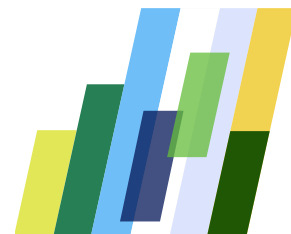




ITALY 2013

Assessment and
Recommendations





This document presents the Assessment and 29 Recommendations of the Environmental Performance Review of Italy that was discussed and approved by the Working Party on Environmental Performance on 11 October 2012. The issues reviewed include:

- Policy-making environment
- Towards green growth
- Multi-level environmental governance: Water
- Climate change

Assessment

Over the last decade, Italy continued to develop its environmental legislation and policies, largely within the framework of the EU and other international commitments. In some cases, Italian environmental policies anticipated EU requirements. Multilateral environmental agreements have also influenced policy and legal developments. The 2006 Environmental Code consolidated various environmental acts, transposed a number of outstanding EU Directives, established key principles of good environmental management, simplified many regulations, and specified procedures to strengthen implementation. However, efforts to develop a more coherent, efficient and effective framework for environmental policies have not been helped by the relatively low priority assigned to the environment over much of the last decade. Recent initiatives, for example to promote a green economy, indicate an increased emphasis on environmental issues by the government.

Italy's environmental management system has also evolved in the context of a major devolution of legislative and administrative responsibilities to subnational levels of government. This catalysed regional and local initiatives that helped to improve environmental performance in many locations. However, the devolution process also created ambiguities about the respective roles of national and regional levels of government, and tended to increase gaps and inconsistencies in the transposition of EU environmental directives. A variety of different, sometimes inconsistent, approaches emerged, partly due to delays by the national authorities in formulating framework environmental policies. This has also undermined the efficiency and effectiveness of national policies in some areas; for example, waste management and climate related policies. The net result is that environmental policy has remained fragmented, largely driven by emergencies, and with a short-term focus.

From an economic point of view, the current set of environmental policies does not create a stable and conducive framework for environmentally related investments, generates unnecessary administrative compliance costs, and creates an unlevel playing for business activities. There is now a pressing need to develop a clear, strategic national vision of environmental policy that links directly with overall economic and social objectives.

In 2006, the responsibilities of the Ministry of Environment were broadened to include marine issues, and the Ministry of the Environment, Land and Sea (MATTM) was created. Despite increased responsibilities, the Ministry's budget was cut by 48% between 2006 and 2011. Further cuts of about 20% are foreseen in the 2011-14 period. This would erode further the MATTM's capacity to establish and implement coherent policies throughout Italy. Other specialised environmental agencies provide support to the MATTM, including the Italian Environment Agency (ISPRA). This Agency has recently been restructured and strengthened. A system of regional environmental agencies supports subnational governments, with significant variations in their human and financial capacities. A solid technical information base has been established to support environmental decision-making, and the communication of environmental information to the public has been made more user-friendly. However, gaps remain, including the capacity to conduct economic analysis of environmental issues which could be addressed to some extent by better co-operation between the administration and the research community.

Some efforts have been made to mainstream environment into government decision making, but they have not been very successful. A Commission on Sustainable Development (C6SS) was established in 2002 as part of the Committee for Economic Planning (CIPE), the main inter-ministerial body that defines national economic policy, outlines multi-year budgets and monitors their implementation. However, the C6SS has been largely inactive. The CIPE should be charged to more effectively mainstream environment and sustainable development into its work, and that of its advisory bodies. More robust and systematic use of Regulatory Impact Assessment and Strategic Environmental Assessment, as well as *ex post* evaluation of policies, would also help to mainstream environmental considerations into sectoral policies and programmes. These efforts should be grounded in the development of a more effective assessment culture.

At the turn of the century, there was considerable divergence in the environmental performance of regions, often linked to differences in wealth, capacities and political priorities. The devolution process reinforced these divergences and made the vertical co ordination of environmental policies more difficult. A variety of mechanisms exist to vertically co-ordinate policies in general (such as the Unified State-Regions-Municipalities Conference), and environmental policies in particular (such as the Network of Environmental Agencies and the National Observatory of Organisation and Management of Environment Agencies). Despite various efforts, the potential of these bodies has not been fully exploited. Consideration should be given to reinvigorating the environmental bodies as part of the broader effort to establish a more coherent and consistent national environmental policy framework. Drawing on experience in the field of regional policy, the disbursement of funds for environmentally related activities should be linked to performance. It should also be coupled with methodological and capacity building support, for example from the Network of Environmental Agencies.

