ENVIRONMENTAL PERFORMANCE REVIEW OF ITALY
EXECUTIVE SUMMARY

A demanding context

Italy has a large economy and a population of 57 million, concentrated on a relatively small territory. High densities lead to strong environmental pressures which, together with the diversity and sensitivity of Italy’s natural patrimony and its important cultural heritage, have made environmental protection a matter of serious public concern.

Priority environmental issues include urban air pollution, soil and water management, waste management, nature and landscape conservation, climate change, transport management, and protection of coastal areas and the marine environment. Measures to cope with hydro-geological risks (floodings, landslides and earthquakes) imply large central budget outlays. With its strong regional disparities, and the largest share of population over 65 years among OECD countries, Italy must find ways to achieve nationally balanced economic, environmental and social development. As a member of the European Union, it must comply with the high standards set out in EU environmental legislation. As a G-7 country, it must contribute to raising awareness of global environmental problems.

To meet this challenge, Italy will need to: i) improve its environmental infrastructure (e.g. for water supply, waste water treatment and waste treatment) and the efficiency of its environmental policies; ii) integrate further environmental concerns into economic and social decisions; and iii) reinforce its international environmental co-operation. This report examines progress made by Italy since the previous OECD environmental performance review in 1994, and the extent to which Italy’s domestic objectives and international commitments are being met. It also reviews the country’s progress in the context of the OECD Environmental Strategy. Some 64 recommendations are made that could help strengthen Italy’s environmental performance in a context of sustainable development.

Much environmental progress was achieved...

In the last ten years, Italy has met or almost met a number of its domestic objectives and international commitments (e.g. SO2, heavy metals and POPs emissions, separate waste collection, nature protection, agri-environmental progress). It has also considerably strengthened its national environmental institutions, issued new environmental legislation, and further devolved environmental responsibilities to regional and local authorities while keeping responsibility for strategic planning and legal co-ordination at the central level. The human and budgetary resources of the Ministry of the Environment and Land Protection (MATT) have been increased very significantly; new directorates deal with sustainable development and protection from flooding, landslides and other natural disasters. The National Environmental Protection Agency (ANPA), which provides MATT with scientific and technical support, has been growing. There has been important progress on environmental legislation (e.g. water, waste reforms), mainly prompted by EU environmental directives. The competence of regions and local authorities with respect to environmental and land management has been strengthened during the devolution process (1997 Bassanini Act). Regional Environmental Protection Agencies (ARPAs) are being established to perform inspection and enforcement on request from regions. Some regions have begun to introduce integrated permitting for existing plants. Enforcement of environmental policies benefits from the actions of the Operational Unit for Environmental Protection of the Carabinieri, placed at the disposal of MATT; prosecution for violations of environmental legislation can rely on specialised judges and specific provisions in the criminal code (e.g. concerning water pollution, forest fires). Environmental impact assessment of projects, carried out at national level since 1989, has been an effective instrument. From 1996 all regions have been required to issue EIA laws, though today only half the regions have operational EIA procedures. The 1990s saw the development of economic instruments and voluntary agreements: measures were adopted to curb air pollution; a carbon tax was introduced in January 1999; implementation of new, tailored tariffs for waste collection and disposal is in progress in many parts of the country; and reforms are being implemented to improve water management. Eco-auditing schemes and eco-labelling have also been developed.

