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Environmental Implementation Review 2022 Country Report - ITALY

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**Communication from the Commission to the European Parliament, the Council, the
European Economic and Social Committee and the Committee of the Regions**

**Environmental Implementation Review 2022: *Turning the tide through environmental
compliance***

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Executive summary

In previous Environmental Implementation Reviews (EIRs), the main challenges identified for Italy for the implementation of EU environmental policy and law were to:

- improve municipal waste management, in particular by reducing landfilling and increasing separate collection of waste in southern regions;
- improve urban wastewater treatment by making investments in these facilities;
- reduce particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂) emissions by reducing traffic congestion and biomass burning;
- designate the remaining Natura 2000 marine sites as special areas of conservation (SACs), set and meet site-specific conservation objectives and ensure the network is effectively managed;
- improve the efficiency with which environmental financing is implemented.

Despite some progress made in recent years on municipal **waste management**, in particular with a steady and consistent increase in recycling and composting, the waste sector in Italy still has significant shortcomings, as illustrated by several infringement procedures against Italy. These include the 'landfill case' and the 'Campania case' subject to fines levied by the Court of Justice of the European Union (CJEU). More action is needed to ensure that waste disposal in Italy is carried out in compliance with EU law. The recovery and resilience plan (RRP) brings important reforms with a national circular economy strategy and a national waste management programme, plus flagship recycling investments that are expected to improve implementation of environmental norms on the ground.

On the **Natura 2000** network, some marine SACs still need to be designated. The conservation status of habitats and species of EU interest must also be improved by fully implementing Natura 2000, using regional prioritised action frameworks to better integrate EU funds, and planning investments more strategically. There are insufficient funds for biodiversity in the RRP to cover the needs; thus the shortfall must be made up from other EU funds and national sources.

Italy has had **advanced practices for natural capital, environmental accounting and well-being indicators** for many years, which are now bolstered through support

from the Commission's technical support instrument and the EIR peer to peer tool.

On **air quality**, Italy has made limited progress in reducing emissions as a whole, despite agreements between the national and regional governments in the Po Valley, an EU Clean Air Dialogue on 3-5 June 2019 and a high profile LIFE integrated project (PREPAIR). Substantial exceedances of the limit values for both PM₁₀ and NO₂ continued in 2020. Around 20% of the RRP is allocated to measures on sustainable energy and transport which will improve air quality. Progress can also be made through a broader tax-shift from labour to environmental and other tax bases, including the gradual elimination of environmentally-harmful subsidies.

On **water management**, Italy has made limited progress in reducing the number of non-compliant agglomerations under the Urban Waste Water Treatment Directive with financial penalties imposed by the CJEU. More investments are needed to achieve progress. Nitrates hotspots also need to be cleaned up in northern Italy and drinking water quality must be improved in Lazio. The RRP will support significant investments in land-use planning (to reduce soil sealing), flood control, reducing leakage and investing in urban wastewater treatment. High water consumption is a concern in southern regions, particularly from agriculture. Furthermore, several marine descriptors are in a poor or very poor state.

EU financing continues to provide substantial support to reduce the gap in environmental implementation. Italy is due to receive over EUR 190 billion from its RRP (2021-2026) in grants and loans and EUR 42 billion from cohesion policy (2021-2027). Italy's overall environmental financing for investments is estimated to reach 0.48% of GDP a year (less than the EU average of 0.7%) in 2014-2020, with 80% coming from national sources. Overall environmental investment needs for the coming period are estimated to reach at least 0.67% of Italy's GDP a year, **suggesting an environmental investment gap of over 0.19% of GDP** to be addressed by focusing on the country's environmental implementation priorities. Italy has improved its capacity to absorb EU funds for environmental measures except in Sicily and Calabria. Total fines related to waste and water issued by the CJEU have exceeded EUR 620 million since 2015.

Part I: Thematic areas

1. Circular economy and waste management

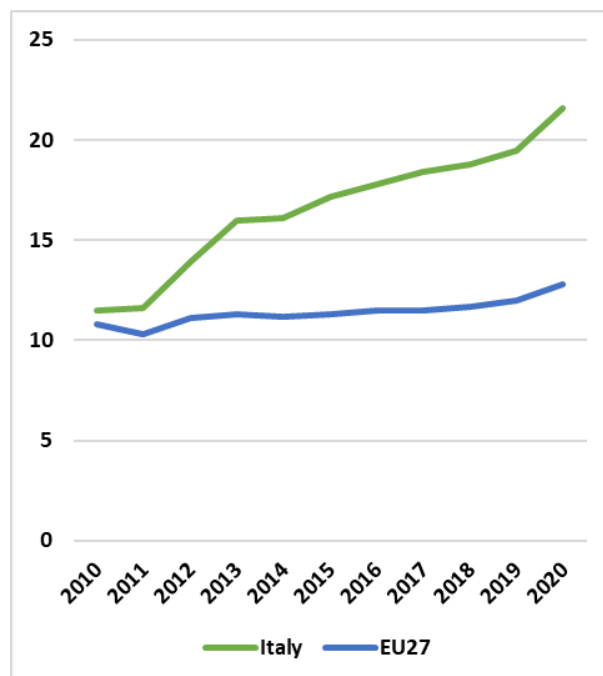
Measures towards a circular economy

The new Circular Economy Action Plan adopted in March 2020 is one of the main building blocks of the European Green Deal. The EU's transition to a circular economy will reduce pressure on natural resources and will create sustainable growth and jobs. It is also a prerequisite to achieve the EU's 2050 climate neutrality target and to halt biodiversity loss. The Action Plan announces initiatives along the entire life cycle of products, aiming to reduce the EU's consumption footprint and to double the EU's circular material use rate by 2030. It targets how products are designed, promotes circular economy processes, encourages sustainable consumption, and aims to ensure that waste is prevented and the resources used are kept in the EU economy for as long as possible.

The circular material use rate is a good indicator of an economy's circularity, as it includes all the materials that are fed back into our economy. There are major differences in the circularity rate between EU countries. To help achieve the EU circular economy action plan's goal of doubling the EU circular material use rate by 2030, ambitious measures targeting the whole product life cycle are needed at Member State level. Such measures range from sustainable product design to increase the durability, reparability, upgradability and recyclability of products, to other measures such as remanufacturing¹, increasing the circularity in production processes, recycling, boosting eco-innovation and increasing the uptake of green public procurement.

Italy's circular (secondary) use of material was 17.1% in 2017 and 21.6% in 2020, way above the EU average of 12.8%, as shown in Figure 1. It also demonstrates a steady increase in secondary material usage over recent years in the country.

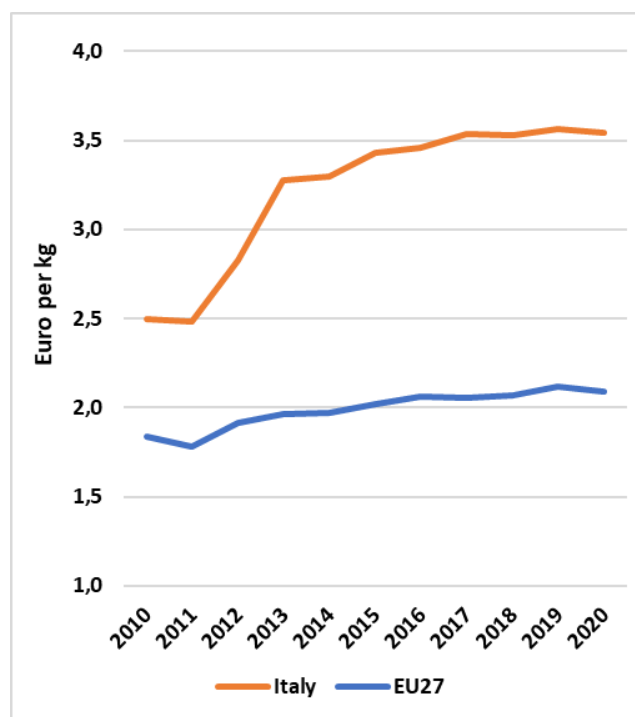
Figure 1 – Circular material use rate (%), 2010-2020²



Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help minimise the negative impacts on the environment and reduce dependency on volatile raw material markets. As shown in Figure 2, with EUR 3.54 generated per kg of material consumed in 2020, resource productivity in Italy is well above the EU average of EUR 2.09 per kg. This positive performance comes on the back of a continuous increase in Italy's resource productivity over the last decade.

¹ a standardized industrial process that takes place within industrial or factory settings, in which cores are restored to original as-new condition and performance or better.

² Eurostat, [Circular Economy Monitoring Framework](#).

Figure 2: Resource productivity 2010-2020³

Circular economy strategies

The Commission encourages Member States to adopt and implement national/regional circular economy strategies covering the whole life cycle of products. This is because such strategies are one of the most effective ways to progress towards a more circular economy. Since the launch of the online Circular Economy Platform in 2017⁴, national, regional or local authorities have used the platform to share their strategies and roadmaps.

With regard to the country's circular economy strategy, as part of the recovery and resilience plan's reforms (RRP), Italy adopted in June 2022 a new national strategy for circular economy⁵, which is expected to cover the entire lifecycle of products. The strategy includes action to help create a new digital waste traceability system, tax incentives to support recycling and the use of secondary raw materials, revision of environmental taxation, right to reuse and repair, reform of the extended producer responsibility and consortia system, support for existing regulatory tools, and support for the industrial symbiosis project through regulatory and financial instruments.

Italy has a national circular economy network and held a fourth annual conference on 5 April 2022⁶.

Italy also adopted in June 2022 a national programme for waste management (PNGR) with the intention of providing technical support to local authorities by the government to implement the environmental regulations and to draw up plans and projects on waste management. Finally, it intends to fund flagship projects, including on the circular economy. In 2021, the Commission's technical support instrument is supporting a project on the circular economy in Italy.

Italy does not have a specific sectorial strategy for plastics, textiles or construction, although some are addressed by the RRP flagship projects mentioned above.

Many LIFE projects in Italy bear on examples of circular economy; some of these were showcased during the 2019 GreenWeek: one is on recycled football stadium seats in Pontedera and the Stadio Olimpico (Rome) appropriately named TACKLE⁷. An innovative partnership has been established for waste management for the City of Rome in 2022⁸.

Eco-innovation

A successful transition to a circular economy requires social and technological innovation. This is because the full potential of the circular economy can only be reached when it is implemented across all value chains. Eco-innovation is an important enabling factor for the circular economy. New approaches to product design and new business models can help produce systemic circularity innovations, creating new business opportunities.

In 2021, Italy ranked 10th on the 2021 Eco-Innovation scoreboard, with a total score of 124, resulting in an average eco-innovation performance (Figure 3). In two out of five areas, namely eco-innovation activities and resource efficiency outcomes, Italy performed above the EU average. It performed below the EU average on eco-innovation inputs, eco innovation outputs, and socio-economic outcomes. One problem facing the Italian economy is that it has few domestic natural resources, and the cost of imported raw materials and their impact on the final cost of products is high. The EIR 2019 had a priority action to increase the risk capital for eco-innovation in SMEs. Awareness of environmental sustainability increases with company size, with for instance, 91% of firms with 50 or more employees separating their waste collection, 71% of companies

³ Eurostat, [Resource productivity](#)

⁴ [Circular Economy Stakeholder Platform](#)

⁵ [National Circular Economy Strategy](#)

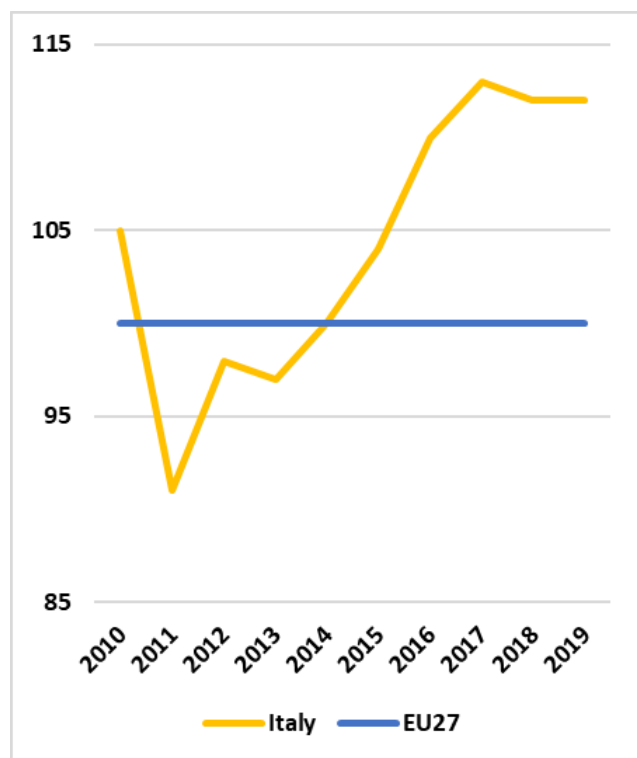
⁶ [Circular Economy Network](#)

⁷ [LIFE Tackle](#)

⁸ Green [Pact](#) for Rome, April 2022

monitoring energy use and 56% monitoring water use⁹. The "Transition 4.0" initiative within the RRP offers incentives, including risk capital, to support the circular economy investments of companies. This means that some progress has been made on the 2019 priority action.

Figure 3 – Eco-innovation performance, 2010-2019¹⁰



Green public procurement (GPP)

Public procurement accounts for a large proportion of European consumption, with public authorities' purchasing power representing around 14% of EU GDP. Public procurement can help drive the demand for sustainable products that meet reparability and recyclability standards. Italy adopted its first green public procurement (GPP) national action plan in 2013. Italy was the first Member State to set, in 2016, an extensive obligation for contracting authorities to include minimum environmental criteria in their purchases. So far it has defined minimum environmental criteria (MEC) for 18 product categories. The obligation to 'buy green' applies to all contracting authorities. Italy plans to bring in a monitoring system, but no official data are yet available. The RRP envisages further supporting MEC under GPP, as

⁹ ISTAT, 2020, [Statistica sperimentale. Comportamenti d'impresa e sviluppo sostenibile](#)

¹⁰ European Commission - Directorate-General for Environment (DG ENV), Eco-innovation Observatory, [Eco-innovation index](#).

part of the national strategy for circular economy. There are also activities at regional level¹¹. On 21 June 2019, Italy (CONSIP) organised an EIR peer to peer event on circular purchasing and participated at another event on models of communication on the value of ecolabels on 21 October 2020 (in Croatia)¹².

EU Ecolabel and the eco management and audit scheme (EMAS)

The number of EU Ecolabel products and EMAS-licensed¹³ organisations in a given country provides some indication of the extent to which the private sector and national stakeholders in that country are actively engaged in the transition to a circular economy. It also shows how committed public authorities are to supporting instruments designed to promote the circular economy.

As of September 2021, Italy had 13 181 products out of 83 590, and 301 licences out of 2 057, registered in the EU Ecolabel scheme, showing a very high take-up of both products and licences¹⁴. Moreover, 1 034 organisations in 4 120 sites in Italy are currently registered in EMAS, the European Commission's eco-management and audit scheme¹⁵. Since the last EIR report in 2019, Italy has registered 3 252 new products under the EU Ecolabel, and 51 new organisations have registered in EMAS. By contrast, 24 fewer Ecolabel licences were registered in 2020 than in 2019.

Waste management

Turning waste into a resource is supported by:

- (i) fully implementing EU waste legislation, which includes the waste hierarchy, the need to ensure separate collection of waste, the landfill diversion targets, etc.;
- (ii) reducing waste generation and waste generation per capita in absolute terms;
- (iii) limiting energy recovery to non-recyclable materials and phasing out landfilling of recyclable or recoverable waste.

¹¹ [Green Procurement Observatory](#), 2021.

¹² [TAJEX - Environmental Implementation Review - PEER TO PEER](#)

¹³ EMAS is the European Commission's eco-management and audit scheme, a programme to encourage organisations to behave in a more environmentally sustainable way.

¹⁴ European Commission, [Ecolabel Facts and Figures](#).

¹⁵ As of May 2018. European Commission, [Eco-Management and Audit Scheme](#).

This section focuses on the management of municipal waste¹⁶ for which EU law sets mandatory recycling targets.

Preventing products and materials from becoming waste for as long as possible is the most efficient way to improve resource efficiency and to reduce the environmental impact of waste. Waste prevention and re-use are the most preferred options, and are therefore at the top of the waste hierarchy. The amount of municipal waste generated is a good indicator of the effectiveness of waste prevention measures.

After falling for a period, municipal waste generation in Italy has started to increase in recent years. It came to 504 kg/year/inhabitant in 2019, although it remains close to the EU average (501 kg/year/inhabitant), as shown in Figure 4. This indicates that Italy's economic growth is not yet decoupled from its generation of waste.

Figure 4: Municipal waste by treatment in Italy, 2010-2019¹⁷

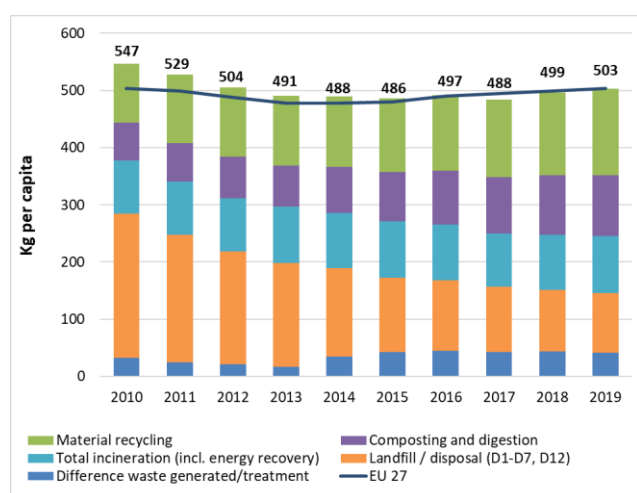


Figure 4 also shows municipal waste by treatment, in terms of kilos per inhabitant. The situation varies by region, but managing waste efficiently at national level remains an important challenge for Italy¹⁸. The partnership agreement 2021-27 cites 2019 data that

¹⁶ Municipal waste consists of (a) mixed waste and separately collected waste from households, including paper and cardboard, glass, metals, plastics, bio-waste, wood, textiles, packaging, waste electrical and electronic equipment, waste batteries and accumulators, and bulky waste, including mattresses and furniture; (b) mixed waste and separately collected waste from other sources, where such waste is similar in nature and composition to waste from households. ([Directive 2008/98/EC](#), Article 3 2b).

¹⁷ Eurostat, [Municipal waste by waste operation](#), April 2022 (2020 data from Italy not yet available). However, [ISPRA](#) data for 2020 indicates waste production per capita of 488.5 kg and separate collection of 63%, up of 1.8% compared to 2019.

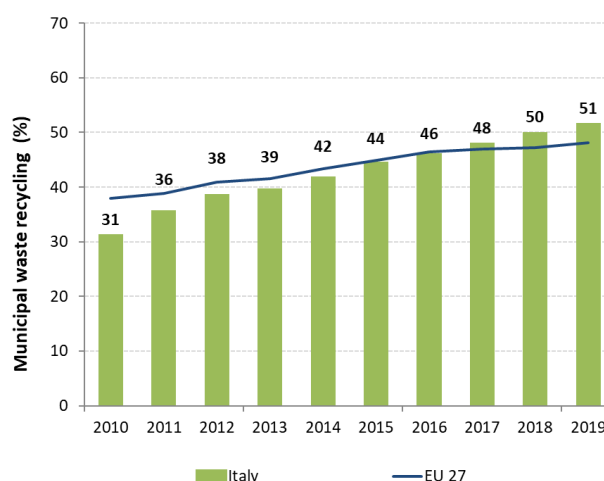
¹⁸ European Commission, [Country Report European Semester 2020](#), (pp.64-5).

shows landfilling is still excessive in the least developed regions (31%) and in the transition regions (39.7%), as compared to the most developed regions (14.8%), and concludes that great efforts by certain regions are needed to meet the 10% national target for landfilling by 2035.

Nevertheless, Italy has made slow but steady progress over the past decade with a steady increase in recycling (in 2019 with 51% compared with EU average of 48%) as shown in Figure 5 and a decrease in landfilling (21% in 2019)

The Italian government's intention under their waste policy is to increase recycling capacity, which, in turn, should reduce the demand for new incineration plants.. The RRP also contains investments for new waste plants and upgrading of existing plants.

Figure 5: Recycling rate of municipal waste, 2010-2019¹⁹



As mentioned above, the centre and south of the country perform less well on waste management than the north. Campania continues to pay fines for poor waste management, following a CJEU ruling for its previous waste-management policies. Some progress has been made in Campania to put in place a functional waste management network, with a one third reduction in the daily fine set since June 2021.

Moreover, based on information available to the Commission, it appears that a significant number of irregular and substandard landfills operate in Italy. These sites are illegal or do not meet the EU landfilling standards (e.g. they lack pre-treatment of waste or do not

¹⁹ Eurostat, [Recycling rate of municipal rate](#), April 2022 (2020 data from Italy not yet available).

process the organic waste fraction) and present serious risks to human health and the environment. Italy was already fined by the CJEU in 2014 for over 200 irregular landfills, and in April 2022, Italy was still paying a fine for 29 irregular landfills; 75% are located in the southern regions.

In its judgement issued on 29 March 2019 for a separate case, the CJEU ruled that Italy had failed to ensure the definitive closure and rehabilitation of a further 44 landfills, that do not comply with the requirements under the Landfill Directive. In the meantime, the Commission has ascertained that, though Italy has regularly closed 32 landfills, it has failed to close and rehabilitate the 12 remaining landfills. The Commission therefore called on Italy to comply with EU rules on landfills²⁰.

Italy is not considered at risk of missing the EU 2020 targets for the reuse and recycling of waste, but continuous efforts are needed to meet the subsequent EU targets.²¹ The Commission is currently finalising its analysis of progress on the recommendations from the 2018 Early Warning Reports and an analysis of progress in achieving the 2025 waste recycling targets. This report will be presented at the end of 2022 and will assess the progress made to date.

Italy (CINSEDO²²/Emilia Romagna) used the EIR peer to peer tool to organise an exchange with Belgium (Flanders) on waste management on 26 October 2020.

The Italian Zero Waste Communities is worthy of mention²³, funded by LIFE.

Implementation of the 2018 waste legislative package

Italy has notified transposition of the 2018 waste package²⁴ to the Commission. A conformity assessment is now ongoing.

Waste management plans and waste prevention programmes are instrumental to achieve sound implementation of the EU's waste legislation. They set out key provisions and investments to ensure compliance with existing and new legal requirements (e.g. waste

prevention, separate collection for a number of specific waste streams, recycling and landfill targets). Revised plans and programmes were due on 5 July 2020.

Italy has waste management plans at regional (19) or autonomous province level (2) and some regions have special waste plans (8) for special or hazardous wastes, making a total of 29 plans. Italy has also a national waste prevention programme for 2013-2020, which is also replicated at regional level. On 24 June 2022, Italy adopted the national waste management programme²⁵. On 23 June 2021, Italy issued a decree for a waste prevention programme for packaging for 2019-2023. Since the 2019 EIR, Italy has also issued decrees covering end-of-life for processing nappies and tyres.

There are currently no geographical gaps in terms of coverage for municipal and special waste plans in Italy but some plans have clear-cut gaps in terms of their policy coverage to bring them into line with the 2018 revision of the Waste Framework Directive. The aforementioned PNGR will be coherent with the waste management plans.

Italy has not yet ratified the Hong Kong International Convention for the Safe and Environmentally Sound Recycling of Ships or the International Convention for the Control and Management of Ships' Ballast Water and Sediments.

In the 2019 EIR Italy had five priority actions in the field of waste. It has made no progress on the priority to harmonise the low-level of regional landfill taxes across the country. It has made limited progress on the priorities to introduce new policy and economic instruments to promote waste prevention, product re-use and increasing recycling rates, but there are milestones in the Council decision of 13 July 2021 adopting the RRP to meet EU recycling targets at national level and separate collection rates at regional level²⁶, so no priority action is proposed for 2022. Italy has made some progress on closing irregular landfills with a steady rate of closure, but this is not completed. Therefore some priority actions are repeated. Italy also received a general priority action in 2019 with regard to signing and ratifying outstanding international agreements.

2022 priority actions

- Harmonise and increase regional landfill tax rates.
- Implement the national waste management programme and ensure regional waste management plans are in line with the revised Waste Framework Directive. Complete closure of non-compliant landfills.

