

Environmental taxes stood at 3.28% of GDP in 2019 (EU-27 average: 2.37 %). The largest portion of the environmental taxes were the energy taxes at 2.65% of GDP, also higher than the EU average of 1.84%. Transport taxes represented 0.6% of GDP (EU average being 0.45%), taxes on pollution and resources represented only 0.03% (lower than the EU average at 0.08%). In the same year, the environmental tax came to 7.71% of total revenues from taxes and social security contributions (higher than the EU average of 5.76 %)¹.

Italy has several economic instruments in place, e.g. a landfill tax and an integrated water service tax. These are described below.

Further options

Congestion charge charge to improve urban air quality

The share of road transport in total emissions in Italy is significant (10%). Particularly in urban areas, the emissions of particulate matter from road transport are an important source of pollution and health hazard. Italy could consider introducing a congestion charge,

differentiated to the exhausted air pollutant emissions of the vehicle; this could reduce emissions by 15%. The revenue could be used to fund investments into public transport. Milan already has a tax on congestion.

Examples of economic instruments

INTEGRATED WATER SERVICE CHARGES

(TARIFFE DEL SERVIZIO IDRICO INTEGRATO (SII))

Integrated water tariffs include three types of charges: for aqueduct, sewerage and water treatment services. In fact, water tariffs are defined as "integrated" since they aim to cover costs derived from all the activity needed to withdraw water from the sources, purify it, transport it up to taps, collect it once used and treat it to clean it before is discharged into the environment.

The methodology to establish those tariffs is the Water Tariff Method (Metodo Tariffario Idrico, MTI) which is based on what it has been consumed, rewards energy efficiency and provides incentives for saving and reusing water. Regionally or locally, different tax rates and brackets of consumption are set according to the local situation. Also, water tariffs are set for different user categories, like domestic use, industrial use, commercial use, agricultural use; potable and non-potable public use. For all users, there is a fixed quota and a variable quota. The latter is aimed at discouraging excessive consumption and preserving water resources..

How it works

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discouraging excessive consumption and preserving water resources.

What it does

The persistent lack of centralised data on revenue from water tariffs makes it arduous to evaluate the real impact that those tariffs had on reducing the serious "Water Service Divide" between northern and southern Italy or promoting efficiency measures to reduce withdrawals and consumption of the water resource. Water tariff revenues are not reported to Eurostat.

While entire geographic areas have a high-quality, efficient and innovative water management system, others stand out for their negative performance due to long interruptions of the service, frequent incidences of non-potability and poor adequacy of the sewage system. Investments are needed to address this critical situation, but funds for water infrastructure and service improvements are limited. One of the main investment barriers on reducing withdrawals and consumption of the water resource is linked to the fact that Italian water consumption per capita is among the highest in the EU, while its cost is one of the lowest. Due to cheap price for water use, Italian citizens are not driven to concrete actions to reduce water consumption and policy makers are much more engaged in the debate on privatization than on that of water efficiency.

How it came about and stakeholder involvement

The use of water and the related tariff is governed by a complex and unstable regulatory framework, which involves different government levels, and has been modified several times. Water privatisation has been a hot political topic for 30 years. A new 4-year MTI for 2020-2023 was approved after an extensive three-months consultation with the interested parties: Environment Ministry, operators, Local Authorities, District Authorities, consortia, associations, monitoring centres and local municipalities. The aims of the new MTI are:

- 1. to introduce innovations and interventions to improve the infrastructure;
- 2. to promote and reward environmental sustainability;
- 3. to improve the efficiency of the measurement of water consumption and
- 4. to strengthen controls on the implementation of investments.

Also, for the first time in Italy, a stakeholder engagement instrument operating on the basis of "willingness to pay" has been introduced, involving citizens in defining the investment plan and achieving a higher water service quality.



LANDFILL TAX

The amount of the landfill tax varies regionally, and it is obtained multiplying the unit amounts, differentiated by type of waste, quality and conditions of delivery by the quantity, expressed in tons, of the waste delivered. The tax categorisation is typically structured around the following categories: 1. Urban waste and waste from urban treatment; 2. Inert waste; 3. Non-hazardous special waste; 4. Special hazardous waste. The tax is due to the regions, which are responsible for determining the amounts applicable, while a unitary maximum value is set at national level. Since 1996, the eco-tax lost 1/3 of its maximum value in 25 years passing from €38.5/ton to €25.8/ton in 2018². Similarly, revenue decreased from €470 million (1996) to €101 million (2018).

The regional breakdown of this revenue is very heterogeneous from €21.9 million in Puglia to €0.2 million in Molise. In some regions, rewarding/penalising mechanisms are also provided according to the level of separate collection reached or the amount of dry waste per capita generated. An incentive modality provides for a reduction of the landfill tax, depending on whether the level of separate waste collection is above the national target level.