* The main objectives of the 2001 OECD Environmental Strategy for the First Decade of the 21st Century covered in the present Conclusions and Recommendations are: maintaining the integrity of ecosystems (Section 1), decoupling environmental pressures from economic growth (Section 2), the social and environmental interface (Section 2), and global environmental interdependence (Section 3).
Many urban areas in southern Italy do not have city master plans. Some 15 to 20% of buildings are constructed without permits. Regions and provinces make little use of territorial planning for environmental purposes and risk management. An integrated approach to coastal zone management is lacking. Positive developments in international co-operation... Nonetheless, further efforts are needed to decouple municipal waste generation from economic growth. While institutional integration has improved, co-ordination among different administrations is not very well established, particularly at the technical level. Involvement of the Inter-Ministerial Committee for Economic Planning (CIPE) in environmental and sustainable development issues is to be encouraged. Economic analyses (e.g. cost-benefit analysis) carried out are insufficient to ensure cost-effective achievement of environmental objectives. Taxes and charges are not well targeted with respect to emission impacts, and there are many exemptions. Environmental related taxes have had a low incidence. Some environmental charges are difficult to enforce, while some (e.g. a plastic bag fee) have been abandoned. Water prices are still low; they fall significantly in the latter part of the 1990s. Market-based integration continues to rely on high energy prices (due to taxes and historically high pre-tax energy utility prices), which have yielded environmental benefits: Italy’s energy intensity is lower than that of any other OECD economy. Italy also relies increasingy on environmentally related taxes and environmental charges: a carbon tax on mineral/fossil fuels and a pesticide tax have been phased in; vehicle taxation has shifted to take greater account of environmental impacts (e.g. through being calculated on engine size); water and waste charges increased significantly in the latter part of the 1990s. Progress towards sustainable development... However, the overall picture is mixed, as Italy has not met a number of its commitments or is not on the way to meet them (e.g. NO\textsubscript{x}, NMVOCs, ammonia emissions, several water goals and targets, climate change, ODA). Transposition of EU legislation has often entailed significant delays. The IPPC Directive has not yet been transposed. Despite efforts made, the Italian legal framework remains too fragmented and complex. In many instances, taxes and charges have been set at a modest level and have had only modest environmental benefits. Cost recovery for water and waste services should be improved; progress needs to be made towards implementation of the polluter pays and user pays principles. There are important disparities in the environmental institutional capacity and the effectiveness of regional and local authorities. Many urban areas in southern Italy do not have city master plans. Some 15 to 20% of buildings are constructed without permits. Regions and provinces make little use of territorial planning for environmental purposes and risk management. An integrated approach to coastal zone management is lacking. There has been a relatively low level of investment in environmental infrastructure, possibly linked to delayed decisions associated with the devolution process and low spending capacity in the case of allocated funds.

Italy has continued to make good progress in decoupling environmental pressures from economic growth, through low energy intensity and reduction of SO\textsubscript{x} and NO\textsubscript{x} emissions as well as through reduction of phosphate fertiliser and pesticide use. Progress in environmental planning is being achieved through preparation of the Environmental Strategy for Sustainable Development. Strategic Environmental Assessment has been developed as a tool to promote sustainable development (e.g. General Transport Plan). Market-based integration continues to rely on high energy prices (due to taxes and historically high pre-tax energy utility prices), which have yielded environmental benefits: Italy’s energy intensity is lower than that of any other OECD economy. Italy also relies increasingly on environmentally related taxes and environmental charges: a carbon tax on mineral/fossil fuels and a pesticide tax have been phased in; vehicle taxation has shifted to take greater account of environmental impacts (e.g. through being calculated on engine size); water and waste charges increased significantly in the latter part of the 1990s. Nonetheless, further efforts are needed to decouple municipal waste generation from economic growth. While institutional integration has improved, co-ordination among different administrations is not very well established, particularly at the technical level. Involvement of the Inter-Ministerial Committee for Economic Planning (CIPE) in environmental and sustainable development issues is to be encouraged. Economic analyses (e.g. cost-benefit analysis) carried out are insufficient to ensure cost-effective achievement of environmental objectives. Taxes and charges are not well targeted with respect to emission impacts, and there are many exemptions. Environmental related taxes have had a low incidence. Some environmental charges are difficult to enforce, while some (e.g. a plastic bag fee) have been abandoned. Water prices are still low; they fall well short of overall operating costs, let alone providing financing for urgently needed capital expenditure. Water for agricultural use is priced extremely low, and groundwater resources are often abstracted illegally.

As a G7 member, a founder of the EU and a Mediterranean country, Italy has continued to support international environmental co-operation very actively, ratifying most agreements and enacting most EU directives, including for climate change and air pollution commitments. It is to be commended for its low energy intensity, its clear GHG emission reduction targets, and its precise estimates of the environmental impacts of the national climate programme. In the 1990s Italy’s performance in meeting international commitments to reduce air emissions was most satisfactory, with major reductions of SO\textsubscript{x} and certain heavy metals as well as dioxins and furans. This progress will serve as encouragement in view of the further ambitious commitments being made (e.g. under the Gothenburg Protocol, to be ratified). With respect to marine issues, developments in the late 1990s have been positive for oil spill prevention, emergency response and ship safety, with quite significant equipment improvements, enforcement and commitments. Environmental co-operation with neighbouring countries has developed: Italy, France and Monaco have created a 100 000 km\textsuperscript{2} sanctuary for protection of marine mammals, especially cetaceans, whose international status would be strengthened by UN recognition. Italy has also been very active in promoting international co-operation, particularly in the area of drought and desertification. It has ratified all relevant international conventions concerning nature protection and biodiversity.
... have to be supplemented in several areas (e.g. climate, marine pollution and resources, ODA).

