Environment Report

Environmental Policy

Sustainable Governance Indicators 2016

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 a front-runner in environmental policy. According to the 2013 Climate Change Performance Index of the Climate Action Network Europe, Denmark is the most climate-friendly country in the world. According to the Environmental Performance Index for 2014 (produced by the Yale Center for Environmental Law and Policy), Denmark ranks 13th among 178 countries. Denmark ranked first for health impacts as well as water and sanitation, but 97th for forests, 93rd for fisheries and 86th for agriculture.

The perception in Denmark is that the country is doing reasonably well. Asked whether they were satisfied or dissatisfied with efforts to preserve the environment, 70% of Danes answered that they were satisfied, putting Denmark in fourth place among OECD countries. Denmark is doing relatively well when it comes to renewable energy, as 23.40% 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 CO2 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 CO2 friendly this is largely mitigated by imports from countries where production is less CO2 friendly. Measured in terms of production Denmark has emissions per capita that rank it 8th highest in the OECD and measured in terms of consumption 7th highest.

The government has set rather ambitious goals including that Danish energy production should be fossil free by 2050. Several sub-targets have been set to reach this goal. Denmark has also aimed to be coal-free by 2030; recently the Minister of the Environment suggested moving the date forward to 2025.

The June 2015 government platform calls for Denmark to remain among the leading countries pushing for the green transition. 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.

Citation:
EU, Statistics on environmental infringements, 2013, http://ec.europa.eu/environment/legal/law/statistics.htm (accessed 19 October 2014).
Organisation for Economic Co-operation and Development, PRESS STATEMENT, Copenhagen, 25 January 2008 Launch of the Environmental Performance Review of Denmark, By Mr. Lorents Lorentsen, Environment Directorate.
Regeringens energi- og klimapolitiske mål, 2013, http://www.kemin.dk/Documents/Presse/2012/Energiaftale/Faktaark%202%20energi%20o g%20klimapolitiske%20mal.pdf
Climate Action Network Europe, "The Climate Change Performance Index. Results 2013," http://germanwatch.org/en/download/7158.pdf (Accessed 19 October 2014).
"Denmark wants to be coal-free by 2015," http://www.euractiv.com/sections/energy/denmark-wants-be-coal-free-2025-309593 (accessed 3 November 2014).
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).

Estonia

Score 9

Environmental awareness has risen rapidly in the political sphere, partly because of the need to comply with standards of the EU and international organizations that Estonia joined after regaining independence. The Ministry of Environment articulated a vision of 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. The challenge, however, is the national economy is still dependent on energy-heavy technologies. On the other hand, Estonia is sparsely populated and possesses significant natural resources – wetlands, forests, and protected areas for flora and fauna.

Regarding climate protection, Estonia has signed the Kyoto Protocol and implemented related tax and consumption regulations. In October 2014, Estonia agreed on EU energy and climate goals looking ahead to 2030. The country is progressing very much in line with EU targets. It has reduced greenhouse-gas emissions by half in a little over 20 years, even as the size of its economy has doubled. The share of renewable energy in Estonia today is already at 25%, close to the European Union's 2030 target. The main remaining challenge is the future of the oil-shale sector.

As far as water resources are concerned, 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. According to recent estimates, the quality of about 26% of surface water is not good.

With regard to forest area, more than half of Estonia's land is forested. Both the area covered by forests and the volume of forests have significantly increased in the last 50 years, making it one of the biggest resources in Estonia, both in natural and economic terms. Seventy percent of the forests are commercial forests, while the remaining third has been placed under different protection regimes. Estonia ranks 10th in Europe on the basis of the proportion of forests protected from development. Two general objectives have been set for forest management: sustainability and effective management of forests.

Finally, looking at biodiversity, 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 is 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. For example, the first "ecoduct" has been opened on the main national highway between Tallinn and Tartu. Strong emphasis has been put on environmental concerns in the process of planning the route for the Rail Baltic high-speed railway.

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. Environmental health policy, air quality and biodiversity were identified as particular strengths. However, weaknesses remain in the areas of climate change, energy issues and water resources.

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. Protected areas, including Natura 2000 territories, cover 11.9% of Latvia's territory. 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.

Citation:
1. Yale University (2012), Environmental Performance Index Rankings, Available at: http://epi.yale.edu/epi2012/rankings, Full report: http://epi.yale.edu/sites/default/files/downloads/2012-epi-full-report.pdf, Last assessed: 20.05.2013
2. Ministry of Environmental Protection and Regional Development (2011), Annual Public Report, Available at (in Latvian): http://www.varam.gov.lv/files/text/VARAM_2011_PublParsk.pdf, Last assessed: 20.05.2013
3. Forest Stewardship Council Database, Available at: http://info.fsc.org/
4. Convention on Biological Diversity, Latvia: Country Profile, Available at: http://www.cbd.int/countries/profile/default.shtml?country=lv#status, Last assessed: 20.05.2013
5. European environment - state and outlook 2015. European Environment Agency. Available at: http://www.eea.europa.eu/soer-2015/countries/latvia, Last assessed 22.11.2015

Sweden

Score 9

As is the case with global social injustice, Sweden tries to be a forerunner in environmental policy as well.

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. Indeed, CO2 emissions are decreasing, bio-diversity is improving and its ecological footprint, while still high, is slowly decreasing. Moreover, governments of both center-right and leftist-green orientation are gradually shifting toward an increase in "green taxes". In addition, environmental policy is an integrated component of the larger project of restructuring the economy and making it more environmentally friendly.

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 do disagree on some issues. For instance, they do not seem to agree on the future of nuclear power; the Social Democrats want to study the issue further whereas the Greens want to shut down two reactors before the next elections (in 2018). Meanwhile, as fate would have it, two nuclear power plants are now scheduled to be closed over the next few years by their owners due to falling electricity prices and the resulting low profitability.

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 a number of cross-sectoral strategies focusing on issues including 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. The population supports these plans. In a survey taken in 2014, 77% said they would vote in favor of phasing out nuclear energy in a popular vote. The final parliamentary decision is still pending and will in all likelihood be influenced by the fact that Switzerland's environmentally oriented parties suffered considerable losses in the 2015 national election.

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 totaled 2.5% of total public expenditure in 2012. 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 factors:

• 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 mix 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.

• Little progress has been made with respect to controlling noise pollution, as 25% to 30% of the population remains exposed to high levels of noise from road and rail traffic.
• Soil protection has improved.

• Average to high levels of success have been achieved in the area of chemical-management policy.

• 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 landscape protection. The number of animal and plant species that have become extinct or are at the risk of extinction continues to increase.

In 2015, environmentally sound energy projects were being discussed and watered down by parliament. Due to the electoral losses of the green parties, incentive taxes on energy will in all likelihood by replaced by softer forms of steering.

Three cantons with shale gas have decided to prohibit fracking.

Finland

Score 8

Finland faces 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. In the Yale 2014 Environmental Protection Index, Finland was ranked 18th out of 178 countries overall, and was top-ranked in the categories of health impact along with water and sanitation. Water

pollution is indeed a large issue in Finland. While pollution emissions from large industrial facilities have been to a large extent 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 management of which is of vital importance for sustainable economic development. 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.

Citation:
Jari Lyytimäki, "Environmental Protection in Finland", http://finland.fi/public/default.aspx?contentid=160041; 2014 "Environmental Performance Index", http://epi.yale.edu/epi/country-profile/finland

Germany

Score 8

In the latest Environmental Performance Index, Germany is among the "strongest performers," achieving a score of 80.47. Ranking sixth worldwide, Germany considerably reduced its distance from Switzerland (87.67), the leading country (cf. Environmental Performance Index 2014). Germany performs well in the areas of water resources, sanitation, biodiversity, air quality, climate and energy. With regard to forests and fisheries, however, there is ample room for improvement.

The greatest environmental policy challenge has been the response to the 2011 government decision to phase out nuclear energy by 2022. Germany is comparatively prepared to tackle this task, as it has become a market leader in renewable energy, offshore wind farms, cogeneration, and the energy efficient redevelopment of buildings and other infrastructure. However, problems remain regarding how to organize and finance the demolition of nuclear plants and waste, how to expand the electric grid to supply renewable energy, and how to harmonize the phase out of nuclear energy while also reducing CO2 emissions.

All three problems received attention in this review period. The renaissance of lignite use after the shutdown of the first nuclear plants endangers the goal to reduce CO2 emissions. A plan by energy minister Gabriel for the introduction of a carbon tax as an incentive to reduce high lignite usage received substantial resistance from within the grand coalition as well as from unions and power plant operators during the first months of 2015. The conflict resulted in a compromise: Instead of the carbon tax lignite plants of an overall capacity of 2,7 gigawatt are to be shut down. Furthermore, public investments and subsidies for energetic efficiency will be made. In order to accommodate protests of citizen groups in southern Germany the building of new high-voltage transmission lines shall be avoided or installed underground. The compromise solutions imply higher costs compared to the carbon tax, which are to be covered by tax money. If the measures can be as effective as the carbon tax in reaching the goals for reducing the CO2 emissions remains to be seen.