Italy has made progress in establishing a framework for managing traditional pollutants. Simplified environmental permitting procedures have helped to reduce administrative burdens on small and medium-sized enterprises which constitute a significant fraction of Italian industry. However, about 600 large plants are still to be granted integrated permits, five years after the deadline established by the EU Integrated Pollution Prevention and Control Directive. Ensuring compliance with permit requirements has been strengthened by the introduction of risk based inspections, streamlining of inspection procedures, and increasing the effectiveness of non-compliance responses. However, regional differences hamper the consistent enforcement of environmental requirements. While significant steps have been taken to clamp down on criminal activities, particularly by the Carabinieri Corps for environmental protection and the State Forestry Corps, further efforts are needed, especially to control trafficking and disposal of illegal waste, as well as illegal construction and poaching. The development of consistent, country-wide strategies, developed in close cooperation with the regions, in areas such as waste management and enforcement, should reduce the scope for illegal activities. The public and mass media could be more actively engaged in efforts to promote compliance with environmental requirements.

Italy was among the first countries to ratify the Aarhus Convention in 2001. Since then, further measures were taken to improve access to information, public participation and access to justice, in line with the EU requirements. Local consultative referendums have played a role in environmental decision making, for example for the eco-pass in Milan. Despite the various mechanisms for sharing information and engaging the public in environmental decision making, dialogue with social partners is fragmented and polarised, and is often limited to emergencies or high profile projects. Many conflicts have long histories, frequently because the public was not engaged early enough, and/or because appropriate consideration was not given to alternative solutions. All stakeholders should be actively and constructively engaged in the development of a strategic national vision for the environment.

Recommendations

- **In consultation with all stakeholders, develop clear national strategies for issues that require common or consistent approaches at the regional and municipal level (e.g. water and waste management, and environmental compliance assurance).**
- **Reinforce efforts to establish more coherent and consistent environmental requirements across all regions, including by: reinvigorating the role of the Network of Environmental Agencies in providing guidance, support for capacity development, sharing good practices, and benchmarking performance.**
- **Complete issuing integrated environmental permits for enterprises with significant environmental impacts; continue to simplify and streamline environmental requirements for small and medium-sized enterprises to reduce administrative costs and barriers.**

Recommendations (ctd)

- Reinforce efforts to combat environmentally related crime, especially concerning waste and land use.
- Strengthen capacity for conducting *ex ante* and *ex post* economic analysis of environmental policies; strengthen the government's collection of environmentally related economic information and establish closer links between the administration and the research community to make better use of the latter's analytical capacities to support policy development.
- Continue to strengthen and harmonise regional approaches to SEA and EIA procedures; ensure that the public is involved at a sufficiently early stage of the procedures and that adequate consideration is given to alternatives.

Towards Green Growth

Assessment

Italy's economy grew slowly for much of the 2000s, largely due to low productivity growth. In response to the 2008 economic downturn and deteriorating public finances, Italy implemented a number of measures to consolidate its fiscal position and stimulate economic growth. Some of these measures had an environmental dimension, such as increases in fuel taxes, energy efficiency incentives, and further liberalisation of energy, transport and environmental services. However, other measures could have a negative impact on the environment, such as the extension of the tax rebate on diesel for truck drivers. There is also a risk that positive steps taken to reduce administrative burdens could result in a weakening of environmental requirements. Overall, the environmental dimension of these measures was limited and lacked coherence.

Much remains to be done to mainstream environment into economic policy. The Economic and Finance Document (DEF), which is the core economic policy document endorsed each year by the Parliament, provides some indications of the government strategic priorities in regard to the environment. However, it currently provides only a limited, short term and unstable basis for establishing Italy's priorities for green growth. A long-term green growth strategy could provide a more stable policy framework which is critically needed in order to spur investment in the green economy.

