

# ITALY

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## CONCLUSIONS AND RECOMMENDATIONS\*

Italy's high population density and high level of industrialisation, the diversity and sensitivity of its natural patrimony, and the importance of its cultural heritage are all factors which have made the protection of the environment a matter of public concern in Italy.

After experiencing over the 1970s and 1980s a rapid growth of the economy and of the associated environmental pressures, Italy has since the mid-1980s strengthened its environmental institutions, laws and policies, made them consistent with European Community directives, and taken an active role in international co-operation concerning the environment.

Today, in the midst of economic structural reforms and adjustments, the challenge to move towards sustainable development largely depends on Italy achieving its economic and environmental objectives through the strengthening of the implementation of its environmental policies and the integration of environmental, sectoral and economic policies.

This OECD report sets out the baseline for assessing future environmental progress and examines the environmental performance of Italy in three major areas:

- i) implementation of environmental policies;
- ii) integration of environmental and economic decision-making;
- iii) international co-operation.

In each of these areas, the extent to which government policy objectives are being met has been assessed. This assessment includes both domestic objectives and international commitments, and is based on environmental effectiveness and economic efficiency criteria. A number of recommendations are put forward that could contribute to further environmental progress in Italy.

### 1. Implementing Environmental Policies

#### *Strengthening the national environmental institutions and management*

The Ministry of the Environment was created in 1986; staff and financing were gradually allocated to it. It soon set up a Three-year Programme to co-ordinate and integrate the activities of the various ministries with regard to the environment. It prepared and achieved adoption of an impressive set of new and often innovative laws and regulations in the field of the environment, including European Community directives. It has instituted economic instruments (e.g. charge on liquid effluents, charge on household waste, creation of a pollution insurance market) which reinforce the regulatory approach. Dialogue with the social partners has been positive. The Italian NGOs have been vigorous and effective.

But Italy's environmental performance suffers from the relative weakness of the institutions in charge of environmental management, beginning with those at the central level. It also suffers from the complexity of its environment laws, which are difficult to enforce and pose problems not only for the concerned sectors, but also for the public administration. The Ministry of the Environment is under-resources to carry out its tasks of implementing environmental policies and of promoting, within government as a whole, sustainable development initiatives. Its support structures — e.g. the National Environmental Protection Agency — have yet to be set up.

It is recommended that consideration be given to the following proposals:

- strengthen the human and budgetary resources of the Ministry of the Environment and review its structure, to better integrate into governmental action as a whole, the operational concepts of sustainable development;

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\* Conclusions and Recommendations approved by the Group on Environmental Performance at its June 1994 meeting.

- provide the National Environmental Protection Agency with the capacity to give the Ministry of the Environment scientific and technical back-up, and to monitor the state of the environment;
- provide financing for environment protection action programmes arising from national, European Community or international initiatives;
- promote the simplification of current legislation and regulations in order to make them easier to enforce;
- strengthen accountability mechanisms (e.g. result-oriented management and post-facto reporting of performance) for all levels of government and industry.

### ***Strengthening regional and local environmental management***

Italy's environmental performance also suffers from the relative weakness of the regional and local institutions in charge of its environmental management. Great efforts will have to be made so that the regions actually play their role fully in environment matters: liaison between the central government and the regions should be improved, particularly in planning and spending capacity; efforts to simplify and harmonize environmental law should be strengthened, and procedures should be simplified so as to reduce administrative delays. At the local level, serious efforts must be made to combat the laxness which, for too many years, has been typical of local environmental management in certain regions and to improve the management of environmental services.

It is recommended that consideration be given to the following proposals:

- define more clearly the regions' responsibilities with regard to environmental management (environmental information, regional state of the environment reports, specialised implementation and enforcement agencies, etc.);
- ensure that the regional and local levels are endowed with adequate financial resources, by instituting environmental charges and eco-taxes and streamlining the procedures for transferring funds from the central level to the regional and local levels;
- identify and report on weaknesses or gaps in the enforcement of environment protection measures at the regional or local level by setting up mobile monitoring teams at the central level; such teams could further review the consistency of implementation among regions and of the implementation by regions of international obligations.