Moreover, concerning the responsibility for the costs for the demolition of nuclear plants and for resulting atomic waste the coalition decided that the plant operators stay fully in charge. How these decisions will affect the energy prices is an open question, but it is very likely that they will further contribute to an increase of the burdens for the consumers.

Citation:
Environmental Performance Index 2014: http://epi.yale.edu/files/2014_epi_report.pdf

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. Progress toward a low-carbon economy is limited in most sectors of the economy, and CO2 emissions per capita are still relatively high. Lithuania is likely to miss its Europe 2020 greenhouse-gas emission targets. The proportion of energy produced from renewable sources in Lithuania reached 23.1% in 2013. 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.

The country's forest-conservation efforts are much stronger, with Lithuania topping the 2012 Environmental Performance Index's forest category due to strong results in the areas of forest cover, growing stock and forest loss. 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. Separately, 94% of the country's municipal waste continues to go to landfills, with just 6% of waste recycled. Infrastructure for waste sorting and recycling has not yet been developed, and most non-hazardous waste is disposed of in landfills. Additional investment is needed to improve recycling rates.

Citation:
COMMISSION STAFF WORKING DOCUMENT, country report Lithuania 2015: http://ec.europa.eu/europe2020/pdf/csr2015/cr2015_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

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 a major oil and gas producer, and it is therefore directly and indirectly contributing to increased global CO2 emissions. The government's plans for achieving its climate goals have sparked national and international controversy. The intention is to rely strongly on the purchase of international CO2 quotas to a degree that appears to be beyond what is acceptable by EU standards (to which Norway is committed despite not being an EU member itself). 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 aimed at reducing and ultimately eliminating CO2 emissions associated with gas exploitation, focusing on the storage of CO2 in the seabed. These initiatives are currently moving from the research to the large-scale experimentation stage.

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 occupy approximately 62% of the total land area, about twice the OECD average. The key mechanism for defining sustainable development goals and targets has been Slovenia's new Development Strategy 2014 – 2020. The adoption of this strategy in late 2013 paved the way for a public debate on the new

Environmental Report, with special emphasis on Slovenia‘s Natura 2000 areas.

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: decreasing GHG emissions, risk assessment of natural and other disasters, establishing an operational program for drinking water supplies, developing a new biodiversity strategy, and creating 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. 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.

Citation:
Slovenia’s Development Strategy 2014-2020. Ljubljana. Available at: http://www.mgrt.gov.si/en/areas_of_work/eu_cohesion_policy/development_planning_and_programming_of_strategic_and_implementing_documents/slovenias_development_strategy_2014_2020_sds_2014_2020/.

Environmental Performance Index 2014. Available at: http://epi.yale.edu/epi/country-profile/slovenia

European Environment Agency. 2015. The European environment - state and outlook 2015. Slovenia. http://www.eea.europa.eu/soer-2015/countries/slovenia

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 EU 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.

Renewable water resources:
In 2000, Ireland signed the EU Water Framework Directive into law. Article 16 of that directive requires the introduction of charges for domestic water. Full implementation of this measure was included in the Troika Agreement with Ireland. To this end, Irish Water (Uisce Eireann) was incorporated in July 2013 as a semi-state company under the Water Services Act 2013. The company is charged with bringing the water and waste-water services of 34 local authorities together under one national service provider, which will subsequently be responsible for public water services including the management of national water assets and making capital and 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 during 2014 and, despite pockets of fierce, sometimes violent, local opposition, is now more than three-quarters complete. Very heavy up-front costs were incurred, while significant savings relative to the inherited situation have yet to be achieved. The proposed structure of the domestic water tariffs, which became the focus of a major political storm and fierce public protests, has been repeatedly revised. The water charge element has been greatly attenuated, so that the levy is now little more than a property tax surcharge and provides only weak incentives for conserving water usage. Toward the end of 2015 it appears that less than two-thirds of liable households have paid any water charges.

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 lands 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:
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 Centre is available at:
http://www.biodiversityireland.ie/

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

Luxembourg

Score 7

During the period under review, Luxembourg has made efforts to protect water resources and curb emissions through a series of governmental measures. However, efforts such as reducing carbon emissions caused partly by the phenomenon of "fuel tourism" by cross-border commuters, as well as the progressive improvement of the water quality of rivers and lakes need to be continued. Luxembourg's Kyoto Protocol pledge to reduce carbon emissions by 28% by 2012 was hampered by tax revenues from fuel tourism, which led to high carbon emissions and the negation of emissions policies. In addition, the country's dynamic economic growth and new car leasing by cross-border workers has also been cited as a reason for increasing carbon emissions. Luxembourg shows Europe's highest energy consumption per capita, the highest vehicle density (660 vehicles per 1,000 people in 2014) and highest renewal rate of passenger cars (12.5%). Despite the contentious debate over environmental liability, Luxembourg was the only EU country to reduce its biofuel ratio in 2012. From 2015 until 2020, Luxembourg is slated to pay an annual contribution of €5 million into the Green Climate Fund, which was born out of the Kyoto Protocol.

Luxembourg also shows the EU's lowest share of renewable-resources consumption (2.1%), while only 36% of the country's wastewater is treated in modern triple-phase sewage treatment plants. In 2011, European Court of Justice ruled against the government for a second time for "failing in its obligation to treat and dispose of urban waste water." Since 2013, Luxembourg has paid a penalty of €2,800 per day as a result. The government has thus prioritized expenditure for the construction of wastewater-treatment plants. The 2016 budget allocates €110 million for significant investment in new sewage-treatment installations.

Luxembourg's water systems are of comparatively poor quality (contaminated with pesticides, etc.), with only 7% of its rivers and streams in "good" condition. There are problems with waste-water treatment and drinking-water supplies if summers are very dry. Monitoring of water systems is regarded as insufficient. To improve drinking-water quality, the environmental administration planned to designate 80 drinking-water protection areas in 2015.

Almost 60% of the country's deep wells have pesticide residues, especially in the south of the country. Although Luxembourg committed to the OECD and EU Pesticide Risk Reduction Project, the government implemented this belatedly, with the result that the community framework for the sustainable use of plant-protection products (2009/128/EG) directive entered into national law only in December 2014.

For several years, the Ministry of Sustainable Development (Département de l'environnement) has promoted a campaign to reduce the use of pesticides, particularly in communal areas and private gardens. In 2015, 75% of Luxembourg's municipalities committed themselves to reducing the use of pesticides. But obligations to environmental protection usually refer to the public and private use of pesticides, and do not focus enough on agriculture, the largest contributor. After pesticides contaminated much of the country's groundwater in 2014, the government decided to ban the use of two pesticides, Métolachlore in general and Métazachlore in certain areas.

Although the country's per capita water consumption has decreased, levels are still high by cross-EU standards. Luxembourg's annual per capita fresh-water abstraction rate (private water consumption) has diminished quite considerably by 12%, for an average of 80.35 cubic meters, compared to 85 cubic meters in 2012. On the other hand, with 653 kilograms of yearly municipal waste generated per person in 2013 (687 in 2011), Luxembourg takes second place behind the EU-28's top country, Denmark.

As of 2011, Luxembourg showed Europe's highest degree of landscape fragmentation, fostering concerns over the country's biodiversity, with many animal and plant species regarded as being in danger of extinction. In 2012, about 34% of the 1,323 native flowering plants, around 54% of mammals and 24% of breeding birds were considered at risk.

The country's environmental policy thus faces some major challenges. Programs implemented during the period and looking forward addressed or will address issues surrounding the country's high recovery and recycling rate; new assessments of environmental sustainability questions; the achievement of sustainable protected forests reserves; monitoring nature conservation programs; the enlargement of energy counseling; a decrease in average per capita water consumption; the reduction of tax-privileged mileage allowances; and the implementation of an indicator-based biodiversity monitoring framework.

