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## CONCLUSIONS AND RECOMMENDATIONS\*

Since 2000, Greece's economy continued to grow rapidly, on average by more than 4% per year. Per capita GDP has risen and is now close to the OECD-Europe average. The adoption of the Euro in 2001 and the public works associated to the Athens 2004 Olympics are among the major drivers of this economic growth. Greece has also been a major beneficiary of EU funds, which have contributed to modernise and develop infrastructure networks (e.g. transport, energy, water), to upgrade competitiveness and human resources and to address regional disparities. Greece has an open economy, with a relatively small industrial base and a stable industrial production. The tourism and construction sectors play an important and increasing role, contributing to 18% and 8.5% of GDP respectively. Greece has a longstanding tradition of maritime transport.

An almost untouched natural environment and a unique and rich cultural heritage characterise wide areas of the country. The present decade saw consolidation of the environmental achievements of the previous one, progress in the implementation of national and EU environmental legislation, as well as enhanced participation in international co-operation activities. However, economic growth has often led to increased pressures on the environment, including unplanned construction, degradation of some coastal zones and some islands, increasing air emissions from electricity generation, high material intensity and excessive use of irrigation water. Overall, further efforts are needed to achieve environmental convergence within the OECD and the EU. To meet these challenges, Greece will need to: i) thoroughly implement its environmental and land-use policies; ii) further integrate environmental concerns into sectoral policies; and iii) reinforce its international co-operation on environmental issues.

This report examines Greece's progress since the previous OECD Environmental Performance Review in 2000, and the extent to which the country has met its domestic objectives and its international commitments. The report also reviews Greece's progress in the context of the OECD Environmental Strategy for the First Decade of the 21<sup>st</sup> Century.\*\* Some 44 recommendations are made that should contribute to further environmental progress in Greece.

### 1. Environmental Management

#### *Strengthening the implementation of environmental policies*

The Greek environmental policy is largely based on environmental regulations, and on EU directives. During the review period, Greece passed important environmental legislation and transposed recent EU directives. Positive developments in the review period include the creation of the ombudsman

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\* Conclusions and Recommendations reviewed and approved by the Working Party on Environmental Performance at its meeting on 17 February 2009.

\*\* The objectives of the Strategy are covered in the following sections of these Conclusions and Recommendations: maintaining the integrity of ecosystems in Section 1; decoupling of environmental pressures from economic growth in Section 2 and global environmental interdependence in Section 3.

with, inter alia, environmental responsibilities and of an operational environmental inspectorate, as well as positive results of surveillance and enforcement concerning marine pollution. Greece also made significant progress in constructing urban wastewater treatment infrastructure (with large financial transfers from the EU funds); all major wastewater infrastructure projects are scheduled to be completed by 2013. Considerable progress was achieved in water pricing, with recovery rates reaching 95% in large cities like Athens. This positive development is largely driven by the EU Water Framework Directive, which requires the implementation of water-pricing policies towards the recovery of water service costs by 2010. Greece made important strides in closing down many illegal landfills by the end of 2008. Waste management and recycling improved during the review period.

Lack of enforcement remains the Achilles heel of environmental and land use policy implementation, weakening the effectiveness of regulations and permitting. Despite the establishment of the new environmental inspectorate and its good start, further efforts are needed to provide it with the capacity and instruments that it requires to fulfil its mandate. Greece needs to persist in its efforts to close the remaining illegal landfills. In many parts of the country, local authorities have experienced difficulties in opening legal/sanitary landfills due to opposition by local communities. Overall, better understanding and implementation of the polluter-pays-principle (PPP) and user-pays-principle (UPP) should be fostered, and environmental awareness further promoted. The use of economic analysis and instruments should be expanded. Although Greece has progressively stepped up its pollution abatement and control (PAC) expenditure to 0.7% of GDP, its environmental expenditure represents less than 1% of GDP. This is a limited effort compared to OECD countries in a comparable development stage despite considerable EU support. The road to environmental convergence in the EU remains challenging for some issues (e.g. air pollution abatement from fixed and mobile sources, waste infrastructure and management). It is suggested that Greece increases significantly its environmental financial efforts, i) looking beyond 2013 and possible decreases in EU support, and ii) moving towards the full implementation of the PPP and UPP, thereby decreasing public support from national and EU sources. The environmental administration, which is significant part of the Ministry for the Environment, Spatial Planning and Public Works (YPEHODE), needs to be further strengthened.