### ***Nature and landscape conservation***

Beyond the long-standing protection efforts targeted at scenic and sensitive areas and at animal species protection, the Framework Law on Protected Areas, in 1991, and the Law on Hunting, in 1992, have given fresh impetus to nature conservation. Together, these two laws provide Italy with a very modern concept of nature protection. One of the goals is to protect 10 per cent of Italy's total land area with parks and reserves, and vigorous efforts have been made to achieve this objective: designation of more than a million hectares of new national parks, creation of central support structures, establishment of management committees for most protected areas, presence of all major ecosystems in the network of protected areas. There are also some successes in respect of wild animals with several species growing in numbers (e.g. the mouflon), extending their habitat (e.g. the wolf), or re-appearing (e.g. the lynx) after a long absence. Italy has ratified all main international conventions concerning wildlife and biodiversity.

However, some other animal species are suffering from loss of habitat, the effects of pollution (e.g. the otter), hunting pressures (e.g. the roe-deer), or introduction of non-indigenous animals (e.g. the grey partridge). Many individual wild plant species as well as the state of the vegetation are cause for concern. There is no national legislation which specifically protects wild plants and their habitats outside protected areas, and regional efforts are limited. There has been little determination to implement the innovative "Galasso" law on the protection of landscapes.

It is recommended that consideration be given to the following proposals:

- implement strictly the 1991 Framework Law on Protected Areas, with the allocation of sufficient personnel and financial resources, and a clear timetable for creating and establishing protected areas;
- strengthen the management of parks and natural reserves, through: incorporation of sustainable development goals in management plans; the application of the agri-environmental measures of the

- common agricultural policy of the European Community; effective public participation mechanisms; strict enforcement of the rules applying within protected areas;
- strengthen the management of fauna and flora species by: making the "Nature Census" operational and carrying out wildlife inventories; developing a national strategy for wildlife management; fully implementing European Community directive 79/409/EEC on the conservation of wild birds; taking measures to protect wild plants;
  - better protect landscapes through the re-activation of the implementation and enforcement of the Galasso law, including setting new timetables for the formulation of landscape plans by the regions, and action by central government in cases where the regions fail to act; strictly enforce environmental and physical planning rules in respect of new building and construction projects.

## *Air*

Urban air quality has improved in a number of cities. Total emissions of SO<sub>2</sub> and lead have decreased and have been decoupled from GDP and fossil fuel use. The integration of environmental concerns into energy policies and transport policies is proceeding well and has already been translated into a variety of effective policy measures. A national air monitoring network is being developed.

However, limit values for a number of pollutants and in several urban areas are breached regularly. Concerning a number of pollutants such as NO<sub>x</sub>, VOC and CO<sub>2</sub>, energy efficiency gains have been largely nullified by the growth of pressures from other sectors such as transport. The cultural heritage of the country suffers from the impacts of air pollution. No region or province has yet finalised its air quality plan and emissions inventory. Several of the policy instruments provided by the 1988 Industrial Air Pollution Law have yet to be applied. As in other countries, the commitment to a 30 per cent reduction in NO<sub>x</sub> and VOC emissions is likely to be difficult to achieve within the deadlines, unless Italy fully implements and strengthens the actions and plans already adopted in the industrial and transport sectors. The Seveso directive has not been implemented in practice, and emergency preparedness to deal with major industrial accidents is likely to prove inadequate, although measures already taken go in the right direction.

It is recommended that consideration be given to the following proposals:

- ensure the completion of the air quality plans and emissions inventories provided for in the 1988 Act with appropriate public involvement in the former;
- implement effectively the law on air pollution from industrial plants and subsequent decrees, with expanded human resources, priority setting, and financing through appropriate fees;
- review efforts to assess and minimize the impact of air pollution on Italy's cultural heritage;
- review and implement strategies to achieve the emission targets concerning NO<sub>x</sub> and VOCs and strengthen efforts concerning both the transport sector and stationary sources;
- approve and implement action plans to deal more rapidly with high risk "Seveso" sites.

## *Waste*

Over the last ten years, much effort has been devoted to putting in place a modern system of waste management. A comprehensive although complex legislative and administrative framework has been created, regional waste management plans have been drawn up, and the overall need for waste treatment capacity has been identified. The target for the recycling of glass has been met. The system of consortiums for the collection and recycling of waste (used lube-oil, old lead car batteries, glass liquid containers and plastic liquid containers) has proven to be effective already for some products, and potentially effective for some others. An effective control system for the transfrontier movements of hazardous waste has been established.

However, only 65 per cent of municipal waste is disposed adequately and most of this is still by landfilling. The programmed objectives to move towards modern treatment methods (e.g. incineration) have not been achieved. For industrial waste, and particularly hazardous waste, there is a shortage of treatment capacity.

