Environment Report

Environmental Policy

Sustainable Governance Indicators 2019

SGI Sustainable Governance Indicators

BertelsmannStiftung

Indicator

Environmental Policy

Question

How effectively does environmental policy protect and preserve the sustainability of natural resources and quality of the environment?

41 OECD and EU countries are sorted according to their performance on a scale from 10 (best) to 1 (lowest). This scale is tied to four qualitative evaluation levels.

10-9 = Environmental policy effectively protects, preserves and enhances the sustainability of natural resources and quality of the environment.
8-6 = Environmental policy largely protects and preserves the sustainability of natural resources and quality of the environment.
5-3 = Environmental policy insufficiently protects and preserves the sustainability of natural resources and quality of the environment.
2-1 = Environmental policy has largely failed to protect and preserve the sustainability of natural resources and quality of the environment.

Denmark

Score 9

Denmark is considered to be a front-runner in environmental policy. According to the 2018 Climate Change Performance Index of the Climate Action Network Europe, Denmark ranked 17 out of 178 countries. Agriculture's contribution to ground and water pollution has occasionally become a political issue in Denmark.

Denmark is doing relatively well when it comes to renewable energy, as 23% of energy consumption is renewable, which puts Denmark in eighth place among OECD countries. Water usage is relatively low in Denmark compared to other OECD countries.

While carbon dioxide emissions measured on the basis of Danish production have been reduced by about 20% since the mid-1990s, the reduction is only about 5% when measured in terms of consumption. Hence, while Danish production has become more carbon dioxide friendly this is largely mitigated by imports from countries where production is less carbon dioxide-friendly. Measured in terms of production Denmark has emissions per capita that rank it eighth highest in the OECD and measured in terms of consumption seventh highest.

Denmark has set rather ambitious goals including that energy production should be fossil free by 2050. Several sub-targets have been set to reach this goal. While the long-term goal is for Denmark to be independent of fossil fuels by 2050, the government has also called for green realism in environmental policy and there are signs that some environmental goals will be softened.

In June 2018, all parties in the Folketing approved an energy agreement, which aims

to have 100% of Danish electricity produced by renewable sources by 2030 . Concretely, three large offshore windfarms are planned. Taxes on electricity will be reduced for various purposes. Money will also be budgeted for green transport, meaning more electric cars.

It is expected that environmental policy will be an important issue in the upcoming parliamentary elections, which must take place before June 2019. On 9 October 2018, the government put forward a new climate plan with 14 specific proposals, mostly concerning the phasing out of petrol and diesel cars by 2030, and earlier for buses and taxis.

Citation:
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Rockwool Fondensforskningsenhed, 2014, Measuring Denmark's CO2 emissions. Copenhagen.

Environmental Performance Index. Country profile: Denmark. http://www.epi.yale.edu/epi/country-profile/denmark (accessed 7 October 2015, re-accessed 23 October 2016).

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Ministry of Environment and Food, Sammen on en grønnere fremtid, https://mfvm.dk/nyheder/nyhed/nyhed/sammen-om-en-groennere-fremtid/ (Accessed 9 October 2018).

"Dansk Energi roser partierne bag ny energiaftale for at tage ansvar og gøre danskernes strøm grønnere og billigere til gavn for både økonomi og samfund." https://www.danskenergi.dk/nyheder/pressemeddelelse/energiaftale-gor-gronnere-danmark-elektrisk (Accessed 7 November 2018).

Estonia

Score 9

The Ministry of Environment develops an integrated system of environmental protection that covers the entire country and ensures the preservation of a clean environment and sustainable use of natural resources. However, the dependence of the economy on energy-heavy technologies remains a challenge. On the other hand, Estonia is sparsely populated and possesses significant natural resources – wetlands, forests, and protected areas for flora and fauna.

On climate protection, the country is progressing in line with international targets. It has reduced greenhouse-gas emissions by half in a little over 20 years, even as the size of its economy has doubled. By 2050, Estonia aims to decrease greenhouse gas emissions by nearly 80% compared to the 1990 level. The share of renewable energy in Estonia today is already at 25%, close to the European Union's 2030 target. The

country's heavy reliance on oil shale (which provides the bulk of Estonian power production) remains a challenge due to its heavy carbon footprint. In 2017, Estonia had the most carbon intensive economy in the OECD.

Estonia has invested significantly in renovation and building of the water management infrastructure. As a result, water pollution has decreased and the quality of tap water has improved. However, most of the country's lakes and rivers are very small, and therefore highly sensitive to any pollution whatsoever.

More than half of Estonia's territory is forested. Commercial forests account for 70% of all forest area, while the remaining third has been placed under various protection regimes. Although the volume of forests has increased over the last 50 years, deforestation and clear-cutting has intensified in recent years. This has triggered several public protests against clear-cutting and for more responsible forest management.

Finally, Estonia has a rich biological diversity, being home to a wide variety of wildlife species. To keep the population of its main species stable, the government regulates hunting through licensing and limits. All protected objects and species form a Natura 2000 network. About half of the Natura 2000 areas are wetlands and another half are dry land. Dry land protected areas cover about 17% of the Estonian mainland. One of the main risks for biodiversity is increasing traffic and road construction, though the newest roads have been constructed in accordance with environmental protection regulations. Strong emphasis has been put on environmental concerns in the process of planning the route for the Rail Baltic high-speed railway.

Citation:
OECD Environmental Performance Reviews: Estonia 2017. http://www.oecd.org/estonia/oecd-environmental-performance-reviews-estonia-2017-9789264268241-en.htm (accessed 16.12.2018)

Latvia

Score 9

Environmental policy effectively ensures the sustainability of natural resources and protects the quality of the environment, as evidenced by Latvia's consistently high rankings in the Environmental Performance Index produced by Yale and Columbia universities (37th in the world rankings in 2018). Though the overall environmental performance has slipped due to sub-par performance on climate change. Water resources, environmental health policy and biodiversity were identified as particular strengths. However, weaknesses remain in the areas of forests, agriculture and fisheries.

In 2015, Latvia adopted a new Environmental Policy Strategy for the 2014 – 2020 period, prioritizing a new financing model for the use of revenue from the natural-resources tax, creating a deposit system for waste management, improving standards in waste-water management, and improving research and development capacities.

The Climate Change Financial Instrument, funded through the International Emissions Trading Scheme, is the main climate-change policy instrument.

Latvia is a heavily wooded country, with 2.9 million hectares (44.5% of the total area) of its territory forested, of which 50% is state-owned. The government acts as both regulator and largest landowner with respect to Latvia's forests. Protection of forests is well organized and secured through legislation, which regulates all related economic activities, including harvesting, management plans, regeneration and monitoring and control of tree species.

Biodiversity in Latvia means coastal biodiversity, with unique brackish-water ecological systems at the shore of the Baltic Sea and the Gulf of Riga as well as forest ecosystems, and bogs and fens. Natura 2000 designated sites cover 12% of the territory of Latvia, representing 327 different areas for the protection of habitats and species. A law called On Protection of Species and Habitats also provides for the establishment of micro-reserves to protect small-scale biologically rich areas that lie outside of protected territories. Over 2,000 micro-reserves had been established as of 2012.

The amount of household waste generated per capita was below the EU average, 410kg (EU average being 482 kg). Air quality is good – the limit values for sulfur dioxide, ozone and carbon monoxide pollutants have not been exceeded. In 2016, €205 million was spent on research and management of environmental quality.

Citation:
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2. European environment – state and outlook 2015. European Environment Agency. Available at: http://www.eea.europa.eu/soer-2015/countries/latvia, Last assessed 31.12.2018

3. European Environment Agency (2018), Latvia – Air Pollution Country Fact Sheet 2018, Available at: https://www.eea.europa.eu/themes/air/country-fact-sheets/latvia#tab-see-also, Last assessed: 31.12.2018

4. Central Statistical Bureau of Latvia (2018), Latvia 2018 - Statistics in Brief, Available at: https://www.csb.gov.lv/sites/default/files/publication/2018-05/Nr%2003%20Latvia_Statistics%20in%20Brief%202018%20%2818_00%29%20EN.pdf, Last assessed: 31.12.2018.

Sweden

Score 9

As is the case with global social injustice, Sweden tries to be a forerunner in environmental policy as well. Sweden performs extremely well in areas such as reduction of greenhouse gas emissions and the use of renewable energy sources but is not a leader in recycling or water usage. Thus, while there is strong political commitment among all the major political parties, the execution of that commitment in some aspects is still lagging. Meanwhile, Sweden continues to push environmental

issues in international forums such as the EU and is a strong supporter of the Paris Agreement.

Environmental policy made its way onto the political agenda in the 1970s and has remained a salient set of issues. With its legacy as a high-energy consuming industrial economy, Sweden certainly has a long way to go, but the data suggest its environmental policy is working. It should be noted that environmental policy is an integrated component of the larger project of restructuring the economy and making it more sustainable; much of this work takes place at the urban level.

After the 2014 elections, the Social Democrats formed a coalition government with the Greens. While both the Social Democrats and the Greens are strongly committed to "green" issues, it seems as if the Greens' ascendance to power has further increased the attention on environmental issues. Nonetheless, the two coalition partners disagreed on some issues. For instance, they do not seem to agree on the future of nuclear power: the Social Democrats wanted to study the issue further whereas the Greens wanted to shut down two reactors before the 2018 elections. As fate would have it, two nuclear power plants are scheduled to be closed over the next few years by their owners due to low profitability resulting from falling electricity prices.

The commitment to sustainable development and addressing climate change is strong among all political parties. While it remains too early to say which party or parties will form a government after the 2018 election, it appears clear that there will be no significant changes in environmental policy.

Switzerland

Score 9

In this area, the most remarkable developments in recent years have been made through the integration of environmental protection and sustainability issues into a wide range of areas that both directly and indirectly concern environmental policy per se. Following the OECD's strategy of green growth, Switzerland has launched several studies aimed at reconciling the goals of sustainability and economic development. Furthermore, Switzerland has in recent years developed several cross-sectoral strategies focusing on issues including noise management, pesticide mitigation, sustainability, biodiversity, climate change adaptation and forest management. New guidelines for integrated water management were published in 2011, taking into consideration the use and protection of natural water sources.

In 2011, the federal government decided to phase out the use of nuclear power over the course of the next several decades. In 2016, the "Energy Strategy 2050" was adopted by parliament and won a majority in a popular vote in May 2017. It aims to significantly develop energy efficiency and exploit the potential of hydropower as well as other renewable energies (e.g., solar, wind, geothermal and biomass). There will be no permits for the construction of new nuclear power stations or any

fundamental changes to existing nuclear power stations. However, existing nuclear power stations may stay in operation for as long as they are deemed safe. A more radical initiative was rejected in a popular vote on 27 November 2016. It would have led to the shutdown of existing nuclear power plants in the near future. Three out of the five nuclear power plants would have been closed down by 2017.

Switzerland invests considerable sums in the area of environmental protection. For example, there are about 8,000 jobs related to protection of the environment at the federal level (500), the cantons (1,500) and the municipalities (6,000) combined. Public spending on environmental protection amounts to 0.7% of GDP, substantially higher than the OECD average of 0.5%. A new article (Article 84.2) was added to the constitution in 1994, stating: "Transalpine freight in border-to-border transit shall be transported by rail. The federal government shall take the necessary measures. Exceptions shall be permitted only if they are inevitable. They shall be specified by statute." This article has not yet been effectively implemented, but the country has made enormous investments in improved railway infrastructure, particularly with regard to transalpine freight.