Recommendations:

- further strengthen the visibility, human and financial resources, and influence of the environmental administration at all levels;
- strengthen overall environmental financial efforts, moving progressively towards full implementation of the polluter-pays- and user-pays-principles;
- implement plans to strengthen the financial and human resources devoted to the new environmental inspectorate; continue to promote compliance with and enforcement of environmental and land use regulations;
- review and revise prices, taxes and subsidies, with the aim of internalising environmental externalities; expand the use of economic instruments to serve environmental objectives;
- strengthen the analytical basis for decision-making, including environmental data, and economic information on the environment (e.g. environmental expenditure, environment-related taxes, resource prices, employment).

*Air*

Greece has considerably reduced air pollutant emission intensities since 2000, showing a relative decoupling from economic growth. Emissions of nitrogen oxides (NO<sub>x</sub>) have remained below the ceiling set at European level and NO<sub>x</sub> emission intensity is now in line with the OECD average. Improvements in vehicle fleet and fuel quality have helped reduce emissions of volatile organic compounds (VOCs), carbon

monoxide (CO) and particulate matters (PM) from the transport sector. Concentrations of pollutants in ambient air tended to decline or stabilise. During the review period, concentrations of sulphur dioxide (SO<sub>2</sub>) and CO were kept below their limits throughout the country, and peak values of NO<sub>2</sub> steadily decreased. Greece has strengthened its inspection system, and emissions from stationary sources and fuel quality are regularly controlled. Greek installations participate in the EU emission trading scheme for greenhouse gases (GHGs); this led some large sources to invest in emission reduction measures. Greece's GHG emissions are currently below the Kyoto Protocol target. According to the 2008 reports from the European Commission and the European Environment Agency, Greece is expected to meet its Kyoto target using existing policies and measures. Greece will need to continue to monitor its programmes to ensure that they are sufficient to meet the more ambitious EU targets to 2020. Concerning energy, the energy intensity of the economy has been reduced, and is now among the lowest in OECD. Greece has implemented regulatory and financial measures to promote the uptake of natural gas and to improve efficiency in energy end-use and electricity generation; progress has been made in opening energy markets. The share of renewables in both total primary energy supply and electricity output has increased, following the introduction of a feed-in tariff in 2001 and other support schemes. Concerning transport, Greece has heavily invested in extending transport infrastructures, using the opportunities given by the EU funds and the 2004 Olympic Games. The urban public transport system in Greater Athens was expanded and upgraded, as were pedestrian areas.

Although SO<sub>2</sub> emissions have started to slightly decrease in recent years, SO<sub>2</sub> emission intensity remains higher than the OECD average and among the highest in Europe, due to the dominance of domestic lignite (with very low calorific value) and oil in the fuel mix. Greece needs to strengthen its efforts in reducing SO<sub>x</sub> and VOC emissions to reach their targets in 2010. Emissions of PM (especially from the residential and commercial sectors) and heavy metals remain of concern. Strengthened efforts are also needed to reach EU limit values for ambient air quality in major cities (e.g. NO<sub>x</sub>, fine particles and ground-level ozone) and to mitigate related health risks. The ambient air monitoring network appears to be undersized and not fully efficient. Information on national emissions is not always adequate, especially for fine particles, persistent organic pollutants and heavy metals. Economic instruments are limited to energy and vehicle taxation; compliance with licensing regulations and financial support remain the main drivers for improving environmental performance at stationary sources. Concerning energy, electricity generation is a major source of air emissions, and there is much scope for improving its efficiency and environmental performance: while major electricity operators have undertaken investment programmes, Greece is home to some of the most polluting power plants in the EU; electricity generation from renewables is still far from the 2010 EU indicative target. Relatively low energy end-use prices and special discounts for some consumer categories may discourage rational use of energy. Concerning transport, road largely dominates the modal split for both freight and passenger transport. The share of taxes in fuel prices has decreased, road tolls are not adequately adjusted to inflation, and vehicle taxes do not satisfactorily take account of vehicle fuel efficiency. Navigation is a growing source of emissions; measures are needed to improve vessel performance and shipping fuel quality, taking into account the regulatory framework developed at international level.

