



Parceria Portuguesa
para a Água



Sustainability of Water Services in Portugal:

The contribution of the private sector

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Consultant



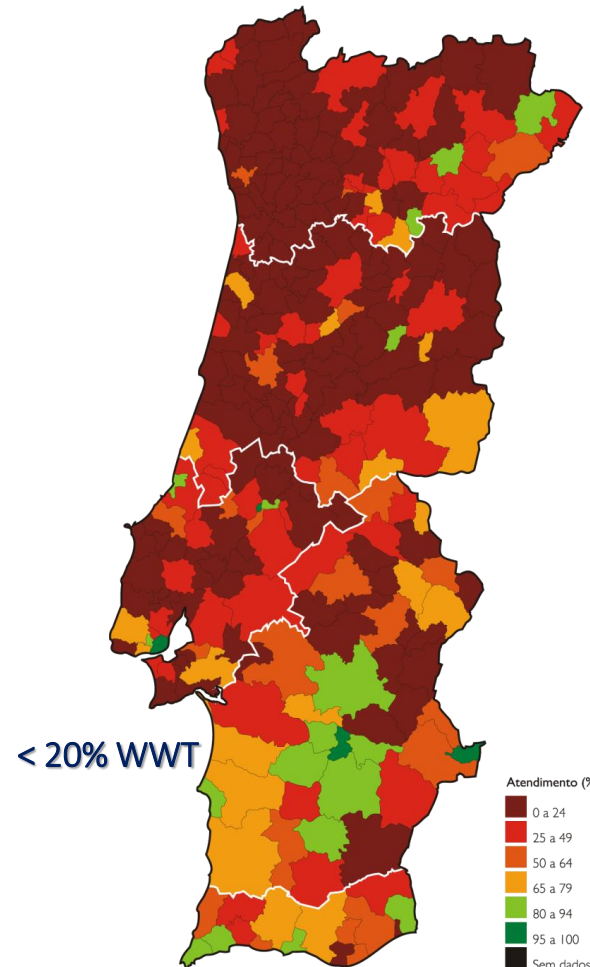
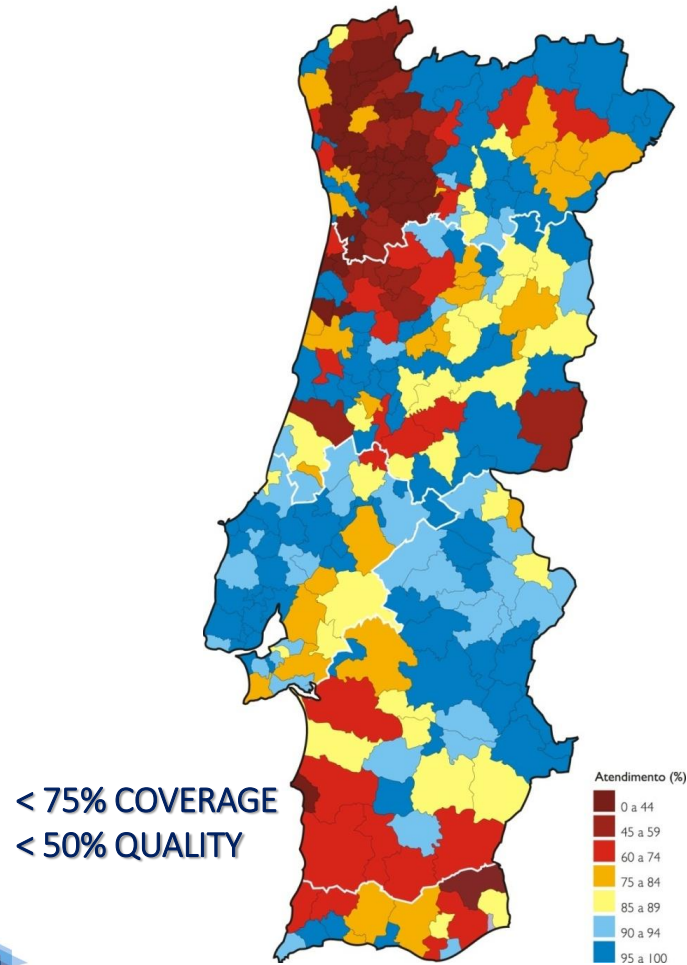
EPPF