To build on the progress made in recent years, it is recommended that consideration be given to the following proposals:

- take determined action to increase the share of up-to-date treatment capacity for municipal waste, and install additional treatment capacity for industrial and particularly hazardous waste to overcome the present shortage in this area;
- consolidate the current legislation and regulations and make them easier to understand and enforce;
- implement procedures and legislation for the recovery and recycling of both municipal and industrial waste;
- extend the use of economic instruments and of the Polluter Pays Principle in support of municipal waste management activities (e.g. local funding);
- ensure that regions and local authorities update their waste management plans, and move towards a pooling of waste treatment facilities among several communities in order to improve the quality of plant design and operation;
- take further measures to avoid local resistance against the siting of new waste management facilities: requiring public involvement at an early stage of the planning process and appropriate public information from all levels of government and industry on their waste management performance;
- complete and implement the regional plans for the reclamation of contaminated sites.

### ***Water***

Overall the environmental performance of Italy concerning water is not fully satisfactory. While most bathing waters comply with standards, the lower reaches of most rivers are highly polluted (organic and microbial pollution, nutrients, persistent chemicals, heavy metals), and groundwater contamination (nitrates, pesticides) is widespread. The withdrawal of freshwater resources is high and in places water shortages have to be faced. A significant share of the population is not constantly and adequately served by public water supply during summer. Much of the country's wastewater is still being discharged with little or no treatment, including cities like Milan, Florence and Palermo.

However, the legislative and institutional elements of a modern system of water management are in place. The identification of the river basin as the principal unit of management has been a positive step towards integrating various water management activities. However, actual implementation has not kept pace with the growing pressures on the country's water resources. Among the major obstacles are low water prices, the fragmentation of the provision of water services, administrative action that is mostly process- rather than result-oriented, and limited spending capability.

In line with existing legislation and the recent Law 36/1994, it is recommended that consideration be given to the following proposals:

- use water more efficiently by upgrading existing water reticulation systems and implementing demand management measures (including increases in the prices of water resources and water services) for households as well as agricultural and industrial users;
- carry out the consolidation of the water utilities;
- ensure that the action plan to meet the EC directive on urban wastewater establishes clear priorities and that the measures are adequately funded;
- undertake urgently an increased investment effort in both drinking water supply and wastewater treatment, on the basis of the new funding regime which enables charging the full capital and operating costs of providing water services;
- ensure the proper functioning of new and existing wastewater treatment plants and promote better compliance with discharge permit conditions;
- make all river basin authorities fully operational as soon as possible, and give priority to the formulation and implementation of river basin plans as the main instrument for integrated water management (including the setting of ambient water quality standards to guide permitting authorities, and giving due weight to ecosystem management).

## 2. Integrating Environmental and Economic Decision Making

### *Environmental and economic policies*

The integration of environmental concerns into economic and sectoral decision making is a key to sustainable development, and improves cost-effectiveness in achieving environmental objectives. At the same time, economic forces and production and consumption patterns in major economic sectors (e.g. energy, transport, manufacturing, tourism, agriculture) exercise a strong influence on environmental conditions and trends. This influence can either enhance or detract from the benefits of environmental policies and technical progress. Such integration, in Italy as in other OECD countries, should be given full attention.

It is recommended that consideration be given to the following proposals:

- establish or re-establish appropriate mechanisms of inter-ministerial consultation and decision making concerning environmental and economic policies, and sustainable development at both Ministerial and administrative levels; establish more systematic consultations with representatives of industry and NGOs in decision-making on environmental and economic policies;
- assess critically the results of the first Three-year Environmental Management Programme and monitor the implementation of the second one; launch the preparation of the next one, with appropriate contributions from the various ministries involved in strategic planning related to environmental matters, consultation of the various tiers of government, and coverage of both domestic and international environmental issues;
- implement the national plan adopted in response to Agenda 21, with full inter-ministerial co-operation; its principles and measures should be integrated in yearly financial laws and the Three-year Environmental Management Programmes and their updates;
- extend the use of economic instruments, in relation to regulatory and other instruments such as voluntary agreements, at national and local levels; fully consider the potential for and the effects of eco-taxes in the case of a general or partial tax reform;
- ensure that an environmental assessment is integrated in government plans and programmes that have potential environmental significance;
- extend environmental impact assessment procedures to projects included in Annex 2 of the European Community directive, and integrate into EIA procedures all existing environmental permitting requirements to establish a system requiring a single environmental permit;
- strengthen the role of the Ministry of the Environment in the dissemination and sharing of positive management experiences at local and regional level (e.g. waste management, nature protection);
- continue to develop a complete and reliable system of information on the state of the environment and on related economic issues (expenditures, employment, sustainable development, consumption and production patterns);
- develop public participation and public access to environmental information and data; in particular, public enquiries should be extended to all projects submitted to environmental impact assessment;
- use land use planning and land use regulation more effectively to serve pollution abatement, nature conservation and risk prevention.

