# auafed

# Map of Water Regulation in Portugal

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# Reminder: 2 combined ways to regulate private operators in water sector

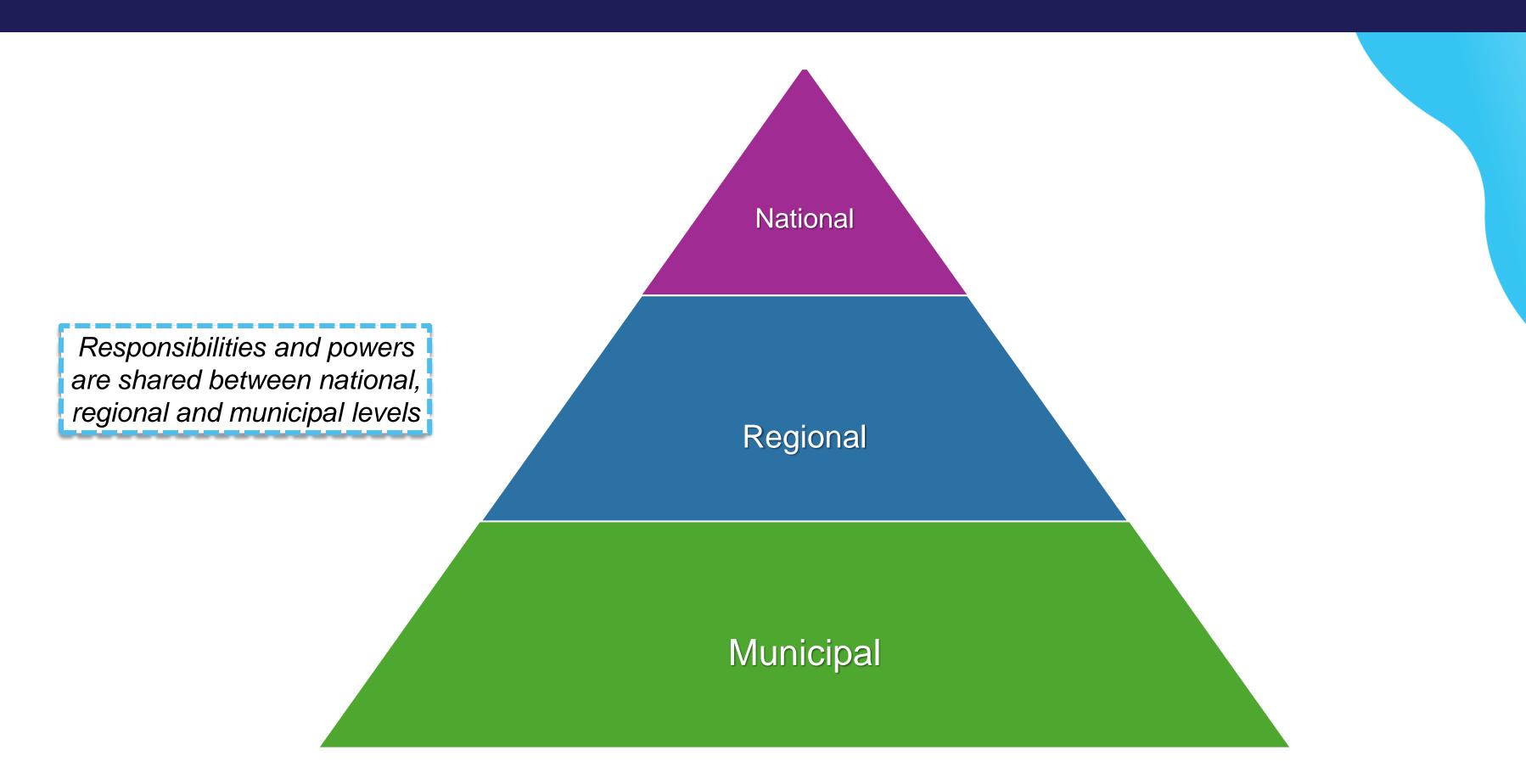
1) Private water operators regulated by national regulators



2) Private water operators regulated by contracts set between public and private water businesses (= PPP – Public Private Partnerships)