In certain regards, the ecological challenges facing Swiss policymakers have been much less demanding than in other countries. Switzerland never developed significant smokestack industries and industrialization took place as a decentralized process. Thus, Switzerland has no regions with large concentrations of industries with significant emissions. Nonetheless, the country's record is mixed in terms of environmental policy overall, as demonstrated by the following:

• Switzerland is ranked very highly internationally in terms of controlling water pollution and has implemented significant environmental-protection measures as a part of its water-infrastructure planning.

• Air quality has improved over the past 25 years, but ozone and other threshold values are frequently exceeded, and legislation for more ambitious norms on CO2 reduction has suffered setbacks.

• Switzerland recently updated its national climate change mitigation policy. A broad combination of voluntary, regulatory and market-based instruments are expected to produce a reduction in emissions through 2020.

• Considerable success has been achieved in the area of waste management policy, especially with respect to hazardous waste. Furthermore, Switzerland's recycling rate is one of the highest worldwide.

• In Switzerland, 1.6 million people (every fifth inhabitant) are exposed to harmful or disturbing road traffic noise during the day and every seventh inhabitant to overall noise disturbances. Total traffic noise generates costs of around CHF 1.9 billion annually. In 2017, the government decided upon a new strategic plan including noise mitigation measures to address these pressing noise issues.

• Soil protection has improved.

• Average to high levels of success have been achieved in regulating the use of chemical substances.

• Policies seeking to prevent the release of hazardous materials into the environment have been very successful.

• There has been little success in terms of nature conservation and protection. The number of animal and plant species that have become extinct or are at risk of extinction continues to rise. In Europe, Switzerland has the lowest share of conservation areas for sustaining biodiversity. Biodiversity remains therefore one of the most pressing environmental challenges for Switzerland. The country adopted a national biodiversity strategy in 2012. The accompanying action plan was approved in 2017, three years later than promised.

• Even though Switzerland's agricultural sector is rather small compared to other European countries, pesticide use per inhabitant is one of the highest in Europe. Negative externalities and exposure risks are to be addressed by the "plant protection action plan" introduced in 2018.

The 2015 national election led to a loss of power for the green-left parties in parliament, weakening those actors who most fervently have supported environmental protection. In recent referenda, voters have preferred excellent motorways, such as an additional tunnel in the Gotthard-region, over environmental preservation. A major challenge for environmental policies in Switzerland remains the adequate and bona fide implementation of federal rules by cantonal and municipal institutions.

In December 2018, the National Council failed to find a compromise to revise the 2012 CO2 law. Switzerland will probably not meet its CO2 emission goals. The revision of the law is now on the agenda of the Council of States.

Citation:
OECD 2017: OECD Environmental Performance Reviews: Switzerland 2017, Paris: OECD

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Finland

Score 8

Finland faces quite specific environmental challenges in terms of climate change and population growth; yet the country's contribution to larger efforts in combating climate change have to date been fairly modest. Still, after being ranked 18 out of 178 countries in Yale University's 2014 Environmental Performance Index, Finland ranked first ahead of Iceland, Sweden and Denmark in 2016. However, in 2018 it fell

to 10th place. According to a report released in December 2017, Finland's greenhouse gas emissions grew by 6% from the previous year, amounting to 58.9 million tons of carbon dioxide. Water pollution is a major challenge in Finland. While pollution emissions from large industrial facilities have to a large extent been successfully curbed and polluted lakes and rivers have been cleaned, waterborne nutrient emissions generated by farms remain a pressing problem. According to calculations, some 1,500 lakes are in need of more active restoration measures to combat eutrophication. Finland's most valuable natural resource is its forests. The overall annual growth rate of trees in the forests exceeds the total timber harvest, a result of institutionalized protections. Separately, efforts to halt an ongoing decline in biodiversity have proved insufficient, though the government has created networks of protected areas. The environment and natural resources are among the responsibilities of 13 centers for economic development, transport and the environment. The Ministry of Employment and the Economy supervises the general administrative work of these centers. Recent research suggests that in environmental matters in which economic factors play a key role there is a trend toward restricting the rights of citizens to be informed about and influence decisions.

Citation:
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Sebastian Frick and Luis Marin Morillas, "Environmental Policies in Finland", https://prezi.com/x6yy6xidpwaj/environmental-policies-in-finland/;
Siina Raskulla, "Ympäristöperusoikeus politiikkainstrumenttina ja kansalaisoikeutena", pp. 280-297, Politiikka, 2016,Nr 4.
Statistic Finlnad, https://www.stat.fi/til/khki/

Lithuania

Score 8

Lithuania's environmental performance varies significantly by sector. Lithuania's energy intensity is more than twice the EU average, with the residential-housing sector being particularly energy-inefficient. The country is progressing toward a low-carbon economy, with CO2 emissions declining. Lithuania is likely to achieve its Europe 2020 greenhouse-gas emission targets. The proportion of energy produced from renewable sources in Lithuania reached 25.8% in 2017, above the country's Europe 2020 target of 23%. The heating sector, where the share of renewables reached 46.5%, largely contributed to this achievement. A reduction in greenhouse gas emissions will reduce Lithuania's dependence on energy imports. Water-supply and sewage infrastructure has benefited substantially over the years through the use of EU structural funds. However, providing adequate connections to the public water supply still remains a challenge in some cases. Moreover, wastewater treatment is inadequate in some respects, with significant differences evident between rural and urban areas. In February 2017, the European Commission initiated an infringement procedure against Lithuania for failing to comply with EU wastewater treatment requirements.

In the Environmental Performance Index 2018, Lithuania ranked 29th out of 180 countries, with the best rankings in the areas of agriculture, biodiversity and habitat, and ecosystem vitality, and the worst ranking in the category of forests (119th). With respect to biodiversity, Lithuania's protected areas cover 15.6% of the country's territory, but only 22% of habitat types and 54% of the protected species in Lithuania are subject to preservation efforts, according to European Commission reports. The country's municipal waste recycling rate reached 34.9% in 2013, well below the EU recycling average. Infrastructure for waste sorting and recycling is insufficiently developed, and most non-hazardous waste is disposed of in landfills. Landfilling remains the predominant way of disposing of waste in Lithuania as it is the cheapest option for municipal waste management.

Citation:
COMMISSION STAFF WORKING DOCUMENT, country report Lithuania 2017: https://ec.europa.eu/info/sites/info/files/2017-european-semester-country-report-lithuania-en.pdf
The Article 17 EU Habitats Directive Reports available at http://ec.europa.eu/environment/nature/knowledge/rep_habitats/
The Environmental Protection Index is available at http://epi.yale.edu/epi2012/country profiles
Environmental Performance Index 2018, https://epi.envirocenter.yale.edu/sites/default/files/2018-ltu.pdf

Luxembourg

Score 8

The condition of the environment is in many areas in need of improvement. In particular, the quality of drinking water needs to be improved. Building on some initial 2008 initiatives, the government has introduced substantial legislation since 2013 to improve the situation.

Under the leadership of Environment Minister Carole Dieschbourg, a new Water Act was passed, which came into force in the summer of 2017, replacing the Water Act of 2008.
Farmers can now receive transfer payments from the water fund, which was not possible in the past. Previously, only private individuals and municipalities could apply for subsidies, for example, if they minimized the risk of contaminating groundwater by replacing oil with a renewable energy source in their heating system. Now subsidies from water suppliers also flow directly to the farmers.

Other subsidies are also now distributed differently. Outdated sewage treatment plants now receive less funding. This has motivated many municipalities to finally build new or modernize old sewage treatment plants, in order to be able to benefit from the old regulations. Nevertheless, due to the outdated sewage treatment plants, the European Union imposed a fine on Luxembourg. Fortunately, a number of new sewage treatment plants are now being built. In addition, the new water law provides more money for flood protection.

In 2013, there was only one water protection zone in Luxembourg, although five more were being planned. In 2018, there were 11 water protection zones, with a

further 24 being planned. Some of the planned water protection zones will be completed during the current review period, which will mean that the number of water protection zones will have increased 20-fold and 86% of all Luxembourg's water sources will be protected.

A new Nature Conservation Act was passed by parliament, replacing the previous 2004 act. In the new law accessing compensation has been made easier. Previously, property developers and private builders had to plant a new tree at a different site or pay for every tree that was felled. Now, the state will take care of it, which is not only good for the environment, but will also make housing construction faster. Building owners, who want to make use of the model, have to pay in "eco-points."

Another innovation in the Nature Conservation Act is the standardization of the conditions for resettlement. "Building regulations" for green zones will be identical throughout the country, which may stop the proliferation of buildings in green zones that previous environment ministers tolerated. A legal basis seems to be fairer than decisions "à la tête du client."

In January 2018, a new forest law was adopted by parliament. It is intended to replace the previous patchwork of regulations, some of which have been in force since 1848. The new law embodies the spirit of sustainable forest management, although forest subsidies have been regulated since 2017. Now, there are monetary incentives for those who cultivate the soil gently, for example, with horses instead of heavy machinery.

Citation:
"Carole Dieschbourg et Claude Turmes au Conseil "Environnement." Communiqué 25 Juin 2018. https://gouvernement.lu/fr/gouvernement/turmes_claude/actualites.gouvernement%2Bfr%2Bactualites%2Btoutes_actualites%2Bcommuniques%2B2018%2B06-juin%2B25-conseil-environnement.html. Accessed 22 Oct. 2018.
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"Wenn das Wasser knapp wird." Luxemburger Wort. 20 August 2018. https://www.wort.lu/de/lokales/wenn-das-wasser-knapp-wird-5b51e4b9182b657ad3b90435. Accessed 22 Oct. 2018.

Norway

Score 8

Norwegian public opinion is highly sensitive to environmental issues, and the government regularly promotes international cooperation on environmental issues. There is a wide range of laws regulating various aspects of environmental policy and the use of natural resources, including specific laws on building regulations, pollution controls, wildlife and freshwater fish, municipal health, environmental protection and motorized vehicles.

Norway's share of renewable-resource use is among the highest in the world. Air and water quality are among the best in the world, largely due to the country's low population density and the fact that Norway's main energy source is hydroelectric

power, which is in turn due to the natural abundance of water in the country. Less positively, Norway does not have a good record on waste management, and has received international criticism for its policy concerning whale hunting. In addition, energy demand and usage per capita are higher in Norway than in the rest of Europe. This is partly attributable to a legacy of inexpensive energy, a factor that international energy markets have now made a thing of the past. The government is committed to energy efficiency. To this end, conservation standards for new buildings have been tightened, and new taxes have been added to the use of electricity and gasoline. However, there is significant scope for improvement in this area.

Moreover, Norway is also a major oil and gas producer, which directly and indirectly contributes to increased global carbon dioxide emissions. The government's plans for achieving its climate goals have sparked national and international controversy. The intention is to continue to tax carbon dioxide emissions, rely strongly on the purchase of international carbon dioxide quotas to a degree that appears to be exceed EU standards (to which Norway is committed despite not being an EU member state), and to promote emission reductions across all sectors of the economy. In the course of this plan, it has been involved in projects to save forest land in Africa, Asia and South America. Environmental groups have criticized the country for attempting to buy its way out of the problem rather than enacting appropriate and lasting economic and organizational reforms.