### *The case of Venice*

In respect of the problems of the city and the lagoon of Venice, a good level of integrated planning and decision-making is now being achieved, and a new public agency has been established for bringing together in a single body the co-ordination of technical and planning issues. Progress is being made with the implementation of the tangible issues on the agenda (i.e. the high-tide barriers, the restoration of the sand banks in the lagoon), but progress is needed to address the more intractable issues, such as tourism and the protection of the city's cultural heritage, which is of great international importance.

It is therefore recommended that consideration be given to the following proposals:

- introduce a greater degree of economic, social and environmental assessment, and invite a greater degree of public participation, in all decision making processes affecting the future of Venice;
- consider means of limiting tourism peak loads (including access fees) where these endanger the cultural heritage of the historic city;
- promote joint public-private funding and partnerships for the restoration and maintenance of the city's cultural heritage;

- limit the shipment of hazardous materials through the lagoon;
- plan for the financing and construction of a sewerage system for historic Venice, strengthen efforts to reduce discharges from industrial and agricultural activities, and relocate, if necessary, activities that are not compatible with the conservation of the city and the lagoon.

### ***Sectoral integration: energy***

On the whole, Italy has succeeded well, over the 1980s and early 1990s, in integrating environmental and energy policies. Italy has achieved very low energy intensity (the lowest of OECD countries in 1991, expressed in energy use per unit of GDP in purchasing power parities). This reflects principally the lasting and effective implementation of energy policies that emphasise the development and use of energy-efficient technology, and the use of a mix of instruments including high energy taxes and prices. Within existing constraints, the country has, de facto, simultaneously pursued the three objectives of minimisation of its dependence on energy imports, production of fiscal revenues, and limiting air pollution.

This integration builds on interministerial co-operation at central level, a National Energy Plan followed by implementation, further regional energy plans, initiatives taken and activities carried out beyond government (e.g. by ENEL). Initially driven by high energy prices during the 1970s and early 1980s, the industrial sector has played an important role in the reduction of energy intensity, both directly by developing and introducing new, efficient technologies, and indirectly by producing energy-saving products. The public has also played an integrative role through its involvement in the development of policies (e.g. referendum leading to the moratorium on nuclear power generation) and projects (public enquiries and environmental impact assessment procedures). The energy production sector has contributed to environmental progress by reducing SO<sub>2</sub> and NO<sub>x</sub> emission in electricity production (by increasing the use of natural gas and low sulphur fuel oil, beginning to install desulphurisation and denitrification equipment, and also developing electricity imports); by producing cleaner and higher quality oil products in refineries; and by the expansion of district heating.

If the international target has been achieved for SO<sub>2</sub> emissions (Helsinki protocol), achieving targets for NO<sub>x</sub> emissions (Sofia protocol and Sofia declaration) and VOC emissions (Geneva protocol) will require renewed efforts from the energy sector. CO<sub>2</sub> emissions, because they are low in relation to those of most other OECD countries, will be difficult to stabilise, as shown by the national plan analysis.

It is recommended that consideration be given to the following proposals:

- achieving further reductions in SO<sub>2</sub> and NO<sub>x</sub> emissions from major installations, e.g. by speeding up the installation of desulphurisation and denitrification equipment;
- formulating and carrying out an implementation programme for the control and stabilisation of CO<sub>2</sub> emissions to achieve the target set in the national plan;
- preparing a long term strategy to deal with NO<sub>x</sub> emissions;
- further pursuing energy efficient production and consumption patterns;
- further implementing effectively its pollution abatement policy, monitoring its results and integrating environmental concerns in the planned restructuring of the energy sector.

### ***Sectoral integration: transport***

Overall, Italy has made progress, over the 1980s and early 1990s, in integrating environmental and transport policies. However, the environmental results of the actions taken are not as significant as they could have been due to the growth of the transport sector, and of its road component in particular. Many environmentally effective actions have been taken at local level concerning urban traffic management: they range from traffic restriction in central areas through entry permits (e.g. Bologna) and traffic restrictions affecting cars not meeting the most recent exhaust emission standards (e.g. Bologna, Milan, Naples), to traffic-free areas (e.g. Florence), or the use of computer assisted traffic control systems (e.g. Genoa). Other actions have been taken at national level, since the creation of the Ministry of the Environment to better integrate environment and transport policies: exhaust emission regulation in line with EC Directives, fuel quality improvements, use of alternative fuels, urban air quality plans (required from 15 major metropolitan areas), effective EIA procedures for large infrastructure projects. Within overall transport policy, a number of positive steps towards better integration of environmental concerns in transport policies have been taken: attempts to promote coastal shipping and combined rail-road transport; creation of an Intergovernmental Committee for the Economic Planning of Transport, although for a short period; a clear recognition in the current national transport plan of the importance of environmental concerns, of existing shortcomings and necessary actions. Further,