Revenue from environmentally related taxes accounted for 2.6% of GDP and 6.1% of total tax receipts in 2010, higher than the corresponding shares for the OECD as a whole. However, their role declined during the last decade, and the real tax burden on energy decreased. Nevertheless, the tax burden on energy, and the tax rates on petrol and diesel, are among the highest in Europe. From an environmental point of view, there is scope to restructure these taxes to better capture environmental externalities. For example, excise duties vary greatly among fuels and users and do not provide a consistent price for carbon. The excise duty on diesel was still 23% below that on petrol in 2011, a difference that is not environmentally justified. Vehicle taxes do not take full account of CO₂ and other emissions, especially for freight vehicles.

Several partial or total exemptions apply to different uses of fuel, which lower end-use prices and reduce incentives to use energy efficiently. For example, such exemptions apply to fuels used for electricity generation, in agriculture, in industrial facilities, and for road freight transport. Special tax provisions on energy and transport were estimated to result in revenue losses of 0.2% of GDP in 2010. In a welcome move, in 2010 the Ministry of Economy and Finance launched the first comprehensive review of tax expenditure. This provides a good basis for further efforts to identify and reform tax expenditure that is inefficient economically, socially and environmentally.

The high tax-to-GDP ratio limits the possibility of further raising tax revenue in Italy. Nonetheless, expanding and restructuring environmentally related taxes and removing environmentally harmful tax concessions could help fiscal consolidation. It could also help to make the tax system more growth-friendly by reducing taxes on labour and businesses. The comprehensive fiscal reform proposal presented by the government in April 2012 explicitly includes an environmental component for the first time. To make the best of this opportunity, the environmental component of the reform proposal could be broadened.

Public and private expenditure on waste, wastewater and water resource management has remained virtually stable at around 2.2% of GDP. Investment in the water and waste sectors has been increasingly financed by utilities providing environmental services on a commercial basis. However, the role of utilities remains limited in most southern regions. Revenue from service tariffs is often insufficient to cover the costs of these services and guarantee necessary investments. Overall, the quality of local public services such as water, waste and urban transport varies widely across regions. In several cases, contracts for the provision of these services have been awarded without public tenders, and penalties have not been consistently applied in case of inadequate service quality. Competition and regulatory oversight has also been weak and often characterised by conflicts of interests at local level.

EU funds for regional development have been a major source of finance for public environment-related investment, complementing national allocations, particularly in southern regions. About 15% of available EU funds and national matching funds in the 2007-13 programming period were allocated to renewable energy sources, energy efficiency, and environmental infrastructure. Programmes for allocating EU funds have been increasingly based on sound analysis of investment needs and progress has been monitored by indicators. Italy has also implemented innovative, results-oriented procedures to disburse funds. However, the realisation of planned investments and the achievement of intended outcomes could be improved.

Some environment-related goods and services sectors have shown positive economic and employment trends, including water and waste management, organic farming and renewables. Medium- to high-skilled employment in these sectors has increased, supported by targeted education and training programmes. An increasing number of businesses, including small and medium-sized enterprises, have invested in environmental protection, energy and resource efficiency, and have introduced environmental innovations. Whereas investment in the waste and water sectors was less than EUR 5 billion in 2010, investment in renewable energy was estimated at EUR 21 billion in 2011, a 43% increase on the previous year. Italy is reportedly among the world and European leaders in renewable energy, in terms of investment, turnover and employment. Investment in renewables has been driven by various support programmes, notably feed-in tariffs and green certificates. The White Certificate and other energy efficiency schemes have stimulated the emergence of a dynamic energy services market. Most of these incentives' costs are ultimately financed by electricity consumers. However, most of the turnover and employment in "clean energy" is in the downstream segments; e.g. installation, operation and maintenance of renewable energy equipment.

Despite some progress, Italy's performance in the more upstream segments of the environmental goods and services sector and in eco-innovation is below its potential. In part, this reflects Italy's weak innovation capacity more generally. Environment- and energy-related R&D spending grew in the 2000s. The number of patent applications for renewable energy technologies increased faster than any other technology. However, R&D spending and patent applications remain low compared to most other large countries. Italy's eco-innovation policy mix is skewed toward the supply side. Strengthening implementation of environmental legislation and of green public procurement would help increase demand for environmental technologies and related market opportunities. Further efforts should be made to promote co-operation between sectors, different levels of government, and the public and private sectors and academia. Consideration should also be given to how best to support eco-innovation in small and medium-sized enterprises. The multi-stakeholder dialogue on the green economy (Stati Generali della Green Economy), launched in 2012, could positively contribute to developing an eco-innovation policy framework, which is currently lacking.