²⁰ European Commission, [April 2022 infringements package: key decisions](#)

²¹ European Commission, Report on the implementation of waste legislation, including the early warning report for Member States at risk of missing the 2020 preparation for re-use/recycling target on municipal waste, [COM\(2018\)656](#).

²² CINSEDO: Centro interregionale di studi e documentazione (inter-regional centre for studies and documentation)

²³ LIFE, [Zero Communities Waste](#)

²⁴ [Directive \(EU\) 2018/851](#), [Directive \(EU\) 2018/852](#), [Directive \(EU\) 2018/850](#) and [Directive \(EU\) 2018/849](#) amend the previous waste legislation and set more ambitious recycling targets for the period up to 2035.

²⁵ [National programme for waste management](#)

²⁶ European Commission, [Italy's recover and resilience plan](#).

- Ratify international Conventions on ship recycling and on ballast water and sediments.

2. Biodiversity and natural capital

The 2030 EU biodiversity strategy adopted in May 2020 aims to put the EU's biodiversity on a path to recovery and sets out new targets and governance mechanisms to achieve healthy and resilient ecosystems.

In particular, the strategy sets out ambitious targets to:

- (i) protect a minimum of 30% of the EU's land area and 30% of its sea area and integrate ecological corridors, as part of a true trans-European nature network;
- (ii) strictly protect at least a third of the EU's protected areas, including all remaining EU primary and old-growth forests;
- (iii) effectively manage all protected areas, defining clear conservation objectives and measures, and monitoring them appropriately.

The strategy also sets out an EU nature restoration plan – a series of concrete commitments and actions to restore degraded ecosystems across the EU by 2030, and manage them sustainably, addressing the key drivers of biodiversity loss.

The Habitats and the Birds Directives are key legislative tools to meet the targets in the EU's biodiversity strategy for 2030, and are the cornerstone of the EU legislation aimed at conserving of the EU's wildlife.²⁷

In 2021 Italy's Ministry for the Ecological Transition started preparing a new national biodiversity strategy for 2030, in line with the contents and targets of the EU biodiversity strategy for 2030. The previous strategy was last reviewed in 2016.

Italy has not yet ratified the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization (ABS) to the Convention on Biological Diversity for which it had a priority action in 2019. According to information available to the Commission, Italy is proposing legislation to do so in the shortterm; therefore no priority action is proposed in 2022.

Nature protection and restoration

Natura 2000²⁸, the largest coordinated network of protected areas in the world, is the key instrument to achieve the objectives in the Birds and Habitats

Directives. These objectives are to ensure the long term protection, conservation and survival of Europe's most valuable and threatened species and habitats and the ecosystems they underpin. The setting up of a coherent Natura 2000 network, the designation of Sites of Community Importance (SCI) as Special Areas of Conservation (SAC) and the setting conservation objectives and measures for the Natura 2000 sites are key milestones towards meeting the objectives of the Directives.

Setting up a coherent network of Natura 2000 sites

Italy hosts 132 habitat types²⁹ and 340 species³⁰ covered by the Habitats Directive. The country also hosts populations of 124 bird taxa listed in Annex I to the Birds Directive³¹.

By 2021, 19.1% of the territory of Italy was covered by Natura 2000 (EU average 18.5%), see Figure 10. Special Protection Areas (SPAs) classified under the Birds Directive cover 13.4% of the territory (EU average 12.8%) and SCIs under the Habitats Directive cover 14.3% (EU average 14.2%) of Italy's territory.

The latest assessment of the Italian Natura 2000 network shows that insufficiencies remain in designating several species and habitat types under the Habitats Directive as well as a number of bird species under the Birds Directive. Therefore, Italy must still complete its Natura 2000 network, in particular the marine network. As a consequence, on 9 June 2021, the Commission sent Italy a letter of formal notice to urge the national authorities to take the measures needed to comply with the requirements of these two Directives.

Considering both Natura 2000 and other nationally designated protected areas, Italy legally protects 21.4% of its terrestrial areas (EU27 average 26.4%) and about 5.4% of marine areas (EU27 average 10.7%)³². Figure 6 shows the situation at EU level for terrestrial and marine sites in terms of meeting the EU biodiversity strategy 2030 target of 30%.

²⁷ These should be reinforced by the Nature Restoration Law, according to the new EU biodiversity strategy.

²⁸ Natura 2000 comprises Sites of Community Importance (SCIs) which are designated pursuant to the Habitats Directive whereas Special Protection Areas (SPAs) are designated pursuant to the Birds Directive; figures of coverage do not add up due to the fact that some SCIs and SPAs overlap. Special Areas of Conservation (SACs) are SCIs designated by the Member States.

²⁹ EEA, Article 17 dashboard, Annex I total, 2019.

³⁰ EEA, Article 17 dashboard, Annex II & Annex IV excluding those in Annex II & Annex V excluding those in Annex II, 2019. This counting only takes into account species and habitats for which assessment of conservation status was requested.

³¹ EEA, Article 12 dashboard, Annex I, 2020. This counting only takes into account birds taxa for which information was requested.

³² Eurostat, Protected Areas, terrestrial protected area percentage (2021) and marine protected area percentage (2019), March 2022.

Figure 6: Marine & terrestrial protected area coverage 2021³³

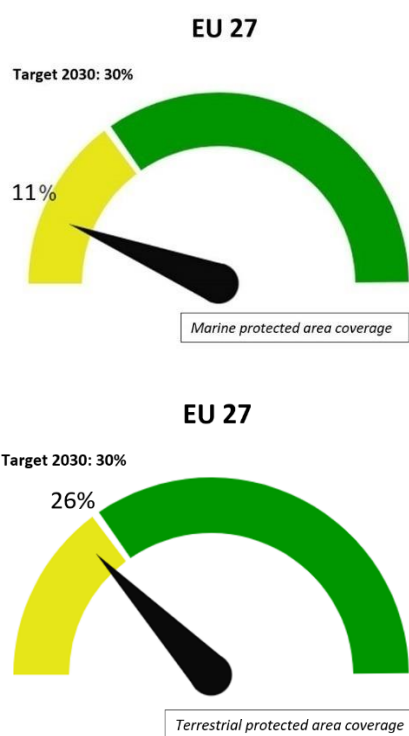
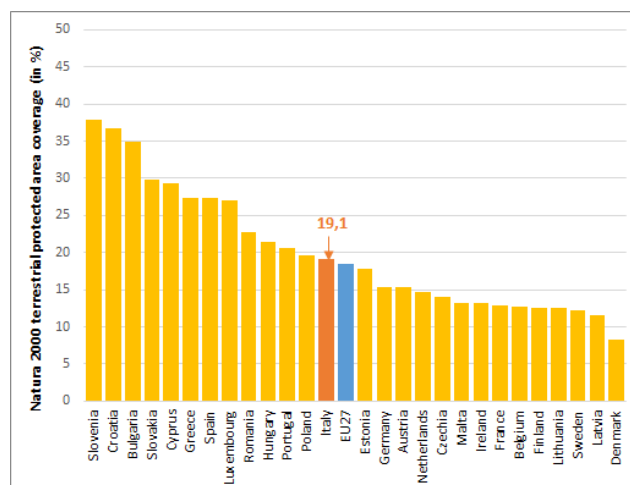


Figure 7: Natura 2000 terrestrial protected area coverage, 2021³⁴



Designating Special Areas of Conservation (SACs) and setting conservation objectives and measures

The six-year deadline set under the Habitats Directive to designate SCIs as SACs and set appropriate conservation objectives and measures has expired for all sites in Italy.

Nevertheless, 12 SCIs have not yet been designated as SACs. Site specific conservation objectives and measures have not been adopted for all designated SACs and the quality of those adopted does not fulfil the required standards. An infringement procedure is ongoing to address these problems.

Progress in maintaining or restoring favourable conservation status of species and habitats

The results of the Article 17 report on the Habitats Directive and the Article 12 report on the Birds Directive on progress towards maintaining or restoring favourable conservation status of species and habitats are key to measure the performance of Member States.

According to the report submitted by Italy on the conservation status of habitats and species covered by Article 17 of the Habitats Directive for the period 2013-2018, the share of assessments of habitats in good conservation status in 2018 was 9.9%, less than the 22.2% reported under the previous reporting period (2007-2012), see Figure 8. For protected species, the share of assessments in good conservation status in 2018 was 43.4%, an increase on the 39.6% reported in the previous period (2007-2012), see Figure 9³⁵.

³³ [EU Biodiversity Strategy Dashboard](#), indicators A1.1.1 and A1.2.1, February 2022.

³⁴ EEA, [Natura 2000 Barometer](#), February 2022.

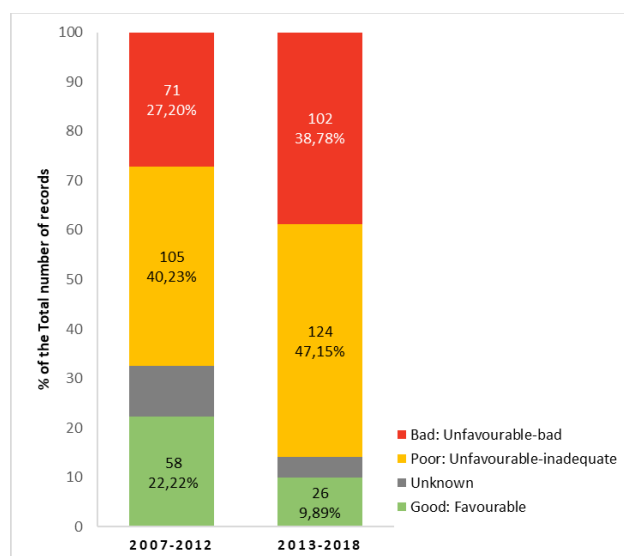
³⁵ EEA [State of Nature in the EU 2021](#).

On the conservation of birds, the population of 47% of breeding species showed short-term increases or were stable (for key wintering species, this figure was 44%).

At the same time, the share of habitats in a bad conservation status rose to 38.7% and the share of assessments for species in bad conservation status remained stable at around 16%. The categories of habitats in the worst conservation status are freshwater habitats, grasslands and dunes habitats. Freshwater fish species have been reported as the species group in the worst conservation status. The main pressure on habitats and species identified in Italy's report are agriculture, alien species and the development, construction and use of residential, commercial, industrial and recreational infrastructure and areas.

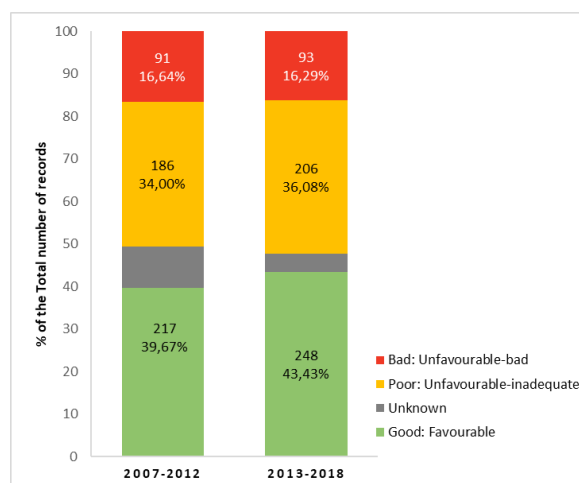
The Commission receives many complaints about poor implementation of the Nature Directives in Italy, namely the lack of effective protection of designated sites (from several types of development projects and activities) and of protected species (e.g. poaching of wild birds).

Figure 8: Assessments on conservation status for habitats for 2007-2012 and 2013-2018 reporting periods³⁶



³⁶ EEA, [Conservation status and trends of habitats and species](#), December 2021. Please note when comparing the figures shown for 2007-2012 and 2013-2018 these may also be affected by changes of methods or due to better data availability.

Figure 9: Assessments on conservation status for species for 2007-2012 and 2013-2018 reporting periods³⁷



The LIFE programme has been widely used in Italy for nature purposes. Three notable example projects are: the integrated project GESTIRE 2020³⁸ for action plans on Habitats Directive species of flora, bats and amphibians and guidelines on invasive alien species (IAS); LIFE BRENTA 2030³⁹, which concerns green infrastructure/nature-based solutions for the Brenta river, also supporting the Water Framework Directive. This project provides an innovative business model that allows the financing and therefore the perpetuation of the actions foreseen by the project itself.; and LIFE WolfAlps which won a LIFE Award in 2019⁴⁰. Italy has also the highest number (23) of projects in the EU funded under Interreg for Natura 2000⁴¹.

As part of the RRP, in 2022 Italy will bring in administrative simplifications and it will develop digital services for visitors to national parks and marine protected areas.

In the 2019 EIR Italy had four priority actions to: finalise SCIs and SPAs for marine areas and to finalise conservation objectives of sites where only limited progress has been made. Italy adopted new national guidelines to implement assessment procedures under the Habitats Directive in December 2019 but they are

³⁷ European Environment Agency, [Conservation status and trends of habitats and species](#), December 2021. Please note when comparing the figures shown for 2007-2012 and 2013-2018 these may also be affected by changes of methods or due to better data availability.

³⁸ [LIFE GESTIRE](#)

³⁹ [LIFE BRENTA 2030](#)

⁴⁰ [LIFE WOLFALPS](#)

⁴¹ The N2K Group (2020), Analysis of the use of Interreg programmes for natura 2000 and biodiversity, p.17.

not yet fully transposed or implemented in all regions, so there is limited progress on this front. Another priority action was to provide resources from competent authorities to implement conservation measures and species specific action plans. Here Italy has made limited progress. The last priority action was to fully implement the national action plan to cease the illegal killing of birds; only limited progress made here.

Bringing nature back to agricultural land and restoring soil ecosystems

Agricultural land

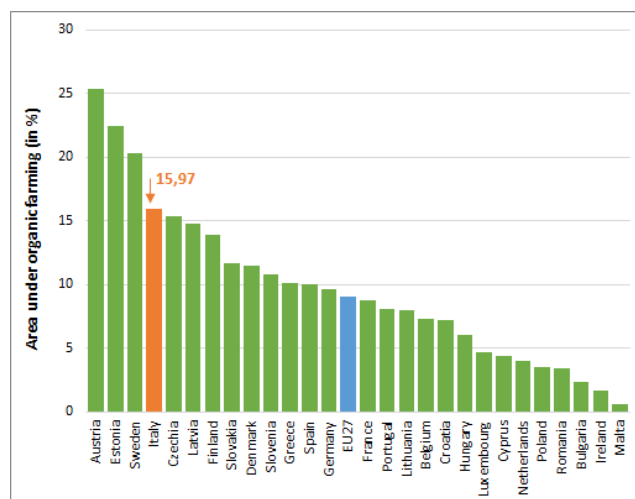
The biodiversity strategy works alongside the new farm to fork strategy and the new common agricultural policy (CAP) to support and achieve the transition to fully sustainable agriculture.

The biodiversity and farm to fork strategies have set four important targets for 2030:

- a 50% reduction in the overall use of – and risk from – chemical pesticides;
- a 50% reduction in the use of more hazardous pesticides;
- a 50% reduction in losses of nutrients from fertilisers while ensuring there is no deterioration of soil fertility (which will result in a 20% reduction in the use of fertilisers);
- bring back at least 10% of agricultural area under high-diversity landscape features and increase areas under organic farming to at least 25%.

As shown in Figure 10, Italy has an estimated 15.97% of area under organic farming, which is above the EU average of 9.07% (2020).

Figure 10: Share of total utilised agricultural area occupied by organic farming per Member State in 2020⁴²



Italy's rural environment is diverse due to the wide range of morphological regions. In northern regions and flat regions in the south of the country, there is intense agriculture. In mountainous regions, it is more extensive. Italy faces issues with soil erosion, flood risk, climate change (droughts and extreme weather events) and eutrophication⁴³. The farmland bird index shows a decline from 92 in 2011 to 77 in 2017 (2000 = 100)⁴⁴.

Soil ecosystem

Soil is a finite and extremely fragile resource. It is increasingly degrading in the EU.

The new EU soil strategy, adopted on 17 November 2021, stresses the importance of soil protection, of sustainable soil management and of restoring degraded soils to achieve the Green Deal objectives as well as land-degradation neutrality by 2030.

This entails:

- (i) preventing further soil degradation;
- (ii) making sustainable soil management the new normal;
- (iii) taking action for ecosystem restoration

One factor degrading the land is the area of soil that is sealed or artificialised⁴⁵ (Figure 11). The net land taken per year in the period 2012-2018 can be seen as a measure of one important pressure on nature and

⁴² Eurostat, [Area under organic farming](#).

⁴³ [Commission Recommendations for Italy's CAP Strategic Plan](#), 2020.

⁴⁴ Eurostat [Farmland Bird Index](#).

⁴⁵ Artificial land cover is defined as the total of roofed built-up areas (including buildings and greenhouses), artificial non built-up areas (including sealed area features, such as yards, farmyards, cemeteries, car parking areas etc. and linear features, such as streets, roads, railways, runways, bridges) and other artificial areas (including bridges and viaducts, mobile homes, solar panels, power plants, electrical substations, pipelines, water sewage plants, and open dump sites).

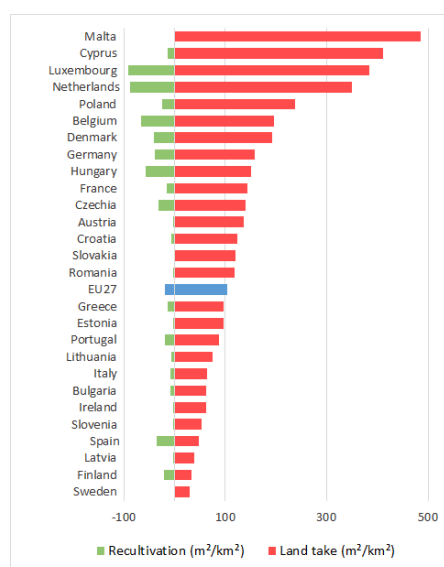
biodiversity - land use change - which constitutes at the same time an environmental pressure on people living in urbanised areas.

Despite a reduction in the last decade (land take was over 1000 km²/year between 2000-2006), land take in the EU28 still amounted to 539km²/year between 2012-2018⁴⁶. The net land take concept combines land take with land return to non-artificial land categories (re-cultivation). Although some land was re-cultivated in the EU28 in the period 2000-2018, 11 times more land was taken.

Italy ranks above the EU average on net land take, with 55.2 m²/km² in 2012-2018 (against the EU27 average of: 83.8 m²/km²)⁴⁷.

In 2018, Italy updated its reporting on land degradation following the next Performance Review and Implementation System (PRAIS3) reporting platform under the United Nations Convention on Combating Desertification (UNCCD)⁴⁸. It listed actions to combat degradation.

Figure 11: Land take and recultivation in EU27 (m²/km²) 2012-2018⁴⁹



Furthermore, Italy has committed to set land degradation neutrality targets under the UNCCD.⁵⁰

The 2019 EIR mentioned that a law on containing the loss of land and re-using soil that has been built on is with the Parliament; this is still the case.

The partnership agreement 2021-27 notes that the diffused presence of polluted sites, if decontaminated, represents an opportunity for new productive investments and services, without increasing soil take, especially in the southern Italy.

Forests and timber

The EU Forest Strategy for 2030 adopted in July 2021 is a part of the 'Fit for 55' Package. The Strategy promotes the many services that forests provide. Its' key objective is to ensure healthy, diverse and resilient EU forests, which contribute significantly to strengthened biodiversity and climate ambition. Forests are important carbon sinks and their conservation efforts are vital for the EU's vision of achieving climate neutrality by 2050.

Out of the 27% of EU forest area protected under the Habitats Directive, less than 15% of assessments show a favourable conservation status⁵¹. Bad conservation status increased from 27% to 31% in the EU compared to 2015.

In Italy, forests cover 29.97% of land⁵². 93 000 ha in Italy is covered by primary forests⁵³. In Italy, over 90% of the assessments reveal areas in a bad to poor status⁵⁴, see Figure 12.

Figure 12: Conservation status of forests protected under the Habitats Directive in EU Member States, 2013-2018 (% assessments)⁵⁵

⁴⁶ EEA, [Land take and recultivation in Europe](#)

⁴⁷ EEA [Land take and recultivation](#); Figure 6; Net land take = land take + recultivation.

⁴⁸ UNCCD, [Prais3](#)

⁴⁹ EEA, [Land take in Europe](#), December 2021

⁵⁰ UNCCD, [The LDN Target Setting Programme](#), and [Countries-with-voluntary-ldn-targets](#).

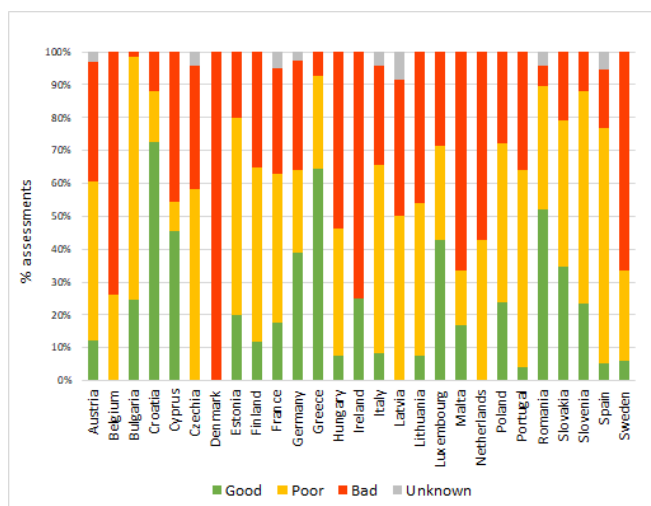
⁵¹ EEA, [State of Nature in the EU 2021](#)

⁵² EEA, [Forest information system for Europe](#)

⁵³ JRC, [Mapping and assessment of primary and old-growth forests in Europe](#), p. 13.

⁵⁴ [EU Forests Strategy 2030: Staff Working Document](#)

⁵⁵ EEA, [Conservation status and trend in conservation status by habitat group - forests](#), January 2022.



The EU Timber Regulation (EUTR)⁵⁶, prohibits the placing on the EU market of illegally harvested timber. In accordance with the EUTR, EU Member States competent authorities must conduct regular checks on operators and traders, and apply penalties for non-compliance. With the amendment of Article 20 of the EUTR, biennial reporting became annual and covers the calendar year as of 2019.

Between March 2017 and February 2019⁵⁷, Italy carried out 1 501 checks on domestic timber operators. It also carried out 285 checks on operators importing timber. It is estimated that Italy had 30 210 operators placing imported types of timber on the internal market over the reporting period.

The new Deforestation Regulation³⁸ will repeal and replace the EU Timber Regulation, as it will essentially integrate and improve the existing system to monitor the legality of timber.

Invasive alien species (IAS)

IAS are a key cause of biodiversity loss in the EU (alongside changes in land and sea use, overexploitation, climate change and pollution).

Besides inflicting major damage on nature and the economy, many IAS also facilitate the outbreak and spread of infectious diseases, posing a threat to humans and wildlife.

The implementation of the EU Invasive Alien Species Regulation and other relevant legislation must be stepped up.

The biodiversity strategy for 2030 aims to manage recognised invasive alien species and decrease the number of 'red list' species they threaten by 50%.

The core of Regulation (EU) 1143/2014 on invasive alien species (the IAS Regulation⁵⁸) is the list of IAS of EU concern.

The total number of IAS of Union concern is currently 66, of which: 30 are animal species; 36 are plant species; 41 are primarily terrestrial species; 23 are primarily freshwater species; 1 is a brackish-water species and 1 is a marine species.

According to a 2021 report⁵⁹ on the implementation of the IAS Regulation, progress was being made towards certain objectives such as creating a coherent framework for addressing IAS at EU level and increasing awareness of the problem of IAS. The report also identified some challenges and areas for improvement. However, given that implementation deadlines for the IAS Regulation were staggered from July 2016 to July 2019, it is still too early to draw conclusions on several aspects of implementation.

Another 2021 report⁶⁰ on the baseline distribution of IAS shows that from the 66 species on the EU list, 39 have been observed in the environment in Italy. The spread can be seen in Figure 13.

Figure 13: Number of invasive alien species of EU concern, based on available georeferenced information for Italy, 2021

⁵⁸ Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species.

⁵⁹ Report from the Commission to the European Parliament and the Council on the review of the application of Regulation (EU) No 1143/2014 of the European Parliament and of the Council of 22 October 2014 on the prevention and management of the introduction and spread of invasive alien species, [COM\(2021\) 628 final](#), 13.10.2021.

