One Connecting Europe Facility (CEF) funded project in Greece is the 'SuperGreen' action, which creates innovative and commercial technological systems that increase the use of alternative fuels in the country's shipping sector.

GR7 – High revenue from environmental taxes

Greece's revenue from environment-related taxes remains among the highest in the EU.

Hungary

<i>Examples of good practice noted in EIR summary report¹⁴</i>		<i>Key themes/ categories</i>
HU1	Resource efficiency programme for companies	Industry
HU2	Good environmental information system web portal	Governance
Other favourable points in the report		
HU3	Air pollution load charge that has helped reduce air pollution somewhat	Air quality
HU4	'Green City' – a green infrastructure initiative	Green infrastructure
HU5	RDP spend on resource efficiency and climate in agriculture, food processing and afforestation	Funding
HU6	Preferential taxes for electric and hybrid company cars	Environmental taxation
HU7	The National Ecological Network	Biodiversity
HU8	Flood prevention measures	Green infrastructure

HU1 – Resource efficiency programme for companies

The 'Ablakon Bedobott Pénz' ('Money thrown in the window') initiative, started in 2002, provides information, advice and incentives to companies to improve resource efficiency. By 2017, 534 measures were carried out by 99 organisations. This resulted in total savings of nearly €123 million, 20 million m³ of water, 882 GWh of electricity and 565,000 tonnes of CO₂.

HU2 – Good environmental information system web portal

Hungary has a dedicated national environmental information system that covers almost all the environmental areas evaluated. The web portal is easy to navigate and clearly structured.

HU3 – Air pollution load charge that has helped reduce air pollution somewhat

An air pollution load charge was introduced in 2003 and has helped reduce air pollution levels in some areas of the country. It applies to emissions of nitrogen oxides, sulphur dioxides and non-toxic dust. The charge is paid by point-source emitters, mainly in the industry and power sector. Exemptions are applied to domestic emitters, district heating suppliers and to all emitters in emergency situations.

HU4 – 'Green City' – a green infrastructure initiative

Green infrastructure in urban policy is encouraged through 'green city' calls published by the Territorial and Settlement Development Operational Programme. Hungary's 'Green City' initiative focuses on greening measures in general and creates green spaces in cities. Miskolc, the first city involved in this initiative, integrates green infrastructure in urban spatial planning and builds its urban development strategy and concrete actions around sustainability.

HU5 – RDP spend on resource efficiency and climate in agriculture, food processing and afforestation

Hungary's rural development programme's (RDP) 'resource efficiency and climate' priority focuses on energy efficiency-related investments in the agriculture and food processing sectors. It aims to support 2,600 projects and improve the efficiency of existing water management systems on 6,000 ha of agricultural land. The RDP will pursue carbon

¹⁴ http://ec.europa.eu/environment/eir/pdf/report_hu_en.pdf

sequestration mainly by supporting afforestation, agroforestry systems, the prevention and restoration of damage to forests, the improvement of the resilience and environmental value of forest ecosystems and the conservation of forests. It will also encourage environment and climate-friendly forest conservation services.

HU6 – Preferential taxes for electric and hybrid company cars

New preferential taxes for electric and hybrid company cars were introduced in 2018.

HU7 – The National Ecological Network

The National Ecological Network, incorporating protected areas and Natura 2000 sites, complemented with other natural/semi-natural adjacent areas, accounts for 36% of the country.

HU8 – Flood prevention measures

The magnitude of flood risk areas is nearly 50% of the country's territory. The Hungarian Partnership Agreement includes natural water retention measures, nature-based solutions for flooding, and Green Infrastructure (habitat protection and ecosystem - floodplains - restoration). The flood measures protect national wealth responsible for about one-third of GDP.

The Vásárhelyi Plan provides a national framework for flood management investments in Hungary since 1999. Revised in 2003, the principle is for potentially damaging surplus floodwater to be diverted in a controlled way into retention reservoirs constructed along the river.

Ireland

<i>Examples of good practice noted in EIR summary report¹⁵</i>		<i>Key themes/ categories</i>
IE1	Publicly available, on-line geographical information system (GIS) on ecosystems & their services	Natural capital
IE2	Very strong in environmental research and development in terms of researchers and green investment	Eco-innovation
IE3	Good use of environmental co-financing, including LIFE and EIB	Environmental funding/investment
Other favourable points in the report		
IE4	Investment in increasing forest area	Environmental investment
IE5	Fiscal measures to support purchase of electric & hybrid vehicles	Environmental taxation
IE6	Second highest in the EU-28 for public participation in transposition measures	Governance

IE1 – On-line GIS on ecosystems & services

Ireland is one of the few countries with a geographical information system (GIS) service that provides detailed data on ecosystems and their services, which is also available to the public online.

IE2 – Strong in environmental R&D

The country is very strong in environmental research and development, attracting many researchers and a lot of early-stage green investment.

IE3 – Good use of environmental co-financing

Ireland is considered to have made good use of EU co-financing for environmental projects, especially through the LIFE programme and European Investment Bank loans.

IE4 – Investment in increasing forest area

The EIB is providing €29 million in financing to help sustain 12,000 hectares of productive forest in Ireland. It will demonstrate how the forestry sector can take better account of the need to safeguard biodiversity, soils and landscape. It will also show how the forestry sector can resist the threats associated with climate change. With this investment, Ireland hopes to increase its forest area from its current 11% to a level that is closer to the EU average of 42%.

IE5 – Fiscal measures to support purchase of electric & hybrid vehicles

Fiscal measures are being extended in 2019 to support the purchase of electric, hybrid and plug-in hybrid cars and vans. The different tax treatment of diesel and gasoline for road use is beginning to be addressed with a 1% vehicle registration tax surcharge for diesel engine passenger vehicles registering in Ireland.

¹⁵ http://ec.europa.eu/environment/eir/pdf/report_ie_en.pdf

IE6 – Second highest in the EU-28 for public participation in transposition measures

Ireland has 71 transposition measures recorded for public participation. This is the second highest number in the EU-28. Ireland has chosen to write public participation requirements into a full range of environmental regulations and procedures, rather than setting out general requirements for public authorities.

Italy

<i>Examples of good practice noted in EIR summary report¹⁶</i>		<i>Key themes/ categories</i>
IT1	Specialised environmental police forces	Compliance assurance
IT2	Effective promotion of LIFE projects	Biodiversity
IT3	Green roof installation shown to have potential to reduce flooding by half	Water
Other favourable points in the report		
IT4	Circular economy actions	Circular economy
IT5	Waste management – reuse centres, tax credit for recycled plastics	Waste management
IT6	Nature-based solutions for flood-risk management	Green infrastructure
IT7	Air quality measures for diesel and biomass	Air quality
IT8	Good practices on noise management	Sustainable cities
IT9	Example of best practice in national-level governance of the REACH Regulation, and actions on hazardous chemicals substitution	Industry
IT10	Tax on phytosanitary products, with funds going to organic farming	Environmental taxation
IT11	BES (Wellbeing, Equal and Sustainable) indicator system to include environmental concerns in budgetary issues	Sustainability
IT12	A reported increase in car sharing schemes	Sustainable cities
IT13	Front runner on GPP	GPP
IT14	Best practice on SEA monitoring indicators	Governance
IT15	Reuse of urban wastewater	Water
IT16	Measures to reduce seabird by-catch in fishing	Biodiversity

IT1 - Specialised environmental police forces

Italy has created specialised environmental police forces to deal with environmental crime.

IT2 - Effective promotion of LIFE projects

The Ministry of Environment has been effective in promoting LIFE projects, such as GESTIRE 2020 (to protect nature in Lombardy), PREPAIR (to improve air quality in the Po valley basin) and the Alien Species Awareness Programme.

IT3 - Green roof installation shown to have potential to reduce flooding by half

Installing green roofs which have the potential to reduce flooding by half, was shown in a study on sustainable urban drainage systems in Avola, Sicily. The study showed that green roofs can be more effective than permeable paving for controlling flood risk. In the study, green roofs halved the volume of flooding over a 10-year period, while permeable paving only slightly reduced the incidence of flooding.

The annual budget law of 2018 provides a green bonus of 36% on the costs up to €5,000 for restructuring and irrigating gardens and green areas in building complexes.

¹⁶ http://ec.europa.eu/environment/eir/pdf/report_it_en.pdf

IT4 – Circular economy actions

The circular economy is also a key component of 'Industria 4.0', the name given to the government's economic development plan. Circular economy appears as a clear priority in the update note for the 2018 budget. Italy was one of the top performers in the EU in 2016, when its circular-material use-rate was 17.1%.

The European Social Fund and the European Regional Development Fund (ERDF) are also supporting the improvement of the regions' capacity to plan and manage the transition of the local territorial systems towards the circular economy, respectively through the use of integrated policy tools as well as with opportunities to invest in the circular economy. At the University of Tuscia in Civitavecchia (Roma) the first-degree course in Circular Economy has started.

Another significant development in Italy's promotion of the circular economy is the entry into force in June 2018 of 'Made Green in Italy', a voluntary system for assessing the environmental footprint of products.

Some examples of growing awareness on the circular economy are described in the report '100 Italian circular economy stories', which lists best practices from large companies, small and medium sized enterprises (SMEs), local authorities and civil society.

The ERDF supported FORCE project encourages cities to cooperate to promote the circular economy. This project involves the city of Genoa taking a lead on the issue of wood waste. The 2018 'Restarter' project encourages the creation of a circular economy for second-hand clothes. In addition, the National Council of the Green Economy has encouraged the creation of the States General of the Green Economy, a grouping of 66 business organisations that represent the green economy in Italy. In November 2017, eight large Italian companies have launched an Alliance for Circular Economy and signed a 'poster' to identify and disseminate national best practices on circularity. Italy's Sustainable Development Foundation also produces regular reports on the green economy, and in 2018, it launched the Circular Economy Network with the support of 13 companies and consortia.

Furthermore, ENEA has launched in 2018 the Italian Circular Economy Stakeholder Platform that, like the European one, is a network of networks with the objective of creating a point of national convergence of initiatives, experiences, criticalities, perspectives of the Italian system on circular economy.

IT5 – Waste management – reuse centres, tax credit for recycled plastics

The annual budget law 2018 provides a credit for businesses of 36% for purchasing recycled plastic.

A new decree on re-use centres is being planned. A pilot project on deposit schemes is also being planned.

Certain regions are already achieving high recycling rates - Emilia-Romagna has a separate collection rate of 61.8%, and Lombardy's rate is 60.8 % (these are average rates, with the separate collection rates actually much higher in some parts of these regions).

IT6 – Nature-based solutions for flood-risk management

The 2014-2020 ERDF and EAFRD regional programmes contain measures to co-finance investment in nature-based solutions for flood-risk management and flood defences. An example of this green infrastructure is the Payment of Ecosystem Services (PES) scheme (the LIFE supported 'Bosco Limite' project) in the province of Padua.

IT7 – Air quality measures for diesel and biomass

In relation to air quality, biomass is a challenging issue. Like diesel, biomass must be managed, and eight actions are now planned to manage biomass, including agreements between local regions and the central government. Initiatives have been launched to end the use of diesel in cities, for example in Piedmont. Italy has created areas with limited access for cars ('zona a traffico limitato') to reduce motor traffic and air pollution in historic urban centres.