Under a business as usual scenario, GHG emissions in 2010 would reach a level 13% above the Kyoto target. Italy would therefore have difficulty achieving its Kyoto target (i.e. reducing GHG emissions by 6.5% relative to 1990) without fully implementing its recent national GHG emissions reduction programme (set out in the national Kyoto Protocol ratification law passed in May 2002). According to recent projections, strongly reinforced policies and measures as well as improved monitoring and enforcement are needed, along with appropriate public and private sector involvement. Concerning protection of the Mediterranean from land-based pollution, most importantly from agriculture, industry and untreated municipal effluents, too little progress has been made and much remains to be done; monitoring and reporting on the state of the surrounding seas should be reinforced. There is concern about the effect of overfishing on some fish stocks, which translates into significant reductions in Italian catches and consequent difficulty adjusting Italian fishing capacities to new circumstances. Italy’s official development assistance has fallen to a very modest 0.13% of GNP. This ODA level does not seem commensurate with Italy’s international role or with the size of its economy. However, the Italian government, which is committed to the EU goal of 0.33% of GNP by 2006, has indicated its intention to further increase its ODA to 1.0% of GNP at a later date.
### Annex: 64 Recommendations

**Environmental management**

- raise the level of investment in environmental infrastructure by fully disbursing funds allocated to MATT and by seeking additional private funding; increase the rates of environmental charges, non-compliance fines and inspection fees and generalise their use;
- evaluate the cost-effectiveness of the mixes of policy instruments in place (economic, regulatory, voluntary, land use planning);
- set charges at levels that create incentives and are in accord with the user and polluter pays principles, and explore the potential for pollution trading mechanisms;
- streamline the legal environmental framework and facilitate its implementation through setting clear environmental policy targets and implementation deadlines;
- complete the establishment of ARPAEs and strengthen their role as the main monitoring and inspection bodies;
- further strengthen national EIA procedures and develop regional EIA procedures and IPPC permitting;
- strengthen the implementation of, and introduce environmental requirements in, regional physical planning, city master planning and building permitting.

**Air**

- take steps to reduce ambient levels of particulate matter and ozone; with emphasis on measures relating to transport;
- ensure implementation of existing legislation to measure and control emissions of toxic air pollutants from industrial sources, with a particular focus on those pollutants and sources that pose the greatest health risks;
- strengthen efforts to meet the targets of the Gothenburg protocols on reduction of emissions of NOₓ and VOCs;
- complete and implement regional air quality plans to serve as primary evaluation and long-term planning tools; these plans should be explicitly and integrally linked to development of other regional and local plans (e.g. transport, energy, mobility);
- extend the use of economic instruments, such as emission trading schemes (especially for NOₓ), and of integrated pollution prevention and control (e.g. plant-wide industrial permit limits);
- complete geographical coverage of the air quality monitoring network, extend monitoring of ozone and particulate matter, and improve quality assurance and control of monitoring techniques and data quality;
- accompany liberalisation in the electricity and natural gas sectors with strict implementation of energy savings objectives in these two sectors, as well as strict enforcement of the same air emission standards for new and existing power plants;
- promote further actions to develop the use of renewable energy in power plants.

**Water**

- implement legislation according to the new EU Water Framework Directive and strengthen the role of river basin authorities;
- mobilise public and private investments to upgrade urban waste water collection and treatment infrastructure in the context of the framework programme agreements between the State and the regions;
- speed up implementation of the Galli Act (e.g. application of user and polluter pays principles, consolidation of municipal water and waste water services within optimal management areas);
- implement statutory water quality objectives introduced by Legislative Decree 152/1999;
- implement demand management measures for water resource conservation, including stricter control of abstraction permits, and increase the use of treated waste water in irrigation;
- prepare watershed management plans, including both water quantity and water quality planning, in close consultation with the various stakeholders;
- strengthen prevention and mitigation measures concerning flood management; complete hydrogeological risk plans for all river basins;
- complete delineation of areas vulnerable to nitrate and pesticide pollution from agriculture.

**Waste**

- accelerate the adoption of regional waste management plans, including closing down small and unsatisfactory landfills and replacing them with disposal facilities that meet current technical norms and regulatory requirements;
- pursue efforts to increase separate collection of urban waste, including packaging materials, and adopt economic and regulatory measures to further develop the recycling markets and industry;
- develop the use of economic instruments and voluntary agreements aimed at reducing waste generation;
- improve the capacity and quality of hazardous waste disposal facilities and their national coverage;
- further improve waste accounting and monitoring, with special reference to generation and disposal of special and hazardous wastes;
- implement remediation measures in contaminated sites of national importance and speed up completion of regional inventories of contaminated sites.