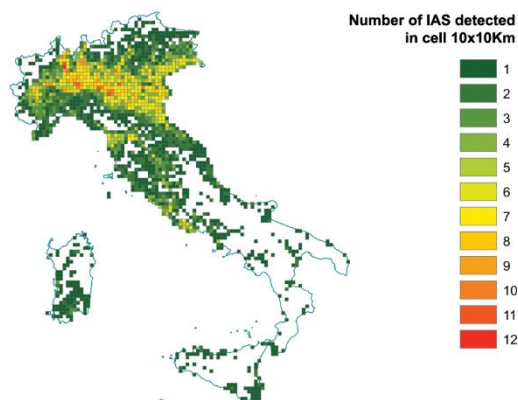
⁶⁰ Cardoso A.C., Tsiamis K., Deriu I., D' Amico F., Gervasini E., EU Regulation 1143/2014: assessment of invasive alien species of Union concern distribution, Member States reports vs JRC baselines, EUR 30689 EN, Publications Office of the European Union, Luxembourg, 2021, ISBN 978-92-76-37420-6, doi:10.2760/11150, [JRC123170](#).

⁵⁶ [Regulation \(EU\) No 995/2010 of the European Parliament and of the Council of 20 October 2010.](#)

⁵⁷ [Commission report 2020 on EU Timber Regulation](#)



TOTAL IAS OF UNION CONCERN IN THE COUNTRY: 39



<https://easin.jrc.ec.europa.eu>

An infringement case is ongoing for Italy⁶¹ since it failed to draw up and implement a single action plan or a set of action plans fulfilling the requirements specified in Article 13 of the IAS Regulation by 13 July 2019 and to transmit it to the Commission without delay.

Italy is involved in the EU-wide LIFE Stop Vespa project which aims to use radar to trace the route of the *Vespa velutina*. The LIFE ASAP project aims to increase the awareness of IAS and to promote the correct and efficient management of IAS by public entities in Italy⁶².

2022 priority actions

- the completion of the Natura 2000 network, namely its marine component;
- setting appropriate, site-specific conservation objectives and measures, and full implementation of them, in line with the specific needs and priorities identified in the updated prioritized action frameworks (PAFs) adopted by the regions;
- more effective enforcement of the nature protection provisions, greater administrative capacity and improved management of designated sites.

Marine ecosystems

The EU Biodiversity Strategy 2030 aims to substantially reduce the negative impacts on sensitive species and

habitats in marine ecosystems and to achieve good environmental status as well as eliminate or reduce the incidental catches of protected, endangered, threatened and sensitive species to a level that allows species recovery and conservation⁶³.

The Marine Strategy Framework Directive (MSFD) requires Member States to achieve good environmental status (GES) for their marine waters. To that end, Member States must draw up marine strategies for their marine waters, and cooperate with Member States sharing the same marine region or sub-region. These marine strategies comprise different steps to be developed and implemented over six-year cycles.

The MSFD also requires Member States by 15 October 2018 to define a set of GES characteristics for each descriptor (Article 9), and to provide an initial assessment of their marine waters (Article 8). The Commission then assesses whether this constitutes an appropriate framework to meet the requirements of the Directive.

The Commission assessed Italy's 2018 determinations of GES for each MSFD's 11 descriptors⁶⁴ and determined their level of adequacy in relation to the Commission Decision on criteria and methodological standards on Good Environmental Status of marine waters⁶⁵. A good or very good score indicates that the national determinations of GES are well aligned with requirements of the Commission GES Decision, providing qualitative and quantitative national environmental objectives to be achieved for their marine waters (Figure 14).

⁶³ The EU Common Fisheries Policy (CFP) aims to contribute to the achievement of the objectives of the environmental legislation for marine ecosystems.

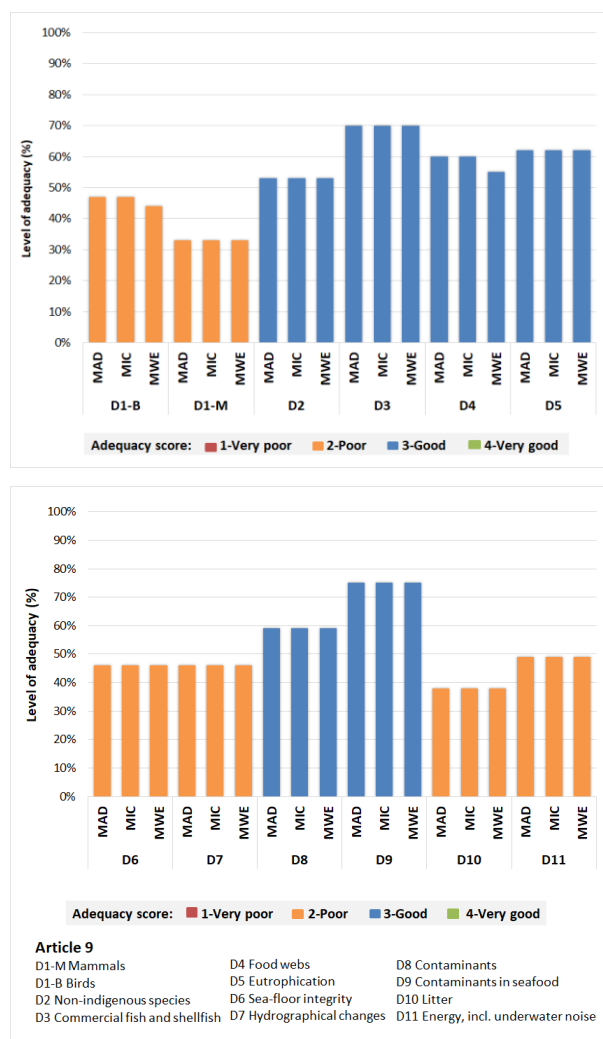
⁶⁴ Annex I of Directive 2008/56/EC establishing a framework for community action in the field of marine environmental policy (Marine Strategy Framework Directive), OJ L 164, 25.6.2008, p. 19–40.

⁶⁵ This assessment was made in relation to the 'Commission GES Decision', [Commission Decision No 2017/848](#), [OJ L 125, 18.5.2017 pp. 43-74](#).

⁶¹ Italy is in infringement (18.06.2021) of the IAS Regulation, along with 17 other countries.

⁶² [LIFE ASAP](#)

Figure 14: Level of adequacy of GES determination by Italy (MAD, MIC and MWE regions) with criteria set under the Commission GES Decision - Article 9 (2018 reporting exercise)⁶⁶



Italy is included in three marine sub-regions:

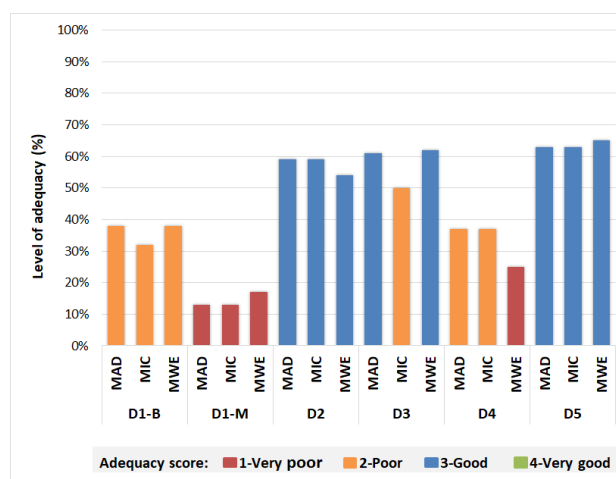
- In MAD-Mediterranean: Adriatic Sea, 6 out of 11 determinations of GES were assessed as good or very good. The national determination of GES by Italy is coherent for 6 out of the 11 descriptors.
- In MIC- Mediterranean: Ionian Sea and Central Mediterranean Sea, 6 out of the 11 determinations of GES were assessed as good or very good. The national determination of GES by Italy is coherent for 6 out of 11 descriptors.

⁶⁶ Assessment carried out by the European Commission of the data reported by the Member States, January 2022. Please note that only two sub-sections of descriptor D1 are displayed (D1-M Mammals and D1-B Birds). For the analysis, these two sub-sections were considered as a whole after averaging them.

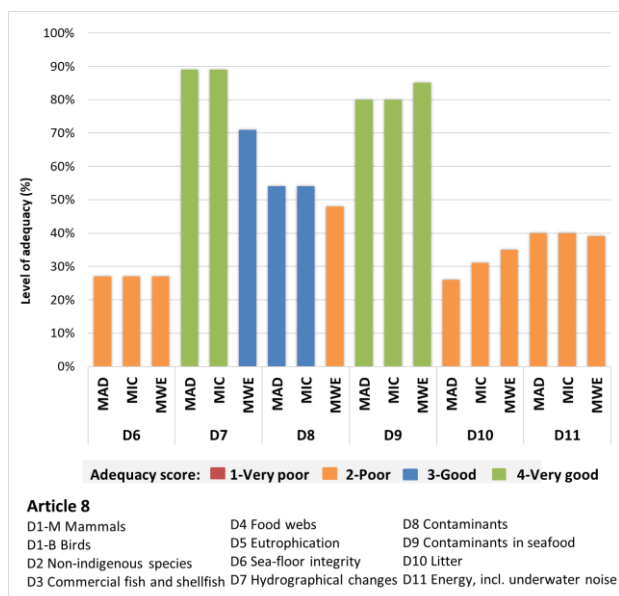
- In MWE- Mediterranean: Western Mediterranean Sea, 6 out of the 11 determinations of GES were assessed as good or very good. The national determination of GES by Italy is coherent for 6 out of the 11 descriptors.

The MSFD also requires that Member States make an assessment of the current environmental status of their marine waters in relation to the determination of GES. A good or very good score indicates that a Member State has good capabilities to assess their marine environment in accordance with the requirements set out in the Commission GES Decision (Figure 15).

Figure 15: Level of adequacy of national assessment of Italy's marine environment (MAD, MIC and MWE regions) with criteria set under the Commission GES Decision - Article 8 (2018 reporting exercise)⁶⁷



⁶⁷ Assessment carried out by the European Commission of the data reported by the Member States, January 2022. Please note that only two sub-sections of descriptor D1 are displayed (D1-M Mammals and D1-B Birds). For the analysis, these two sub-sections were considered as a whole after averaging them.



In the marine sub-region MAD-Mediterranean: Adriatic Sea, 6 descriptors out of the 11 were scored as good or very good. Italy's assessment of its marine environment is coherent with the requirements set under the Commission GES Decision for 6 out of the 11 descriptors.

In the marine sub-region MIC-Mediterranean: Ionian Sea and Central Mediterranean Sea, Italy scored 5 descriptors out of the 11 as good or very good. Italy's assessment of its marine environment is coherent with requirements set under the Commission GES Decision for 5 out of the 11 descriptors.

In the marine sub-region MWE-Mediterranean: Western Mediterranean Sea, Italy scored 5 descriptors out of the 11 as good or very good. Italy's assessment of its marine environment is coherent with requirements set under the Commission GES Decision for 5 out of 11 descriptors⁶⁸.

In the partnership agreement for 2021-27, Italy plans to take actions under the EMFAF to improve marine stocks, illegal fishing and reducing pollution including marine litter⁶⁹.

Italy has used the LIFE programme for notable projects such as CLEAN SEAS addressing marine litter⁷⁰ and LIFE SEPOSSO for a project on sea grass *Posidonia* (the results of which are taken forward in the RRP). Indeed, Italy plans under the RRP to have mapped 90% of the seabed and coastal zones by 2025 with 20% restored by action under 22 large-scale projects.

Italy has not yet ratified the Protocol for the Protection of the Mediterranean Sea against Pollution Resulting from the Exploration and Exploitation of the Continental Shelf and the Seabed and its Subsoil (Offshore Protocol to the Barcelona Convention) or the Protocol on Integrated Coastal Zone Management in the Mediterranean (ICZM)⁷¹ (Protocol to the Barcelona Convention). In the 2019 EIR, Italy had four priority actions. Three are considered fulfilled: one on providing the reporting due under the MSFD; and two on providing more information about measures to address pressures, where some progress has been made. Italy also received a general priority action in 2019 on signing and ratifying outstanding international agreements.

As highlighted in the Commission's report on the implementation of the MSFD⁷², although regional cooperation has improved since adoption of the MSFD, more cooperation is needed to attain full regional coherence of the marine strategies, as required by the Directive. Furthermore, in March 2022, the European Commission published a Communication with recommendations for Member States. According to the Commission's assessment, Member States must step up action to determine good environmental status and use of the criteria and methodological standards set out in the Commission GES Decision. The above considerations form the basis for the 2022 priority actions.

2022 priority actions

- ensure regional cooperation with Member States sharing the same marine (sub)region to address predominant pressures;
- implement the recommendations made by the Commission in the staff working document⁷³ accompanying the communication⁷⁴ on recommendations per Member States and region on the 2018 updated reports for Articles 8, 9 and 10 of the MSFD;
- ratify the Offshore Protocol to the Barcelona Convention and the ICZM Protocol to the Barcelona Convention.

Ecosystem assessment and accounting

The EU biodiversity strategy for 2030 calls on Member States to better integrate biodiversity considerations into public and business decision making at all levels and to develop natural capital accounting. The EU needs a better-performing biodiversity-observation network and more consistent reporting on the condition of

⁶⁹ in line with the Commission Communication. COM (2021) 240 final of 17.05.2021.

⁷⁰ [LIFE CLEAN SEAS](#)

⁷¹ Integrated Coastal Zone Management.

⁷² [COM\(2020\)259](#)

⁷³ [SWD\(2022\)1392](#)

⁷⁴ [C_2022_1392_1_EN.pdf \(europa.eu\)](#)

ecosystems.

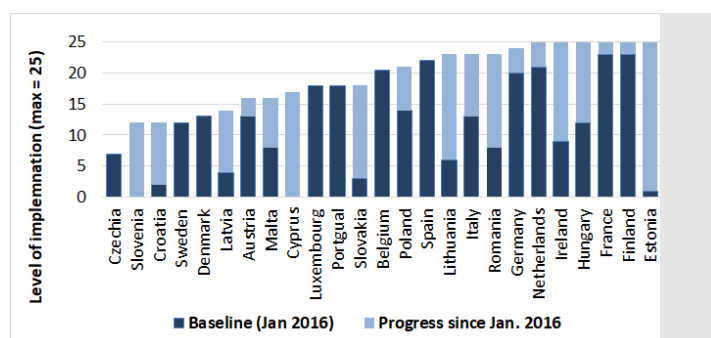
In Italy, law 221/2015 on environmental measures for promoting the green economy and limiting the excessive use of natural resources, established the adoption of annual reports in order to promote measure of physical and economic aspects of natural capital stocks and flows. It also brought in *ex ante* and *ex post* assessments of the effects of public policies on natural capital and ecosystem services. The second report was detailed in the 2019 EIR.

The fourth report was published in April 2021⁷⁵. This report is very much aligned with the priorities under the RRP and estimates that environmentally harmful subsidies damaging biodiversity accounted for at least EUR 28 billion in 2018. The third report was published in 2019.

Pressure on natural capital, habitat fragmentation and land use of natural and semi-natural ecosystems are analysed at national and eco-regional scale, as they are primary concerns in ecosystem conservation and health. Great attention is devoted to the impact of climate change on forest ecosystems and to forest fires and drought, very topical and highly sensitive issues for Italy.

Italy has provided updated information and therefore has made encouraging progress since January 2016 (Figure 16). This assessment is based on 27 implementation questions and updated every six months. Progress on ecosystem accounting implementation is assessed at national scale based on 13 questions.

Figure 16: ESMERALDA MAES Barometer, January 2016- Mars 2021⁷⁶



⁷⁵ [4th Report on Natural Capital Accounting](#), 2021

⁷⁶ European Commission, Joint Research Centre, [EU Ecosystem assessment: summary for policymakers](#), May 2021, (p.80).

3. Zero pollution

Clean air

EU clean-air policies and legislation need to significantly improve air quality in the EU, moving the EU closer to the quality recommended by the WHO and curbing emissions of key air pollutants.

Air pollution and its impacts on ecosystems and biodiversity should be further reduced with the long-term aim of not exceeding critical loads and levels. This requires strengthening efforts to reach full compliance with EU clean-air legislation and defining strategic targets and actions for 2030 and beyond.

The 2030 zero-pollution action-plan targets are to reduce the health impacts of air pollution by 55% and to reduce the EU ecosystems threatened by air pollution by 25%, compared to 2005.

The EU has developed a comprehensive suite of clean air legislation⁷⁷, which sets health-based air quality standards and emission reduction commitments⁷⁸ for a number of air pollutants.

However, at the same time, air quality in Italy continues to give cause for serious concern. The latest available annual estimates (for 2019) by the European Environment Agency⁷⁹ indicate some 49 900 premature deaths (or 504 500 years of life lost (YLL)) attributable to fine particulate matter concentrations⁸⁰, 3 170 (33 200 YLL) to ozone concentrations⁸¹ and 10 640 (107 600 YLL) to nitrogen dioxide concentrations^{82 83}.

Emissions of key air pollutants have decreased significantly in Italy over the last years, while GDP growth continued (see Figure 17). According to the latest projections as submitted under Article 10(2) of the National Emission reduction Commitments Directive (NECD)⁸⁴. Italy projects to reach its commitments on reducing emissions of all air pollutants covered by the

Directive for the period 2020-2029 and for 2030 onwards. The latest inventory data submitted by Italy, prior to review by the Commission, indicate that Italy is in compliance with the emission reduction commitments for all pollutants in 2020.

Italy submitted its national air pollution control programme (NAPCP) on 22 September 2020.

Figure 17 Emissions of main air pollutants/GDP in Italy 2005-2019⁸⁵

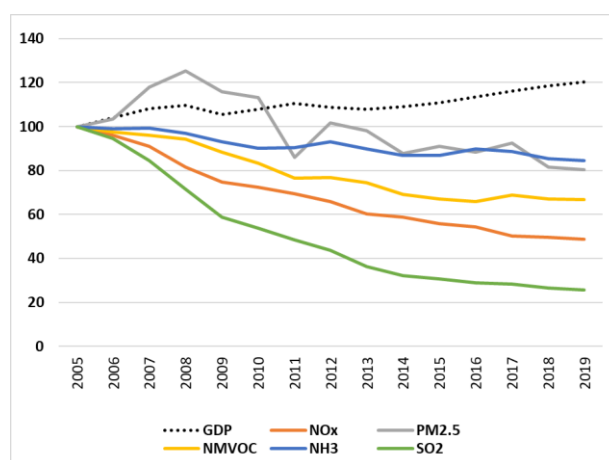


Figure 18 shows emissions of PM2.5 and NOx by economic sector.

⁷⁷ European Commission, 2016. [Air Quality Standards](#).

⁷⁸ European Commission, [Reduction of National Emissions](#).

⁷⁹ [EEA, Air Quality in Europe –2021 Report](#). Please see details in this report on the underpinning methodology, (p.106).

⁸⁰ Particulate matter (PM) is a mixture of aerosol particles (solid and liquid) covering a wide range of sizes and chemical compositions. PM10 refers to particles with a diameter of 10 micrometres or less. PM2.5 refers to particles with a diameter of 2.5 micrometres or less. PM is emitted from many human sources, including combustion.

⁸¹ Low-level ozone is produced by photochemical action on pollution.

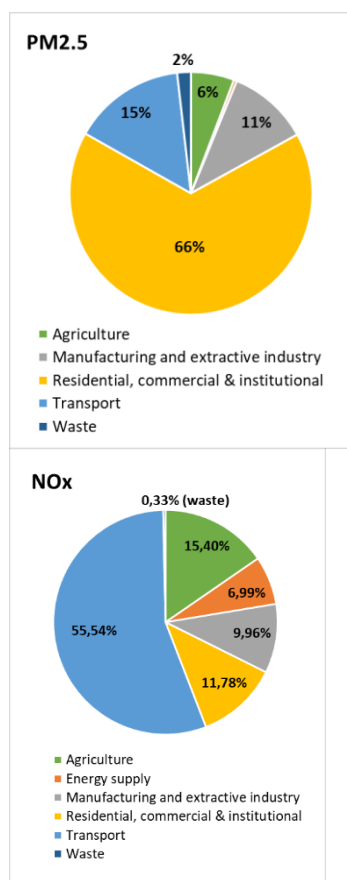
⁸² NOx is emitted during fuel combustion e.g. from industrial facilities and the road transport sector. NOx is a group of gases comprising nitrogen monoxide (NO) and nitrogen dioxide (NO2).

⁸³ Note that these figures refer to the impacts of individual pollutants, and to avoid double-counting cannot be added up to derive a sum.

⁸⁴ Directive 2016/2284/EU.

⁸⁵ EEA

Figure 18: PM_{2.5} and NO_x emissions by sector in Italy, 2019⁸⁶



Italy has not yet ratified the amended Gothenburg Protocol, Heavy Metals Protocol and POPs Protocol under the UNECE Air Convention.

For 2020, Italy registered exceedances above the limit values established by the Ambient Air Quality Directive for nitrogen dioxide (NO₂) in 10 air quality zones and for particulate matter (PM₁₀) in 33 zones. In addition, the target values for ozone concentration were not met for several air quality zones⁸⁷.

Persistent breaches of air quality requirements, which have severe negative effects on health and environment, are being followed up by the European Commission through infringement procedures (mainly over PM₁₀ and NO₂ exceedances) covering all Member States concerned. This included Italy for exceeding the limit values for PM₁₀, PM_{2.5} and NO₂ limit values. For exceedances of PM₁₀ limit values and for NO₂, the CJEU has delivered judgements, C-644/18; COM vs Italy for PM₁₀ and C-573/19; COM vs Italy for NO₂, confirming non-compliance with Directive 2008/50/EC. The aim is that appropriate

measures are put in place to bring all air quality zones into compliance.

The agreements (pacts) reached between the government and the regions to manage air pollution across the country can help, including the measures taken after the Turin Clean Air Dialogue in June 2019⁸⁸.

Italy has used the LIFE programme notably for the PREPAIR integrated project, which assesses air quality in the Po Valley (also mentioned in the 2019 EIR)⁸⁹.

In the 2019 EIR, Italy received four priority actions. The first was related to taking specific action under the NAPCP and the national energy and climate plan (NECP); here Italy has made limited progress so it is reiterated. The second and third actions addressed reductions of nitrogen oxides and particulate matter, including through planning, fiscal and energy choices; here Italy has made some progress notably through the RRP, but there is a need to comply with WHO and EU standards. The fourth priority action was to upgrade and improve air quality monitoring and ensure timely reporting; here Italy has made some progress with the NAPCP being adopted. Italy also had a general priority action in 2019 on signing and ratifying outstanding international agreements.

2022 priority actions

- take action under the NAPCP to reduce emissions from the main sources mentioned above;
- ensure full compliance with the EU air quality standards and maintain the reduction in emissions of air pollutants, and reduce adverse air pollution impacts on health and economy with a view to reaching WHO guideline values in the future;
- accelerate the ratification of the amended Gothenburg Protocol, Heavy Metals Protocol and POPs Protocol under the UNECE Air Convention.

Industrial emissions

The main objectives of EU policy on industrial emissions are to:

- protect air, water and soil;
- prevent and manage waste;
- improve energy and resource efficiency;
- clean up contaminated sites.

To achieve this, the EU takes an integrated approach to the prevention and control of routine and accidental industrial emissions. The cornerstone of the policy is the

⁸⁶ EEA.

⁸⁷ EEA, [Eionet Central Data Repository](#).

⁸⁸ Ministry of Environment, [Press Release](#), 14.11.2019.

⁸⁹ [LIFE PREPAIR](#)

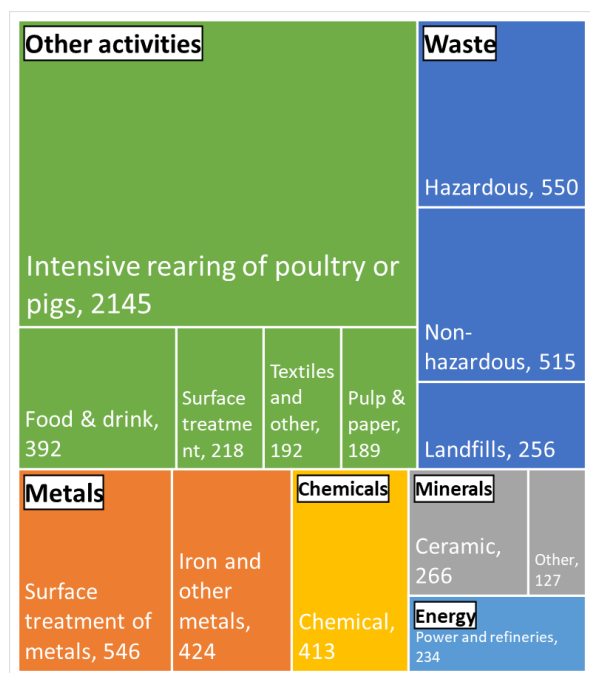
Industrial Emissions Directive (IED)⁹⁰. The Commission tabled a proposal in April 2022⁹¹. The revision seeks to improve the Directive's contribution to the zero-pollution objective, as well as its consistency with climate, energy and circular economy policies.

