

Luxembourg's revenue from environmentally relevant taxes was below the EU average. Environmental taxes stood at 1.72% of GDP in 2019 (EU-27 average: 2.37%). The largest portion of the environmental taxes were the energy taxes at 1.6% of GDP, below the EU average of 1.84%. Transport taxes represented 0.11% of GDP (well below EU average of 0.45%), with taxes on pollution and resources almost negligeable at 0.02% (the EU average is 0.08%). In the same year, the environmental tax came to 4.25% of total revenues from taxes and social security contributions (below the EU average of 5.76%)<sup>1</sup>.

### Further options

### A **pesticide tax** could work to improve water quality

Luxembourg has a high level of pesticide applications. The Commission's Implementation Review of Luxembourg establishes that "The most significant impact on surface water bodies was organic and chemical pollution (100%)". According to OECD's environmental performance review of Luxembourg "Many aquifers have been contaminated and more than 50% of groundwater sources are polluted by certain pesticides, sometimes at concentrations that exceed the legal limit of 100 ng/litre (...) This reflects not only the fact that the Luxembourg sandstone aquifer

is more vulnerable to pollution than the aquifers of neighbouring regions, but also a lack of protection for the abstraction areas". OECD recommended "to review, revise and increase, when necessary, environmental taxes and charges".

Modelling suggests that much higher rates based on pesticide load indicators, as used in Denmark [see factsheet DK] would potentially strongly reduce the pesticide load in Luxembourg too. According to modelling, such a tax would have no impact on GDP or employment.

## Examples of economic instruments

## **MUNICIPAL WASTE** MANAGEMENT TAX

Waste management responsibilities are distributed among different institutions and actors in the Grand Duchy of Luxembourg. The Ministry of Environment, Climate and Sustainable Development is in charge of defining national policies in terms of waste management, including the development and monitoring of the National Waste Management Plan (NWMP) (approved in 2018). The NWMP states that costs should be allocated in a way that reflects the real environmental cost of waste generation and management, in line with the polluter-pays principle (PPP). The cost of waste management is borne by the original waste producer or the current or previous 'holder' of the waste.

Responsibility for household, bulky and similar waste lies with the municipalities ('communes') and municipal associations, in particular as regards collection, recovery and recycling methods, waste disposal, awareness-raising measures, and municipal waste management taxes. Waste treatment prices must include all waste collection costs and costs incurred in setting up and managing the disposal or recovery infrastructure. For household and similar waste, there is a legal obligation that the taxes charged must correspond to the actual production of waste. Thus, taxes must include a variable component based on the weight and/or volume of waste (household or bulky) produced.

#### What it does

The municipal tax falls in line with the PPP, as defined in the NWMP. The tax must cover all costs incurred and must be directly linked to the actual production of waste, to encourage the population to participate in waste prevention and collection. The NWMP states that in order to help municipalities set their taxes, a cost consideration model will be developed and made available to them. The Plan also states that one way to use taxes as incentives is to offer negative taxes according to the quantities of waste disposed of through separate collection structures.

As an example of the level of annual taxation, the municipality ('commune') of <u>Stadtbredimus</u> charges the

following municipal waste taxes (as of 29 May 2020): a fixed charge of €18/year/household/bin and a variable charge of €1.35/L. The basic charge is calculated based on 960L of waste per year (i.e. equivalent to €24 of collection costs per year). Collection costs (referred to as 'emptying costs') amount to €0.025/L. If needed, households can throw away additional bags of waste (next to their bins), but they have to purchase specific 'SIGRE' bags of 70 L (€5/bag). Bulky waste can be picked up upon request and cost between €35 to €50, depending on the volume (max. 3 m2). More details on the taxes in Stadtbredimus can be found here.

# How it came about and stakeholder involvement

Waste management is governed and defined by the <u>NWMP</u>, the <u>Law on Waste Management</u> (21 March 2012). Each municipality also defines its own regulation concerning waste management.

Other stakeholders involved in waste management decisions and planning include the Ministry of Interior, who oversees the legality of municipal decisions in terms of waste management and coordinates territorial organisations. There are also three intermunicipal associations, SIDEC, SIDOR, and SIGRE. They possess waste management facilities and have concluded a cooperation agreement.

**Academics** (They can provide more context/information)

Dr. Birte Nienaber (<u>Department of Geography and Spatial Planning</u>, University of Luxembourg) (<u>birte. nienaber@uni.lu</u>)

Tom Becker (<u>Department of Geography and Spatial Planning</u>, University of Luxembourg) (<u>tom.becker@uni.lu</u>)