SITUATION IN PORTUGAL IN 1993

Water services

Wastewater services

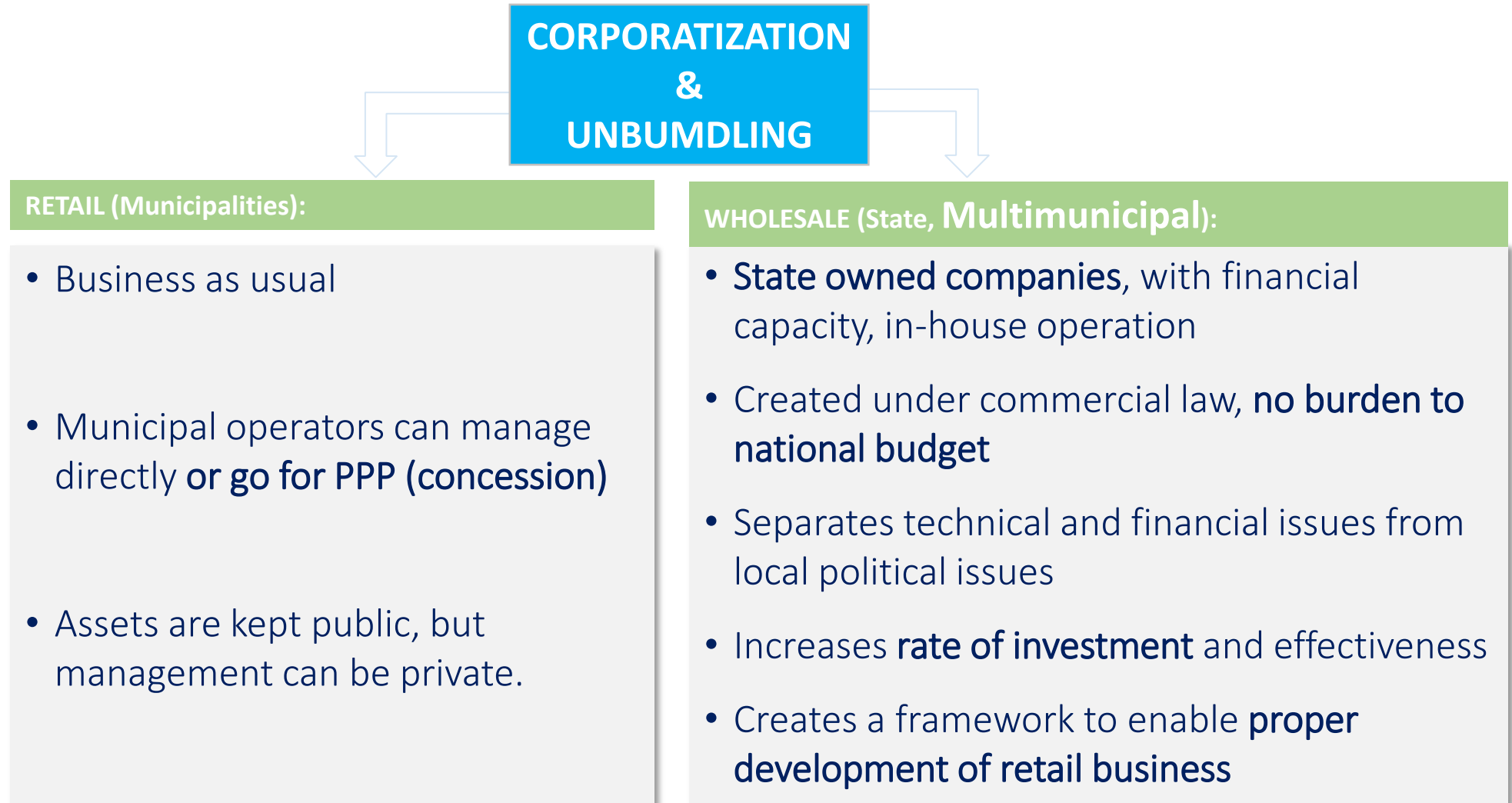


- **Lack of scale** of service providers, too many players (municipalities)
- **Non-corporate**, administrative bodies; completely public
- **Unsustainable tariffs** (no tariffs for wastewater services in most of the municipalities)
- Lack of technical capacity, poor planning
- Lack of investment in the sector
- Lack of transparency: no information to consumers and stakeholders



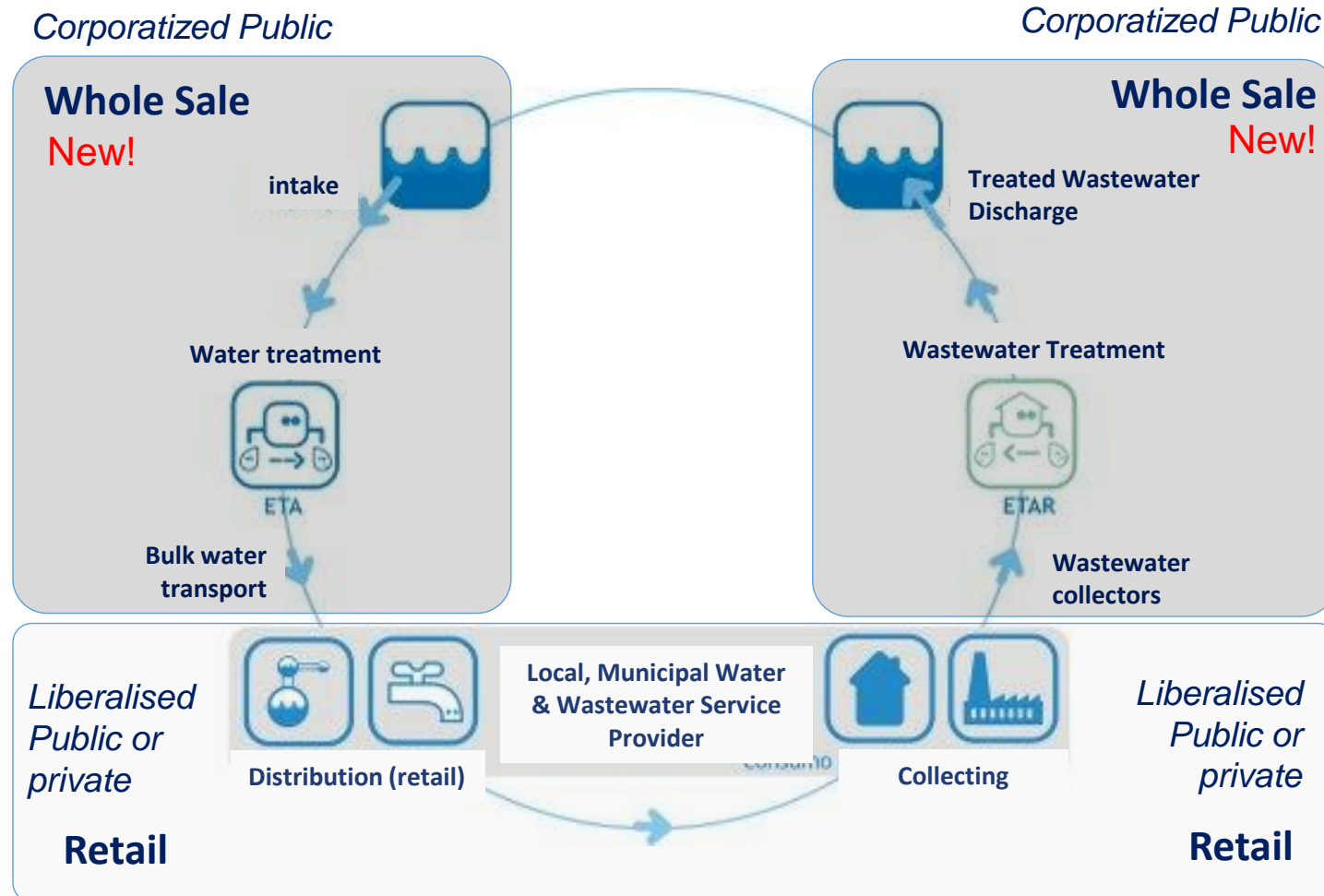
The Process of Change in the Governance Model