At the international level, Italy has actively supported implementation of the OECD Guidelines for Multinational Enterprises, and the OECD Recommendation on Common Approaches on Environment and Officially Supported Export Credits, in some cases going beyond their requirements. Since 2007, Italy has assigned a higher priority to environmental issues in the context of its official development assistance (ODA) programme. The average share of environment-focused aid was 41% of total sector allocable aid in 2009, which is high compared to many other members of the OECD Development Assistance Committee (DAC). Issues and partner countries have been prioritised. An inter-ministerial group was established to promote policy coherence for development. In 2011, guidelines for integrating environment into development co-operation belatedly were issued. However, the recent progress in integrating environment into development co-operation should be seen in the context of a weak overall ODA performance: in 2011, ODA reached 0.19% of gross national income. This is well below the OECD-DAC average of 0.31% and the 2010 EU target of 0.51%, as well as far from the international commitment of 0.7% by 2015.

Recommendations

- **Mandate the Inter-Ministerial Committee on Economic Planning (CIPE) to prepare a green growth strategy that provides a clear, coherent and sufficiently long-term policy framework, amongst other things, to spur investment in the green economy; monitor and report on implementation of this strategy in conjunction with the annual Economic and Finance Document.**
- **Implement a comprehensive environmental fiscal reform as part of the proposed reform of the tax system that: i) removes special tax provisions that are environmentally harmful and economically inefficient; ii) restructures energy and vehicle taxes so that they better reflect environmental externalities including greenhouse gas emissions; and iii) considers reforming existing, or introducing new, environmental taxes on resource use and pollution (e.g. on water abstraction, wastewater discharges, pesticides, fertilisers and packaging materials).**
- **Continue to regularly survey tax expenditure; introduce a mechanism to systematically screen existing and proposed direct and indirect subsidies against their potential environmental impact.**
- **Further promote efficiency in the provision of environmentally related local public services, including waste, water and local transport services, by: ensuring a stable regulatory framework, including for the financing of these services; applying user charges that allow sustainable cost recovery; enforcing competition rules (e.g. for public tendering procedures); and ensuring systematic monitoring by independent regulatory authorities of utilities' efficiency and service quality.**
- **Improve the effectiveness of regional development funds for environment-related investment by tying their disbursement to the fulfillment of preliminary conditions (e.g. sound sectoral plans and regulatory frameworks, sufficient matching finance), and to the achievement of measurable quality targets for the provision of environmental services.**
- **Develop and implement a comprehensive framework for promoting eco-innovation that includes a balanced mix of increased public support for R&D and demand-side measures (e.g. innovation-oriented standards and economic incentives); improve co-ordination of industrial, innovation and eco-innovation policies across the government, between the central government and the regions, and between academic institutions and business sectors.**
- **Further strengthen environmental education and training with a view to ensuring the supply of suitably trained workers for the green economy, and facilitating the transition of workers from contracting conventional sectors to expanding "green" sectors.**
- **Further strengthen the environmental component of ODA in line with Italy's comparative advantages, while increasing the overall ODA budget in line with EU and international obligations.**

Multi-level environmental governance: water

Assessment

Despite relatively high average annual rainfall, freshwater availability per capita in Italy is one of the lowest among OECD countries. This is due to high evapotranspiration, rapid run off and limited storage capacity. Uneven distribution of water between seasons and regions reinforces the complexity of water management. While northern Italy enjoys an abundance of water, the South experiences water shortages which are compensated by the increasing use of groundwater (often above the replenishment rate) and water transfers between regions. Overall, Italy is considered to be a water-stressed country, and competition for water resources among alternative uses is likely to increase in the future. Climate change will exacerbate these pressures.

Pollution pressures have lessened in the last decade due to improved pollution prevention and control, and, especially in the aftermath of the 2008-09 crisis, reduced economic activity. However, water resources still receive heavy pollution loads from industry, households and agriculture, particularly in the industrialised and densely populated North. Polluted water is an additional supply constraint. More than one third of surface water bodies and 11% of groundwater bodies will not meet the EU Water Framework Directive (WFD) objectives for ecological status by 2015.