IT8 – Good practices on noise management

Orbassano created an acoustic zoning plan, which sets out noise limit values during the day and night for six different land-use areas. Specific noise strategies were also developed for each part of the municipality. Such acoustic zoning is a requirement of Italian rather than EU law. Florence is another example of best practice – it has used LIFE funding to promote acoustic mitigation. Rimini has planned low-noise roads in the centre in its 2018-2023 Action Plan on Management of Environmental Noise.

IT9 – Example of best practice in national-level governance of the REACH Regulation, and actions on hazardous chemicals substitution

Italy's technical coordination committee (CTC) is an example of best practice in national-level governance of the REACH Regulation. The CTC gathers relevant branches of the public administration to agree a common position at both the national and EU level. To share this governance experience, a website has also been set up, allowing a continuous dialogue to take place among all relevant stakeholders.

Italy has undertaken a variety of actions to promote the substitution of hazardous chemicals between 2010 and 2018. In 2017, two dedicated events were organised with the participation of ECHA and the Commission, and a survey among industry players was launched to learn more about cases of substitution. In 2018, two new workshops were planned and a working party on substitution was set up within the Ministry of Health.

IT10 – Tax on phytosanitary products, with funds going to organic farming

A phytosanitary production tax revenue is distributed annually to projects supporting organic agriculture. This covers a wide range of pesticides and herbicides utilised for plant protection. The current rate of taxation is 2% of the product value. The tax base is restricted to products which are classed as posing particular hazards. Revenue from the tax is on average EUR 3 million per year. From 2000, when the tax was introduced, until 2013, the total tonnage of phytosanitary product sold has declined by 25%. The amount of land in organic cultivation as a proportion of all utilised agricultural land has almost doubled in the same period, from 6.7% to 11.5% between 2000 and 2014. However, the role played by the tax in these shifts is difficult to establish.

IT11 – BES indicator system to include environmental concerns in budgetary issues

As mentioned in the previous EIR, Italy has taken steps to include environmental concerns in budgetary issues by creating the BES indicator system (Benessere equo e sostenibile - Wellbeing, Equal and Sustainable). The Ministry of Economy and Finance is tasked with producing an annual analysis reporting back to the Italian parliament by 15 February each year. BES was identified in the 2018 European Semester country report for Italy as best practice.

IT12 – A reported increase in car sharing schemes

Car sharing has also become more widely available in Italy, according to the study. In 2005, car sharing was only available in four cities, but by 2015 the availability of car sharing in these cities had increased, and five more cities had developed schemes. However, the researchers point out that the success of car-sharing schemes is linked to good public-transport systems, as the two services are complementary. 'Park-and-ride' services have also been developed in most cities.

IT13 – Front runner on GPP

A European Parliament study shows that Italy is a front-runner in the implementation of its national action plan for GPP. Minimum environmental criteria, approved by ministerial decrees, have been published for 18 product groups, including buildings, vehicles, public lighting and food-and-catering services. The inclusion in their contracts of the minimum environmental criteria is mandatory for all contracting authorities regardless of the value of the contract. To monitor the uptake of GPP, an agreement was signed in March 2018 between the Ministry of Environment and the National Anti-corruption Agency, identified by law as the body in charge of monitoring GPP.

All the operational programmes funded by the structural funds explicitly refer to the use of minimum environmental criteria (as identified by the national action plan on GPP). This ensures that co-financed activities respect air quality plans under Directive 2008/50/EC, and that urban transport investments are consistent with the sustainable urban mobility plans.

One of the selection criteria used in all 2014-20 ERDF programmes is that the programme must promote sustainable development.

IT14 – Best practice on SEA monitoring indicators

The strategic environmental assessment (SEA) monitoring indicators in the networks and mobility operational programmes 2007-2013 and 2014-2020 and are noted by the EIR as a best practice.

IT15 – Reuse of urban wastewater

In order to maximise water resources, the operators of aqueducts are reusing urban wastewater for agricultural, industrial and anti-incendiary purposes e.g. Puglia with the ERDF and under EFSI, Sardinia and Veneto.

IT16 – Measures to reduce seabird by-catch in fishing

As part of biodiversity action for the bird population, Italy reports on an existing measure in its action plan to reduce incidental catches of seabirds in fishing gear. This measure is complemented by an indirect new measure on training and awareness-raising measures for fishermen to reduce their by-catch of seabirds.

Latvia

<i>Examples of good practice noted in EIR summary report¹⁷</i>		<i>Key themes/ categories</i>
LV1	A good example project for protection and enhancement of green infrastructure	Green infrastructure
LV2	A good example project for protection and management of coastal habitats	Biodiversity
LV3	Very broad access to justice in environmental cases	Access to justice
Other favourable points in the report		
LV4	By law, revenues from EU emission allowance auctions to be spent on climate	Climate change
LV5	Relatively higher environmental taxes, a Natural Resource Tax, and environmental funds	Environmental taxation
LV6	An NGO representative Board to aid environmental decision-making	Public participation
LV7	Annual seminars for farmers on sustainable use of plant protection products and fertilisers	Compliance promotion and monitoring
LV8	Sustainable Development Policy in Latvia	UN SDGs
LV9	Sustainable cities measures	<u>Sustainable cities</u>

LV1 – A good example project for protection and enhancement of green infrastructure

Protection and enhancement of green infrastructure across a lowland rivers landscape in the Zemgale Region of Latvia and Northern Lithuania. This was launched as part of a 2018 cross border co-operation LIFE project (ENGRAVE).

In general, the 2019 EIR acknowledges the improvements in the status of species and habitats that have recently been reported in Latvia.

LV2 – A good example project for protection and management of coastal habitats

The LIFE Nature project 'Protection and management of coastal habitats in Latvia' was noted as a good practice example.

LV3 – Very broad access to justice in environmental cases

Latvia grants the public, particularly individuals and NGOs, very broad access to justice in environmental cases. It has well-developed legislation on access to information and public participation. The action plan on open government partnership and the work of the Environmental Consultancy Board are good examples of how these rights are put into practice.

LV4 – By law, revenues from EU emission allowance auctions to be spent on climate

Latvia's Law on Pollution prescribes that revenues derived from the auction of EU emission allowances must be spent on climate-related measures. In 2016 a new national green investment scheme for tackling climate change, supporting adaptation and reducing greenhouse gas emissions has been established. Four calls for projects have been organised since 2016 with overall co-funding of €50 million. All unspent revenues from the auction of

¹⁷ http://ec.europa.eu/environment/eir/pdf/report_lv_en.pdf

allowances from previous years are accumulated and earmarked for climate change-related open tenders for projects and measures in upcoming years.

LV5 – Relatively higher environmental taxes and a Natural Resource Tax

Latvia's revenue from environmentally relevant taxes remains higher than the EU average. Environmental taxes accounted for 3.48% of GDP in 2017 (EU-28 average: 2.4%), and energy taxes for 2.97% of GDP (EU average 1.84%). In the same year, environmental tax revenues were 11.11% of total revenues from taxes and social security contributions, considerably higher than the EU-28 average of 5.97%.

There is a Natural Resource Tax in place, which includes an aggregates tax, water abstraction tax, landfill tax, water pollution tax, tax on various goods that are harmful to the environment, tax on materials used for packaging, tax on radioactive materials, air pollution tax (including CO₂), and a tax on the use of coal, coke and lignite.

The packaging tax is used to stimulate lower consumption of packaging materials and greater recovery of such materials, though a 2012 EU report notes that most suppliers can avail of an exemption by becoming part of a compliance scheme.

Part of national funding is operated by the Administration of Latvian Environmental Protection Fund. The fund promotes sustainable economic development by integrating environmental protection into all sectors of the economy and taking action to conserve biodiversity and protect ecosystems.

In addition, local municipalities are also required to reinvest their income from natural resource tax revenues to invest in the environmental protection. The Riga municipality has established its own environmental fund.

LV6 – An NGO representative Board to aid environmental decision-making

A Latvian body cited as aiding more efficient participation in environmental decision-making is the Environmental Consultancy Board, consisting of 20 annually elected, voluntary environmental NGO representatives. In accordance with the public interest, the Board submits proposals and opinions to the relevant ministries on draft legislation and policy documents, as well as draft EU legal acts affecting environmental policy. The Board also informs the public about environmental issues. Involves regular meetings, at least once a month, or more frequently, as necessary, as well as separate thematic meetings with representatives of ministries and delegation of representatives to work in the working groups of ministries and state institutions. Other non-member organisations can participate and be involved in the preparation and presentation of opinions and positions. Sessions are open to the public.

LV7 – Annual seminars for farmers on sustainable use of plant protection products and fertilisers

Each year the State Plant Protection Service organises seminars for farmers all across Latvia to promote proper and sustainable use of plant protection products and fertilisers, as well as taking part in workshop events organised by the Latvian Rural Advisory and Training Centre and other organisations.

LV8 – Sustainable Development Policy in Latvia

Sustainable development planning began in Latvia in the early 1990s, when the country regained independence and launched its initial environmental policy, with the express intent of balancing economic and social processes with environmental needs. Latvia adopted a sustainable development policy in 2002.

In 2007 Latvia began a new sustainable development planning process in which people expressed their vision for Latvia until 2030 on all dimensions of sustainability. It resulted in Latvia's new Sustainable Development Strategy of Latvia until 2030 (Latvia 2030) adopted by Parliament in 2010. Because of the breadth and depth of the public discussions about the future of Latvia that took place with diverse groups across the country, Latvia's main long-term planning document, i.e. 'Latvia 2030', can be considered a social contract.

A cross-sector coordination centre operating under the direct authority of the Prime Minister is responsible for the preparation of the National Development Plan and for integrating SDGs into the national planning system and into public policy making at national level. Most of the SDGs are included and addressed in national development documents and sector-specific policies. Ministries are encouraged to use mapping of indicators in the mid-term evaluation process of sector-specific policy documents and, in cooperation with the public, to include SDGs in future policy implementation. Evaluations, together with public discussions, are to contribute to the programming of the next National Development Plan 2021-2027 and subsequent related policies.

Latvia's 2014-2020 national development plan includes green infrastructure targets such as increasing the organic farming area, increasing forest coverage, promoting the sustainable use and biodiversity of land and other natural resources and species conservation measures. Latvia's sustainable development strategy covering the period until 2030 also mentions green corridors within the urban transport network. The strategy states that the government should introduce a plan to preserve and restore natural capital at state level. This would also include spatial planning of nature preservation and restoration.

LV9 – Sustainable cities measures

There is a Baltic Biogas Bus project to increase biogas use in city buses, supported through an EU regional policy programme.

Nine municipalities in Latvia and Lithuania came together to jointly implement a project: 'Let's make our cities greener'. The project focuses on urban areas and improving their green infrastructure. Emphasis was placed on collaboration between architects and city planners in both countries, trying to find the best way to balance aesthetics, ecology and functionality of green areas.