Research performed by government-owned companies has led to pioneering technological innovations involving carbon dioxide storage in seabeds, which aim to reduce and ultimately eliminate carbon dioxide emissions associated with gas exploitation. However, these initiatives have proved difficult and costly in the transition from research to large-scale experimentation.

Recent positive developments include the announcement that the state petroleum fund will stop investing in petroleum-related businesses and the effects of subsidies for electric cars on car sales. The share of electric cars is high and rapidly increasing, and there are strong incentives for owners of electric cars. According to government plans, electric ships will also soon be introduced.

Slovenia

Score 8

Slovenia enjoys extraordinarily rich biodiversity and landscapes due to its location at the junction of several ecological regions. The country's natural endowment has been enhanced by a tradition of close-to-natural forest management and by low-intensity farming. Forests comprise approximately 62% of the total land area, which is about twice the OECD average.

The key mechanism for defining sustainable development goals and targets has been Slovenia's new Development Strategy 2014-2020. In mid-2015, the Ministry of

Environment and Spatial Planning initiated a comprehensive public debate about the update of the Spatial Planning Development Strategy (for the period until 2050 with a medium-term action plan until 2020), with a comprehensive third round of consultations taking place in March 2016. Over the last decade, Slovenia has established a comprehensive environmental legislation. It has transposed most EU environmental directives into the 2004 Environmental Protection Act and other national laws. It has introduced risk-based planning of environmental inspections and improved compliance monitoring and enforcement. Several action plans and programs are in planning, such as plans to reduce greenhouse gas emissions, implement risk assessments of natural and other disasters, establish an operational program for drinking water supplies, develop a new biodiversity strategy, and create a national development program to establish an adequate waste management infrastructure. Another instrument providing support to individuals is the ECO Fund, which creates financial incentives for various energy-efficiency measures and renewable energy schemes.

In parallel with these developments, Slovenia improved the provision of and access to environmental information. Environmental NGOs fulfill an important watchdog role, participate actively in environmental policymaking, and play a role in environmental management – for example, by helping manage nature reserves. However, as in many countries, the legal basis enabling NGOs to challenge government decisions in the courts could be strengthened and their independence from public finances could be strengthened. While gross expenditure on R&D for environmental purposes has more than tripled in real terms in the last decade, the country's environmental innovation system has produced relatively little output.

After massive fires in 2017 at two waste processing plants (Kemis Vrhnika and Ekosistemi Zalog), both plants have resumed operation, despite protests from local communities. Both events clearly demonstrated substantial deficiencies in environmental legislation and administration, and the lack of government commitment to protecting the environment and health of citizens. As a consequence of the events, new safety mechanisms and procedures are being implemented at all waste processing plants.

Canada

Score 7

Environmental policy, across the board, is more-or-less balanced in Canada, with some areas preforming better than others. Biodiversity in Canada's forests and waterways has declined over the past decade, and climate change and renewable energy policies have featured prominently in public policymaking in the last several years.

In 2017, the introduction of bills C-48, a moratorium for large oil tankers accessing ports on British Columbia's north coast, and C-55, which establishes a network of protected marine areas and prohibits certain activities in these areas, indicate an

effort to increase conservation of marine resources. In 2016, Canada ratified the Paris Agreement on Climate Change, committing to a reduction in greenhouse gas emissions by 30% under 2005 levels by 2030, and has adopted this commitment as a national target. The Pan-Canadian Framework on Clean Growth and Climate Change represents a collaborative effort to ensure the target is met through carbon pricing, investing in energy efficiency and renewable energy strategies. Renewable energy policy is largely the responsibility of the provinces and several provinces have already made significant efforts to address climate change. However, the 2017 Commissioner of the Environment and Sustainable Development report concluded that federal government departments and agencies are "nowhere near being ready to adapt to the impacts of climate change."

The federal government approved two out of three proposed major oil pipelines in 2016. including the controversial Kinder Morgan Trans Mountain pipeline expansion. The Kinder Morgan pipeline would triple the capacity of the existing pipeline, increase greenhouse gas emissions and increase tanker traffic around British Columbia's coast sevenfold. In 2018, facing investor uncertainty stemming from low global oil prices and fierce local opposition, the government purchased the pipeline along with adjoining infrastructure for CAD 4.5 billion in an attempt to rescue the project. However, the Supreme Court subsequently ruled that the project had failed the duty to consult with indigenous peoples through whose traditional territories the pipeline runs. The outcome of a second round of consultations is still unclear.

A parliamentary review of Canada's federal environmental assessment and regulatory processes, initiated by the Trudeau government in 2016, has led to the proposal of sweeping changes to a number of laws related to the environment. Bill C-69, which is currently under consideration by the Senate, seeks to streamline the impact assessment process while simultaneously widening its scope from purely adverse environmental factors to considerations such as the government's ability to meet its climate change commitments, contributions to sustainability, and the impacts on Indigenous groups and rights. The proposal was made by environmental groups and Indigenous peoples, and has the potential to speed up the process and reduce uncertainty, which may also benefit industry.

The government has also passed legislation to impose a carbon tax in provinces without a comparable program. Many observers consider the initial carbon price level to be too low, however. At the same time, the Trudeau government continues to face fierce opposition from some provinces, including Ontario, the largest province, with conservative premiers.

Citation:
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France

Score 7

Although the OECD in its 2016 environmental report attests that France has significantly improved its environmental performance over the last ten years, the performance record with respect to environmental targets is not satisfactory. According to OECD indicators, France is ranked in the lower middle group in most areas. Too often, environmental policies continue to be subordinated to sectoral policies, which are considered more important. The latest example was the October 2014 withdrawal of the so-called eco-tax on truck-transported goods, which was driven by fears of truck driver protests. While being extremely active at the international level (e.g., Cop 21 and related forums), France has been unable to reach its own targets in most of the areas. This is due to lobby groups’ resistance to the full implementation of environmental policies. In September 2018, this situation triggered the resignation of the minister for environment, Nicolas Hulot, a well-known activist and one of the most popular “green” figures in France.

France’s good performance on carbon emissions is credited to the nuclear sector in France. The objectives set out in the July 2015 energy transition bill (reduce nuclear power in total energy production from 75% to 50% by 2025 and increase renewable energy sources to 40% from its current 12.5% share) are unlikely to be met given the complex authorization processes for renewable energies.

Until the recent Volkswagen scandal, the government refused to deviate from incentives for diesel cars, as French companies have a marked preference for diesel engines. Following public pressure, the government decided to end the tax privilege it afforded to diesel fuel in October 2016. Additional symbolic measures have been introduced by the new Macron administration, such as the prohibition on further research into oil fields in France (whose production represents 1% of total consumption) or the announcement that by 2030 no cars using combustible fossil fuels would be available for sale in France. The decision to raise taxes on petrol and diesel from 2019 provoked the “yellow vests” riots in November/December 2018, which in turn led to the government withdrawing this decision. Some pesticides (e.g., Glysophate) will be banned in the future but the government rejected any attempt by the opposition to set a deadline sooner than the deadline set by the European Union.

The same contrast is observable in the field of renewable water resources. In principle, France supports a water policy and has set up water agencies to monitor

the use and protection of its water resources. However, the objectives set out in the Ecophyto plan (2009) to enhance water quality have not been met by 2015. French authorities have been unable to resist the agriculture lobby, which is the largest consumer of water. The use of pesticides has increased by 29% (2008 – 2014). The attitude of the government is split between a desire to reduce pesticides and pressure from farmers who refuse to reduce their use.

The performance of municipal composting, waste management and recycling are far behind that of other countries.

Air quality is another problem. In the Paris region (Ile-de-France) in particular, but also in many other regions, pollution levels are still above EU targets. Symbolic policies, such as the prohibition of traffic one Sunday per month, are poor substitutes for efficient policies. Local governments are torn between the desire to cap and reduce air pollution, and pressure from car lobbies and users.

The situation is much better with biodiversity and forests, which are experiencing a growth in surface area. A new law on biodiversity was adopted in August 2016. However, the protection of biodiversity has met resistance in metropolitan France by many diverging interests (agriculture, construction and transportation).

Citation:
OECD Environmental Performance Reviews: France 2016, Paris, OECD, 6 oct. 2016

Iceland

Score 7

Environmental policy has historically not been a high priority on Iceland's political agenda. The Ministry for the Environment and Natural Resources (Umhverfis - og auðlindaráðuneytið) was established, comparatively late, in 1990. The ministry was a single-issue ministry until 2013 when the ministry was merged with fishery and agricultural affairs. However, a new minister for environment and natural resources was appointed at the end of 2014, separating the two ministerial positions. At the time of writing, this remains the situation.

The country is rich in onshore energy and freshwater resources, and has substantial offshore fisheries. However, apart from the fisheries management system in operation since the mid-1980s, there has been little discussion about how to preserve these resources, reflecting a popular assumption that these resources are, in effect, unlimited.

In early 2013, Iceland's parliament made two significant steps toward addressing the country's nature and natural resources. First, parliament passed a new act, Lög um Náttúruvernd No. 60, which strengthened the regulatory framework for protecting the natural environment. Second, the parliament passed a resolution that implemented aspects of the Master Plan for Hydro and Geothermal Energy

Resources 1999 – 2010 (Rammaáætlun). The plan was based on scientific and impartial advice, rather than special interests, and it was intended to be open to public involvement and scrutiny. The 2013 resolution provided greater substance to the initial plan by stipulating which hydropower and geothermal resources could be used for power generation. However, the Gunnlaugsson cabinet (2013 – 2016) reversed the previous government's progressive environmental policy agenda. In November 2013, the minister for the environment and natural resources argued that the act had "met great resistance from different groups in the society" and proposed to repeal it by spring 2013. After bargaining between government and opposition, a final compromise was ratified in late 2015.

In September 2018, the Icelandic Government announced a new Climate Strategy, intended to boost efforts to cut net greenhouse gas emissions. The new measures aim to help Iceland meet its Paris Agreement targets for 2030 and reach the government's ambitious goal to make Iceland carbon neutral before 2040. The main emphasis of the new plan is on two measures: to phase out fossil fuels in transport; and to increase carbon sequestration through afforestation, revegetation and restoration of wetlands. Climate mitigation measures will receive a substantial increase in funding, almost ISK 7 billion, between 2019 and 2023. A general carbon tax, already in place, will be gradually increased.

So, even though environmental policy has historically not been a high priority on Iceland's political agenda, it seems to be gaining ground.

Citation:
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Ireland

Score 7

Climate Policy:
In 2013, the government published a draft Climate Action and Low Carbon Development Bill. A commitment to producing up to 40% of the country's energy from renewable sources is being implemented, relying heavily on the construction of wind farms. During 2015, progress was made toward attaining these targets.

Ireland is a world leader in carbon-efficient agriculture and food production.
At a EU summit in October 2014, Ireland argued strongly for concessions in its carbon-emission reduction targets outside the Emission Trading System, because its agricultural sector (dairy farming in particular) produces almost half of the country's

carbon emissions. The country's negotiators claimed that displacing this production from Ireland to countries outside the European Union would ultimately result in higher global emissions.

During 2015, it was announced that the ban on smoky bituminous fuels, which had been progressively extended to the main cities and towns since 1990, will be applied countrywide by autumn 2018.

Ireland has one of the highest proportions of electricity provided by wind power in the world. On 23 February 2017, wind power generated 55% of Ireland's total supply of electricity compared to 45% in Germany and only 18% in the United Kingdom. The figures vary daily according to weather conditions (see: www.windeurope.org/dailywind).