A NATIONAL REFORM STARTED IN **1993**



The Process of Change in the Governance Model

A NATIONAL REFORM STARTED IN 1993





The Process of Change in the Governance Model

THE MULTIMUNICIPAL MODEL: PUBLIC – PUBLIC PARTNERSHIP

The management framework

- **Public regional water utilities provide wholesale water services** to the municipalities. **In-house contract** is awarded by the Government to these SOE for a period of 30 years.
- **Contract includes a capital investment plan** for the duration of the contract and a framework for services provision.
- **Full cost recovery tariffs are set annually** by the Minister of Environment on the basis of a budget presented by the company to ERSAR.
- **Cost-of-service model** with a **fixed return on capital** (Euribor+3%).
- **Benchmarking by ERSAR** by annually monitoring a set of financial and quality-of-service indicators; no service performance rewards or penalties.
- Being SOE, **costs of raising capital are low**, as compared to private companies.

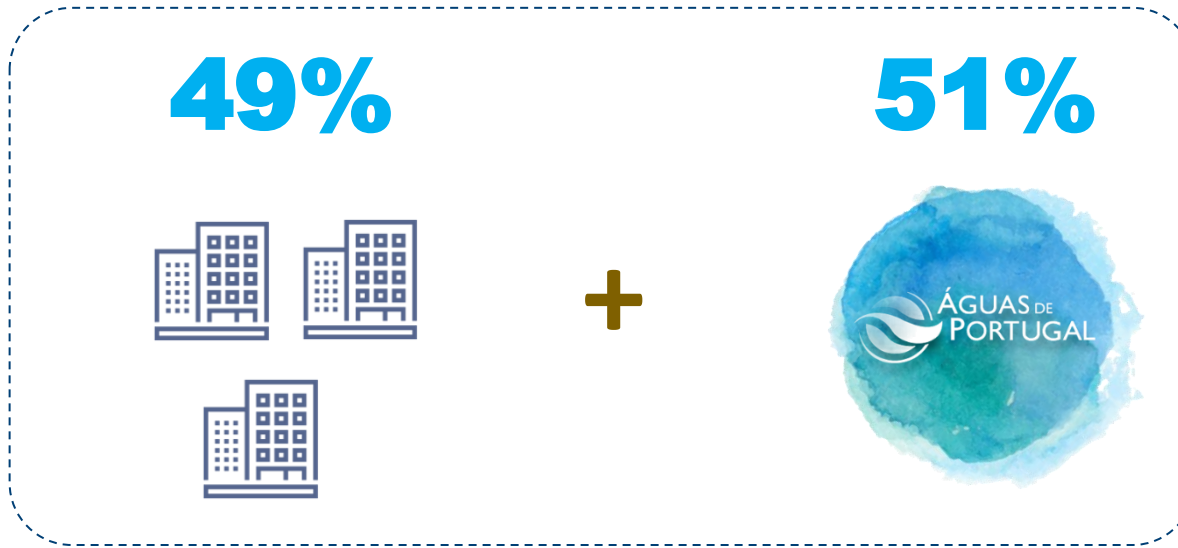


The Process of Change in the Governance Model

The way forward **2014 - 2020**

Bulk

Retail



Corporatization
Consolidation
Full cost-recovery



Municipal
companies

or



Private
operators

or



Municipalities

or



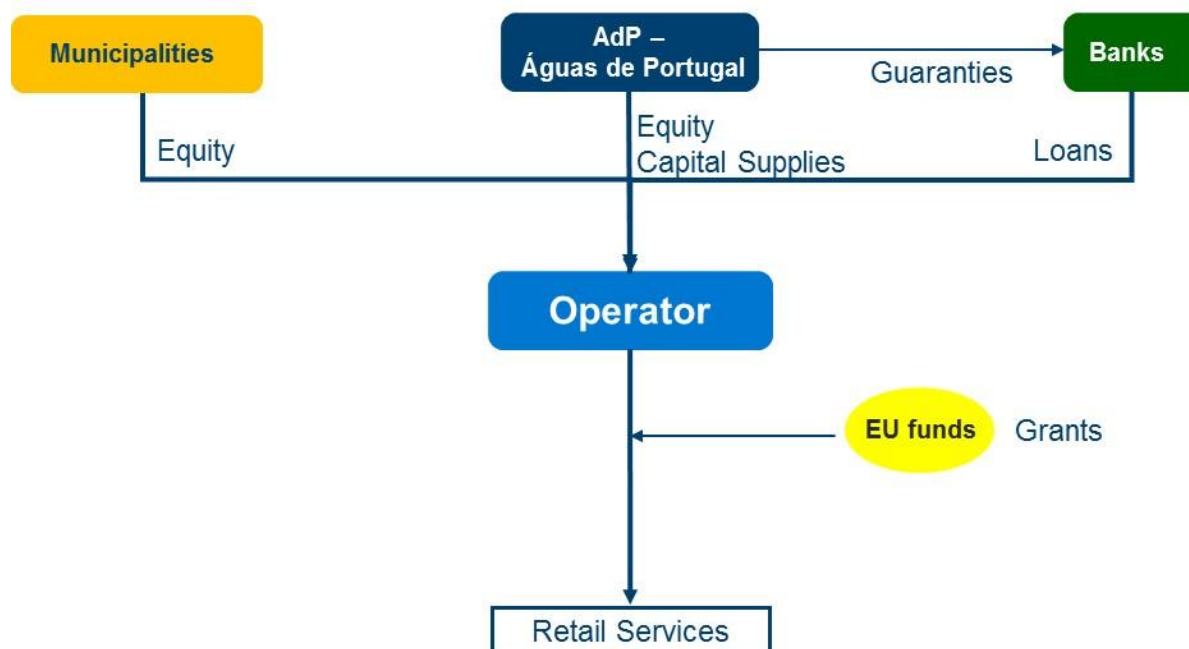
Public Partnerships
Municipalities and AdP



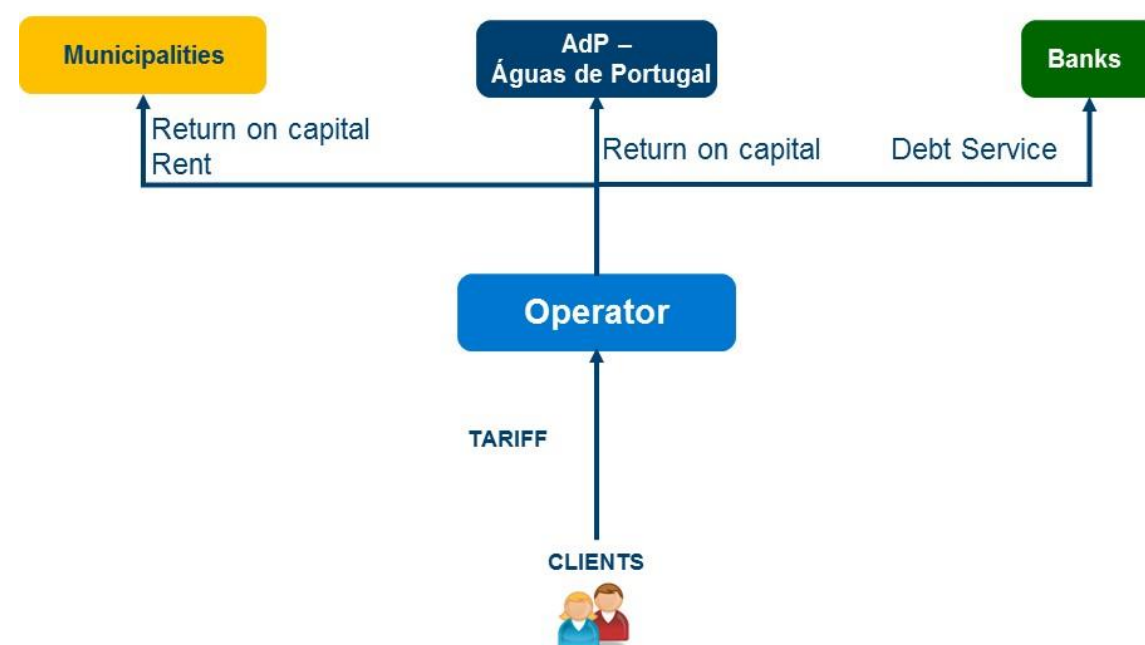
FINANCE STRUCTURE

Finance structure based on equity, grants and tariffs

Financing Sources



Yield





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Aguas de Portugal REGIONAL COMPANIES (2018)

