

ENVIRONMENTAL PERFORMANCE REVIEW OF SPAIN

EXECUTIVE SUMMARY

In a context marked by economic growth, the pressures from sectors such as construction, tourism, transport, energy and agriculture, high densities and pressures in coastal areas and islands...

Spain's GDP has grown by 36% in the last ten years. It is now the ninth highest in the world. GDP per capita has also risen and is now closer to the EU 15 average, partially owing to EU support. In many instances economic growth has led to increased pressures on the environment in Spain, in terms of both pollution and use of natural resources (e.g. water, land). This partly reflects a 52% increase in international tourist arrivals, and housing construction at a rate of 700 000 new dwellings per year (the tourism and construction sectors accounting for 11% and 9% of GDP, respectively). The population density of the coastal regions and the islands (where almost 60% of the population lives) is five times as high as in the interior regions. In some tourism areas population density can triple in the summer. Economic integration into the EU has led to 77% growth in road freight transport. Despite a significant decline, the unemployment rate is over 11%, among the highest in the OECD area.

Over the review period, decoupling of some environmental pressures from economic growth (e.g. for SO_x and NO_x emissions, water abstractions) has been achieved and much progress has been made in developing environmental infrastructure (e.g. water supply, waste water treatment). Environmental legislation has evolved very significantly, and some regions implement very advanced environmental policies. However, Spain faces important challenges with respect to high energy intensity, high water use intensity, and increasing CO₂ emissions and municipal waste generation. Priority environmental issues include natural resource management (e.g. water management), biodiversity conservation, climate change and air pollution, sustainable tourism and waste management. Under the Constitution, the autonomous regions, which present considerable differences in their physical, social and economic conditions, have a major role to play in implementing environmental policy.

To meet these challenges, it will be necessary for Spain to: i) thoroughly implement its environmental policies, improving their cost-effectiveness and inter-regional co-ordination; ii) further integrate environmental concerns into economic and sectoral decisions; and iii) pursue its international environmental co-operation. This report examines progress made by Spain since the previous OECD Environmental Performance Review in 1997, and the extent to which the country's domestic objectives and international commitments are being met. It also reviews progress in the context of the OECD Environmental Strategy.^{**} Some 46 recommendations are made that could help strengthen Spain's environmental progress in the context of sustainable development.

... environmental management has progressed further within the EU environmental legal framework and with large environmental infrastructure investment...

Within the overall Spanish constitutional framework regarding the distribution of environmental competencies, environmental legislation has evolved positively and significantly over the review period, partly in response to EU Directives. Major national laws have been enacted, including on packaging waste (1997), waste (1998), environmental impact assessment (2001), integrated pollution prevention and control (IPPC) (2002) and forest (2003). The autonomous regions have also adjusted their legal frameworks. The Sectoral Conference on the Environment and Sustainable Development and the new network of environmental authorities are important co-ordination mechanisms (between the central government and the autonomous regions), including for transposition of EU Directives and distribution of EU funds. Many of the environmental efforts of national and regional administrations have continued to focus on programming environmental infrastructure investment and its financing, including through EU structural (e.g. water supply and waste water infrastructure) financing. Enforcement activities have increased. Product charges on packaging wastes have been developed and landfill taxes on municipal waste were recently introduced. Progress has been made with voluntary eco-labelling of products. Spanish firms have greatly expanded their participation in environmental management systems. Voluntary approaches have been adopted countrywide in several industrial sectors; their environmental effectiveness and economic efficiency should be monitored. Regional and local fiscal powers, including for environmentally related taxes, have recently been increased.

^{**} Objectives of the 2001 OECD Environmental Strategy covered in these Conclusions and Recommendations include maintaining the integrity of ecosystems (Section 1), decoupling environmental pressures from economic growth (Sections 2.1 and 2.3), the social and environmental interface (Section 2.2) and global environmental interdependence (Section 3).

^{**} See Annex.

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... but still requires more efficient implementation of environmental policies.

During the review period environmental expenditure increased somewhat. It nevertheless remains relatively low compared to that in other comparable OECD countries: pollution abatement and control expenditure represents about 0.8% of GDP (below the EU and OECD averages). Spain's environmental policy continues to be hampered by reliance on subsidies, government transfers and other forms of financial assistance. Spain makes limited use of environmental taxes and other economic instruments to influence behaviour, as it is widely believed that they could affect competitiveness and employment. There is considerable scope to improve efficiency through full recovery of the costs of supplying environmental services such as water and sewerage. Some municipalities do not charge for waste services; less than a third of waste collection and treatment costs are recovered countrywide. Increasing the use of economic instruments (e.g. water services pricing) to finance environmental services is a matter of urgency in view of the expected decline of EU funding. Penal infringements and confinement sanctions for poor implementation of environmental legislation remain limited.