Renewable water resources:
In 2000, Ireland signed the EU Water Framework Directive into national law. Article 16 of the directive requires the introduction of charges for domestic water. Full implementation of this measure was included in the Troika Agreement with Ireland. In July 2013, Irish Water (Uisce Éireann) was incorporated as a semi-state company under the Water Services Act 2013. The creation of Irish Water merges the water and waste-water services of 34 local authorities together within one national service provider. Irish Water is now responsible for public water services, including the management of national water assets, and making capital investment decisions regarding the country's water infrastructure. Irish Water is accountable to the Commission for Energy Regulation (CER) and the Environmental Protection Agency (EPA).

The installation of domestic water meters began in 2014 and, despite sometimes violent local opposition, this process is now more than three-quarters complete. Substantial up-front costs were incurred with significant savings yet to be achieved. The proposed structure of the domestic water tariffs, which became the focus of fierce public protests, has been repeatedly revised. The water charge element was greatly attenuated, so that the levy became little more than a property-tax surcharge. Consequently, it provides only a weak incentive for conserving water usage.

In June 2016, the minister of the environment appointed an Expert Commission on Domestic Public Water Services. Its final report, the Report on the Funding of Domestic Public Water Services in Ireland, was published on 29 November 2016. The commission recommended that "the optimal arrangement is one involving the funding of water services, for domestic and personal use, as a charge against taxation." It also suggested that "excessive or wasteful use of water will be discouraged by charging for such use and therefore is consistent with the 'polluter pays principle.'" Essentially the commission marginalized the issue of water charges, suggesting that the "question of metering is one of policy and is outside the Expert Commission's terms of reference."

Finally, in 2015, Eurostat ruled that the mechanisms proposed by the Irish government to fund Irish Water did not meet the criteria for classifying it as a commercial company. As a result, for national accounting purposes, its budget must be included in the public-sector budget (for further details see our section on Policy Communication).

Forest area:
Significant grants for increasing the proportion of the territory under forestry have been in place for some time. The state-owned forestry service operates forests that now cover about 7% of the country's land area. The privatization of the harvesting of some of these forests was recommended in the Troika agreement but now has been shelved in response to concerns about the potentially adverse effects on the amenity value of these land assets. Increased afforestation has been proposed in exchange for leeway on the emissions from the Irish dairy sector.

Biodiversity:
Ireland is broadly compliant with EU directives on biodiversity, and engages in enforcement measures to protect wildlife and flora. An extensive rural environmental protection scheme has sought to encourage farming in a sustainable and environmentally sensitive manner. In addition, a large number of protected areas have been designated.

Citation:
Report on the Funding of Domestic Public Water Services in Ireland, November 2016.
Climate Action and Low Carbon Development Bill 2015
http://www.oireachtas.ie/documents/bills28/bills/2015/215/b215d.pdf

For an update on Ireland's progress in regard to renewable energy see
http://www.seai.ie/Publications/Statistics_Publications/Energy_in_Ireland/Energy-in-Ireland-1990-2013-report.pd

The latest data on emissions, etc. are contained in an EPA factsheet:
http://www.epa.ie/pubs/reports/indicators/epa_factsheet_waste_v2.pdf

Information on the National Biodiversity Data Center is available at:
http://www.biodiversityireland.ie/

The coverage of protected areas is set out in:
http://www.npws.ie/protected-sites

New Zealand

Score 7

The performance of New Zealand's environmental policy is mixed. In the 2018 Environmental Performance Index, the country slid to 17th (from 11th in 2016). Among the countries in the pacific region, New Zealand is at the top of the group for demonstrating "strong overall environmental performance." However, in the group of OECD countries, it holds only an average overall position. The OECD's third Environmental Performance Report, released in March 2017, lead to increased public concern over New Zealand's environmental situation. According to the report, New

Zealand's strong economic growth comes partly at the expense of environmental quality, which puts the country's hard-earned green reputation at risk. Central concerns include rising greenhouse gas emissions and declining freshwater quality. With regard to New Zealand's record on climate change, it is important to note that the country's position is somewhat unique. New Zealand produces a fraction of the world's carbon emissions – 0.17%. At the same time, however, the country's largest emitter is methane from farm animals belching. According to the OECD, New Zealand has the highest share of emissions from agriculture among the 35 OECD member countries. The main policy tool for tackling greenhouse gas emissions is New Zealand's Emissions Trading Scheme. However, the effectiveness of the scheme is limited, as biological emissions from agriculture and transitional arrangements are excluded.

Other areas of concern include water usage and management and greenhouse gas emissions. Due to strong resistance from NZ First during the coalition-building negotiations, a party whose voter support comes disproportionately from rural and provincial town electorates, Labour agreed to drop its proposal for a water tax on farmers. However, the two parties did agree on a tax on exported bottled water. Moreover, the government banned future offshore oil and gas exploration in NZ (part of the coalition agreement between Labour and the Greens). However, existing permits for 22 for offshore oil and gas exploration are unaffected.

Prior to the change of government, environmentalists accused the National-led government of pandering to farmers, especially the rapidly expanding dairy industry, who are among the National's strongest supporters. The National party were also accused of failing to take a strong stance to support international environmental agreements such as the Kyoto Protocol. Since October 2017, the Green party holds ministerial responsibility for climate change issues. There is no doubt that climate change policy was significantly strengthened under the new government. Following the British approach and modeled on the UK's 2008 Climate Change Act, the new government seems committed to pass and implement a Zero Carbon policy. The government will seek to meet that goal by putting a climate-change target into law and by establishing an independent Climate Commission. On 17 April 2018, the Climate Change Minister announced the terms of reference and membership of the Interim Climate Change Committee. The cabinet has agreed to a process of consultation, beginning in June 2018, before the Zero Carbon Bill is introduced. The bill is planned to become law in 2020, though the carbon-neutral-by-2050 goal might not become part of the Zero Carbon Act itself.

Citation:

Environmental Performance Index 2018: New Zealand (Yale/Columbia: Yale University/Columbia University 2016) http://epi.yale.edu/downloads (accessed June 30, 2016).

OECD Environmental Performance Reviews: New Zealand 2017 (http://www.oecd.org/environment/country-reviews/oecd-environmental-performance-reviews-new-zealand-2017-9789264268203-en.htm) (accessed January 18, 2018).

NZ Herald. 2017. Labour's proposed water tax on farmers to be scrapped. https://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11935003

Young, Audrey (11 April 2018). "Prime Minister Jacinda Ardern bans new offshore oil and gas exploration in New Zealand." New Zealand Herald.

United Kingdom

Score 7

Environmental goals were ostensibly close to the heart of both governments led by David Cameron. Yet, some critics have expressed dismay at cuts in subsidies for green energy, and an increase in government support for natural gas fracking and nuclear power. The latter was reaffirmed in the decision to proceed with new reactors, but recent re-assessments of the commercial viability of nuclear energy may prevent it happening. The coalition government (2010 – 2015) set itself the goal of becoming "the greenest government ever," and its Conservative successor government has not noticeably changed tack. However, worries about the cost of living led the government to suspend automatic increases in fuel duties for seven years in succession, and there have been rumblings of discontent over the 2008 Climate Change Act, which forms the legislative foundation for climate-change polices.

In many areas, the Cameron government continued previous government's initiatives. For example, market-based environmental policy mechanisms, and a planning system designed to preserve and protect "green belts" around major conurbations. The "eco towns" initiative of the former Labour government, promoting low carbon emissions, renewable energy, expansive green space and high recycling rates, was substantially scaled back due to spending cuts.

After taking over from Cameron in July 2016, Prime Minister Theresa May dissolved the Department of Energy and Climate Change, which had existed since 2008, merging it into the newly established Department for Business, Energy & Industrial Strategy. This step was harshly criticized by environmentalist groups. In her keynote speech at the Conservative and Unionist Party Conference, Prime Minister May did not mention any environmental topics beyond the ratification of the Paris Climate Agreement which took place on 11 November 2016. In a speech given at the U.N. General Assembly in September 2017 she stressed again the importance of staying within that agreement. There are renewed signs under the current environment minister, Michael Gove, that environmental policy will feature more prominently in the government's agenda in the future, while air quality has become an issue of growing public concern.

Much environmental policy is still determined by the European Union (e.g., the Water Framework Directive or the Biodiversity Agenda) beyond which there is little space for nationally specific initiatives. After "Brexit," some divergence from the European Union could occur, although there is no reason to believe that the United Kingdom will renege on big issues such as the Paris climate accord. Renewable water resources have never been an issue for the United Kingdom, although utility companies are being encouraged to reduce leaks and improve sewerage. Forestry policy is a devolved competence. In England there is Forestry Commission, which has responsibility for both tress and biodiversity.

Austria

Score 6

Austria's government has sought to establish a policy course balancing economic growth and protection of the environment. In reality, this is very often thought of as a contradiction. Environmental policies may have significant effects for employment and even for economic growth in the long run, but in the short run – and the Austrian government, like any democratic government, is first and foremost focused on short-term effects – traditional economic incentives are given priority most of the time, at the cost of environmental protection.

Ecological values have been embraced by virtually all political parties, not just the Greens, and as long as protecting the environment is not in immediate conflict with economic growth, the government has promoted environmental policies. But the ambiguity remains, as well as a tendency to think within traditional frameworks that favor economic growth over environmental protection. Public opinion in Austria is inclined to think the country should be in the vanguard of international environmental protection and for that reason Austria's signing of the Paris Agreement on Climate Change in Paris at the end of 2015 was not disputed domestically. Despite all this, Austria is one of the very few EU member states that has failed to meet the objectives of the Kyoto Protocol. To this day, Austria's greenhouse gas emission levels are very high for a country of its size, well above those of its neighbors France, Italy and Switzerland, but below Germany.

Partly due to EU laws (the so-called Eurovignette directive), more international transit, and partly due to the failure to make railroads a more attractive way to transport goods, Austria has completely failed to decrease carbon dioxide emissions from vehicle traffic. Greenhouse gas emissions for heavy vehicles and trucks have not decreased since 2005 – contrary to other traffic emission sources.

Industry and commerce remain the largest contributor to carbon dioxide emissions. Economic growth and cheap carbon-market certificates for carbon dioxide can be seen as the principal reasons for the increase in carbon dioxide emissions in this sector. In part due to strong lobbying by economic actors, the Austrian government has failed to control the supply and prices of tradable carbon dioxide certificates, contributing to a significant fall in certificate prices. As the FPÖ – a party that has repeatedly denied the existence of human-induced climate change – has become a governing party, there is not much reason to expect that this trend will be reversed.

The FPÖ has proven to be less strict in promoting restrictions on carbon dioxide emissions. This can be seen in the decision of the FPÖ's minister of infrastructure and transportation to increase the speed limit on highways, although (for the moment) this is limited to a rather short part of the highway system. As this is defined as an experiment, the final outcome is still open. However, such an

experiment, demonstrates a tendency to perceive climate change as a less serious challenge. Similarly, the government is aiming to speed up approval procedures for projects of "national interest." The first drafts of this act left no doubt that the primary motivation of the government was to bypass environmental regulations, which the government considers to be too severe.