Lithuania

<i>Examples of good practice noted in EIR summary report¹⁸</i>		<i>Key themes/ categories</i>
LT1	A deposit-refund system for plastic/glass bottles and cans has achieved its 2020 objective of 90% collection rate early in 2017	Waste management
LT2	Successful LIFE programmes on wetlands	Biodiversity
LT3	Ministry of Environment complaints hotline	Compliance assurance
Other favourable points in the report		
LT4	Forest management plans must take biodiversity features into account	Biodiversity
LT5	New products taxed under the Law on the Tax on Environmental Pollution	Environmental taxation

LT1 – A deposit-refund system for plastic/glass bottles and cans has achieved its 2020 objective of 90% collection rate early in 2017

The introduction of a deposit-refund system for single-use plastic and glass bottles and metal cans proved to be very successful, having achieved its 2020 objective of 90% collection rate already in 2017.

Lithuania is noted as being well on its way to compliance with the 50% recycling 2020 target. Recycling and composting at 48% is slightly above the EU average of around 46%. The deposit-refund system is noted by the EIR as an important factor that contributed to the increase in the recycling of the dry recyclable fraction.

There are specific plans to further improve and optimise the separate collection system: by the end of 2021, it is planned to optimise the collection points network and continue providing individual households with separate collection containers. Since 2015, the Ministry of Environment conducts a public survey which indicates that the public opinion on waste management system (separate collection, access to containers, awareness rising) becomes more favourable every year.

LT2 – Successful LIFE programmes on wetlands

Lithuanian LIFE programme projects on ensuring the viability of grasslands and restoring hydrology in the Amalvas and Žuvintas wetlands have been identified as success stories to showcase.

An integrated planning tool that can be used to ensure the viability of grasslands has: (i) identified common policy shortcomings and eliminated them to make sure grassland biodiversity is maintained in the long-term; (ii) restored around 140 ha of grasslands to create the preconditions for sustainable grassland management; (iii) set up a capacity-building programme on applying the integrated planning tool, which led to the training of 400 people. The second project is on the restoration of hydrology in the Amalvas and Žuvintas wetlands; it succeeded in reversing degradation processes in 1,158 ha of targeted wetland in the Žuvintas biosphere reserve.

LT3 – Ministry of Environment complaints hotline

The Ministry of Environment homepage includes a hotline specifically for complaints.

¹⁸ http://ec.europa.eu/environment/eir/pdf/report_lt_en.pdf

LT4 - Forest management plans and biodiversity features

Forest management plans must take into account biodiversity features in the area when forest management measures are being planned.

LT5 – New products taxed under the Law on the Tax on Environmental Pollution

Seven products were added to the products taxed under the Law on the Tax on Environmental Pollution of the Republic of Lithuania: tyres, accumulators, batteries, fuel and oil filters, air intake filters, shock absorbers and mercury lamps.

Luxembourg

<i>Examples of good practice noted in EIR summary report¹⁹</i>		<i>Key themes/ categories</i>
LU1	Agricultural management contracts for better water and soil management, and supporting biodiversity	Funding
LU2	Good example of public access to information, including mobile apps	Governance
Other favourable points in the report		
LU3	Circular economy and business	Circular economy
LU4	Free public transport from 2020	Sustainable cities
LU5	Mandatory passive house standard	Climate
LU6	New public procurement law means attention paid to criteria other than lowest price	GPP
LU7	Sustainable mobility measures	Sustainable cities
LU8	The Climate Pact for municipality action on climate change	Climate
LU9	Sustainable Development actions	Sustainable development
LU10	National Nature Protection Plan	Biodiversity

LU1 – Agricultural management contracts for better water and soil management, and supporting biodiversity

Environmental aspects of rural development: almost 28% of agricultural land in Luxembourg is expected to come under management contracts that support better water management; nearly 11% will be under contracts to improve soil management; and over 90% will come under management contracts that support biodiversity.

LU2 – Good example of public access to information, including mobile apps

Public access to information: the website guichet.lu provides information on how to make a complaint and offers specific online forms for individual environmental matters; the data platform data.public.lu lists data sources on environmental matters, such as waste management, air quality, energy and noise pollution; and the national geoportail.lu illustrates spatial datasets on environmental topics, such as strategic noise maps.

Mobile applications: the government has begun to develop mobile apps on a range of issues to boost public access to information. These include a mobile version of the website guichet.lu and specific apps on waste management and air quality.

LU3 – Circular economy and business

The 'Fit 4 Circularity' programme launched by the Ministry of the Economy together with LuxInnovation is part of the broader 'Third Industrial Revolution' strategy. 'Fit 4 Circularity' helps SMEs' transition to the circular economy. It aims to ensure sustainable and smart growth for SMEs by: (i) helping them identify and assess their growth potential and (ii) integrating the circular economy into their general innovation activities. "SuperdrecksKëscht fir Betriber" helps companies become more resource efficient. Currently 5000 companies have joined this partnership.

¹⁹ http://ec.europa.eu/environment/eir/pdf/report_lu_en.pdf

LU4 – Free public transport from 2020

In January 2019, the Government presented details on the introduction, from March 2020, of free public transport in all modes of national public transport financed by the State in the Luxembourg territory. Second class travel will then be free, while first class charges are maintained. In addition, the ministry is pursuing a "no-emission" objective by 2030 with the introduction of electric buses on the national bus network.

LU5 – Mandatory passive house standard

Luxembourg has introduced a mandatory passive house standard for all residential buildings to boost sustainable, low-energy housing.

LU6 – New public procurement law means attention paid to criteria other than lowest price

Promoting the circular economy in public procurement. The new public procurement law means that attention is now paid to criteria other than the lowest price. It also encourages innovative and green public procurement.

LU7 – Sustainable mobility measures

Promoting electromobility and launching a programme for zero-emission personal vehicles. To boost the development of electric mobility, new tax abatements have been introduced to encourage people and companies to use electric cars and bikes. In January 2019, a draft decree establishing a scheme of financial aid for zero or low-emission vehicles was adopted. In 2017 the Government decided that in principle its own fleet vehicle (type M1) should be battery electric or plug-in hybrid vehicles, exceptions being justified.

More sustainable mobility has been encouraged through a number of recent measures. These include the 2017 tax reform and significant investment in public transport. In May 2018, the Government adopted the new sustainable mobility strategy (MoDu 2.0). This strategy builds on the progress since the previous strategy of 2012, extending the range of mobility measures. It also addresses more explicitly the four mobility players, namely the public, local councils, employers and the State. MoDu 2.0's strategic objective for 2025 is to reduce peak-hour congestion while transporting 20% more people than in 2017.

LU8 – The Climate Pact for municipality action on climate change

The Climate Pact was set up by the Ministry of Sustainable Development and Infrastructure. In the framework of a contract, each participating municipality undertakes to implement a management system for its energy and climate policy and an energy accounting system for its municipal infrastructure and facilities. The State, for its part, guarantees financial support and technical assistance to the municipality. Since June 2017, all Luxembourg municipalities have adopted the Climate Pact. The investments made since the beginning of the pact currently represent €55 million: €31 million in subsidies obtained under the pact and €24 million euros in aid committed from the part of the Fund for the protection of the environment. Many projects have been initiated across the country by the Climate Pact, in the field of territorial development, energy and climate concepts at the municipal level; planning and construction of energy-efficient and sustainable buildings or renewable energy heating networks; mobility concepts, projects promoting soft mobility and public transport.

LU9 – Sustainable Development actions

In 2016, Luxembourg's Ministry of the Economy published its 'Third Industrial Revolution' strategy. This outlines plans to support sustainable development in Luxembourg through innovation. One of the provisions in the strategy is the Luxembourg Sustainable Development Finance Platform. This acts as an intermediary for financing sustainable development.

In 2017, Luxembourg's Ministry of Finance and Ministry of Sustainable Development and Infrastructure launched the Forestry and Climate Change Fund as a public-private partnership. Its role is to provide funding to help companies, communities and small farmers manage secondary and degraded forests in the tropics. Luxembourg's Government has committed €30million until end 2019.

The Higher Council for Sustainable Development launched a campaign called '#MengAktioun' aimed at public institutions and civil society. These players are given the chance to present their projects that help implement the 2030 Agenda using an online platform.

In 2018, Luxembourg has launched the Luxembourg sustainable finance roadmap, drafted in partnership with UNEP, and based on a consultation of the financial industry and civil society, to contribute to the Agenda 2030 and the objectives of the Paris Agreement.

Luxembourg is also developing a roadmap for sustainable food production.

LU10 – National Nature Protection Plan

As reported in the previous EIR, in January 2017, Luxembourg adopted the national nature protection plan (PNPN2) which involves:

- implementing species and habitat action plans,
- restoring ecosystems and their services,
- defragmenting landscapes,
- improving the follow-up of indicators,
- speeding up the creation of protected areas and their management,
- purchasing nature areas,
- strengthening communication with all stakeholders on nature conservation.

The PNPN2 includes that green infrastructure should be promoted instead of grey infrastructure to boost flood protection, in particular by restoring wetlands. The PNPN2 provides for an interdepartmental group on biodiversity, public works and spatial planning to oversee the large-scale implementation of green infrastructure.

The budget earmarked for implementing the plan is €100 million. In June 2018, the Parliament adopted a new nature protection law to reform and strengthen existing legislation.

Malta

<i>Examples of good practice noted in EIR summary report²⁰</i>		<i>Key themes/ categories</i>
MT1	A free school transport scheme for all and tax incentives for electric vehicles	Air quality/green taxation
MT2	Raising awareness on plastic waste	Waste management
MT3	An on-line waste game	Waste management
MT4	Environment Ministry's facebook page	Information
MT5	Good digital public services and reuse of information	e-Government
Other favourable points in the report		
MT6	A proposal to enshrine environmental protection in the Constitution	Effectiveness of environmental administrations
MT7	Planned beverage container refund system	Waste management
MT8	Water pricing	Green taxation
MT9	Mandatory GPP checklist before publishing calls for tender	GPP
MT10	Rural policy and design guidance to protect eco-systems	Biodiversity

MT1 – A free school transport scheme for all and tax incentives for electric vehicles

To ease congestion on the roads, a free school transport scheme was introduced for all students.

For electric and gas-powered vehicles, Malta has abolished the registration tax and granted a 5-year exemption from annual road tax, as well as a grant for purchasing such vehicles. A target of 5,000 electric vehicles has been set for 2020. Hybrid vehicles are encouraged by reducing the registration tax for such vehicles. Excise duty has also been increased to further discourage the use of conventional fuels.

MT2 – Raising awareness on plastic waste

As part of the pan-European 'Researchers' Night', Malta's Science and Arts Festival 2018 focused on increasing citizens' awareness of the effects of plastic waste on the planet through an interactive exhibition.

MT3 – An on-line waste game

The government's 'Don't Waste Waste' campaign has launched an online game to engage the public in understanding more about good waste-management practices and ongoing initiatives in Malta and Gozo.

MT4 – Environment Ministry's facebook page

The Ministry for Environment, Sustainable Development and Climate Change created an official Facebook page to raise awareness and announce initiatives, such as litter clean-ups, involving different stakeholders and volunteers.

