

This country profile was compiled by the OECD Secretariat and reflects information available as of March 2015. Further information and analysis can be found in the publication: OECD (2015) *Water Resources Allocation: Sharing Risks and Opportunities*, OECD Studies on Water, OECD Publishing. Country profiles for all of the 37 allocation regimes in 27 OECD and key partner countries surveyed for this project are available for download at: <http://www.oecd.org/fr/publications/water-resources-allocation-9789264229631-en.htm>.

## LUXEMBOURG

### Overview and highlights

Water is abundant in Luxembourg. However, a reform of water allocation regime was undertaken in 2008, to address concerns relating to water quality and improve environmental protection. One-third of water bodies in Luxembourg are considered “at risk”, based on EU criteria.

The same allocation regime prevails across the whole territory, which is defined in the 2008 Water Law and in the Civil Code. The main highlights include:

- Domestic uses represent the vast majority of water abstracted;
- Any water use in Luxembourg requires a licence;
- Entitlements are unbundled from land ownership. They are granted to private users for 5 to 20 years (and can be renewed). Entitlements that are not used within a given period are lost;
- Entitlements are defined as a share of available water and linked to a river basin management plan;
- New entitlements can be granted, condition upon assessments of third-party and environmental impacts;
- All categories of water users pay a water abstraction charge, set by Law (0.10€/m<sup>3</sup>).

### Legal and institutional setting for water allocation

Institution	Scale	Main Responsibilities
Ministry for Sustainable Development and Infrastructures	National	Integrated water management (policy)
Water Management Agency	National	Integrated water management (implementation and technical matters)
Municipalities	Local	Water supply and sanitation

**Legal context for water allocation:** Roman/ Statutory Law.

**Legal definition of ownership of water resources:** Surface and groundwater is legally defined<sup>1</sup> as *Res nullius*, or “ownerless” property (in Roman Law, *res nullius* characterises a property not subject to private ownership). An authorisation is required to use the resource.

### Tracking water scarcity

No mapping has been done to identify areas where scarcity is becoming an issue, as water is abundant in Luxembourg.

<sup>1</sup> The legal status of surface and groundwater is defined in the Civil Code, by article 640 and subsequent articles.

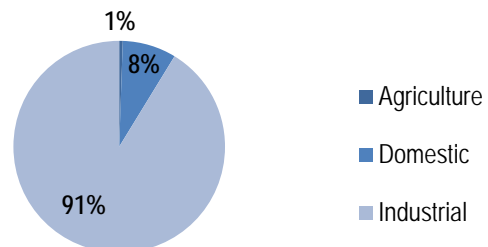
### Allocation Regime Example: Luxembourg (national scale)<sup>2</sup>

#### Physical features of the water resource

Water flows can be managed or controlled to a certain extent, as water systems are **partially regulated** in Luxembourg. Domestic uses represent the vast majority of water abstracted. The mean daily consumption amounts to 120 000m<sup>3</sup>. Two thirds are supplied from groundwater, one third from the water barrage Esch-sur-Sûre. No water is abstracted for energy supply.

In terms of **non-consumptive** uses, the Moselle River that runs along the Eastern border is the only one used for navigation in the country.

Mean annual inflow/recharge consumed per use



#### Defining the available resource pool

**Are limits defined on consumptive use?** Yes.

- There is a defined limit on consumptive use based on either the total volume of water that can be abstracted or as a share of total available water. The limit on consumptive use is linked to a river basin management plan, defined and managed by the Water Management Agency. The Plan is a statutory instrument that must be followed.

**Are environmental-flows clearly defined?** Not at present.

- However, minimum environmental flows are in the process of being defined.

**Are there arrangements to deal with impacts of climate change?** The depth of aquifers and surface water bodies is gauged and monitored (piezometric and limnimetric measurements).

**What is the status of resource pool?** Neither over-allocated nor over-used.

None of the following **factors are taken into account** in the definition of the available resource pool: non-consumptive uses, base flow requirements, return flows, inter-annual and inter-seasonal variability, connectivity with other water bodies, and climate change.