Water management in Italy was subject to significant reform before 2000. This included the pioneering introduction of a river basin approach, and the consolidation of water supply and sanitation services. Despite these advances, water governance remains overly complex, largely emergency driven, and oriented towards short term problem solving. To address current strategic and legal uncertainties, there is an urgent need to formulate a strategic vision for the water sector. This vision should include more effective multilevel governance, better policy coherence and planning aligned with national and local priorities, more systematic use of economic instruments, a better alignment of river basin authorities with hydrological boundaries, comprehensive and consistent information systems, and better financing and regulatory frameworks for service provision. The process of developing this vision should engage a broad range of stakeholders from national and subnational levels in setting objectives and developing innovative solutions.

In the 2000s, transposition of the EU WFD provided a further push for consolidating water-related legislation, streamlining water management institutions and increasing water use efficiency. However, the measures implemented have further complicated the water governance system. Proposals were made in 2006 to replace river basin authorities with 8 river basin districts to implement some of the main provisions of the WFD. However, they were blocked by interest groups on various grounds, including not always appropriate consultation with regions. The arrangements put in place by the government using emergency powers made the governance arrangements even more complex, with some river basins managed by multiple authorities. The river basin management plans that were subsequently produced to implement the WFD reflected the institutional uncertainty and provided little value-added compared to river management plans prepared by the regions.

Building on earlier reforms, there has been a substantial consolidation of water service providers. Following the designation of optimal territorial areas – ATOs – the number of water utilities was reduced from more than 8 000 to 115 over the last 15 years. This has helped achieve economies of scale, improve planning, and, in some cases, establish the operation of utilities on a more commercial basis. However, the governance of the water supply and sanitation sector remains weak and is characterised by uncertainty and ambiguity. The authorities established to oversee ATOs and utilities – AATOs – have lacked the means to effectively control water service providers. The contracts between AATOs and utilities were, in many cases, poorly structured, creating uncertainties about interpretation and conflict resolution.

Participation of local representatives in both AATOs and water utilities has created conflicts of interest. Efforts to more clearly separate water utilities and municipalities have stalled. Measures to abolish AATOs were introduced but uncertainty about the institutions that should replace them has resulted in many continuing to operate. Further uncertainty has been created by the 2011 water referendum, which significantly reduced the role of the private sector. Uncertain and weak governance arrangements have resulted in poorer water service provision in Italy than in many other OECD countries (for example, unaccounted for water is relatively high, and access to efficient wastewater treatment infrastructure is relatively low).

A body to regulate tariffs was established in the 1990s and reorganised following adoption of the 2006 Environmental Code. However, this body remained weak, with no executive powers or capacity. As a result, tariffs were set at the level of ATOs. This in turn resulted in tariffs being set at levels which did not cover the costs of maintaining or renewing infrastructure, and a lack of transparency which created barriers for new market entrants. The recent allocation of water service oversight functions to the National Gas and Electricity Authority (AEEG) is a potentially positive step. Drawing on the experience of managing other utilities, this new regulatory framework is expected to strengthen the financial management of water utilities, including by: reducing regulatory and legal risks, particularly in areas of the country where such risks are considered high by financial markets; further promoting economies of scale and the wider use of innovative financial products that could help to spread the financing of water infrastructure over the lifetime of the assets; and introducing competitive benchmarking of the performance of water utilities.

Italy has applied a wide range of economic instruments for water management. However, the way they are implemented has not always led to more efficient use of the resource, and fails to generate the revenue needed to invest in infrastructure. For water supply and sanitation, although tariffs have increased, they are still much lower than in many other OECD countries. Substantial amounts of water used are not billed, and in several regions the collection of payments for water use remains low. For the management of water resources more generally, instruments in use include water licenses, water allocation quotas, and various charges for water use and pollution releases. However, water abstraction charges remain low and exemptions are numerous. The ongoing reorganisation of water management and the revision of river basin district management plans provide an opportunity for introducing a comprehensive reform of water-related economic instruments and underline the need for reform of the wider legal framework. Responsibility for setting water charges and using the revenue generated should be more closely linked with river basin district planning and management.

