



8 October 2024

Environmentally related taxes and fees
2023

ENVIRONMENTALLY RELATED TAXES REACHED 5.4 BILLION EURO IN 2023

In 2023, the value of environmentally related taxes was approximately 5.4 billion euro, representing 5.6% of revenue from taxes and social contributions (5.3% in 2022). That value corresponds to an increase of 15.7% compared to 2022, whereas total revenue from taxes and social contributions increased by 8.9%.

According to information available for 2022, in Portugal, the share of environmentally related taxes in total revenue from taxes and social contributions was higher (5.3%) than the EU27 average (5.0%).

Statistics Portugal publishes data for environmentally related taxes and fees for the year 2023. “Environmentally related tax” means a tax whose tax base is a physical unit (or a proxy of a physical unit) of something that has a proven negative impact on the environment, and which is identified in ESA 2010 as a tax.

This information is consistent with the Portuguese National Accounts (Base 2021) and is transmitted annually to Eurostat under the Regulation (EU) No 691/2011 of the European Parliament and of the Council, of 6 July 2011, on European environmental economic accounts.

International comparability is presented at the European level for 2022, the latest year for which this information is available.

This press release is organized into two distinct parts: environmentally related taxes and environmentally related fees.

Environmentally related taxes

In 2023, the value of these taxes was approximately 5.4 billion euro, registering an increase of 15.7% comparing to 2022, reflecting the growth of revenue from tax on oil and energy products (ISP), as a result of the increase in fuel consumption and the reversal of the policy to mitigate the increase in fuel prices.

According to data on fuel sales from the General Directorate of Energy and Geology (DGEG), diesel consumption returned to pre-pandemic values and gasoline consumption reached values that had not been recorded since 2011.

Another contribution for the growth in ISP collection was the start of the gradual increase of the carbon tax on fuels, which began in May 2023, after being frozen for some years.



Since the growth of total revenue from Environmentally related taxes (+15.7%) was higher than that of total revenue from taxes and social contributions (+8.9%), the share of this kind of taxes increased slightly in the Portuguese tax system (5.6%, which compares to 5.3% in 2022).

Between 2022 and 2023, tax on oil and energy products maintained its share (60.2%) in total revenue from environmentally related taxes, although its revenue increased. This is explained by higher revenues from carbon trading rights, which increased the share of other energy taxes to 13.6% (12% in 2022 and 5.9% in 2021).

Revenue from carbon trading rights was, in 2023, the third most important revenue from all environmentally related taxes (673.2 million euro).

Within the category of taxes on transports, the share of tax on motor vehicle sales fell from 9.8% to 8.9% and the same happened to the unified circulation tax (from 16.3% to 15.4%, in 2022).

The revenue from taxes related to the acquisition and use of motor vehicles (tax on oil and energy products, tax on motor vehicle sales and the unified circulation tax) represented, in 2023, around 84.5% of all environmentally related taxes, a figure inferior to the previous year (86.2%).