### Recommendations:

- further reduce air emissions, especially SO<sub>2</sub> emissions from electricity generation (e.g. lignite fired power plants) and VOCs emissions from transport, so as to meet national emission ceilings; strengthen the monitoring and management of particulate matter (including PM<sub>2.5</sub>) and ground level ozone;
- strengthen efforts on energy demand-side management and on market-oriented instruments to achieve more effective and efficient energy use: review the energy price levels and structure, and assess the impact of exemptions and subsidies;
- continue the shift towards cleaner fuels (e.g. natural gas, low sulphur oil) and renewables for electricity generation and end-use;
- continue to invest in efficient and reliable public transport systems, including in cities other than Athens; further develop transport demand management in urban areas;
- review transport prices and taxes, to better internalise environmental impacts and reflect vehicle environmental performance and fuel efficiency (e.g. linking vehicle taxes to the EU CO<sub>2</sub> vehicle labelling);
- address air pollutant emissions from ships, e.g. taking measures to improve vessel performance and fuel quality.

### ***Water***

The state of Greece's freshwater bodies is generally good. Water quality is commonly fit for various uses (irrigation, industry, production of drinking water). Greece has an especially good record in terms of water quality at the more than 2 000 coastal sites designated under the EU Bathing Water Directive: virtually all sites comply with mandatory values and 96-98% also comply with the more stringent guide values. Price structure for urban water services encourages the prudent use of water, and price levels increased to allow a greater degree of cost recovery. Good progress was made during the review period with the construction of urban wastewater treatment stations: about 65% of the total population is connected to public wastewater treatment plants, up from the 45% in the late 1990s. The Athens Metropolitan Area is now equipped with a state-of-the-art sludge drying facility. After growing significantly during the 1990s, the rate of water abstraction was stabilised in the review period. Action plans were put in place in all areas vulnerable to nitrate pollution from agriculture and the use of agricultural inputs of nitrogenous fertilisers and pesticides has been reduced since the end of the last decade. Greece transposed the EU Water Framework Directive (WFD) into domestic law in 2003; to implement the directive, it created 13 Regional Water Directorates and a specialised Central Water Agency, a governmental authority under the aegis of YPEHODE, in charge of definition and oversight of national water policy.

However, Greece still faces serious water challenges, in particular in terms of its agricultural water use, which represents about 85% of overall abstraction. Excessive pumping of groundwater has caused water levels to fall dramatically in some rural areas, as well as salt water intrusion in some coastal aquifers. Illegal abstractions and discharges pose a hurdle to improving water management. Enforcement of regulations and water permit conditions has not sufficiently improved. Water losses in urban and, in particular, irrigation water conveyance systems are too high. Agricultural water prices neither cover the cost of supply nor provide sufficient conservation incentives. Little attention has been paid so far to ecological aspects of water quality. Efforts to clean up longstanding pollution hot spots should be reinforced as a matter of priority. Implementation of a plan to control discharges of dangerous substances,

first drawn up early in the review period, has only recently begun. None of the deadlines of the EU Urban Waste Water Directive were met and it will take until 2013 to fully meet the directive's targets, notably for smaller agglomerations. While there are on-going efforts to improve the monitoring systems, it is still proving difficult to produce national statistics useful for water management.

#### Recommendations:

- continue efforts to fully comply with the EU Water Framework Directive;
- formulate and implement a national irrigation policy, integrating agronomic, water and environmental policy objectives, which promotes the rational use of water, aims to reduce groundwater abstractions and to improve irrigation efficiency and practices in both communal and private irrigation networks, and ensures that all water abstractions are properly licensed;
- further improve wastewater management, in compliance with the EU Urban Waste Water Directive, and consider the wastewater treatment needs of smaller settlements; encourage utilities to improve water quality assurance (e.g. through participation in international benchmarking);
- intensify efforts to reduce water pollution by dangerous substances, to prevent illegal discharges of wastewater, and clean up pollution hot spots;
- introduce new measures to improve the allocation of water to ensure water flows to the highest-value uses;
- raise greater public awareness and understanding, particularly among farmers, of the economic, social and environmental aspects of water management.