Citation:
http://www.greenclimate.fund/contributions/pledge-tracker/#states
http://www.wort.lu/de/politik/un-klimafonds-Luxembourg-gibt-fuenf-millionen-euro-5422a07bb9b398870806aa45
http://www.luxembourg.public.lu/de/publications/c/statec-lux-chiffres/statec-lux-chiffres-2015-DE.pdf
http://apis.lu/files/Dossier_MECO_FUAL.pdf
http://www.environnement.public.lu/developpement_durable/dossiers/pndd_2010/PNDD.pdf
http://www.gouvernement.lu/4079297/10-trinkwasser
http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/docs/nap_luxembourg_en.pdf
http://chd.lu/wps/portal/public/RoleEtendu?action=doDocpaDetails&backto=/wps/portal/public&id=6834#
http://ec.europa.eu/food/plant/pesticides/sustainable_use_pesticides/index_en.htm
http://www.gouvernement.lu/4444990/12-qualite-eau?context=3393616
http://www.environnement.public.lu/conserv_nature/biodiv/de/Luxembourg
http://europa.eu/rapid/press-release_IP-11-1273_en.htm
http://www.greng.lu/sites/greng/files/20120709-PK%20Sauer-Waasser-Velo-final%20.pdf
http://ec.europa.eu/eurostat/tgm/table.do?tab=table&init=1&plugin=1&pcode=t2020_rd300&language=en
http://www.gouvernement.lu/4876211/2014-rapport-activite-agriculture
http://www.wort.lu/de/lokales/alzette-anrainer-komplettes-versagen-beim-gewaesserschutz-56010b490c88b46a8ce60a95
http://www.lessentiel.lu/de/news/Luxembourg/story/17721967
https://www.gouvernement.lu/3595282/26-dieschbourg-revue?context=3316826
http://www.statistiques.public.lu/fr/actualites/economie-finances/comptes-finances/2014/08/20140806/20140806.pdf
http://www.statistiques.public.lu/catalogue-publications/luxembourg/2012/PDF-18-12.pdf
http://www.statistiques.public.lu/catalogue-publications/economie-statistiques/2014/76-2014.pdf
http://www.wort.lu/en/politics/emissions-vs-tax-revenue-the-pros-and-cons-of-fuel-tourism-53df4e68b9b398870804fcb3
http://www.wort.lu/de/view/Luxembourg-tut-sich-schwer-mit-dem-gewaesserschutz-5109ec4fe4b04af8b813ce57
http://www.wort.lu/en/luxembourg/ministry-says-water-safe-for-consumption-pesticide-pollution-exceeds-eu-norms-5436bba6b9b3988708074791

United Kingdom

Score 7

Environmental goals are ostensibly close to the heart of the Conservative government. However, some critics have expressed dismay at recent cuts in subsidies for green energy, and an increase in government support for natural gas fracking and nuclear power. The previous coalition government had promised a wide range of action to protect and preserve the sustainability of natural resources and the quality of the environment. It had set itself the goal of becoming “the greenest government ever.” However, worries about the cost of living led the government to suspend automatic increases in fuel duties, 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 Conservative government will continue to build on the previous government’s initiatives – for example, in introducing market-based mechanisms to environmental policy – but also on a planning system that had endeavored 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.

Much environmental policy is 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. Renewable water resources have never been an issue for the UK, 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 seen 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.

However, this has changed little by little in recent decades, as public opinion has slowly accepted the need for 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 environment protection. A recent scandal in the state of Carinthia (Kärnten), however, where large areas of land have been polluted with hexachlorobenzene by a local cement plant, has put government under pressure to foster and safeguard environmental standards.

In part for this reason, Austria is one of the very few EU countries 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.

A significant share of CO2 emissions in Austria (28.4% in 2013, taking second place behind industrial emissions) is due to vehicle traffic. Indeed, CO2 emissions related to vehicle traffic increased by 61.4% between 1990 and 2013. This increase in CO2 emissions is overwhelmingly due to the rise in goods transportation, which accounted for 42% of vehicle-traffic CO2 emissions in 2010. A total of 30.5% of vehicle-traffic CO2 emissions are due to the export of fossil fuels (defined as transit traffic and "petrol-station tourism" by non-Austrians).

Partly due to EU laws (the so-called Eurovignette directive), and partly due to the failure to make railroads a more attractive way to transport goods, Austria has completely failed to decrease vehicle-traffic CO2 emissions.

Industry and commerce are responsible for the second-highest increase in total CO2 production, and remain the largest contributor to CO2 emissions in full with 45.6% of total greenhouse gas emissions. Economic growth and cheap carbon-market certificates for CO2 can be seen as the principal reasons for the increase in CO2 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 CO2 certificates, contributing to a significant fall in certificate prices.

Citation:
New data on CO2 emissions stemming from: Klimaschutzbericht 2015, Umweltbundesamt, 2015, http://www.umweltbundesamt.at/fileadmin/site/publikationen/REP0555.pdf

Belgium

Score 6

The Belgian government has established a climate-policy website (www.climat.be) on which the authorities themselves write that the country's environmental policy is "rather complicated" ("la politique de notre pays en matière de climat est assez compliquée"). Belgium's environmental policy is indeed split between the federal government and the three regions, which makes it largely unmanageable. Most of the energy spent at this policy seems to be devoted to pushing the burden of adjustment to another of these partners. The website proudly details the progress made between 2008 and 2012, but concludes with the understatement that negotiations for the 2013 – 2020 policy round have not yet come to fruition. In practice, this means that environmental policy in Belgium remains largely uncoordinated, local and inefficient. Generally speaking, environmental quality matches the OECD average.

Carbon emissions represent the most immediately troubling environmental dimension. These have fallen over time, but primarily due to the economic crisis that wiped out large swathes of industry. Company cars remain largely subsidized and public transportation (mainly rail) systems are rather inefficient, with a high propensity to mount strikes. The implicit subsidization of diesel engines also increases nitrogen-oxide and particulate-matter pollution.

Car traffic is unlikely to decrease in the short run, partly due to the poor management of public transportation projects (e.g., a regional express train for the greater Brussels area, initially planned for completion in 2012, has been postponed to 2025). The government is introducing a per-kilometer tax on trucks, but the main objective is to shift some of the tax burden away from labor, not to reduce traffic. Congestion in the major cities remains high. Brussels, for instance, ranks as the sixth-most-congested city in Western Europe, according to the TomTom congestion index, with an average daily delay of 25 minutes during peak hour for what would be a 30-minute drive in off-peak conditions.

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.

Efforts have been made to increase the share of solar and wind-based electricity production, but with huge cost overruns that were not anticipated by policymakers despite warnings from experts. Traditionally, Belgium has relied broadly on nuclear power to produce electricity, but several recent plant failures (without environmental consequences) may lead to a drop in the share of nuclear power in the future. Too little effort has been made to improve energy efficiency, even when this would have been less costly than producing solar energy. However, new and innovative business ventures are today being created to tackle the problems left open by previous policy failures.

The regions are now responsible for maintaining forests and biodiversity. Overall, forest management is proactive, with a view toward long-term sustainability. Some superficial attention is given to biodiversity.

Citation:

References:
European Commission (2015): http://ec.europa.eu/environment/water/water-framework/pdf/4th_report/MS%20Annex%20-%20Belgium.pdf
European Environment Agency (2014). “Total greenhouse gas (GHG) emission trends and projections (CSI 010/CLIM 050) - Assessment”, June
European Environment Agency (2014). Air Pollution Fact Sheet2014: Belgium.
OECD (2015). “OECD Economic Surveys. BELGIUM”
TomTom (2015). “TomTom European Traffic Index. Measuring congestion worldwide”

Bulgaria

Score 6

Given the heavy damage to the environment inherited from the socialist economy, the overriding priority of environmental policy in Bulgaria over the last two decades has been to reduce pollution. Issues such as climate policy, renewable water resources, forest policy and biodiversity have been placed on the agenda by EU initiatives.

Bulgaria’s per capita CO2 emissions are relatively low and might further decrease with improvements in energy efficiency, the substitution of lower (gas) for higher (coal) emission fuels for power plants, and the rise in the share of renewables in the energy mix. Climate policy has concentrated on subsidizing renewable energy sources, especially solar and wind. Energy supply from renewables has increased at a high pace and equals more than 20% of final energy consumption. However, the subsidies proved to be overly generous, which had the undesired effect of effectively raising prices for end consumers, who subsequently rose in protest. As a result, contracts have been renegotiatied and subsidies brought down, which is likely to slow down the rise in the share of renewables.

As for renewable water resources, governance largely rests at the level of municipalities, creating problems of coordination and strategy development. A

further strategic 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. Bulgaria still lacks a clear water-resources strategy.

Forests in Bulgaria are either private, municipal or state property. This fact impedes the development and implementation of coordinated forestry policy actions. However, Bulgaria forest coverage is above the global average and, more importantly, has grown over the last two decades. This indicates that the existing model is performing relatively well and possibly needs incremental adjustments.

In terms of biodiversity policies, Bulgaria is an active participant in Natura 2000, the European Union's largest network for the preservation of biodiversity. With approximately a quarter of its territory dedicated to Natura 2000, Bulgaria is significantly above the average for the European Union. 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.

Czech Republic

Score 6

The Czech Republic 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.

Given the set of tasks and time schedules officially agreed upon during EU accession, environmental protection and sustainable development are now an integral part of the government's agenda. The policy responses to key environmental challenges have been outlined in a strategy for environmental policy for the years 2012-2020. In the period under review, the government adopted a new strategy for climate protection to 2030, an update of the government's energy policy and a National Action Plan for the Development of Nuclear Energy. Active policies addressing environmental issues are overwhelmingly influenced, and often funded, by the European Union. After the 2009 economic crisis, both public and private investment continued to grow in 2014, with overall spending on environmental protection increasing by 1.6% as compared with 2013. The focus of spending has been on wastewater management, air and climate protections, and waste management.