Citation:
World bank data on COP2 emissions: https://data.worldbank.org/indicator/EN.ATM.CO2E.PC?view=map
CO2 Emission data for Austria: http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0582.pdf

Belgium

Score 6

The Belgian government has established a climate-policy website (www.climat.be) on which the authorities themselves concede that the country's environmental policy is "rather complicated" given the unique policymaking arrangements. Belgium's environmental policy is split between the federal government and the three regions, which makes it largely unmanageable. As of November 2017, the website proudly detailed the progress made between 2008 and 2012, but concluded that the government gave up trying to elaborate a plan for the 2013 – 2020 period in order to "focus on the 2021 – 2030 period." Hopefully, European regulations will force the country to improve its policy approach.

Generally speaking, environmental quality is below the OECD average and the country's two main cities, Antwerp and Brussels, are among cities in the OECD suffering most from air pollution. As in other Belgian urban areas, there are multiple sources of pollution, but the largest contributors are heavy industry, activities around the harbor in Antwerp and extremely dense road congestion in urban areas.

The European Environmental Agency's report indicates that significant forms of air pollution (i.e., particulate matter, nitrogen dioxide, ozone and sulfur dioxide have improved, but that a high percentage of the Belgian population is still exposed to excessive concentrations of the four most important air pollutants (PM, NO2, O3 and SO2) ." One of the main contributors to this situation has been the country's incapacity to coordinate any form of effective transportation policy, resulting in the consistent decline in the performance of the National Railways Company and increasingly long traffic jams.

The hope is that regional initiatives will eventually produce improvements. The local, bottom-up nature of these projects means that it is hard to see a general pattern or a well-defined policy direction – especially around the larger Brussels area that spans three institutional regions (Brussels, Flanders and Wallonia). However, regional initiatives may also produce better results in the long term if these projects are able to achieve their aspirations and increase the general public's awareness of environmental issues.

Car traffic is unlikely to decrease in the short term. Belgium's geographical location between the major northwestern European economic and population basins (i.e., the United Kingdom, France, the Netherlands and Germany) makes it an extremely dense transit area, especially for road traffic (cars as well as freight). The government has introduced a controversial per-kilometer tax on trucks, but the main objective this policy is to shift some of the tax burden away from labor, not to reduce traffic. Besides, labor legislation still enables a very generous scheme of "company cars" (extra income in the form of a car covered by the company) in the private sector. This is a major incentive for workers to continue using cars to commute to work and for various other short-distance journeys. Congestion in and around major cities therefore remains high. Brussels, for instance, now ranks as the fifth most-congested city in Western Europe, according to the TomTom Traffic Index.

Significant improvements in water treatment have been recorded in all regions after Belgium was taken to court by the European Commission for failing to implement its international commitments. Implementation in this area has become a regional prerogative.

The regions are now responsible for maintaining forests and biodiversity. Overall, forest management is proactive, with a view toward long-term sustainability. Increasing attention is given to the issue of biodiversity, but Belgium's highly urbanized nature, especially in the northern portions of the country, provides limited room for short-term improvement in areas of dense construction.

Citation:
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TomTom (2017). "TomTom European Traffic Index. Measuring congestion worldwide." https://www.tomtom.com/en_us/trafficindex/city/BRU

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https://www.eea.europa.eu/themes/air/country-fact-sheets/belgium
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http://www.oecd.org/belgium/environmental-tax-profile-belgium.pdf
http://www.oecd.org/eco/surveys/Belgium-2017-OECD-economic-survey-overview.pdf

European Commission (2015): http://ec.europa.eu/environment/water/water-framework/pdf/4th_report/MS%20Annex% 20-%20Belgium.pdf

Bulgaria

Score 6

The share of renewables in the energy mix of Bulgaria has stagnated since 2013, having increased relatively rapidly previously. Improvements in energy efficiency and the substitution of higher for lower carbon emitting fuel sources have led to a gradual decrease in the carbon dioxide intensity of the economy. Per capita carbon dioxide emissions remain relatively low.

Water resource management rests predominantly with municipalities, creating problems of coordination and strategy development. One problem in this area arises from the fact that much of the renewable water resources in Bulgaria also affect neighboring countries (i.e., Romania, Turkey, Greece), requiring international coordination. In the summer of 2018, the government appropriated a relatively large budget to fund improvements in dam maintenance and management.

Forests in Bulgaria are either private, municipal or state property. This fact impedes the development and implementation of coordinated forestry policy actions. However, Bulgaria's forest coverage is above the global average and has a long-term growing trend.

Bulgaria has a relatively large share of protected biomes. Approximately one quarter of its territory is under protection or special status. As opposed to many other issues, there is an active civil society sector working on biodiversity and conservation issues, which is capable of applying political pressure and sometimes achieves results. However, powerful business actors with access to policymakers often manage to violate environmental-protection policies in order to further business interests. Most violations of this kind take place in the tourism and mining sectors. The decision to build a second lift in the Bansko mountain resort, for instance, led to protests by citizens and environmental groups, and was initially withdrawn by the minister in charge. Later, however, there was a second attempt to build the lift, which was appealed in court and overthrown by the Supreme Administrative Court.

Chile

Score 6

Chile has an efficient but scarcely restrictive environmental regulatory system. From 2010 onwards, it has boasted a modern environmental institutional system. For example, the former National Commission for Environmental Issues (Comisión Nacional del Medio Ambiente) has been upgraded into the Ministry of Environment (Ministerio del Medio Ambiente). The creation and implementation of complementary institutions, such as environmental tribunals (Tribunales Ambientales) and a chairperson for the environment (Superintendencia Ambiental), showed some progress by the end of 2012. However, Chilean environmental policy is basically designed for compliance with standards required by international markets and thus does not necessarily focus on aspects like ecological sustainability. In addition, Chilean environmental policy is also exposed to major domestic political pressures from the industrial sector, especially in the field of water and forestry policies and regulation. This often leads to clashes over the protection, preservation and sustainability of natural resources and the quality of the environment. It is quite common for the judiciary to stop investments and projects on ecological-sustainability grounds. In September 2016, Chile signed the Paris Agreement on climate change, which was ratified in January 2017. This entry into force might

foster institutional efforts to protect and preserve natural resources and environmental quality in the near future. Chile will host the next U.N. Climate Conference Cop25, which will take place at the end of 2019 or beginning of 2020.

Chile is poised to enact a climate change law (Ley de Cambio Climático) in 2019 in order to establish an effective climate governance system and help to reduce carbon dioxide emissions.

Citation:
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http://www.senado.cl/ratifican-acuerdo-de-paris-sobre-cambio-climatico/prontus_senado/2017-01-25/110753.html
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Czechia

Score 6

Czechia continues to battle both a historical legacy of environmental damage and other ongoing environmental issues. There has been a long-term trend of decline in emissions of acidifying substances, ozone precursors, primary particles, secondary particulate precursors, greenhouse gas emissions from the manufacturing industry. Surface and groundwater pollution has also diminished over time.

The main priorities of the State Environmental Policy of Czechia 2012-2020 are the sustainable use of resources, climate and air protection, nature and landscape protection and safe environment. The focus of the new Babiš government is on water management (measures against drought and efforts for water retention, wastewater management, water infrastructure ownership, reconstruction, and maintenance); waste management (strengthening strategic raw material security and self-sufficiency, by recycling discount for municipalities and individual citizens); protection of agricultural land; air quality (particularly in Moravian-Silesian and Ústí Regions), where air quality remains low; support for low-emission vehicles in public and private transport; accelerating the shift away from fossil fuels by households; biodiversity (possibly extension of areas of environmental protection, including forest areas). These priorities follow the 2016 National Action Plan on Adaptation to Climate Change and a climate protection strategy for the period until 2030 with a long-term outlook until 2050 and the evaluation by the EU in 2017, which pointed to a mixed performance in the implementation effectiveness of environmental policies. It remains to be seen how these priorities will be implemented, not least in view of the imminent reduction in EU funding. The government plans to expand the nuclear power plant Dukovany in order to decrease the reliance on non-renewable (fossil)

fuels, but this has also met with suspicion from EU and NATO allies over the possible involvement of Russia and China. In October 2018, Prime Minister Babiš assured U.S. Defense Minister Mattis that the enlargement of Dukovany is in a planning stage and no negotiations are taking place with either Russia or China.

Germany

Score 6

In the latest Environmental Performance Index (2018), Germany places only among the second tier of "strong performers" ranking behind some of its European peers. After ranking sixth worldwide in 2015, the country's relative position deteriorated to rank 13 in 2018. Its score decreased from to 84.26 to 78.37 in 2018. Germany performs relatively well in the areas of water resources and biodiversity, but clearly below average in climate, energy and agriculture.

The greatest environmental policy challenge remains adequately responding to the 2011 government decision to phase out nuclear energy by 2022. With regard to alternative forms of energy production, Germany is comparatively well prepared. The country has become an investor friendly destination for renewable energy, offshore wind farms, cogeneration, and the energy efficient redevelopment of buildings and other infrastructure. But still, coal is an important energy source with substantial shares in electricity production.

Concerning renewable energy, Germany has consistently increased its share. Whereas in 2010 only 19.2% of the energy production originated from renewable energy sources, the share in 2017 was 38.6% and again increased to 41.1% in in August 2018. As a key component of energy policy, in its coalition contract the new government determined to increase the share of renewable energy in electricity consumption to at least 65% in 2035. Nevertheless, major challenges remain, including the question of how to permanently store nuclear wastes, expand the electric grid to supply renewable energy and harmonize the phasing out of nuclear energy while also reducing carbon dioxide emissions.

However, Germany failed to meet the ambitious climate targets of the European Union and of the former government.

Citation:
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Israel

Score 6

Israel faces significant environmental challenges due to its small territory, high population growth and poor natural water resources. Its geopolitical climate adds another challenge, since unlike many OECD countries, Israel's relationship with its neighboring countries prevents it from sharing power facilities and thereby reducing environmental costs. Security and political considerations also overshadow environmental issues, resulting in long-term neglect of environmental policy even as OECD accession has bound Israel to conform with Western standards and goals.

However, Israel has demonstrated significant recent advances with regard to environmental policy. At the end of 2016, the country ratified the Paris climate agreement. Earlier that year, the governmental approved an ILS 500 million national program aimed at reducing greenhouse gas (GHG) emissions and increasing energy efficiency; as a part of this policy, it has committed to reducing its GHG emissions by 26% from the 2005 emissions level. An additional ILS 260 million has been allocated to a two-year program focused on reducing air pollution. A reduction in emissions intensity was reported In 2017, indicating some early success for the policy effort. In addition, a new solar-power station, one of the largest in the world, was launched in 2017 in the Negev desert. Israel also has a unique green-tax policy, created to encourage customers to purchase less pollution-intensive cars. This innovative policy has led to positive results, and is regarded as a model within the OECD.

However, Israel has experienced some severe ecological disasters in recent years. In 2011, a backhoe loader damaged an underground fuel pipeline, and 1.5 million liters of jet fuel polluted the Zin river. Three years later, in 2014, another oil pipeline disaster occurred in southern Israel. Millions of liters of oil leaked into Evrona Nature Reserve, creating one of the worst pollution disasters in its history. In 2017, massively acidic water polluted the Ashalim Creek. Investigation of these cases has often lasted for long periods of time, and the Israel Union for Environmental Defense, one of the country's most prominent environmentalist groups, has criticized the fact that criminal proceedings in this area take so long.

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Japan

Score 6

Japan was a global leader in terms of antipollution policy and energy conservation in the 1970s and 1980s. More recently, Japan has been faced with the major concern of how to improve its domestic energy mix.