#### *Nature and biodiversity*

Greece has an exceptionally rich biodiversity; an almost untouched natural environment characterises wide areas of the country. Greek policy documents (including the 2002 National Strategy for Sustainable Development) explicitly refer to the international and EU commitment of reducing the current rate of biodiversity loss. During the review period, a number of new protected areas were designated, including ten national parks; the list of Sites of Community Importance and Special Protection Areas was extended; the Natura 2000 network was designated to cover 21% of the land surface and 5.5% of the territorial waters. Greece improved and updated the legislative framework for nature conservation, moving from a strict protection approach to a more integrated and participatory management. Twenty-seven independent and multi-stakeholder Management Bodies were given management responsibilities over some 1.7 million hectares of protected areas. Information on the status of habitats and species is improving, for instance through the Biodiversity Clearing House Mechanism website. The number of threatened species covered through protection projects considerably increased, with significant involvement of environmental NGOs and research institutes (e.g. loggerhead sea turtle, Mediterranean monk seal). Stricter measures were implemented to control international trade of species. Organic farming has developed rapidly. There is no GMO cultivation in Greece. The renewed forest legislation adopts the principles of biodiversity conservation and multiple uses of forest lands. Further steps have been taken to promote more eco-friendly tourism, and the Specific Framework Plan for Tourism sets restrictions on construction of tourist facilities. Greece participates actively in international activities to preserve the biodiversity of the Mediterranean area and to control marine pollution.

Despite this progress, additional actions are needed to mitigate the growing pressures on natural assets from economic activities. Greece is among the four OECD countries that have not yet submitted the National Biodiversity Strategy and Action Plan, thereby lacking a comprehensive framework for the protection of species and ecosystems. The National Biodiversity Strategy is currently under consultation. The actual management of the Natura 2000 network needs improvement: less than one fifth of the

Natura 2000 surface is included in legally designated protected areas, and nearly half lacks the environmental study required to define conservation measures. Only a few marine areas are included in the network. Most protected areas still require management plans. Management responsibilities rest with many authorities at central and local levels, with consequent overlapping and coordination problems and weak enforcement. Budgetary and human resources should be reinforced. Management Bodies of protected areas have mostly relied on EU funds. Greece needs to ensure adequate long term financing, including funds to substitute for EU contributions. Many of the mammal and freshwater fish species living in Greece are threatened, and an increase in invasive alien species has been observed, especially concerning marine ecosystems. Inventories of species need to be extended and improved, and Red Lists of fauna and flora to be regularly updated. Conservation policy has yet to achieve an effective mainstreaming of biodiversity issues into other sectors. Poor farming practices and excessive use of water for irrigation have contributed to degrade semi-natural habitats and wetlands. The number of farmers participating in agri-environmental schemes has grown steadily, but still accounts for a small share of farmland. While forests appear relatively healthy, they are threatened by frequent and devastating summer fires; more resolute prevention and restoration measures need to be undertaken. Tourism development exerts growing pressure on ecosystems, especially in coastal zones and islands, where protective provisions have been often infringed. Further efforts are needed to build consensus around nature conservation, informing local communities of related ecosystems services and economic benefits.

#### Recommendations:

- adopt and implement the National Biodiversity Strategy and Action Plan, as a comprehensive action-oriented framework for ecosystem and species conservation at both national and local levels; set time-bound objectives and periodically evaluate progress;
- continue to extend protected areas, particularly including coastal areas and marine ecosystems; complete the implementation of the Natura 2000 network; ensure that all protected areas are provided with management plans and adequate conservation measures;
- further improve the human and financial capacity for nature conservation and the management of protected areas; review the future evolution of the funding system of biodiversity management, with substitutes to EU contributions (e.g. increased use of economic instruments; contribution of national and local public and private funding);
- increase and disseminate knowledge on the conservation status of species; carry out systematic monitoring of endangered and threatened species, and evaluate the effectiveness of protection projects;
- improve the integration of biodiversity concerns into the agricultural sector, through a targeted use of agri-environmental schemes and specific educational programmes.

