

SGI Sustainable
Governance
Indicators

2015 Environment Report

Environmental Policy



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 policies and is pressing for high environmental standards within the European Union. Much of Denmark's current policy is based on EU directives. Taking EU policy as standard – and it can of course be discussed whether EU standards are good enough – the data available on implementation suggest that Denmark is doing reasonably well. In 2013, there were 353 infringement cases in the European Union, eight involving Denmark. But there were no Article 260 court cases (failure to comply with an ECJ judgement) against Denmark.

The latest OECD Environmental Performance Review for Denmark was published back in 2008. It was somewhat mixed. On the one hand, it stated that “the well-balanced environmental policies of Denmark have led to significant environmental progress.” However, at the same time it stated that “further environmental progress is needed for health and economic reasons,” suggesting that further environmental improvements be reflected in the country's transport, agriculture, energy sectors as well as fiscal policies.

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.

According to the 2013 Climate Change Performance Index of the Climate Action Network Europe, Denmark is the most climate-friendly country in the world. It is the current government's aim that Denmark should be coal-free by 2030, but recently the Minister of the Environment has suggested moving the date forward to 2025.

Citation:

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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.

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<http://www.kemin.dk/Documents/Presse/2012/Energiaftale/Faktaark%202%20energi%20og%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.

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 renovation within 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 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 top ranking in the

2012 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. Of a total 98,505 million Latvian lats invested into environmental protection in 2011, the largest sums were directed toward water infrastructure projects (50.373 million Latvian lats), greenhouse gas emission reduction measures (25.8 million Latvian lats) and waste-management services (8.6 million Latvian lats).

The Climate Change Financial Instrument, funded through the International Emissions Trading Scheme, is the main climate change policy instrument. In 2011, a total of 1,428 projects worth 56.57 million Latvian lats were approved in areas such as energy effectiveness, technology development for reducing greenhouse-gas emissions, switching from fossil to renewable energy sources.

Latvia's Environmental Policy Strategy for 2009 – 2015 prioritizes policy interventions in Baltic Sea marine water quality and waste water purification. In 2011, significant investments were made in waste water purification plants (20 renovated, 10 newly built), the expansion of sewage networks (by 134 kilometers), water-supply-system improvements (26 systems reconstructed, two newly built) and the expansion of water-supply networks (125 kilometers). The proportion of residents provided with high-quality water (58.9%) and waste water services (54.2%) has increased as a result.

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. The economic crisis precipitated an increase in Latvia's logging quotas and Latvian timber exports grew by over 50% between 2009 and 2010. Over 500 million Latvian lats (€14.2 million) worth of timber was exported in 2010, primarily to the United Kingdom, Sweden and Germany. Logging practices by the state-owned forest company Latvijas Valsts Mezi (LVM) were deemed unsustainable by the Forest Stewardship Council (FSC), leading to a loss of certification on 16 July 2010. Re-certification of several LVM management districts was achieved in 2012 and 2013.

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

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.

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 threshold values of ozone and other are frequently exceeded.
- 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.

At the time of writing, ecologically sound energy projects were being discussed by parliament.

Finland

Score 8

Finland faces specific environmental challenges in terms of climate change and population. Yet, the country's contribution to larger efforts in combating climate change have so far been modest. Water pollution is another large issue. 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. Fortunately, 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>

Germany

Score 8

In recent years, there has been a change in focus in Germany from traditional regulatory policies to new environmental policies such as ecotaxes, tradable permits and environmental agreements. German environmental policy is embedded in and influenced by the European framework; however, Germany has established itself as a pioneer and market driver in the fields of renewable energy, offshore wind farms, cogeneration, and the energy efficient redevelopment of buildings and other infrastructure. 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 Fukushima meltdown in 2011 resulted in a controversial change in German environmental policy. In May 2011, Chancellor Angela Merkel announced that nuclear power would be phased out by the end of 2022, reversing her previous policy. Although the decision was generally welcomed by the public, certain questions remain unanswered. Long-term radioactive waste storage remains a challenge for public authorities. As do the costs for the consequent changeover in the energy mix, the financing of much needed electric grid expansion and additional renewable energy subsidies. These costs will result in the medium term in ballooning energy prices for consumers.