The overview of industrial activities regulated by the IED set out below is based on data reported to the EU Registry (2018)⁹².

In Italy, around 6 470 industrial installations are required to have a permit based on the IED. The distribution of installations is shown in the Figure 19.

The industrial sectors in Italy with most IED installations in 2018 were intensive rearing of poultry and pigs (33%), followed by the waste management sector, including landfills (20%), the production and processing of metals (15%), chemicals production (6%) and mineral production (6%).

Figure 19: Number of IED industrial installations per sector in Italy (EU Registry, 2018)



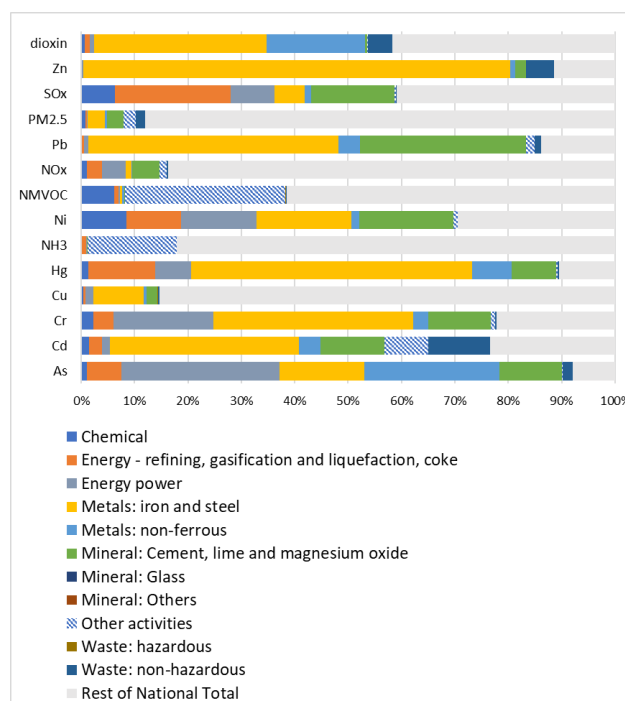
⁹⁰ Directive 2010/75/EU covers industrial activities carried out above certain thresholds. It covers the energy industry, metal production, the mineral and chemical industry, waste management, and a wide range of industrial and agricultural sectors (e.g. intensive rearing of pigs and poultry, pulp and paper production, painting and cleaning).

⁹¹ European Commission, [proposal for a revision of the Industrial Emissions Directive](#), 4 April 2022. The revision of the IED is performed in parallel to the revision of Regulation (EC) No 166/2006 on the European Pollutant Release and Transfer Register (E-PRTR).

⁹² EEA, [European Industrial Emissions Portal](#) (data retrieved on 3 November 2021).

The industrial sectors identified as contributing the largest burden to the environment for emissions to air were the energy sector for sulphur oxides (SOx), nitrogen oxides (NOx) and arsenic (As); the production and processing of metals (in particular iron and steel) for cadmium (Cd), chromium (Cr), copper (Cu), mercury (Hg), nickel (Ni), lead (Pb), zinc (Zn), particulate matter (PM2.5) and dioxins; the mineral industry for NOx and PM2.5; surface treatment using organic solvents for non methane volatile organic compounds (NMVOCs); and intensive rearing of poultry and pigs for ammonia (NH₃). The breakdown is shown in Figure 20.

Figure 20: Emissions to air from IED sectors and rest of national total air emissions in Italy, 2018⁹³



The European Environment Agency has identified two thermal power stations, Centrale Termoelettrica Federico II and Enel Produzione SpA, which are among the 30 industrial facilities in Europe generating the highest absolute damage costs from emissions of the main air pollutants and greenhouse gases aggregated over the five year period 2013-2017⁹⁴. The iron and steel plant,

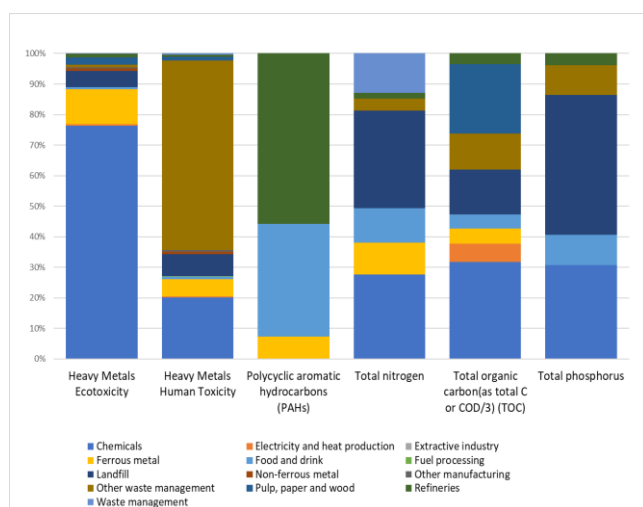
⁹³ EEA, LRTAP, [Air pollutant emissions data viewer \(Gothenburg Protocol, LRTAP Convention\) 1990-2019](#) (data retrieved on 3 November 2021).

⁹⁴ EEA (2021). [Costs of air pollution from European industrial facilities 2008-2017](#). Eionet Report - ETC/ATNI 2020/4. The ranking is based on

ILVA SpA in Taranto, ranked 32 among all facilities in 2017⁹⁵.

The environmental burden for industrial emissions to water mainly result from the chemicals sector and other waste management activities for total nitrogen, phosphorous and total organic carbon; from refineries and food and drink industries for polycyclic aromatic hydrocarbons (PAH), and from the chemical sector, ferrous metals and other waste management activities for heavy metals. The breakdown, based on E-PRTR data, is given in Figure 21.

Figure 21: Relative releases to water from industry in Italy, 2018⁹⁶



The EU approach for enforcement under the IED creates strong rights for citizens to have access to relevant information and to participate in the permitting process. This empowers citizens, and NGOs, to ensure that permits are appropriately granted and the conditions of these permits are compiled with. As part of environmental inspection, competent authorities carry out site visits at IED installations to take samples and to gather necessary information. According to Article 23(4) of the IED, site visits must be carried out between once a year and once every 3 years, depending on the environmental risks posed by the installations. In 2018, Italy carried out 2 665 site visits, the majority of which to the waste management sector, including landfills (38%),

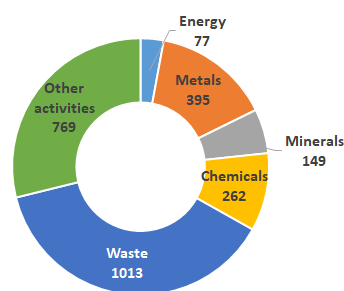
the approach accounting for the value of a life year (VOLY), table 41, (p.125).

⁹⁵ EEA (2021). [Costs of air pollution from European industrial facilities 2008–2017](#). Eionet Report - ETC/ATNI 2020/4. The ranking is based on the approach accounting for the value of a life year (VOLY), Table 44, (p.141).

⁹⁶ EEA, E-PRTR, [European Industrial Emissions Portal](#). The heavy metals are presented both as a weighted sum of eco toxicity and human toxicity factors to illustrate both the ecological and human impact (based on USEtox) ([data retrieved on 3 November 2021](#)).

followed by installations for the intensive rearing of poultry or pigs (15%), production and processing of metals (15%) and the chemicals sector (10%); see Figure 22.

Figure 22: Number of inspections in IED installations in Italy in 2018⁹⁷



The development of best available techniques (BAT) reference documents (BREFs) and BAT conclusions ensures good collaboration between stakeholders and enables better implementation of the IED⁹⁸. Since the last EIR report, BAT Conclusions were adopted for waste incineration, for the food, drink and milk industries and for surface treatment using organic solvents including wood and wood products preservation with chemicals.

The Commission relies on the efforts of national competent authorities to implement the legally binding BAT conclusions and associated BAT emission levels in environmental permits. This should result in considerable and continuous reductions in pollution.

On 29 October 2018, Italy participated in the EIR peer to peer workshop on ammonia emissions from agriculture.

In 2019, Italy had priority actions to review permits so that they comply with new adopted BAT conclusions and to strengthen control and enforcement to ensure compliance. The Commission gave follow up to the reporting by Italy to the EU Registry, which did not lead to any specific findings. The Commission is currently verifying the reported information with Italy on the permits granted for each installation in the scope of the IED. In 2019, Italy also received a priority action to address emissions to air from the ILVA steel mill in Taranto, where there has been limited progress.

2022 priority actions

⁹⁷ EEA, EU Registry, [European Industrial Emissions Portal \(data retrieved on 3 November 2021\)](#).

⁹⁸ European Commission [BAT reference documents](#).

- continue addressing emissions to air from the ILVA steel mill in Taranto.

Major industrial accidents prevention – SEVESO

The main objectives of EU policy on the prevention of major industrial accidents are to:

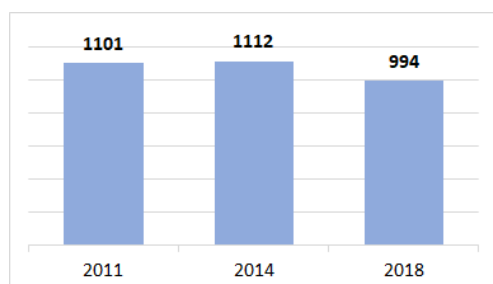
- control major accident hazards involving dangerous substances, especially chemicals;
- limit the consequences of such accidents for human health and the environment;
- continuously improve prevention, preparedness and response to major accidents.

The cornerstone of the policy is Directive 2012/18/EU (the Seveso-III Directive)⁹⁹.

The overview below of industrial plants regulated by the Seveso-III Directive (hereafter ‘Seveso establishments’), is based on data reported to the eSPIRS database (2018)¹⁰⁰ and the Italy report on implementation of the Seveso-III Directive for the period 2015-2018¹⁰¹.

In Italy, among the 994 Seveso establishments, 479 are categorised as lower-tier establishments (LTE) and 515 as upper-tier establishments (UTE) – based on the quantity of hazardous substances likely to be present. The UTE are subject to more stringent requirements. Changes in the number of Seveso establishments in Italy are illustrated in Figure 23.

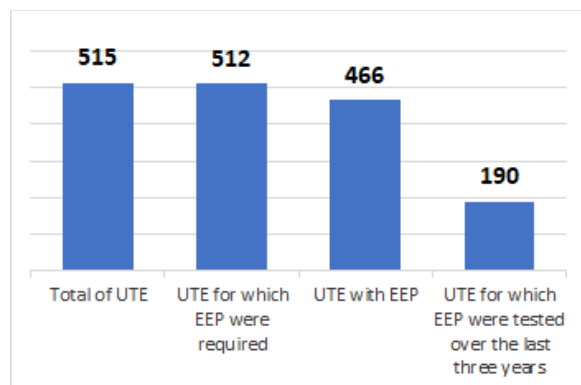
Figure 23: Number of Seveso establishments in Italy, 2011, 2014 and 2018¹⁰²



According to Italy, an external emergency plan (EEP) is required for 512 UTEs. In 2018, 466 UTEs had an EEP and

190 of these EEPs had been tested over the last three years. The summary is shown in Figure 24. The establishment of EEPs is essential to enable the proper preparation and effective implementation of the necessary actions to protect the environment and the population in the event of a major industrial accident.

Figure 24: Situation regarding EEP in Italy, 2018¹⁰³



The information to the public referred to in Annex V to the Seveso-III Directive – especially about how the public concerned will be warned in the event of a major accident; the appropriate behaviour in the event of a major accident, and the date of the last site visit – are permanently available for 30% of Seveso establishments in Italy.

The share of UTE for which information on safety measures and requisite behaviours were actively made available to the public over the last years are presented in Figure 25. This is an important provision of the Seveso-III Directive as the knowledge of these information by the public may reduce the consequences of a major industrial accident.

⁹⁹ Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances.

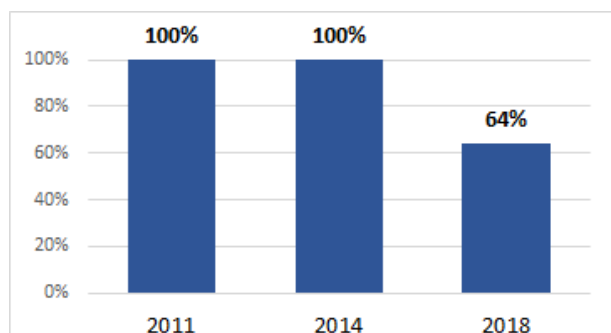
¹⁰⁰ European Commission, [Seveso Plants Information Retrieval System](#).

¹⁰¹ As provided for by Article 21(2) of the Seveso-III Directive

¹⁰² European Commission, [Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU \(implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances\)](#), 2022.

¹⁰³ European Commission, [Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU \(implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances\)](#), 2022.

Figure 25: Share of UTE for which information on safety measures and requisite behaviours were actively made available to the public in Italy, 2011, 2014 and 2018¹⁰⁴



2022 priority actions

- strengthen control and enforcement to ensure compliance with Seveso-III Directive provisions, especially on information to the public and on EEPs.

Noise

The Environmental Noise Directive¹⁰⁵ provides for a common approach to avoid, prevent and reduce the harmful effects of exposure to environmental noise, although it does not set noise limits as such. The main instruments it uses in this respect are strategic noise mapping and planning. A relevant 2030 zero pollution action plan target is a reduction by 30% of the share of people chronically disturbed by transport noise compared to 2017.

Excessive noise from aircraft, railways and roads is one of the main causes of environmental health-related issues in the EU. It produces ischaemic heart disease, stroke, interrupted sleep, cognitive impairment and stress¹⁰⁶.

In Italy, based on a limited set of data¹⁰⁷, environmental noise is estimated to cause at least around 1 800 premature deaths and 8 500 cases of ischaemic heart disease every year¹⁰⁸. Moreover, some 1 million people

suffer from disturbed sleep. In Italy, the share of people exposed to noise increased by 1% between 2012 and 2017. On the basis of the latest full set of information that has been analysed, noise mapping of agglomerations, roads and railways is complete.

In the 2019 EIR, Italy received two priority actions to complete noise maps and action plans, where there has been some progress as detailed above. Therefore no priority actions are proposed for 2022.

Water quality and management

EU legislation and policy requires significant reduction of the impact of pressures on transitional, coastal and fresh waters (including surface and ground waters). Achieving, maintaining or enhancing good status of water bodies as defined by the Water Framework Directive will ensure that EU citizens benefit from high standards for safe drinking and bathing water, and that the nutrient cycle (nitrogen and phosphorus) is managed in a more sustainable and resource-efficient way.

Water Framework Directive

The Water Framework Directive¹⁰⁹ is the cornerstone of the EU water policy in the 21st century¹¹⁰. The Water Framework Directive and other water related legislation¹¹¹ set the framework for sustainable and integrated water management, which aims at a high level of protection of water resources, prevention of further deterioration and restoration to good status.

By March 2022, all Member States had to report the third generation of River Basin Management Plans (RBMPs) under the Water Framework Directive. Italy has recently adopted and reported its third generation RBMPs. The Commission will assess the reported status and progress, checking how the findings identified in the assessment of the second generation RBMPs¹¹² have been addressed.

¹⁰⁴ European Commission, [Assessment and summary of Member States' implementation reports for Implementing Decision 2014/896/EU \(implementing Directive 2012/18/EU on the control of major accident hazards involving dangerous substances\)](#), 2022.

¹⁰⁵ Directive 2002/49/EC

¹⁰⁶ WHO 2018, Environmental Noise Guidelines for the European Region

¹⁰⁷ For further information: European Environment Agency, [Noise Fact Sheets 2021](#).

¹⁰⁸ These figures are an estimation by the European Environmental Agency based on : (i) the data reported by Member States on noise exposure covered by Directive 2002/49/EC; (ii) ETC/ATNI, 2021, Noise indicators under the Environmental Noise Directive 2021: [Methodology for estimating missing data](#), ETC/ATNI Report No 2021/06, European Topic Centre on Air Pollution, Transport, Noise and Industrial Pollution;

(iii) the [methodology for health impact calculations](#), ETC/ACM, 2018, Implications of environmental noise on health and wellbeing in Europe, Eionet Report ETC/ACM No 2018/10, European Topic Centre on Air Pollution and Climate Change Mitigation.

¹⁰⁹ [Water Framework Directive \(2000/60/EC\)](#).

¹¹⁰ [EU Water Policy](#).

¹¹¹ This includes the [Groundwater Directive \(2006/118/EC\)](#), the [Environmental Quality Standards Directive \(2008/105/EC\)](#), the [Floods Directive \(2007/60/EC\)](#), the [Bathing Water Directive \(2006/7/EC\)](#), the [Urban Waste Water Treatment Directive \(91/271/EEC\)](#), the new [Drinking Water Directive \(2020/2184/EC\)](#), the [Nitrates Directive \(91/676/EEC\)](#), the [Marine Strategy Framework Directive \(2008/56/EC\)](#), the [Industrial Emissions Directive \(2010/75/EU\)](#) and the new [Regulation on minimum requirements for water reuse \(2020/741\)](#).

¹¹² Detailed information can be found in the [5th Report from the Commission on the implementation of the Water Framework Directive and the Floods Directive](#), as well as in the 2019 EIR.

In December 2021, the Commission published the sixth Implementation Report¹¹³, which provides an interim assessment on progress of the implementation of the programmes of measures and on monitoring of the new priority substances. The assessment report for Italy¹¹⁴ concluded that a comprehensive overview of progress in implementing Italy's programme of measures (PoMs) is lacking, given that reported data only refer to three out of Italy's eight river basin districts (RBDs) (Eastern Alps RBD, Central and South Apennines RBDs). However, it is noted that measures have started in five of the eight RBDs, and in other areas, all planned measures have either started or been completed.

Based on the second generation RBMPs reporting and data published 2020¹¹⁵, in Italy 41.8% of all surface water bodies¹¹⁶ achieved good ecological status (with 18.4% unknown status) and 71.7% have good chemical status (with 19.8% in unknown status). For groundwater, 30.3% failed to achieve good chemical status and 19.0% are in a poor quantitative status.

Figure 26 below illustrates the proportion of surface water bodies in Italy and other European countries that failed to achieve good ecological status.

Figure 26: Proportion of surface water bodies (rivers, lakes, transitional and coastal waters) in less than good ecological status per River Basin District¹¹⁷

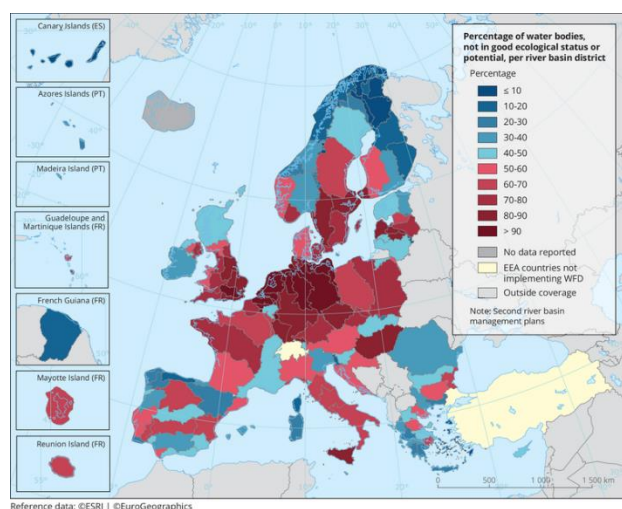
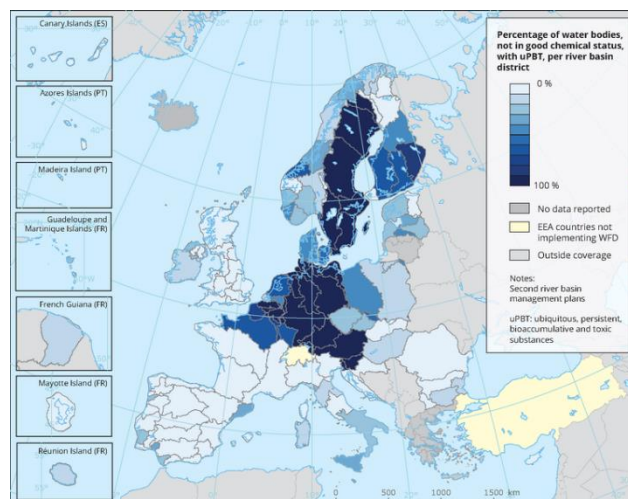


Figure 27 shows the proportion of surface water bodies in Italy and other European countries that failed to achieve good chemical status. For Italy, it is 8.5%, if one includes water bodies failing due to substances behaving

as ubiquitous PBTs (persistent, bio-accumulative, toxic). Without uPBTs, 3% of surface water bodies fail to achieve good chemical status.

Figure 27 Percentage of water bodies not achieving good chemical status¹¹⁸



Under the IED framework, it should be stressed that Italy achieved a significant reduction over the last decade (24.8%) in industrial releases of heavy metals like Cd, Hg, Ni, Pb and (23.1%) in total organic carbon (TOC) to water¹¹⁹.

The total volume of water abstracted annually (corresponding to the 2019 baseline) in Italy from surface and groundwater sources is 39 253.45 hm³¹²⁰. The percentage for water abstraction per sector is 42.15% for agriculture, 23.82% for public water supply, 14.66% for electricity cooling, 19.37% for manufacturing, as illustrated in Figure 28. Italy uses a register to monitor water abstraction. In Italy, abstraction or the use of public water without a permit or licence issued by the competent authority is prohibited. There is a specific administrative procedure to follow to obtain a water abstraction licence, which culminates in the adoption of a specific decision (the licence award) by the competent authority for the geographical area. Italy has a high leakage rate nationally in its water supply system (42% leakage rate in 2018), with issues particularly in the south of the country with Campania at 46.7%, and Sicily at 50% (ISTAT data).

¹¹³ See the [6th Implementation Report of the WFD and FD](#).

¹¹⁴ European Commission, Directorate-General for Environment, Assessment of Member States' progress in Programmes of Measures during the second planning cycle of the Water Framework Directive. Member State: [Italy](#), 2022.

¹¹⁵ [WISE Freshwater \(europa.eu\)](#)

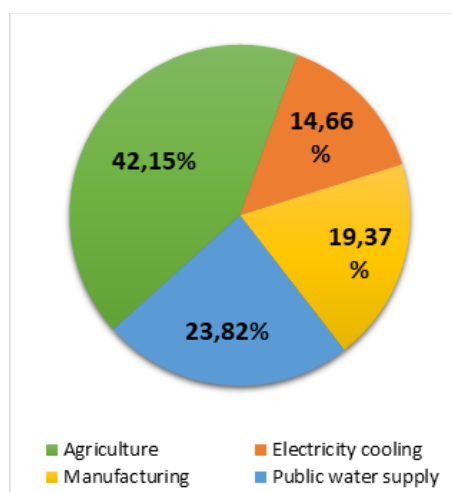
¹¹⁶ river, lake, transitional, coastal, territorial

¹¹⁷ EEA, [2021](#).

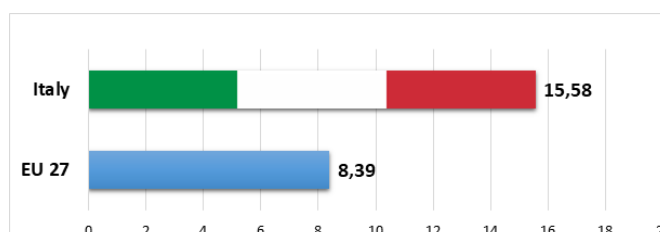
¹¹⁸ EEA, [December 2019](#)

¹¹⁹ [EEA, 2021](#)

¹²⁰ EEA 2022

Figure 28. Water abstraction per sector in Italy¹²¹

In Italy, the water exploitation index plus (WEI+)¹²² was 15.58 in 2017, which is below the 20% that is generally considered as an indication of water scarcity¹²³ (Figure 29). Though it ranks above the EU average¹²⁴ Italy is ranked 6th (from high to low score) in the EU in terms of WEI+.