## **2. Towards Sustainable Development**

### ***Integrating environmental concerns into economic decisions***

In the context of rapid economic growth and structural changes, key accomplishments include the elaboration of a national sustainable development strategy, strengthening of the environmental impact assessment process, and the establishment of a strategic environmental assessment process. Environmental impact assessments have been in place since 1990; they have now become an operational tool most important in a period dominated by infrastructure building (e.g. transport, energy, water). Strategic environmental assessments (SEA) are now embedded in law; the 2004 Olympic Games went through an SEA. Environmental objectives have been largely integrated into EU funded programmes. In the 2000-06 programming period, about 25% of EU support (excluding agriculture-related support) was allocated to

environment-related investments at large (averaging 0.8% of GDP). Progress has been made in reducing some emission and resource intensities (e.g. NO<sub>x</sub> and nitrogen fertilisers), showing a relative (although still limited) decoupling of environmental pressures from economic growth. The energy intensity of the economy has been considerably reduced, and steps have been taken to promote reliance on natural gas.

However, the 2002 National Strategy for Sustainable Development has not been fully used to its potential as an integrative tool. The strategy has not been really influential over the past years and it has not been thoroughly monitored. It does not include targets, and focuses on the environmental dimension. The revised strategy should be more influential as an integrative policy tool with measurable targets and more operational monitoring and evaluation mechanisms. Overall material intensity in Greece is well above the OECD average, especially for fossil fuels (reflecting the country's large use of domestic lignite). Revenues from environment-related taxes as a share of GDP decreased during the review period, reaching 1.9% of GDP, among the lowest shares in OECD. Energy and fuel taxes are relatively low in Greece, and there is scope and need to apply economic instruments to encourage a shift to less polluting energy production. Electricity from lignite is exempted from the excise duty, and several discounts and tax breaks on energy prices are used for social purposes. Greece should consider revising taxes or charges to influence demand, and introducing targeted compensation schemes to address social issues. Vehicle taxes take account of fuel efficiency and environmental performance only to a limited extent.

#### Recommendations:

- include appropriate targets and objectives in the revised National Strategy for Sustainable Development;
- utilise fully the institutions on sustainable development now in place to ensure the implementation of the revised National Strategy for Sustainable Development; continue focusing sector integration and sound long-term planning with a view to achieve a low-carbon, energy and material efficient economy;
- expand the use of economic instruments as part of a green fiscal reform (e.g. energy taxation, progressive car taxation in relation to pollution);
- progressively eliminate environmentally harmful subsidies (e.g. agriculture water tariffs); consider replacing tax exemptions (e.g. on heating oil) with more targeted social compensation schemes;
- review the economic efficiency of environmental subsidies (e.g. to renewable energy sources) and revise them accordingly.

#### ***Integrating environmental and social decisions***

Environment-related employment has increased, mainly related to large environmental infrastructure investments and to new government bodies created at national and local levels. Concerning environmental democracy, Greece ratified the Aarhus Convention in 2005 and transposed the related EU directives into national legislation, with a well-designed institutional and legal framework for environmental information and reporting in place. A wide range of environmental information is available free of charge and accessible through web-based tools. The Greek legal system provides a broad recognition of individual and collective rights to a protected natural and cultural environment. Access to courts in environmental cases for individual citizens and NGOs is provided for in both administrative and judicial procedures. The Greek Ombudsman investigates cases of possible inappropriate administrative actions related to the environment. Mechanisms to assure public participation in environmental decision-making improved during the review period and public consultation is now widespread at all government levels. NGOs are full members of Management Bodies of protected areas and of Regional Water Councils and are actively involved in raising environmental awareness. Environmental education has received increasing attention and several projects have been implemented in primary and secondary schools. Local

and national campaigns, as well as extensive media coverage of environmental themes, have raised environmental awareness. Greece has enjoyed further gains in life expectancy and reductions in infant mortality. Health risk factors (e.g. drinking water quality, ozone and PM<sub>10</sub> concentrations) are monitored on a regular basis throughout the country; a national legislation to contrast tobacco-smoke is in place. Several awareness raising initiatives have been addressing occupational health.

