

## Countries and regions

# Italy



## Main themes and sectors addressed in the national State of Environment report

In accordance with law No. 349/1986<sup>[1]</sup>, the Italian Ministry of the Environment (MoE) submits its State of the Environment Report<sup>[2]</sup> to the parliament every two years. Most of the information for the State of the Environment Report<sup>[3]</sup> comes from the Environmental Data Yearbook<sup>[4]</sup>, which is published annually by ISPRA (Institute for Environmental Protection and Research<sup>[5]</sup>) with the collaboration of Italy's regional/provincial environmental protection agencies.

The Environmental Data Yearbook-Key Topics<sup>[6]</sup> deals with a variety of environmental issues that are considered priority areas by the EU. These issues include:

- Climate change
- Biodiversity and ecosystems
- Air quality
- Inland water quality
- Sea and coastal areas
- Exposure to physical agents
- Nuclear activities and environmental radioactivity
- Environmental hazards
- Soil and land
- Waste
- Resource use and material flows
- Environment and health
- Instruments for environmental knowledge and awareness
- Environmental certification

## Key findings of the State of Environment report

### Climate change

During the last 30 years, the Italian mean temperature anomaly (a measure of how the average temperature in Italy in any given year differs from a historical, multi-year average) was almost always higher than the global over land air temperature anomaly. In 2013, the mean temperature anomaly was +1.04° C in Italy, compared to the global mean of +0.88° C<sup>[7]</sup>.

Total greenhouse gas emissions, in CO<sub>2</sub> equivalent and excluding emissions and removals from LULUCF, decreased by 11.4% between 1990 and 2012. Italy's Kyoto target is to reduce annual emissions by 6.5% between the base year (1990) and the period 2008-2012 (which is calculated by taking an average of annual emissions in that four-year period). Comparing the average annual emissions in the 2008-2012 period to the emissions in the base year, Italy's level of emissions decreased by 4.6%.

Italy will meet its Kyoto target for the 2008-2012 period by using the credits arising from Kyoto Protocol mechanism and forestry activities<sup>[8]</sup>.

### Air quality

In 2012, Italy had satisfactory levels of air quality concerning sulphur dioxide and benzene. However it had unsatisfactory concentrations of PM<sub>10</sub> (the daily limit value was exceeded at 40% of monitoring stations), ozone (the long-term target for human-health protection was exceeded in 93% of monitoring stations) and nitrogen dioxide (the annual limit was exceeded in 17% of monitoring stations).

### Water quality/ Sea and coastal areas

In Italy and the Mediterranean, marine coastal zones remain among the most vulnerable and most seriously threatened natural ecosystems. There are many sources of pollution that can render water unfit for swimming, but the most significant source is microbiological pollution. For the 2012 bathing season, Italy counted 629 inland waters and 4 880 marine and transitional waters for a total of 5 509 bathing waters. The results of the monitoring carried out during the 2012 bathing season show 85% of these waters were in compliance with the guideline value established by Directive 76/160/EEC.

### Biodiversity and activities on ecosystems

Of all the European countries, Italy has one of the largest stores of biodiversity, accounting for half the plant species and a third of the animal species occurring in Europe. About 31% of vertebrate species are threatened, with amphibians and cartilaginous fishes a particular cause for concern. About 15% of the higher plants and 22% of the lower plants (bryophytes and lichens) are threatened.

### Soil and land

At the national level, ISPRA data<sup>[9]</sup> show that artificial land cover reached 7.3% in 2012 (Figure 1). This means that, on average, more than 7 square metres of soil a second were built over since 1950. The pace has increased in recent years. Between 2009 and 2012, the consumption of soil was approximately 8 metres per second.

### Environmental hazards

Landslides are the most commonly occurring type of natural disaster in Italy. They are second only to earthquakes in terms of the number of victims and the amount of damage they cause.