Monitoring and data collection related to water quality and quantity remains a challenge at the national level and in several regions. In the past decade, and under the leadership of the Environment Agency (ISPRA), Italy strengthened its capacity to collect hydro geological, physical and meteorological data in order to support real time monitoring and standardise methodologies across the country. However, there are still substantial information gaps, especially regarding water abstraction, at the regional and local level. Economic analysis is still poorly woven in the development of water policies. ISPRA and the Ministry of the Environment, Land and Sea have very few staff dedicated to the water economy. This lack of capacity could be bridged by drawing more on relevant expertise in academic institutions.

Recommendations

- **Develop a common and long term strategic vision of how the national government can most effectively support regional and local authorities in managing water resources, taking account of territorial disparities in resource endowments, policy priorities and capacities.**

Recommendations (ctd)

- Streamline institutional arrangements for managing river basins, and strengthen their efficiency and effectiveness, by aligning them as far as possible with water catchment areas and establishing one authority in each district; strengthen their planning capacity and ensure coordination with national and local priorities; ensure that adequate provision is made for stakeholder and public participation in decision making, and for transparency and accountability.
- More systematically apply economic instruments (abstraction and pollution charges, and user fees) to support the effective management and sustainable financing of water resources at the level of river basins, including to finance measures for adaptation to climate change.
- Ensure that the newly appointed water regulator has sufficient human and financial capacity to carry out the key regulatory functions for the water supply and sanitation sector, including to promote sustainable cost recovery and to benchmark the performance of water utilities.
- Strengthen the collection, analysis and dissemination of information on the economic and financial aspects of water resources management; strengthen the analysis of the drivers of, and trade offs associated with, competing uses of water.

Climate change

Assessment

After more of a decade of continuous growth, Italy's domestic greenhouse gas (GHG) emissions declined in the second half of the 2000s. Several factors contributed to this decline, including: a further switch to natural gas; increased use of renewable energy sources; and some improvement in energy efficiency. The deep economic recession in the late 2000s also contributed significantly. Overall, GHG emissions declined by 9% from 2000-10. The already relatively low energy and carbon intensities of the Italian economy also decreased further, although unevenly across the country. When absorption of GHGs by forest sinks is taken into account, emissions were 6.2% below 1990 levels in 2010, compared to the Kyoto target of a 6.5% reduction in 2008-12. Any shortfall in meeting this target would be made up by purchasing carbon credits.

Italy's climate change policy has largely been developed in the framework of EU climate and energy policies. The central government has overall responsibility for climate policy, although regions have acquired increased policy-making and implementation responsibilities. Despite improvements in institutional arrangements for horizontal and vertical co-ordination, policy co-ordination has often been difficult. This, together with uneven administrative capacity and differentiated approaches across regions, has led to implementation and investment delays. While climate change mitigation did not have high political priority during most of the last decade, it has been given renewed impetus more recently. The development of a national climate adaptation strategy is also under way. Since 2011, the Ministry of Environment, Land and Sea (MATTM) has reported annually on Italy's progress in meeting international GHG emission reduction commitments in the Economy and Finance Document.

A national GHG emission reduction plan, adopted in 2002 and subsequently revised, outlined the main approaches for meeting Italy's Kyoto target and included an array of potential mitigation measures. It also established an annual monitoring and reporting process. However, the plan did not clarify which measures (other than purchasing international carbon credits) would be used to narrow the "distance to target", and delegated responsibility for identifying specific measures to the competent ministries and authorities. In 2012, the MATTM presented a draft plan for achieving the EU related target to 2020. This plan overcomes the weaknesses of previous plans. It integrates the measures foreseen in the national plans for renewables and energy efficiency, as well as regional actions supported by EU and national funds for regional development. Further efforts should be made to assess the cost-effectiveness of measures included in the plan.

Italy has made greater use of economic instruments in its climate mitigation policy. The EU Emissions Trading System (EU-ETS), launched in 2005, covers about 40% of Italy's GHG emissions. This is a lower share of emissions than in other large EU economies, leaving most emission abatement to be achieved by domestic measures in the non-ETS sectors. Unlike in most other countries participating in the ETS, installations in Italy bought allowances on the market in the first years of trading since their emissions were above the allocations. Over-allocation emerged at the end of the decade, however, largely due to the impact of the economic downturn. Uncertainty remains about whether the ETS will lead to a CO₂ allowance price that is stable and high enough to provide incentives to invest in low-carbon technology. This suggests the need for complementary measures. There is scope to complement the ETS with a form of carbon tax on energy products used in the non-trading sectors, particularly transport and services, so as to establish a consistent carbon price across the economy. While energy taxes are high in Italy and have recently been increased, the rates do not fully or consistently reflect CO₂ emissions and other environmental externalities across fuels and energy uses.

