

Environmentally related taxes and fees

2018

Environmentally related taxes represented 7.4% of total revenue from taxes and social contributions, in 2018

In 2018, the value of environmentally related taxes was approximately 5.3 billion euro, representing 7.4% of total revenue from taxes and social contributions (7.6% in 2017). That value corresponds to an increase of 4.3% compared to 2017, lower than the increase observed for total revenue from taxes and social contributions (+6.4%).

According to information available for 2017, in Portugal, the share of environmentally related taxes in total revenue from taxes and social contributions was higher (7.6%) than the EU28 average (6.1%).

Statistics Portugal publishes data for environmentally related taxes and fees for the year of 2018. "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, consistent with the Portuguese National Accounts (Base 2016), 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.

With the implementation of the new benchmark year of the Portuguese National Accounts, there were some changes in total revenue of environmentally related taxes and fees. These changes had small influence in total receipts of environmentally related taxes (average revision of +0.1%), as in total receipts of environmentally related fees (average revision of -0.2%). At the end of this press release, in the methodological notes, a small section was introduced which depicts the main changes and their impact.

International comparability is presented at the European level for 2017, 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

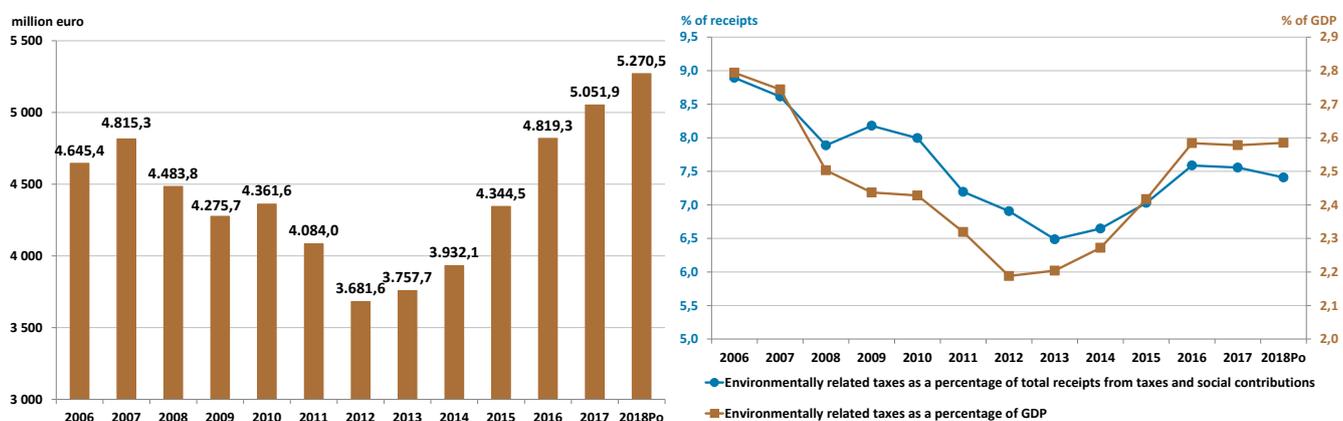
In 2018, the value of these taxes was approximately 5.3 billion euro, registering an increase of 4.3% comparing to 2017, which was lower than the increase observed for total revenue from taxes and social contributions (+6.4%).

Between 2017 and 2018, tax on oil and energy products lost share in total revenue from environmentally related taxes (from 69.2% to 67.3%). In opposite direction, unified circulation tax and other energy taxes have now a higher share (12.3% and 4.8%, respectively).

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 2018, around 90% of all environmentally related taxes. This share was 92% in 2017 and this downward behaviour is explained by the rise of receipts from carbon trading rights, which gained share in total receipts.

By categories, in 2018, energy taxes accounted for 72.1% of total environmentally related taxes. Transport taxes had a relative weight of 27.2%. The remaining categories – Resource taxes and Pollution taxes – were insignificant in the structure of environmentally related taxes (0.4% and 0.3%, respectively).