²⁰ http://ec.europa.eu/environment/eir/pdf/report_mt_en.pdf

MT5 – Good digital public services and reuse of information

Malta is leading on the supply of government services to citizens, ranking first on the reuse of information across administrations (pre-filled forms) as well as on the sophistication of services (online service completion), and has continued to improve its digital public services

MT6 – A proposal to enshrine environmental protection in the Constitution

In an effort to enshrine environmental protection in the Constitution, in March 2018, the Maltese Environment Minister proposed a constitutional amendment to introduce a 'strong moral and political obligation' for the government to favour policy to preserve the environment for future generations. The Bill would flesh out Article 9 of the Constitution to read: 'The State shall protect the environment for the benefit of present and future generations and shall take measures to address the problem of pollution and any other form of environmental degradation in Malta, and to promote the right of action in favour of the environment.' If the Bill is adopted, the Maltese government intends to work to create an environmental court to be tasked with deciding legal matters related to the environment.

MT7 – Planned beverage container refund system

The new Resource Recovery and Recycling Agency has been established to foster the transition towards a circular economy. The Agency is set to facilitate the implementation of a new Beverage Container Refund System, expected in 2019, to improve collection.

MT8 – Water pricing adopted

Water pricing has traditionally been politically and socially sensitive in Malta. Household water consumption was effectively supported until the year 2000. Since then, a national scheme of water supply and water metering fees has been adopted to encourage more sustainable water use. A 'rising block' tariff structure is used for water supply fees for domestic, residential and non-residential water use, although the highest non-residential water users benefit from a reduced tariff for the highest volumes. Self-abstraction of groundwater is a significant issue in Malta, in particular for agricultural use; this is frequently metered (in the case of boreholes), but not subject to water supply tariffs or extraction quotas.

MT9 – Mandatory GPP checklist before publishing calls for tender

In Malta an administrative procedure is in place whereby all contracting authorities are required to complete a green public procurement checklist before publishing a call for tender.

MT10 – Rural policy and design guidance to protect eco-systems

The 2014 rural policy and design guidance protects landscape features and ecological corridors such as rubble walls, natural ponds, indigenous trees, etc. in agricultural areas, which enhance connectivity while providing habitats for flora and fauna.

MT11 – Work on Green Infrastructure

Afforestation projects are given priority to rehabilitate degraded habitats and enhance green spaces. Malta has upgraded several parks and green belts which are seen as best practice.

Through its National Biodiversity Strategy and Action Plan, Malta committed to safeguard urban biodiversity in villages and towns through the uptake of community initiatives. These initiatives include, among others, green rooftops, green open spaces, and other incentives, such as competitions for the best gardens and open spaces in urban areas, which promote the use of indigenous species so as to increase green urban areas.

Netherlands

<i>Examples of good practice noted in EIR summary report²¹</i>		Key themes/ categories
NL1	Continuing strong in the circular economy & building it into climate action plans	Circular economy
NL2	A new green deal on circular procurement & exceeding European Commission recommendations on GPP	GPP
NL3	Water-related and nature restoration projects	Biodiversity
Other favourable points in the report		
NL4	Pension fund reducing portfolio CO ₂ emissions and increasing renewables investment	Climate
NL5	Waste medicines collection	Waste management
NL6	Tax advantage schemes for resource efficiency	Environmental taxation
NL7	Local energy cooperatives for renewables	Climate
NL8	New climate policy	Climate
NL9	Various nature measures	Biodiversity
NL10	Alternatives to hazardous chemicals	Industry
NL11	Funding in relation to sustainability	Funding
NL12	Monitoring the SDGs	Sustainability
NL13	Environmental quality label for products and services	Eco-innovation

NL1 – Continuing strong in the circular economy & building it into climate action plans

As detailed in the 2017 EIR report, circular economy actions continue to play an important role in the Netherlands. The 2019 EIR considers the Netherlands to be a model of public-private partnership to achieve a more circular economy. It is also the best performer in terms of resource productivity. Small businesses are becoming increasingly circular and the recycling rate for municipal waste is among the highest in the EU. The programme 'A circular economy in the Netherlands by 2050' is one of the most far-reaching in the EU, according to the 2019 EIR.

Since 2017, the government has built the circular economy into its climate action plans. According to various studies, the 2016 circular economy programme could have a decisive impact on the reduction of GHG emissions by 2050. Plastics reuse and recycling could account for 28% of emissions reduction, while biomass and food circular actions might add up to around 35%. Author note: it is unclear to what the percentage reduction relates to; the source document was examined but this was not determinable; it is presumably the total emissions reduction associated with circular economy actions. A government report on "guidance, progress, environmental and socio-economic effects in the Circular Economy" will be published at the start of 2020 that will go beyond EU monitoring requirements.

To boost waste prevention and further increase recycling rates, the 2016 programme for a circular economy (A circular economy in the Netherlands by 2050) aims in part to ensure that by 2025 the annual volume of residual household waste is no more than 30 kg per capita (100 kg in 2020). By 2022, the volume of residual waste from companies, organisations, and governments comparable to residual household waste must be halved (compared to 2012).

²¹ http://ec.europa.eu/environment/eir/pdf/report_nl_en.pdf

Local and regional authorities are creating new networks on waste-related issues, mainly to support plastic recovery and recycling. Some 260 municipalities within the Statiegeld Alliantie are calling for a deposit system for plastic bottles. In March 2018, the State Secretary for Infrastructure and Water Management announced that a deposit on small plastic bottles would be introduced in 2021, unless the packaging industry managed to achieve 90% recycling of throw-away bottles by the autumn of 2020. She also urged the packaging sector to reduce street litter by 70 to 90%.

NL2 – A new green deal on circular procurement & exceeding European Commission recommendations on GPP

The Netherlands has set an ambitious government level target on GPP and applies it not only to the central government, but also at regional and local levels; this target aims at reducing over one million tonne of CO₂ emissions per year by 2021. Green public procurement already exceeds European Commission recommendations. The Netherlands has several circular procurement practices in place and the 'green deal' programme has begun with a number of pilots and guidance for functional specifications. During 2018, a new green deal on circular procurement was signed by 50 public and private organisations and companies, adding up to €100 million in purchasing power. The initiative is open to all organisations keen on circular purchasing.

The country currently offers a 'Circular Procurement Academy'. Public procurers can only participate if they are tendering for an innovative solution and if they are willing to meet regularly with other participants. During these meetings, problems, questions and experiences are discussed. The Netherlands also supports learning networks and pilot projects, and is working on establishing monitoring systems to make the effects of GPP visible.

Local initiatives are also ongoing on this field. Almost 160 municipalities, provinces and water boards have signed the national sustainable public procurement manifesto. This has helped to increase awareness and understanding of, and commitment to GPP.

NL3 – Water-related and nature restoration projects

The Netherlands excels at water-related projects and nature restoration on former agricultural land. Examples include projects such as Sand Motor and Marker Wadden and the transformation of 80,000 hectares of agricultural land which have been included in the National Ecological Network.

NL4 – Pension fund reducing portfolio CO₂ emissions and increasing renewables investment

The Pension Fund for Civil Servants (ABP), the largest Dutch pension fund, adopted a policy for sustainable investment in 2015. In 2017 alone, the ABP cut the level of CO₂ emissions in its equity portfolio by 7 million tonnes, while its investment in renewable energy rose by 25%.

NL5 – Waste medicines collection

The Royal Dutch Pharmacists Organisation (KNMP) states that more than 140 tonnes of waste medicine ends up in surface waters. KNMP is reducing the amount of leftover medication ending up in the environment through initiatives such as medicine use monitoring and incentives for a new waste collection system in pharmacies. The number of municipalities making pharmacies pay for waste medicine fell from 45% in 2016 to 10% in 2018.

NL6 – Tax advantage schemes for resource efficiency

In recent years there has been an increasing number of public-funded projects to increase resource efficiency. The MIA (an environmental investment rebate) and VAMIL (discretionary depreciation of environmental investments) are public schemes to grant tax advantages for environment-friendly products and entrepreneurs to bring innovative products to market more rapidly.

NL7 – Local energy cooperatives for renewables

Local energy cooperatives set up by citizens are flourishing. The number of local sustainable energy corporations increased to 392 in 2017. Together, they started 100 new collective solar energy projects.

NL8 – New climate policy

The new government has committed to a more ambitious climate policy, which will be laid down in a new Climate Law and a national Climate Agreement next to the existing Energy Agreement. The National Climate Agreement, the Dutch contribution to "Paris", has one central goal, which is to reduce GHG emissions in the Netherlands by at least 49% in 2030 compared to 1990. Additionally, the Dutch government's efforts in a European context could result in an even more ambitious target towards 55%.

The Netherlands is among the Member States incentivising the use of electric vehicles to improve local air quality by applying lower excise duties for electricity supplied to charging stations.

NL9 – Various nature measures

Since 2016, groups of farmers have been allowed to apply for subsidies in areas with high potential to increase natural value. These subsidies aim to complement the NEN, national ecological network. The NEN is protected by spatial planning schemes in provincial regulations and listed as a national priority in the national policy strategy for infrastructure. National and local authorities, businesses and NGOs are working together to incorporate nature into infrastructure (highways, railways, waterways) through green deals.

The National Green Fund finances projects that improve the quality of the natural environment.

Business, nature organisations and governments have set up an online platform, 'Naturalcapital.community' to scale up the application of natural capital principles in daily business practice.

The Leaders for Nature network brings together 20 multinationals and major Dutch enterprises aiming to make ecosystem thinking central to business decision-making.

In 2016 and 2017, the Netherlands co-hosted the first and second WAVES policy forums. WAVES (Wealth Accounting and the Valuation of Ecosystem Services) is a World Bank-led global partnership to promote sustainable development by ensuring that natural resources (including ecosystems and ecosystem services) are mainstreamed in development planning and national economic accounts.

NL10 – Alternatives to hazardous chemicals

In 2018, the Ministry of Infrastructure and Water Management hosted a workshop on the national safe chemicals innovation agenda (SCIA), an initiative to promote safe materials and products that can replace hazardous chemicals. This research agenda aims to serve as

guidance for R&D policies at EU and Member State level. The SCIA focuses on three interlinking items: first, the essential functionalities of widely used chemicals; second, hazardous chemicals considered difficult to substitute; and third, the potential for new market niches and/or longer-term competitive advantage for European businesses.

NL11 – Funding in relation to sustainability

European Investment Bank signed loans to support dairy farmers' investments in biogas installations, and signed loans to acquire new equipment to ensure that all the electric trains in the Netherlands continue running on green electricity supplied by sustainable power generation.

An example of an ongoing EFSI project is the Green Metropole Fund. Its goal is to accelerate the transition towards a circular and low-carbon economy in the metropolitan area of Amsterdam. EIB funds of €40 million will try to leverage the investment capacity towards SMEs and small projects. Another good example is the Limburgs Energie Fonds, that aim to improve SMEs' energy efficiency and develop new waste treatment facilities and sustainable transport in the province of Limburg (EIB participation amounts up to €30 million).

The Green Funds Scheme, a tax incentive scheme launched in 1995 to encourage individual investors to put money into projects that benefit nature and the environment. By December 2016, 185 deals had been concluded, with 1,225 participants.

The Dutch National Fund for Green Investments is another instrument that provides services in the fields of financing, public support, advice and financial management to make the Netherlands greener. The Fund's contribution to climate targets helped to prevent 136,131 tonnes of CO₂ from being released and helped to restore 345 hectares of natural environment.

NL12 – Monitoring the SDGs

The CBS put in place a 'Monitor Sustainable Netherlands' in 2016 and the government reports annually on the progress made on the SDGs to Parliament. Since 2018, the SDG monitoring is integrated under the wider Quality of Life Monitor (Monitor Brede Welvaart).