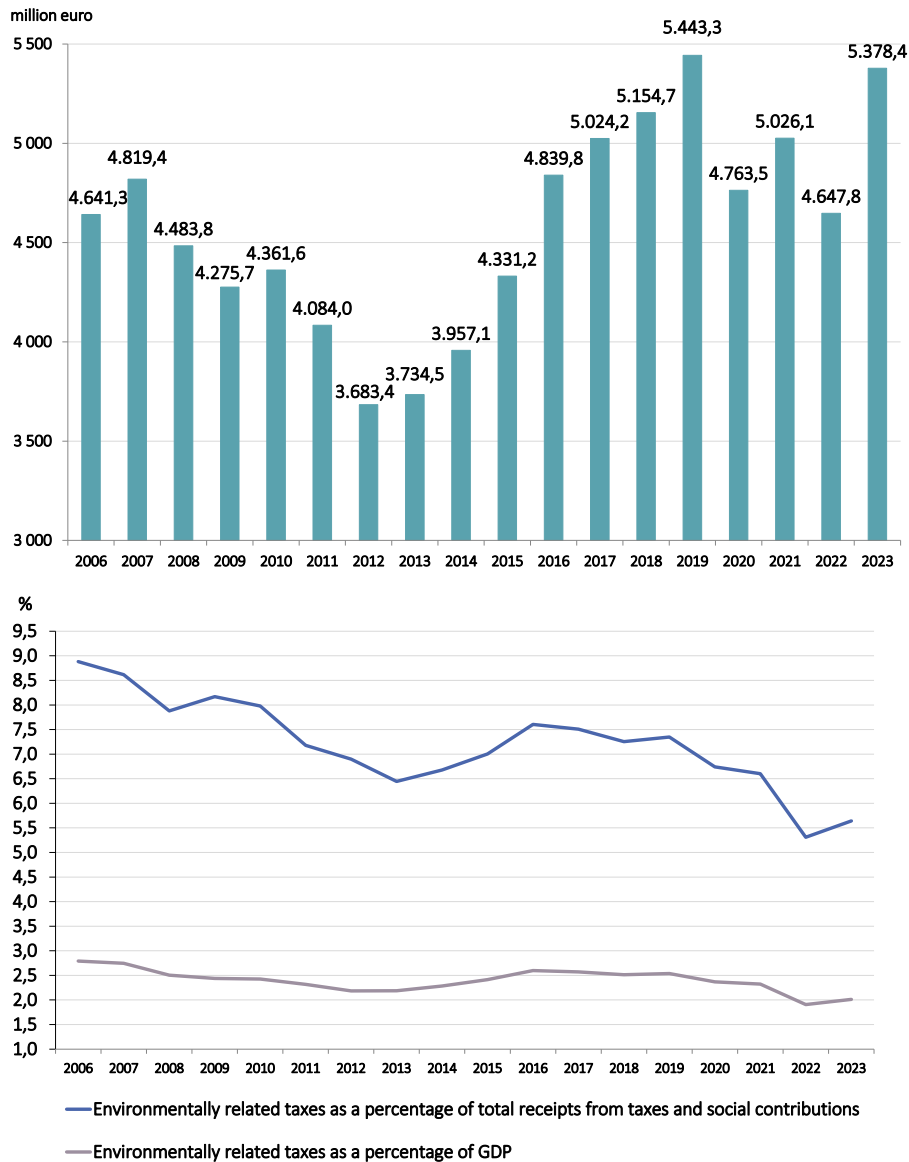
It is also worth mentioning the new carbon tax on air and sea travel, which reached an amount of 56 million euro in 2023, benefiting from the recovery of tourism after the restrictive years of the pandemic and for the value of the Excise duties on single-use packages which recorded, in its first full year of collection, 3.3 million euro.

By categories, in 2023, energy taxes accounted for 73.8% of total environmentally related taxes. Transport taxes had a relative weight of 24.3%. The remaining categories – Pollution taxes and Resource taxes – were insignificant in the structure of environmentally related taxes (1.5% and 0.4%, respectively).

A final note to the fact that, despite the slight recovery in 2023, environmentally related taxes share in GDP (2.0%) was the second lowest since 1995.