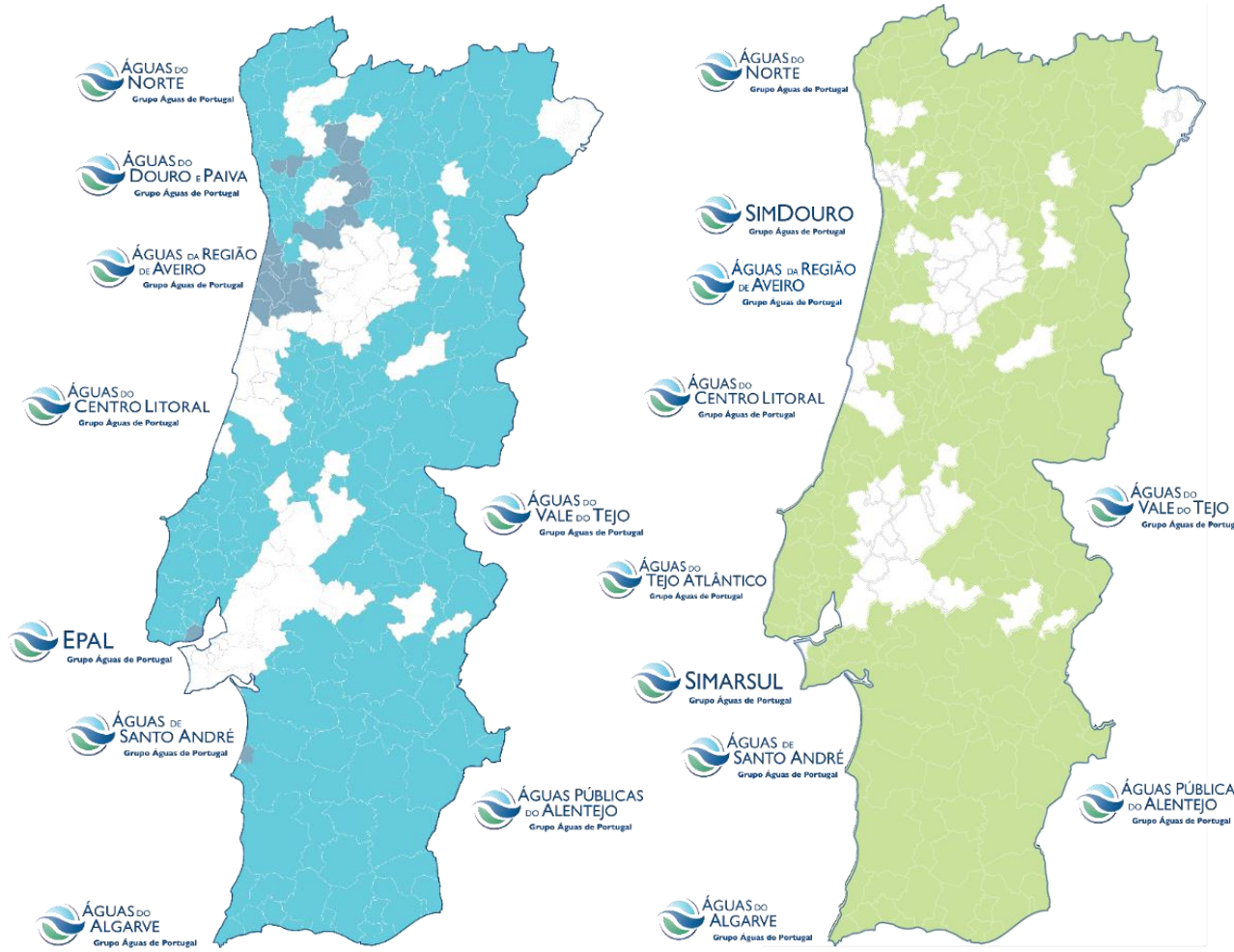
WATER SUPPLY

7,85 million people served
Upstream systems

900 thousand people served
Downstream system

218
Municipalities served

99,7%
Water quality compliance



WASTEWATER TREATMENT

6 million people served
Upstream systems

347 thousand people served
Downstream system

223
Municipalities served

94%
Wastewater quality compliance



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INFRASTRUCTURES BUILD AND MANAGED



WATER

Intakes	WTP	Water mains(km)	Storage Facilities	Pumping Stations
935	150	14,264	1,444	634



Intake (Odelouca Dam, Algarve)



WTP (Asseiceira, Tomar)



Water main (Jovim, Gondomar)



Storage (Lisboa)



Pumping Station (Alcanhões)

WASTEWATER

WWTP	Sewers (km)	Pumping Stations	Marine Outfalls
953	7,577	1.759	20



WWTP (Cascais)



WWTP(Aveiro)



WWTP (Leiria)