What it does

The eco-tax should have improved the waste management cycle by reducing the use of landfills, by making landfill less convenient and supporting waste initiatives to reduce waste generation and incentivising recycling and energy recovery alternatives. Although

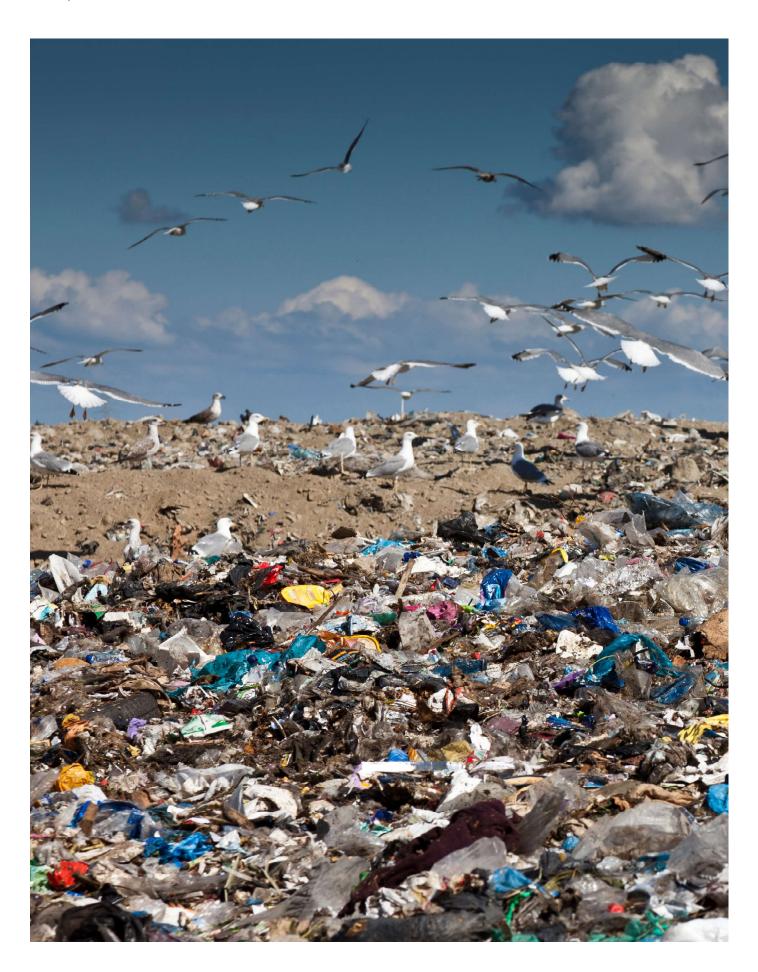
there was a reduction of landfilled waste since 1996, the amount of waste sent to landfill was still excessive, with 22% of the total municipal waste disposed of in landfill in 2018 (still far above the EU target of 10% fixed for 2035). Furthermore, the reduction in landfilled waste was not progressively accompanied by the robust increase in the landfill tax by the Regions, on the contrary, there was a progressive decrease. Because of the current low rate, the landfill tax does not contribute significantly to public revenue, nor does it disincentivise landfill. Furthermore, though there was originally a commitment to use 20% of the revenue for financing more sustainable waste treatment, actually only 1% of the revenue has been allocated to build such infrastructures.

How it came about and stakeholder involvement

The landfill tax was introduced in 1 January 1996 to promote separate collection and to support recycling and energy recovery plants. Relevant stakeholders have addressed the need to discuss a progressive increase of the tax which would discourage landfilling. Since 2018, ARERA has started three consultations³ for the definition of the Tariff Method for the Integrated Waste Management Service. Criteria have been set for recognising effective costs for the period 2018-2021. This represents a first and important step in the start of the economic regulation of waste management. In the second consultation, which involved a large number of different types of stakeholders, a "zero landfill" goal was discussed and a new perspective was taken, which envisages economic instruments that would encourage

mechanical-biological treatment and energy recovery. However, this would require a strong commitment to improve the current infrastructural deficit and

implement the best industrial experiences in waste management.



