

ENSURING THAT POLLUTERS PAY

Portugal



Portugal's revenue from environmentally relevant taxes remains close to the EU average. Environmental taxes stood at 2.54% of GDP in 2019 (EU-27 average: 2.37 %). The largest portion of the environmental taxes were the energy taxes at 1.84% of GDP, against an EU average of 1.84 %. Transport taxes represented 0.67% of GDP (EU average being 0.45%), taxes on pollution and resources represented 0.03%. In the same year, the environmental tax came to 6.89% of total revenues from taxes and social security contributions (well above the EU average of 5.76 %). (Eurostat, 2019)

Further options

Intensive agriculture tax on livestock

Reports to the European Commission on implementation of the nature directives show a high proportion of habitats reported as being in unsatisfactory condition are under grazing pressure. Portugal could consider introducing taxation of intensive agriculture (livestock). A nil rate would apply for stocking density below 1 livestock unit (LSU)/ha, and a flat rate of € 70 per LSU for each LSU in excess of the number of hectares grazing available. Modelling suggests that this could raise a revenue of €16.1 million, which could be recycled to support very extensive grazing needed on Natura 2000 areas. The results from the modelling suggest that the intensive agriculture tax, without revenue recycling, would not have a significant macroeconomic impact. However, when the revenues are reinvested into the agriculture sector or recycled as income tax reductions, the measure could lead to an increase of GDP of 0.05%.

Water consumption charge

Water scarcity issues are prevalent in central and southern regions of Portugal, and these regions are projected to encounter increased water resource issues in the future. In particular regions, water stress is severe and the use of resources are unsustainable.

Water resource fees throughout Portugal exist (Taxa de Recursos Hídricos – TRH), covering a range of components including environmental costs associated with abstraction. Analysis suggests that the scale of the fee for use in the public water supply is 60 times that incurred for agriculture, which if so would impact the effectiveness of the instrument. Portugal could consider expanding the existing charging structure to better reflect the environmental externalities of water extraction.

Impacts of an expanded water consumption charge on GDP and employment would be slightly negative, unless the revenues are recycled through income tax.

TAX ON LIGHTWEIGHT PLASTIC BAGS

This tax is applied to all establishments that supply lightweight plastic bags, i.e., with a thickness equal or less than 50 micrometres (μm), to the final purchaser in the point of sale of goods or products. The value of the contribution on lightweight plastic bags is 0.08 EUR/bag, plus current VAT (23%), i.e., 0.02 EUR/bag (total: 0.10 EUR/bag). The payment of the contribution to the State is made by producers and importers of lightweight plastic bags with headquarters or permanent establishment in the mainland Portugal, as well as the buyers of lightweight plastic bags from suppliers with headquarters or establishment in another Member State of the EU or in Portugal's Autonomous Regions (Madeira and Azores). The value of the contribution is passed on, through the various economic actors intervening in the commercial chain, as a price, until the final purchaser¹.

consumed per capita in Portugal. This level was significantly lower than the targets established in the EU Directive 2015/720 for 2019 (90 bags per capita) and 2025 (40 bags per capita).

With the taxation of lightweight plastic bags, retail industry (particularly supermarkets) started to apply a price equivalent to the value of the tax for bags thicker than 50 μm . Data from 2014 to 2017 shows a rise in the number of these plastic bags as well as of garbage bags. Nevertheless, this increase was lower than the reduction in lightweight plastic bags, either in number or weight.³