In October 2015, following several years of debate, open-cast mining limits for brown coal in the Usti region were undone, yielding criticism from experts and politicians. The cabinet justified cited the need to maintain employment and ensure thermal power stations and housing a sufficient supply of coal in justifying its decision. The symbolic value of this decision, which effectively ended 24 years of political compromise between the mining industry and public health authorities, underscored the dominance of industry and employment interests over environmental protection.

:

Czech Statistical Office, Environemental Protection Expanditures 2014. Published on 30.9.2015. available online https://www.czso.cz/csu/czso/environmental-protection-expenditure-2014 (last visited 6.11.2015).
European Environmental Agency, report on the Czech Republic published on 18.2.2015 and updated on 10.8.2015.

France

Score 6

France has a poor performance record with respect to environmental targets. Its good performance on carbon emissions is due to the importance of nuclear power in France. In contrast, areas related to energy efficiency, such as insulation technology, have been neglected. Environmental policies have continued to be subordinated to sectoral policies which are considered more important. When economic interests and environment protections clash, economic interests tend to prevail. While people's awareness of environmental issues has increased, environmental interest groups and government ministries (although established comparatively early) still do not play a decisive role in policymaking. Former President Sarkozy, who launched an ambitious environmental plan, later considerably downgraded his ambitions. The influence of the Greens, which participated in government between 2012 and 2014, has been minimal.

Lobbyists and pressure groups in favor of the status quo or of the interests of business are much more influential. Environmental requirements are perceived as a source of additional costs and rarely as an incentive for innovation and competitiveness. The latest example was the October 2014 withdrawal of the so-called ecotax on truck transported goods, which was driven by fears of truck driver protests. A bill on energy transition, which was adopted in July 2015, plans to reduce the share of nuclear power in total energy production from 75% to 50% by 2025, whereas renewable energy sources should represent 40% instead of the 12.5% seen today. As for energy savings, it has been announced that the isolation of buildings will become compulsory. It remains to be seen if these ambitious targets will be supported by consequential policies. Up to the recent Volkswagen scandal, the government had refused to deviate from incentives for diesel cars, as French companies have a marked preference for diesel engines. Following pressure from a more sensitive public, the government has decided to put an end to the tax privilege it affords diesel fuel.

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 French authorities have been unable to resist the agriculture lobby, which is the largest consumer of water. This plays out in the southwest of France, where the intensive production of corn jeopardizes regional resources, and even more in Brittany, where surface water (the main resource in that region) is highly polluted by intensive pork and poultry production. Despite condemnations by the courts and the EU commission, the government has been reluctant and unable to tackle the problem properly. Rivers and the sea are affected by the excessive proliferation of toxic seaweed. The situation is much better with forests (their surface is growing) and biodiversity.

In this latter case, it must be noted that the protection of biodiversity has met resistance in metropolitan France by many diverging interests (agriculture, construction and transportation). Thanks to France's vast and essentially wild territories overseas in Guyana and in the Pacific zone, the results regarding ecological indicators are slightly better than they would be if only the European space was considered. While forests are growing, a result of the drastic reduction of farming and of cultivated land, the maintenance of these new wild areas is insufficient despite a long tradition of care by specialized engineers whose profession was established by French monarchs.

Hungary

Score 6

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 European Union continues to serve as an important driver of policy action. However, environmental policy has suffered from the country's tight budgetary situation, the lack of a separate Ministry of Environment and a relatively low environmental awareness among the population. In the third Orbán government, environmental issues have largely been dealt with by a Ministry of Agriculture department led by a deputy state secretary. 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. Zoltán Illés, the former state secretary for environment in the second Orbán government, has strongly criticized the third Orbán government for neglecting the protection of the environment and for downgrading its institutions. The government has failed to address pressing issues such as the ragweed allergy that has been a big problem for many Hungarians. President János Áder has participated in many international forums for propagating the environmental issues, but has refrained from criticizing the government.

Citation:
Antal, Attila, 2014: Strong Constitutional Basis, Weak Environmental Policy.Paper Prepared for the 3rd UNITAR-Yale Conference on Environmental Governance and Democracy, 5-7 September 2014, New Haven (http://www.academia.edu/8117004/Strong_Constitutional_Basis_Weak_Environmental_Policy_The_Case_of_Hungary)

Iceland

Score 6

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. When the present government came to power in May 2013, the Ministry of Environment and Resources was brought under the responsibility of the person who also was Minister of Fisheries and Agriculture. However, a new Minister for Environment and Natural Resources was nominated at the end of 2014, separating the two ministerial positions.

The country is rich in onshore energy and fresh water resources, and has substantial offshore fisheries. However, apart from fisheries management quota 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 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, 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 present center-right government 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.

Citation:
Althingi. Taken 17. May 2013 from the link http://www.Althing.is/pdf/Althing2011_enska.pdf
Law on nature protection (Lög um náttúruvernd) 2013 nr. 60 10. apríl.
Vernd og orkunýting landsvæða (rammaáætlun) 89. mál þingsályktunartillaga Þál. 13/141 141. löggjafarþingi 2012—2013.
Constitutional Bill (2012), http://www.thjodaratkvaedi.is/2012/en/proposals.html

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 poor relationship

with its neighboring countries prevents it from sharing power facilities, which would reduce environmental costs. Security and political considerations also overshadow environmental issues, resulting in long-term neglect of environmental policy while OECD accession in 2010 binds Israel to conform with western standards and goals.

Since Israel received a status as a developing country with regards to climate policy, it is not bound to international climate treaties and has discretion over greenhouse-gas emissions and pollution targets. In 2009, it stated its aim to reduce emissions by a modest 20% by the year 2020 and subsequently launched a policy package of ILS 2.2 billion. However, the treasury halted the transfer in 2013 and again in 2015 as well as reduced the policy goals. Similarly, the Clean Air Act (2008) that set standards for industrial pollutant emissions and waste dumping underwent severe budget cuts. Although the government has sought to use taxation and price mechanisms to provide incentives for energy use reductions, it has not done enough to offer viable alternatives.

Years of drought and rising water prices motivated Israeli scientists to develop new innovative technologies such as desalination facilities, sewage treatment procedures and infrastructure, and efficient irrigation techniques. These have become front-line technologies recognized around the world, used to a somewhat lower (but sufficient) degree in Israel itself. However, Israel has considerable room for improvement with respect to regulation and water pollution prevention.

Israel's approach to preserving forest areas is systematic and effective, but could be improved. According to 2010 report, Israel's wooded area makes up 8.9% of its total land, and some 10% of its open rural area. Most of this land is declared as preserved, and is supervised by governmental authorities such as the KKL-JNF.

Israel's geographical diversity supports impressive biodiversity. Yet, in 2010 8% of plants were under threat or sever threat and 2% were already instinct, while the percentage of endangered vertebrates in Israel is one of the highest in the OECD. In 2006, Israel established a communal program which promotes cooperation between the government's main environmental bodies.

Citation:
Begano, Yuval, "The state comptroller's report: Did the gatekeeprs of air pollution fall asleep?," Maariv online, 5.5.2015:
http://www.maariv.co.il/news/israel/Article-475976 (Hebrew).

Berg, N., Ginzburg O. and Provolotzky, A., "National plan for monitoring the status of nature and biodiversity in open territories in Israel," Ecology and Environment 3.3 (2012), 256-262 (Hebrew).

Drukman, Yaron, "The controversy over reduce gas emissions is resolved," Ynet, 17.9.2015:
http://www.ynet.co.il/articles/0,7340,L-4701280,00.html (Hebrew).

Tzafrir, Rinat, "Despite the approaching climat summit: The government cancels the national plan to reduce greenhouse emissions", Haartz (via Green) 4.8.2015:
http://www.green.org.il/%D7%9C%D7%9E%D7%A8%D7%95%D7%AA-%D7%95%D7%A2%D7%99%D7%93%D7%AA-%D7%94%D7%90%D7%A7%D7%9C%D7%99%D7%9D-%D7%94%D7%A7%D7%A8%D7%91%D7%94-%D7%94%D7%9E%D7%9E%D7%A9%D7%9C%D7%94-

%D7%9E%D7%91%D7%98%D7%9C%D7%AA/ (Hebrew).

Berg Nema, Drori Roni, Dan Harel, Perelberg Amir, "The state of nature 2015," HaMarag publication, June 2015: http://www.hamaarag.org.il/sites/default/files/media/file/report/field_report_report_file/%D7%93%D7%95%D7%97%20%D7%9E%D7%A6%D7%91%20%D7%94%D7%98%D7%91%D7%A2%202015.pdf (Hebrew).

State Comptroller, "Vehicle emissions", State Comptroller annual report 64c (2014), 1055-1115: http://www.mevaker.gov.il/he/Pages/search.aspx?k=%E2%80%9D%D7%97%D7%95%D7%A7%20%D7%90%D7%95%D7%95%D7%99%D7%A8%20%D7%A0%D7%A7%D7%99%E2%80%9D (Hebrew).