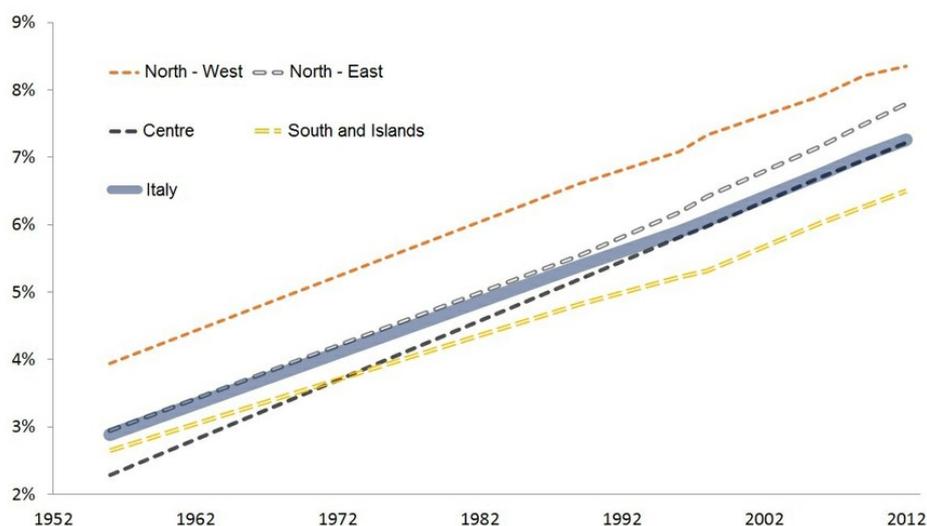
The population potentially exposed to landslides every year is 995 484 people spread out over 21 182 km<sup>2</sup> (7 % of the national territory). In 2013, 112 major landslide events were recorded. It is estimated that every year 6 153 860 people are exposed to the effects of flooding in Italy. Floods in Italy killed 1 557 people from 1951 to 2013.

### Waste

Total municipal waste in 2013 was about 29.6 million tonnes, 1.3% less than in 2012. Waste generation per person fell from 505 kg/person in 2012 to 487 kg/person in 2013. In 2013, about 37% of municipal waste was disposed of in landfill, but 39% was sent to material recovery (including composting and anaerobic digestion of biowaste)<sup>[10]</sup>.

Separate collection of different waste streams is recognised as essential for the effective recycling of the different components of municipal waste. In 2013, 42.3% of total municipal waste was separately collected.

**Figure 1. Soil consumption trend, 1950s - 2012<sup>[9]</sup>**



Source: ISPRA

## Main policy responses to key environmental challenges and concerns

Despite recent progress, Italy still faces important environmental challenges <sup>[11]</sup>, such as climate change mitigation, climate change adaptation, urban air quality, waste management, ground water pollution, groundwater over-exploitation, and hydro-geological instability.

### Climate change

In order to help mitigate climate change, Italy has adopted the European emissions trading system. It has also promoted energy-saving measures, renewable energy, and low-environmental-impact fuel in the transport sector. As regards adaptation, the process for the adoption of the National Adaptation Strategy is in progress.

### Waste

There is considerable diversity between different regions of Italy when it comes to progress in waste management. Further effort will need to be made to achieve the targets set out in Directive 2008/98/EC, especially with regard to the prevention and recycling of municipal waste. In 2010, Italy implemented directive 2008/98/EC to promote upstream waste reduction and the separate collection of different waste streams. This will help to develop the waste management industry and create new jobs in waste management.

### Sea and coastal areas

The Marine Strategy Framework Directive (2008/56/EC) is an important and innovative tool since it is the first binding instrument to consider the marine environment as a precious resource to be protected and – where possible – restored. Italy has already begun to implement the MSFD in its seas. It has drafted an initial assessment of the state of the marine environment, based on existing data and information. It has also created a definition of 'good

marine environmental status' on the basis of 11 qualitative descriptors of the marine environment, comprising data on issues such as biodiversity and pollution.

Italy is now designing a monitoring programme for the continuous evaluation of the state of the environment of marine waters.

### Soil and land

Italy has enacted a soil-protection law, which ensures the protection and recovery of soil and subsoil, the maintenance of soil-based water-functions and ground water, and the restoration of soil polluted with hazardous substances.

### Green growth

As Italy recovers from the effects of the economic crisis, it is looking to 'mainstream' environmental concerns into its economic policy<sup>[12]</sup>. This 'Green Growth' agenda comprises:

- Economic policy and the environment
- Greening the tax system
- Environment-related expenditure and investment
- Expanding environment-related markets and employment
- Promoting environmental technologies and eco-innovation

Greening the tax system is a particularly promising area. Italy hopes to alter its taxation system to receive a smaller share of taxation revenue from income tax, and a larger share of revenue from taxes on polluting activities.

## Country specific issues

Italy is particularly susceptible to hydro-geological instability, due to its geological and geomorphological characteristics, the impact of weather and climate factors, and the widespread, uncontrolled presence of human activities. Land use is an especially important policy area in this regard.

ISPRA and the environmental protection agencies at the provincial and regional level monitor soil-sealing activity and land-take across Italy. This monitoring activity helps to shape and assess policies at national, regional, and municipal levels.

SOER 2015 country briefings provide an overview of state of the environment across 39 European countries. They are part of the EEA's report SOER 2015, addressing the state of, trends in and prospects for the environment in Europe. The EEA's task is to provide timely, targeted, relevant and reliable information on Europe's environment.

For **references**, see [www.eea.europa.eu/soer](http://www.eea.europa.eu/soer) or scan the QR code.

PDF generated on 04 Aug 2017, 03:17 PM



Published on 18 Feb 2015