The triple 3/11 disaster led to some policy rethinking with respect to nuclear energy. However, the LDP-led government has reiterated that nuclear power will remain an important part of the country's energy mix well into the future. The country's 48 reactors were all shut down between 2011 and 2012. As of July 2018, there were (again) nine reactors operating that met the new, stricter standards.

According to the new 5th Strategic Energy Plan, released in July 2018, the basic proportions envisioned for the country's 2030 energy mix remain unchanged, including the goal of a 22% to 24% share for renewables and 20% to 22% for nuclear energy. However, renewables are for the first time designated as a "major source." This goal may still be ambitious, as public concerns are rising that wind parks and mega-size solar fields may seriously threaten the environment.

Japan has made great progress in terms of waste-water management in recent decades. Today the country has one of the world's highest-quality tap-water systems, for example. The use of water for energy production is limited for geographical reasons.

The country has a proactive forestry policy, and in 2011 passed both the Fundamental Plan of Forest and Forestry and a National Forest Plan. A Forest

Management Law introduced in mid-2018 promotes the commercialization of forestry. This may ultimately produce some tension with wider societal and environmental objectives.

Japan's biodiversity is not particularly rich compared with other Asian countries. While the country has in recent years taken a proactive stance under its National Biodiversity Strategy, it has experienced a long-term decline in biodiversity due to its developmental path.

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Mexico

Score 6

Mexico is a signatory of the Paris Agreement and has shown every sign of taking environment policy seriously. However, it continues to face several very serious environmental challenges. The provision of clean water to Mexico City, air pollution in the capital and other major cities, deforestation and erosion in rural Mexico are some of the most pressing problems. While a marked decrease in population growth is relieving some environmental pressure, policies aiming to conserve the environment and reduce pollution should remain a top priority for ensuring sustainable development. While environmental policy has become more sophisticated, particularly in Mexico City and other major cities, the enforcement of environmental standards and regulations is often lacking. It is worth noting the substantial variation between government levels and across issues; the federal government is much more capable, with better and more efficient regulations and monitoring. This is not the case at the local level, where funds, human capital, and administrative resources are scarce; in particular, in the most ecologically rich but poorest regions of the country. In terms of environmental issues, Mexico has very strong air quality regulations and made significant progress over the last two decades. In contrast, norms regulating water consumption and pollution are far less advanced.

From a comparative perspective, the government's recent economic reforms were more diluted and slower to pass than its environment legislation, but implementation of policies and regulations remains a major challenge. Many companies do not comply with existing regulations and the high degree of informality in the economy

is further aggravating the challenge of non-compliance. Despite an increasing awareness of environmental challenges among the broader population, particularly among the young, public pressure and support for environmental NGOs remains weak when compared to many other OECD countries. Business interest groups are much more powerful than their environmental counterparts. It is worthwhile noting that the Mexican Green Party is not as "green" as its name might imply in other countries; environmental interests are still weakly nested in the major political parties. This became particularly clear when the Biodiversity Act was passed in April 2018, largely promoted by the Green Party. Due to some vague formulations of the law, environmentalists feared it would make it easier for companies to carry out mining and fracking. However, the legislation was not passed.

In addition to liberalizing energy prices for gasoline and natural gas, the energy reform of 2013, established provisions for an increasing participation of renewables in the energy mix in Mexico. Private power generators are now able to sell electricity, but the new regulations also provide incentives for the use of renewables and the reduction greenhouse gas emissions by constraining the biggest consumers to get a proportion of their power from clean energy sources. The reform was fully implemented in 2018. It is considered to have been quite successful so far, since the framework of the electricity sector and especially the sector of renewable energy has become more stable and competitive.

Citation:
https://www.wilsoncenter.org/sites/default/files/mexico_renewable_energy_future_0.pdf
https://ecoosfera.com/2018/04/ley-de-biodiversidad-peligro-medio-ambiente-mexico-2018/

Portugal

Score 6

The reduction in production resulting from the recent economic crisis has eased environmental pressures in the 2010s. This was particularly apparent during the bailout period and economic downturn, when Portugal ranked third in the 2014 and fourth in the 2015 Climate Change Performance Index (CCPI).

The subsequent economic recovery has been accompanied by a decline in Portugal's ranking and score. In the 2018 CPPI report, the country fell to 18th place worldwide, with an overall score of 59.16 (albeit with a somewhat different methodology) – the worst results over the past five years.

In the previous report, we noted the political tension around subsidies to the renewable energy sector, perceived to be excessive by a number of international bodies as well as by the Socialists' left-wing parliamentary allies. While not against renewable sources, the Left Bloc and the Communist Party are against passing through the cost of these subsidies to consumers' energy bills and have demanded that additional measures be taken against excessive rents in the renewable energy sector.

In the period under review, a proposal in late November 2017 by the Left Bloc to tax producers of renewable energy was blocked by the Socialist party, with the parliamentary party group initially approving the measure in the first reading, before recalling the measure and voting against it the following week, following the orientation given by the government. The political issue around these excessive rents is exacerbated by the legal protection that the energy producers have and by their political clout.

Since 2002, Portugal has proposed a National Strategy for Sustainable Development (ENDS), but implementation of this strategy continues to be at best partial.
While the CCPI 2018 report rates Portugal's national climate policy performance as high, it seems fair to say that – as in other areas – the effective implementation of environmental legislation appears to lag vis-à-vis the legal text.

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The Portuguese Environmental Agency for the ENDS 2015 edition (http://www.apambiente.pt/index.php?ref=16&subref=143&sub2ref=734). lists four documents on the ENDS, including the strategy, the plan of implementation, and two execution reports. However, none of these files is actually available on the website, which gives an error message when attempting to access these documents.

Australia

Score 5

Australia's economy is based to a considerable extent on the exploitation of natural resources and on a resource-intense mode of agricultural production and exportation. Therefore, the trade-off between environmental concerns and economic growth is a topic of great public debate.

Environmental policy in Australia has focused very much in recent years on climate change and water security. Some progress has been made on water security in recent years, including the construction of desalination plants and the creation of the Murray-Darling Basin water management plan. However, energy consumption is generally high and, despite great potential for solar and wind energy, the contribution of renewable energy to the grid remains relatively low.

Australia's infrastructure continues to be stretched thin, a fact contributing to rising carbon emissions. Public transport in Australian cities is less developed than in comparable European or Asian cities. Investment in infrastructure has been deficient, and must become a key component in Australia's environmental policy over coming decades.

One of the early acts of Prime Minister Abbott's Liberal-National coalition government was to abolish the carbon tax introduced by the previous Labor government in 2012, which ceased to apply from 1 July 2014. The government remains committed to reducing by 2030 carbon emissions by anywhere from 26% to 28% compared to 2005 levels, but currently have no effective means of achieving this.

A government-commissioned review of the national electricity market was published in June 2017. Most of its recommendations were accepted, but in the intervening period up to the end of the review period, there has been almost no progress on the policy front. Industry uncertainty therefore persists, undermining incentives to invest in energy generation, and contributing to record-high energy prices for consumers, low levels of reliability, and very limited progress on emissions reductions.

Biodiversity decline is also a significant concern in Australia, with considerable evidence of an acceleration in decline over recent decades. In response to this concern, in October 2010 the Australian government released "Australia's Biodiversity Conservation Strategy 2010 - 2030," which provides the guiding framework for conserving Australia's biodiversity over that period. Various policies to address the decline in biodiversity have been implemented, though more action is required.

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Hungary

Score 5

As the 2011 constitution incorporated "green" values, the constitutional basis for environmental policy in Hungary is strong. Comprehensive environmental regulations are in place, and the EU continues to serve as an important driver of policy action. However, environmental policy has suffered from a lack of commitment and institutional fragmentation. Ever since the second Orbán government, no separate Ministry of Environmental Policy has existed. Environmental issues have largely been dealt with by the Ministry of Agriculture, in

a department. Here a large number of employees were fired in 2018, a fact heavily criticized by Greenpeace. However, water management has rested with the Ministry of the Interior, and, the subnational environment authorities have become part of the newly created government offices at the county level. Due to the low importance attached to the protection of the environment, problems such as the frequent contamination of drinking water resources and the mismanagement of garbage sites poisoning the environment have grown. The megalomaniac construction activities of the government have led to a serious "deforestation" in Budapest, as hundreds of big trees in many parts of the capital have been cut. Especially in the field of air pollution (particulate matter emissions) there is little if no progress. The extension of the Paks nuclear power plant has been one of the biggest bones of contention between the government and the opposition, since the Danube may not be sufficient in cooling the hot water produced by Paks-2.

Citation:
OECD (2018): Environmental Performance Review: Hungary. Paris (https://www.oecd.org/publications/hungary-2018-9789264298613-en.htm).

Italy

Score 5

Italy was not an early mover in the field of environmental policies compared to other European and OECD countries, but in a number of aspects its environmental record has significantly improved. For instance, Italy ranks above average in its performances for CO2 emissions in comparison to GDP. In the field of renewable energies, where Italy traditionally fared reasonably well thanks to its large hydroelectric (and geothermic) plants, the promotion of new sources (e.g., solar or wind energy) has been very effective in recent years thanks to generous incentives. Because of budgetary constraints (and in part also because of other conflicting environmental reasons, such as the protection of landscapes) incentives for solar energy have been reduced in the recent years. Nonetheless, the transition toward renewable energy has gained momentum and renewable energy sources now supply between 32% and 35% of total energy demand (data from GSE). Strong fiscal incentives for sustainable house building and renovations have existed for several years. An initial discussion about the return to nuclear energy with the purpose of further reducing CO2 emissions was stopped by the Fukushima disaster.

Forest areas have been growing significantly in recent years and biodiversity is above the European average.

In other dimensions, such as water efficiency, Italy fares less well. Disparities between northern or central Italy, and southern Italy remain significant. Some waste emergencies (e.g., in Rome, Naples, Palermo and other places in southern regions) have demonstrated in recent years the lower performance of some local and regional authorities in environmental matters. The absence or inadequacies of purification plants still affects parts of the coastline and rivers. As with other oceans, the Mediterranean is polluted by microplastics.

Recycling rates have increased very significantly in central and northern Italy. According to Reuters, Italy ranks very highly in Europe for recycling. Recent ISPRA data also indicates significant improvements in southern Italy where recycling rates had traditionally lagged behind.

Erosion, flood and earthquake prevention should be a high priority for the government, as the geology of the Italian peninsula means that the country is very exposed to natural disasters. After the recent 2016 earthquakes, the government is launching a long-term investment policy to promote public and private rebuilding.

Climate change has and will have a huge impact on Italy. The country has among the highest numbers of cars per capita in the world, and this combines with poor short-, medium- and long-haul public transport to make life in cities difficult. It also compromises the transport of goods and persons across Italy. Smog, particulate matter, poor air quality and traffic jams increasingly undermine the quality of life significantly in Italian towns. Perhaps more so than any other policy area, the environment demands a stronger strategy and corresponding political action, as Italy is dropping back on the European but also global level for quality of life.
At least in theory, the new government declares a strong pro-environment orientation.