Figure 29 Water exploitation index plus (WEI+) inside EU in 2017¹²⁵

The increasing demand for water for multiple purposes and the intensification of severe weather conditions due to climate change have put a significant strain on freshwater supplies in Italy. To overcome water shortages, Italy has paid special attention to water reuse in recent years and treated wastewater has been considered as a potential alternative to water supply. Italy's RRP supports the green transition by planning key investments to improve waste and water management

¹²¹ European Environment Agency, [Water abstraction by source and economic sector in Europe](#), 2022.

¹²² The Water Exploitation Index plus (WEI+) is a measure of total fresh water use as a percentage of the renewable freshwater resources (groundwater and surface water) at a given time and place. It quantifies how much water is abstracted and how much water is returned after use to the environment.

¹²³ Eurostat

¹²⁴ By May 2022, the EEA will develop seasonal WEI+ at river basin and NUTS2 level, which provide a more complete picture of water stress and water scarcity for each Member State.

¹²⁵ EEA, [Water exploitation Index Plus](#), 2022.

(EUR 11.2 billion). These investments are accompanied by important reforms that aim to improve the efficiency in the use and management of water resources and local public services.

Italy has a specific issue with the correct application of Article 4.7 of the Water Framework Directive to hydropower projects.

Floods Directive

As mentioned above, in December 2021 the Commission published the sixth implementation report on the Directive. It includes a review and update of the preliminary flood risk assessments during the second cycle (2016-2021).

According to the assessment report¹²⁶, Italy has developed a detailed national database of flood events and their impacts, providing extensive information for analysis of past floods. Italy also used a broad range of criteria to identify potentially significant future floods and presented a clear, step-by-step process for designating areas of potential significant flood risk (APSFRs) based on past and future flood analyses. However, the assessment identified that Italy did not include clear thresholds for past significant floods and long-term developments, other than climate change, when identifying potential adverse future flood consequences.

Italy has not yet adopted and reported the second generation of flood risk management plans (FRMPs) under the Floods Directive. The European Commission will assess progress since the first flood risk management plans and publish a new report, as in 2019.

Project examples to deal with flooding have been presented in the EIR 2017 and 2019. The total damage caused by October-November 2019 flooding, including Venice, was EUR 5.6 billion, for which a solidarity fund application is being processed. The partnership agreement for 2021-27 notes that 1.3 million people (2.2% of the population) live in areas at risk from landslides) and 6.2 million people (10.4% of the population) live in areas with a medium risk of flooding. Most of the funds for water in the RRP are earmarked to manage hydrogeological risks (EUR 8.5 billion), which will be accompanied by appropriate governance reforms. The RRP and cohesion policy investments favour nature-based solutions as a default approach.

¹²⁶ European Commission, Directorate-General for Environment, Assessment of Second Cycle Preliminary Flood Risk Assessments and Identification of Areas of Potential Significant Flood Risk under the Floods Directive : Member State : [Italy](#), 2022.

On 29-31 May 2019, Italy participated in a study visit to Hungary under the EIR peer to peer visit on hydrometeorological monitoring and on an early warning system for natural hazards.

Drinking Water Directive

On the Drinking Water Directive¹²⁷, no new assessment of the quality of drinking water is available since the 2019 EIR. The quality of drinking water in Italy is an issue with an infringement for exceeding arsenic and fluoride levels in Lazio. The recast Directive¹²⁸ entered into force on 12 January 2021, Member States have until 12 January 2023 to transpose it into their national legal system. Italy will have to comply with these reviewed quality standards.

Bathing Water Directive

On the **Bathing Water Directive**, Figure 30 shows that in 2020, out of 630 bathing waters, 89.2% were of excellent quality in Italy¹²⁹. Figure 31 shows the evolution.

Figure 30: Bathing water quality in Europe in the 2020 season¹³⁰

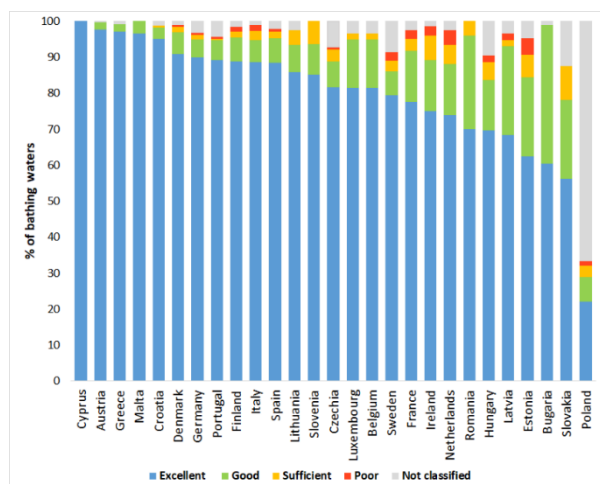
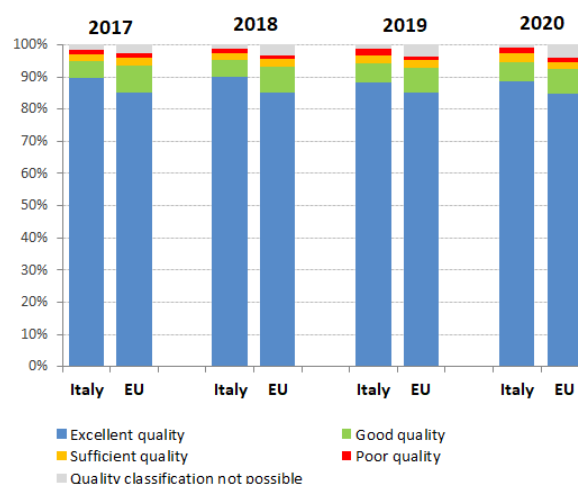


Figure 31: Bathing water quality 2017-2020¹³¹



*For 2017, 2018 and 2019, data about the UK bathing waters are included under the EU average.

Nitrates Directive

The latest Commission report on the implementation of the Nitrates Directive¹³², for 2016-2019¹³³, warns that nitrates are still causing harmful pollution to water in the EU. Excessive nitrates in water are harmful to both human health and ecosystems, causing oxygen depletion and eutrophication. Where national authorities and farmers have cleaned up waters, it has had a positive impact on drinking water supply and biodiversity, and on the sectors such as fisheries and tourism that depend on them. Nevertheless, excessive fertilisation remains a problem in many parts of the EU.

According to the latest report on implementation of the Nitrates Directive¹³⁴, referring to the change between the periods 2008-2011 and 2016-2019, groundwater quality has slightly improved since the previous reporting period. The percentage of stations reaching or exceeding 40 or 50 mg nitrates per litre decreased from 5.8% to 5.6% and from 12.7% to 12.6%, respectively. As regards the situation concerning nitrate concentrations in surface water was stable during the period 2008-2011 at 0.3% (exceeding 40 mg nitrate per litre), but it increased from 0.2% to 0.6% (exceeding 40 mg nitrate per litre) during the period 2016-2019. There are hotspots, with a nitrate concentration above 50 mg/litre with a few hotspots where the levels are increasing. A high number of waters that are found to be eutrophic. A number of ground

¹²⁷ OJ L 330, 5.12.1998, p. 32–54.

¹²⁸ OJ L 435, 23.12.2020, p. 1–62.

¹²⁹ EEA, 2021. [State of bathing waters in 2020 – Italy country report](#).

¹³⁰ EEA – [European Bathing Water Quality in 2020](#), 2022.

¹³¹ EEA, European Bathing Water Quality in [2017](#), [2018](#), [2019](#), [2020](#).

¹³² Implementation of the [Nitrates Directive](#) in the EU.

¹³³ Last [Implementation Report 2016-2019](#).

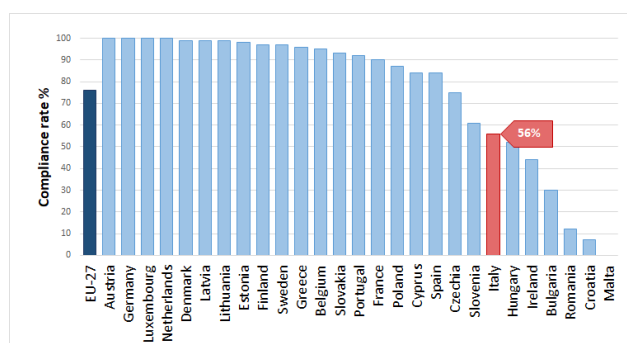
¹³⁴ Annex 23 to the [Staff Working Document accompanying the report on the implementation of the Nitrates Directive for the period 2016-2019](#)

water monitoring stations with nitrate concentrations above 50 mg/litre and a high level of surface waters found to be eutrophic are located outside the nitrate vulnerable zones (NVZ). Several regions have received derogations in the past (mentioned in the EIR 2019).

Urban Wastewater treatment Directive

Italy has, over the years, encountered serious difficulties in meeting its obligations under the Urban Waste Water Treatment Directive (UWWTD). Overall, in Italy, the compliance rate is 56% lower than the EU average (76%) in 2018¹³⁵, see Figure 32.

Figure 32: The proportion of urban waste water that meets all requirements of the UWWTD (collection, biological treatment, biological treatment with nitrogen and/or phosphorus removal) in compliant urban areas of the UWWTD ('compliance rate')¹³⁶



Despite the improvement in compliance over the years, for which the use of EU funding has been fundamental, incomplete implementation of the UWWTD has led to several rulings of the CJEU against Italy. A total of 895 agglomerations have been found to be in breach of the EU Directive, affecting a population equivalent of over 26.7 million people.

An example of good practice has been to use the EIR peer to peer tool for hosting a workshop (CINSEDO hosted) on exchanging best practices with Belgium (Flanders) on urban wastewater treatment on 26 October 2020, with a follow-up event on sludge on 23 June 2021.

In the 2019 EIR Italy had four priority actions. Firstly to harmonise different regional approaches to pressures for the Water Framework Directive; this cannot be evaluated given the lack of an assessment of the third generation RBMPs. The second was to increase metering for water abstraction and review permitting especially in water scarce areas; here Italy has made some progress with regard to the RRP. The third priority was to designate the

NVZs that were lacking, where Italy has made limited progress. The last priority was to emphasise climate change considerations in the FRMPs; here too the Commission is currently making an assessment.

2022 priority actions

- New physical modifications of water bodies should be assessed in line with Article 4(7) of the Water Framework Directive. In these assessments alternative options and adequate mitigation measures have to be considered.
- Continue current efforts to further reduce nitrates pollution from agriculture in groundwater. The Commission recommends that Italy reviews the designation of NVZs and include groundwater stations polluted or at risk and areas that drain into waters that are eutrophic when agriculture pressure is significant.
- Complete implementation of the Urban Waste Water Treatment Directive for all agglomerations, by building up the necessary infrastructure.

Chemicals

The EU seeks to ensure that chemicals are produced and used in a way that minimises any significant adverse effects on human health and the environment. In October 2020, the Commission published its chemicals strategy for sustainability - 'Towards a Toxic-Free Environment'¹³⁷ which led to some systemic changes in EU chemicals legislation. The strategy is part of the EU's zero-pollution ambition – a key commitment of the European Green Deal.

The EU's chemicals legislation¹³⁸ provides baseline protection for human health and the environment. It also ensures stability and predictability for businesses operating within the internal market.

Since 2017, the Commission has gathered information on the enforcement of Regulation on the Registration, Evaluation, Authorisation and Restriction of Chemicals ('the REACH Regulation') and the Regulation on Classification, Labelling and Packaging ('CLP Regulation'). In December 2020, the Commission assessed the Member States reports on the implementation and enforcement of these Regulations¹³⁹, in line with Article 117(1) of the REACH Regulation and Article 46(2) of the

¹³⁵ WISE

¹³⁶ European Commission, [WISE Freshwater](#), 2021.

¹³⁷ COM(2020) 667 final.

¹³⁸ REACH: OJ L 396, 30.12.2006, p.1. - CLP: OJ L 252, 31.12.2006, (p.1).

¹³⁹ European Commission, Final Report, on the operation of REACH and CLP, [Final report REACH-CLP MS reporting 2020.pdf \(europa.eu\)](#)

CLP Regulation. According to the latest available data, national enforcement structures have not changed much. However, it is apparent from this report that there are still many disparities in implementing the REACH and CLP Regulations, notably on law enforcement. Recorded compliance levels seem to be quite stable over time, but with a slight worsening trend, which is likely to be due to enforcement authorities being more effective in detecting non-compliant products/companies and more non-compliant products being put on the EU market.

In August 2021, the Commission published a measurable assessment of the enforcement¹⁴⁰ of the two main EU regulations on chemicals using a set of indicators tracking different aspects of enforcement.

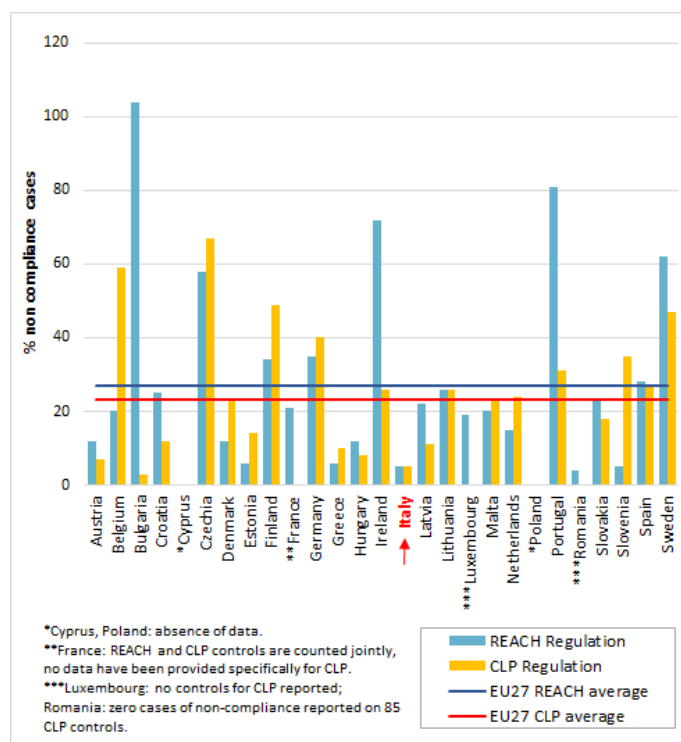
Responsibility for checking compliance with both REACH and CLP in Italy rests with the Ministry of Health-DG Health Prevention and with the regions and autonomous provinces¹⁴¹.

Italy has devised and fully implemented both REACH and CLP enforcement strategies¹⁴².

As a rule, all infringements of REACH are classed as 'serious' or 'very serious' environmental administrative offences. If the infringement is sufficiently serious, the competent authority may decide to impose further penalties in addition to a fine. That authority may also, where necessary, order the provisional seizure of assets and documents.

In Italy, there were 200 inspectors distributed in 21 regions (also responsible for other regulations) in 2019. There is an annual enforcement plan and priorities are based on local needs and competent authority requests, including critical products identified in the EU RAPEX system. Italy has one of the lowest shares of non-compliance cases in the EU as shown in the Figure 33¹⁴³.

Figure 33: Percentage % of non-compliance cases out of the total number of REACH and CLP controls during 2019 per Member State and compared to the EU average¹⁴⁴



Italy has not yet ratified the Stockholm Convention on Persistent Organic Pollutants (POPs).

Italy had a general priority action in 2019 on signing and ratifying outstanding international agreements.

2022 priority actions

- upgrade the implementation and enforcement administrative capacities towards a zero tolerance to non-compliances;
- ratify the Stockholm Convention on POPs.

¹⁴⁰ European Commission, [REACH and CLP enforcement: EU level enforcement indicators](#)

¹⁴¹ European Commission, [Final Report, on the operation of REACH and CLP](#), p. 70

¹⁴² European Commission, [Final Report, on the operation of REACH and CLP](#), p. 76

¹⁴³ European Commission, [Final Report, on the operation of REACH and CLP](#), p. 79

¹⁴⁴ European Commission, [Final Report, on the operation of REACH and CLP](#), p. 87-88, 2022.

4. Climate action

In line with the Paris Agreement and as part of the European Green Deal, the European Climate Law sets the EU target of reaching climate neutrality by 2050 and reducing greenhouse gas (GHG) emissions by 55% by 2030 compared to 1990. The law also limits the contribution that carbon removals can make towards emission reductions in 2030 to ensure a sufficient mitigation effort.

The EU and its Member States submitted updated Nationally Determined Contribution (NDC) to the UNFCCC in December 2020.

The EU is working across all sectors and policies to cut GHG emissions and make the transition to a climate-neutral and sustainable economy, as well as addressing the unavoidable consequences of climate change.

EU climate legislation incentivises emissions reductions from power generation, industry, transport, the maritime sector and fluorinated gases (F-gases) used in products.

For road transport, EU legislation requires the GHG intensity of vehicle fuels to be cut by 6% by 2020 compared to 2010¹⁴⁵ and sets binding GHG emission standards for different vehicle categories¹⁴⁶.

Under the F-gas Regulation, the EU's F-gas emissions will be cut by two thirds by 2030 compared with 2014 levels.

From 2021, emissions and removals of GHGs from LULUCF have been included in the EU emission-reduction efforts.

The EU adaptation policy is an integral part of the European Green Deal. From 2021, Member States are required to report on their national adaptation policies¹⁴⁷, as the EU Climate Law recognises adaptation as a key component of the long-term global response to climate change. Member States will be required to adopt national strategies, and the EU will regularly assess progress as part of its overall governance on climate action. The updated EU adaptation strategy, published in February 2021, sets out how the EU can adapt to the unavoidable impacts of climate change and become climate resilient by 2050.

Key national climate policies and strategies

Italy has an integrated *national energy and climate plan* (NECP) for the period 2021-2030, which includes

¹⁴⁵ The Fuel Quality Directive (Directive 98/70/EC) sets strict quality requirements for fuels used in road transport in the EU to protect human health and the environment, and to make road travel across the EU safer.

¹⁴⁶ Directive 98/70/EC.

¹⁴⁷ Article 29 of Regulation (EU) 2018/1999.

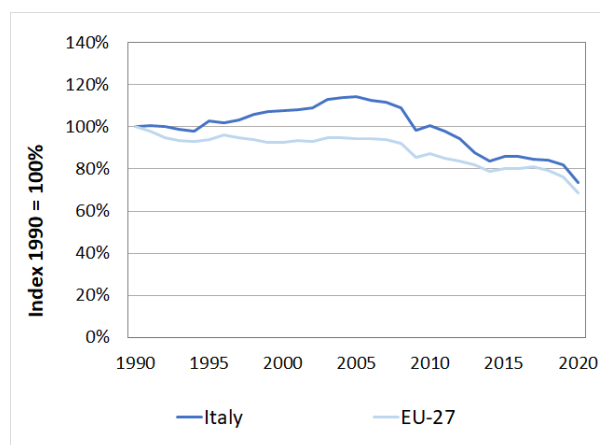
investments and reforms in line with its current target under the Effort Sharing Regulation. The work is also consistent with the report Italy's *Long-term Strategy on Reducing Greenhouse Gas Emissions*. According to this document, Italy is on track to reach climate neutrality in line with the EU's target for 2050.

In its RRP, Italy allocates 37.5 % of the plan to climate objectives and outlines crucial reforms and investments to further the transition to a more sustainable, low-carbon and climate-resilient economy. Investments are planned in clean energy production and energy efficiency, sustainable mobility and waste management (more details in section 5).

Italy has adopted its *national adaptation strategy* in 2015. To implement the strategy, it is drafting a *national adaptation plan* (NAP) with the aim of issuing a more operational and concrete document to support national, regional, and local institutions in drawing up their own sectoral and local adaptation paths.

Italy's greenhouse gas emissions have decreased since 1990 levels, although by less than the EU average. Both emissions per GDP and emissions per capita are slightly below the EU average.

Figure 34: Total greenhouse gas emissions (incl. international aviation) in Italy, 1990-2020



Effort sharing target

For emissions not covered by the EU's emission trading scheme (ETS), Member States have binding national targets under the Effort Sharing legislation¹⁴⁸. Italy's

¹⁴⁸ Regulation (EU) 2018/842. This is for sectors currently not covered by the existing EU emissions trading sector (typically emissions from the buildings, road transport, small industry, waste, agriculture and

target under the EU legislation is to reduce emissions not covered by the EU emissions trading system (such as buildings, road transport, agriculture, small industry and waste) by 13% by 2020 and 33% by 2030 (see Figure 35). The country's non-ETS emissions in 2019 were lower than its 2020 target. Italy has reached its EU-level and domestic greenhouse gas reduction targets.

Under its NECP, Italy intends to achieve slightly more reductions than its current non-ETS target for 2030 of a 33% reduction.

Figure 35: Emissions and targets under the Effort Sharing Decision/ Effort Sharing Regulation in Italy, 2020 and 2030 as percentage change from 2005

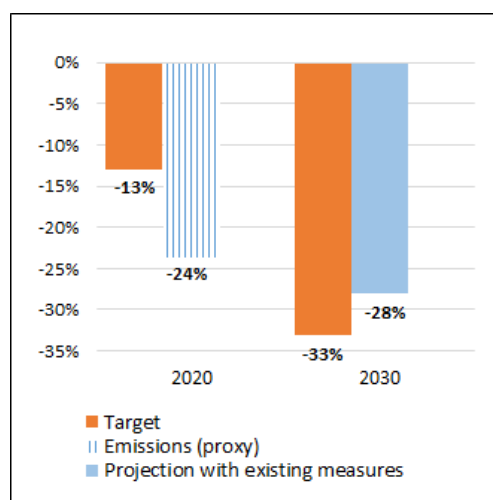
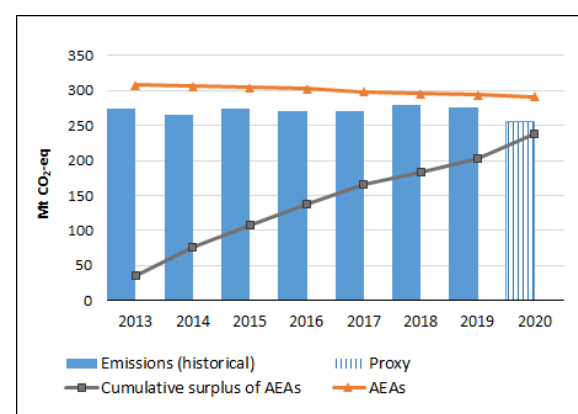


Figure 36: Emissions, annual emission allocations (AEAs) and accumulated surplus/ deficit of AEAs under the Effort Sharing Decision in Italy, 2013-2020



Key sectoral developments

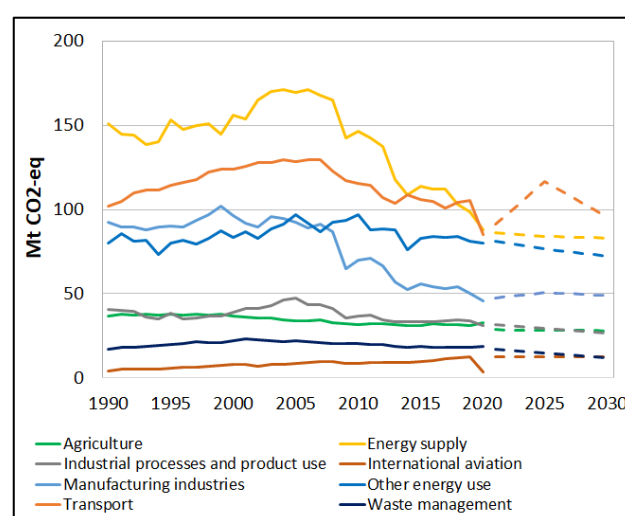
In road transport, the GHG intensity of vehicle fuels in Italy decreased by 3.7% from 2010 to 2019. The country must act swiftly to meet the current EU-wide reduction

non-CO₂ emissions from other sectors). The proposed national target will continue to cover this scope.

target of 6% by 2020. There are several types of action that Member States can take in this regard, for example, by further expanding the use of electricity in road transport, supporting the use of biofuels, in particular advanced biofuels, incentivizing the development and deployment of renewable fuels of non-biological origin and reducing upstream emissions before refining processes.

In 2019, road transport emissions accounted for 22% of total greenhouse gas emissions of Italy. Emissions in transport decreased by 18% compared to 2005.

Figure 37: Greenhouse gas emissions by sector in Italy¹⁴⁹ – historical emissions 1990-2020, projections 2021-2030¹⁵⁰



Buildings are one of the biggest emitting sources in Italy. Most of the 14.5 million buildings were built before criteria on energy savings and the corresponding legislation were adopted. More energy-efficient buildings will yield substantial energy savings and contribute to the post-COVID recovery of the economy. See Figure 37.