In addition, it is highly plausible that this phaseout will result in a higher share of fossil fuels in the country's energy mix, making it more difficult for the country to achieve its CO₂ emissions goals. Due to the turnaround in energy policy, German electricity production relied to a greater extent on lignite in 2013. Lignite is the most CO₂-intensive technology of all fossil fuels with almost one ton carbon emission per megawatt hour (in comparison, natural gas emits 350 kg/MWh). The decision by the German energy industry to abandon large-scale carbon capture, transport, and storage (CCTS) implies that the country's CO₂ objectives can only be met through a rapid phasing out of lignite plants (DIW Berlin, 2012). On the other hand, the European trading system for industrial carbon emissions permits, which is in place and working, is apt to absorb the shocks stemming from the policy turnaround. Its

introduction, despite myriad complexities and difficulties, has without a doubt been a fundamental step toward a market-oriented strategy for reducing externalities. The energy tax, which is an indirect tax on the consumption of fossil and renewable fuels, is also driven by market principles.

Nevertheless, the phaseout policy will add new difficulties to an already mixed environmental policy picture. While environmental concerns have been among the top issues on Germany's policy agenda in recent years, policymakers have in some cases failed to align implemented measures with market incentives. The extremely expensive subsidies provided to renewable energy producers represent one such example. In this case, the Renewable Energy Act (Erneuerbare Energien Gesetz, EEG) has guaranteed fixed prices for renewable energy suppliers over a long-term investment horizon. The EEG, in addition to its distorting effects on prices, is highly discriminatory between different types of renewables. In particular, the EEG heavily promotes and subsidizes photovoltaic electricity production, which is extremely expensive in comparison to other renewable energy sources.

On 1 August 2014, an amended version of the Renewable Energy Act (EEG) came into force to remedy some of the most serious distortions. The EEG created the basis for the further development of renewable energies and has become a main pillar of the German electricity supply (with a share of 25%). However, the rapid increase of renewable energies has resulted in a rise in EEG apportionment, and has presented a challenge for the stability and security of the electricity supply. The aim of the reform is to keep the EEG apportionment stable and to guarantee that the electricity supply remains both secure and affordable. The measures are expected to decrease feed-in tariffs for new electricity facilities and contain expenditure growth. An unresolved issue, however, relates to reserve capacities in electricity production for instances of peak demand and situations of low renewable production (e.g., in windless and dark winter days). Although these capacities are needed, they do not pay off for investors due to their very low expected production times.

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. Renewable energy represented about 23% of total energy consumption in 2010. Water-supply and sewage infrastructure has benefited substantially over the years through the use of EU structural funds, but providing adequate connections to the public water supply still remains a challenge in some cases.

Moreover, there are deficiencies in the treatment of wastewater, with significant differences evident between rural and urban areas. The country's treatment of forests is 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.

Citation:

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 world's highest. 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 the 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. 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, helping to 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.

OECD, 2012: Environmental Performance Review Slovenia. Paris. Available at: <http://www.oecd.org/slovenia/slovenia2012.htm>.

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>

Sweden

Score 8 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, biodiversity 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 Greens joined a coalition government with the Social Democrats. While both, the Social Democrats and the Greens, are strongly committed to “green” issues, they do not seem to agree on the future of nuclear power; the Social Democrats want further studies whereas the Greens want to shut down two reactors before the next elections (in 2018). However, due to the stalemate in parliament in December 2014, it remains to be seen if the red-green government will be confirmed in the extraordinary election in March 2015 and if there will be some changes in environmental policies during 2015.

United Kingdom

Score 8 Environmental policy is close to the heart of both partners in the coalition government, and the government promised a wide range of action to protect and preserve the sustainability of natural resources and the quality of the environment. It 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 policies.

In many areas, the new government could 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. Plans by the Labour government to build “eco towns” as new models for sustainable living (with low carbon emissions, renewable energy, expansive green space, high recycling rates etc.), however, were scaled back substantially in 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.

Czech Republic

Score 7

The Czech Republic continues to battle both a historical legacy of environmental damage and other on-going environmental issues. Active policies addressing environmental issues are overwhelmingly influenced, and often funded, by the European Union. Reversing the trend after the 2009 economic crisis, both public and private investment grew in 2013, with overall spending on environmental protection increasing by 1.8% as compared with 2012. The focus of spending has been on waste-water management, air and climate protections, and waste management.

Ireland

Score 7

Climate Policy:

Ireland overshot its first Kyoto Protocol carbon-reduction targets, and has implemented a range of carbon-pricing instruments including a carbon tax. The long-term objectives for 2050 include an 80% reduction in carbon emissions across the electricity, transportation and built-environment sectors. 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.