How it came about and stakeholder involvement

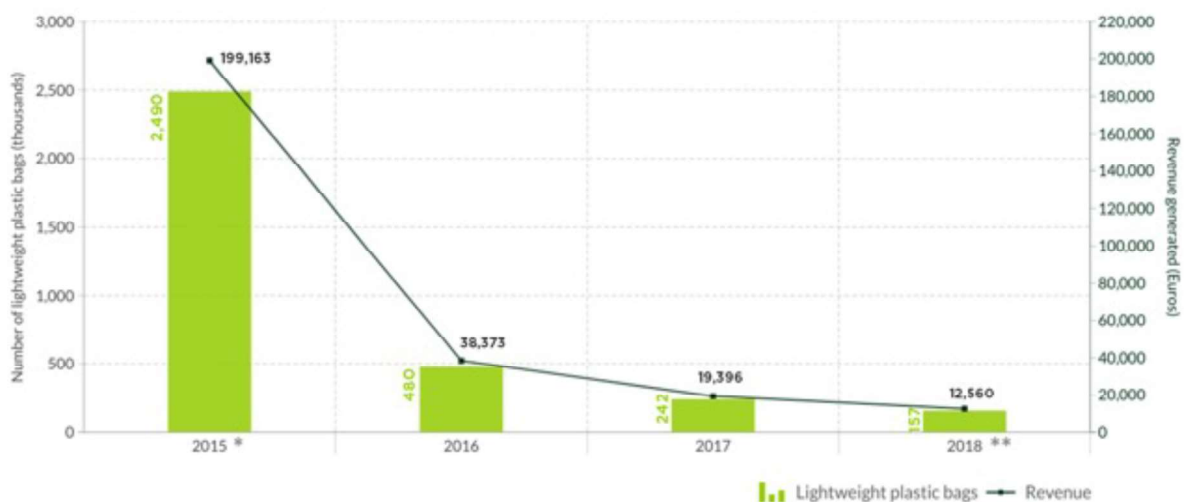
This instrument was proposed as part of the Green Taxation Reform (GTR) (Reforma da Fiscalidade Verde) in alignment with the EU mandate to reduce the consumption of lightweight plastic bags. The GTR was developed in 2014 with the support of a committee composed of both academic and professional experts. An important task of the committee was to coordinate the process of public consultation, which received more than 100 contributions to the draft of the GTR from several stakeholders (NGOs, business associations, citizens, etc.). The Law No 82- D/2014 of 31 December embodied the results of the GTR, including various measures in other fields such as waste management and water pricing.

What it does

This instrument was created in 2014 and implemented in 2015 to motivate citizens and economic actors to reduce the production and consumption of plastic bags². Data for the period 2015-2018 shows a decrease in the number of lightweight plastic bags subject to the tax from approximately 2.5 million to 157 thousand bags, whereas the corresponding revenue went from around 199.2 to 12.6 thousand Euros, respectively (Figure 1).

Counting all types of lightweight plastic bags (taxable and exempt), data from the Portuguese Environment Agency for 2018 shows that a total of 6 bags were

Fig 1 – Evolution of the number of lightweight plastic bags subject to the contribution and revenue generated.



PAYMENTS FOR ECOSYSTEM SERVICES IN RURAL SETTINGS

This programme consists of a remuneration model for land owners and managers to adopt measures to restore, protect and enhance biodiversity and ecosystem services in two pilot areas - Protected Landscape of the Serra do Açor (Área de Paisagem Protegida da Serra do Açor), and Tagus International Natural Park (Parque Natural do Tejo Internacional). The remuneration model is funded by the Portuguese Government's Environmental Fund (Fundo Ambiental) and covers the following types of payments for the period 2019-2038: initial investment costs (e.g., plantations, infrastructure repair, mulching of exploration areas); maintenance costs (e.g., irrigation, manual control of shrub vegetation); opportunity costs (associated with potential revenue losses originated by a change in the occupation and land management); and payment for ecosystem services.⁴ Table 1 summarises the main characteristics of this programme for the two pilot areas.

What it does

This programme relies on an investment supported by the Environmental Fund (Fundo Ambiental) of 3,737,705 Euros, which is oriented to the development of actions that will improve ecosystems and their capacity to provide services. Due to its recent implementation, it is not possible to provide information of its impact. The selection of pilot areas and the fact that it is implemented through a long period of time (20 years) are beneficial aspects for the understanding of the programme's impact and potential replicability in other areas.