Citation:
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Netherlands

Score 5

The new government has described itself “the greenest coalition” so far and put climate change on its political agenda. However, broad consultations about specific policies have not produced politically tangible results so far. Dutch businesses are reluctant to contribute without government subsidies and there is fear that if lower incomes will have to bear a disproportionately high burden for greening the economy, they will block efforts to achieve a workable consensus. Climate policy is largely focused on medium-term targets, for example 2020 or 2030. Before the Paris Accords, the Dutch government resisted more ambitious international climate goals. While the current government has started negotiating a new climate agreement (currently in the third round of negotiations), the government’s ambitions remain neatly within the boundaries of the Paris agreement with few specific policy measures to work with. In October, “Urgenda,” an environmental association, won a court appeal: the court issued a verdict stating that the government’s failure to reduce carbon dioxide significantly contradicts its human rights obligations. It remains to be seen how this verdict will influence government policies, domestically and abroad.

There is a clear policy shift toward climate adaptation. This appears manageable today because any adverse developments in the Netherlands will be gradual. The Netherlands' natural-gas reserves have diminished rapidly and will necessitate gas imports from 2025 onward, despite decreasing demand. Meanwhile, earthquakes and soil subsidence are damaging houses in the northern provinces where the Dutch gas reserves are located. The government has introduced compensation measures for victims (still contested as too small). This led to the decision to stop gas production in the region by 2030. Consequently, all households are to be gas-free (for cooking and central heating) by 2050. Sustainable agriculture, particularly meat and dairy farming, is on the agenda and is gaining social support. Plastic is seen as a problem, but is dealt with largely at the municipal level, as a part of local recycling programs. A deposit paid by consumers on certain forms of packaging will eventually be introduced by 2021.

The quality of air and surface water in the Netherlands is poor, with intensive farming and traffic congestion the primary causes of concern, as well as soil salification of agricultural lands. Half of rivers, canals and lakes contain too much nitrogen and phosphates. Air pollution, especially particular matter in the region around Amsterdam, Rotterdam and the Hague, is among the highest in Europe, and the concentrations of ozone and nitrogen dioxide are linked to a very considerable amount of premature deaths.

Although the Netherlands is praised as a pioneer in the area of mapping and assessing ecosystems and their management, and on developing natural capital accounting systems, significant problems remain. The most serious problems involve habitat fragmentation and biodiversity loss, atmospheric nitrogen deposition, desiccation and acidification. Over the last 25 years, about 140 species inhabiting the North Sea have suffered a 30% decline, mainly due to recently forbidden commercial fishing techniques.

Citation:
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Raad voor de leefomgeving en infrastructuur, Duurzaam en gezond. Samen naar een houdbaar voedselsysteem. Maart 2018

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Romania

Score 5

Despite its membership in the EU, Romania continues to struggle with developing and implementing comprehensive environmental regulations. Despite improvements to the country's waste management regulatory regime, households and companies recycle very little and the implementation of the EU's Strategy and Legislation on Hazardous Waste and Chemicals remains ineffective. The structural factors inhibiting success include petty corruption, under-resourced enforcement agencies and the economic development incentive of a weak regulatory regime. The Danube river and lower Danube watershed in Romania is one of the largest in Europe but struggles against the significant industrial and agricultural run-off from Romania and elsewhere in Europe. Soil degradation resulting from increased agriculture and poor farming practices are putting additional pressure on this important ecosystem. Organized crime manifests itself in illegal forestry as evident in the Directorate for Investigation of Organized Crime and Terrorism (DIICOT) operation in 2018 to break-up a €25m illegal logging ring, estimated to be one of the largest in Europe. Forestry has the potential to be a strong industrial sector with forests covering more than 25% of the country, but a lack of reliability and regulation have prohibited the forestry sector from truly thriving.

Slovakia

Score 5

Slovakia has considerable natural resources. However, interest groups and policymakers have traditionally assigned priority to economic growth rather than the protection of the environment. Although NGOs have helped draw attention to environmental issues, and EU accession has come with the obligation to meet the European Union's strict environmental standards, this negative legacy is still present in policymaking. As a result, each government's approach to environmental issues has tended to be patchy rather than holistic. A second major problem has been the weak implementation of environmental laws and regulations. A third problem is the country's strong industrial production, which keeps energy demand high.

Slovakia relies heavily on nuclear power, which means low greenhouse emissions, but this comes with other risks. Around 54% of the energy mix is nuclear energy, while around 19% come from thermal power and 17.6% from hydroplants. The share of renewable energy sources is a mere 6.8%. Slovak legislation and regulation hinders the installation of small wind turbines that generate electricity for households, and there are only two small wind parks in the country. The country's heavy dependence on nuclear energy has made the planned completion of the third and fourth nuclear power plant in Mochovce a major issue for some time. After considerable delay, the completion of the third bloc now looks near.

In the period under review, the Institute of Environmental Policy at the Ministry of Environment has been drafting a new strategy for environmental policy up to 2030. An amendment to the act on support for renewable energy sources and highly efficient cogeneration in October 2018 has further limited the support of renewables.

Citation:
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Spain

Score 5

Spain enjoys exceptionally diverse natural habitats; however, government policy has not provided sufficient safeguards regarding sustainability or general environmental quality in recent years. In 2018, new Prime Minister Pedro Sanchez merged environment and energy policies into a single ministry "for the ecological transition," underlining his government's commitment to environmental sustainability. However, Spain's anti-climate-change efforts remain insufficient, with country slated to reach a series of intermediate goals that seem today seem unattainable under the current legislation and tools available. A new law on climate change and energy transition was under discussion at the end of 2018, which would set a 2030 emissions target at 20% below 1990 levels, and promote renewables.

As the country is extremely dependent on external energy supplies, government strategy during the period under review was also aimed at encouraging energy savings. Iberdrola, the country's largest energy company, announced the closure of its last coal plants in 2017, and the new government, revising its predecessor's opposition, said it would not block the decommissioning of coal-fired plants. Air quality remains a big problem in big capitals such as Madrid and Barcelona, but local

governments in both cities have approved measures to reduce pollution. In terms of protecting natural resources and biodiversity, the country has a mixed record.

Citation:
October 2018, El Pais: "Why Spain is failing to meet EU climate targets"- https://elpais.com/elpais/2018/07/10/inenglish/1531208963_491007.html
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Croatia

Score 4

Environmental policy in Croatia has been strongly shaped by Croatia's accession to the European Union. According to the National Strategic Reference Framework, which guides the use of EU Structural and Cohesion Fund money, Croatia is to spend almost €10 billion on waste management, water management and air protection – the three most important environmental issues in the EU accession negotiations – by 2023. However, implementation of the envisaged measures has progressed slowly. The regulatory framework was extended in 2018 with the amendments of the Environmental Protection Act. However, while improving the environment reporting system, they failed to expedite the passing of the rules and regulations required for enforcement of laws. In water management, substantial investment in the public water supply and drainage system and wastewater treatment system is needed, because there is still a high percentage of water loss (48%) in this system. The progress is waste management is also inadequate: of 12 regional waste management centers planned, only two have been completed – both in western parts of the country. Another problem is the fact that these planned waste management centers are to be focused primarily on mixed municipal waste, which is to be treated mechanically and biologically and turned into the fuel for incinerators in the regional centers. The focus is still not on measures aiming primarily at the selection, separate collection and re-use of waste as one of the key policy tools of the development toward a circular economy.

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Tišma, S., Funduk, M. (2018): Zaštita okoliša/Environmental Protection, in: V. Samardžija (eds.), Izazovi provedbe europskih politika u Hrvatskoj/The Challenges of European Policies Implementation in Croatia. Zagreb: IRMO, 179-218.
European Commission (2017): The EU Environmental Implementation Review Country Report Croatia. SWD (2017) 45 final, Brussels (http://ec.europa.eu/environment/eir/pdf/report_hr_en.pdf).

Cyprus

Score 4

The absence of a comprehensive and coherent policy, dispersed responsibilities, and political expediency favoring financial interests at the expense of environmental protection place Cyprus very low on many relevant EU ratings. The country is failing its EU obligations, despite warnings from Brussels and pressure from local and international organizations. Awareness-raising efforts and pressure from

environmental groups since the late 1980s have failed to convince the authorities to halt projects with a destructive environmental impact. Politicians and representatives from both public and private institutions are persistently seeking that the Commission relax environment protection rules.

The country's response to demands for climate protection remains insufficient in many respects. According to the European Commission (2017), promising plans to reduce gas emissions require more action, including a reduction in fuel dependency and access to good public transportation infrastructure. The use of environmentally friendly energy showed some progress recently. The Commission also points to eco-innovation as an opportunity for development, since Cyprus currently ranks 26th.

Despite the Commission's view that the major environmental challenge for Cyprus is water management, given its dependence on rainfall, new water-intensive projects (e.g., golf courses) continue to be approved. Desalination and limited wastewater reuse do exist and are increasing, but these also have negative environmental impacts. Illegal drilling for water also negatively affects efforts toward sustainable water management.

Forest protection under a national program for the 2010 – 2020 period aims at reforestation, the reduction of fire hazards, and protection from pollution and other risks. A major challenge is the adequate protection of Natura 2000 areas, which are at risk from projects promoted without impact assessment studies. Areas such as the Akamas peninsula remain unprotected and are at risk from government decisions and the activities of private developers. Local authorities and communities often align with developers in seeking profit at the expense of environmental protection.

Waste management, including avoiding the expansion of landfills, is a third major challenge. Despite Commission threats of sanctions, the waste management problem remains unresolved. The subject was also addressed in a report by the auditor general in late 2017. Furthermore, in 2018, Cyprus received warnings from Brussels for failing to integrate EU directives on the environment into national laws, failing to meet recycling targets, and failing to efficiently manage waste.

The authorities continue to use the economic crisis as a pretext as they proceed in relaxing or canceling environmental protection rules. Warnings by experts and the existing EU rules are often ignored and new projects are approved with additional negative effects on ecosystems. A 2017 law leaves the door open for the privatization of beaches, while recent decisions to allow the construction of 30- to 40-floor skyscrapers without proper environmental impact analyses has run contrary to significant elements of town planning legislation.

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Greece

Score 4

In comparison to many other countries, Greece performs rather well on environmental policy. According to Yale University's Environmental Policy Index, Greece is in the 22nd position among 180 countries with a score of 73.60 in overall environmental performance. Greece is among the 10 top world performers in access to water and sanitation.

After 2010, industrial production and greenhouse gas emissions in Greece declined – a consequence of the economic crisis. Recycling has only modestly increased over the past 15 years and waste management is not systematically practiced. Given that Greece, which has a population of 11 million inhabitants, receives an annual inflow of approximately 30 million tourists, one should expect a reliable policy of waste management. Such a policy, however, does not really exist. Particularly during the prolonged tourist season, waste overflows landfills in tourist areas.

Several causes lie at the root of Greece's environmental challenges: a lack of state mechanisms capable of controlling sources of pollution, unchecked urban development, large infrastructure projects and negligent consumer behavior. Environmental and forest management is haphazard and subject to the vicissitudes of changing political leaderships and interests.

The crisis has exacerbated a tendency to privilege economic growth at the expense of environmental protection; nowadays growth is pursued at all cost. For example, on Greece's coasts new hotel construction is mushrooming without much care for environmental concerns. In cities and rural areas, public works and town planning have likewise always been afforded priority over environmental protection. The result has been that important targets of environmental protection – climate change, renewable water sources and forest biodiversity – have never been pursued in a systematic fashion.

On a positive note, in 2017 the government introduced a so-called eco-tax of four cents for every plastic bag used for shopping or garbage. Greeks use plastic bags at twice the average among other Europeans. It has been estimated that plastic bags make up half of the waste in Greece's waters. The eco-tax immediately impacted plastic bag consumption. As of 2019, the charge will rise to seven cents.