OECD, "Environmental performances report: Israel 2011 - Main findings," OECD, 2011, (Hebrew).

HaMarag, "HaMarag - National plan for monitoring the status of nature and biodiversity in open territories in Israel," HaMarag website (Hebrew).

Central Bureau, "Society in Israel: Past, present and future perspectives report no. 6," Central Bureau of Statistics, October 2013, (Hebrew).

"Stopping the deterioration of bio-diversity and environment in Israel", The Society for the Protection of Nature in Israel Publication, January 2014, (Hebrew).

British Mandate of Palestine, "The Forest Law: current form," Kakal, 1926: http://www.kkl.org.il/files/about_kkl/pkuda/pkudat_hayearot.pdf (Hebrew).

Kakal, "What is the Forest Law?," Kakal website (Hebrew).

OECD, "OECD environmental performance review of Israel assessment and recommendations chapter," OECD, 31.5.2011, (Hebrew).

Japan

Score 6

Japan was a global leader in terms of antipollution policy and energy conservation in the 1970s and 1980s, partially due to technological progress and the forceful implementation of relevant policy programs, and partially due to the overseas relocation of polluting industries. 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, particularly under the DPJ-led cabinets (until 2012). In the (fourth) Strategic Energy Plan of April 2014, the LDP-led government has, however, reiterated that nuclear power will remain an important power source for a considerable time. According to the Long-term Energy Supply and Demand Outlook published in July 2015, nuclear power will continue to account for 20% – 22% of Japan's electricity in 2030, with renewables holding only a slightly larger share (22% – 24%). In August 2015, the first nuclear reactor was restarted after the Fukushima incident, with new safety rules created under the new Nuclear Regulation Authority in place. However, this policy remains fairly unpopular, and at the time of writing it remained uncertain whether additional reactors would or could be swiftly started.

Japan has made great progress in terms of waste-water management in recent decades, following a series of disastrous incidents in the 1960s and 1970s. Today the country has one of the world's highest-quality tap-water systems, for example. Usage 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. The devastation caused by 3/11 in northeastern Japan has led to further emphasis on forest-support measures.

Japan's biodiversity is not particularly rich compared with other advanced countries. However, the country has in recent years taken a proactive stance under its National Biodiversity Strategy, and has also supported other countries in achieving the Aichi Biodiversity Targets.

New Zealand

Score 6

The performance of New Zealand's environmental policy is mixed, but improving. In the latest Environmental Performance Index of the Yale Center for Environmental Law and Policy (Yale University) and the Center for International Earth Science Information Network (CIESIN) (Columbia University) for 2014, the country ranked 16th out of 178, but this should not detract from the fact that it holds only an average overall position in the group of OECD countries. Major environmental problems stem from New Zealand's particular type of economy, with its strong reliance on agricultural production. Areas of concern include water usage and management and greenhouse gas emissions. Deforestation, in contrast, is much less a concern, as logging in indigenous forests on public land has ceased and on privately owned land can only be carried out with a permit (although several major forests will reach maturity in the next few years). Finally, biodiversity is an area in which all recent governments have been quite active. Due to New Zealand's isolated location, its biodiversity is one of the most varied in the world, with a high percentage of vulnerable endemic species. Due to the public's interest in and attention to environmental issues (made even more acute by disasters such as the grounding of the Rena, a container ship, in October 2011) but also due to the Memorandum of Understanding the National-led minority government had with the Green Party until the elections in 2014, environmental policy has been a necessary part of the government's agenda. On the other hand, the government's critics accuse it of pandering to farmers, who are among National's strongest supporters, and failing to take a strong stance in supporting international environmental agreements such as the Kyoto Protocol. Organizationally, the most important development has been the establishment of the Environmental Protection Authority, which has begun work as a major regulator in managing nationally significant proposals under the Resource Management Act, regulating hazardous substances and new organisms, handling the administration of the New Zealand Emissions Trading Scheme, and managing the regulation of ozone-depleting substances and hazardous waste.

Citation:
Environmental Performance Index 2014 (Yale/Columbia: Yale University/Columbia University 2014).
Environmental Protection Agency: http://www.epa.govt.nz/Pages/default.aspx (accessed November 28, 2015).

Poland

Score 6

Poland has enshrined the principle of sustainable development in Article 5 of its constitution, and has broadly adopted EU environmental standards. However, as evidenced once more in the 2015 election campaign, there is a broad political consensus in the country that economic growth should be given priority over protection of the environment. 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. With the coal industry in mind, the PO-PSL government sought to obstruct attempts by the European Union to tighten targets for the reduction of carbon emissions. The government's emphasis on and liberal approach toward the exploration and production of shale gas, as well as its plan to build a nuclear-power station, have generated controversy. In September 2015, the Ministry of Environment conceded that test drillings so far had not been very successful. The share of renewables in Poland still stands at a meager 1%.

Citation:
OECD 2015, Environmental Performance Review: Poland 2015. Paris.

Portugal

Score 6

Portugal has legislation in place meant to protect the environment. Although the government has failed to implement adequate policies to mitigate climate change, ensure renewable water sources, or to protect forest areas and biodiversity, the reduction in production resulting from the economic crisis has eased the pressures placed on the environment. According to the 2015 Climate Change Performance Index (CCPI), released in December 2014, Portugal ranks fourth overall, behind only Denmark, Sweden and the United Kingdom, with regard to having the most effective environmental policies. This is a fall of one position in terms of rank, while the country's score also saw a slight drop (from 68.38 in 2014 to 67.26 in 2015).

Portugal has proposed a National Strategy for Sustainable Development (ENDS) at least since 2002, but this strategy remained pending during the review period. Such a strategy could have a very positive impact. In its main elements, this reform seeks to develop a green public-accounting system; harmonize and publicize existing environmental information; create analysis and decision-support tools that combine environmental, social, economic and budgetary aspects; review sectoral regulation policies; and rationalize existing environmental funds.

In the meantime, in lieu of the ENDS, assessments here are based largely on newspaper reporting. In this regard, Portugal can be rated as good on climate issues;

not good on water resources, but with a National Plan for Water under discussion; not bad on forests; and good on biodiversity, particularly with regard to marine environments.

Citation:
Source: Público 18/11/2013.
Technical Report for the DGEP Model Results prepared for the Commission for Green Fiscal Reform (http://www.portugal.gov.pt/media/1537849/20140917%20fiscalidade%20verde%20anexo%20IV%20DGEP%20model%20results.pdf (doc 23 e 24)

Jan Burck, Franziska Marten & Christoph Bals (2014), The Climate Change Performance Index Results 2015, available online at: https://germanwatch.org/en/download/10407.pdf

Jan Burck, Franziska Marten & Christoph Bals (2013), The Climate Change Performance Index Results 2014, available online at: https://germanwatch.org/de/download/8599.pdf

United States

Score 6

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 have occurred. The Environmental Protection Agency (EPA) has imposed several major measures, including increased fuel-economy standards for cars and light trucks, and carbon standards for new coal plants. In 2014, the EPA proposed regulations that would require reductions in power plants' carbon emissions of 30% by 2030, in effect, largely phasing out coal-fired power plants. Despite the failure to enact a cap-and-trade policy, the United States is on pace to cut carbon emissions by an estimated 16.3% by 2020, consistent with international expectations. In November 2015, President Obama announced that the United States was rejecting the proposed Keystone XL Pipeline that would have carried bitumen produced from tar sands in Alberta, Canada, for processing into oil in Texas. Because producing oil from tar sands has high energy costs, environmentalists criticized the project as undermining the effort to reduce carbon emissions.

Canada

Score 5

Canada's environmental-protection and sustainable-development record has been on the decline over the past years. A bill (No. C-38) passed in 2012 eliminated the Canadian Environmental Assessment Act, lowering the stringency of the federal environmental-assessment process and limiting the scope for public involvement. Environmentalists argue that the bill is part of a general pattern in which habitat-protection measures that often existed in law for years are removed in order to enable the development of energy projects and pipelines.

Bill C-38 had a number of implications for renewable water resources, forests, and biodiversity. Federal protection of over 95% of Canada's lakes and rivers was eliminated under the new Navigable Waters Protection Act, and pipelines and power lines were exempted from the provisions of the act. Amendments to the Species at Risk Act relieved the National Energy Board of the duty to impose critical-habitat-protection conditions on projects it approves. In addition, companies no longer have to renew permits periodically for projects that threaten critical habitats. As part of the government's austerity budgets between 2012 and 2015, Parks Canada suffered significant cuts in its budget.