How it came about and stakeholder involvement

In 2018, the Ministry for Environment and Energy Transitions requested the support of the academic

Table 1 – Main characteristics of the ecosystem services remuneration programme in the two pilot areas

	Protected landscape of the Serra de Açor	Tagus International Natural Park
Location ^a	Centre of mainland Portugal, near the Estrela Mountain	Centre of mainland Portugal, bordering the Tagus river
Area covered by the programme ^b	1,190 ha, with an obligation to present additional area of intervention of 25 to 100 ha	26,484 ha, with an obligation to present an additional area of intervention of 30 to 100 ha
Average property size ^c	Very small	Large
Cadastral/land registry ^c	No	Yes
Inclusion of public property ^c	Yes	No
Specific objectives of the programme Beneficiaries of the programme ^d	<ul style="list-style-type: none"> Maintenance and promotion of mixed forest stands, including oak and chestnut, as well as of different shrub species Decrease fire susceptibility Increase feeding capacity for domestic and wild animals Rehabilitation of agricultural areas and rigarian systems Etc. 	<ul style="list-style-type: none"> Renaturalisation of forest areas with native species (e.g. cork oak, holm oak) Conversion of eucalyptus into scrub management area and pasture areas Water stream management Etc.
Beneficiaries of the programme ^d	Forest Management Entities; Forest Producers' Organisations; Wasteland management entities	Forest Management Entities; Forest Producers' Organisations; Natural or legal persons, whatever their nature, whose annual turnover does not exceed 10 million euros.

Sources: ^a Protected Landscape of the Serra do Açor (<https://natural.pt/protected-areas/paisagem-protegida-serra-acor/>); Tagus International Natural Park (<https://natural.pt/protected-areas/parque-natural-tejo-internacional?locale=en>); ^b <https://www.fundoambiental.pt/avisos-2019/conservacao-da-natureza-e-biodiversidade/programa-de-remuneracao-dos-servicos-dos-ecossistemas-1-fase.aspx>; ^c Communication by Carlos Rio Carvalho (CENSE - Center for Environmental and Sustainability Research from NOVA University Lisbon) in the webinar: "Revitalização do Território: o papel da remuneração dos serviços dos ecossistemas" (Territorial Revitalisation: the role of remuneration for ecosystem services) (17/02/2020); ^d <https://www.fundoambiental.pt/ficheiros/relatorio-final-programa-de-remuneracao-dos-servicos-dos-ecossistemas-1-fase-pdf>.

sector to initiate a discussion and develop a project about the payment of ecosystem services in rural settings, particularly forest areas. This project was coordinated by CENSE (Center for Environmental and Sustainability Research) from NOVA University Lisbon (FCT NOVA), with the involvement of the School of Agriculture (ISA) and Técnico (IST) from the University of Lisbon, the Faculty of Law from University of Coimbra (FD UC) and the University of Évora (UE). This instrument was designed as a part of the solution to several socio-economic and environmental problems of the rural areas (e.g., population ageing, biodiversity loss, forest fires, low productivity and economic profitability), and to enhance the provision of ecosystem services, recognizing the current lack of incentives. The final report of the project “Economic

instruments for biodiversity conservation and payment for ecosystem services in Portugal” was released in September 2019.⁵ In the same year, the Ministry for Environment and Energy Transitions launched an open call for applications from potential beneficiaries of the programme (e.g., forest management entities; forest producers’ organizations; wasteland management entities), accepting 14 proposals.⁶ This instrument is aligned with the National Strategy for Nature Conservation and Biodiversity for 2030 (Estratégia Nacional de Conservação da Natureza e Biodiversidade 2030 - ENCNB 2030), National Programme for Territorial Planning Policy (Programa Nacional da Política de Ordenamento do Território - PNPOT), and the Pinhal Interior Revitalization Program (Programa de Revitalização do Pinhal Interior).⁷

Key stakeholders

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

CENSE (Center for Environmental and Sustainability Research) – CENSE is a research centre of the NOVA School of Science and Technology. This centre works in the thematic areas of Ecological Economics and Environmental Management; Energy and Climate; Computation for Sustainability; Bioresources and Green Technologies; and Sustainable Water Sanitation, Wastes and Resources Recovery. CENSE was involved in the coordination of a project focused on the payment of ecosystem services in rural settings and has a solid experience in green taxation.