Figure 1 - Total environmentally related taxes

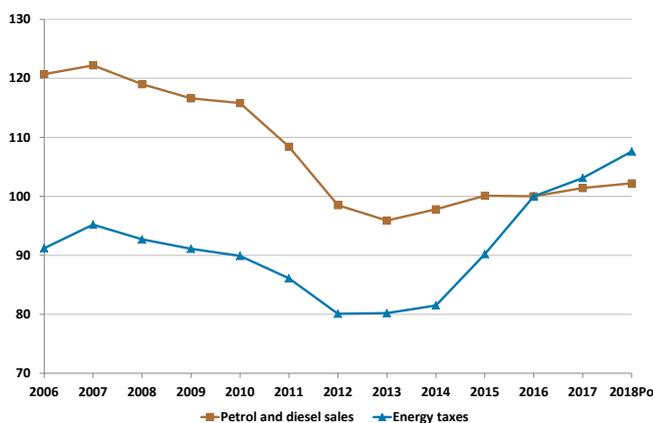


Since environmentally related taxes are essentially comprised by three taxes - tax on oil and energy products, tax on motor vehicle sales and unified circulation tax, it is relevant to analyse the performance of those taxes, given the behaviour of the respective tax base.

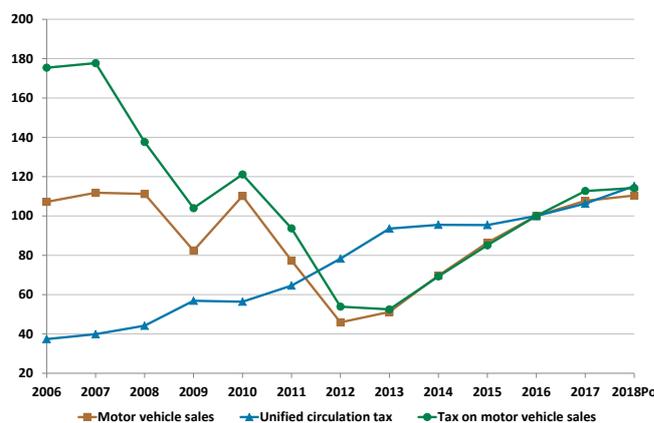
The evolution of energy taxes was, in general, similar to petrol and diesel sales, in volume terms, until 2014. From 2015 onwards, there was a deviation (figure 2, left) explained by a significant rise in tax rates, as well as the introduction of a new tax component related to CO₂ emissions.

Regarding transport taxes, motor vehicle sales and tax on motor vehicle sales show a similar behaviour. On the opposite side, the unified circulation tax, which focuses on the existing stock of vehicles, presents a growth for the total series. This behaviour is mainly explained by the car taxation reform, which entered into force in 2007, and increased taxation over the vehicle's lifetime.

Figure 2 – Evolution of fuel and motor vehicles sales and their respective taxes



Source of data on petrol and diesel sales: Directorate-General of Energy and Geology