Concerning sustainable development, there is a need to integrate environmental concerns into economic decisions in many sectors.

Spain continues to make progress in decoupling environmental pressures from economic growth (e.g. by reducing SO_x emissions and controlling the growth of NO_x emissions, nitrogen fertiliser use and water abstractions). Integration of environmental concerns in sectoral policies has also progressed, particularly in the energy sector. EIA procedures (e.g. for transport projects) have led to stricter conditions or project modifications. In some industries (e.g. coal, fishery) a process of restructuring and phasing-out of subsidies has begun.

However, further efforts are needed to decouple CO₂ emissions and the generation of municipal waste from economic growth. Rapid expansion of passenger and freight transport is of particular concern. Concerning institution-based integration, much remains to be done at the strategic, planning, programming and possibly budgetary levels. A national sustainable development strategy is being developed in consultation with several ministries and autonomous regions, although there has not yet been significant civil society involvement. There is still considerable fragmentation or lack of integration among various sectoral or regional environmental plans and programmes. EU financial assistance has mainly contributed to infrastructure supply and there is a risk of oversupply (e.g. road infrastructure). It has also contributed to some extent to a bias against demand management in environmental policies. A clear vision of how to ensure future financing of environmental policies should be developed, given the expected decline in EU funding. Strategic environmental assessment of plans and programmes (e.g. for transport, tourism, irrigation) also needs to be developed. Concerning market-based integration, fiscal instruments have been used to some extent to internalise externalities but mostly to reward environmentally friendly behaviour and investments, impeding economic efficiency. These instruments should be used more widely to tax activities that have negative impacts on the environment, possibly within the context of a neutral fiscal reform (e.g. increased energy taxation might be balanced by decreased labour taxation). Energy, transport and water prices in general might be reviewed from the point of view of environmental and economic efficiency to obtain the benefits of win-win situations.

Despite progress with its international commitments, ...

Spain has already ratified many agreements focused on marine issues. It has been particularly active in protecting the Mediterranean Sea (e.g. under the Barcelona Convention and the UNEP Mediterranean Action Plan). Concerning oil spills, progress has been made by Spain under the Convention on Oil Pollution Preparedness, Response and Co-operation. The National Plan for Special Services for Saving Human Life at Sea and Controlling Pollution was approved in July 2002. Co-operation with Portugal has been strengthened in the framework of the Albufeira Convention. Spanish official development assistance (ODA) has been reformed: a new Law on International Development Co-operation and a four-year Master Plan (with environmental protection as one of three main priorities) have been adopted. A Spanish Co-operation Strategy for the Environment is intended to guide objectives-setting by co-operation players and to link their actions with international environmental agreements. Although the national Climate Change Strategy has not yet been adopted, many plans with direct or indirect impacts on GHG emission reductions have been adopted (e.g. the Plan for Developing Renewable Energies for 2000-10, planning of development of the electricity and gas sectors for 2002-11, the Energy Efficiency Strategy for 2004-12, the Plan for Improving Transport Infrastructure for 2000-07). Concerning ozone depleting substances, methyl bromide consumption decreased by 75% between 1995 and 2003.

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... Spain faces important challenges concerning marine, climate change, ODA and regional air pollution.

However, there is room for progress in these areas. Concerning marine issues, Spanish fishing vessels, together with vessels under other flags, exploit some species which are outside the safe biological limit. The 1990 Lisbon Co-operation Agreement, which provides a framework for close co-operation by the EU, France, Morocco, Portugal and Spain to protect the coasts and waters of the northeast Atlantic against pollution by oil and other hazardous substances, is not yet in force. Ratification of the 1989 International Convention on Salvage is pending. The Spanish fleet was on the "grey list" of the Paris MOU in 2000-02, indicating some problems with meeting MARPOL standards. ODA fell from 0.3 to 0.25% of GNI between 2001 and 2003. Concerning climate, GHG emissions increased by 38% between 1990 and 2002 and the outlook for the next few years is pessimistic. The national Climate Change Strategy has not yet been approved. Marginal abatement costs could differ significantly between sectors, leading to Spain meeting the overall abatement target at a higher cost than necessary. Although over 400 proposed climate change-related measures are under consideration, their cost-effectiveness has been analysed in only some cases. Concerning NO_x emissions, Spain has failed to meet the Sofia Declaration and Sofia Protocol reduction targets. Its ratification of the Aarhus and Gothenburg Protocols to the LRTAP Convention is pending.