Climate-change policy has been extremely controversial in Canada. The Conservative government has, on occasion, openly questioned the science of climate change, and largely failed to address the issue of global warming and greenhouse gas emissions. Unlike the government of British Columbia, the federal government has not introduced a carbon tax, and unlike the government of Ontario, it has not developed a comprehensive strategy for renewable energy. Bill C-38 included a repeal of the Kyoto Protocol Implementation Act. The latest (2014) Commissioner of the Environment and Sustainable Development report concluded that Canada is all but certain to miss its target for the Copenhagen Accord, which the government signed in lieu of participating in the Kyoto Protocol. Under the Accord, greenhouse gas production was to be cut to 17% below 2005 levels by 2020. Using Environment Canada data, the commissioner estimated that by 2020, greenhouse gas production in the oil and gas sector will be 27 megatons higher than it was in 2012.

Although the Liberal government under Justin Trudeau, which was elected in October 2015, has not yet committed to a clear target of greenhouse gas emissions, its stated intentions are more pro-environment than those of its predecessor.

Citation:
Office of the Auditor General of Canada, 2014 Fall Report of the Commissioner of the Environment and Sustainable Development, posted at http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201410_00_e_39847.html.

Theresa McClenaghan (2012) "Bill C-38: Federal Budget Bill 2012 Implications for Federal Environmental Law" Canadian Environmental Law Association, June. http://www.cela.ca/sites/cela.ca/fi les/Bill-C-38-Federal-Budget-Bill-R eview-and-Implications.pdf

Chile

Score 5

Chile is a country with 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 produces 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.

Citation:
http://www.sma.gob.cl/

Croatia

Score 5

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 progressed slowly under the Milanović government. Croatia has started to establish regional waste-management centers at the county level, but failed to meet its commitment in the accession negotiations to reduce its very large share of biodegradable waste (some two-thirds of the total waste transported to landfills) substantially.

During the period under review, major attempts have been undertaken to limit building development in order to maintain the quality of the enviroment. On the one hand, the legalization of illegal buildings has been accelerated. Some 40% of more than 820,000 requests for legalization had been resolved by October 2015. On the other, the number of construction permits issued has been substantially reduced. However, the announced merging of land registry and cadastre has not been carried out.

Netherlands

Score 5

Environmental policy is no longer a significant issue among the public in the Netherlands. According to a 2011 Eurobarometer study, only about half of the population supports a progressive environmental policy (e.g., one that addresses climate change, with a sustainable energy policy). Climate skepticism has won a voice in the States General through the People's Party for Freedom and Democracy (Volkspartij voor Vrijheid en Democratie, VVD) and the Party for Freedom (Partij voor de Vrijheid, PVV) Although the Dutch government speaks the language of sustainable growth, this is largely rhetorical, as GDP growth and job creation clearly have priority over sustainability criteria reflecting environmental and social concerns.

Climate-change mitigation (CO2 reduction) no longer has a top priority; indeed, the Netherlands now is one of the top-10 polluting countries in the European Union. There is a clear policy shift toward climate adaptation; this appears manageable today because any adverse developments in the Netherlands will be gradual. Lower growth rates have meant that the government has made very modest investments in energy efficiency and renewable energies in service of the EU's 2020 climate goals, which it is expected to meet. The Dutch government has resisted more ambitious climate goals in international negotiations. The so-called Energy Pact of summer 2013, welcomed as a decisive step toward an energy transition, suffered from very considerable implementation gaps and delays after only one year. In 2015 the General Audit Chamber and many other NGOs observed that the goals set in the Energy Pact are no longer feasible. Strikingly, in a case brought by climate NGO Urgenda, a civilian court recently ruled against the Dutch government for showing insufficient effort in terms of CO2-emissions reduction and in its energy policies more broadly. The Netherlands' natural-gas reserves are diminishing 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.

The recently implemented Delta Program dealt with climate risks and the associated risks and uncertainties related to flood safety, freshwater availability and urban development.

Forest area and biodiversity protection are more or less neglected aspects of climate-change policy. Plans for expanding the National Ecological Network in order to protect and enhance biodiversity have been abandoned or toned down. Nature-conservation policy has for years been subject to financial cutbacks and subordinated to farmers' economic interests under policies dating back to the Rutte-Verhagen (Rutte I) government.

PBL (2013), the effects od climate change in the Netjerlands: 2012 (www.pbl.nl/publications/the-effects-of-climate-change-in-the-netherlands)

PBL, 2014, Nationale Energieverkenning 2014 (pbl.nl)

PBL, 3 June 2015, "Transitie naar schone economie in 2015 vergt scherpere klimaatdoelen voor 2030" (pal.nl. consulted 26 October 2015)

Algemene Rekenkamer, Rapport Stimulering van duurzame energieproductie (SDE+). Haalbaarheid en betaalbaarheid van beleidsdoelen, 16 April 2015 (rekenkamer.nl, consulted 26 October 2015)

"De rechter verplichtte de staat tot meer klimaatactie. Wat is er met het vonnis gebeurd?", Jelmer Mommers, in De Correspondent, 17 September 2015.

Romania

Score 5

Environmental problems persist in Romania and remain largely unaccounted for in national government action. A variety of illegal forestry and resource activities persist, stemming from corruption and weak oversight on behalf of the government. In spite of the actions of the Ministry of Environment, Waters and Forestry, led by Minister Gratiela Gavrilescu, the country faces significant challenges in managing its relations with large multinational corporations that seek to operate under the weakly regulated environmental regime. An important example is the case of the Roșia Montană Gold Corporation (RMGC), which has for years sought permission to conduct a gold-mining project that would bring jobs and economic prosperity to a small Transylvanian village. The eventual rejection of the permission by the Ponta government in 2014, which came in light of potential environmental damage and popular protest to the project, prompted the company to seek arbitration at the International Centre for Settlement of Investment Disputes (ICSID) in mid-2015.

Increased taxation on landfill waste and fines levied by the National Environment Guard have marginally contributed to improving the environmental situation, but also yield corruption concerns. A sizeable $1.56bil investment pledged by KMG International over the next seven years to improve environmental management has spurred optimism for improving Romania's natural environment. Similar optimism has arisen from a 2015 European Commission investment program totalling € 9.5 billion aimed at improving Romania's environmental, energy and transportation sectors. Provided the expenditures related to these opportunities can be efficiently managed and programmed, measurable improvement to Romanian environmental practices may well be on the horizon.

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. The government's new energy plan adopted in November 2014 compasses the construction of a new nuclear-power plant in Jaslovské Bohunice and a (major) new hydropower station in Sereď. Besides relying on nuclear power (the third block of the Mochovce nuclear power plant will go into operation in 2016) the government aims to generate more renewable energy and therefore plans to build hundreds of small hydropower plants across the country. Approved projects (e.g., in the Trnava region) prompted opposition within the population in 2015. In 2015, the government also introduced the "Green Household" project, a support scheme which allows households to switch to renewable energy sources like solar collectors or photovoltaic panels. Through this scheme, households can receive support drawn from EU funds to help cover up to 50% of the costs involved with switching to renewables. In terms of environmental issues, Slovakia's air pollution represents the country's biggest problem as air quality in the country is one of Europe's worst.

Citation:
Liptáková, Jana, Voucher scheme to support renewables, in: Sloval Spectator, 20.8.2015; http://spectator.sme.sk/c/20059668/voucher-scheme-to-support-renewables.html

South Korea

Score 5

Environmental policies are currently insufficient to protect the environment or to preserve the sustainability of resources. Environmental problems are massive, particularly when it comes to air quality. In the 2014 Yale Environmental Performance Index, Korea was ranked at 43rd out of 178 countries overall, but at 166th place in terms of air quality. Although about half of the most problematic particulate matter comes from the industries of coastal China, Korea itself could also do a better job in reducing harmful emissions. For example, the share of energy production accounted for by renewables is the second-lowest in the OECD.

Park Geun-hye's administration has distanced itself from the "green growth" agenda of her predecessor (which in truth was more focused on growth than on environmental protection). However, it has not presented an alternative environmental policy agenda. Facing pressure from domestic and U.S. car makers, Park's administration has delayed a proposed tax on vehicle carbon emissions until 2020. An emissions-trading scheme launched in 2015, but is not broadly effective. South Korea is one of the few countries that dramatically expanded its nuclear-power generation capacity after the 2011 Fukushima catastrophe without having solved the problems of nuclear-waste storage.

Local governments, particularly in Seoul, have expanded bike paths, although many

of these paths are designed for recreational use and will have only a marginal effect on reducing commuter traffic. Public transportation is also steadily improving, with new subway lines and new high-speed railway connections under construction. South Korea also has a high level of recycling. However, in many other areas conservation efforts are stalling. For example, priority is still given to cars, many buildings are poorly insulated and energy use continues to be subsidized. Beginning in 2010, the government launched an effort to reduce excessive use of heating in the winter and excessive air conditioning in the summer. These efforts have borne fruit in public environments such as public buildings and transportation, but have not as yet resulted in private individuals adopting more ecological lifestyles.