Citation:
Data on Greece's performance regarding renewable energy sources, water management and recycling is drawn from the SGI database available on this platform.

Data from Environmental Performance Index https://epi.envirocenter.yale.edu/epi-indicator-report/EPI

Malta

Score 4

Malta's environmental challenges are complicated by large population density, a constant challenge to create employment opportunities, attract foreign investment and improve standards of living. As an EU member state, Malta is bound to fulfill key climate targets within the context of the Europe 2020 Strategy. Only 6% of Malta's energy consumption was obtained from renewable energy sources; ongoing efforts are required to ensure that the established national target of 10% is met. Moreover, Malta is one of the few EU member states experiencing difficulties in staying on track with regard to renewable energy, energy efficiency and emissions not covered by the EU Emissions Trading Scheme. Consequently, Malta is paying several hundreds of thousands of euros for Bulgaria's extra emission allowances. This shortcoming is largely a result of the country's continued high dependence on cars, the growing dependency on air conditioning and the slow reduction in the island country's forest and parkland area.

Several initiatives aimed at the targets have been undertaken. These include the generation of photovoltaic power, the establishment of photovoltaic farms, construction of an interconnected electricity system with Sicily, promotion of fuel-efficient cars, plans for a more cycle-friendly road network, the promotion of car-sharing facilities, free public transport access to young people and the construction of a gas-fired power station. A new waste management plant that will manage 40% of Malta's waste is in the pipeline, while a differentiated waste-collection system that had previously been voluntary became mandatory at the end of October 2018. New regulations have been introduced to strengthen the environmental impact assessment (EIA) procedure. The effect of these initiatives will primarily be felt in the future. Also, an assessment of government spending indicates that less is being spent on the environment than in previous years.

Fresh water is a scarce resource in Malta, yet until recently the government's approach to this important issue was inconsistent and in general inadequate to protect the island country's water reserves. The production of water for domestic and commercial use is heavily dependent on reverse-osmosis plants. To relieve pressure from reverse-osmosis water generation, a National Flood Relief Project was concluded at the end of 2015 with the aim of increasing the amount of water collected annually. Government re-piping has also reduced loss of water from leaky pipes by 35%, though theft still accounts for a loss of between a 1/5 and 1/4 of total production. Moreover, the 2015 – 2021 Water Catchment Management Plan for Malta identifies several key measures that need to be implemented if optimal water conservation is to be attained. The plan's implementation is being supported by a €17 million EU-funded project. A €400,000 project to train businesses on water sustainability was also launched in October 2018.

The Maltese countryside is protected from unsustainable development through a regulatory process of permits and enforcement. Proposed amendments to the environment impact assessment regulation in order to correct identified and persistent shortcomings have been made. Nonetheless, EU data highlights the fact that Malta has one of the highest proportions of artificial land cover, coupled with a population density that is among the highest in the EU. The annual number of building permits for new dwellings has increased by 230% since 2013, with 283 approvals for dwellings in outside development zones in 2016. The Malta Environmental and Planning Authority (MEPA) has been restructured and is now divided into two separate entities (Planning Authority and Environment and Resource Authority) which are respectively responsible for planning and environmental issues. However, this split and many of the related changes have generated considerable controversy, including increased ministerial powers in the selection of board members, reducing the autonomy and independence of these boards and the strange anomaly that allows a representative of the environmental authority to sit on the planning authority boards only when invited to do so. A new agency called Ambjent Malta was established in August 2018. This is not a regulatory institution, but instead is intended to bring together every environmentally related directorate. Its aim is to improve people's quality of life and appreciation of the environment. The idea of setting up an environmental court with jurisdiction over areas in the public domain has also been mooted.

The government has introduced various policies to preserve Malta's biodiversity, as the small island country is home to a "varied and interesting array of habitats and hosts endemic, indigenous, and migratory species," as stated in the National Environment Policy. Yet Malta's biodiversity continues to be threatened through land development, invasive species, overexploitation of species and climate change. The policy outlines measures aimed to halt the loss of biodiversity by 2020. These include the compiling of a dedicated National Biodiversity Strategy and Action Plan, the creation of additional marine protected areas and strengthening the management of existing protected areas. The recent establishment of Ambient Malta may also contribute positively to preserving the island's natural capital. However, the government decision to extend the hours of hunting to 12:00 in the Majjistral Nature and History Park, Malta's first national park, against the unanimous objection of the advisory board undermines these policies, as did the decision to allow autumn hunting in 2018 despite flagrant abuses. The introduction of a fuel service-station policy deemed to be negatively impacting virgin land was meant to be reassessed; however, this had not taken place by the end of the review period. Spending on environmental protection has decreased by around €86 million as compared to 2012 levels.

Citation:
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Times of Malta 03/08/18 New agency geared towards environmental protection launched

Poland

Score 4

Poland has enshrined the principle of sustainable development in Article 5 of its constitution, and has broadly adopted EU environmental standards. However, there is a broad political consensus in the country that economic growth should be given priority over protection of the environment. All governments have been especially keen on protecting the domestic coal industry, which is a large employer and reduces the country's dependence on Russian energy, an issue that has taken on even greater prominence since the Ukrainian crisis, and have resisted attempts by the European Union to tighten targets for the reduction of carbon emission. For the PiS government, coal, gas and nuclear energy have been the prime energy sources, whereas renewables account for a meager 1%. Three new coal power stations are being built in Opole, Jaworzno and Kozienice, and the government has announced plans to erect a new nuclear-power station by 2029. It is also very eager to explore and produce shale gas. Since the drilling began without an impact assessment, the European Commission took Poland to the European Court of Justice in Luxembourg for breaking EU environment law in May 2017. The heavy reliance on coal has strong negative effects. According to the World Health Organization, 33 of the 50 most-polluted towns in Europe in 2016 are in Poland. On 17 January 2017, all schools in Poland were closed due to high levels of smog. Currently, the government plans to reduce the share of coal in energy production to 50% by 2030, and to produce 8,000 megawatts of electricity from offshore wind-energy plants. However, work on a new energy strategy is still under progress.

The government's disregard for environmental issues is reflected in another ongoing conflict on the Białowieża primeval forest. This is a protected Natura 2000 site, but

the government started to cut down a considerable number of trees, arguing that this was necessary because the bark beetle would otherwise destroy the whole forest. This provoked protests by environmentalists, who claimed the logging was not needed to fight the beetle but was only done for economic interests, and then mobilized the European Commission. Since the logging did not stop, the European Commission launched an infringement procedure against Poland in April 2016. The issue went to the European Court of Justice, which initially asked the Polish government to stop the cuts, and ultimately ruled in April 2018 that the logging should be stopped. Polish Minister for the Environment Henryk Kowalczyk said Poland would accept the judgment, and the country therefore does not have to pay additional fines.

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South Korea

Score 4

Environmental policies remain insufficient either to protect the environment or to ensure sustainable resource use. Moreover, Korea has been losing ground to the front runners in the transition to becoming a carbon-neutral and ecologically sustainable country. Environmental problems are very serious, particularly with regard to air quality and greenhouse-gas emissions. In the 2018 Yale Environmental Performance Index, Korea improved to rank 60 out of 180 countries overall, but ranked poorly with regard to climate and energy (110) and biodiversity (144). Problems with fine dust exposure are among the world's worst, with the country ranking 174th in this area. While some of this pollution originates in China, most of it is homegrown. Korea is the 7th largest emitter of CO2, and the share of energy production accounted for by renewables is the second-lowest in the OECD. The Moon administration plans to expand the share of renewables to 20% by 2030. South Korea is the fifth-largest producer of nuclear energy in the world, with its 24 reactors generating about 30% of the country's electricity. While Moon Jae-in originally pledged to phase out coal and nuclear energy, he later backed away from some of the more ambitious timelines. Environmental topics are gaining importance in the society, but the government clearly prioritizes economic growth over environmental concerns.

On a positive note, the quality of public transportation, especially in Seoul, is steadily improving, and the country has a high recycling rate. During the hot summer of 2018, President Moon declared air conditioning to be a "basic welfare" good, and

temporarily lowered electricity prices. In another populist move, the government temporarily lowered taxes on fuel when oil prices rose in October 2018. Plans to build new apartments in the green belt around Seoul further demonstrate the low priority accorded to environmental policies. Despite the ever-increasing traffic jams, cars are still regarded as holding the greatest transportation priority in most urban-development projects.

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United States

Score 4

The United States has had ambitious environmental programs since the early 1970s. By the 1990s, major enactments covered the entire range of significant environmental concerns, including water resources, wetlands, endangered species and protection of forests. In some areas, such as hazardous-waste management and new sources of air pollution, environmental controls have imposed excessive costs. The issue of climate change, however, requires the implementation of costly controls for the sake of benefits that will occur years or even decades in the future and that will affect the rest of the world as much as the United States itself.

In his 2008 and 2012 election campaigns, President Obama promised to make effective action on climate change a major priority. In 2009-2010, he pushed for a major cap-and-trade bill, but the measure failed in the Senate. Nevertheless, a number of constructive developments occurred. The Environmental Protection Agency (EPA) imposed several major measures, including increased fuel-economy standards for cars and light trucks, and carbon standards for new coal plants.

The Trump administration has been a rapidly escalating disaster for environmental policy. Trump has embraced an extreme version of climate-change denial and withdrawn from the Paris Climate Agreement. Although some of the more liberal states will continue to seek reductions in carbon emissions, no national action can be expected during Trump's presidency. Indeed, Trump has promised to rejuvenate the coal-mining industry, an economic absurdity. He appears to want to reverse any action that was taken by the Obama administration – for no other reason than that.

Meanwhile, Trump has appointed hardliner opponents of environmental regulation from industry to top environmental positions. His EPA has ordered the cancellation of numerous Obama-era environmental regulations – actions that have generally

been undertaken without benefit of serious analysis and may, in many cases, eventually be struck down by the courts. It has decimated the EPA's scientific and expert staff. In addition, the EPA under Trump is unlikely to enforce many regulations that remain on the books. Aggressive oversight by the new Democratic House of Representatives in 2019-2020 may curtail what has been a virtual abandonment of environmental regulation at the federal level.

Turkey

Score 3

Sustainable development policies gained in importance in Turkey as part of the EU accession process, which involved the country taking steps forward in environmental policy and legislation. The environmental chapter (Chapter 27) of the EU acquis was opened in 2009. In terms of environmental impact assessments, Turkey is generally in line with EU environmental legislation. In recent years, considerable progress has been made toward establishing emissions controls, the use of renewable energies and promoting energy efficiency. In the 2018 Environmental Performance Index, Turkey was ranked 108 out of 180 countries. According to the 2018 Climate Change Performance Index (CCPI), Turkey ranked 47 out of 60 countries.

According to the European Commission (2018), Turkey has some level of preparation in relation to environment and climate change. But enforcement remains weak, especially on waste management and industrial pollution. Over the short run, Turkey should complete its alignment with the directives on water, waste management and industrial pollution, and ensure that the Environment Impact Assessment Directive is correctly implemented. In addition, Turkey should complete its alignment with the acquis on climate change. However, its claim to continue using coal for energy production, and to be ranked again in the group of emerging countries in order not to risk its economic needs and projections, undermines official commitments and renders the country's efforts ineffective and unsustainable.

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