NL13 – Environmental quality label for products and services

A national scheme in place is the Milieukeur, the environmental quality label for products and services.

Poland

<i>Examples of good practice noted in EIR summary report²²</i>		<i>Key themes/ categories</i>
PL1	Green infrastructure projects to slow down water outflow for flood and drought prevention	Green infrastructure
PL2	LIFE project on implementation of an air quality plan	Air quality
PL3	Project on rights and obligations for nature conservation	Biodiversity
Other favourable points in the report		
PL4	National fund for spending environmental income	Funding
PL5	Developing the market for electric, compressed natural gas (CNG) and liquid natural gas (LNG) cars	Air quality

PL1 - Green infrastructure projects to slow down water outflow for flood and drought prevention

Two green infrastructure projects, the so-called ‘small retention in forests’, aimed at flooding and drought prevention, have been implemented across Poland. They use nature-based solutions to slow down water outflow from forested areas. The projects received EU funding under the 2007-2013 Operational Programme for Infrastructure and Environment.

PL2 – LIFE project on implementation of an air quality plan

An EU co-financed LIFE project in the Małopolska region which helped to implement an air-quality plan. The project was designed to provide support and advice on taking measures to tackle severe air pollution in Małopolska. The region has an air pollution problem resulting from the combustion of solid fuels in obsolete household boilers.

PL3 – Project on rights and obligations for nature conservation

The EU co-financed project ‘You have the right to effective protection for nature’ was implemented to enhance knowledge and improve cooperation on nature protection between judicial and enforcement authorities. The project helped authorities and the public to deepen their knowledge on rights and obligations related to nature conservation.

PL4 – National fund for spending environmental income

The National Fund manages funding collected from environmental fees and penalties, product fees, concessions for use of environmental resources, and income from the sale of greenhouse gas allowances. This funding is spent on loans and grants for waste-water projects, disaster prevention (especially flood protection and landslide prevention), waste management, rehabilitation of contaminated sites, energy efficiency and renewable energies, nature conservation measures and raising public awareness. The selection of projects is based on an annual priority list setting out measures to be supported in the following year and detailed conditions for project selection.

PL5 – Developing the market for electric, compressed natural gas (CNG) and liquid natural gas (LNG) cars

Poland is putting a great deal of emphasis on developing the market in electric, compressed natural gas (CNG) and liquid natural gas (LNG) cars. The government has set a very ambitious target: over a million electric vehicles on the road by 2025.

²² http://ec.europa.eu/environment/eir/pdf/report_pl_en.pdf

Portugal

<i>Examples of good practice noted in EIR summary report²³</i>		<i>Key themes/ categories</i>
PT1	Good examples in environmental governance	Governance
PT2	The Environmental Funding Programme	Funding
PT3	Good measures on green public procurement	GPP
Other favourable points in the report		
PT4	National Environmental Education Strategy	Sustainability
PT5	Coalition for Green Growth	Biodiversity
PT6	Lisbon green infrastructure activities	Green infrastructure
PT7	Permanent Forest Fund	Funding
PT8	Sustainable Cities 2020 Strategy	Sustainable cities
PT9	'Sustainability and Efficiency in the Use of Resources' programme	Funding
PT10	The GoodAfter online supermarket	Circular economy

PT1 - Good examples in environmental governance

Portugal was noted for several good examples in environmental governance: iFAMA (Single Platform for Inspection and Monitoring in the areas of Agriculture, Sea and Environment); E-GAR (platform for information accompanying waste shipments); and the Single Environmental Permitting Platform (to run the Single Environmental Permitting Regime).

PT2 – The Environmental Funding Programme

The Environmental Funding Programme is an important investment tool in the fields of climate change, the circular economy and habitat development. It began operating in 2017 and in that year alone over €41 million was invested in projects related to climate change, circular economy, nature conservation and environmental awareness.

PT3 – Good measures on green public procurement

The Portuguese government has adopted measures to promote green public procurement and a more sustainable use of resources in public administration. Measures include reducing the use of paper and single-use plastics and limiting the acquisition of fossil fuel.

The 2020 National Strategy sets targets for the National System for Public Procurement, which involves most public bodies. The target set was to integrate environmental criteria in 60% of contracts and 60% of procurement value by 2020. In addition, similar targets were set for state-owned companies, at 40%.

A related measure is the SIMPLEX programme for dematerialisation of government procedures.

²³ http://ec.europa.eu/environment/eir/pdf/report_pt_en.pdf

PT4 – National Environmental Education Strategy

The National Environmental Education Strategy for 2017- 2020 (ENEA 2020) was adopted in 2017 and aims to establish a collaborative, strategic and cohesive commitment to environmental literacy in Portugal. The actions envisaged in this strategy are based on the pillars: i) decarbonising society; ii) making the economy circular; and iii) valuing the territory.

PT5 – Coalition for Green Growth

The Coalition for Green Growth, formed in 2014 by a large number of private and public partners, and the subsequent "Green Growth Commitment" adopted by the Portuguese Government in 2015, include: (i) work on implementing nature-based solutions against the risk of natural disasters such as floods, (ii) implementing the Business and Biodiversity Strategy, and (iii) promoting agro-industry practices that sustain farming systems of high natural value. The initiative on Business and Biodiversity is a Portuguese national platform that aims to promote the introduction of biodiversity strategies in businesses through voluntary arrangements.

PT6 – Lisbon green infrastructure activities

The Lisbon Strategy for 2010-2024 has three main objectives for the city: (i) city regeneration: rehabilitation of vacant buildings and degraded city districts and green areas, to reverse depopulation; (ii) adaptation to climate change: focusing on the challenges posed by climate change and the consequent natural vulnerabilities (such as flooding), as well as on energy efficiency, reducing the number of vehicles in circulation and increasing the amount of land given over to green areas; and (iii) green connectivity: creating a network of green areas and green corridors for recreational activities and the protection, appreciation and promotion of biodiversity and of natural and cultural landscapes. This strategy has increased the size and improved the quality and connectivity of green areas in Lisbon, thanks to cycle lanes, bicycle-friendly streets, ecological corridors and allotments. The green corridor networks and informal open areas such as allotments are accessible to urban residents, workers and tourists. It is noted that there is still room for improvement in implementing these measures.

The Master Development Plan for Lisbon aims to ensure the continuity and complementarity of natural and semi-natural systems in the urban territory. The city also has a target to increase 20% of its biodiversity by 2020.

PT7 – Permanent Forest Fund

Portugal has a Permanent Forest Fund (FFP) to finance sustainable forest management.

PT8 – Sustainable Cities 2020 Strategy

The Sustainable Cities 2020 Strategy in 2015. This guiding document provides municipalities, inter-municipal bodies and other urban stakeholders with a roadmap on urban sustainability for the next EU funding cycle, which runs up to 2020. The document outlines a set of non-binding strategic guidelines to be adopted by Portuguese cities and towns. These lay the foundations on which Sustainable Cities 2020 can be put into practice, through the launch of a range of tools promoting its implementation. The strategy reinforces the strategic role of cities in urban regeneration and restoration, the urban environment, low carbon, climate change, and risks.

PT9 – 'Sustainability and Efficiency in the Use of Resources' programme

There is a national Operational Programme dedicated to the environment: the OP 'Sustainability and Efficiency in the Use of Resources' (POSEUR). It has a budget of €2.6 billion and channels investment in the environment through the Cohesion Fund in Portugal. This programme is designed to anticipate and adapt to global changes in the field of energy,

climate change and more efficient resource use. It takes a dynamic approach that links competitiveness and sustainability, in line with the Europe 2020 strategy.

PT10 – The GoodAfter online supermarket

The GoodAfter online supermarket, which is paving the way for large-scale food waste prevention and recycling.

Romania

<i>Examples of good practice noted in EIR summary report²⁴</i>		<i>Key themes/ categories</i>
RO1	The LIFE project 'Connect Carpathians'	Biodiversity
Other favourable points in the report		
RO2	Fleet renewal scheme	Environmental funding
RO3	European Investment Bank loan to a PET Fibre recycling plant	Environmental funding, circular economy
RO4	Mobile app for reporting of cases affecting habitats/species	Citizen science, complaint handling

RO1 – The LIFE project 'Connect Carpathians'

The LIFE project 'Connect Carpathians – Enhancing landscape connectivity for brown bear and wolf through a regional network of NATURA 2000 sites in Romania' aims at enhancing landscape connectivity within an ecological corridor located in western Romania. It consists of a network of Natura 2000 sites and is the only route through which flagship species such as bears and wolves can move between the two areas.

RO2 – Fleet renewal scheme

A three-year fleet renewal scheme was launched in 2017, which includes incentive bonuses for scrappage, and for buying electric and hybrid vehicles and vehicles with CO₂ emissions lower than 98 g/km.

RO3 – European Investment Bank loan to a PET Fibre recycling plant

The EIB (European Investment Bank) is providing a €7.5 million EFSI (European Fund for Strategic Investments) loan to GreenFiber International SA, a producer of recycled PET fibres, used in furniture, cars, clothes, and in construction. This circular economy project will help create 280 full-time jobs and will increase the amount of waste collected and processed in Romania by over 50,000 tonnes per year.

RO4 – Mobile app for reporting of cases affecting habitats/species

In 2018, the National Environmental Guard launched INCOLAB – a mobile application that allows citizens to report cases that might affect protected habitats or species in certain protected area (such as dead animals, poaching, destroyed nets, cutting of trees, fires and pollution) to responsible authorities.

²⁴ http://ec.europa.eu/environment/eir/pdf/report_ro_en.pdf

Slovakia

<i>Examples of good practice noted in EIR summary report²⁵</i>		<i>Key themes/ categories</i>
SK1	Improvements in the status of species and habitats	Biodiversity
SK2	Preparation of the new Slovak 2030 environment strategy	Circular economy
SK3	New compliance check to verify projects for EU co-financing	Funding
SK4	Two Slovak LIFE nature/information projects among the 28 best projects	Biodiversity
Other favourable points in the report		
SK5	An action plan for development of electro-mobility and a strategy for low carbon development to 2030	Climate
SK6	Citizens' initiative 'we are the forest'	Biodiversity

SK1 – Improvements in the status of species and habitats

Improvements in the status of species and habitats have recently been reported in Slovakia, following the enlargement of the country's terrestrial Natura 2000 network under the Birds and Habitats Directives.

SK2 – Preparation of the new Slovak 2030 environment strategy

Analytical work by the Slovak Institute for Environmental Policy, which cooperates with the OECD and the World Bank, is feeding into the preparation of the new Slovak 2030 environment strategy. In addition, the 2030 economic policy will introduce an updated raw materials policy which covers circular economy principles.

SK3 – New compliance check to verify projects for EU co-financing

A new compliance check unit under the Ministry of the Environment verifies projects to be co-financed by EU funds using the methodology developed with the European Investment Bank and the Joint Assistance to Support Projects in European Regions.

SK4 – Two Slovak LIFE nature/information projects among the 28 best projects

Two Slovak projects qualified among the 28 best LIFE nature/information projects in 2016-2017.

SK5 – an action plan for development of electro-mobility and a strategy for low carbon development up to 2030

An action plan for the development of electro-mobility as well as a strategy for low carbon development up to 2030, are both under preparation.