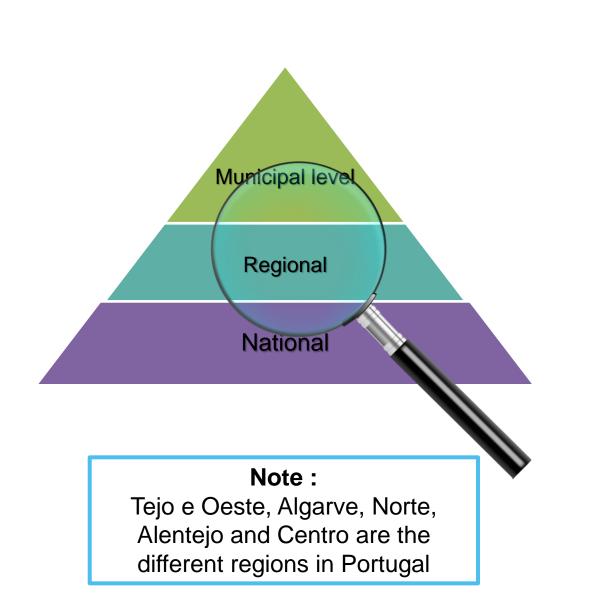


# Different levels of regulators in Portugal





# Regulatory structure - simplified view

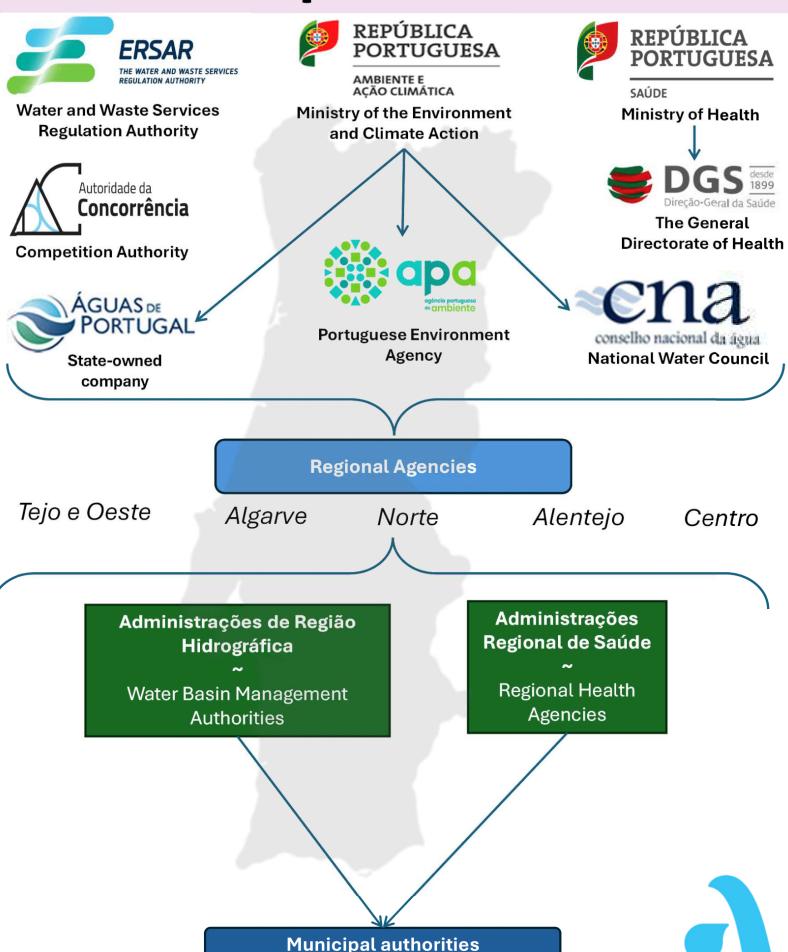


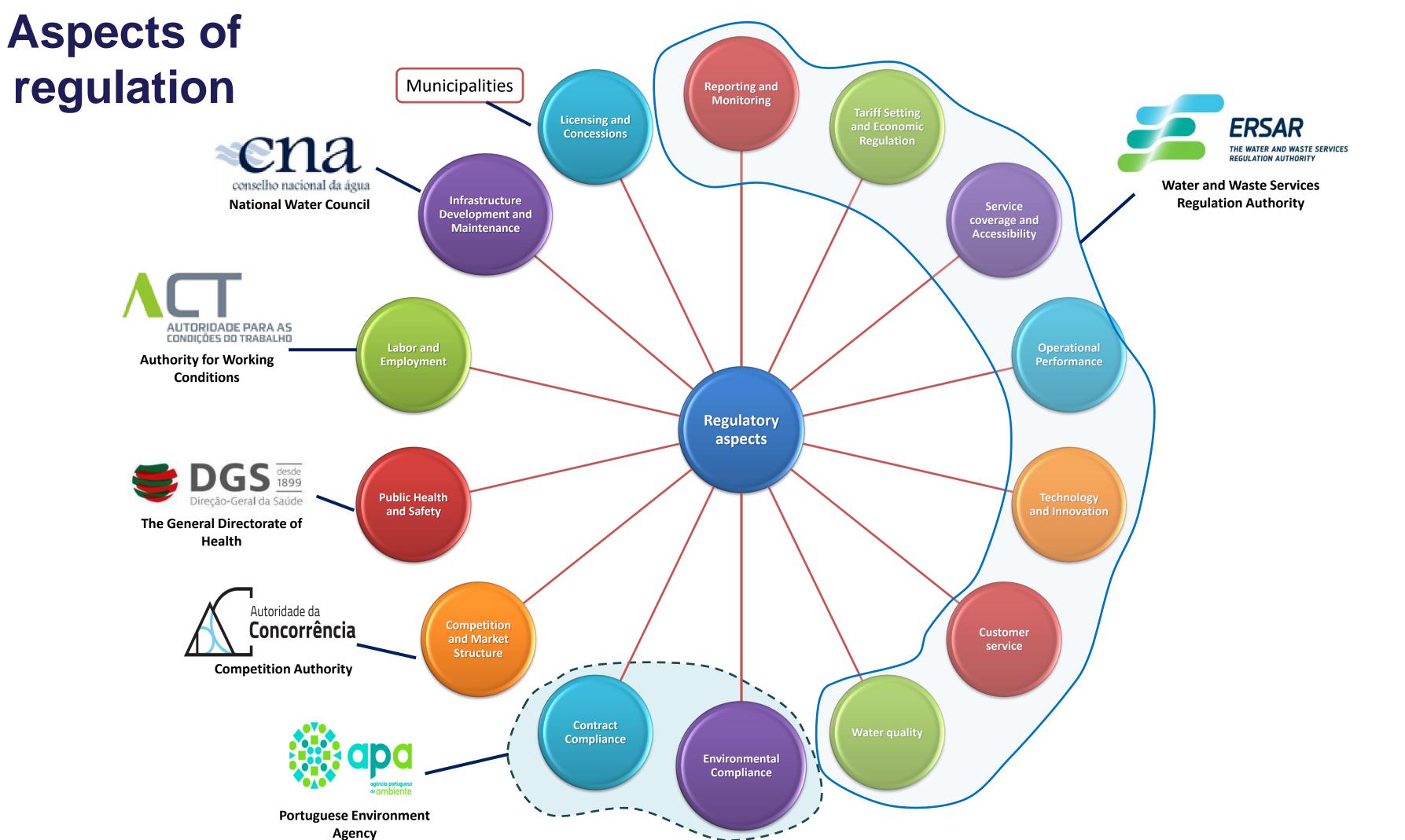
National

Regional

Municipal level

# Portuguese regulations of private operators







# Role and responsibilities: Central level (1/2)

#### Main and most important regulator of the water sector in Portugal (independent organization)

#### Responsible for:

- Economic regulation,
- Service quality control :
  - Annual approval of the operator's water quality control programmes;
  - Supervision of its implementation, in liaison with health authorities;
  - Assessment and benchmark of operators.

This assessment follows a set of indicators related to drinking water supply, urban wastewater management and urban waste management services, which allow ERSAR to regulate by benchmarking.

The indicators are divided in three groups:

- •Protection of users' interests: ERSAR intends to assess how users' interests are protected, in particular, the degree of access and the quality of the provided service;
- •Operator's sustainability: ERSAR intends to assess the degree of technical and economical sustainability of operators and their legitimate interests, concerning economic and financial, infrastructural, operational and human resources;
- •Environmental sustainability: set of indicators used to assess the protection level of environmental issues related with operators' activities.
- •Annually, ERSAR evaluates the quality of service provided to users and the control of drinking water quality by the regulated entities/ operators.
- Consumer protection,
- Tariff setting / approval
  - End-users' expenses with water and waste services are defined for each municipality, according to three different levels of use (60, 120 and 180 cubic meters).