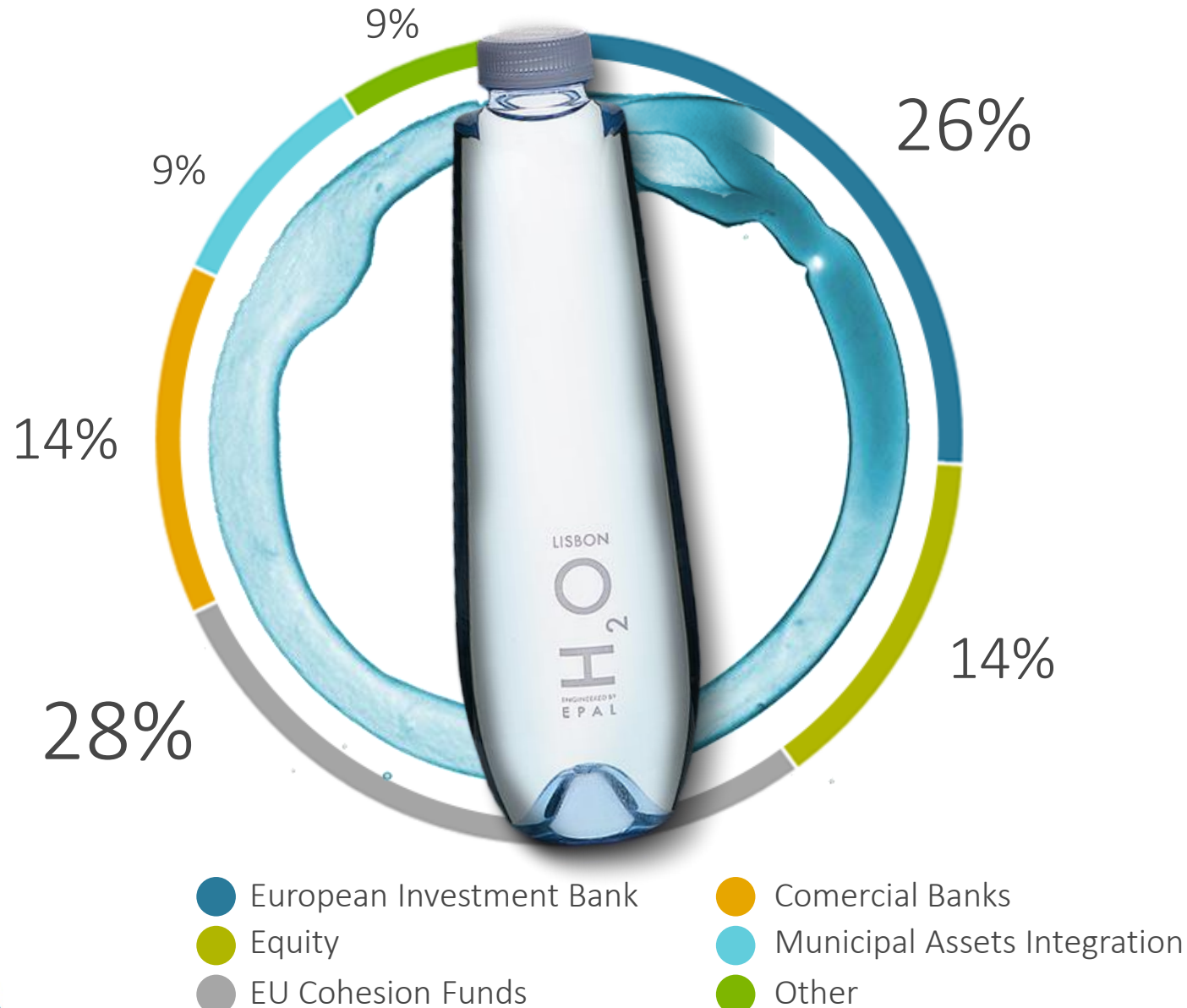
WWTP (Alcântara - Lisboa)



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INFRASTRUCTURES INVESTMENT 1995 TO 2015

7.5 billion €



Turnover | 2016

646 000 000 €

Operational Result | 2016

166 500 000 €

EBITDA | 2016

306 300 000 €

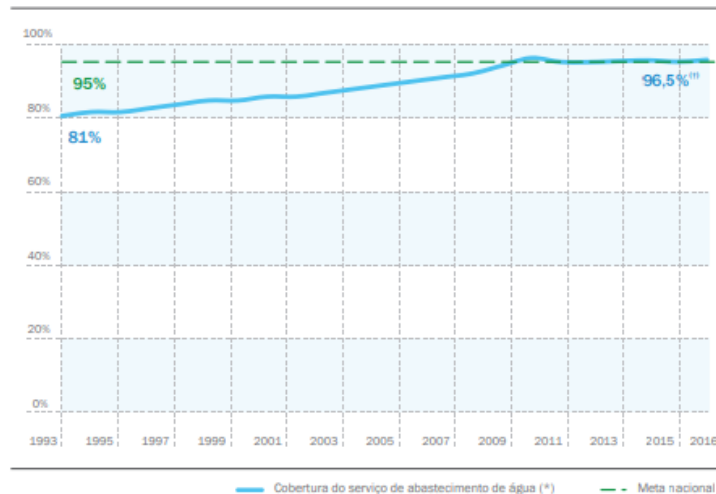
Net Profit | 2016

70 800 000 €



Acesso ao serviço de abastecimento de água

Fonte: ERSAR | RASARP (Indicador "AA01 baixa")