Ireland is a world leader in carbon-efficient agriculture and food production.

At the 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.

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. However, it became clear by October that all was not progressing well with this initiative. Very heavy up-front costs were being incurred, while the uncertain promise of significant savings over the medium term seemed largely aspirational. The structure of the tariffs for domestic water became the focus of a major political storm. The popular view is that they are unfair and constitute little more than a surcharge on the property tax. No estimates have been published of their effectiveness in conserving water usage. As of the time of writing, the issue looked as though it might become the government's biggest threat to survival since taking office in 2011.

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.

Citation:

Climate Action and Low Carbon Development Bill 2013

<http://www.environ.ie/en/PublicationsDocuments/FileDownload,32468,en.pdf>

Israel

Score 7

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, thereby reducing 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 to 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 2.2 billion shekels. However, the treasury halted the transfer in 2013, preventing it from achieving significant results. Similarly, the Clean Air Act (2008) that set standards for industrial pollutant emissions and waste dumping underwent severe budget cuts causing it to be only partially implemented. 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 largely 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 extinct, 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. However, a prominent ecological organization firmly criticizes the government's readiness for fulfilling its commitment to the global biodiversity treaty of 2010 to start implementing a national plan for biodiversity in 2015.

Citation:

Berg, Naama, Orit Ginzburg and Provolotzky, Avi, "National plan for monitoring the status of nature and biodiversity in open territories in Israel," *Ecology and Environment* 3.3 (2012), 256-262 (Hebrew)

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

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

“Stopping the deterioration of biodiversity and environment in Israel”, The society for the protection of nature in Israel publication (January 2014) (Hebrew).

“The Clean Air Act,” Ministry of Environmental Protection website (Hebrew)

“The Forest Law: current form” (hebrew)

“What is the Forest Law?,” Kakal website (Hebrew)

“OECD environmental performance review of Israel assessment and recommendations chapter,” OECD, 31.5.2011(Hebrew)

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 (27% in 2012, taking second place behind industrial emissions) is due to vehicle traffic. Indeed, CO₂ emissions related to vehicle traffic increased by 60% between 1990 and 2012. 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. 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.

Belgium

Score 6

Following a general trend in Europe, carbon emissions have decreased substantially since the start of the economic crisis; emissions in Belgium in 2012 were down by 18.5% in comparison with 1990. This reduction, however, seems to have leveled off in 2013–2014, according to OECD projections. The main reason for this drop was the lack of competitiveness of several high-emission sectors (e.g., steel, car production,...) which led to plant closures.

Car traffic is unlikely to decrease, partly due to poor management of public transport projects (e.g., a regional express train for the Greater Brussels area, initially planned for completion in 2012, has been postponed to 2025), and partly due to the state's inability to internalize the externalities of car and truck transport. The country's highways are toll-free, and congestion in the major cities remains high. Brussels, for instance, ranks as the eleventh most-congested European city out of 60, according to the TomTom congestion index, with an average delay of 45 minutes during peak hour, for a one-hour drive in off-peak conditions. Only Istanbul and Moscow fare worse on that metric, according to the analysis by TomTom.

There remains the recurring temptation to increase highway capacity around the capital Brussels. What's more, several big shopping centers are planned to open in the periphery of Brussels, which is expected to increase traffic. Outside of city centers, housing remains largely dispersed (urban sprawl), which further increases car traffic.

Efforts have been made to increase the share of solar and wind electricity production, but with huge cost overruns that were not anticipated by policymakers (despite warning from experts). Traditionally, Belgium relied a lot on nuclear power to produce electricity but several plant failures (without environmental consequences) may imply a drop in the share of nuclear power in the future. Too little has been made to improve energy efficiency, even when it would have been less costly than producing solar energy (which was fancier).

Significant improvements in water treatment have been recorded in all regions (the

implementation of which has become a regional prerogative), even though Belgium still only fulfills 50% of its target (this places Belgium in the middle of the pack in comparison with other EU countries. The European Court of Justice keeps nudging Belgium to improve by repeatedly condemning it for failing to abide by EU regulations (at least one ruling per year over the last years).

Policy-wise, an OECD report from 2011 suggests the “...need for reviewing the division of environmental responsibilities to reduce the costs of lack of coordination and harmonization of policies.” 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:

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European Environment Agency (2014). “Total greenhouse gas (GHG) emission trends and projections (CSI 010/CLIM 050) - Assessment”, June

OECD (2011). <http://www.oecd.org/belgium/economicsurveyofbelgium2011.htm>

OECD (2013). “OECD Economic Surveys. BELGIUM”

TomTom (2014). “TomTom European Traffic Index”

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 put on the agenda by EU initiatives.