Water and Waste Services
Regulation Authority

# Role and responsibilities: Central level (1/2)



Agency









Under responsibility of Ministry of the Environment and Climate Action.

#### Responsible for:

- Managing water resource
- Granting licenses for water use
- Oversees environmental aspects of water management
- AdP owned but the Ministry of Finance Águas de Portugal group plays a structural role in the environment sector in Portugal and spanning the fields of water supply and wastewater sanitation.
- National bulk water provider

Independent advisory body for:

- Planning
- Sustainable management of water

Under responsibility of the Ministry of Health, responsible for :

• Establishing and controlling quality standards for drinking water

Independent organization, responsible for:

• Ensuring fair competition in the sector and prevents anti-competitive practices



## Role and responsibilities: Central level

- Supervise the quality of both drinking water and wastewater services,
- Regulate wastewater treatment, discharge control and protection of water resources, by setting environmental standards, and the licensing/control.
- Manage freshwater and coastal zones (as well as marine waters),
- Prepare and approve FRMPs and RBMPs (Flood Risk Management Plans & River Basin Management Plan)
- Implement water management in river basins via River Basin District Administrations (which are bodies of the Portuguese Environment Agency at regional level),

# Role and responsibilities: Regional (1/2)

### Regional Health Agencies – rolled out in the 5 regions in Portugal

Tejo e Oeste, Algarve, Norte, Alentejo, & Centro



- Water quality monitoring and risk assessment: Test drinking water quality, assess potential health risks associated with water sources, and ensure compliance with national and EU standards.
- Public health protection: Prevent waterborne diseases, address contamination issues, and coordinate emergency responses for water-related health crises.
- Collaboration and regulatory oversight: Work closely with water utilities and other authorities to implement improvements, ensure regulatory compliance, and contribute to policy development.
- Public awareness and education: Provide information to the public about water quality, potential health risks, and best practices for safe water consumption.



# Role and responsibilities: Regional (2/2)

# Administrações de Região Hidrográfica

**Water Basin Management Authorities** 

Regulatory and licensing: Enforce water laws, issue permits, and monitor private operators' compliance with environmental standards and management plans.

Stakeholder engagement: Facilitate communication and cooperation between private operators, municipalities, and other relevant parties in the water sector.

Environmental stewardship: Protect water quality, manage ecological aspects of water bodies, and oversee pollution prevention measures.

Resource planning: Develop and implement River Basin Management Plans, allocate water resources, and promote sustainable use among all stakeholders.



Private operators in Portugal's water sector must work closely with these water basin management authorities to ensure compliance with regulations, obtain necessary permits, and contribute to sustainable water resource management. The authorities provide a framework for private operators to operate within, balancing economic interests with environmental protection and sustainable water use.

## Role and responsibilities: Municipal level

- Municipalities approve and fix tariffs.
- Municipal authorities may be responsible for the day-to-day management of water services in their area.
- They may interact directly with private operators for local operational issues.
- Municipalities are responsible for the provision of water and wastewater services. They can manage them:
  - Directly;
  - Delegate them in municipal companies;
  - Enter into a partnership with the central government through AdP Águas de Portugal (a State-Owned-Enterprise); or set up PPPs with a private operator
- Note: Concessionaire -> PPP set with municipalities, not with government



# Water management: Bulk and Retail, 2 main activities shared in Portugal

- The WSS (Water Supply and Sanitation) sector is mainly split between "bulk" systems (regional water catchment and treatment, and wastewater treatment and conveyance, covering 80% of the population) and "retail" systems (water distribution, wastewater collection and customer relationships).
- AdP (with a majority share) can enter into partnerships with the municipalities in both "bulk" and "retail" systems.
- The municipalities can also award concessions to private operators or establish joint (mixed economy) companies, although retaining a majority share.
- Six private operators are supplying water to 22% of the population in the Portuguese mainland

## Regulated tariffs

# The procedure of defining the tariffs is different depending on the operator's management model and can be divided in two groups:

- Concessionaires of municipal utilities, regulated according to a concession contract, have to comply with the tariffs update and review formulas set on their contracts. In this case, ERSAR is entitled to opinions on the concession contract template and to supervises what was previously agreed;
- All other municipal owned systems (not concessioned) follow different management models. These systems are subject to a different tariff selection criteria, as well as to a distinguished process of tariff approval.