²⁵ http://ec.europa.eu/environment/eir/pdf/report_sk_en.pdf

SK6 – Citizens’ initiative ‘we are the forest’

One of the most visible environmental initiatives is ‘We are the forest’ — a citizens’ initiative to fight against deforestation in protected areas. This has set out ‘10 commandments’ for the protection of forests in the country.

Slovenia

<i>Examples of good practice noted in EIR summary report²⁶</i>		<i>Key themes/ categories</i>
SL1	Circular economy projects	Circular economy
SL2	Already exceeded the 2020 municipal waste recycling target of 50%	Waste management
SL3	New 2018 decree on green public procurement	GPP
SL4	One of the highest shares of environmental tax revenues in the EU	Environmental taxation
Other favourable points in the report		
SL5	2030 development strategy to achieve a high quality of life for all	Sustainability
SL6	Measures to develop the electric car market	Climate
SL7	Pollution and resources taxes	Taxation
SL8	Green tourism and sustainable development	Sustainability
SL9	One third of Slovenian farmland under RDP contracts to improve biodiversity, water & soil management	Funding

SL1 - Circular economy projects

Several circular economy projects are included in the European Circular Economy Stakeholder Platform's website, e.g. Ljubljana's project turning invasive plants into recycled paper, and the Econyl project which is collecting and reprocessing used nylons, mainly from the fishing industry, into an innovative ecological material.

SL2 - Already exceeded the 2020 municipal waste recycling target of 50%

With a 58% recycling rate for 2017, Slovenia has already exceeded the 2020 municipal waste recycling target of 50% and is now focusing on the post-2020 recycling targets. 32 sites will help to divert waste away from landfilling. Examples include the network of reuse and waste prevention centres (planned capacity 5000 t/y) and the expanding set of recycling/composting plants.

A separate municipal waste collection in Ljubljana and awareness-raising campaigns for citizens to improve separate collection and increase recycling rates in the short term, are noted in the EIR.

SL3 - New 2018 decree on green public procurement

A new 2018 decree on green public procurement (GPP) extended the product and service categories for which GPP is mandatory to 20 and defined objectives for each product or service (e.g. 50% of office paper and hygienic paper products should come from sustainably managed forests).

SL4 – One of the highest shares of environmental tax revenues in the EU

A tax regime creating favourable conditions to protect the environment as Slovenia boasts one of the highest shares of environmental tax revenues in gross domestic product across the EU.

SL5 – 2030 development strategy to achieve a high quality of life for all

²⁶ https://ec.europa.eu/environment/eir/pdf/report_si_en.pdf

Slovenia's 2030 development strategy, adopted in December 2017, provides a framework to achieve a high quality of life for all. The 2004 spatial development strategy emphasises the ecological, environmental, social and structural purposes of green and open spaces. It requires cities to prepare 'green systems' that include elements of green infrastructure. City municipalities adopted 'sustainable urban development strategies' in 2015 and implementation plans in the spring of 2017, both of which include measures for the use of green infrastructure. A 2050 spatial development strategy is being prepared, which includes a strategic national green infrastructure network of multifunctional spatial and landscape elements. It also includes guidelines for integrating green infrastructure into regional and local spatial plans. Each development goal under the strategy has regularly assessed performance indicators. For example, performance indicators for Goal 8 are as follows: material productivity; share of renewable energy in gross final energy consumption; and GDP per total greenhouse gas emissions; and for Goal 9: utilised agricultural area; biochemical oxygen demand in rivers; and a new synthetic indicator Ecological Footprint (EF) as one of the most widely used and recognised integrated sustainability indicators for human pressure on ecosystems, with the ambitious target of 20% reduction by 2030. EF (including the 20% reduction target) is also proposed as key indicator for the new national environmental action programme up to 2030.

SL6 – Measures to develop the electric car market

Slovenia is focusing on developing its car market. An estimated 1% of cars in circulation will be electric cars by 2020 and this will rise to an estimated 16.9 % by 2030. Slovenia has good recharging facilities in place — one public recharging point for every 1.64 electric vehicles. The development of the electric car market is supported by currently applied or planned measures, such as tax exemptions and benefits and incentives to buy and use electric cars.

SL7 – Pollution and resources taxes

Slovenia has eight pollution and resources taxes in place. These taxes are on: CO2 emissions:

- the use of lubricating oils and fluids;
- environmental pollution due to the generation of waste with end-of-life tyres resulting from the use of tyres;
- environmental pollution due to the use of packaging and wrapped goods and consequently the generation of packaging waste;
- environmental pollution caused by the use of electrical and electronic equipment, including portable batteries and accumulators, and consequently the generation of electrical and electronic equipment waste;
- environmental pollution due to the use of volatile organic compounds;
- environmental pollution caused by waste water discharge; and
- environmental pollution from the landfilling of waste.

SL8 – Green tourism and sustainable development

Tourism is a big industry in Slovenia and the country is marketed as providing 'green, active and healthy' experiences. Green tourism and sustainable development are at the core of Slovenia's 2017-2021 sustainable growth tourism strategy.

SL9 – One third of Slovenian farmland under RDP contracts to improve biodiversity and water and soil management

Under its RDP, roughly one third of Slovenian farmland is covered by funded contracts to improve biodiversity and water and soil management.

Spain

<i>Examples of good practice noted in EIR summary report²⁷</i>		<i>Key themes/ categories</i>
ES1	A police unit to combat environmental crime and a specialised Environmental Prosecution Authority	Compliance assurance
ES2	LIFE projects for designating a network of marine Natura 2000 sites	Biodiversity
ES3	Good data gathering on the waste water Directive	Water
Other favourable points in the report		
ES4	High spend under the Circular Economy Strategy and water reuse a significant element	Circular economy
ES5	Strategic plan on nature and biodiversity tourism	Biodiversity
ES6	Development of natural capital accounts	Nature
ES7	Spanish Business and Biodiversity Initiative	Biodiversity
ES8	Sustainable and Integrated Urban Development funding initiative	Sustainable cities
ES9	Second national plan for green public procurement	GPP
ES10	National operational programme for Sustainable Growth	Funding
ES11	Sustainable Development Goals (SDGs)	SDGs

ES1 – A police unit to combat environmental crime and a specialised Environmental Prosecution Authority

In the field of environmental compliance assurance, Spain has created a police unit to combat environmental crime and a specialised Environmental Prosecution Authority. The two have already been successful in investigating and prosecuting organised environmental crime.

ES2 – LIFE projects for designating a network of marine Natura 2000 sites

The LIFE Programme (LIFE+ project INDEMARES and LIFE integrated project INTEMARES) has been used to designate a consolidated network of marine Natura 2000 sites, with the active participation of the sectors involved and research as a basic tool for decision-making.

ES3 – Good data gathering on the waste water Directive

The Ministry for the Environment has created a solid data-gathering system which is very similar to the WISE-Water reporting tool but also integrates information on the Waste Water Directive. This new system will facilitate sending data from the regional to the national level and incorporating the data in the EU WISE system.

ES4 – High spend under the Circular Economy Strategy and water reuse a significant element

The strategy includes an action plan for 2018-2020 and an investment of around €632 million. Water reuse will be a major component, with 57% of the budget earmarked for such actions.

The country has a national ‘Pact for a Circular Economy’ - 300 stakeholders have signed up to it and committed to its 10 points of action to promote the transition towards a circular economy.

²⁷ http://ec.europa.eu/environment/eir/pdf/report_es_en.pdf

ES5 – Strategic plan on nature and biodiversity tourism

There is a Spanish 2014-2020 strategic plan on nature and biodiversity tourism. Under this plan, Spain has developed good practice guidelines on wild watching certain protected species and set up a system for recognition of the sustainability of nature tourism in Natura 2000 sites.

ES6 – Development of natural capital accounts

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

ES7 – Spanish Business and Biodiversity Initiative

The Spanish Business and Biodiversity Initiative is led by the Biodiversity Foundation, which depends on the Ministry for the Ecological Transition. It aims to involve the business sector more, to integrate natural capital protection into business and management policies, to achieve the international Aichi biodiversity targets.

ES8 – Sustainable and Integrated Urban Development funding initiative

In the EU funding period 2014-2020, Spain has designed a comprehensive initiative for local administrations to promote Sustainable and Integrated Urban Development, called EDUSI and launched by the Ministry for Finance. It continues the tradition in Spain of using EU funding for urban regeneration in many cities and towns, while placing the emphasis on sustainability.

ES9 – Second national plan for green public procurement

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

ES10 – National operational programme for Sustainable Growth

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

ES11 – Sustainable Development Goals (SDGs)

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

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

Sweden

<i>Examples of good practice noted in EIR summary report²⁸</i>		<i>Key themes/ categories</i>
SE1	High performance on eco-innovation	Eco-innovation
SE2	Expertise on habitat restoration	Eco-systems and their services
SE3	A high use of alternative fuels	Climate
SE4	City initiatives on the environment and climate change	Sustainable cities
Other favourable points in the report		
SE5	Environmental taxes: air travel, NO _x (stationary sources), SO ₂ , and on chemicals in certain electronics; virtual removal of fossil fuel subsidies	Green taxation
SE6	Regional Development Programme focus on preserving/improving ecosystems	Nature
SE7	Support initiative - 'The Industrial Leap' – for the shift towards zero greenhouse gas emissions	Climate
SE8	Green Infrastructure – measures in planning, building, agriculture, and forestry	Natural capital
SE9	Reducing fishing by-catches	Funding
SE10	Extended producer responsibility' scheme for pharmaceuticals	EPR
SE11	Climate actions	Climate
SE12	Extensive work on climate change adaptation	Climate
SE13	Trans-national partnerships	Circular economy
SE14	A plan to ban intentionally used microplastics nationally	Circular economy
SE15	Circular economy transition	Circular economy

SE1 – High performance on eco-innovation

Sweden's performance with regard to eco-innovation is noted as "outstanding". The 2017 Global Cleantech Innovation Index report states that Sweden shows evidence of a highly developed innovation ecosystem, which forms the foundation of a successful cleantech-specific start-up sphere.

Sweden's cleantech innovation is highly incentivised by government policy, and benefits from the large number of domestic cleantech investors, relative to GDP. One example (as also reported in the last EIR) is Swedish Cleantech, a business-to-business platform for Swedish companies aiming to contribute to the development, commercialisation and export of Swedish environmental technology.

Vinnova is the Swedish government agency that administers state funding for research and development. An example of a Vinnova initiative is 'challenge-driven innovation', a programme that aims to solve social challenges that require broad cooperation.

²⁸ http://ec.europa.eu/environment/eir/pdf/report_se_en.pdf

The National Innovation Council has contributed to the five innovation partnership programmes aiming to find innovative solutions to today's societal challenges as well as strengthening Sweden's competitiveness. There is a clear focus on eco-innovation and the circular economy in these partnership programmes.

The Swedish Government presented a re-industrialisation strategy, called 'smart industry'. The strategy has four focus areas, of which one is sustainable production.

The percentage of SMEs that offer green products or services is significantly higher than the EU average. Sweden ranked 1st on the 2018 European Innovation Scoreboard, with a 5.5% increase since 2010.