Bulgaria’s CO₂ emissions per capita are relatively low and might further decrease with improvements in energy efficiency. Climate policy has concentrated on subsidizing renewable energy, especially solar and wind. However, these subsidies proved to be overly generous over the 2012 – 2014 period, activating supply of electricity from such sources, which had the undesired effect of effectively raising prices for end consumers, who subsequently rose in protest. As a result, it is likely that the level of subsidies will be scaled down in the future, slowing down the transition toward 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 (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 world 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.

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, whereas other 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. Environmental interest groups and government ministries (although established comparatively early) do not play a decisive role in policymaking. Former President Sarkozy, who launched an ambitious environmental plan, later considerably downgraded his ambitions. Even at the time of writing, when the government coalition is comprised of Socialists and Greens, the influence of the latter is 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 has been the withdrawal of the so-called eco-tax on the road transportation of goods in October 2014, which was driven by fears of a truckdrivers' protest. The bill on the "energetic transition" which was adopted in October 2014 doesn't do much to curtail the dominance of nuclear energy as its contribution to the overall needs is capped at 50% of the total.

The French policy in favor of environmental concerns has to be seen within this tension. For instance, the focus on nuclear energy puts the country in a favorable

position as far as carbon production is concerned, but the choice of diesel oil rather than gas implies a considerable excess in particle emissions. In many large cities, France does not reach relevant targets established by the European Union.

The same contrast is observable in the field of renewable water resources. In principle, France supports a water policy and has set up water agencies to monitor the use and protection of its water resources. However, the 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 and the lack of a separate Ministry of Environment. In the third Orbán government, environmental issues have been dealt with by a Ministry of Agriculture department led by a deputy state secretary. While there is a certain awareness of the importance of environmental policy, the government has failed to address pressing issues such as the ragweed allergy that has been a big problem for many Hungarians, or the mismanagement of water levels in Lake Balaton, which has caused serious flooding in the neighboring region.

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 new government came to power in May 2013, the Ministry of Environment and Resources was brought under the responsibility of Sigurður Ingi Jóhannsson, who was also Minister of Fisheries and Agriculture.

The country is rich in onshore energy and fresh water resources, and has substantial offshore fisheries. However, 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 hydro-power and geothermal resources could be used for power generation. However, the new government, with less environment emphasis, reversed the previous government's progressive environmental policy agenda. In November 2013, the new 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 the new government and the opposition, the spring 2013 version of the act will be revised and a final version is to be presented for ratification in July 2015.

Many consider the most serious environmental problem facing Iceland to be the long-standing erosion of its soil. Government failure to restrict the ability of livestock – such as, sheep and horses – to roam freely about the countryside continues to cause substantial damage to the natural environment and is the main reason for why large swaths of Iceland's countryside are gray rather than green. The unwillingness of the government to fence in the sheep and horses in part reflects the disproportionate political power of farmers, even though the rural population accounts for only 6% of Iceland's total population.

Citation:

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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>

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 new (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. This policy though remains unpopular. As of late 2014, all 48 nuclear reactors remained offline for security reasons. Given the government's intent to reduce the vastly grown energy-import bill and likely local approval in at least some areas, a few reactors are expected to come online again in 2015. The government also intends to increase the share of renewable energy use, from some 10% in 2012 to 20% in 2030, which does not seem overly ambitious.

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 best 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.

Citation:

Agency for Natural Resources and Energy, Cabinet Decision on the New Strategic Energy Plan, 11.04.2014, http://www.meti.go.jp/english/press/2014/0411_02.html

Ben McLannahan, "Power switch weighs on Abe", *Financial Times*, 23.10.2014, p. 7

The Economist, Nuclear power in Japan: Critical mass, 03.11.2014

Luxembourg

Score 6

Luxembourg has during the period focused efforts toward protecting water resources and curbing emissions with a series of governmental measures that have helped improve conditions. However, efforts such as reducing carbon emissions caused partly by the phenomenon of “fuel tourism” – cross-border commuters that benefit from lower fuel prices – and the progressive improvement of the water quality of rivers and lakes need to be continued. Luxembourg’s pledge per the Kyoto Protocol to reduce carbon emissions by 28% by 2012 has been hampered by tax revenues from fuel tourism (€1.15 billion tax revenue a year), which has led to high carbon emissions and the negation of emissions policies. Also, the country’s dynamic economic growth has also been cited as a reason for increasing carbon emissions.

