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## Comparison of European Water Prices

**Our Future Water Conference** 

Berlin, November 7<sup>th</sup>, 2018





The study delivers a systematic approach integrating cost recovery and quality of service levels into a price comparison

#### Background of the study

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- Water supply systems are very different across the EU member states
- Standards and requirements set on a European level (quality, safety, protection of the environment)
- Water sector is the only economic sector in Europe for which EU directives lay down rules on the quality of services and on pricing with the objective of the recovery of costs

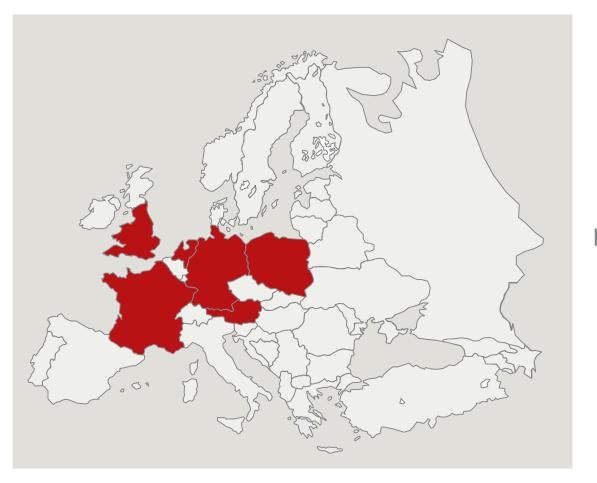
#### Study

- Comparisons of water prices per cubic metre are not sufficiently taking the circumstances into account.
- The study delivers a systematic approach to quantifying and integrating the most relevant issues



# The study extends to six countries covering more than half of the EU 28-population

#### **Countries compared in the study**





 45% of total volume of water extracted

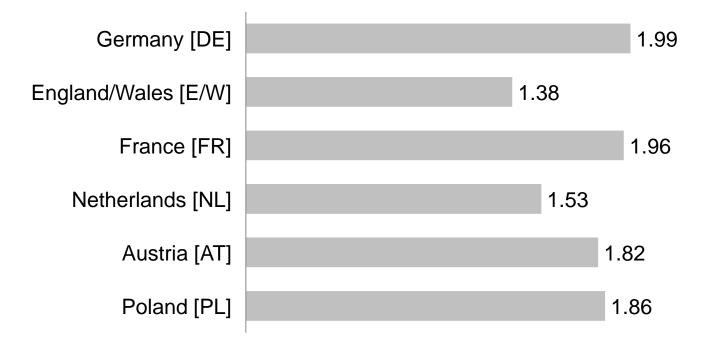
of EU-28



# In this comparison, Germany has the highest price per cubic metre, followed by France

#### **Country specific water price**

€ per m<sup>3</sup> of water supplied, purchasing power adjusted





## Are prices per m<sup>3</sup> really meaningful?

## The approach comprises a price comparison on three levels

#### Methodology of the Study

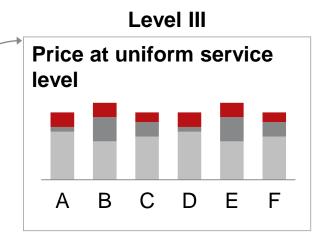


Average water and wastewater expenses for households weighted according to volumes and residents

Change from Level I to Level II



Consideration of grants (= cost recovery)