Figure 1. Total environmentally related taxes



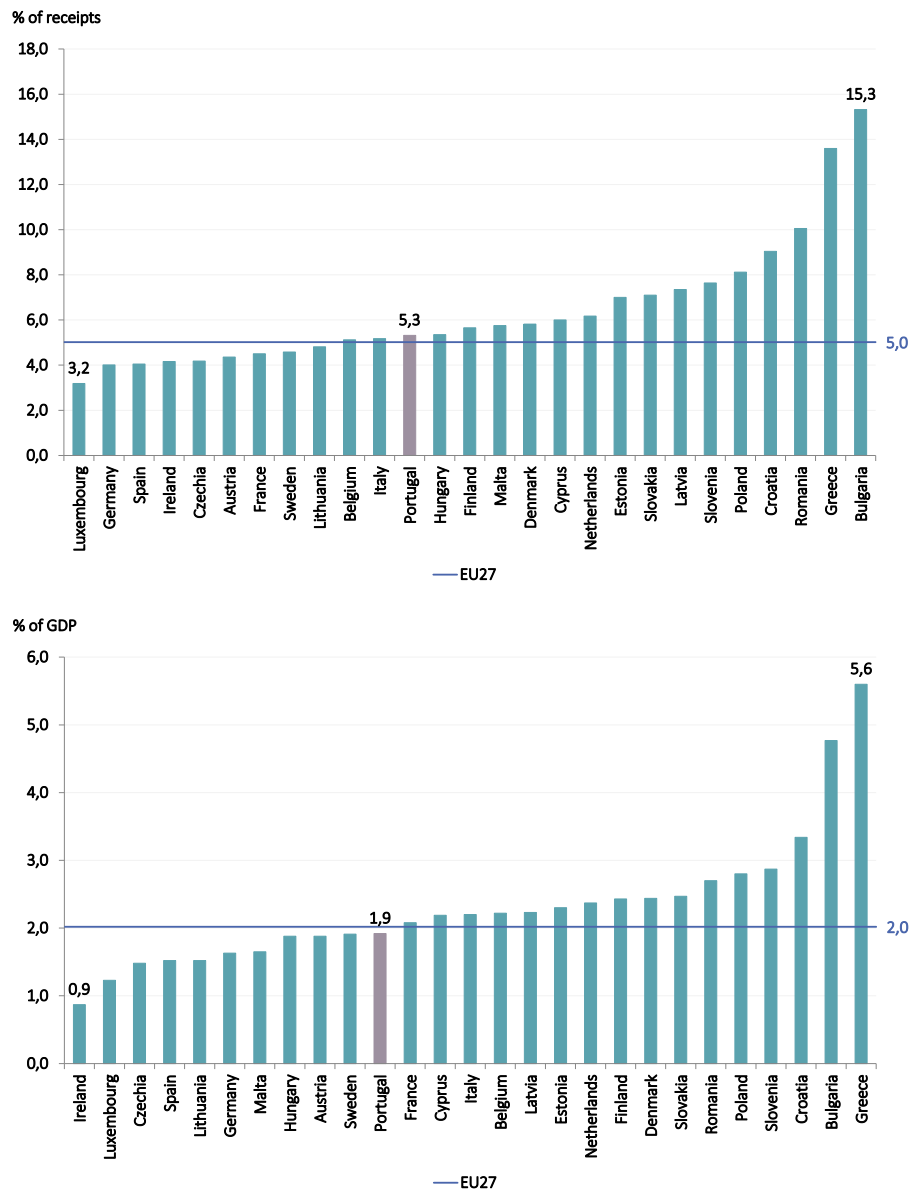
Source: Statistics Portugal, Tax Revenue Statistics

Comparing with other European Union countries, in 2022, “Environmentally related taxes as a percentage of total revenue from taxes and social contributions”, in Portugal, registered a value of 5.3%, which is higher than the EU27 average of 5.0%.

Regarding “Environmentally related taxes as a percentage of GDP”, Portugal registered a value of 1.9%, which was lower than the EU27 average (2.0%).



Figure 2. Environmentally related taxes as a percentage of total receipts from taxes and social contributions and as a percentage of GDP, in European Union countries, in 2022