Luxembourg claims the highest energy consumption per capita, the highest vehicle density and renewal rate of passenger cars (14.3%) in Europe. Despite the controversial debate over environmental liability, Luxembourg was the only EU country to reduce its biofuel ratio in 2012.

What’s more, according to EU environmental statistics, at 2.1% Luxembourg also claims the lowest share of consumption of renewable resources and only 36% of the country’s wastewater is treated in modern triple-phase sewage treatment plants. In 2011, the government was condemned for a second time by the European Court of Justice for “failing in its obligation to treat and dispose of urban waste water.” Although Luxembourg committed to the OECD Pesticide Risk Reduction Project, it was not implemented until 2012. Moreover, public transport in the country has to be reinforced in the context of an overall policy on sustainable mobility.

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 is a problem with waste-water treatment and also drinking-water supply if summers are very dry. Monitoring of water systems is regarded as being insufficient.

Although the country’s per capita water consumption has decreased, in comparison to average use in the European Union, levels are still high. The European Commission has pointed out that Luxembourg’s low fresh-water abstraction rate (91 cubic meters in 2011) ranks second in the EU-28. Moreover, with 687 kilograms of waste per year per person (2011), Luxembourg’s waste volume is one of the highest in the OECD (OECD average: 540 kilograms).

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://apis.lu/files/Dossier_MECO_FUAL.pdf
http://www.environnement.public.lu/developpement_durable/dossiers/pndd_2010/PNDD.pdf
http://www.environnement.public.lu/conserv_nature/Observatoire/rapport/PKRappOBS2012.pdf
http://www.environnement.public.lu/conserv_nature/biodiv/de/luxembourg
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<http://www.statistiques.public.lu/fr/actualites/economie-finances/comptes-finances/2014/08/20140806/20140806.pdf>
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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 Organization for Economic Cooperation and Development (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, with a number of government initiatives enacted during the period under review, such as a reformed Emissions Trading Scheme and a national policy for regulating freshwater management (an area which previously was nearly completely devolved to regional water boards). 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 container ship *Rena* 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 October 13, 2014).

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, 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 Tusk government sought to obstruct attempts by the European Union to tighten targets for the reduction of carbon emissions. The government's emphasis on a liberal approach toward the exploration and production of shale gas, as well as its plan to build a nuclear-power station, have led to controversy. Shale-gas production plans have triggered protests by citizens. In 2013 – 2014, an initiative in the village of Żurawłów in southeast Poland became quite famous for its successful protest against Chevron, which had conducted some local test drillings.

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, is unlike any previous environmental issue. Effective action requires imposing 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 both 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 has imposed several major measures – including increased fuel-economy standards for cars and light trucks, and carbon standards for new coal plants. Moreover, about 30 states have passed laws requiring greater use of renewable energy by electric power plants, and California has established its own cap-and-trade policy. Most importantly, recent sharp declines in the cost of natural gas have reduced the use of coal, with significant reduction in greenhouse-gas emissions. In 2014, the Environmental Protection Agency 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.

Citation:

Brownstein, Ronald, "Time Is Ticking for Obama's Climate Agenda," *National Journal*, 29 June 2013.

Eilperin, Juliet and Mufson, Steven, "Everything you need to know about the EPA's proposed rule on coal plants," *The Washington Post*, 2 June 2014.

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 2012 – 2014 austerity budgets, Parks Canada suffered significant cuts in its budget, losing 30% of its full- and part-time positions nationally in 2012 – 2013, with more cuts expected in 2014 – 2015 despite additional funds promised by

the government to address critical infrastructure needs. In other areas, however, some progress is being made. The 2014 Fall Report of the Commissioner of the Environment and Sustainable Development (a branch of the Auditor General of Canada) found that the federal government has laid the groundwork for more comprehensive monitoring of the environmental effects of the oil-sands development in the province of Alberta.

Climate-change policy has been extremely controversial in Canada. Many observers argue that the federal government has not seriously addressed 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 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.

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/files/Bill-C-38-Federal-Budget-Bill-Review-and-Implications.pdf>

Chile

Score 5

Chile is a country with an efficient but scarcely restrictive environmental regulatory system, and 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 is often clashes with 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 due to the lack of adequate ecological sustainability.

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 has 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 by the end of 2013.