Italy's strategy for achieving climate mitigation goals has relied heavily on increased use of renewable energies. Economic incentives for electricity generation, in the form of feed-in tariffs and tradable renewable energy certificates (green certificates), have been at the core of the renewables policy mix. These support programmes have driven a dramatic increase in generation of electricity from renewable sources and have helped stimulate growth and employment in the renewables sector. Overall, renewables accounted for about 10% of gross final energy consumption in 2010, up from less than 5% in 2005 and above the intermediate target set by the Renewable Energy Action Plan. Therefore, Italy is on track to meet its 2020 target of 17% of renewables in gross final energy consumption. However, such rapid progress has entailed increasingly high costs, mainly due to the rapid growth in installed solar photovoltaic capacity. Solar power has been prioritised at the expense of more cost-effective options, such as use of renewables for heating and cooling. In addition, the cost of abating one tonne of GHG emissions implied by these incentives is estimated to be relatively high. In a welcome move, the government adopted new rules in 2011-12 aimed at aligning incentive rates with the decreasing costs of renewable technologies, redressing the bias towards solar power, and better controlling costs for electricity consumers in the period to 2020.

Italy is a front-runner in Europe in the development of smart grids, which are expected to facilitate the integration of the growing number of small, dispersed and intermittent renewable electricity sources into the distribution network. The roll out of smart meters, the first step in the development of smart grids, has virtually been completed. However, like many other countries, Italy needs to further develop its networks, especially the transmission network in southern regions and islands, which have a high renewables potential. While progress has been made in simplifying some administrative processes, spatial planning and authorisation procedures for plant construction and grid reinforcement are complex and regionally differentiated. This can hold back investment in renewables. In 2012, the central and regional governments agreed to share renewables targets among regions. While this could lead to some loss in economic efficiency, it could help improve governance and effectiveness and facilitate investment. Systematic and rigorous monitoring will be crucial for successful implementation.

Italy has introduced a number of regulatory measures and economic instruments to promote energy efficiency, including tax incentives and a trading mechanism. These measures have contributed to energy savings above the intermediate target set by the national Energy Efficiency Action Plan, mainly in regard to electricity used by the residential sector. Progress in the service and transport sectors has been more modest and below expectations, underlining the need for additional efforts. Analysis suggests that energy efficiency measures have been cost-effective, with benefits (in terms of avoided energy costs) well above the costs borne by energy users and tax payers. The market for energy efficiency certificates (white certificates, or WCs) has been the most cost-effective measure. It could be further expanded and reinforced. The effectiveness of the current incentive mechanisms would also benefit from more complete and consistent implementation of the certification of building energy performance, which is currently uneven across regions.

Despite progress, Italy's renewables and energy efficiency policies have lacked a general long-term vision. Management of the incentive systems for energy efficiency and renewables involves a number of different agencies and institutions, which results in co-ordination difficulties and increasing transaction costs. There has been a multitude of overlapping measures, which have also changed several times within a few years. This has created unnecessary complexity and regulatory uncertainty, although recent measures have addressed some of these problems. In addition, the interaction between energy efficiency and renewables incentives and the EU-ETS requires ongoing evaluation, as these initiatives could further depress the CO₂ allowance price and lead to displacement of emissions. A long-awaited national energy strategy was released for consultation in 2012, and provides the opportunity to address all these issues in a comprehensive way.

Trends in passenger and freight transport have broadly followed Italy's economic performance, although with some differences among transport modes. Road transport has continued to heavily dominate the modal split, despite considerable investment in extending and upgrading the railway network. The economic recession in the late 2000s and specific policy measures led to a decline of GHG emissions from the transport sector. Nonetheless, transport, particularly by road, has remained the main energy end-use and the second largest source of CO₂ emissions. Improving energy efficiency in the transport sector and reducing related GHG emissions should, therefore, be a priority. While Italy has one of the highest car ownership rates in the OECD, the energy efficiency of passenger cars is good and improving, compared to that in other European countries. Italy reached the EU target of an average 130 g CO₂/km for newly registered cars ahead of the 2015 schedule. However, the fleet of freight vehicles is relatively inefficient, partly due to reduced fuel tax rates. Taxes on car ownership are based on pollutant emission standards, but not on CO₂ emission levels, while those on heavy goods vehicles are not linked to any environmental criterion. A 2007-10 scrapping incentive has been the main measure implemented to further reduce cars' average CO₂ emissions. While it was effective in maintaining the car renewal trend at pre-crisis level, the economic efficiency of this measure was relatively low, and its medium- and long-term benefits are questionable.