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THE OECD ENVIRONMENT PROGRAMME

Annex: 46 Recommendations*

Environmental Management	<ul style="list-style-type: none"> • strive for implementation of the <u>polluter-pays</u> and <u>user-pays</u> principles to improve the efficiency of environmental policies and secure financing of environmental services, including in the context of fiscal powers devolution; • review the policy mix supporting environmental management; increase the use of <u>economic instruments</u>; strengthen <u>enforcement mechanisms</u> for both pollution and land use regulations (e.g. administrative and penal sanctions); monitor the effectiveness and efficiency of voluntary approaches; • speed up the development of a <u>national environmental strategy</u> with appropriate multistakeholder consultation, measurable and timebound environmental objectives and targets, and related indicators; • increase the use of <u>economic analysis</u> to improve the efficiency of environmental policies; eliminate environmentally harmful subsidies in the water sector.
Air	<ul style="list-style-type: none"> • strengthen efforts to <u>improve ambient air quality</u> (e.g. ozone and particulate matter concentrations) and to reduce air pollutant emissions (e.g. SO_x and NO_x from power generation, NO_x and VOCs from transport, VOCs from solvent use, ammonia from agriculture); strengthen efforts to meet national emission ceiling targets for SO_x, NO_x, VOCs and NH₃; • improve <u>air quality planning and management</u> through better integration of air quality policies in regional/local planning (especially transport planning); strengthen air quality enforcement authority and capacity at all levels of government; • reduce <u>greenhouse gas emissions in conjunction with other goals</u>, such as meeting the air emission reduction objectives for 2010, energy security, energy efficiency and greater use of renewable energy; • improve the <u>integration of air quality concerns in transport decisions</u> with respect to both freight and passenger transport, including reduction of energy consumption (e.g. through increased use of public transport, cleaner and more energy efficient vehicles, application of economic instruments), review of fuel pricing strategies (e.g. reducing the diesel tax differential, creating further incentives for use of cleaner fuels); develop and thoroughly implement more rigorous <u>inspection and maintenance</u> of in-use vehicles; • improve the <u>integration of air quality concerns in energy decisions</u> (including promotion of greater energy efficiency and investments to reduce emissions from power plants, refineries and industrial facilities), with a focus on large combustion plants and integrated pollution prevention and control; continue developing and using renewable energy sources.
Water	<ul style="list-style-type: none"> • further strengthen <u>demand management</u> with respect to all types of water use (e.g. agricultural, municipal, industrial) by ensuring that existing instruments (such as water pricing, trading, metering) are effectively implemented and are achieving their purpose; in particular, ensure that there is full payment of charges and cost recovery for service delivery; • implement the Water Act's <u>minimum reserve flow requirements</u> in such a way that river habitats are restored and effectively protected; • review and revise the <u>National Hydrological Plan</u>; • complete the national plans concerning <u>sewerage, waste water treatment and sewage sludge</u>; further improve the operation of the pollution licensing system and promote effective and efficient management of <u>urban water services</u> (e.g. water supply, waste water collection and treatment) through rigorous monitoring of drinking water quality, adoption of formal quality assurance systems and strategic planning by utilities; • carry out <u>modernisation of existing irrigation systems</u> to achieve the improvements in water use efficiency proposed in the National Irrigation Plan; firmly implement measures to reduce the <u>environmental impact of agriculture</u> on water quantity and quality; • expand the mix of measures to halt over-exploitation of <u>groundwater</u> resources; • improve recognition and understanding of the relationships between water and <u>economic variables</u> with: i) <u>better data</u> on expenditures, prices and financing; ii) systematic analysis of the <u>microeconomic conditions</u> facing key water users; and iii) a systematic <u>review of subsidies</u> for water supply and treatment infrastructure, aiming at cost-effectiveness and long-term financing of the maintenance and upgrading of facilities.
Nature and Biodiversity	<ul style="list-style-type: none"> • extend the total size of <u>protected areas</u> and ensure that they are representative of the main habitat types, in the context of implementing the Natura 2000 network and as part of development of regional spatial planning strategies; prepare <u>management plans</u> for all parks and reserves and guidelines for the development of the Natura 2000 network; • foster <u>co-ordination of nature management among the autonomous regions</u>, possibly through reinforcing the role of the National Nature Protection Commission; provide a legal basis for ecological corridors; • enhance <u>nature conservation along rivers</u>, particularly in the context of the creation of a public hydrological domain; • improve integration of nature conservation concerns in the <u>agriculture sector</u>, through a sectoral action plan under the national biodiversity strategy and greater reliance on (and more targeted use of) agri-environmental payments; • set a target for protection of remaining natural <u>coastal areas</u> from urban development; accelerate implementation of the 100-metre dune and beach protection zone; • ensure conformity of <u>regional hunting laws</u> with the EU Birds Directive.