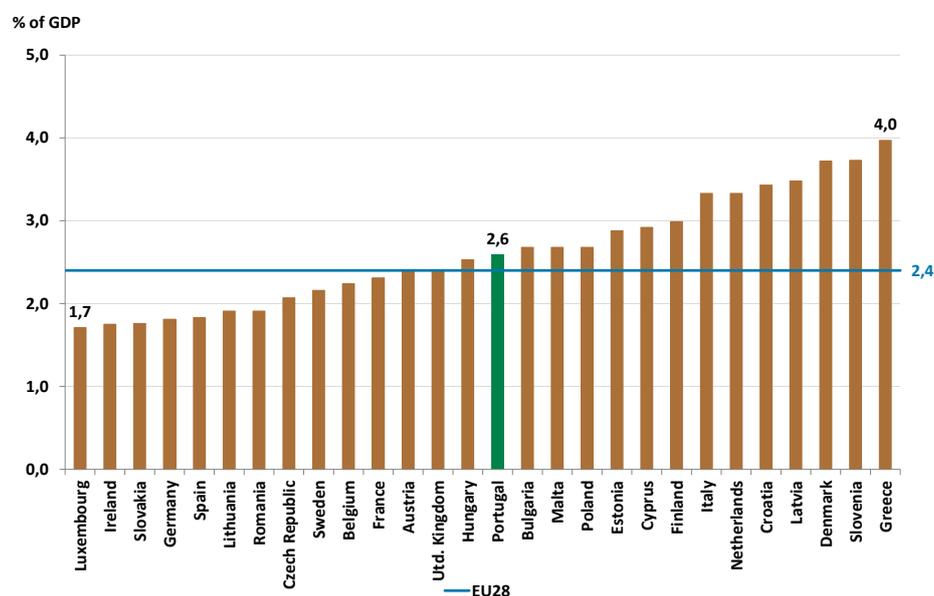
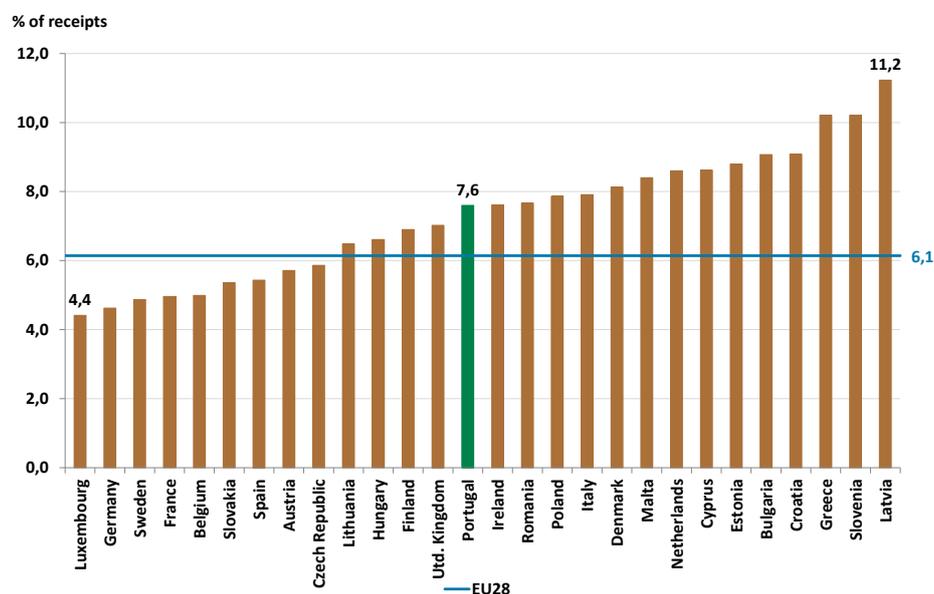
Source of data on motor vehicle sales: ACAP – Portuguese Vehicle Sales Association

Comparing with other European Union countries, in 2017, “Environmentally related taxes as a percentage of total revenue from taxes and social contributions”, in Portugal, registered a value of 7.6%, which is higher than the EU28 average of 6.1%¹.

Regarding “Environmentally related taxes as a percentage of GDP”, Portugal registered a value of 2.6%, which was also higher than the EU28 average (2.4%).