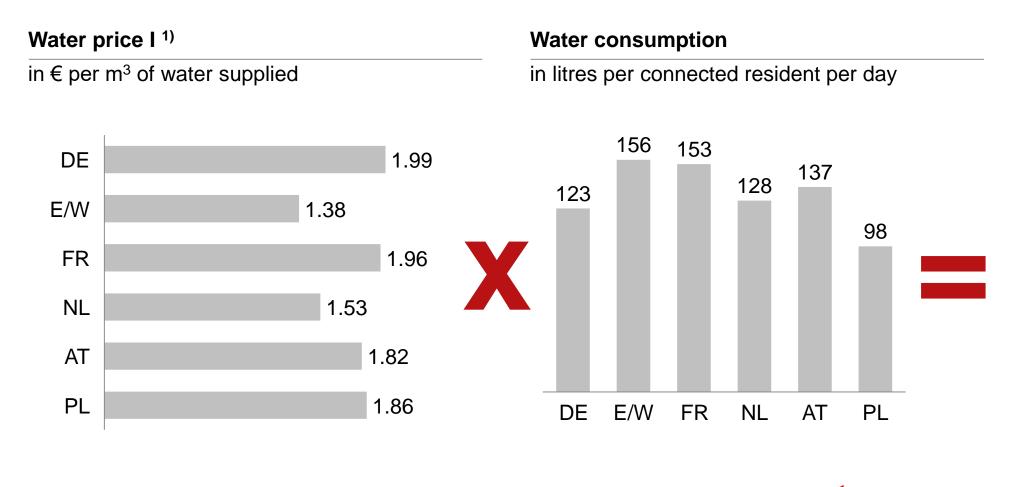
Equalisation of service levels of the countries in the comparison to a uniform service level

Change from Level II to Level III



For the evaluation of asset services dominated by fixed costs, we should rather also take water consumption into account

#### **Country specific water price**



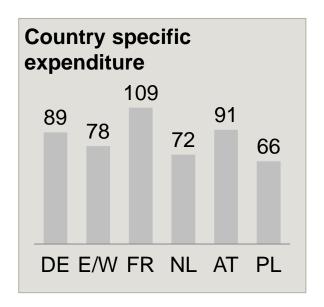
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## Expenditures in countries with high consumption like England/Wales or France are rising, compared to m<sup>3</sup> prices

#### Total expenditure for water delivery

in € per capita and year, price indexed and adjusted for purchasing power



Change from Level I to Level II

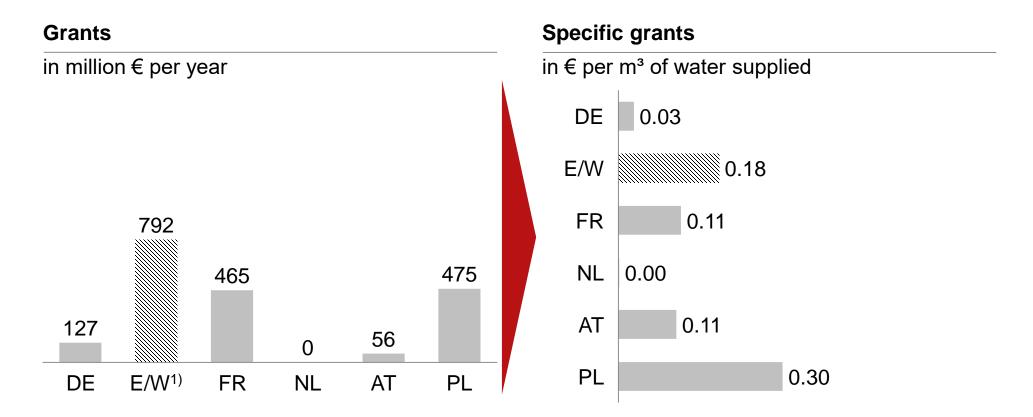




# Do consumers' expenditures really tell the whole story?

The water sector receives grants between 0 and 30 Cents per cubic metre – green dowry in England/Wales is treated like a grant

#### Grants for drinking water



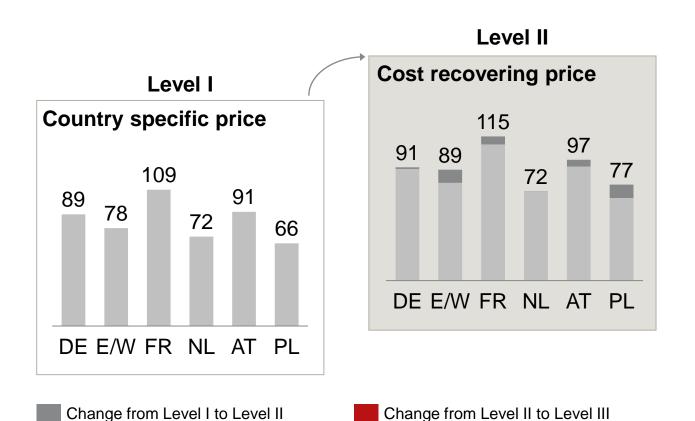
1) Water industry in E/W is actually receiving only marginal grants; however, the conditions under which the industry was privatised in 1989 must be regarded as a state grant (so called green dowry in the amount of GBP 6.4bn, treated like a grant over 30 years)