<sup>2</sup> Further information available at: [www.legilux.public.lu/leg/a/archives/2008/0217/a217.pdf#page=2](http://www.legilux.public.lu/leg/a/archives/2008/0217/a217.pdf#page=2); and [www.waasser.lu](http://www.waasser.lu).

### Entitlements to use water

Definition of entitlements	Characteristics of entitlements
<p><b>Are entitlements legally defined?</b> Yes.</p> <p><b>Are private entitlements defined?</b> Yes, as an individual entitlement (to an individual person).</p> <p><b>Nature of entitlement:</b> Water entitlements are unbundled from property titles. Entitlements are defined by the purpose the water is used for, the maximum volume that can be abstracted in a given period, as well as a share of the available resource that can be used in a given period of time.</p> <p><b>Period granted for:</b> A period of 5 to 20 years, which can be renewed.</p> <p><b>Return flow obligations:</b> not specified.</p>	<p>If the entitlement is not used in a given period, it is lost.</p> <p><b>Are entitlements differentiated based on the level of security of supply (or risk of shortage)?</b> Yes, some restrictions apply in cases of scarcity (see below).</p> <p><b>Is there a possibility to trade, lease or transfer entitlements?</b> No.</p> <p><b>Are allocations (the amount that can be taken at any point in time) managed separately from entitlements?</b> No.</p> <p><b>Is allocation trading allowed?</b> n/a.</p> <p><b>Can entitlements function as a financial instrument?</b> No.</p>
<p><b>Type of users not required to hold a water entitlement to abstract water:</b> None. The only exceptions are emergency services under <i>force majeure</i> or unexpected circumstances.</p> <p><b>Is it possible to obtain a new entitlement or to increase the size of an existing entitlement?</b> Yes. New entrants can be granted an entitlement, on the condition of the assessment of the potential impact on the environment and third parties.</p>	

### Abstraction charges

User category	Abstraction charge?	Basis for charge	Reflects water scarcity? <sup>3</sup>
Agriculture	✓	The water abstraction charge is set by the 2008 Water Law. It is set at 0.10€/m <sup>3</sup>	✓
Domestic	✓		✓
Industrial	✓		✓
Energy production (not including hydro power)	✓		✓
Hydro power	✓		✓

### Dealing with exceptional circumstances

<p><b>Distinction between the allocation regimes used in “normal” and extreme/severe water shortage times?</b> Yes.</p> <p><b>How is the amount of water made available for allocation adjusted:</b> Seasonal variations are taken into account.</p> <p><b>Definition of “exceptional” circumstances:</b> Extended droughts.</p>
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<sup>3</sup> Water scarcity is not an issue in Luxembourg. However, in order to prevent water wasting in general and reduce the risk of droughts in the future due to a changing climate an abstraction tax is set nationally to all kind of abstractions.

**Legal bodies declaring the onset of “exceptional” circumstances:** The Ministry in charge of water management and the Water Management Agency. Stakeholders are not consulted. When exceptional circumstances are declared, restrictions on water use are put into place. In 2008, the Ministry of Interior set up a 3-step plan to raise awareness and ensure water supply in cases of droughts. The first step essentially deals with informing water users and raising awareness. The second and third steps include increasingly stringent restrictions. In cases of scarcity, the Ministry in charge of water informs local authorities of the appropriate step (2 or 3) that applies. Local authorities set the measures that need to be taken to temporarily limit water uses and protect the resources required to supply water to the population.

### Monitoring and enforcement

**Responsible authority:** Water Management Agency.

**Types of withdrawals monitored:** Agriculture, domestic and industrial uses are monitored.

**Monitoring mechanisms:** Two mechanisms apply: either annual metering, or a statement by users.

**Sanctions:** Sanctions are set by the 2008 Water Law. They include fines and possible imprisonment.

**Conflict resolution mechanisms?** Yes, in the Administrative Court of Justice, or via a claim for equitable relief.