However, employment opportunities in environmental sectors are not being fully exploited in Greece. A comprehensive assessment of the impact of Greek environmental policy on employment would be very useful. The potential value of public participation in policy-making is still weakly acknowledged. Consultations often appear to be undertaken to fulfil legal obligations (e.g. at local level), especially when required by EU directives (e.g. Environmental Impact Assessment, Strategic Environmental Assessment, Water Framework Directive). A comprehensive framework for environmental education at different stages of education is missing; environmental themes are integrated in school curricula and training programmes mainly on a project-basis. Gaps remain in collecting and processing environmental health data, and little attention has been given to cost-benefit analysis in environmental health policy design.

#### Recommendations:

- implement the environmental health action plan; priorities for action should be based upon scientific research and economic analysis (e.g. reduced health expenditure, improved labour productivity, improved well-being);
- further develop an active and long-term environmental employment policy;
- continue efforts to collect, process and disseminate environmental information at national and territorial government levels;
- continue to encourage more active public participation associated with decision-making, as well as effective implementation of provisions for access to environmental justice and follow-up to judicial decisions; enhance the effectiveness of consultation procedures;
- take further steps towards the integration of environmental themes at all stages of education, including professional training.

#### ***Strengthening land use and spatial planning***

Considerable investments in transport infrastructure (e.g. major motorways in the west and north of the country) and energy infrastructure during the current review period have created better prospects for a more balanced distribution of economic development throughout Greece. Similar improvements in Athens (including a new metro and a new airport), have changed the city for the better. At the outset of the review period, Greece incorporated the principles of sustainable development in its spatial planning legislation. For the first time, the country armed itself with the legislation that is necessary to create a comprehensive planning framework to guide the spatial aspects of economic and social development and the protection of its natural and cultural heritage at a national, regional and local planning scale. Since then, 12 strategic Regional Framework Plans for Planning and Sustainable Development have been adopted: one for each of the country's 13 regions except for the Athens Metropolitan Area, which already had its own master plan. The country's first national strategic spatial plan, the General Framework, and the Specific Framework Plan for Renewable Energy Sources were approved in 2008. The Specific Framework Plans dealing with the tourism and industrial sectors are expected to be approved in mid-2009. Greek authorities claim some success in bringing down the incidence of unauthorised construction, which has been a longstanding problem. Greece also made progress with the establishment of a national cadastre. The review period saw the creation of numerous industrial parks, which in the long run will help remove industries from unsuitable locations.

It is still too early to assess the effects of all the planning activities on what is actually happening “on the ground”. The reality so far has been one of spontaneous urbanisation whereby construction has often preceded planning, notably in the coastal zone, on islands, and on the fringes of urban areas. Policies specifically aimed at Integrated Coastal Zone Management are absent. The problem of forest fires is partially due to the weak planning system, including the lack of a complete National Cadastre and of a National Forest Registry. The reforestation of burned and degraded forestlands slowed down during the review period. Towns and cities suffer from a dearth of open space and green areas. Planning decisions often suffer time delays, partly because issues need to be referred to the central administration. Ombudsman reports also suggest that the administration of planning law by local authorities still is far from efficient, including in terms of the required environmental impact assessments, carried out a posteriori or bypassed altogether. Finally, the new framework plans will, by themselves, not secure good implementation and outcomes, and much will depend on a balanced interpretation of the term “sustainable development”: it appears that in many decisions to date, the word “development” has been given much greater weight than the word “sustainable”.