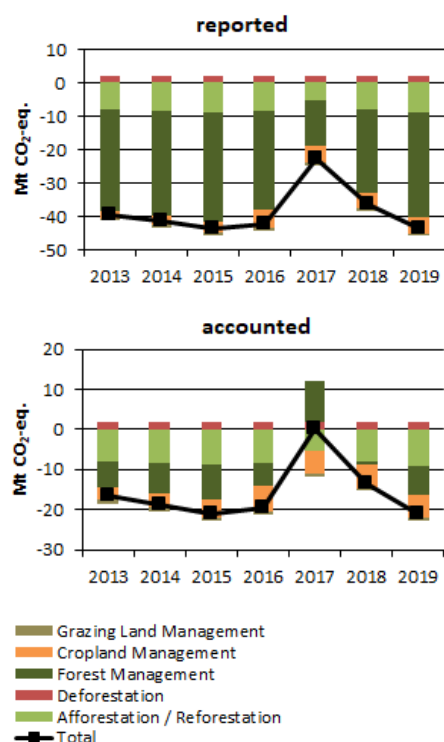
In the land use, land use change and forestry (LULUCF) sector, Italy projects a decrease in net removals by 2030. Reported quantities under the Kyoto Protocol for the LULUCF sector in Italy show average net removals of -38.5 Mt CO₂-eq for the period 2013-2019. In this regard, Italy contributes with 11.2% to the annual average sink of -344.9 Mt CO₂-eq of the EU-27. Accounting for the same period depicts net credits of,

¹⁴⁹ The sectors in the figure correspond to the following IPCC sectors: Energy supply: 1A1, 1B and 1C. Energy use in manufacturing industries: 1A2. Industrial processes and product use: 2. Transport: 1A3. Other energy use: 1A4, 1A5 and 6. Agriculture: 3. Waste: 5. International aviation: 1.D.1.a.

¹⁵⁰ EEA, [Total GHG trends and projections](#).

on average, -15.7 Mt CO₂-eq, which corresponds to 13.6% of the EU-27 accounted sink of -115.0 Mt CO₂-eq. See Figure 38.

Figure 38: Reported and accounted emissions and removals from LULUCF in Italy¹⁵¹



- enhance sustainable transport, especially urban, local and regional sustainable transport, such as the metro system, trams, cycling and regional railways, and electrification of transport;
- Increase the uptake of renewable energy;
- improve energy efficiency in buildings. Further efforts are needed to simplify renovation projects;
- decarbonise industry;
- improve rail connections to ports as ports can play a key role in making Italy a sustainable logistics hub linked by long-distance rail connections and using digital cargo clearance.

Use of revenues from the auctioning of EU ETS allowances

Total revenue from auctioning emission allowances under the EU ETS between 2012-2021 were nearly EUR 8.9 billion. Over 50% of the auctioning revenues was spent on climate and energy purposes. In Italy, the law guarantees that 50% of the revenues is used for climate and energy but only after the year has ended, which can cause underreported spending. The remaining is allocated to the general budget, which funds climate and energy projects, as well as other initiatives.

2022 priority actions

¹⁵¹ The differences between reported and accounted emissions from LULUCF under the Kyoto Protocol are described in the 'explanatory note on LULUCF – accounted and reported quantities under the Kyoto Protocol'.

Part II: Enabling framework: implementation tools

5. Financing

Environmental investment needs in the European Union

Financing environmental measures is essential for their success. Although most financing comes from national sources, various EU funds contribute significantly, helping to close the financing gaps.

Post-2020, environmental implementation will also be supported by the EU's COVID-19 Recovery Fund (via the RRF) and the 'do no significant harm' principle which runs across the EU budget. The renewed commitments made at COP26 (Glasgow, October-November 2021) and the Biodiversity Convention (April-May 2022)¹⁵² will also be reflected in the EU budget.

Overall environmental investment gaps (EU27)

The EU's investment needs for the green transition cover a range of interlinked areas. The additional investment needs to the baselines (i.e. the gap between what is needed and what is forecast to be invested if no additional action is taken) for climate, energy and transport were estimated at EUR 390 billion a year (EU27)¹⁵³, with a further EUR 130 billion to meet the EU's core environmental objectives¹⁵⁴. The costs of climate change adaptation can also be significant, and are estimated to reach a total of EUR 35-62 billion (narrower scope) or EUR 158-518 billion (wider scope) per year¹⁵⁵. Those investment needs to reflect the implementation objectives to 2020 and to 2030 (except for climate adaptation, the costs of which are expected to last over a longer time horizon).

A preliminary update of the EU's core environmental investment gap is provided in Table 1¹⁵⁶. Almost 40% of the environmental investment needs relate to dealing with pollution, which account for nearly two-thirds of the investment gap if combined with water management. The investment gap in circular economy and waste is

estimated to be between EUR 13-28 billion a year, depending on the levels of circularity implemented. The annual biodiversity financing gap is estimated at around EUR 20 billion.

Table 1 - Estimated breakdown of the EU's environmental investment needs, by environmental objective

Environmental objective	Estimated investment gap (EU-27, per year)	
	EUR billion	%
Pollution prevention & control	42.8	39%
Water management & industries	26.6	24%
Circular economy & waste	13.0	12%
Biodiversity & ecosystems ¹⁵⁷	21.5	20%
R & D & I and other	6.2	6%
Total	110.1	100%

EU funding will also help bridge the investment gaps when accounting for the new commitments made under the United Nations Framework Convention on Climate Change at the COP 26 (Glasgow, 31 October to 12 November 2021), or the Biodiversity Convention COP15 (April-May 2022), under nature-based solutions and investments¹⁵⁸.

Environmental investment needs in Italy

There is a clear shift of investment priorities in Italy to supporting climate policies, as can be seen in the RRP.

¹⁵² [The Convention on Biological Diversity](#)

¹⁵³ [SWD\(2021\)621](#)

¹⁵⁴ [SWD\(2020\) 98 final/2.](#)

¹⁵⁵ [SWD\(2018\)292.](#)

¹⁵⁶ With decreases due to Brexit and some reconciliation among the objectives. Source: DG Environment 'Study supporting EU green investment needs analysis' (ongoing, 2021-2023) and DG Environment internal analysis 'Environmental investment needs and financing in the EU's green transition' July 2020.

¹⁵⁷ To meet the needs of the 2030 Biodiversity Strategy (Natura 2000, green infrastructure), at least EUR 20 billion a year should be unlocked for nature (COM/2020/380 final) while to fully cover the strategy (including restoration) EUR 30-35 billion may be needed, indicating a gap of EUR 10-20 billion a year compared to current baseline expenditure.

¹⁵⁸ [The Convention on Biological Diversity \(cbd.int\); Post-2020 Global Biodiversity Framework, IUCN](#)

The focus is on sustainable energy and transport to reduce greenhouse gases. There is also much unfinished business in Italy with investments needed in water and waste infrastructure, biodiversity and nature. Climate investment priorities address the needs or 'investment gaps' in a wide set of economic sectors such as energy renovation of housing, e-mobility and transportation infrastructure.

The following environmental investment needs have been identified by sector:

Pollution prevention & control

The EU's first Clean Air Outlook¹⁵⁹ under the clean air programme estimated that the total air pollution control costs for Italy to reach the NECD emission reduction requirements (ERRs)¹⁶⁰ by 2030 amount to EUR 7 382 million per year, including EUR 5 588 million for capital investment (assuming the achievement the 2030 climate and energy targets are met).

The EU's second Clean Air Outlook¹⁶¹ suggested that, the EU would largely achieve the reductions of air pollutant emissions that correspond to the obligations under the NEC Directive for 2030 if: (i) all relevant legislation adopted up to 2018 (including all air pollution and the 2030 climate and energy targets set in 2018) delivered its full benefits and (ii) if Member States also implemented the measures announced in their NAPCPs. The only exception is for ammonia (NH₃) for 15 Member States¹⁶².

Water management

According to the OECD study 'Financing a Water Secure Future' (2022)¹⁶³, despite near universal public water supply connection rates, water availability in Italy remains an issue in some regions. Similarly, compliance with wastewater treatment standards (which is below the EU average) belies significant regional disparities in service coverage and levels. There are four infringements open for wastewater, and fines are being paid for one of them. Italy faces significant future flood risks, especially in northern river basins. Italy suffers medium-to-high water stress, leading to intense use of water. Northern

regions, in general, receive more rain than southern regions and furthermore, 70% of Italy's groundwater is located under northern regions. Many southern regions rely on water imported from farther north. EU funding has provided a significant share of public funding over the past decade¹⁶⁴. It is also estimated that Italy will need to invest an additional cumulative EUR 12 487 million by 2030 over baseline levels for drinking water and sanitation – corresponding to around EUR 1 250 million investment need (capital expenditure) per year, with around 90% relating to wastewater¹⁶⁵. Moreover, the recent 6th Water Framework Directive and Floods Directive Implementation Report¹⁶⁶ and the financial - economic study¹⁶⁷ accompanying it, are also a relevant source of information in this domain.

The Italian authorities also identified high investment needs for the coming period to reach compliance with the UWWTD with EUR 184 billion¹⁶⁸. This covers works on wastewater treatment plants, with an estimated investment cost of EUR 151 billion and works on collecting systems and/or IAS (Individual and other Appropriate Systems) with a estimated investment cost of EUR 33 billion¹⁶⁹.

Waste & circular economy

According to a Commission study¹⁷⁰ to meet the recycling targets for municipal waste and packaging waste, Italy still needs to invest an additional EUR 2 304 million (around 330 million per year) between 2021-2027 (beyond the baseline investment) in collection, recycling reprocesses, bio-waste treatment, waste sorting facilities and digitilising waste registries. This includes costs for bio-waste treatment facility replacement of EUR 348 million for 2021-2027. However, these does not cover the investment needed for other key waste streams (plastics, textiles, furniture) or to unlock a higher uptake of circularity and waste prevention across the economy.

¹⁵⁹ International Institute for Applied Systems Analysis (IIASA), [Progress towards the achievement of the EU's air quality and emissions objectives](#), 2018.

¹⁶⁰ Covering the reductions of and the emission ceilings for 5 atmospheric pollutants, SO_x, NO_x, PM_{2.5}, NH₃ and VOC by 2030, compared to 2005. Source: Progress towards the achievement of the EU's air quality and emissions objectives, IIASA 2018. (p.29). Requirements are based [Directive \(EU\) 2016/2284](#).

¹⁶¹ [COM\(2021\) 3 final](#). International Institute for Applied Systems Analysis (IIASA), Support to the development of the Second Clean Air Outlook, 2020 and [Annex](#).

¹⁶² N.B. the Commission's June 2020 NAPCP review (in its Annex III) did not include data for Italy on the risk of non-compliance emission reduction commitment for 2020 -2029 due to late submission.

¹⁶³ OECD, [Financing a Water Secure Future](#), 2022.

¹⁶⁴ OECD, [Financing a Water Secure Future](#), 2022.

¹⁶⁵ OECD, [Italy- Country fact sheet- Financing Water Supply, Sanitation and Flood Protection](#).

¹⁶⁶ [Water Framework Directive and Flood Directive Implementation Reports](#) – DG Environment – European Commission.

¹⁶⁷ European Commission, Directorate-General for Environment, [Economic data related to the implementation of the Water Framework Directive and the Flood Directive and the financing of measures](#), Final report. Publications Office, 2021.

¹⁶⁸ European Commission 10th UWWTD Implementation report, 2020

¹⁶⁹ The methodologies used by the OECD and the Italian authorities for estimates are different e.g. works on IAS and for dealing with storm water overflows are taken into account differently.

¹⁷⁰ European Commission, [Study on investment needs in the waste sector and on the financing of municipal waste management in Member States](#), 2019, (p.61).

Biodiversity & ecosystems

The priority action frameworks (PAF)¹⁷¹ for Italy shows that nature protection costs (including Natura 2000) in 2021-2027 are EUR 3 481 million - or EUR 497.3 million¹⁷² per year (with 225.7 million annual running costs and 271.7 annual one-off costs). This excludes additional costs to implement the 2030 biodiversity strategy, including on increased protection and restoration.

EU environmental funding 2014-2020

The multiannual financial framework (MFF) for 2014-2020 allocated almost EUR 960 billion (in commitments, 2011 prices)¹⁷³ for the EU. The commitment to green transition included a 20% climate spending target and funding opportunities for the environment under the European Structural and Investment (ESI) Funds¹⁷⁴. The 2014-2020 budget was subsequently topped up with over EUR 50 billion (current prices) from the REACT-EU programme for cohesion policy action against COVID-19¹⁷⁵.

Italy received EUR 59.7 billion from the ESI Funds in 2014-2020 to invest in job creation and a sustainable and healthy European economy and environment. The planned direct environmental investment amounted to EUR 4.3 billion with a further EUR 1.8 billion in indirect environmental investment, bringing the total to EUR 6.1 billion. Figure 39 gives an overview of (planned) individual ESI Funds earmarked for Italy (EU amounts, without national amounts). The REACT-EU investments include improving sustainable transport and improving water supply (reducing leakages by districts, *distrettualizzazione*) as well as supporting sustainable productive processes and circular economy.

Figure 39: 2014-2020 ESI Funds allocated to Italy, including environmental investments¹⁷⁶

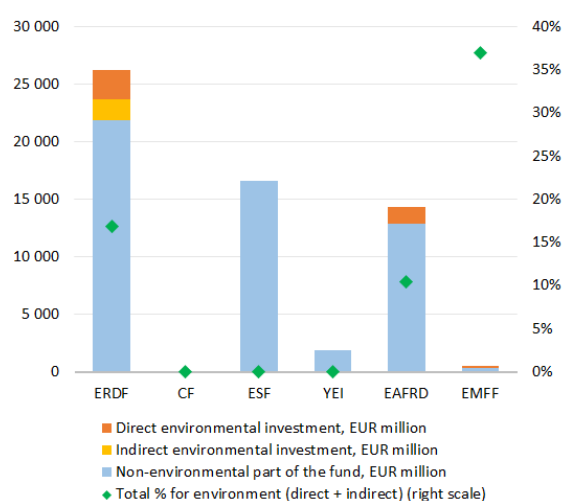


Table 2: 2014-2020 environmental investments under the ESI Funds in Italy¹⁷⁷

Instrument	Allocations for the environment (EUR million)
Under Cohesion policy (ERDF)	4 424.6
<u>Direct environmental investments</u>	<u>2 615.8</u>
water	991.5
waste	223.1
air quality	7.6
biodiversity and nature	154.9
land rehabilitation	164.0
climate and risk management	1 074.7
<u>Indirect environmental investments</u>	<u>1 808.9</u>
renewable energy	27.6
energy efficiency	488.6
other energy ¹⁷⁸	66.9

¹⁷¹ In Italy there are PAFs per region and autonomous provinces, i.e., 21 in total.

¹⁷² The N2K Group, *Strengthening investments in Natura 2000 and improving synergies with EU funding instruments report to the European Commission*, 2021.

¹⁷³ [Council Regulation \(EU, Euratom\) No 1311/2013](#).

¹⁷⁴ The European Structural and Investment (ESI) Funds include the European Regional Development Fund (ERDF), the Cohesion Fund (CF) which does apply to Italy, the European Social Fund (ESF) with the Youth Employment Initiative (YEI), the European Agricultural Fund for Rural Development (EAFRD) and the European Maritime and Fisheries Fund (EMFF).

¹⁷⁵ [Regulation \(EU\) 2020/2221](#).

¹⁷⁶ European Commission, DG Environment - Data analysis, DG Environment analysis based on ESI Funds Open Data Portal (cohesiondata.ec.europa.eu), [Integration of environmental concerns in Cohesion Policy Funds \(COWI, 2017\)](#), [Regulation \(EU\) No 1303/2013](#), [Regulation \(EU\) 2021/1060](#) and [Implementing Regulation \(EU\) No 215/2014](#). Cut-off date for data: December 2021. Environmental investments here are captured via the combined use of intervention fields and coefficients under Regulation (EU) No 1303/2013 and Regulation (EU) 2021/1060 allowing for a more precise identification and valuation of relevant environmental investments. N.B. Indirect environmental investments are valued using the Annex I environmental coefficients in Regulation (EU) 2021/1060 (as opposed to full value).

¹⁷⁷ European Commission, DG Environment - Data analysis. The values of environmental investments identified here in the specific environmental areas may differ from the tracking values at cohesiondata.ec.europa.eu, e.g. for clean air or biodiversity due to two factors: the set of environmental coefficients used and the range of funds assessed. DG Environment's analysis here covered the full range of ESI Funds. See also previous footnote.

sustainable transport	1 118.4
sustainable tourism	49.8
business development, R&I	57.6
Under EAFRD/rural development	1 497.9
<u>Direct environmental investments</u>	<u>1 475.2</u>
water	269.2
climate and risk management	1 206.0
<u>Indirect environmental investments</u>	<u>22.7</u>
renewable energy	21.0
energy efficiency	1.7
Under EMFF	198.5
<u>Direct environmental investments</u>	<u>196.1</u>
environment protection & resource efficiency	196.1
<u>Direct environmental investments</u>	<u>2.5</u>
business development, R&I	2.5
Under ESI Funds total	6 121.0
Direct environmental investments	4 287.0
Indirect environmental investments	1 834.0

In Sicily, there has been a reallocation of funds away from hydrogeological risks and coastal erosion, dams for water supply and to clean-up polluted sites; funds earmarked for actions to end infringements have not been reduced (for urban wastewater or irregular landfills), and it should be noted that the changes mainly affect energy efficiency. The underperformance of Thematic Objective 4 (low carbon) in 2014-2020 and the reduction of its budget consequently is worrying, in light of the upcoming greater focus on Priority Objective (PO) 2 (low carbon) due to the thematic concentration for 2021-2027. Furthermore, in Sicily, as noted in the 2019 EIR, the *ex-ante* conditionality for waste for the 2014-2020 period has still not been met, which has blocked reimbursement. Calabria also has difficulties absorbing the funding, especially ERDF for urban wastewater treatment.

Sardinia has drawn up for the period 2014-2020 a specific model of environmental sustainability for the ERDF and EAFRD under the SEA procedure.

The SRSP (former TSI) supported in 2019 a project to reprioritise and improve the absorption of structural funds at local level.

In Italy, the environmental authority ensures that environmental considerations are integrated into operational programmes in term of sustainability¹⁷⁹;

furthermore, there is a network of environmental and managing authorities¹⁸⁰.

Funding for the environment from ESI Funds has also been also supplemented by other EU funding programmes available to all Member States, such as, the LIFE programme, the Horizon 2020 or loans from the European Investment Bank (EIB), that add up to an estimated total of EUR 10.8 billion of EU environmental financing for Italy for the period 2014-2020

The LIFE programme¹⁸¹ is entirely dedicated to environmental and climate objectives. It finances demonstration and best practice actions for green solutions to be deployed. In 2014-2020, Italy received EU support for 155 LIFE projects (for nature and environment) for an amount of EUR 268.9 million from the LIFE programme (out of 1 028 EU-27 LIFE projects with a total EU contribution of EUR 1.74 billion)¹⁸².

In 2014-2020, Horizon 2020 allocated about EUR 205.7 million to Italy (in particular, for circular economy, climate action, natural resources and ecosystems), which is about 3.7% of Italy's total allocation¹⁸³. From the European Fund for Strategic Investments (EFSI), Italy received EUR 1.0 billion in direct environmental investment and a further EUR 48.4 million as indirect environmental investment. This brings Italy's total amount for the environment to some EUR 1.1 billion out of its total allocation of EUR 7.5 billion¹⁸⁴. Italy received EUR 3.8 billion for direct environmental investments, specifically, for water and sewerage and some for waste, out of all EIB loans to Italy (EUR 70.5 billion)¹⁸⁵. The country ranks first in the EU in terms of the amount of total EIB lending. In 2020, the EIB provided EUR 24.2 billion in funding to fight climate change at EU level, 37% of its total financing. It also provided EUR 1.8 billion (3% of its financing) for broader environmental lending¹⁸⁶.

EU environmental funding 2021-2027

The 2020 European Green Deal Investment Plan (EGDIP) calls for EUR 1 trillion in green investments (public and private) by 2030. The MFF for 2021-2027 and the

¹⁸⁰ [Rete Ambientale](#).

¹⁸¹ [European Commission, LIFE Programme](#).

¹⁸² [LIFE Country overview Italy 2021](#).

¹⁸³ [EASME](#).

¹⁸⁴ [approved and signed EFSI financing - EIB, 2015-2020](#).

¹⁸⁵ [EIB Open Data Portal 2014-2020](#)

¹⁸⁶ [EIB 2021 Activity Report](#). The EIB Group jointly works with the European Commission in implementing several programs that finance environmental implementation: InvestEU, the successor of EFSI, Pillar II and III of the Just Transition Mechanism. The EIB Group is a key implementing partner for InvestEU with responsibility for managing 75% of the overall budgetary capacity of the mandate.

¹⁷⁸ Intelligent energy distribution systems (smart grids) and high efficiency co-generation and district heating, based on intervention field 53 and 54 respectively (with 40% environmental coefficients) of Regulation (EU) 2021/1060, Annex I.

¹⁷⁹ Law No 116, approved 11.08.2014, Article 12(4a)

NextGenerationEU spending programme will mobilise EUR 2.018 trillion (in current prices) to support the COVID-19 recovery and the EU's long-term priorities, including environmental protection¹⁸⁷. Following the EU Green Deal's¹⁸⁸ pledge to 'do no harm' and the Interinstitutional Agreement on the 2021-2027 MFF¹⁸⁹, 30% of the EU budget will support climate efforts, while biodiversity will receive 7.5% of the EU budget (as of 2024) and 10% (as of 2026). To reach these targets, more financial resources will need to be allocated to biodiversity, specifically under the 2021-2027 cohesion policy and the 2023-2027 common agricultural policy.

Sustainable finance significantly increases transparency on environmental sustainability (a goal promoted by the EU Taxonomy)¹⁹⁰. It also strengthens non-financial reporting requirements and facilitates the issuance of green bond (by the EU green bond standard¹⁹¹). Reinforced by the renewed sustainable finance strategy (2020)¹⁹², it will increase investment flows to climate and the environment. The new strategy on adaptation to climate change¹⁹³ can help close the insurance protection gap, which currently leaves many risks from climate-related events uninsured¹⁹⁴. The EIB will align 50% of its lending for climate and environment projects by 2025¹⁹⁵ with an EUR 250 billion contribution to the EGDIP by 2027.

Table 3 gives an overview of the EU funds earmarked specifically to Italy for the 2021-2027 period. These funds are supplemented by other EU funding programmes available to all Member States.

Table 3: Key 2021-2027 EU funds allocated to Italy (current prices)

Instrument	Country funding allocation (million EUR)
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¹⁸⁷ European Commission, [2021-2027 long-term EU budget & NextGenerationEU](#).

¹⁸⁸ [COM/2019/640 final](#).

¹⁸⁹ [Interinstitutional Agreement, OJ L 433I](#).

¹⁹⁰ European Commission, [EU taxonomy for sustainable activities](#)

¹⁹¹ [EU Green Bond Standard](#) - 2021/0191 (COD).

¹⁹² COM (2021) 390 Final - European Commission, Strategy for Financing the Transition to a Sustainable Economy.

¹⁹³ [COM\(2021\) 82 final](#).

¹⁹⁴ The strategy would support improved insurance gap coverage including through the natural catastrophe markets as reflected with the EIOPA (the Association for European Insurance and Occupational Pension Authorities) dashboard on insurance protection gap for natural catastrophes. See: [The pilot dashboard on insurance protection gap for natural catastrophes | Eiopa \(europa.eu\)](#).

¹⁹⁵ EIB Climate Bank Roadmap 2021-2025, November 2020

Cohesion policy	Total: 43 114.5¹⁹⁶
ERDF	26 614.9
ESF+	14 535
ETC (ERDF)	934.9 ¹⁹⁷
Just Transition Fund	1 029.6¹⁹⁸
EAFRD/rural development	6 749.6²⁰⁰
under CAP Strategic Plans 2023-2027 ¹⁹⁹	
European Maritime, Fisheries and Aquaculture Fund (EMFAF)	518.2²⁰¹
Recovery and Resilience Facility (RRF)	68 880.5 (grants)
2021 – 2026 ²⁰²	122 601.8 (loans)²⁰³

In Italy, the programming process for most of EU funds 2021-27 (cohesion policy funds, EAFRD and EMFAF) is ongoing. However, the negotiations have been concluded under the Recovery and Resilience Facility (RRF).