96,5%
das famílias
com acesso
ao serviço
público de
abastecimento

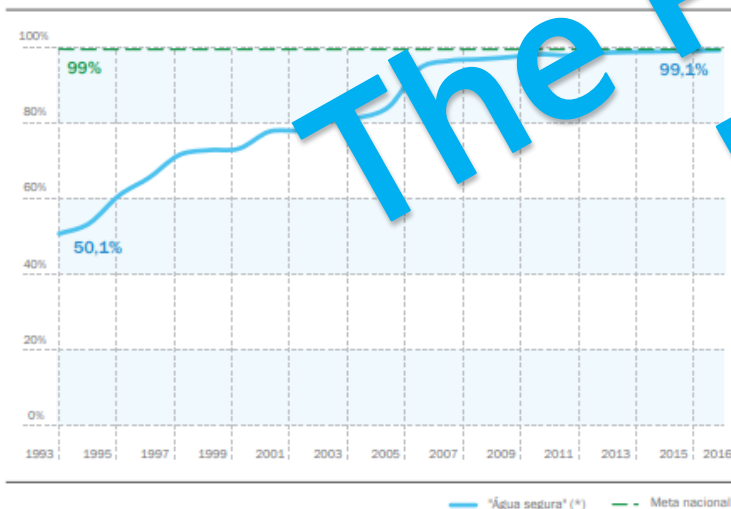
95%
meta nacional
já alcançada

Qualidade da água para consumo humano

Fonte: ERSAR | RASARP (Indicador "AA04 baixa")

Qualidade da água para consumo humano

Fonte: ERSAR | RASARP (Indicador "AA04 baixa")

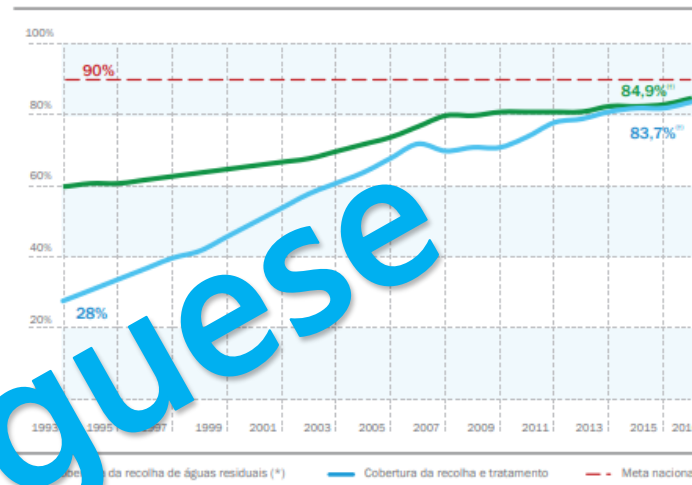


99%
de água
controlada de
boa qualidade
para consumo
humano

50%
de água que,
há 25 anos, ou
não era de boa
qualidade, ou
cuja qualidade
não era conhecida

Acesso ao serviço de saneamento de águas residuais urbanas

Fonte: ERSAR | RASARP (Indicador "AR01 baixa")



90%
meta nacional
para a
cobertura
da recolha e
tratamento de
águas residuais

84%
das famílias
com acesso ao
serviço público
de saneamento

28%
nível de recolha
e tratamento há
25 anos

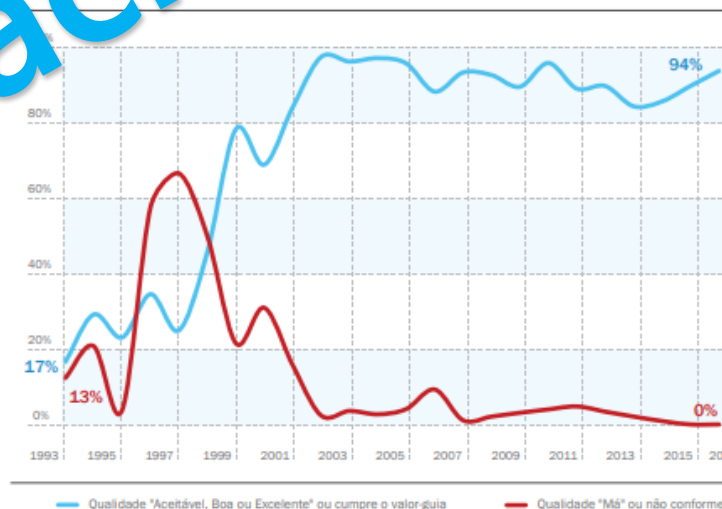
94%
de qualidade
nas águas
balneares
interiores

70%
com qualidade
desconhecida
há 25 anos

(*) Indicador definido como a percentagem do número total de alojamentos localizados na área de intervenção da entidade gestora para os quais as infra-estruturas do serviço de recolha e tratamento se encontram disponíveis
(†) Dados provisórios (Julho 2017).

Qualidade das águas balneares interiores

Fonte: APA | Relatório do Estado do Ambiente



— Qualidade "Aceitável, Boa ou Excelente" ou cumpre o valor-guia — Qualidade "Má" ou não conforme



(*) Indicador definido como a percentagem de água controlada e de boa qualidade, sendo esta o produto da percentagem de cumprimento da frequência de amostragem pela percentagem de cumprimento dos valores paramétricos.



Portuguese companies have acquired, over the last decades, experience, capacity and know-how of excellence that are at the level of what is best done at a global level.