Key stakeholders

Academics working in this field (universities, thinktanks research institutes, independent researchers)

CNR - Consiglio Nazionale delle Ricerche - https://www.cnr.it/- National Research Council disseminates and promotes research activities and ideas about water saving, proposing solutions for the sustainable management of urban water. It supports ARERA in the definition of waste and water tariffs)

IEFE - Istituto di Economia e Politica dell'Energia e dell'Ambiente - http://www.clusterspring.it/luoghi/iefe-istituto-di-economia-e-politica-dellenergia-e-dellambiente-universita-commerciale-luigi-bocconi/ - Centre for Research on Energy and Environmental Economics and Policy - Bocconi University coordinates and conducts research on environmental economics, with a focus on environmental policies, environmental management and sustainability focused on energy, water and waste. They advise private companies and public agencies on those issues.

Laboratorio REF Ricerche - https://www.refricerche.it/ - REF Research Laboratory is a think tank which follows the processes of liberalization and regulation of the water and waste management service in Italy, in terms of managerial balances, investments and tariffs, supporting both the regulators in their analyses and the managers in the correct application of the provisions concerning tariff adjustments. They contribute to provide clear and effective information to promote market transparency, prevent anomalies in the price formation process and exercise profitable action aimed at containing tariff dynamics.

IFEL - Istituto per la Finanza e l'Economia Locale - https://www.fondazioneifel.it/ - Institute for Finance and Local Economy is a body appointed to assist Municipalities in matters of finance and local economy. It is a reference structure for the systematic collection, processing and dissemination of data relating to taxes on water and waste.

NGOs (environmental, consumer, green business networks, citizen science groups, etc.)

Legambiente - https://www.legambiente.it/ is an environmental association that contributed to the modification of the new water tariff underlining the

need to discourage large consumption and provide for the implementation of full cost recovery.

ANEA - Associazione Nazionale degli Enti di Governo d'Ambito per l'Idrico e i Rifiuti - http://www.associazioneanea.it/anea/ - National Association of Local Government Bodies for Water and Waste assists and coordinates the activities of the Local Bodies concerning the organization, planning and control of the integrated water service, as well as the protection of consumers - users; the Association supports its associates in carrying out specific operations related to the revision of the Tariff Area Plan and the elaboration of the Economic and Financial Plan.

Cittadinanzattiva - https://www.cittadinanzattiva.
it/ - Active citizenship - Prices and tariffs Observatory is a non-profit consumer organization promoting civic participation and the protection of citizens' rights. It has set up an observatory of water and waste prices and tariffs that allows citizens to have an overall picture of the state of the integrated water service and the integrated waste management system and the related tariff aspects.

IAERE - Associazione Italiana **Economisti** Ambientali e delle Risorse - https://www.iaere.org/ -The Italian Association of Environmental and resource Economists is a scientific association which contributes to the development and application of environmental economics as a science in Italy and supports the discussion around the promotion of a green tax reform. Concerning water tariff, they underlined the need to i) differentiate the pricing of household water consumption, based on the real consumption and ii) increase fees for the water extraction for industrial use and energy production based on the externalities generated. Concerning landfill tax, they contribute to the debate about the need to increase it to incentive separate collection and recycling.

Fise Assoambiente - https://www.fpcgil.it/contratti/pcont/contratti-nazionali/igiene-ambientale/fise-assoambiente/ - Association of urban sanitation, recycling, recovery and disposal of urban and special waste and remediation activities. It contributes to the debate on waste charges underlining the need to rethink environmental taxation, penalising landfilling by revising upward the eco-tax on landfilling or sending abroad).

Useful links:

Newspaper articles

Italian-style eco-tax: little "eco", a lot of "taxes" and in the end the landfill wins

https://www.greenreport.it/news/economia-ecologica/ecotasse-allitaliana-poco-eco-molto-tasse-e-alla-fine-vince-la-discarica/

When environmental taxation does not protect the environment.

https://www.lavoce.info/archives/70574/quando-la-tassazione-ambientale-non-tutela-lambiente/

Water: in Italy 42% of the water introduced into the network is lost

https://www.regionieambiente.it/acqua-in-italia-siperde-il-42-di-quella-immessa-nella-rete/ Italian water among the cheapest in Europe

https://www.ilsole24ore.com/art/l-acqua-italiana-le-meno-care-d-europa-ACPNwHD?refresh_ce=1

Water tariffs, enormous differences in costs and quality of service in Italy

https://www.helpconsumatori.it/secondo-piano/tariffedellacqua-in-italia-enormi-differenze-su-costi-equalita-del-servizio/

News videos, campaign videos

Webinars on environmental tax reforms for Italy:

FEEM - Fondazione Eni Enrico Mattei - https://www.feem.it/it/

https://www.youtube.com/user/FEEMchannel/videos



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¹ https://ec.europa.eu/eurostat/databrowser/view/env_ac_tax/default/table?lang=en

² Elaboration on <u>ISTAT</u> data 1996-2018

³ 713/2018/R/rif; 351/2019/R/rif; 352/2019/R/rif