Netherlands

Score 5 Environmental policy is no longer a big issue among the public in the Netherlands. According to a 2011 Eurobarometer study, only about half of the population supports a progressive environmental policy (addressing climate change, sustainable energy policy). Climate skepticism has 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 rhetoric, because old-fashioned growth of GDP and jobs clearly have priority over the other sustainability criteria regarding environmental and social concerns.

Climate

Climate mitigation (CO₂ reduction) no longer has priority; there is a clear shift to climate adaptation which also appears manageable because any adverse developments in the Netherlands will be gradual. For example, lower growth rates have meant that the government has made very modest investments in energy efficiency and renewable energies in targeting the EU's 2020 climate goals, which it is expected to meet. The Dutch government resisted more ambitious climate goals in the next round of international negotiations. The so-called Energy Pact of summer 2013, welcomed as a decisive step to be taken toward an energy transition, suffered after only one year from very considerable implementation gaps and delays. The Dutch natural gas reserves are diminishing rapidly, necessitating gas imports from 2025 onwards in spite of 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.

Renewable water resources

The recent Delta Program dealt with climate risks and the associated risks and uncertainties on flood safety, freshwater availability and urban development.

Forest Area and Biodiversity

These are more or less neglected aspects of climate change. 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 several years been subjected to financial cutbacks and farmers' economic interests by (unchanged) policies of the Rutte-Verhagen (Rutte I) government.

Citation:

EC, DG Communicatie (2011), Nationaal Rapport Eurobarometer Nederland (www.ec.europa.eu/public_opinion/archives/eb/eb76/eb76_nl_nat.pdf)

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

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

Portugal

Score 5

There is legislation to protect the environment. Although the government has failed to implement adequate policies to mitigate climate change, ensure renewable water sources, and 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 Climate Change Performance Index, Portugal is behind only Denmark and the United Kingdom in having the most effective environmental policies. It is worth noting as well that a so-called Green Fiscal Reform, outlined in 2014 and slated to be implemented in 2015, is currently pending. This 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.

Citation:

Source: Publico 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)

Romania

Score 5 Romania continues to suffer from a range of environmental problems that are insufficiently addressed by government policies. A recent report by the European Commission (2014) highlights problems with poor air quality and insufficient flood-prevention control measures. Moreover, Romania is the worst performer in the European Union with respect to municipal waste management. The European Commission will commence legal action against Romania for failure to comply with EU regulations on mining-waste management. The case stems from Romania's Bosneag tailings pond, a 102-hectare abandoned wasteland that once served the Moldova Noua copper and zinc mines. The European Commission considers the pond a major toxic-dusts pollution source, detrimental to both human health and environment. Environmental issues have also featured prominently in the mass protests in September and October 2013 against a government bill allowing Roşia Montană Gold Corporation (RMGC) to extract gold in Roşia Montană. The protestors claimed that these mining operations would cause serious environmental degradation due to the use of cyanide. Even though the parties of the governing coalition had campaigned against the project in 2012, the Ponta government initially chose to continue with the project in part because the Romanian state has a 19% stake in RMGC and would have received 6% of the project's royalties. Protesters also asserted that many top politicians had personal financial interests in promoting the project. Upon civil society's pressure, the parliamentary commission responsible for reviewing the draft measure rejected the gold-mining project.

European Commission (2014) Assessment of the 2014 national reform programme and convergence programme for ROMANIA http://ec.europa.eu/europe2020/pdf/csr2014/swd2014_romania_en.pdf Accessed [23/12/14]

Slovakia

Score 5 Slovakia is a country with 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, both governments' approach to environmental issues has tended to be patchy rather than holistic. Neither the Radičová nor the Fico government have updated Slovakia's 1993 Environment Strategy or developed an environmental strategy focusing on Slovak priorities rather than on the mere compliance of EU requirements. A second major problem has been the weak implementation of environmental laws and regulations. The government's new energy plan has been delayed, with approval appearing elusive as late as October 2014. Plans to build a new nuclear-power plant in Jaslovské Bohunice have provoked controversy, as have proposals for hydropower stations and plants on the Váh and Ipel' rivers.

South Korea

Score 5 Environmental policies are currently insufficient to protect the environment or to preserve the sustainability of resources. In recent years contradictory trends have emerged. On the one hand, the previous Lee Myung-bak administration had put “green growth” at the center of its agenda, and environmental policies had entered the political mainstream. The Lee administration had strongly supported new technologies and had helped South Korean firms to develop “green” products, such as hybrid and electrical vehicles or LED-based lighting and displays. Yet, much of this so-called green growth was simply a new name for industrial and infrastructure policies.