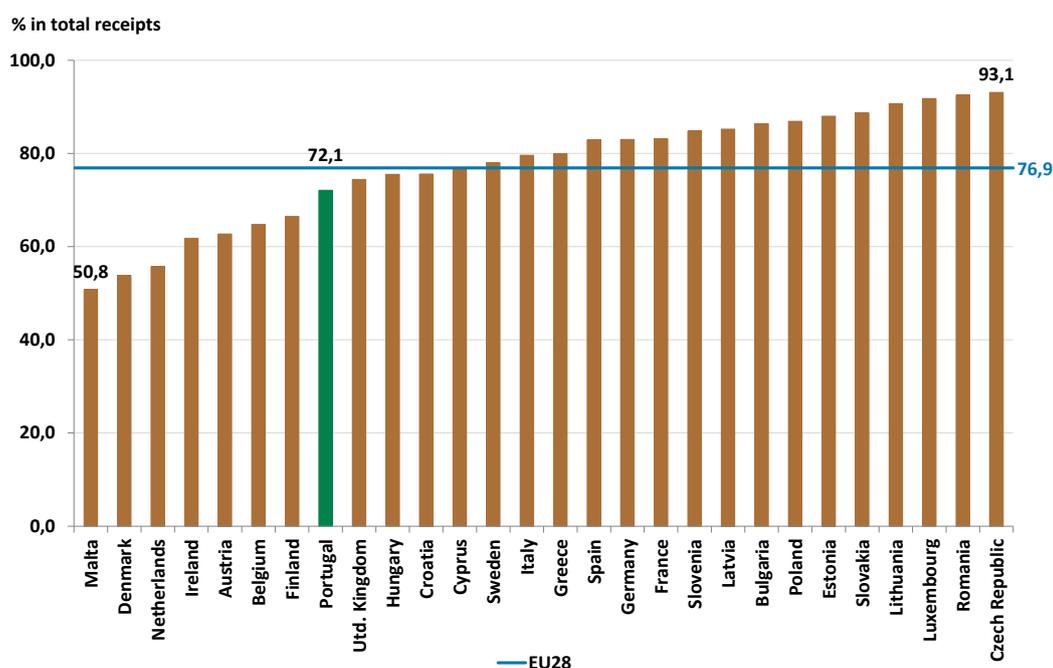
¹ Currently, data regarding some EU countries could be referenced to the previous National Accounts base. As a reminder, in 2019, about 20 countries will implement (or have already done it) a new benchmark year for National Accounts. For this reason, it's possible that the relative position of some of these countries could change. For Portugal, in 2017, between base 2011 and base 2016, environmentally related taxes as a percentage of total revenue from taxes and social contributions went up slightly (from 7.5% to 7.6%). Regarding the other indicator (as a percentage of GDP) there was no changes between the bases. Also to mention that 2017 data was provisional in base 2011 and, for base 2016, data is final.

Figure 3 - 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 2017



Like Portugal, most EU countries have a higher relative weight of energy taxes in total environmentally related taxes. However, in 2017, that weight (72.1%) has been lower than the EU28 average (76.9%).

Figure 4 - Energy taxes as a percentage of total environmentally related taxes, in European Union countries, in 2017



Environmentally related fees

In 2017, the last year for which this information is available, environmentally related fees amounted to 1.484 billion euro (0.8% of GDP) an increase of 4.7%, compared to 2016, mainly explained by higher revenues from fees for solid waste collection, treatment and disposal (+5.3%), from waste management fee (+130.5%) and from fees for the recycling and disposal of packages (glass, cardboard, plastic, metal and wood) (+29.8%).

The increase of fees for the recycling and disposal of packages is explained by a new entity that participates into the system, increasing overall revenue.

Although revenues from integrated waste management systems based on an ECOVALUE rate increased 22.3%, fees for solid waste collection, treatment and disposal and for wastewater collection, treatment and management accounted for more than 90% of total revenue collected from environmentally related fees.