#### Recommendations:

- streamline the administrative procedures associated with environmental impact assessments and the application for planning and building permits; reduce building and housing construction without prior planning;
- ensure adequate control and strict enforcement of the existing legal framework regarding construction without prior building permit;
- complete the National Cadastre and the National Forest Registry as soon as possible;
- adopt and implement the proposed Framework Plans for Coastal Areas and Islands and for Mountainous Areas; set up a transparent monitoring system to track and report on the effectiveness of the Frameworks for Spatial Planning and Sustainable Development;
- increase the rate of reforestation of burned and degraded forestlands;
- raise awareness and understanding of sustainable development among the major stakeholder groups and in the Greek society at large.

### **3. International Co-operation**

Although faced with the imperative of achieving near-term economic growth, Greece has embraced and promoted long-term sustainable development by implementing national actions to achieve, inter alia, the goals of the World Summit on Sustainable Development, the UN Millennium Development Goals and the EU Strategy for Sustainable Development. As a donor country, Greece’s development assistance programme has improved substantially with the establishment of the “Hellenic Aid” Department within the Ministry of Foreign Affairs. It has supported improved environmental governance and programme effectiveness at the international level by pressing for institutional reform and better programme coherence (e.g. within UNEP and the UN Commission on Sustainable Development), and by ratifying virtually all major multilateral environmental conventions. Greece has also made an intensive effort to transpose the EU environmental legislation into domestic law. Significant progress was made in the maritime transport area in protecting the environment and improving the safety of life and property at sea; fisheries management was strengthened through national actions under the EU Common Fisheries Policy. Progress was made in protecting endangered species under the CITES convention, and in implementing the provisions of the Basel Convention on transboundary movement of hazardous waste. In the area of climate change, Greece has established institutional arrangements and developed analyses and plans to meet its commitments under the Kyoto Protocol and the EU burden-sharing agreement. Greece has also intensified its efforts to engage its neighbours in co-operative efforts to address water quality and

water flow issues associated with transboundary rivers and lakes. Greece has provided effective leadership of the Mediterranean Component of the EU Water Initiative (MED EUWI) since its launch in 2003.

While performance improved markedly in the past few years, Greece needs to intensify its efforts to comply adequately with the EU environmental legislation. In a number of areas (waste, natural areas, water management) gaps exist between the high quality of analysis/planning and actual programme implementation. Greece is behind schedule in achieving EU targets for renewable energy use and reduction of energy consumption. Despite the progress in the enforcement of laws and regulations to control illegal trade in endangered species, ozone depleting substances and hazardous waste, Greek authorities need to remain vigilant and to be adequately staffed and equipped to carry out these tasks. Concerning coastal waters, while their quality is generally excellent, pollution hotspots remain problematic due to uncontrolled development and inadequate wastewater treatment; management of coastal wetlands and protected areas needs to be improved and decoupled from EU financial support. While there are plans to progressively increase the Official Development Assistance, its environmental content remains quite small, and provisions do not exist for systematic environmental reviews of all proposed major development projects. Greece should be a leader within the IMO-ILO-UNEP framework on environmentally sound shipbreaking, commensurate with its commitment to sustainable development and its development assistance policy objectives. Co-operation with neighbouring countries on transboundary water and marine issues remains challenging, requiring further political and programme initiatives by the relevant countries.

Recommendations:

- continue efforts to reduce greenhouse gases with a view to achieving the EU emissions reduction target set for Greece; enhance efforts on energy efficiency and renewable energy sources;
- encourage Greek leadership within the IMO-ILO-UNEP framework in support of the Convention on the Safe and Environmentally Sound Recycling of Ships;
- strengthen the protection of water quality in near shore marine areas and bays through improved development siting, upgraded wastewater treatment and effective enforcement of existing national and EU environmental legislation and regulations; ensure that the environmental regulations governing water quality in the aquaculture industry are adequate to protect human health and environmental sustainability, and are fully enforced;
- strengthen customs inspection and enforcement capacity (expanded staff, improved training, better technology) to control illegal trade in endangered species, ozone depleting substances and hazardous waste;
- further utilise bilateral, regional and multilateral mechanisms to expand co-operation with neighbouring countries on the environmental management of transboundary waters;
- strengthen the environmental content of the Development Assistance Programme as it continues to grow, while ensuring that major development projects funded by Greece are subject to environmental reviews, where appropriate.