# These grants result in a significant price adjustment for England/Wales, France, Austria and Poland

#### Total expenditure for water delivery

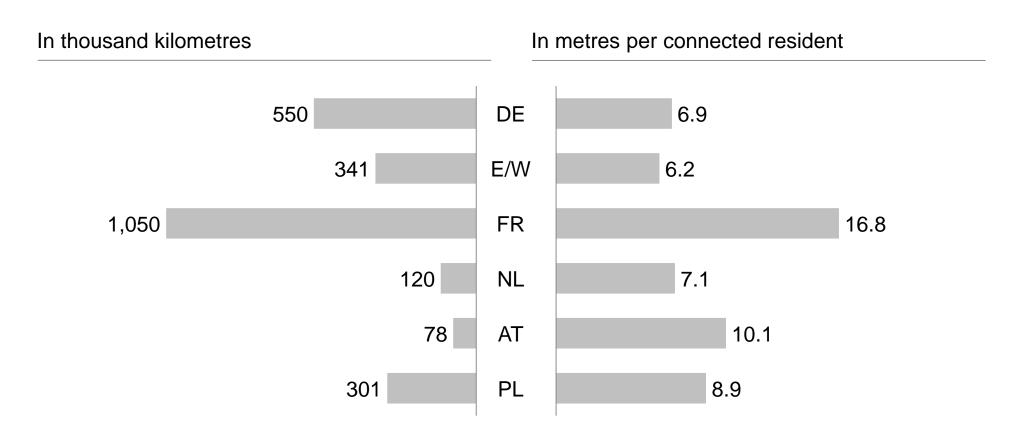
in  ${\ensuremath{\in}}$  per capita and year, price indexed and adjusted for purchasing power



And what value do consumers get for their money?

## The length of the pipeline network varies between the countries

#### Length of the pipeline network

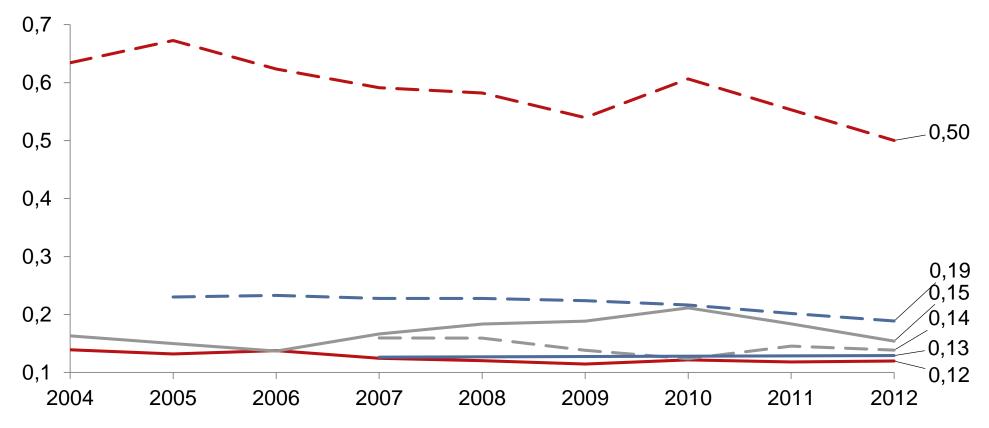




The condition of the pipeline network can be evaluated by specific water losses – being very high in England/Wales