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

Geota works in the fields of territorial planning; energy, mobility, and transport; sustainable consumption; forests and biodiversity; sustainable tourism; and environmental tax reform.

Quercus’ thematic areas include, among others, sustainable agriculture; nature conservation; energy and climate change; air quality; environmental education; and forests.

ZERO is involved in the areas of sustainable societies and new forms of Economy; climate change, energy and mobility; water and oceans; biodiversity, agriculture and forest; and soil and land management. ZERO regularly advocates for green taxation reform.

The previous three NGOs regularly evaluate the environmental market-based instruments (MBIs) implemented in Portugal, and had an active participation

in the public consultation process associated with the Green Taxation Reform.

Useful links:

Newspaper articles

“*As principais propostas da fiscalidade verde*” (The main proposals of green taxation):

<https://www.publico.pt/2014/07/10/economia/noticia/as-principais-medidas-da-reforma-fiscal-verde-1662267>

“*Estado avança com dois milhões para pagar quem aposta na floresta autóctone*” (State advances with two million Euros to pay those who bet on the native forest):

<https://www.publico.pt/2018/10/28/economia/noticia/estado-avanca-dois-milhoes-pagar-aposta-floresta-autoctone-1849123>

“*Lei reduziu para metade compra de sacos de plástico*” (Law halved purchase of plastic bags):

<https://www.dn.pt/edicao-do-dia/03-jul-2019/lei-reduziu-para-metade-compra-de-sacos-de-plastico-11069413.html>

News videos, campaign videos

“*Reforma da fiscalidade verde entra em consulta pública*” (Green tax reform enters public consultation):

<https://www.rtp.pt/noticias/economia/reforma-da-fiscalidade-verde-entra-em-consulta-publica-v751542>

“*Sacos de plástico já são pagos*” (Plastic bags are already paid for):

https://www.rtp.pt/noticias/economia/sacos-de-plastico-ja-sao-pagos_v805088

Webinar “Revitalização do Território: o papel da remuneração dos serviços dos ecossistemas” (Revitalisation of the Territory: the role of remuneration for ecosystem services):

<https://pasc.pt/atividades/clusters-tematicos/cluster-ordenamento-do-territorio/webinar-sobre-revitalizacao-do-territorio-o-papel-da-remuneracao-dos-servicos-dos-ecossistemas/>



¹ Law 82-D/2014 of 31 December: <https://dre.pt/application/file/66014833>.

² Portuguese Environment Agency: <https://apambiente.pt/index.php?ref=17&subref=1104&sub2ref=1105>.

³ Gouveia, E. G. D. (2018). Impactos da fiscalidade ambiental na economia portuguesa.

⁴ Environmental Fund: <https://www.fundoambiental.pt/aviso-2019/conservacao-da-natureza-e-biodiversidade/programa-de-remuneracao-dos-servicos-dos-ecossistemas-1-fase.aspx>.

⁴ Santos, R., Antunes, P., Carvalho, C. e Aragão, A., 2019. Nova Política para a Provisão e Remuneração de Serviços dos Ecossistemas em Espaços Rurais – o Problema, a Política e a Implementação. CENSE – Centro de Investigação em Ambiente e Sustentabilidade, FCT Universidade NOVA de Lisboa e Faculdade de Direito da Universidade de Coimbra. Fundo Ambiental, Ministério do Ambiente e Transição Energética. Lisboa. 45 pp. ISBN 978-972-8893-81-1: <https://www.fundoambiental.pt/ficheiros/nova-politica-para-a-provisao-e-remuneracao-de-servicos-dos-ecossistemas-em-espacos-rurais-em-portugal-o-problema-a-politica-e-a-implementacao-pdf.aspx>.

^{5 6} <https://www.fundoambiental.pt/ficheiros/relatorio-final-programa-de-remuneracao-dos-servicos-dos-ecossistemas-1-fase-pdf>.



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