The RRP has a budget of EUR 191 billion. This includes: for circular economy & sustainable agriculture EUR 5.27 billion (of which for waste: EUR 2.1 billion); for renewable energy, hydrogen, sustainable mobility EUR 23.78 billion; for energy efficiency and renovation EUR 15.36 billion, and for land protection and water EUR 15.06 billion. To fund nature projects, the plan allocates EUR 1.8 billion to nature conservation (notably for the Po River) and to clear up contaminated sites. As already mentioned in section 4 of this report, a 37.5% share of the RRF funding for Italy is for measures that contribute to the climate and environmental objectives (Figure 40). This is in line with the climate target of 45% set for all EU27 Member States by 2030. Italy is just above the 37% climate expenditure target, the minimum level required under the RRF Regulation²⁰⁴. Overall, the plan ensures that

¹⁹⁶ European Commission, [2021-2027 Cohesion policy EU budget allocations](#).

¹⁹⁷ Interreg initial allocations per Member State including ETC transnational and ETC cross-border co-operation.

¹⁹⁸ European Commission, [2021-2027 Cohesion policy EU budget allocations](#).

¹⁹⁹ [European Commission, CAP strategic plans](#).

²⁰⁰ [Regulation \(EU\) 2021/2115](#), Annex XI.

²⁰¹ [Regulation \(EU\) 2021/1139](#), Annex V.

²⁰² The actual reforms and investments under the RRF have to be implemented until 31 December 2026.

²⁰³ [Council Implementing Decision, FIN 521](#).

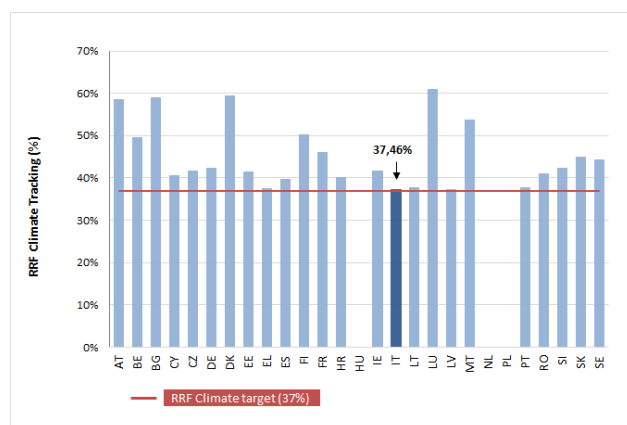
²⁰⁴ [Regulation \(EU\) 2021/241](#)

direct action can be taken at local levels to achieve the green transition, while protecting or restoring the environment, and in compliance with the Do No Significant Harm (DNSH) principle²⁰⁵. There is also a national supplementary fund (*fondo complementare*) with EUR 30.6 billion for 2021-2026 to cover the same priorities as the RRP.

Italy's partnership agreement 2021-2027 devotes 30% of its budget to climate change; it also indicates the ambition to contribute to meeting the MFF requirements for financing biodiversity. Italy must also meet the enabling conditions on satisfactory waste management plans in order to fund investment in the waste management and circular economy, updated planning for required investments in water and wastewater sectors, and prioritised action frameworks (PAFs) for investments in nature and biodiversity. On the enabling condition for climate change adaptation, Italy has provided its national strategy on adaptation (mentioned in section 4 of this report), guidelines for regional strategies on the same issue, and a document on disaster risk management.

In the 2021-2027 period, financing under the RRP and cohesion policy will be carefully dovetailed EUR 8.9 billion is allocated to the PO2 on low carbon: from the ERDF (EUR 8.5 billion) and EMFF (EUR 0.4 billion) 2021-2027, figures taken from the partnership agreement.

Figure 40: Climate expenditure in RRP²⁰⁶



Under NextGenerationEU, the Commission will issue up to EUR 250 billion in EU green bonds (one third of the NGEU) until 2026 that comply with the general spirit of the DNSH principle, but are not subject to the current delegated acts related to the EU Taxonomy and are not fully aligned with the proposed EU green bond standard.

²⁰⁵ [C\(2021\) 1054 final](#)

²⁰⁶ European Commission. The contributions to climate objectives have been calculated using Annex VI of the RRF Regulation (EU) 2021/241.

In addition to the EU funds earmarked specifically for Italy in 2021-2027 period, various other EU funding programmes are open to all Member States. These include, the LIFE programme (EUR 5.4 billion), Horizon Europe (EUR 95.5 billion)²⁰⁷, the Connecting Europe Facility²⁰⁸ (EUR 33.7 billion)²⁰⁹ and InvestEU²¹⁰. These instruments will also support the green transition, including research and innovation activities for environmental protection (Horizon Europe)²¹¹, clean transport and energy (the Connecting Europe Facility)²¹² and sustainable infrastructure (InvestEU)²¹³.

National environmental protection expenditure

Total national environmental protection expenditure (including all relevant current and capital expenditure)²¹⁴ in the EU-27 was EUR 272.6 billion in 2020, representing 2% of GDP. This percentage has remained quite stable over time. Although the highest expenditure is concentrated in a few countries, as a share of GDP, most countries spend between 1-2% of their GDP on environmental protection, including Italy that dedicated 1.8% of its GDP (Figure 41).

Of the above total, the EU-27's capital expenditure (Capex) on environmental protection (i.e. investment) amounted to EUR 56.3 billion in 2018, falling to EUR 54.5 billion in 2020, or some 0.4% of GDP. Most Member States invested 0.2-0.5% of their GDP in environmental protection, including Italy (0.3%) (Figure 42). For the period 2014-2020, this totalled some EUR 376 billion of environmental investment in the EU-27, and to EUR 36.9 billion in Italy.

²⁰⁷ European Commission, [Multiannual financial framework 2021-2027 \(in commitments\) - Current prices](#).

²⁰⁸ The CEF (Transport) includes also EUR 11.3 billion transferred from the Cohesion Fund. 30 % of the transferred amount will be made available, on a competitive basis, to all Member States eligible for the Cohesion Fund. The remaining 70% will be allocated in line with the national envelopes until 31 December 2023. Any unspent amount, by that date, under national envelopes will support all Cohesion Fund's Member States.

²⁰⁹ [Regulation \(EU\) 2021/1153](#).

²¹⁰ The InvestEU Fund plans to mobilise over EUR 372 billion in investment through an EU budget guarantee of EUR 26.2 billion to back the investment of financial partners such as the EIB Group and others.

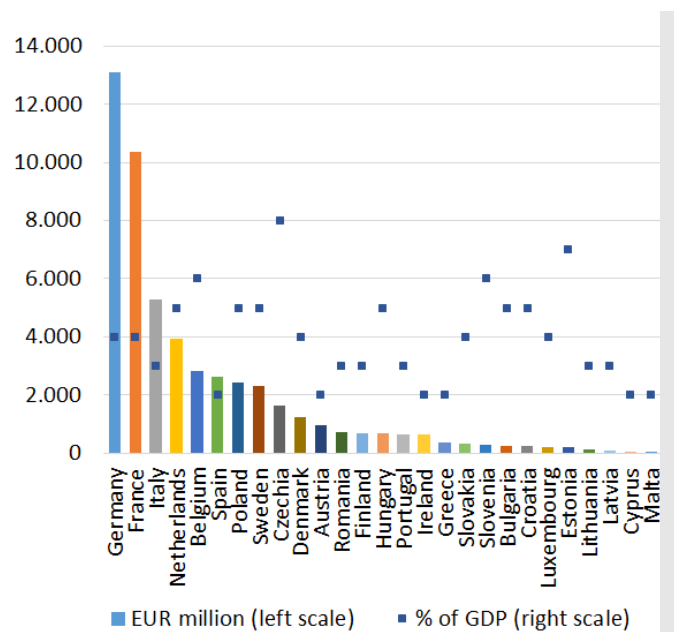
²¹¹ European Commission, [Horizon Europe](#).

²¹² European Commission, [Connecting Europe Facility](#).

²¹³ European Union, [InvestEU](#).

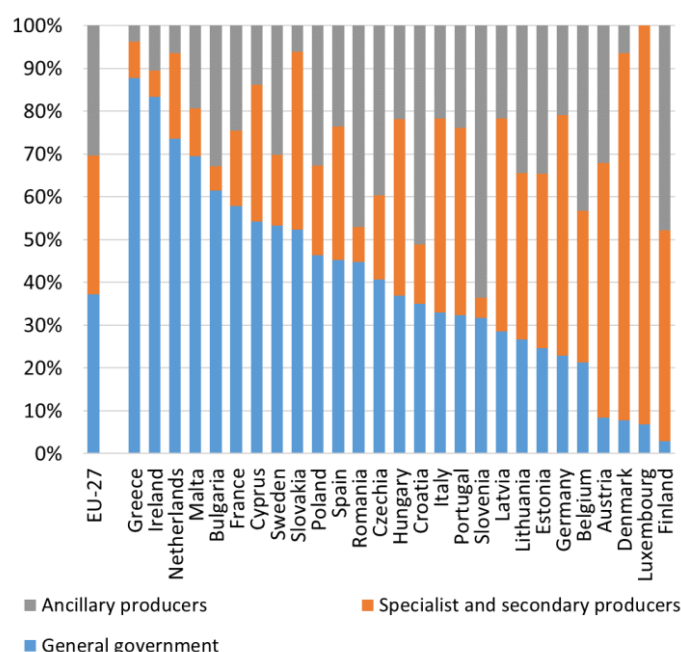
²¹⁴ At economy level, including final consumption, intermediate consumption and capital expenditure of households, corporations and governments related to environmental protection goods and services. It excludes EU funds, while may include some international expenditure beyond domestic. Data source: Environmental Protection Expenditure Accounts (EPEA), Eurostat. EPEA accounts are based on the CEPA 2000 classification, excluding climate, energy and circular economy

Figure 41: Direct and indirect environmental protection investments in the EU-27 (EUR million and % of GDP), 2018²¹⁵



By institutional sector in 2018, around 33% of Italy's environmental protection investments (capital expenditure) came from the general government. A further 45.3% came from specialist producers (of environmental protection services, e.g. waste and water companies) and 21.6% from industry (or business) sectors carrying out environmental activities as ancillary to their main activities. At EU level, 37% was provided by governments, 33% by specialist producers and 30% by industry (business) (Figure 42).

Figure 42: EU-27 Member States' environmental protection investments (Capex) by institutional sectors (Total economy = 100%, 2018)²¹⁶



A breakdown of investment by environmental topic is only partially available at institutional sector level (instead of economy level), due to different reporting patterns²¹⁷. In 2018, at general government level, 34% of environmental protection investments went on environmental research, 24% on biodiversity, 20% on waste management and 9% on urban wastewater. Multiple sources of pollution together accounted for 13% of investment by Italy's specialist producers, around half of the investments were received by wastewater management (48%) and waste management (49%). In the business sector, 28% of investments went on protection of air, 31% on urban wastewater and 8% on waste.

In addition to co-financing EU projects, Italy has its own National Cohesion and Development Fund, with a budget of EUR 1.9 billion for the 2014-2020 period, which would be included in these national environmental protection expenditures. 87.5% of this budget is for water (EUR 1.66 billion), 6.6% is for waste (EUR 126 million) and the remainder for green infrastructure and energy efficiency.

²¹⁵ Eurostat, [Environmental Protection Expenditure Account](#), 2021.

²¹⁶ Eurostat, Environmental Protection Expenditure Accounts (env_epe).

²¹⁷ Data reporting differs for the three institutional sectors, leading to aggregation difficulties. Specialist companies provide comprehensive data across all environmental areas (CEPA 1-9), but this is less the case for general government and industry which often report (non-obligatory) data in merged categories only (with breakdowns difficult) or not at all.

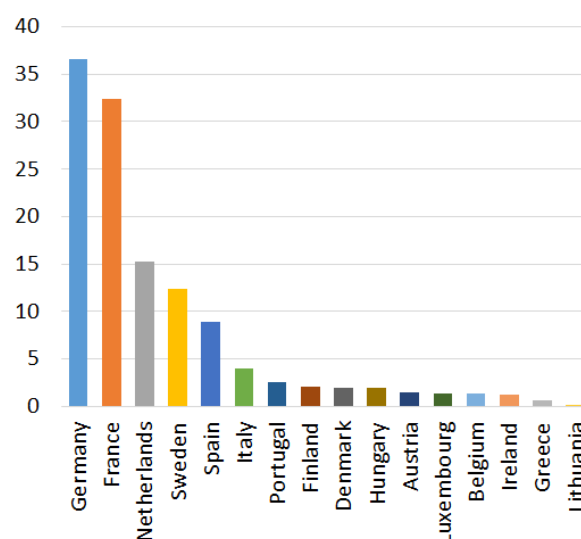
The situation for the period 2021-2027 is in flux but Italy plans investments in the southern regions.

On 4 September 2019 the Italian government announced a national Green Deal (GRIND²¹⁸) with a fund of EUR 4.24 billion for the period 2020-2023 in the 2020 budget law. The enacting law (Environmental Annex to the 2020 Budget Law) was presented to the Parliament on 17 August 2020 but it has yet to pass the parliamentary process.

The total annual European green bond issuance²¹⁹ in 2020 was USD 156 billion (EUR 137 billion²²⁰), rising from USD 117 billion (EUR 105 billion) in 2019, and including some non-EU European countries. By EU27 Member States only, the 2020 annual green bond issuance was EUR 124 billion. 83% of the green bonds issued by European countries was to meet energy, buildings, or transport objectives between 2014-2020, 8% was for water and waste, and a further 6% for land use – with links to ecosystem conservation & restoration, based on the Climate Bonds Taxonomy (broadly similar to the EU Taxonomy)²²¹. Of this 2020 annual EU green bond issuance, Italy had almost EUR 4 billion issuance (data available for 16 EU Member States, see Figure 43).

On 3 March 2021 Italy issued the first Italian sovereign Green Bond (BTP Green), with a 1.50% annual coupon and maturing on the 30 April 2045 issued for EUR 8.5 billion. In February 2021, the Italian Ministry of Economy and Finance also published the Framework for the Issuance of Sovereign Green Bonds²²². A report, entitled the *Italian Sovereign Green Bond Allocation and Impact Report*, will be published annually to update investors and the public on the management and allocation of bond proceeds and their environmental impact as tracked by a set of indicators and metrics.

Figure 43: Annual EU green bond issuance in 2020 (EUR billion)²²³



Green budget tools

Green taxation and tax reform

Italy's revenue from environmentally related taxes was the second highest in the EU in 2020 in absolute terms, as shown in Figure 44. Energy and transport taxation accounted for the highest share of taxes with 80% and 18.6% in 2020, while taxes on pollution/resource was 1.2%. In terms of percentage of GDP, environmental taxes were 3% in 2020 (against the EU average of 2.24%).

²¹⁸ Green and Innovation Deal.

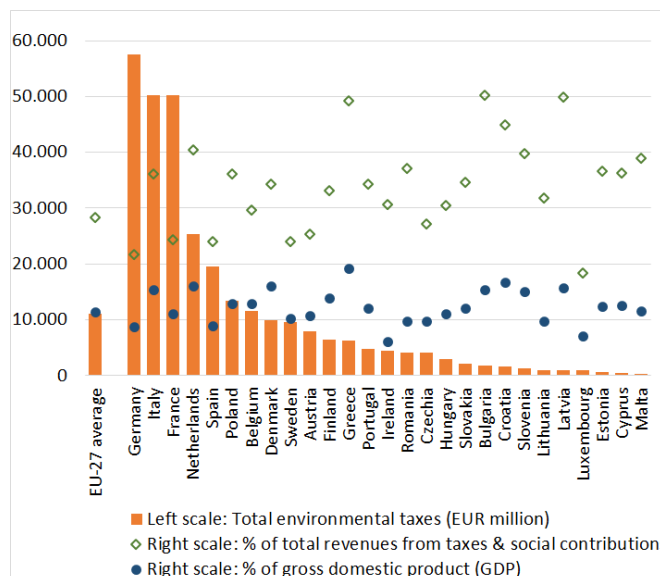
²¹⁹ Green bonds were created to fund projects that have positive environmental and/or climate benefits. The majority of green bonds issued are green "use of proceeds" or asset-linked bonds. The very first green bond was issued in 2007 with the AAA-rated issuance from multilateral institutions, the EIB and the World Bank.

²²⁰ At Eurostat's annual average EUR/USD exchange rates.

²²¹ Interactive Data Platform at www.climatebonds.net. Further information on [Climate Bonds Taxonomy](#)

²²² [Ministry of Economy and Finance](#)

²²³ [Climate Bonds Initiative](#), 2022.

Figure 44: Environmental taxes in the EU-27 (2020)

The 2019 European Green Deal underlines that well-designed tax reforms can boost economic growth and resilience, foster a fairer society, and promote a just transition. Tax reforms can contribute to this by sending the right price signals and incentives to economic actors. The Green Deal creates the context for broad-based tax reforms, the removal of fossil fuel subsidies, and a shift in the tax burden from labour to pollution. It achieves this while simultaneously taking account of social considerations²²⁴. The Green Deal promotes the ‘polluter pays principle’²²⁵ which stipulates that polluters should bear the cost of measures to prevent, control and remedy pollution. The polluter pays principle is facilitated by the European Commission’s technical support instrument (TSI) flagship project on greening taxes²²⁶.

There is potential to increase environmental taxation in Italy. For example, there are considerable regional differences in integrated water services charges for aqueducts, sewerage, and water treatment services. One of the barriers to sufficient investment in Italy is that, though water consumption per person is high, water charges are low²²⁷. There is scope to further increase water taxes and introduce pesticide taxes²²⁸. Another tax is for landfills, although as mentioned in the section on

waste, being set at regional level, the rates are variable. Italy could extend the use of congestion taxes to reduce air pollution (such as applied in Milan)²²⁹. Furthermore, Italy has received country specific recommendations in the European Semester to shift taxes from labour and eliminate environmentally-harmful subsidies (see hereafter).

Environmentally-harmful subsidies

Addressing and removing environmentally-harmful subsidies (EHS) is a further step towards wider fiscal reform.

Fossil fuel subsidies are costly for public budgets and undermine Green Deal objectives. They also often de incentivise green investments and do not contribute to levelling the playing field. Fossil fuel subsidies have fluctuated around EUR 55 billion in the EU since 2015. They rose by 4% between 2015 and 2019, however some countries, such as Latvia, Lithuania Sweden, Greece or Ireland, managed to decrease them. At EU level, subsidies on petroleum products, in sectors such as transport and agriculture, continued to increase in 2015-2019, whereas subsidies on coal and lignite decreased, largely owing to the diminishing role of solid fuels in electricity generation. In its 2019 NECP, Italy plans to phase out the use of coal by the end of 2025.

As a share of GDP, fossil fuel subsidies ranged from 1.2% in Hungary to less than 0.1% in Malta in 2019 (EU average 0.4%). Fossil fuel subsidies amounted to EUR 5.5 billion in Italy in 2019, under the EU average (0.31%). In 2020, the EU27’s total fossil fuel subsidies decreased to EUR 52 billion (due to falling consumption trends amid the COVID-19-related restrictions). Without Member State actions, these subsidies are likely to rebound as economic activity picks up from 2020²³⁰.

Further details of the situation in Italy are shown in Figure 45.

²²⁴ COM (2019/640 final), p.17.

²²⁵ Article 191(2) of the Treaty on the Functioning of the European Union: “Union policy on the environment (...) shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay”.

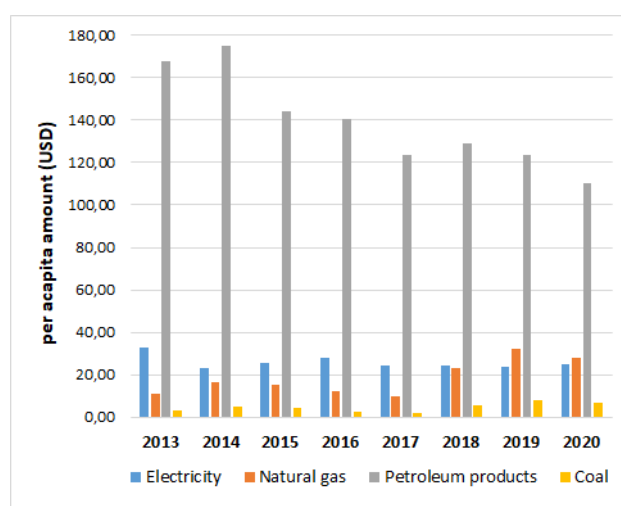
²²⁶ European Commission, [Greening taxes- applying polluter pays principle in practice, green budgeting TSI participation](#).

²²⁷ Gianmarco Donolato, European Commission, Paper on Water Sector, February 2021.

²²⁸ European Commission, [Study on assessing the environmental fiscal reform potential for the EU 28](#), 2016.

²²⁹ European Commission, [Green taxation and other economic instruments](#), 2021.

²³⁰ State of the Energy Union report, [COM\(2021\) 950 and Annex](#)

Figure 45: Trends in fossil fuel subsidies in Italy²³¹

% GDP	2013	2014	2015	2016	2017	2018	2019	2020
Electricity	0,09	0,06	0,08	0,09	0,08	0,0	0,07	0,08
Natural gas	0,03	0,05	0,05	0,04	0,03	0,0	0,10	0,09
Petroleum products	0,47	0,49	0,48	0,45	0,38	0,3	0,37	0,35
Coal	0,01	0,01	0,01	0,01	0,01	0,0	0,02	0,02

Two EHS that have been identified as candidates for reform in Italy are diesel subsidies in freight and passenger transport worth EUR 1 294 million per year and for lubricating oils for plastic and rubber manufacture worth EUR 78 million per year²³².

Italy follows the best practice of having a catalogue of environmentally friendly and harmful subsidies with four editions published since 2016 and the intention to reduce the estimated EUR 20.4 billion in 2020²³³. Furthermore, as mentioned in section 2 of this report, environmentally harmful subsidies damaging biodiversity accounted for at least EUR 28 billion in 2018²³⁴. The Committee on Ecological Transition (CITE) intends to draft a plan to phase out EHS (including FFS) by 2025. Furthermore, Italy passed a law on 28 March 2022 banning reductions in excise duties for energy products used by railway transport of passengers and goods, the exemption from excise on energy products used for the production of magnesium from seawater, tax relief on energy products used in ships involved in transshipment operations, and excludes the use of government resources for research,

development and demonstration in the fossil fuel sectors (oil, gas, coal)²³⁵.

Current green budgeting practices

Green budgeting encompasses various climate and environmental tagging and tracking practices in budgets²³⁶. Some EU Member States already use green budgeting practices²³⁷. Green budgeting helps identify and track green expenditure and green revenues to increase transparency on the environmental implications of budgetary policies. This is aimed at improving policy coherence and supporting green policies (including climate and environmental objectives)²³⁸.

The Commission has also drawn up climate proofing and sustainability proofing guidance as tools to assess project eligibility and a project's compliance with environmental legislation and criteria²³⁹. The Commission developed a green budgeting reference framework²⁴⁰ and launched a TSI flagship project on green budgeting in 2021 to help Member States develop national green budgeting frameworks. In this respect, Italy participated in a training on 24 February 2022.

Italy is quite advanced in reporting on the environmental impact of its budget. Since 2000, Italy has published an annex to its budgetary plans which details planned expenditure on environmental protection and on resource management (*ecobilancio*). Since 2010, a similar document (*ecorendiconto*) reports on spending on the same budget items. Furthermore, Italy's budgetary documents include an annex reporting on recent trends and expected progress on 12 indicators that track fairness and sustainable well-being^{241,242}.

Italy plans to re-classify the general state budget, with reference to the environmental expenditure, in line with the UN sustainable development goals (SDGs) and targets set under Agenda 2030²⁴³. At regional level,

²³⁵ Article 18 in Law 25, [Italian official journal](#) number 73 28 March 2022, (p.97).

²³⁶ Tagging is explained in European Commission, [Green budgeting practices in the EU: a first review](#), 2021 (p.7).

²³⁷ European Commission, [Green budgeting practices in the EU: a first review](#), 2021. and OECD, Public Governance Directorate, Climate Change and Long-term Fiscal Sustainability, Working Paper, February 2021, [p.43](#)

²³⁸ European Commission, [European Commission Green Budgeting Reference Framework](#).

²³⁹ European Commission, [Technical guidance on sustainability proofing for the InvestEU Fund](#).