#### **Specific water losses**

in m<sup>3</sup> per pipe kilometre and hour



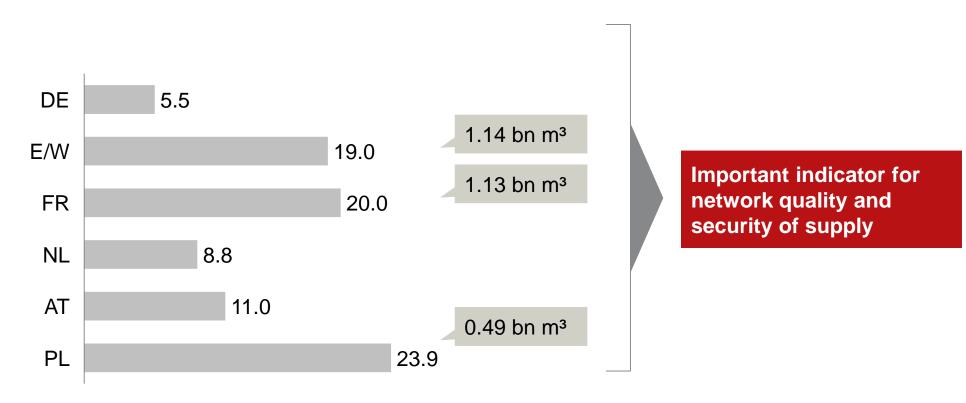




The water losses are regarded as one of the most important indicators for network quality; they exceed 20 percent in some countries

#### Relative water losses (unmetered network supplies)<sup>1)</sup>

in % of water available

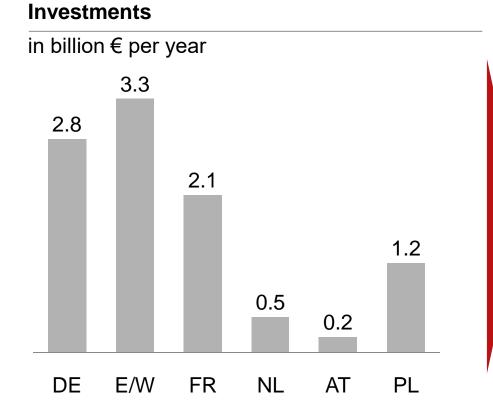


1) Water drawn for operational and fire department uses was counted as losses.

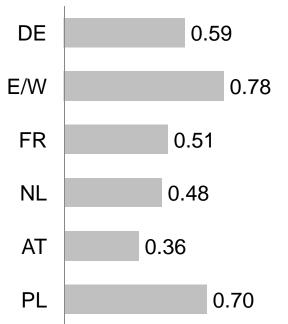


Investments per cubic metre are highest in countries with accumulated investment needs

#### Average investment for drinking water



### Specific investments in € per m<sup>3</sup> of water supplied per year

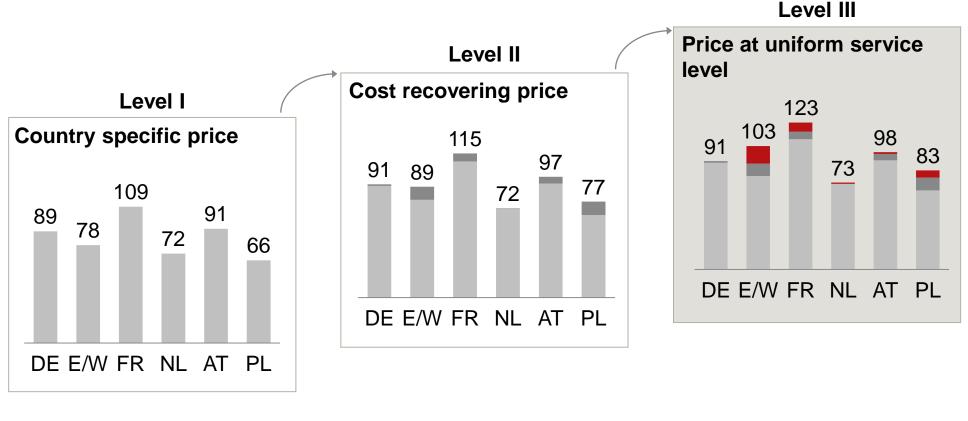




Opportunity cost of water losses and cost of the installation of meters lead to significant adjustments of prices at the third level

#### Total expenditure for water delivery

in  ${\ensuremath{\in}}$  per capita and year, price indexed and adjusted for purchasing power



Change from Level II to Level III



# The study delivers an approved approach to compare prices and could be extended to further countries

#### Conclusion

- A mere comparison of cubic metre prices is not useful.
- The study delivers an approved approach to compare expenditures in different countries taking subsidies and service levels into account
- This approach observing the implementation of standards set in EU directives for quality of services AND for pricing – could be extended to further European countries; the necessary data is meanwhile largely available







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