Table 1 - Environmentally related fees, between 2006 and 2017

FEE DESCRIPTION	unit: million euro											
	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Pollution fees	912,951	1 072,462	1 150,342	1 136,050	1 249,517	1 272,823	1 247,892	1 260,771	1 294,014	1 391,553	1 402,048	1 466,022
Fees for solid waste collection, treatment and disposal	442,521	517,442	563,861	521,122	567,548	556,711	542,629	532,459	547,364	613,201	640,206	636,355
Fees for wastewater collection, treatment and management	396,386	454,361	480,658	504,098	549,427	589,667	600,366	629,160	642,470	676,765	665,292	700,688
Fee for the recycling and disposal of packages (glass, cardboard, plastic, metal and wood)	41,995	53,610	54,274	56,251	71,752	67,562	55,477	50,528	55,366	50,386	54,694	70,992
Fee for the recycling and disposal of pharmaceutical and plant protection products	1,825	1,857	1,935	1,852	2,035	2,165	2,054	1,984	2,043	2,118	2,224	1,975
Fee for the recycling and disposal of used lubricating oils	5,588	5,679	5,632	4,996	5,156	4,666	3,878	3,997	4,202	3,502	3,357	5,652
Fee for the recycling and disposal of tyres	8,673	9,123	10,540	9,965	10,369	9,081	8,235	9,994	11,266	11,760	12,654	12,564
Fee for the recycling and disposal of old motor vehicles	0,250	0,246	0,245	0,248	0,274	0,579	0,416	0,417	0,436	0,425	0,399	0,396
Fee for the recycling and disposal of electrical and electronic equipments	10,930	22,458	22,517	21,126	22,555	17,966	11,521	10,285	9,378	8,744	7,968	8,033
Fee for the recycling and disposal of batteries and accumulators	2,464	2,459	1,413	1,591	2,020	1,682	1,569	1,579	1,548	1,472	1,393	1,522
Waste management fee	//	3,055	6,593	11,941	15,732	18,131	17,301	15,889	15,966	19,124	10,458	24,101
Fee for collection of corpses of dead animals on the farm	2,319	2,172	2,674	2,860	2,649	4,613	4,446	4,479	3,975	4,056	3,403	3,744
Resource fees	0,093	//	//	8,060	16,167	8,269	22,289	18,195	23,177	16,502	15,785	18,104
Fee for the use of water resources	//	//	//	8,060	16,167	8,269	22,289	18,195	23,177	16,502	15,785	18,104
Fee for boiling springs management	0,093	//	//	//	//	//	//	//	//	//	//	//
Total environmental related fees	913,044	1 072,462	1 150,342	1 144,110	1 265,684	1 281,092	1 270,181	1 278,966	1 317,191	1 408,055	1 417,833	1 484,126

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 2013).

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).

Changes introduced by the new benchmark base of National Accounts

With the new benchmark base of National Accounts, two new environmentally related taxes were introduced – the fee on non-reusable beverage packaging, collected by the Regional Government of Azores and the fee of the management system of intensive energy consumptions, collected by the Portuguese Energy Agency. Values for carbon trading rights and for hunting and fishery licenses were also updated due to better detail from sources of information.

These changes had small influence in total receipts of environmentally related taxes (average revision of +0.1%, with the exception for years 2008 and 2012 where the revision was +1%).

Regarding the fees for solid waste collection, treatment and disposal and the fees for wastewater collection, treatment and management, which are obtained within the compilation of the final and detailed data from the National Accounts, the new base implied a small downward revision of the series. Bigger revisions occurred in 2015 and 2016 due to the use of updated and detailed data regarding municipalities' revenues.

DESCRIPTION	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total environmental related taxes (million euro)											
Base 2011	4.638,0	4.814,4	4.436,3	4.276,2	4.355,0	4.078,2	3.637,6	3.761,4	3.933,9	4.341,6	4.811,4
Base 2016	4.645,4	4.815,3	4.483,8	4.275,7	4.361,6	4.084,0	3.681,6	3.757,7	3.932,1	4.344,5	4.819,3
Change (%)	0,2	0,0	1,1	0,0	0,2	0,1	1,2	-0,1	0,0	0,1	0,2
Total environmental related fees (million euro)											
Base 2011	913,0	1.072,5	1.150,3	1.144,1	1.272,3	1.288,0	1.280,4	1.288,5	1.317,2	1.387,7	1.437,6
Base 2016	885,5	1.040,6	1.116,1	1.110,3	1.228,8	1.243,0	1.232,1	1.240,1	1.277,4	1.345,4	1.393,5
Change (%)	-3,0	-3,0	-3,0	-3,0	-3,4	-3,5	-3,8	-3,8	-3,0	-3,0	-3,1