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* These Recommendations were formally approved by the OECD Working Party on Environmental Performance.
### Nature and biodiversity
- Complete the National Biodiversity Strategy.
- Protect still preserved coastal areas and apply strict nature conservation measures in these areas.
- Develop adequate partnerships between the national administration and regions, municipalities and civil society, in order to improve management of national and regional parks.
- Establish a coherent national ecological network, increase expenditure on nature conservation, including by increased reliance on economic instruments; evaluate the effects of agri-environmental and farm forestry schemes on nature conservation; fully implement and enforce landscape protection acts and regulations; strictly enforce physical planning and environmental regulations for new buildings and construction projects.

### Towards sustainable development
- Further integrate environmental concerns within agriculture, energy and transport policies, as well as health and tourism policies; expand the use of ex-post environmental assessment.
- Finalise adoption of the Environmental Strategy for Sustainable Development, with quantitative targets and time limits, based on full consultation with various stakeholders; review the economic efficiency and environmental effectiveness of incentive schemes granted in terms of subsidies, tax rebates or exemptions to various economic sectors; review existing environmentally related taxes (e.g. transport taxes, taxes on energy products) with a view to restructuring them in the light of the green tax reform; foster implementation of cost recovery schemes in waste management and extend such schemes to water management; make more systematic use of integrated economic and environmental analyses (e.g. cost-benefit analysis, data on public and private environmental expenditure) in environmental policy-making, with the aim of achieving sustainable development objectives more cost-effectively;
- Mainstream sustainable development policy into institutional arrangements and decision-making at all levels (central, regional and local).

### Environmental/social integration
- Reinforce efforts to reduce regional disparities in access to environmental services through development programmes (e.g. environmental infrastructure) in the South;
- Further promote capacity building (e.g. EU Structural Funds task-force) in project and financial management, and in implementation of the Environmental Strategy for Sustainable Development, at both regional and local levels;
- Promote the creation of environmentally related jobs (e.g. at local level, in organic farming, in small enterprises);
- Review the lessons to be learned from urban development programmes carried out so far, and build on positive experiences in future urban renewal and Local Agenda 21 projects;
- Improve land use planning and building permitting through full use of information concerning exposure to natural disasters and industrial risks;
- Strengthen environmental information systems through extended and improved monitoring, economic coverage (e.g. concerning environmental expenditure) and integration of information from various sources;
- Further inform the public about its rights to environmental information, facilitate public access to environmental information, and encourage public participation in decision-making.

### Sectoral integration: transport
- Improve co-ordination of economic and environmental planning of transport among the state, regions, provinces and municipalities, and among national administrations;
- Further develop market-based integration through implementing a mix of supply and demand measures (concerning infrastructure, vehicles, fuels and traffic, transport market reform, taxes and charges);
- Strengthen exhaust emission controls and vehicle inspection, particularly for trucks and two-wheeled vehicles;
- Further develop and implement a long term strategy and medium term action plan to create alternatives to road transport in long distance freight movements and in urban mobility, and to ensure an appropriate focus on transport infrastructure development;
- Review and revise transport taxes and charges, so as to better internalise environmental externalities and eliminate distortions among transport modes (e.g. progressively reducing exemptions and/or incentives to road freight transport);
- Ensure the effectiveness of environmental impact assessment (e.g. public participation, large infrastructure projects) and further implement strategic environmental assessment, in line with EU legislation;
- Further strengthen international co-operation to reduce the share of road transport in cross-Alpine freight movements, with a view to minimising negative environmental impacts.

### International environmental co-operation
- Increase the amount of official development assistance towards the Rio commitment (0.7% GNP); increase bilateral environmental ODA, as well as environmental co-operation with south-eastern European and other Mediterranean countries (e.g. Mediterranean Action Programme hotspots);
- Implement, monitor and develop the national programme of greenhouse gas emissions reductions to meet the Kyoto target;
- Continue effective implementation of the Montreal protocol and relevant EU regulations on ozone-depleting substances; in particular, continue to enforce the ban on trade of CFCs;
- Strengthen protection of the marine environment from land based pollution (from agriculture, industry, traffic and municipal waste water);
- Ratify and implement the few remaining recent international environmental agreements awaiting ratification (Annex II).