Citation:
"What happened to green growth?, The Korea Times, July 17, 2013
"S.Korea increases emissions cap in proposed carbon trading scheme," Reuters, Sep 11, 2014

Spain

Score 5

Spain enjoys exceptionally diverse natural habitats; however, government policy has not provided sufficient safeguards regarding sustainability and general environmental quality. Nevertheless, some positive trends can be observed in recent years, both as a consequence of government actions (both regional and local) and as a salutary effect of the crisis (which reduced energy consumption, limited construction work and prevented further littoral and forest destruction).

Concerning climate, a report released by the international NGO WWF shows a decrease in greenhouse-gas emissions since 2008, although those emissions are not yet within the maximum threshold allowed by the Kyoto Protocol, and may again increase now that the economy is recovering. More worrisomely, the Spanish government has aggressively rolled back economic incentives for renewable energy development since 2011, while in 2015, the Ministry of Industry and Energy announced new fees on consumers who use batteries to store electric power produced by their own solar panels. Decisions such as these have jeopardized Spain's previous leadership role with regard to solar power and wind energy. As the country is extremely dependent on external energy supplies, government strategy during the period under review was aimed at encouraging energy savings through a pricing policy. Air quality remains a big problem in big capitals such as Madrid and Barcelona, but new local governments in both cities now seem determined to reduce pollution.

Regarding water resources, increases in rainfall during the three last years prompted the government to postpone the extremely controversial transfers of water between different basin areas and the construction of very expensive desalination plants that had been included in various national hydrological plans in previous decades. Nevertheless, Spain was one of the few EU member states to delay completion of its river-basin management plans. During the review period, the European Commission

took Spain to the EU Court of Justice for not properly treating waste water from communities with more than 10,000 inhabitants, which poses risks to human health, inland waters and the marine environment.

In terms of protecting natural resources and biodiversity, the assessment is mixed. On the one hand, the reform of the Sea Coast Law (Ley de Costas) in 2013 deregulated some coastal activities which will likely lead to the resumption of coastal construction projects. The European Commission has also criticized Spain for problems in the implementation of the Natura 2000 network (the centerpiece of EU nature and biodiversity policy). On the other hand, the expansion in 2013 and 2014 of the network of national parks continued the trend of improving safeguards for wildlife ecosystems. Finally, and despite public spending cuts, Spain is now a global reference country in the prevention of this forest fires thanks to the increasingly professionalized forestry services in regional autonomous communities and the Ministry of Agriculture and Environment.

Citation:
Energy Storage Is The Real Target Of Spain's New Tax On The Sun
www.forbes.com/sites/williampentland/2015/06/18/energy-storage-is-the-real-target-of-spains-new-tax-on-the-sun/

European Commission on environmental infringements: http://ec.europa.eu/environment/legal/law/press_en.htm

WWF report on gas emissions: /www.wwf.es/?31600/WWF-considera-inadmisible-que-Espaa-siga-quemando-carbn

Australia

Score 4

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. However, Australia continues to promote a lifestyle that is not sustainable. Energy consumption is generally high and, despite great potential for solar and wind energy, the contribution of renewable energy to the grid has declined since the 1970s, an exception in the OECD. Furthermore, since 1971, CO2 emissions have almost tripled in Australia, again one of the worst performances in the OECD.

Australia's infrastructure continues to be stretched thin, a fact contributing to the rising CO2 emissions. Public transport in Australian cities is less developed than in comparable European or Asian cities. Investment in infrastructure will have to be a key component in Australia's environmental policy in the next decades.

The country has periodically taken positive steps with respect to climate change, most significantly when a carbon tax of $23 per ton was introduced on 1 July 2012.

However, one of the early acts of the Abbott Liberal-National coalition government was to abolish the carbon tax, which ceased to apply as of 1 July 2014. Nonetheless, the government remains committed to reducing carbon emissions by 26% to 28% as compared to 2005 levels by 2030. A Direct Action Plan, under which businesses will be paid incentives to reduce their emissions, has replaced the carbon tax, but is regarded by most experts as a poor substitute that will ultimately have minimal effects.

Concerning the country's scarce water resources, restrictions on urban water use are common and several states have built desalination plants in recent years. There has been a great deal of policy attention on achieving more sustainable and efficient agricultural use of water in the Murray-Darling Basin, the predominant source of water for agriculture in Australia. However, satisfactory resolution of differences between the four states affected has not been achieved to date.

Biodiversity decline is also a significant concern in Australia, with considerable evidence of acceleration in decline in recent decades. In response to this concern, in October 2010, the Australian government released "Australia's Biodiversity Conservation Strategy 2010 –2030," a report that 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.

Citation:
Australian Natural Resource Management Ministerial Council, 'Australia's Biodiversity Conservation Strategy 2010–2030', 2010: http://www.environment.gov.au/biodiversity/publications/strategy-2010-30/pubs/biodiversity-strategy-2010.pdf

http://www.timebase.com.au/news/2014/AT338-article.html

http://infrastructureaustralia.gov.au/policy-publications/publications/files/Australian-Infrastructure-Audit-Executive-Summary.pdf

Cyprus

Score 4

Environmental issues appeared on the public agenda in the late 1980s, initially thanks to awareness-raising efforts by environmental groups on the negative effects that tourism-related development had on the environment and the quality of life. To date, however, Cyprus has not developed a comprehensive and coherent environmental policy and has failed to meet its EU obligations in this regard. In order to make rapid headway in this area, ministerial responsibilities must be integrated, more information efforts are required, and administrative coordination must be improved. Environmental-information centers have been created with the aim of raising citizen awareness on the issue.

The country's response to the demands for climate protection has been insufficient in many respects. Exploitation of solar energy, which was long a low priority, has begun to improve in recent years, but progress in using renewable resources remains

slow overall. Energy-consumption levels are high, and the deficient public-transportation infrastructure results in an overuse of private cars. As a consequence, Cyprus is typically rated low on environmental-policy indexes. Actions designed to meet time-sensitive obligations to contain emissions and create an efficient waste-management infrastructure remain slow.

Water is a problem for Cyprus, an island, due to substantial dependence on (scarce) rainfall. The country has turned to desalination as a potential solution. Waste water is insufficiently exploited, as rural areas are just beginning to install sewage systems. Drilling for water – in some cases without permits – has led to depletion of groundwater sources. Water conservation and sustainable management remain big challenges.

Forest protection is governed by a national program for the 2010 – 2020 period, which aims at reforestation and a reduction of fire hazards. Other measures seek to protect forests from pollution and problems caused by visitors. A number of areas, even those included in the Natura 2000 project such as the Akamas peninsula, continue to be placed at risk by government decisions and private developers' activity, as well as by neighboring communities and landowners seeking to profit without considering environmental protection requirements.

In December 2012, on the occasion of its European Council presidency, Cyprus presented a strategic plan for biodiversity policy looking forward through 2020. In this area too, policy gaps and a deficient implementation of plans and regulatory enforcement measures are evident. Ecosystem protection measures, including the Natura 2000 program, have not been effectively promoted. The economic crisis is leading to a relaxation of rules governing land development, a major cause of ecosystem destruction and exploitation of beaches. In the past, such development has been frequently promoted in ostensibly protected zones. Hunting poses another threat to protected species, especially trapping with nets and other illegal practices. Political expediency continues to prevail at the expense of implementation of existing rules or effective action to protect the environment.

Overall, despite some efforts to promote solar and renewable energies, major challenges persist with regard to waste management and the development of a comprehensive environmental-policy framework.

Citation:
1. Press report, Expenditure for the protection of the environment, Cyprus Mail, http://cyprus-mail.com/2015/02/05/still-lagging-behind-the-eu-average-in-environmental-expenditure/

Greece

Score 4

Compared to other OECD Nations, Greece is one of the relatively large producers of energy. With regard to waste management and renewable energy sources, Greece ranks average.

Moreover, while compared to the rest of OECD nations Greece's CO2 emissions are average and its energy intensity rather low. Its ecological footprint is surprisingly large for a country that is nowadays clearly de-industrialized and has never been an industrial power. Unchecked urban development, large infrastructural works and negligent consumer behavior have probably had a negative impact on the country's natural environment.

Indeed, in Greece, economic development in tourism and agriculture has often proceeded in a haphazard manner and has always taken priority over environmental concerns. During the economic crisis raging since 2010, environmental policy has been neglected even more than in the past. Environmental NGOs were only nominally consulted by the Ministry of Environment, Town Planning and Public Works (YPEXODE). In fact, public works and town planning have always been afforded priority over environmental protection. The result has been that none of the three targets of environmental protection – climate, renewable water sources, forest area biodiversity – have ever been pursued in a systematic fashion. Moreover, Greece has struggled to develop a land registry (i.e., an inventory of land ownership) to determine responsibility and control. In 2015, the new radical left-wing/right-wing coalition government tried to stop a major gold mining investment in Northern Greece. It retracted the license granted to a foreign company to invest in the mines, claiming technical and environmental complications. However, the country's supreme administrative court has annulled the government's decision ruling that the environmental concerns have been taken care of by the investors.