* These Recommendations were formally approved by the OECD Working Party on Environmental Performance.

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<i>Integration environment-economy</i>	<ul style="list-style-type: none"> • further <u>decouple</u> environmental pressures from economic growth to reduce pollution intensity and improve the resource efficiency of the economy; • finalise the <u>Spanish sustainable development strategy</u> with the involvement of civil society; • further strengthen <u>policy co-ordination and integration</u> among all levels of government as an important component of achieving environmental objectives; • develop <u>strategic environmental assessment</u> (SEA) of sectoral programmes and plans with appropriate public participation; in particular, <u>integrate</u> further environmental considerations in agricultural policies and physical planning; • at project level, continue and further strengthen the use of <u>environmental impact assessment</u> (EIA); • continue to phase out <u>environmentally harmful subsidies</u> (direct and indirect) in the coal, agriculture and fishery sectors; • review existing <u>environmentally related taxes</u> (e.g. on energy and transport) with a view to restructuring them in a more environmentally friendly manner, possibly in the context of a fiscal reform better balancing energy and labour taxation; • further promote <u>local development initiatives</u> (e.g. in the context of Local Agenda 21) integrating economic, social and environmental concerns in coastal, urban and rural development.
<i>Integration environment-social</i>	<ul style="list-style-type: none"> • continue to consider <u>employment</u> implications in environmental decisions and policies; • continue to promote <u>environmental education</u> nationally and regionally in formal and vocational education; • renew and broaden communication between national and regional environmental authorities and civil society (e.g. NGOs, trade unions) and increase <u>public participation</u> (e.g. in the preparation of sustainability strategies, plans and programmes, EIA and SEA procedures); • ratify and effectively implement the <u>Aarhus Convention</u>; • further develop and use <u>environmental indicators</u> at national and regional levels, including to monitor progress towards meeting environmental objectives.
<i>Sectoral integration: tourism</i>	<ul style="list-style-type: none"> • strengthen efforts to improve the environment in coastal areas, protect it from pressures related to development of infrastructure, construction and tourism, and promote <u>integrated coastal management in tourism</u>; • pursue efforts to integrate environmental concerns in the tourism sector by establishing a <u>national strategy for sustainable tourism development</u>; introduce quantitative and qualitative targets; • <u>strengthen the leadership of the national tourism administration in regard to environmental management</u>, promote further inter-ministerial co-operation (transport, nature, construction) and increase allocated resources; • further develop sustainable tourism management <u>information, guidance and training addressed to autonomous regions and municipalities</u>; • implement the <u>Spanish system of environmental tourism indicators</u> and develop its analytical use to measure progress and performance with respect to sustainability; • further promote voluntary <u>sustainable management initiatives by the tourism industry</u>; • explore (with all the economic actors involved) the <u>use of economic instruments</u> to preserve and valorise environmental assets in tourism areas.
<i>International Co-operation</i>	<ul style="list-style-type: none"> • adopt the <u>national Climate Change Strategy</u> and monitor its implementation; identify further possible needs for reinforcing it to meet the Kyoto target and the terms of the EU burden-sharing agreement; analyse the cost-effectiveness of its measures and amend it as necessary; • further strengthen <u>protection of the marine environment</u> from oil spills, and improve the system of liability for damage related to transport of hazardous substances by sea; ratify the 1990 <u>Lisbon Agreement</u> on protection of the coasts and waters of the northeast Atlantic against pollution by oil and other hazardous substances; complete the ratification process for the <u>Protocol on (marine) Pollution Incidents by Hazardous and Noxious Substances</u> (HNS Protocol) and the new amendment to the emergency <u>Protocol to the Barcelona Convention</u>; • increase total ODA, up to the UN objective of 0.7% of GNI, and <u>ODA devoted to environmental projects</u>; • ratify and implement the <u>Aarhus and Gothenburg Protocols</u> to the LRTAP Convention.