A considerable amount of the investment associated with this drive had been earmarked for the environmentally very controversial Four Rivers Project, which included the construction of artificial waterways and dams. Huge amounts of public funds were also used to develop, build and export new nuclear power plants. South Korea became one of the few countries that dramatically expanded its nuclear power generation after the 2011 Fukushima catastrophe.

Park Geun-hye’s administration has since distanced itself from this “green growth” agenda, but it has not presented an alternative environmental policy agenda. Park’s administration has delayed a proposed tax on vehicle carbon emissions until 2020, amid pressure from domestic and U.S. car makers. Furthermore, the emissions trading scheme, which is expected to launch in 2015, also suffers setback.

The local government in Seoul has expanded bike paths, although many of these paths are designed for recreational use and will have a marginal effect on reducing commuter traffic. Public transportation is also steadily improving with new subway lines and a high-speed railway connection to the airport 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. Since 2010, the government has launched an effort to reduce excessive heating in the winter and excessive cooling in the summer. These efforts work in public environments, such as public buildings and transportation, but have not 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's environmental policy still cannot protect completely the sustainability of its exceptionally diverse natural habitats and the quality of its environment, but some positive trends can be observed in recent years as a consequence of the government's actions. However, it should be noted that the effects of the crisis have also helped the environment by reducing energy consumption, limiting construction work and preventing further littoral or forest destruction.

Concerning climate, a report released by the World Wildlife Fund 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 increase again now that the economy is recovering. Eurostat noted that Spain ranked third among EU member states in reducing CO₂ emissions for 2012 – 2013 (by 12.6%, as compared to the average EU reduction of only 2.5%). Economic incentives for renewable energies were suspended in 2012, which has jeopardized Spain's leadership role in solar and wind energies. As the country is extremely dependent on external energy supplies, the current government strategy aims to encourage energy savings through a pricing policy, although the third working program of the National Plan for Climate Change (approved in December 2013) includes a somewhat more comprehensive approach. Air quality is still a big problem in big capitals, such as Madrid and Barcelona – both currently at risk of being sanctioned by the European Union for violating pollution limits.

Regarding water resources, rainfall data for 2013 and 2014 have prompted the government to postpone the extremely controversial transfers of water between different basin areas or the building of very expensive desalination plants that were included in the different hydrological national plans of previous decades. Nevertheless, Spain was one of the few EU member states to delay completion of its river basin management plans (by the end of 2014, only the complex Canary Islands' management plans were pending to be adopted). 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, to 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, the fight against forest fires has become increasingly professionalized to the extent that Spain is now

a global reference country in the prevention of this type of fire thanks to the forestry services in regional autonomous communities and the Ministry of Agriculture and Environment.

Citation:

WWF report on gas emissions:

http://awsassets.wwf.es/downloads/informe_de_emisiones_de_gei_en_espana_1990_2012.pdf

European Environment Agency on recycling: www.eea.europa.eu/publications/managing-municipal-solid-waste

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

Australia

Score 4

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

Environmental policy at the federal level is the responsibility of the Department of the Environment. There are also parallel departments and agencies in all of the states and territories with similar environmental policy responsibilities within their own jurisdictions. 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 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. A substitute Direct Action plan, under which businesses will be paid incentives to reduce carbon emissions, was in the process of implementation at the end of the review period, but is regarded by most experts as a poor substitute which will have minimal effects. The Abbott government also abolished the three government agencies concerned with climate change that were established by the previous Labor government.

The Abbott government's attempt to de-list the Tasmanian Wilderness World Heritage Area from UNESCO's World Heritage List has been a significant defeat. UNESCO refused to implement that proposal in June 2014 and as a result the reputation of Australia as an environmentally conscious nation has suffered a blow.

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.

The Australian, state and territory governments are all signatories to the 1992 National Forest Policy Statement (NFPS). The NFPS provides the framework within which the governments work cooperatively to achieve sustainable management of Australia's forests. In addition, in November 2012 the Australian Parliament passed the Illegal Logging Prohibition Act 2012, which makes it a crime to import illegally logged timber into the Australian market and to process timber that has been illegally harvested in Australia.