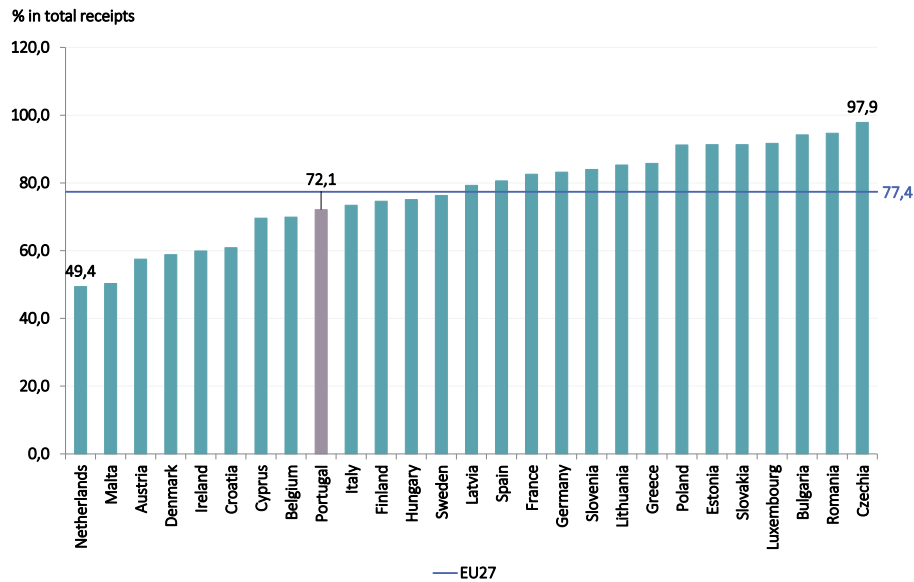


Source: Statistics Portugal, Tax Revenue Statistics; Eurostat

Like Portugal, most EU countries have a higher relative weight of energy taxes in total environmentally related taxes. In 2022, that weight (72.1%) was lower than the EU27 average (77.4%).



Figure 3. Energy taxes as a percentage of total environmentally related taxes, in European Union countries, in 2022



Source: Statistics Portugal, Tax Revenue Statistics; Eurostat

Environmentally related fees

In 2022, the most recent year for which this information is available, environmentally related fees amounted to 1.83 billion euro (0.7% of GDP), representing an increase of 7.3% compared to 2021, mainly explained by higher revenues from fees for solid waste collection, treatment and disposal (12.3%), from fees for wastewater collection, treatment and management (7.1%) and from waste management fee (28.2%).

The fees from the system of recycling and disposal of packages (glass, cardboard, plastic, metal and wood) fell 41.8%, due the steep reduction of its unit value. An extraordinary appreciation in the market for reclaimed materials, especially plastic and paper and cardboard, allowed lower unit values per kg of each type of non-reusable packaging material introduced in the market.

Fees for solid waste collection, treatment and disposal and for wastewater collection, treatment and management still account for 88.4% of total revenue collected from environmentally related fees.



Table 1. Environmentally related fees, between 2013 and 2022

FEE DESCRIPTION	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
	unit: 10 ⁶ euro									
Pollution fees	1 260,771	1 294,014	1 391,553	1 361,392	1 421,854	1 487,288	1 545,384	1 633,813	1 675,377	1 794,484
Fees for solid waste collection, treatment and disposal	532,459	547,364	613,201	585,907	587,275	613,116	640,852	666,047	687,588	772,340
Fees for wastewater collection, treatment and management	629,160	642,470	676,765	665,292	700,688	735,269	754,812	796,022	786,806	842,881
Fee for the recycling and disposal of packages (glass, cardboard, plastic, metal and wood)	50,528	55,366	50,386	54,694	70,992	69,261	70,850	84,556	92,236	53,660
Fee for the recycling and disposal of pharmaceutical and plant protection products	1,984	2,043	2,118	2,224	1,975	2,159	2,119	2,213	2,260	2,219
Fee for the recycling and disposal of used lubricating oils	3,997	4,202	3,502	3,357	5,652	5,636	4,845	5,780	6,539	3,338
Fee for the recycling and disposal of tyres	9,994	11,266	11,760	12,654	12,564	11,209	11,655	10,016	11,131	11,407
Fee for the recycling and disposal of old motor vehicles	0,417	0,436	0,425	0,399	0,396	0,559	0,572	0,632	0,735	0,879
Fee for the recycling and disposal of electrical and electronic equipments	10,285	9,378	8,744	7,968	8,033	8,386	12,245	13,087	13,315	14,193
Fee for the recycling and disposal of batteries and accumulators	1,579	1,548	1,472	1,393	1,522	1,617	1,778	1,863	2,502	2,837
Waste management fee	15,889	15,966	19,124	24,101	29,013	35,532	41,187	49,820	67,163	86,070
Fee for collection of corpses of dead animals on the farm	4,479	3,975	4,056	3,403	3,744	4,544	4,469	3,777	5,102	4,660
Resource fees	18,195	23,177	16,502	15,785	18,104	19,788	24,500	22,572	27,976	33,576
Fee for the use of water resources	18,195	23,177	16,502	15,785	18,104	19,788	24,500	22,572	27,976	33,576
Fee for boiling springs management	//	//	//	//	//	//	//	//	//	//
Total environmental related fees	1 278,966	1 317,191	1 408,055	1 377,177	1 439,958	1 507,076	1 569,884	1 656,385	1 703,353	1 828,060