²⁴⁰ European Commission, [Green Budgeting Reference Framework, based on the review of the OECD Paris Collaborative on Green Budgeting initiative](#), 2017.

²⁴¹ European Commission (2020), [Country Report](#), (p.28).

²⁴² ISTAT, [Relazione BES 2022](#).

²⁴³ OECD, European Commission, IMF (2021), [Green Budgeting: Towards Common Principles](#).

²³¹ OECD, [Fossil Fuel Subsidy Tracker](#).

²³² European Commission, on-going study, Mapping objectives in the field of environmental taxation and budgetary reform: Environmentally harmful subsidies (EHS)

²³³ Ministry of Ecological Transition, [Economia Ambientale](#).

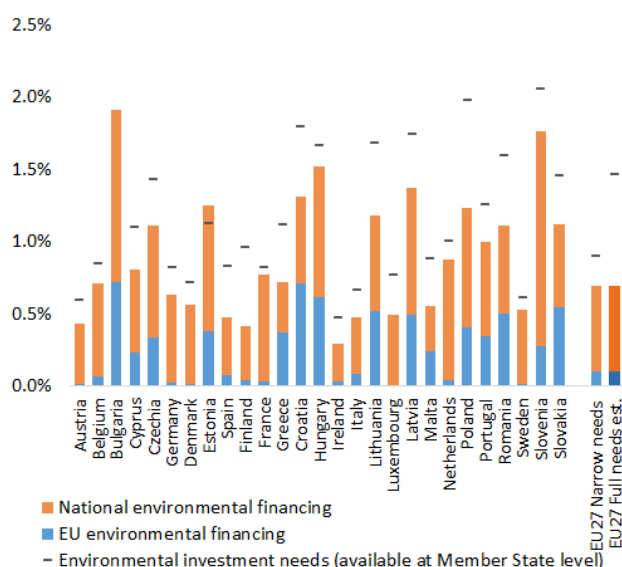
²³⁴ [4th Report on the State of Natural Capital Accounting](#), April 2021

Sardinia also applies green budgeting, and Bologna at city level.

Overall financing compared to the needs

The EU's overall environmental financing for environmental investments is estimated to have been 0.6-0.7% of GDP in 2014-2020 period, comprising both major EU funds and national financing (Figure 46). This ranged from 0.3% (Ireland) to 1.91% (Bulgaria), depending on the level of environmental challenges in different Member States. In 2021-2027, it is estimated that the EU's overall environmental investment needs will range between 0.9 and 1.5% of the projected GDP (2021-2027), suggesting a potential environmental financing gap of 0.6-0.8% of GDP, unchanged financing levels assumed ²⁴⁴.

Figure 46: Total environmental financing baseline (2014-2020) and estimated needs (2020-2030) in the EU27 (% of GDP)²⁴⁵



Italy's overall environmental financing for investments is estimated to have been 0.48% of GDP (less than the EU average of 0.7%) in 2014-2020, 80% coming from national sources. The country's environmental investment needs in 2021-2027 are expected to be over

0.67% of GDP, suggesting a potential environmental financing gap of at least 0.19% of GDP, likely to be higher when also accounting for needs currently estimated at EU-level only (e.g. water protection, circularity, biodiversity strategy etc.).

In absolute amounts, the annual environmental investments (EU plus national) amounted to an estimated EUR 8.1 billion on average in 2014-2020. The identified annual needs (not comprehensive) are estimated to reach EUR 11.9 billion in the coming period, suggesting the need to increase financing levels for environmental compliance and sustainability.

2022 priority actions

In the 2019 EIR, Italy received three priority actions on environmental financing. The first was to close the implementation gaps for water, waste and air using EU and national financing, where limited progress has been made, especially with regard to closing the irregular landfills. The second was to make greater use of EU funds to implement targeted nature conservation measures. Here again, Italy made limited progress, although with the RRP notably addressing this issue. The third was to improve the capacity of environmental administrations at national, regional, and local level to ensure programmed expenditure takes place; the evaluation here will depend very much on the programming for the 2021-2027 period, and hence is deferred to a future EIR.

- Italy is invited to devise an environmental financing strategy to maximise opportunities to close the environmental implementation gaps, bringing together all ministries and tiers of the administration.

²⁴⁴ Source: DG Environment data analysis. EU financing sources covered: ESI Funds (ERDF, CF, ESF, YEI, EAFRD, EMFF), Horizon 2020, LIFE, EFSI (EU amount), EIB loans. National financing: total national environmental protection capital expenditure (investments) - source: Eurostat EPEA dataset. Cut-off date for data: end 2021. N.B. The total financing may be higher, in particular through further indirect investments, requiring further analysis in the future.

²⁴⁵ Eurostat; [ESI Funds Open Data](#), 2021.

6. Environmental governance

Information, public participation and access to justice

Citizens can more effectively protect the environment if they can rely on the three 'pillars' of the Aarhus Convention:

- (i) access to information;
- (ii) public participation in decision making;
- (iii) access to justice in environmental matters.

It is of crucial importance to public authorities, the public and businesses that environmental information is shared efficiently and effectively²⁴⁶. Public participation allows authorities to make decisions that take public concerns into account. Access to justice is a set of guarantees that allows citizens and NGOs to use national courts to protect the environment²⁴⁷. It includes the right to bring legal challenges ('legal standing')²⁴⁸.

Environmental information

The INSPIRE (Infrastructure for Spatial Information in Europe) Directive²⁴⁹ aims at establishing a European spatial data infrastructure for sharing environmental spatial information between public authorities across Europe, assisting in policymaking across boundaries and facilitating public access to this information. Geographic information is needed for good governance at all levels and should be readily and transparently available.

Italy's implementation of the INSPIRE Directive is lagging behind. In 2019, Italy received a priority action on the need to improve access to spatial data and services by making stronger links to the country INSPIRE portals. It has made some progress on data identification and documentation, but implementation levels are limited.

More efforts are needed on INSPIRE to: (i) make the data more widely accessible; (ii) improve the conditions for data reuse, and (iii) prioritise environmental datasets in implementation, especially those identified as high-value

spatial datasets for implementing environmental legislation²⁵⁰ (Table 4).

Table 4: Country dashboard on the implementation of the INSPIRE Directive (2016-2020)²⁵¹

2016		2020		Legend
Effective coordination and data sharing				<div>■ Implementation of this provision is well advanced or (nearly) completed. Outstanding issues are minor and can be addressed easily. Percentage: >89%</div> <div>■ Implementation of this provision has started and made some or substantial progress but is still not close to be complete. Percentage: 31–89%</div> <div>■ Implementation of this provision is falling significantly behind. Serious efforts are necessary to close implementation gap. Percentage: <31%</div>
Ensure effective coordination	■	■		
Data sharing without obstacle	■	■		
INSPIRE performance indicators				
i. Conformity of metadata	■	■		
ii. Conformity of spatial data sets ²⁵²	■	■		
iii. Accessibility of spatial data sets through view and download services	■	■		
iv. Conformity of network services	■	■		

Public participation

Italy provides for public participation under several articles of the Environmental Code (Legislative Decree No. 152/2006, Part II, Title II and III).

As mentioned in previous EIRs, the Ministry of Ecological Transition maintains a public database²⁵³, which includes detailed information on projects requiring an environmental impact assessment (EIA), a strategic environmental assessment (SEA) and the Integrated Emissions Directive permit. The database contains

²⁴⁶ The Aarhus Convention, the Access to Environmental Information Directive (Directive 2003/4/EC) and the INSPIRE Directive (Directive 2007/2/EC) together create a legal foundation for the sharing of environmental information between public authorities and with the public. This EIR focuses on the INSPIRE Directive's implementation.

²⁴⁷ These guarantees are explained in the Commission Notice on access to justice in environmental matters, OJL 275, 18.8.2017 and a related Citizen's Guide.

²⁴⁸ This EIR focuses on measures taken by Member States to guarantee rights of access to justice, legal standing and to overcome other major barriers to bringing cases on nature and air pollution.

²⁴⁹ [INSPIRE](#)

²⁵⁰ European Commission, [List of high value spatial data sets](#).

²⁵¹ [INSPIRE knowledge base Italy](#)

²⁵² The deadlines for implementation of the spatial data interoperability were in 2016 still in the future: 23.11.2017 for Annex I data and 21/10/2020 for Annex II and III data. It must be also considered that this conformity indicator will in many cases never reach 100% conformity as majority of the countries provide as-is-data sets in addition to the INSPIRE harmonised data sets.

²⁵³ [EIA-SEA-IED](#)

technical background and documentation, which enables the public to analyse the projects in detail. There is a specific section '*Citizen Area*²⁵⁴' for members of the public to express their opinion on projects and installations under consultation. They can send observations by email or by filling in the form on the website. The website also includes a *FAQ section*²⁵⁵, and it contains the sections '*Data and Tools*²⁵⁶' and '*Notices to the public*²⁵⁷' with detailed information on EIA procedures.

Centralised statistical information on the level of public participation in decision-making processes regarding EIA and SEA procedures has not been found on these websites. There is no evidence that public participation in environmental impact assessment procedures is falling.

Access to justice

Physical and legal persons, including NGOs, may challenge environmental administrative decisions.

In Italy, there are some difficulties in challenging plans or programmes. There is a system of regular supervision of regulatory legally binding acts, but it is barely accessible to members of the public and NGOs, they can only flag issues to the bodies or officials who are entitled to initiate an extraordinary supervision procedure.

There is some information on access to justice, usually only available in the official language(s) of the country or autonomous provinces, maintained by the government, and it needs to be searched for²⁵⁸.

In 2019, Italy had a priority action on better informing the public of their access to justice rights, notably in relation to air pollution and nature. Italy has made limited progress on this front.

2022 priority actions

- make spatial data more widely accessible and prioritise environmental datasets in implementing the INSPIRE Directive, especially those identified as high-value spatial datasets for implementing environmental legislation;
- develop structured and user-friendly information on SEA and EIA procedures, available online, from public

authorities, throughout the whole country, learning from the best practice of the Ministry of Ecological Transition and some regions;

- collect and publish data on the level of public participation on SEA and EIA procedures and encourage public participation through the dissemination of clear and useable information;
- improve access to courts by the public concerned when challenging administrative or regulatory decisions, in particular under the areas of planning related to water, nature and air quality;
- better inform the public about their access to justice rights—in particular by referring to the judicial and administrative portals and the Commission eJustice fact sheets on access to justice in environmental matters²⁵⁹;
- ensure no barriers (e.g. costs) to access to justice on environmental matters.

Compliance assurance

Environmental compliance assurance covers all the work undertaken by public authorities to ensure that industries, farmers and others fulfil their obligations to protect water, air and nature, and manage waste²⁶⁰.

It includes support measures provided by the authorities such as:

- (i) compliance promotion²⁶¹;
- (ii) inspections and other checks that they carry out, i.e. compliance monitoring²⁶²;
- (iii) the steps that they take to stop breaches, impose sanctions and require damage to be remedied, i.e. enforcement²⁶³.

Compliance promotion and monitoring

In April 2020, Italy launched a new version of the National Environmental Information System (SINA²⁶⁵)

²⁵⁴ [Citizens Area](#)

²⁵⁵ [FAQs](#)

²⁵⁶ this section is divided into six sub-sections: environmental data; technical specifications and forms; legislation; sector studies and investigations; BAT conclusions; Bref – IED.

²⁵⁷ [Public announcements](#)

²⁵⁸ [Detailed information on access to justice](#).

²⁵⁹ [European Commission](#)

²⁶⁰ the concept is explained in detail in the Communication on EU actions to improve environmental compliance and governance COM(2018)10 and the related Commission staff working document, SWD(2018)10.

²⁶¹ this EIR focuses on the help given to farmers to comply with nature and nitrates legislation.

²⁶² this EIR focuses on inspections of major industrial installations.

²⁶³ this EIR focuses on the availability of enforcement data and co-ordination between authorities to tackle environmental crime.

²⁶⁴ the Environmental Liability Directive, 2004/35, creates the framework.

²⁶⁵ [ISPRA SinaCloud](#)

portal with environmental data, mapping services and linked open data.

Extensive explanations, guidelines and relevant documentation are provided in the section on the Natura 2000 network of the Ministry of Ecological Transition's website²⁶⁶. Similarly, the Italian Institute for Environmental Protection and Research (ISPRA)²⁶⁷ also plays an important role in providing information and guidelines on nature and nitrates.

Some regions provide on their websites a general overview and guidelines (although not directly addressed to farmers) on implementing the Nitrates Directive. Nonetheless, no guidelines specifically written for farmers or other duty-holders are available across regions. However, as a best practice example, on the Lombardy Region's website there are information and support actions for farmers. Similarly, regarding biodiversity protection, the Ministry of Ecological Transition and ISPRA include on their websites specific sections on biodiversity with extensive explanations, guidelines, and information on current projects.

The aforementioned Ministry of Ecological Transition's website also contains a specific section (Environmental Assessments and Authorisations SEA - EIA - IED permitting) on statistics linked to environmental inspections and a more general section 'Environmental statistics' with information structured by a thematic classification²⁶⁸. Annual activity reports linked to environmental inspections are also available on the ISPRA website²⁶⁹.

Complaint handling and citizen science

ARPA²⁷⁰ control activities at regional level in the Italy may be carried out at the initiative of the competent authorities or local authorities, by delegation of the judiciary, or at the request of following a report filed by citizens. Citizens may also file a report to other local police forces or authorities (e.g. the Carabinieri).

Some ARPAs provide information on the complaint procedure for local authorities and citizens (e.g. how to access environmental information and administrative acts or how to report environmental irregularities) on their websites.

The Ministry of Ecological Transition and ISPRA provide information on their website (in the form of FAQ or request information function) on to whom and how to submit a complaint about environmental nuisance or environmental damage.

An increasing number of environmental associations in Italy play a fundamental role in denouncing environmental offences and raising public awareness. The Ministry of Ecological Transition provides on its website an exhaustive list²⁷¹ of recognised environmental protection associations. The main NGOs include *Legambiente*, which publishes an annual report on environmental crime based on data submitted by the law enforcement authorities (LEAs). At present, the number of complaints lodged with the Commission in the environmental field is above the EU average.

Enforcement

The specialised environmental unit²⁷² of the Italian Carabinieri (*Comando Carabinieri per la Tutela Forestale, Ambientale e Agroalimentare*) provides a yearly report of environmental control, follow-up and enforcement activities (available on the Ministry of Ecological Transition's website).

NGOs also play an important role in prevention. They are in constant contact with LEAs and collect statistics based on the data submitted by law enforcement authorities. The main ones are the statistics in the annual report published by *Legambiente*²⁷³. However, no structured statistics were found on prosecution and court cases related to environmental crime.

Italy has a robust legal framework to exchange information between relevant competent authorities. As mentioned in previous EIRs, the National Network for Protection of the Environment was set up in 2016 to coordinate, *inter alia*, control activities of ISPRA and regional agencies. However, no information is available on official websites on formal cooperation mechanisms between inspectors and other bodies along the enforcement chain. The situation has not improved, and the same gaps are currently identified.

Italy has specialised units dealing with environmental crimes in almost all Public Prosecutors' Offices and a network system in the environmental sector under the supervision of the Chief Prosecutor's Office at the Court

²⁶⁶ Ministry of Ecological Transition, [Natura 2000](#)

²⁶⁷ [Institute for Environmental Protection and Research](#)

²⁶⁸ Ministry of Ecological Transition, [EIA-SEA-VINCA statistics](#)

²⁶⁹ ISPRA, [Report on IED inspections](#)

²⁷⁰ The ARPA are the regional agencies for environmental protection within the Italian public administration.

²⁷¹ Ministry of Ecological Transition, [list of recognized environmental NGOs](#).

²⁷² [Italian Carabinieri](#).

²⁷³ *Legambiente*, [data on law enforcement data](#).

of Cassation, which ensures uniformity of procedures while respecting the autonomy of all prosecutors. The clear definition of the role played by the different LEAs on environmental crime avoids any overlap of investigations and responsibilities between LEAs (i.e. the *Carabinieri* and the *Guardia di Finanza*).

Environmental Liability Directive (ELD)

ISPRA publishes every two years biannual reports on environmental damages in Italy (see e.g. the 2019 ISPRA report²⁷⁴). The Ministry of the Ecological Transition publishes on its website provisions on damage remediation or threat of damage prevention. However, a specific ELD registry has not been identified.

The Ministry of Ecological Transition maintains a public central database²⁷⁵ on the portal for environmental impact assessments but does not include information on incidents of environmental damage. ISPRA has a national accidents register²⁷⁶ but specific access credentials are required. This register is built under Seveso legislation (see section 3 of this report) and does not include information about ELD cases.

Financial security for ELD liabilities is not mandatory. Italy indirectly requires under national law financial securities for some ELD liabilities. Financial security policies and bank guarantees, as well as stand-alone environmental insurance policies are widely available in Italy. Wide use is made of extensions to general liability policies that provide insurance for remediating off-site pollution from a sudden and accidental incident at an insured's site.

The 2019 EIR had priority actions to improve financial security for liabilities and ELD guidance, and to publish information on environmental damage. Since 2019, Italy has made no progress on those issues.

2022 priority actions

- better inform the public about compliance promotion, monitoring and enforcement by ensuring structured and easily accessible online information is provided to farmers at national level about how to comply with obligations under the Nitrates and Nature Directives;
- improve overall coordination at national and regional level between enforcing authorities and provide

information on public authorities' official websites on formal cooperation mechanisms;

- develop structured statistics from national authorities on the enforcement of environmental crimes.

Effectiveness of environmental administrations

Those involved in implementing environmental legislation at EU, national, regional and local levels need to have the knowledge, tools and capacity to ensure that the legislation and the governance of the enforcement process bring about the intended benefits.

Administrative capacity and quality

The regionalised structure of Italy means responsibilities are shared between national and regional levels. The Ministry of Environment was incorporated into a new enlarged Ministry of Ecological Transition in 2021 combining environmental and energy responsibilities. The minister also has the role of co-ordinating the new Interministerial Committee for Ecological Transition (CITE). A national ecological transition plan is being prepared.

The CITE also is in charge of the national sustainable development strategy (NSDS). Italy adopted the NSDS in 2017 (mentioned in the 2019 EIR) and is currently revising it with a strong focus on policy coherence for sustainable development (see the section technical support instrument) and on other enabling tools (vectors) to empower participation and promote a culture for sustainability through education, training, information and communication. The NSDS is the reference framework for regional and municipal level strategies and agendas on sustainable development and builds on a strengthened institutional coordination and cooperation mechanisms, both horizontal and vertical. Italy has also 19 regional and 2 provincial sustainable development strategies.

Implementation of environmental rules in Italy lies predominantly in the hands of the regions, which results in differences in implementation and enforcement, and transposition delays. Italy suffers in particular from fragmentation of responsibilities and needs strong co-ordination.

Italy is one of the Member States with the highest number of ongoing environmental infringement procedures (21 in March 2022). It must step up its efforts to ensure compliance with EU environmental rules. The lack of enforcement of court judgements issued under Article 260 of the Treaty on the functioning of the European Union is highly problematic and results in

²⁷⁴ ISPRA, [environmental damages 2017 and 2018](#).

²⁷⁵ Ministry of Ecological Transition, [EIA-SEA-VINCA portal](#).

²⁷⁶ ISPRA, [national accidents register](#).

significant fines being paid to the EU budget. This shows that a timely and coherent approach to environmental infrastructure investments is crucial. Another major issue of concern is the lack of an effective enforcement system that ensures that all administrative or judicial decisions are readily put into force.

On 8 February 2022, Parliament passed a constitutional amendment that makes the protection of the environment one of Italy's constitutional principles, in particular by ensuring the protection of 'biodiversity, ecosystems and animals [the latter for the autonomous regions and provinces, related to hunting], also in the interest of future generations'. In addition, it stated that private economic initiatives cannot be conducted if they contrast with social utility, human dignity, health, (...) and now also 'the environment'.

The partnership agreement for 2021-27 period notes that Italy will have: a national operational programme for cohesion capacity; technical assistance within the individual operational programmes (regional and national); plans for administrative regeneration (PRigA) building on the previous plans for administrative reinforcement plans (PRAs) from the 2014-2020 period (mentioned in previous EIRs). The new PRigAs will simplify procedures to accelerate public investment for the structural funds and build up administrative capacity, especially new personnel. Furthermore, the 2019 annual budget²⁷⁷ included the recruitment between 2019-2021 of 420 new specialised staff (including 20 managers) to the Environment Ministry; this should lead to the progressive reduction of technical support from in-house companies.

To boost transparency, new rules were introduced in 2019 on the composition of members of the EIA-SEA Technical Committee²⁷⁸.

On 29 May 2020, Italy (CINSEDO) organised a seminar on the governance issues in the 2019 EIR report (environmental information, access to justice and compliance assurance)²⁷⁹.

Italy is applying digital or innovative solutions in the field of environment as mentioned in this section on compliance assurance and also in the water and marine chapters.

Since 6 August 2021, Italy has set up a Civil Environmental Service (Servizio civile ambientale) to help young people face the challenges of the green revolution

coordinated by the Institute of Universal Civil Service (l'Istituto del Servizio civile universale)²⁸⁰.

In the 2019 EIR, Italy had two priority actions. One was to improve overall environmental governance and the other to better address fragmented implementation of environmental policy. Italy had made limited progress on both fronts.

2022 priority actions

- continue to address the fragmented implementation of environmental policy at regional and local levels by developing a better national overview of regional implementation mechanisms for the environment (especially implementation of the Nitrates Directive at regional level).
- improve overall national environmental governance, in particular administrative capacity and coordination at regional and local level between enforcing authorities.

Coordination and integration

As mentioned in the 2019 EIR Report, transposition of the revised EIA Directive²⁸¹ provides an opportunity to streamline the regulatory framework on environmental assessments. Italy has transposed the revised Directive. The Commission encourages Member States to streamline the environmental assessments in order to reduce duplication and avoid overlaps in environmental assessments applicable to projects. Streamlining also helps reduce unnecessary administrative burden and accelerates decision-making, provided it is done without compromising the quality of the environmental assessment procedure²⁸². Italy had already streamlined environmental assessments under EIA and Habitats Directives before the revised EIA Directive entered into force. Joint procedures have been established for the EIA, the Water Framework Directive and the Industrial Emission Directive. Under the RRP, Italy passed a law in 2021 to halve the time for EIAs for railway projects and to simplify procedures for photovoltaics²⁸³. There is another RRP milestone on streamlining renewable energy projects in 2024.

²⁸⁰ [Prime Ministers Office](#).

²⁸¹ Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment

²⁸² The Commission issued a guidance document in 2016 regarding the setting up of coordinated and/or joint procedures that are simultaneously subject to assessments under the EIA Directive, Habitats Directive, Water Framework Directive, and the Industrial Emissions Directive, OJ C 273, 27.7.2016, (p. 1).

²⁸³ Official Journal n. 181 of 30 July, Law n. 108/2021 of 29.07.2021 converting Decree-Law n. 77/2021 of 31.05.2021.

²⁷⁷ Legge 30 dicembre 2018, n. 145, Bilancio di previsione dello Stato per l'anno finanziario 2019 e bilancio pluriennale per il triennio 2019-2021. (18G00172).

²⁷⁸ Ministry of Environment, [Press Release](#), 28.08.2019.

²⁷⁹ European Commission, [Environmental Implementation Review - Environment](#)

Reforms through the Commission's technical support instrument (TSI)

The Commission supports environmental implementation and the green transition, not only through the EU financing programmes, but also by granting technical assistance such as the technical support instrument (TSI). The Commission's TSI supported a project in 2019-2020 on environmental fiscal reform in Italy. In 2020 four projects were supported related to the BES indicators; mainstreaming sustainable development in other policies (policy coherence); sustainable finance identifying investments for the transition to a green economy, and continuing environmental fiscal reform from the 2019-20 project. In 2021 two projects were supported on the circular economy and on green infrastructure in transport, plus targeted support to implement the RRP. In 2022, a project will be supported on supporting urban mobility.

TAIEX EIR peer to peer projects

The Commission launched the TAIEX EIR peer-to-peer tool to facilitate peer-to-peer learning between environmental authorities. During the reporting period, Italy benefited from a study visit to Hungary on hydrometeorological monitoring and early warning system for natural hazards (2019) and from two expert missions on circular procurement (2019) and on phosphorus recovery from wastewater treatment (2021). Italy also participated in multicountry workshops on best practice in environmental governance (2020), ammonia reducing technology and measures (2021) and on zero pollution (2022).