Italy's transport sector presents several key necessary conditions for an effective integration of environmental concerns in transport policies: relatively limited fiscal distortions which would favour environmentally less friendly modes; taxes and prices concerning diesel fuels, leaded and unleaded gasoline, among the highest of OECD countries; financial assistance and promotional efforts for public transport in urban areas.

However, the results of these many actions have been undermined by the growth of the transport sector. In Italy, road traffic (both freight and passenger) and car ownership have grown at particularly high rates. NO<sub>x</sub>, VOCs, and CO<sub>2</sub> emissions as well as noise from transport have yet to be brought under control, as in many other countries. Although some benefit should be derived from the progressive replacement of vehicles by relatively less polluting ones and the implementation of the more environmentally sensitive national transport plan, a more effective implementation of the measures taken and a strengthening of the integration of environmental concerns in transport policies are required, to contain or reduce the pressures on the environment from this growing sector. Urban traffic congestion remains widespread and public transport is often not as cost-effective as it could be.

It is recommended that consideration be given to the following proposals:

- re-establish an intergovernmental committee to ensure integrated economic and environmental planning of transport;
- draw lessons from those policies and actions which have already showed positive results, especially at city level, and encourage the sharing of these experiences;
- strengthen the enforcement of regulations concerning emission standards and vehicle maintenance;
- promote the implementation of a mix of concerted measures (measures concerning transport infrastructures, land use policies and planning, vehicles, traffic management, taxes and rates, public transport services, air quality plans, etc.) at national, regional and local levels;
- balance the modal split in transport supply through actively promoting and making competitive alternatives to road transport including combined freight transport and local public transport services; in particular, develop a long term strategy and medium term action plan to reduce significantly the share of road transport in long distance freight movements;
- strengthen international co-operation concerning cross-border transport.

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

Italy very actively supports international co-operation concerning the environment. It has ratified most agreements and is implementing nearly all European Community directives. Joint activities are carried out with its neighbours in order to protect frontier regions and common lakes. Marine reserves were created along its coasts and, at international level, an international sanctuary for marine mammals was agreed upon. Much attention is paid to protecting its coastline against pollution from shipping. Strong and effective measures have been taken to prevent illegal export of hazardous waste. Italy took measures to reduce production of CFCs and created a deposit-refund system for domestic equipment containing CFCs. It ratified the Climate Change Framework Convention and has adopted a national plan to stabilise its CO<sub>2</sub> emissions. Italy is supporting international initiatives to protect nature, it created a sizeable network of protected areas and ratified the Biodiversity Convention. Italy has adopted a national environmental plan, in response to Agenda 21.

While the overall record is positive, there is still room for improvement. Implementation of international agreements and of European Community directives is not always satisfactory due to a lack of resources at the national, regional and local levels. A number of conventions will have to be ratified in the near future to better protect the Alpine and marine environments. As several other countries, Italy could face difficulties in meeting its international commitments concerning NO<sub>x</sub>, VOCs and CO<sub>2</sub> in the future, because of traffic growth. As a member of the G-7, Italy should improve its performance in the field of the environment through the provision of appropriate resources. This includes, in particular, increasing the role of international environmental affairs in the relevant ministries and providing administrative support to meet precise commitments (e.g. transfer of information, implementing national plans and strategies). From a financial point of view, an increase in the aid to GDP ratio would be in line with targets adopted within UN or announced at Rio.

Based on the above assessment, it is recommended that consideration be given to the following proposals:

- ratifying and implementing a number of recent international agreements (Annexes III.A and III.B);
- improving co-ordination on the protection of the marine environment;
- improving interministerial consultation on international environmental issues;
- ensuring a better protection of the coastline by reinforcing the means available to prevent marine disasters and to cope with their consequences;
- adapting the domestic legal regime for hazardous waste to the new Community regulation and the Basel convention;
- giving a higher priority to the protection of natural areas of international significance;
- strengthening co-operation with southern Mediterranean countries and with developing countries by increasing environmental aid in regional and in multilateral institutions.