Source: Statistics Portugal, Tax Revenue Statistics and National Accounts



METHODOLOGICAL NOTES

Taxes consist of compulsory, unrequited payments, which are levied by general government. The term “unrequited” means in this context that government provides nothing directly in return to the individual unit making the payment, although they might use the funds to provide goods and services to other units or to the community as a whole.

ENVIRONMENTALLY RELATED TAXES

Environmentally related tax statistics record data on revenues raised by governments from taxation on products and services with a negative impact on the environment. Thus, all taxes levied on these tax bases are environmentally related taxes (this definition is in agreement with Eurostat’s publication – [Environmental taxes – A statistical guide](#), from 2024).

The value added tax (VAT) is excluded from the definition of environmentally related tax. This is mainly because VAT is a neutral tax (with few exceptions) since it is deductible for industries but not for households. Therefore, it does not influence relative prices in the same way as an environmentally related tax does.

Alcohol, tobacco and similar consumption taxes should also not be included in environmental tax statistics, since they are not considered to be specifically negative for the environment.

The source of information is table 9 of the national accounts (ESA 2010) transmission programme – Regulation (EC) n. 5492/2013 of the European Parliament and of the Council, of 21 May 2013, which details tax and social contribution receipts by type of tax and social contribution and receiving sub-sector.

According to ESA 2010, there are three main categories of taxes:

- Taxes on production and imports (D.2);
- Current taxes on income, wealth, etc. (D.5);
- Capital taxes (D.91).

For analytical purposes, the environmentally related taxes can be classified into four main categories:

- Energy taxes – this group includes taxes on energy products (petrol, diesel, fuel oil, natural gas, coal and electricity), as well the proceeds from emission permits recorded as taxes in the national accounts.
- Transport taxes – this group mainly includes taxes related to the ownership and use of motor vehicles. Taxes on other transport equipment – planes or ships – are also included here, when they conform to the general definition of environmentally related taxes. The transport taxes may be a single tax related to imports or sales of the equipment or recurrent taxes such as an annual road tax.
- Pollution taxes – this group includes taxes on measured or estimated emissions to air and water, management of solid waste and noise.



- Resource taxes – this group includes taxes linked to the extraction or to the use of natural resources, such as oil and gas, water, forests, wild flora and fauna, etc., as these activities deplete natural resources.

ENVIRONMENTALLY RELATED FEES

The difference between a tax and a fee is on the way General Government uses the receipts. If the amounts collected are used to issue licences to organise some proper regulatory function (such as checking the competence or qualifications of the entity concerned or the promotion of management systems in areas that have a tendency to generate negative externalities), these payments should be treated as purchases of services from government (P.11 – Market output, in ESA 2010) rather than payment of taxes, unless the payments are clearly out of all proportion to the cost of providing the services. Some examples are garbage disposal fees or wastewater collection, treatment and management fees.