The tariffs set should ensure an adequate return of investment and services operational costs, as well as of environment and scarcity costs. Tariffs should also ensure an acceptable contribution by users from different sectors in cost coverage.

The absence of tariffs or disparities in the criteria used to set those tariffs point to the necessity of defining and harmonizing tariffs in order to allow full recovery of costs with the provision of the different services.

# Main regulations governing water supply and sanitation in Portugal

- Water Framework Directive (2000/60/EC)
- Urban Wastewater Treatment Directive (UWWTD, 91/271/EEC)
- Floods Directive (FD, 2007/60/EC)
- Drinking Water Directive 98/83/EC (DWD) by the European Commission being repealed by Directive 2020/2184 with effects from January 2023.
- New Regulation (EU) 2020/741 of the European Parliament and of the Council of 25 May 2020 on minimum requirements for water reuse.
- Decree-Law No. 306/2007 establishes the authority and powers of the public supply system managing entities. This Decree-Law is composed of seven Chapters divided in 41 articles and two annexes. It sets the legal regime applicable to quality of water used for human consumption. Particular attention is paid to set water quality standards and a severe control programme. Moreover, The Decree-Law regulates the sharing of responsibilities between authorities partaking the management of public supply systems.
   Annexe I fixes chemical and microbiological parameters and limit values; Annex II rules control procedures.
- Decree-Law 152/2017 Establishment of new rules for water quality control techniques and parameters
- Law no. 10/2014 of March 6thApproves the Statutes of the Water and Waste Services Regulatory Authority
- DECREE-LAW 194/2099This decree-law establishes the legal regime forpublic water supply services, urban wastewater sanitation and urban waste management services.management

# AquaFed's comments on Portuguese regulations (1/2)

- Do you think the legal, policy and regulatory framework in Portugal enables private operators to grow their business?
- ✓ Yes, because it is very comprehensive legal framework
- ✓ Develop democratic country, easy to working and extending business
- ✓ Respect of contracts
- ✓ Finding arrangements in any sector
  - What are the pros of Portuguese system?
- ✓ Part of the EU court, following the EU directives
- ✓ Mature sector 30 years in PPPs experience in Portugal
- ✓ Strong regulators
- ✓ Stable currency, stable inflation & interests
  - What are the cons of Portuguese system?
- ✓ Political adversity to private sector. The market for private operators has been frozen for 20 years.



# AquaFed's comments on Portuguese regulations (2/2)

- Innovations: barriers or regulatory incentives for innovation?
- ✓ the Procurement laws make it difficult for innovative technologies
  - Investment: barriers or not ?
- ✓ The EU provides grants and funds
  - Do Portuguese regulators have efficient skills and capacity to be able to their job?
- ✓ Yes, absolutely. They have efficient skills.



## Reference

# Special thanks to **Diogo Faria De Oliveira**, Executive Director of Defining Future Options





https://definingfutureoptions.com/



## Annexes

- 1. Private sector contribution in Portugal
- 2. Tariff setting
- 3. AdP role scope
- 4. CCDR non regulators but possible interaction with private sector
- 5. Websites and documents



# Annex 1 – Private sector contribution (2/2)

#### Six private operators are supplying water to 22% of the population in the Portuguese mainland

#### Private Market Share [retail services] **Population Served Municipalities Served** [%] [#] Water Sanitation Water Sanitation Private Private Private Private 22% **Public Public** Public **Public** 78% 79% 241 250 **Private Operators** FCC ifin BEWG 北控水務 JUDY Marubeni Azuladicional, Lda. miya Group aqualia **INDAQUA** 📚 be water **AGS** Plainwater 3 **AQUAPOR**