SE2 – Expertise on habitat restoration

Sweden has a high level of expertise in restoring habitats and various restoration activities are giving good results, e.g. on grasslands, bogs and sand dunes. The area covered by old forest and protected forest in Sweden is increasing.

SE3 – A high use of alternative fuels

The use of alternative fuels in new passenger cars has increased considerably in the past few years. The share of new cars using alternative fuels in 2016 was twice that in 2013. Use of alternative fuels is also encouraged in public transport, although the most common alternative fuel is biodiesel. Sweden is one of the few EU countries where more than 5% of new cars use alternative fuels.

SE4 – City initiatives on the environment and climate change

Swedish municipalities are generally involved in EU initiatives related to environmental protection and climate change.

Växjö was the first Swedish city to win the European Green Leaf title. It was also the first to use biomass for district heating and one of the first to start working on the UN 2030 Agenda for Sustainable Development. Växjö was also committed to being fossil-fuel free over 20 years ago, with the target being set for 2030. The city has made improvements to its public transport system, increasing the number of buses by 40% and switching to a biogas (from food waste) fleet. The city has various protected natural areas and green spaces, with strategies to conserve them and with accessibility to inhabitants through creating cycle paths and walkways. It is also developing urban agriculture to ensure that its people have access to local and organic produce. Växjö adopted an action plan against traffic noise for 2015-2020, which includes measures such as using silent asphalt and including noise-related requirements in public tenders.

A project in Gothenburg on fossil free energy districts is taking place, with a budget of €4.7 million. It covers energy efficiency and smart energy management in public infrastructure and housing; moderating the demand for heating and cooling; and renewable-based heating/cooling of buildings and neighbourhoods.

SE5 – Environmental taxes

Sweden has both a NOx charge (from stationary sources) and an SO2 tax, both introduced in the early 90s, which has led to the reduction of these air pollutants. The tax is reimbursed to these plants, favouring those which are more energy efficient. Also, a tax on chemicals in certain electronics was introduced in 2017, as was a tax on air travel and a system of indexation of environmental taxes with the Consumer Price Index.

Meanwhile, fossil fuel subsidies decreased in the past decade and almost disappeared by 2016.

However, at the same time, Sweden's overall revenue from environment-related taxes remains just below the EU average. The government attributes this to partially be due to the intended behavioural impact of the taxes.

SE6 – Regional Development Programme focus on preserving/improving ecosystems

The RDP for Sweden focuses on restoring, preserving and improving ecosystems related to agriculture and forestry. More than 28% of agricultural land will come under contracts for biodiversity and around 33% for better water management.

SE7 – Support initiative - 'The Industrial Leap' – for the shift towards zero greenhouse gas emissions

The Swedish Government launched a support initiative for Swedish industry, called 'The Industrial Leap'. In total, SEK 300 million per year is to be invested between 2018 and 2040 to support Swedish industry in the shift towards zero emissions of greenhouse gases.

SE8 – Green Infrastructure – measures in planning, building, agriculture, and forestry

The 2013 Swedish strategy for biodiversity and ecosystem services includes a number of proposed legislative changes with relevance to green infrastructure. It commissioned Sweden's 21 Country Administrative Boards to develop regional action plans for green infrastructure by 2017. (Progress on these is underway, but there are reportedly significant differences between regions.)

Work on mainstreaming green infrastructure is ongoing. The Swedish Board of Agriculture has started work on managing, restoring and creating habitats in the landscape, and on building transition zones between forestry and agricultural land to support green infrastructure and biodiversity.

The development of green infrastructure and related initiatives is funded from various sources in Sweden and has been allocated relatively large resources in recent years. In addition to EU funding, the Swedish Government provides state funding for green infrastructure via the EPA, the County Administrative Boards and different foundations that manage national parks and other protected areas. In 2016 alone, approximately €42 million was granted, some 35% of which was allocated to nature maintenance and restoration, in particular of pastures and meadows.

Guidance on ecosystem services and green infrastructure in planning and building is currently being developed.

The state-owned forestry company Sveaskog's system of 'eco-parks' cover large connected forested areas of particular ecological value. In an eco-park, at least 50% of the productive forest must be used for conservation purposes, more specifically to protect and actively support the function of its natural values. However, despite these and other efforts, the protection of valuable forests is listed as a key challenge in Sweden's own progress report on its environmental objectives.

In recent years, the ecosystem service concept has been a focal point in Sweden's work relating to sustainable urban development. It is also being integrated into environmental impact

assessments and land-use plans. Work on green infrastructure in water management, transport infrastructure and tourism is ongoing.

An example of innovative funding for green infrastructure was initiated by the City of Gothenburg in 2013. As the world's first initiative of this kind at municipal level Gothenburg issued green bonds earmarked for investment in 'green' projects, including various green infrastructure-related projects.

SE9 – Reducing fishing by-catches

Under the European Maritime and Fisheries Fund (EMFF), one of the Swedish programme's main objectives is to facilitate implementation of the discard ban. Support from the fund will boost investments aimed at reducing and handling by-catches.

The EMFF supports initiatives run by local groups to promote sustainable fisheries and aquaculture as well as economic growth and job-creation. Projects financed by the EMFF typically involve the marketing of fisheries products (local products and shorter distribution circuits) and the diversification of fisheries businesses (coastal tourism and restaurants).

SE10 – Extended producer responsibility' scheme for pharmaceuticals

Amongst other categories, Sweden also has 'extended producer responsibility' schemes for paper and pharmaceuticals.

SE11 – Climate actions

The Swedish Parliament's latest national Climate Policy Framework, adopted in June 2017, has targets of:

- No net emissions of greenhouse gases by 2045 and thereafter negative emissions. This means emissions from activities are to be at least 85% lower by 2045 compared to 1990 levels.
- By 2030, non-ETS emissions should be at least 63% lower than emissions in 1990.
- By 2040, non-ETS emissions should be at least 75% lower than emissions in 1990.
- Emissions from domestic transport to be reduced by at least 70% by 2030.

Sweden had lower emissions than its annual emission allocations in each of the years 2013-2017. Sweden has cancelled its spare units, rather than banking them, in order to enhance the environmental integrity of the system. Transport emissions in Sweden decreased by 7% from 2013 to 2016.

SE12 – Extensive work on climate change adaptation

Under the "National strategy for adaptation to climate change, Sweden is carrying out work in sectors that are of relevance to climate change adaptation such as biodiversity and ecosystem services, fresh water supply, health, infrastructure, rural businesses, technical supply systems, and urban areas. In 2018, 32 national authorities and the administrative boards of the regions (County Administrative Boards) were assigned through an ordinance to develop action plans. 17 of these agencies had already developed, or were in the process of developing, action plans for the sectors for which they are responsible. Since 2009, the CABs are responsible for climate adaptation at regional level and supporting the adaptation work of municipalities. All 21 regions have undertaken climate impact studies and adopted regional action plans. In the National strategy, a five-year policy cycle is established for the strategy, this cycle includes implementation, follow-up, evaluation and revision. The Expert council for adaptation has the task of monitoring and evaluating the work on adaptation. The council will also provide evidence for the focus of the national work on climate change for the revision of the strategy, planned in 2023.

SE13 – Trans-national partnerships

The Sweden-India Innovation Partnership for a Sustainable Future, signed by Sweden and India's Prime Minister in 2018 holds the circular economy high among its priorities. According to the agreement, Sweden and India will work together to develop and implement joint innovation projects. Indian and Swedish businesses and other key innovation players are set to work together to find solutions to common challenges in several strategic areas, including the circular economy.

SE14 – A plan to ban intentionally used microplastics nationally

The Swedish Government advocated for an even more ambitious EU Strategy for Plastics, and asked for a complete ban on intentionally used microplastics in the EU. Sweden is currently planning to adopt a national ban.

SE15 – Circular economy transition

In 2016, the Swedish Government examined policy instruments that prevent waste and promote a circular economy via an inquiry. The report that summarised the main findings of the exercise indicated a lack of clearly stated goals and ambitions as well as of a strategic context that would make it possible for policy makers to support the circular transition in Sweden. The Swedish Government has set up a task force dealing with circular economy. The Academy of Engineering Sciences (IVA) — composed of decision-makers and experts from business, industry, academia and public administration — is gathering best practices on resource efficiency and the circular economy in Sweden to help trigger change at the ground level. A new project called 'Resource effectiveness and the circular economy' aims to create a common platform and draw conclusions about Sweden's future policies in the sector.

UK

<i>Examples of good practice noted in EIR summary report²⁹</i>		<i>Key themes/ categories</i>
UK1	Among best performing for company RE measures	Industry
UK2	Central Scotland Green Network – largest green infrastructure project in EU	Green infrastructure
UK3	Increase of alternative fuel passenger cars and a zero diesel differential	Climate
Other favourable points in the report		
UK4	Ecosystem services for everyday decision making	Nature
UK5	Circular economy actions	Circular economy
UK6	One of the leaders on GPP	GPP
UK7	New legislation to tackle diffuse pollution under the Nitrates Directive	Water
UK8	Green infrastructure investment by water companies	Green infrastructure

UK1 – Among best performing for company RE measures

The UK is among the best-performing Member States on resource efficiency. Only 4% of British companies have not taken any resource-efficiency measures and only 12% say they do not intend to take any further measures.

UK2 - Central Scotland Green Network – largest green infrastructure project in EU

The Central Scotland Green Network aims, among others, to include an integrated habitat network and improve landscape quality. It runs until 2050 and is by far the largest green infrastructure project in Europe, covering the whole of Scotland’s central belt and involving 19 local authorities.

In the UK in general, green infrastructure measures are implemented by or funded through NGOs or wider civil society, such as the ‘Living Landscapes’ initiative through which 150 landscapes are restoring wildlife. Similarly, a growing number of businesses now take ‘natural capital’ approaches as they recognise the benefits of having green infrastructure in their developments and assets.

London has several related initiatives, including the 2050 London Infrastructure Plan, which supports green infrastructure, and the London Plan, which encourages the protection and maintenance of trees and the planting of new trees and woodlands.

Scotland has been a leader in incorporating green infrastructure into forest policy and management through its Forest Habitat Network initiative.

UK3 – Increase of alternative fuel passenger cars and a zero diesel differential

The use of alternative fuels in new passenger cars sold in the UK has increased considerably over the past few years. Furthermore, the UK is the first Member State that has been able to reduce the ‘diesel differential’ (the price of diesel vs. petrol) to zero.

²⁹ http://ec.europa.eu/environment/eir/pdf/report_gb_en.pdf

UK4 – Ecosystem services for everyday decision making

Under the 'living with environmental change' initiative the ecosystem task force (ETF) aims to make evidence, knowledge and tools available to practitioners in a form that supports everyday decision making for the sustainable management of natural resources. The ETF will examine outputs from the national ecosystem assessments (NEAs), BESS (biodiversity, ecosystem services and sustainability), the 'insect pollinators' initiative and ESPA (Ecosystem services for poverty alleviation) projects with a view to exchanging knowledge on the projects and making the best use of their results so that they can advise businesses and local authorities.

UK5 – Circular economy actions

In 2018, the UK committed through its 25 Year Environment Plan to: make sure resources are used more efficiently and kept in use for longer to minimise waste and reduce environmental impacts, by promoting reuse, remanufacturing and recycling; double resource productivity by 2050; and work towards eliminating all avoidable waste by 2050 and all avoidable plastic waste by 2042.