Finally, biodiversity decline is 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>

Cyprus

Score 4

Environmental issues took a place on the public agenda in the late 1980s, initially through awareness-raising focusing on the negative effects that tourism-related development had on the environment and residents' quality of life. However, the country still lacks a comprehensive and coherent environmental policy, and fails to meet EU obligations. In order to make swifter progress 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. Urgent action is

needed to meet time-sensitive obligations to contain emissions and create an efficient waste-management infrastructure.

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 other 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 land owners seeking to profit without considering the demands of environmental protection.

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 likely to lead to a relaxation of rules governing land development, a major cause of ecosystem destruction. 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. Politicians and authorities appear to lack the will to implement existing rules or take effective measures 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. Cyprus: No fall in gas emissions between 2009 - 2012, <http://cyprus-mail.com/2014/10/28/cyprus-falls-short-of-climate-goals/>

2. Cyprus Strategy for Biodiversity, 2012, available in Greek at, [http://www.moa.gov.cy/moa/environment/environment.nsf/All/CE0747F45EB24725C2257B2F002D1685/\\$file/Biodiversity%20Report%20Final-Draft.pdf](http://www.moa.gov.cy/moa/environment/environment.nsf/All/CE0747F45EB24725C2257B2F002D1685/$file/Biodiversity%20Report%20Final-Draft.pdf)

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 always took priority over environmental concerns. 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 four targets of environmental protection – climate, renewable water sources, forest area biodiversity – have ever been pursued in a systematic fashion.

Forest management is haphazard, too, and subject to the vicissitudes of changing political leaderships and interests. It is also vulnerable to fires, some of which are started deliberately for planning reasons. Moreover, Greece has struggled to develop a land registry or inventory of land ownership to determine responsibility and control. Again, the crisis has negatively affected Greece's ability to manage any aspect of environmental policy.

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 under the Monti government (and in part also because of other conflicting environmental reasons such as protection of the landscape) these incentives have been reduced, an approach continued under the Letta and Renzi governments. Nonetheless, renewable energy sources now constitute 30% of total energy. The government has also provided incentives for sustainable house building and house renovations. 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 towns demonstrate the low performance of local and regional authorities in environmental matters. The absence of purification plants affects parts of the coast line and rivers. Erosion, flood and earthquake prevention should be a high priority for the government.

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 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. However, this year Malta will for the first time reach its target of generating 3% of national energy use from renewable sources.

High electricity tariffs have hampered the competitiveness of small and medium-sized enterprises. In 2014, the government reduced energy tariffs for households and states, and said it would do the same for 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. In 2011, the Malta Environmental & Planning Authority (MEPA) launched the first national Water Catchment Management Plan, with the aim of establishing a framework for regulatory measures required in this area. A principal concern of the plan is the considerable pressure put on Malta's scarce water resources. To relieve this pressure, a €6 million national flood-relief project is being implemented with the aim of increasing the amount of water collected annually from 300,000 cubic meters to 1 million cubic meters. 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. Moreover, the National Environment Policy launched in 2012 emphasizes the need to use land more efficiently. 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 undergoing restructuring and revision, with some changes generating controversy, including the proposal to create a separate environmental authority, 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 p. 8

<http://www.mepa.org.mt/topic-wc-mp>

Pre-Budget Document 2013 p. 39

National Environment Policy February 2012 p. 54, p.76

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Borg. B National Environment Policy lacks substance, environmentalists charge. Times of Malta 12/09/11

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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

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. However, 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. It is true that many companies do not comply with existing regulations, but 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 – and particularly younger – population, public pressure is still weak compared to many other OECD countries. It does not help that the Mexican Green Party is not particularly green as the term is typically understood internationally.

Turkey

Score 4

Sustainable development policies began to be important in Turkey as part of the EU accession process, inspiring steps toward environmental policy and legislation. In recent years, considerable progress has been made toward emissions controls, use of renewable energy and promulgation of energy efficiency, improvements in waste management and the expansion of water, and waste water services. 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 achieved regarding air quality and industrial pollution control, though full implementation of legislation will require time and significant funding. The European Commission confirms that enforcement of new legislation has remained rather weak. 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.

Although awareness on ecology and climate change has been rising in Turkey in recent years, even within inner-government circles, obstacles remain significant. Ecological problems are mainly perceived as potential risks to the country's economic development, and as challenges which can be handled technologically and from above. A prominent example of this pattern has been the government's plan for a massive increase in the number of dams and hydroelectric plants despite the associated disruption of ecological and social balances, instead of supporting renewable-energy and energy-efficiency projects with a smaller impact on nature.

Citation:

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