Portuguese Showcase



LESSONS LEARNED FROM THE LAST 25 YEARS

- PPP were part of the solution (they bring **competition for the contract**), but several problems arose because the privatization model was ill-conceived:
 - Water services are **natural monopolies** with **huge sunk costs** and must be dealt with having this always present and so **rules must be set from the first moment**. This was not the case.
 - Legal framework was not considered as being important and therefore no **framework at all was designed**, only the public contracts law was in place, one that did not consider the specificities of concession and cession contracts:
 - risks involved and how are they shared between the two parties,
 - long term contracts with large investments required, Project Finance models for the financing of the required investments;
 - increasing marginal unit costs of service provision,

These are
some of the
lessons
learned from
the
Portuguese
experience



LESSONS LEARNED FROM THE LAST 25 YEARS

- **No conditions were set upon the municipalities before engaging in PPP:** no KPI were requested so as to have an insight on what was going on in what concerns
 - NRW, metering,
 - Physical accessibility
 - Level of cost recovery,
 - Asset value,
 - Burst frequency,
 - Water consumption, ...
- **No due diligence was required** to be performed before starting the tendering procedure, so as to assess the situation in what concerns the fiscal, legal and physical situation of the operation;

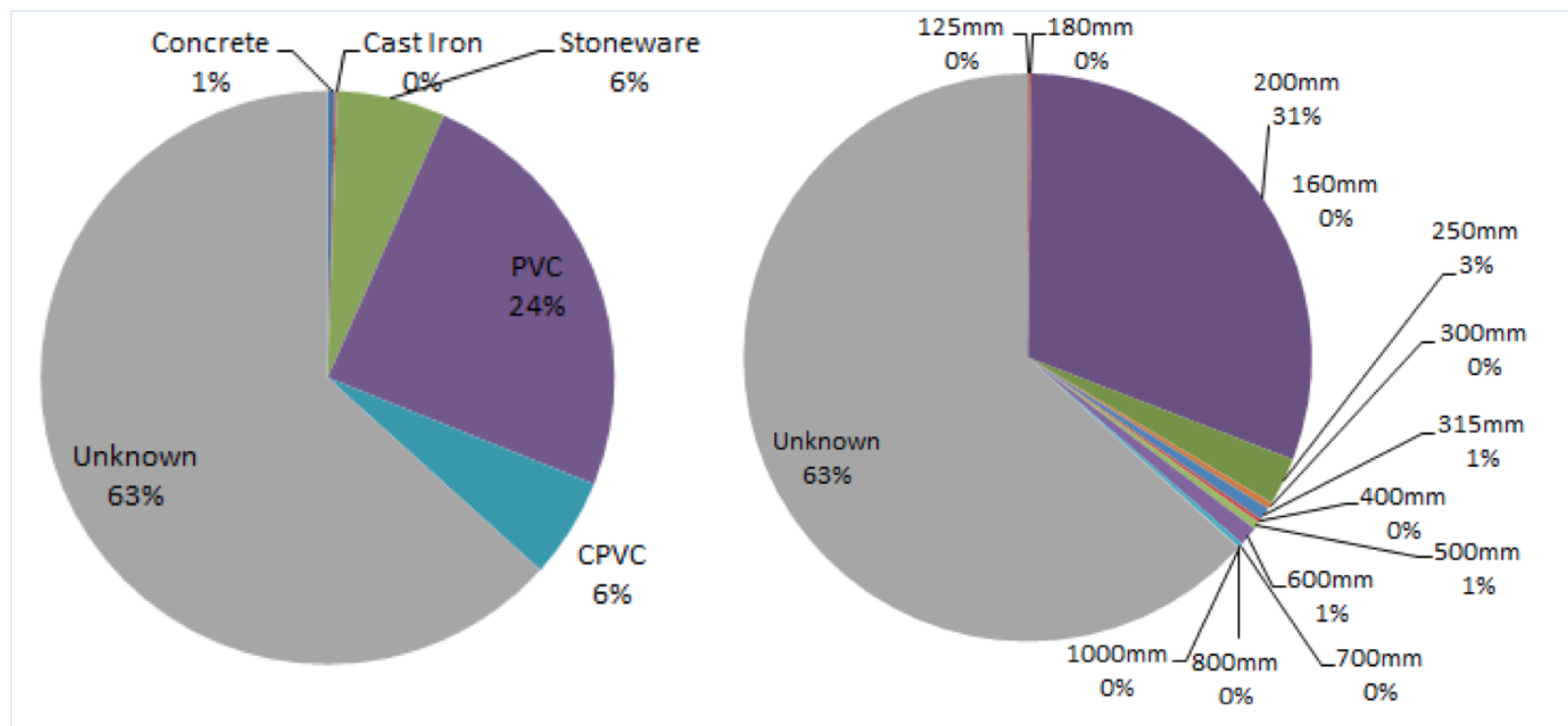


These are
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LESSONS LEARNED FROM THE LAST 25 YEARS

- In some cases no Financial Statements were even available: no Annual Reports, no detailed description of the infrastructure, no reasonable forecast of the future operation, no sound analysis of the expected capex and opex.



ASSET MANAGEMENT: a presente challenge

GOOD PRACTICES TO SUSTAIN FULL LIFE CYCLE COST

If you want to go for a PPP you must have an insight into the financing institutions perspective:

- **Sound investment planning:** optimal capital spending via risk-based planning, proactive prioritization of needs and increased *Value for Money* outcomes.
- **Risk management:** Improved control of the critical infrastructures and risk reduction for failures or collapses with impact in the water utility reputation and image.
- **Capacity to pay debts:** Optimized life cycle cost and higher return on assets.
- **Service:** consistent and continuous responses to the clients' needs and positive impact in the utility reputation.
- **Long term sustainability:** Reduced risk of non-payment.

This was not the case when we launched our first PPP and the sector is still enduring the consequences of the errors that were committed.



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Thank you for your attention

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