Some progress has been made in developing integrated urban transport systems, and many of the larger cities have implemented low emission zones. In Milan, the low emission zone has been combined with a pollution/congestion charge, which has reduced vehicle use in the city centre and related emissions. Otherwise, with the exception of parking pricing, use of price based mechanisms to manage transport demand and reduce emissions from private vehicle use has been limited and could be expanded. In general, public transport systems in most cities remain insufficiently developed (in terms of infrastructure and service quality) to provide an adequate alternative to use of private vehicles. This is particularly true in southern regions. Similarly, further financing and regulatory efforts are needed to develop the infrastructure of medium- and long-distance rail and multi-modal transport, and improve service quality. Further investing in alternatives to road transport would reinforce the environmental effect of fuel taxes and of a future carbon tax. While many national transport infrastructure plans have been developed, Italy still lacks a comprehensive transport strategy aimed at rebalancing the modal split of both passenger travel and freight haulage.

Recommendations

- Adopt the draft plan to meet the 2020 domestic emission reduction targets at the earliest opportunity; implement it on the basis of a clearly defined implementation schedule and progress indicators; systematically review the cost-effectiveness of implemented measures and the consistency of the national plan and regional actions.
- Use the opportunity provided by the current reporting requirements on GHG emissions in the annual Economy and Finance Document to enhance transparency and promote broader participation of stakeholders and civil society in climate-related policy making.
- Restructure taxation of energy products to explicitly include a carbon tax component, with a view to complementing the EU Emissions Trading System and providing a consistent price of carbon across the economy.
- Further develop the renewable energy policy in the framework of a long term, comprehensive national energy strategy; ensure consistency of the incentive mechanisms and related rules, and continue to align incentive rates with the decreasing costs of renewable technologies; continue to streamline administrative procedures for plant construction and grid reinforcement, e.g. by establishing a centralised system for monitoring regional and local procedures.
- Streamline energy efficiency incentive measures, and make sure that multiple incentives effectively address different barriers and do not entail excessive costs; further strengthen implementation of the White Certificate system, e.g. in the transport sector.
- Promote effective and consistent implementation of the EU Energy Performance of Buildings Directive in the regions; develop a monitoring system at national level to support the use of consistent methodologies for assessing and certifying energy savings at the regional level.
- Rationalise the governance and management of the incentive systems for energy efficiency and renewables.
- Speed up implementation of plans for investment in urban public transport infrastructure and multimodal freight networks, in the framework of a comprehensive strategy to rebalance the modal split of both passenger travel and freight haulage.
- Extend the use of price-based mechanisms, such as pollution and congestion charges, to reduce emissions from vehicle use in urban areas; restructure vehicle taxation, for both cars and heavy goods vehicles, to include components reflecting CO₂ emissions and other environmental externalities.
- Complete preparation of a climate adaptation strategy through an open and inclusive process involving all stakeholders; establish priorities based on comprehensive economic and social assessment, emphasising low cost and no regrets actions; include a structured review process based on clearly identified indicators.

OECD Environmental Performance Reviews

ITALY 2013

The OECD Environmental Performance Review Programme provides independent assessments of countries' progress in achieving their domestic and international environmental policy commitments, together with policy relevant recommendations. They are conducted to promote peer learning, to enhance countries' accountability to each other and to the public, and to improve governments' environmental performance, individually and collectively. The Reviews are supported by a broad range of economic and environmental data. Each cycle of the Environmental Performance Reviews covers all OECD member countries and selected partner countries. The most recent reviews include: Mexico (2013), Germany (2012), Slovenia (2012), Israel (2011), Slovak Republic (2011), Norway (2011) and Portugal (2011).

This report is the third OECD review of Italy's environmental performance. It evaluates progress towards sustainable development and green growth, with a focus on policies that tackle climate change and multi-level governance issues associated with water.

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