The 2016 updated Greening Government Commitment includes commitments to increase the sustainability of the government estate and includes a target to reduce overall waste arising by 32% and a target to increase recycling to 59% of all waste.

The Plastics Pact is a collaborative industry initiative led by WRAP on a national level. On an international level, a Commonwealth Clean Oceans Alliance (CCOA) has been established and a Global Plastics Action Partnership has been initiated which helps deliver the CCOA goals.

In 2017, the London Waste and Recycling Board published a strategic roadmap 'Towards a Circular Economy'. Studies commissioned by local authorities estimate potential benefits to the city of up to GBP 7 billion a year by 2036. Moreover, 12,000 new jobs in the areas of reuse, remanufacturing and materials innovation should be created by 2030 from the roadmap's measures.

In 2017, the Welsh government's economic action plan introduced the circular economy as a key target for investments. In particular, the action plan set up a GBP 6.5 million capital fund for 2019-2020 to promote the circular economy in the country.

The UK's landfill tax has started to produce clear results on reducing landfilling - a 75% decrease in 14 years. The tax, which is currently one of the highest in Europe, has effectively reduced the disposal of waste, thus increasing the recycling of dry materials and food waste. In addition, various new national targets have led to an increase in recycling, especially of dry goods.

The UK has an aggregates levy to reduce the negative environmental impacts of aggregate extraction and to serve as an incentive for recycling.

Local Authorities in Wales have been set local statutory recycling targets (reaching 70% for 2025) and in 2017/18 the municipal waste recycling rate in Wales was 63%.

UK6 – One of the leaders on GPP

The UK is noted as one of the leaders on GPP. GPP in the UK has 'mandatory minimum' and 'voluntary best practice' criteria for about 60 products. GPP targets are embedded in departmental and centralised procurement contracts through 'government buying standards'. All central government departments and their related organisations must ensure that they meet these mandatory standards.

UK7 – New legislation to tackle diffuse pollution under the Nitrates Directive

The UK has implemented new legislation in England to help tackle diffuse pollution from agriculture. The Reduction and Prevention of Agricultural Diffuse Pollution (England) Regulations 2018 are designed to complement and supplement the UK's implementation of Article 11(3)(h) of the Water Framework Directive, and the Nitrates Directive. The new rules apply to all agricultural land in England and cover two main activities in order to reduce and prevent diffuse water pollution from agricultural sources: the application and storage of fertilisers; and the management of soil and livestock.

UK8 – Green infrastructure investment by water companies

Several water companies have invested in green infrastructure. For example, the 'Upstream Thinking' management scheme by South West Water and EnTrade is an online trading platform that enables farmers to bid for Wessex Water funding for cover crops to reduce nutrient leaching.

AN GHNÍOMHAIREACHT UM CHAOMHNÚ COMHSHAOIL

Tá an Gníomhaireacht um Chaomhnú Comhshaoil (GCC) freagrach as an gcomhshaoil a chaomhnú agus a fheabhsú mar shócmhainn luachmhar do mhuintir na hÉireann. Táimid tiomanta do dhaoine agus don chomhshaoil a chosaint ó éifeachtaí díobhálacha na radaíochta agus an truaillithe.

Is féidir obair na Gníomhaireachta a roinnt ina trí phríomhréimse:

Rialú: Déanaimid córais éifeachtacha rialaithe agus comhlionta comhshaoil a chur i bhfeidhm chun torthaí maithe comhshaoil a sholáthar agus chun díriú orthu siúd nach gcloíonn leis na córais sin.

Eolas: Soláthraimid sonraí, faisnéis agus measúnú comhshaoil atá ar ardchaighdeán, spriocdhírthe agus tráthúil chun bonn eolais a chur faoin gcinnteoireacht ar gach leibhéal.

Tacaíocht: Bimid ag saothrú i gcomhar le grúpaí eile chun tacú le comhshaoil atá glan, táirgiúil agus cosanta go maith, agus le hiompar a chuirfidh le comhshaoil inbhuanaithe.

Ár bhFreagrachtaí

Ceadúnú

Déanaimid na gníomhaíochtaí seo a leanas a rialú ionas nach ndéanann siad dochar do shláinte an phobail ná don chomhshaoil:

- saoráidí dramhaíola (*m.sh. láithreáin líonta talún, loisceoirí, stáisiúin aistriúcháin dramhaíola*);
- gníomhaíochtaí tionsclaíocha ar scála mór (*m.sh. déantúsaíocht cógaisíochta, déantúsaíocht stroighne, stáisiúin chumhachta*);
- an diantalmhaíocht (*m.sh. muca, éanlaith*);
- úsáid shrianta agus scaoileadh rialaithe Orgánach Géinmhodhnaithe (*OGM*);
- foinsí radaíochta ianúcháin (*m.sh. trealamh x-gha agus radaiteiripe, foinsí tionsclaíocha*);
- áiseanna móra stórála peitрил;
- scardadh dramhuisece;
- gníomhaíochtaí dumpála ar farraige.

Forfheidhmiú Náisiúnta i leith Cúrsaí Comhshaoil

- Clár náisiúnta iniúchtaí agus cigireachtaí a dhéanamh gach bliain ar shaoráidí a bhfuil ceadúnas ón nGníomhaireacht acu.
- Maoirseacht a dhéanamh ar fhreagrachtaí cosanta comhshaoil na n-údarás áitiúil.
- Caighdeán an uisce óil, arna sholáthar ag soláthraithe uisce phoiblí, a mhaoirsiú.
- Obair le húdarás áitiúla agus le gníomhaireachtaí eile chun dul i ngleic le coireanna comhshaoil trí chomhordú a dhéanamh ar líonra forfheidhmiúcháin náisiúnta, trí dhírú ar chiontóirí, agus trí mhaoirsiú a dhéanamh ar leasúchán.
- Cur i bhfeidhm rialachán ar nós na Rialachán um Dhramhthrealamh Leictreach agus Leictreonach (DTLL), um Shrian ar Shubstaintí Guaiseacha agus na Rialachán um rialú ar shubstaintí a ídionn an ciseal ózóin.
- An dlí a chur orthu siúd a bhriseann dlí an chomhshaoil agus a dhéanann dochar don chomhshaoil.

Bainistíocht Uisce

- Monatóireacht agus tuairisciú a dhéanamh ar cháilíocht aibhneacha, lochanna, uisce idirchriosacha agus cósta na hÉireann, agus screamhuisecí; leibhéal uisce agus sruthanna aibhneacha a thomhas.
- Comhordú náisiúnta agus maoirsiú a dhéanamh ar an gCreat-Treoir Uisce.
- Monatóireacht agus tuairisciú a dhéanamh ar Cháilíocht an Uisce Snámha.

Monatóireacht, Anailís agus Tuairisciú ar an gComhshaoil

- Monatóireacht a dhéanamh ar cháilíocht an aeir agus Treoir an AE maidir le hAer Glan don Eoraip (CAFÉ) a chur chun feidhme.
- Tuairisciú neamhspleách le cabhrú le cinnteoireacht an rialtais náisiúnta agus na n-údarás áitiúil (*m.sh. tuairisciú tréimhsiúil ar staid Chomhshaoil na hÉireann agus Tuarascálacha ar Tháscairí*).

Rialú Astaíochtaí na nGás Ceaptha Teasa in Éirinn

- Fardail agus réamh-mheastacháin na hÉireann maidir le gáis ceaptha teasa a ullmhú.
- An Treoir maidir le Trádáil Astaíochtaí a chur chun feidhme i gcomhar breis agus 100 de na táirgeoirí dé-ocsaíde carbóin is mó in Éirinn.

Taighde agus Forbairt Comhshaoil

- Taighde comhshaoil a chistiú chun brúnna a shainnaint, bonn eolais a chur faoi bheartais, agus réitigh a sholáthar i réimsí na haeráide, an uisce agus na hinbhuanaitheachta.

Measúnacht Straitéiseach Timpeallachta

- Measúnacht a dhéanamh ar thionchar pleananna agus clár beartaithe ar an gcomhshaoil in Éirinn (*m.sh. mórfheicteoireacht forbartha*).

Cosaint Raideolaíoch

- Monatóireacht a dhéanamh ar leibhéal radaíochta, measúnacht a dhéanamh ar nochtadh mhuintir na hÉireann don radaíocht ianúcháin.
- Cabhrú le pleananna náisiúnta a fhorbairt le haghaidh éigeandálaí ag eascairt as tairmí núicléacha.
- Monatóireacht a dhéanamh ar fhorbairtí thar lear a bhaineann le saoráidí núicléacha agus leis an tsábháilteacht raideolaíochta.
- Sainseirbhísí cosanta ar an radaíocht a sholáthar, nó maoirsiú a dhéanamh ar sholáthar na seirbhísí sin.

Treoir, Faisnéis Inrochtana agus Oideachas

- Comhairle agus treoir a chur ar fáil d'earnáil na tionsclaíochta agus don phobal maidir le hábhair a bhaineann le caomhnú an chomhshaoil agus leis an gcosaint raideolaíoch.
- Faisnéis thráthúil ar an gcomhshaoil ar a bhfuil fáil éasca a chur ar fáil chun rannpháirtíocht an phobail a spreagadh sa chinnteoireacht i ndáil leis an gcomhshaoil (*m.sh. Timpeall an Tí, léarscáileanna radóin*).
- Comhairle a chur ar fáil don Rialtas maidir le hábhair a bhaineann leis an tsábháilteacht raideolaíoch agus le cúrsaí práinnfhreagartha.
- Plean Náisiúnta Bainistíochta Dramhaíola Guaisí a fhorbairt chun dramhaíl ghuaiseach a chosaint agus a bhainistiú.

Múscailt Feasachta agus Athrú Iompraíochta

- Feasacht chomhshaoil níos fearr a ghiniúint agus dul i bhfeidhm ar athrú iompraíochta dearfach trí thacú le gnóthais, le pobail agus le teaghlaigh a bheith níos éifeachtúla ar acmhainní.
- Tástáil le haghaidh radóin a chur chun cinn i dtithe agus in ionaid oibre, agus gníomhartha leasúcháin a spreagadh nuair is gá.

Bainistíocht agus struchtúr na Gníomhaireachta um Chaomhnú Comhshaoil

Tá an ghníomhaíocht á bainistiú ag Bord Iáinimseartha, ar a bhfuil Ard-Stiúrthóir agus cúigear Stiúrthóirí. Déantar an obair ar fud cúig cinn d'Oifigí:

- An Oifig um Inmharthanacht Comhshaoil
- An Oifig Forfheidhmithe i leith cúrsaí Comhshaoil
- An Oifig um Fianaise is Measúnú
- Oifig um Chosaint Radaíochta agus Monatóireachta Comhshaoil
- An Oifig Cumarsáide agus Seirbhísí Corparáideacha

Tá Coiste Comhairleach ag an nGníomhaireacht le cabhrú léi. Tá dáréag comhaltáí air agus tagann siad le chéile go rialta le plé a dhéanamh ar ábhair inní agus le comhairle a chur ar an mBord.

BEST PRACTICES

from the Environmental Implementation Review 2019 across the EU 28 Countries

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