Shareholder

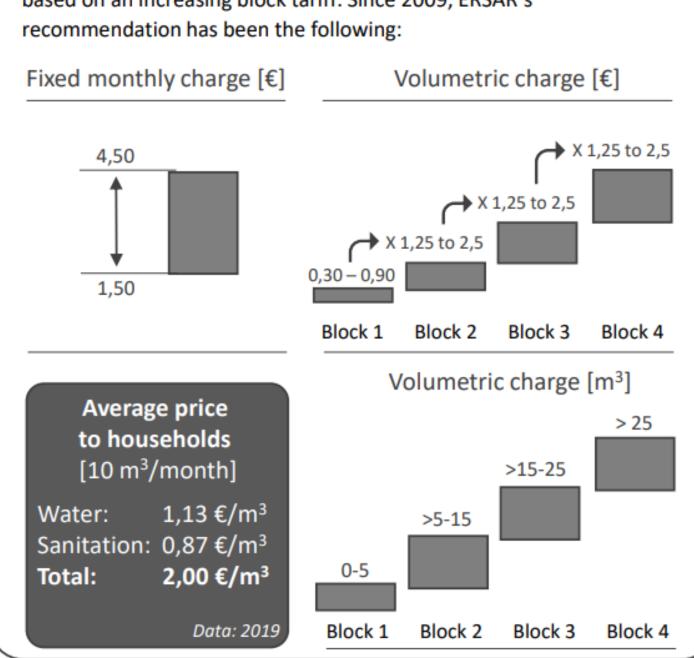
Operator

Notes: Population and municipalities served by retail services | Data: 2019 | Shareholders updated in March 2021

## Annex 2 – Tariff setting in Portugal

#### TARIFF LEVELS AND STRUCTURE

There is a wide variation in tariffs levels across the country, but the tariff structure usually includes a fixed charge and a volumetric charge based on an increasing block tariff. Since 2009, ERSAR's recommendation has been the following:



#### **SOCIAL TARIFFS**

Establishing pro-poor tariffs is not mandatory for municipalities, although the majority already implemented them. There are many different schemes in force, and most of them are based on the following principles:

- Exemption or discount in the fixed tariff component
- The 2<sup>nd</sup> block of the volumetric tariff is charged at the price of the 1<sup>st</sup> block

Large families also benefit from discounts through adjustments to the block ranges

Social tariffs are mostly financed by other utility customers (an implicit cross-subsidy) # of municipalities with pro-poor tariffs in force

Water: 214 Sanitation: 202

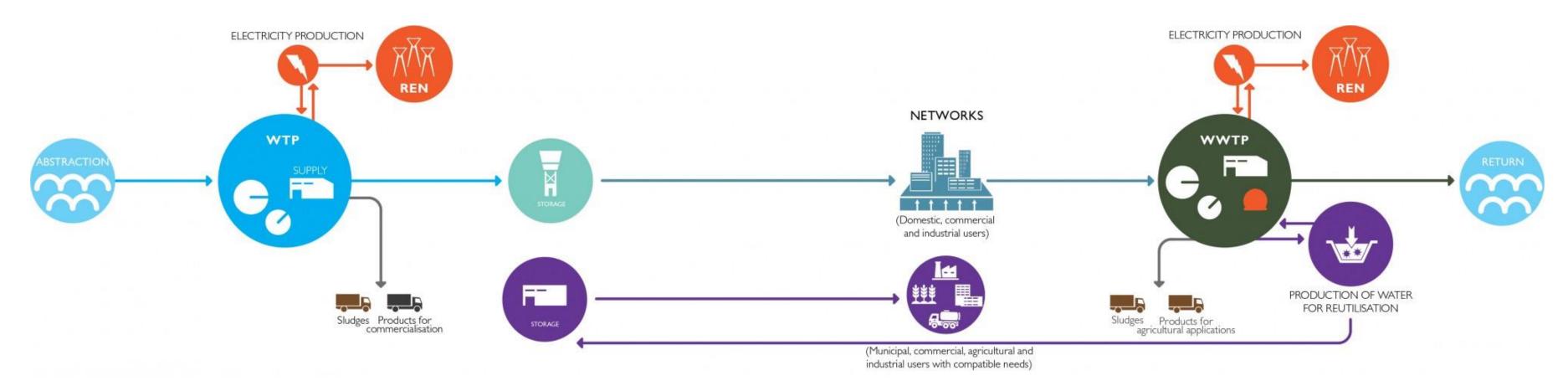
Data: 2019

#### **CONNECTION FEES**

Connections are compulsory for water and wastewater if the public network is within 20 metres of the household

The ERSAR 2009 recommendation mentioned that connections up to 20 meters should be exempt of fees – a successful measure that promoted many connections. Since 2018 this became mandatory.