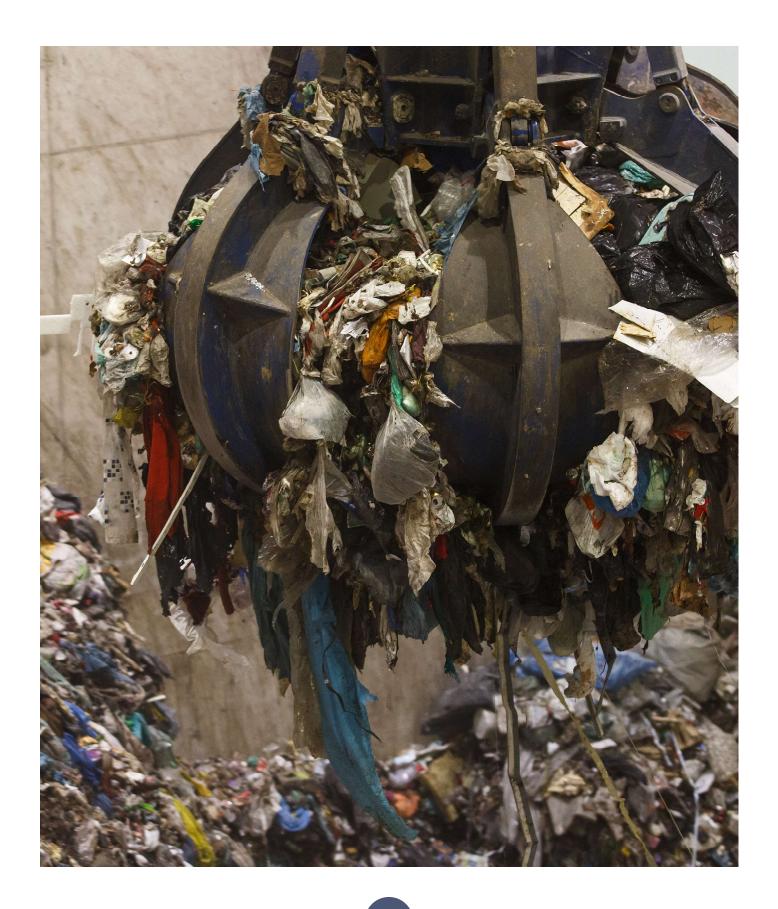
**NGOs** (environmental, consumer, green business networks, citizen science groups, etc.) o**r associations/ trade unions** 

Intermunicipal waste management associations: <u>SIDEC</u> (see <u>contact form</u>), <u>SIDOR</u> (+3523781041 or see <u>contact form</u>), <u>SIGRE</u> (+3527705991 or see <u>contact</u>

<u>form</u>), <u>SIAS</u> (+3523494101 or <u>secretariat@sias.lu</u>), STEP (+3525209881 or <u>admin@step.lu</u>).

<u>natur&ëmwelt</u>: Isabelle Zwick, expert on biodiversity (<u>i.zwick@naturemwelt.lu</u>) and Mathieu Wittmann, in charge of policy projects (m.wittmann@naturemwelt.lu)

Association Luxembourgeoise pour le Droit de <u>l'Environnement</u> (ALDE) (info@alde.lu)



## **BIODIVERSITY OFFSETTING AND THE**

# **ECO-POINTS REGIME**

In 2018, Luxembourg introduced a biodiversity offsetting (or of <u>eco-points</u> (paid per m2). The principle of <u>ecological</u> compensation is based on the obligation to compensate for ecological damage caused by private or public buildings or facilities. Developers are required to pay an amount equal to the difference between the total eco-points of their site before development and its residual points after development. The amount raised goes into a <u>national or</u> regional funding pool, from which conservation efforts are financed. To ensure a degree of (relative) internalisation, ecopoints are awarded a 'basic eco-points score' ranging from 1 (for roadways) to 64 (e.g. for species-rich grassland on of 104 different habitat types produced by the government (with the help of the list in the EU Habitats Directive). For a particular site, an 'adjustment factor' (ranging between 0.75 and 1.25) is applied to the basic eco-point score to reflect habitat quality. Another 'correction factor' (ranging from 5 to 10) is added if development is permitted on sited protected by the EU Nature Directives

What it does

The biodiversity offsetting and eco-points scheme seeks to <u>prevent any net loss of biodiversity</u>. An offsetting measure is equivalent to actions to restore or create biotopes or habitats, which must be complemented by conservation management measures (e.g. extensive grazing, orchard pruning) to ensure environmental performance. More information can be found <u>here</u>.

# How it came about and stakeholder involvement

The biodiversity offsetting system was shaped by the Law on nature and natural resource protection (18 July 2018), the Regulation instituting a digital assessment and evaluation system for the compensation in ecopoints (1 August 2018), and the Regulation determining the list of habitats relevant to the offsetting system (1 August 2018).

Developers are responsible for funding compensatory measures. The funds are poured in two types of compensation pools: a national one, managed by the Nature and Forestry Administration (ANF), and regional compensation pools, managed by municipalities ('communes').

<sup>1</sup> https://ec.europa.eu/eurostat/databrowser/view/env\_ac\_tax/default/table?lang=en



	Linguistic version	Media/Volume	Catalogue number	ISBN	DOI
	EN PDF	PDF/Volume_01	KH-03-21-293-EN-N	978-92-76-39071-8	10.2779/665590