Forest management is haphazard, too, and subject to the vicissitudes of changing political leaderships and interests. It is also vulnerable to fires, although in the summer of 2015 the extent of forest destruction by fires was not as large as in previous years.

To sum up, regarding environmental sustainability and given its conducive geographical morphology (long coastline) and helpful weather conditions (sunshine, winds blowing in the Aegean sea), Greece certainly has the potential for improvement.

Italy

Score 4

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 such as 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 protection of the landscape) 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 more than 35% of total energy demand. 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 and waste management, Italy fares less well. In these fields disparities between northern and central Italy on the one side and southern Italy on the other remain significant. In environmental policy the decentralization efforts of the last 15 years show that southern Italy does not achieve national standards in waste management. Some emergencies in Naples, Palermo and other southern regions demonstrate the low performance of local and regional authorities in environmental matters. The absence of purification plants affects parts of the coastline and rivers. Erosion, flood and earthquake prevention should still be a high priority for the government. Climate change has and will have a huge impact on Italy.

Italy 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. Erosion is a danger in many parts of Italy. 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.

Citation:
http://www.gse.it/it/Statistiche/RapportiStatistici (provides data about renewable energies production in Italy)

Malta

Score 4

As an EU member state, Malta is bound to fulfill key climate targets within the context of the Europe 2020 Strategy. However, it will have to work harder if it is to achieve these targets. Malta’s current energy supply is derived almost wholly from imported oil, while the contribution of renewable energy sources continues to be marginal. Indeed, data published during the second quarter of 2015 by the European Commission stated that Malta’s indicative renewable energy share was 3% for the period 2013 to 2014, significantly short of the national target of 10% by 2020.

High electricity tariffs have hampered the competitiveness of small and medium-sized enterprises. The government reduced energy tariffs for households in 2014, before extending this reduction to the business sector in 2015. A number of initiatives aimed at fulfilling targets have been undertaken, including the generation of photovoltaic power, the construction of an electricity interconnection system with Sicily, the promotion of fuel-efficient cars, and the construction of a gas-fired power station. The impact of these initiatives will primarily be felt in the future.

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's water reserves. The production of water for domestic and commercial use is heavily dependent on reverse-osmosis plants. The second draft Water Catchment Management Plan (2015-2021) is in its consultation phase. The plan aims to further consolidate the objectives of the first plan, while identifying new challenges. To relieve pressure from reverse-osmosis water generation, a National Flood Relief Project (with a net value of €42.9 million) is being implemented. The project aims to increase the amount of water collected annually. This is to be supplemented by the increased monitoring of groundwater extraction. While the national flood-relief scheme is nearing completion, the other measures remain at the planning stage.

The Maltese countryside is protected from unsustainable development through a regulatory process of permits and enforcement. A total of 51% of Malta's surface land is devoted to agricultural production, 22.3% to urban development, and 18.3% to natural vegetation. The environmental policy is undergoing revision, and some of the proposals appear to depart from earlier, more restrictive policies. The Malta Environmental and Planning Authority (MEPA) and the Malta Local Plan are currently being restructured. However, several proposed changes have generated controversy, including the separation of the planning and protection functions of MEPA, the creation of two separate authorities for planning and the environmental, the composition of the environmental and planning review tribunal, the increased powers of the prime minister in selecting board members and designating cases, the removal of both panels of the heritage advisory committee, the granting of ministerial powers to regularize illegal development, and the removal of the blanket ban on regularizing development outside development zones.

The government has introduced various policies to preserve Malta's biodiversity, as the small island 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.

Citation:
National Reform Programme April 2013 p. 16
Council Recommendation on the National Reform Programme 2012 and delivering a Council opinion on the Stability Programme of Malta, 2012-2015, July 2012 C 217/61
Pre-Budget Document 2013 p. 39
National Environment Policy February 2012 p. 54, p.76
http://www.mepa.org.mt/permitting
A look inside Malta's new, national environment policy. Malta Today 08/09/11
Borg. B National Environment Policy lacks substance, environmentalists charge. Times of Malta 12/09/11
Life Porgramme; Country Fact Sheet, Malta. EU Commission 2013 ec.europa.eu/environment/life/countries/documents/malta_en_2013.pdf
New MEPA rules give minister power to regularise illegal development. Malta Today 03/04/14
Two Weeks Consultation period on MEPA split Malta Today 26/03/2014
European Semester Thematic Fiche - Climate Change and Energy p.11
Pre-Budget Document 2015 p. 55
https://www.mepa.org.mt/topic-wcmp
https://mti.gov.mt/en/Pages/WASD/PROJECTS/Rainwater-Flood-Relief-Project.aspx
Malta Today 29/07/15 Aquilina Kevin, Twenty Reasons against MEPAs de merger
Times of Malta 11/09/2015 Environmental law amendments will remove checks and balances

Mexico

Score 4

Mexico is a signatory to the Kyoto Protocol and has shown every sign of taking environment policy seriously. However, it needs to do so, because it has some very real environmental problems. The provision of clean water to Mexico City, air pollution in the capital, and deforestation in rural Mexico are some of the largest challenges. Helping the Mexican authorities is a marked decrease in population growth. Although environmental policy has become more sophisticated, particularly in Mexico City and other major cities, the enforcement of environmental standards and regulations is often lacking. However, the government's recent economic reforms were more diluted and slower to pass than its environment legislation. While many companies do not comply with existing regulations, this is mainly due to the high degree of informality in the economy as a whole. 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 stronger than environmental interest groups. It does not help that the Mexican Green Party is not as "green" as the term might imply in other international contexts.

Turkey

Score 4

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 2014 Environmental Performance Index, Turkey was ranked 66th out of 178 countries. In the 2014 Climate Change Performance

Index, Turkey was described as showing “very poor performance,” and was ranked 54th out of 61 countries, climbing three positions compared to the previous year. Turkey’s greenhouse-gas emissions rose by 5.1% in the 2010 – 2011 period, and by 3.7% in 2011 – 2012. Whether the slowdown in this rate of growth is due to past legal and structural reforms and/or technical improvements is a matter of growing debate.

Progress has also been made in terms of regulating air quality and industrial pollution, though it will take time and considerable funding for this legislation to undergo full implementation. On 2 April 2015, the Turkish Ministry of Environment and Urban Planning adopted a new regulation on waste management based on the EU’s Waste Framework Directive (2008/98/EC). The regulation that will take effect immediately is intended to manage waste with minimal harm to the environment and human health, decrease waste produced, increase the re-use and recycling of waste, and supervise the market in terms of environmental protection.

The European Commission confirms that the enforcement of new legislation in Turkey has remained rather weak. While the country’s legislative alignment has made significant progress, implementation will require time and significant funding. Achieving full alignment with the EU acquis with regard to environmental policy will be quite challenging for Turkey. Large investments will be required to achieve EU environmental-quality standards in a wide range of areas, including water and air quality; integrated pollution prevention and control; management of municipal and hazardous waste and chemical products; biotechnology; radiation protection; and nature conservation. Improving compliance, while maintaining cost competitiveness, will be a key challenge for Turkey in the years ahead. Investments targeting the implementation of the EU environmental acquis are expected to place an increasing burden on Turkey’s public sector finances over the next two decades.

Although public awareness of environmental issues and climate change has been rising in Turkey in recent years, even within inner-government circles, obstacles remain significant. Environmental problems are perceived primarily as potential risks to the country’s economic development and as challenges to be addressed through technology and by those in positions of power at the top. These views are reflected in the government’s eschewal of support for renewable-energy and energy-efficient projects and plan instead to increase significantly the number of dams and hydroelectric plants, despite the disruption of environmental and social balances associated with such projects.

:

European Commission, Turkey Progress Report, November 2015

World Bank (2015) World Bank Group - Turkey Partnership: Country Program Snapshot, Washington D.C.: The World Bank (April).

Yale Center for Environmental Law & Policy and Center for International Earth Science Information Network (Columbia University) in collaboration with World Economic Forum, Geneva, Switzerland 2014 Environmental Performance Index, http://epi.yale.edu/files/2014_epi_report.pdf (accessed 5 November 2014)

German watch and Climate Action Network, The Climate Change Performance Index Results 2014, https://germanwatch.org/en/download/8599.pdf (accessed 5 December 2014

Address | Contact

Bertelsmann Stiftung
Carl-Bertelsmann-Straße 256
33311 Gütersloh
Germany
Phone +49 5241 81-0

Dr. Daniel Schraad-Tischler
Phone +49 5241 81-81240
daniel.schraad-tischler@bertelsmann-stiftung.de

Dr. Christian Kroll
Phone +49 5241 81-81471
christian.kroll@bertelsmann-stiftung.de

Dr. Christof Schiller
Phone +49 5241 81-81470
christof.schiller@bertelsmann-stiftung.de

Pia Paulini
Phone +49 5241 81-81468
pia.paulini@bertelsmann-stiftung.de

www.bertelsmann-stiftung.de
www.sgi-network.org

BertelsmannStiftung