# Annex 2 – Aguas de Portugal: role scope





#### Abstraction

Collection of water, both surface and subterranean, from the hydric environment. This may include pumping activities.



#### WTP - Water Treatment Plant

#### Treatment

Correction of the physical, chemical and bacteriological properties of water to render it fit for human consumption.

#### Supply

Transport of water upstream. May include pumping and storage activities.



#### Electricity production

Production of electricity from hydro, wind and solar sources.



#### Storag

Storage of water so as to enable the continual operation of the supply network.



#### Storage

Storage of water for reutilisation.



#### **NETWORKS**

#### Distribution

Distribution of water to consumers in the quantities and at the pressure required by their needs. May involve pumping activities.

#### Collection

Collection of the wastewater produced, May involve pumping activities

#### Transpor

Transport of wastewater from their point of collection to the wastewater treatment plant units. May involve pumping activities.



#### WWTP - Wastewater Treatment Plant

#### Treatment and recovery

Correction of the physical, chemical and biological characteristics of the wastewater taking into consideration the final destination of the treated wastewater.

Recovery of the treatment process sub-products (energy value of the sludges, production of water for reutilisation, recycling of nutrients, etcetera).



#### Production of water for reutilisation

Production of water for reutilisation for internal and external usage.



#### Electricity production

Production of electricity through capturing the biogas produced by the anaerobic digestion of sludges, and from hydro, wind and solar sources.



#### Dotum

Return of treated waters that are not subject to reutilisation to the hydric environment.

UPSTREAM DOWNSTREAM DOWNSTREAM

UPSTREAM

# Annex 3 – CCDR: Non-regulators but might interact with the private sector

Comissões de Coordenação e Desenvolvimento Regional (CCDRs) - Portugal Regional Coordination and Development Commission

#### Divided in 5 regions in Portugal:

- Tejo e Oeste
- Algarve
- Norte
- Alentejo
- Centro



- Regional coordination: CCDRs are responsible for coordinating policies and actions at the regional level, which could include oversight of water services.
- Sustainable development: They work to promote sustainable development in the regions, which certainly encompasses water resource management.
- Strategic planning: CCDRs are involved in regional strategic planning, which may include aspects<sub>2</sub>related to water infrastructure and management.
- Liaison with central government: They serve as intermediaries between local authorities and the central government.
- Management of European funds: CCDRs often manage European funds, which may be used for water-related and infrastructure projects.



### Annex 4 – Links

- https://portal.cor.europa.eu/divisionpowers/Pages/Portugal-Water-Management.aspx#:~:text=Member%20State&text=Central%20authorities:,%2C%20and%20the %20licensing/control.
- https://waterhub.pt/en/entity/ersar/
- https://www.ersar.pt/en/consumer/tariffs-to-the-end-user
- https://www.ersar.pt/en/site-consumer/site-drinking-water-quality
- <a href="https://www.ersar.pt/en/site-consumer/Pages/quality-of-service.aspx">https://www.ersar.pt/en/site-consumer/Pages/quality-of-service.aspx</a>
- https://www.iwa-network.org/filemanageruploads/WQ\_Compendium/Cases/Portugal%20Drinking%20Water.pdf
- https://business.turismodeportugal.pt/pt/Conhecer/Quem\_e\_quem/Paginas/CCDR-Comissoesde-Coordenacao-e-Desenvolvimento-Regional.aspx
- https://apambiente.pt/en/node/70
- https://www.fao.org/faolex/results/details/en/c/LEX-FAOC074485/
- <a href="https://www.ersar.pt/en/site-consumer/Pages/tariffs-to-the-end-user.aspx">https://www.ersar.pt/en/site-consumer/Pages/tariffs-to-the-end-user.aspx</a>
- https://conselhonacionaldaagua.weebly.com/\
- https://www.adp.pt/en/
- Portuguese Water Supply and Sanitation Outlook 2020