Generally, the value of the fees is determined by the revenue charged by the entity that is legally responsible for the assessment and collection of the fee. However, given the complexity of waste and wastewater management activities, the amount of revenue collected from fees for solid waste collection, treatment and disposal and from fees for wastewater collection, treatment and management is indirectly obtained from National Accounts' data for entities belonging to subsectors "S11001 - Public non-financial corporations" and "S13 - General government". It should be noticed that several integrated waste management systems operating in the country are managed by entities that do not belong to the General Government sector. However, these entities are licensed by the Portuguese Environmental Agency, where they were given a mandate to assume a role that should be the responsibility of the Government. Thus, the revenues collected for the management of each system by those entities are considered to be an environmentally related fee.

Regarding the fees for solid waste collection, treatment and disposal and for wastewater collection, treatment and management collected by entities outside general government sector, those were now included in the current exercise which determined changes in the whole series for environmentally related fees.

In the specific case of fees for solid waste collection, treatment and disposal, these are determined taking into account the revenue of CPA product 38 (Waste collection, treatment and disposal services; materials recovery services) obtained by entities classified in NACE 36 (Water collection, treatment and supply), in NACE 37-38-39 (Sewerage; Waste collection, treatment and disposal activities; materials recovery; Remediation activities and other waste management services) and in NACE 841 (Administration of the State and the economic and social policy of the community).

Regarding the fees for wastewater collection, treatment and management, these are determined considering the revenue of CPA product 37 (Sewerage services; sewage sludge) obtained by entities classified in NACE 36 (Water collection, treatment and supply), in NACE 37-38-39 (Sewerage; Waste collection, treatment and disposal activities; materials recovery; Remediation activities and other waste management services) and in NACE 841 (Administration of the State and the economic and social policy of the community).



NATIONAL ACCOUNTS BENCHMARK REVISION

Statistics Portugal published the new series of Portuguese National Accounts, with 2021 as benchmark year. The regular five-yearly update of the National Accounts reference year is recommended by Eurostat and is common practice in European Union countries, allowing for the incorporation of new structural information and the introduction of improvements in the methods used (including new recommendations arising from methodological discussions at European Statistical System level).

Since Environmentally related tax and fees statistics is a satellite account of National Accounts, some data were also reviewed, namely:

- Reclassification of the Fee for the obligatory establishment and maintenance of reserves of petroleum products, charged by ENSE – Entidade Nacional para o Sector Energético, E.P.E, from other taxes on production (D.29) to taxes on products (D.21). With this reclassification, the data was methodologically aligned with what other European countries are already doing and had no impact on the total value of the tax or the main indicators of this project;
- Change in the tax compilation associated with carbon trading rights. The implementation of the new manual for compiling General Government Deficit and Debt implied a new method for calculating the tax associated with carbon trading rights: the value of the tax corresponds now to the revenue obtained from the sales of rights in the previous year. This change had already been implemented for years after 2021, and now, with the benchmark revision, previous years values were also changed.

The impact of the changes is shown in the following table:

DESIGNATION	unit: 10 ⁶ euro								
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Benchmark year 2016's values	5,036	33,832	47,853	79,674	79,086	103,088	217,726	240,424	222,757
Benchmark year 2021's values		10,652	72,782	67,095	99,210	75,088	100,351	265,608	257,113
Impact on the value of total environmental related taxes	- 5,036	- 23,180	24,929	- 12,579	20,124	- 28,000	- 117,375	25,184	34,356
Impact on the indicator "Environmentally related taxes as a percentage of total receipts from taxes and social contributions"	0,0	0,0	0,0	0,0	0,0	0,0	-0,2	0,0	0,0

Regarding environmentally related fees, there were no methodological changes in the data released under the previous benchmark revision.



INSTITUTO NACIONAL DE ESTATÍSTICA
STATISTICS PORTUGAL

press release

DIISTAQUE

ACRONYMS AND DESIGNATIONS

CO₂ – Carbon Dioxide

CPA – Statistical classification of products by activity

ESA2010 – European system of accounts - 2010

EU – European Union

EU27 – All the 27 countries (Member states) that belong to the European Union, since 31 January 2020

GDP – Gross Domestic Product

NACE – Statistical classification of economic activities in the European Community