



# Sector Paper

## Water Collection, Treatment & Supply sector





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## Sources

- Mini-presentations from VG Warsaw 2012
  - Sweden
  - France
  - Hungary
  - Poland
  
- Discussant remarks and contributions
  
- Country Progress Reports



# Overview of sector

## Water

- Precious, scarce resource essential to sustain life, economic development and ecosystems
- Natural environments very different across countries

## Water Collection, Treatment and Supply sector

- Collection and distribution of water for household and industrial needs
- Sewerage treatment often secondary activity

## Organisation of the industry

- Natural monopoly
- Usually public service provided by local government
- Other organisation – national government, private sector, co-operative
- Co-production



# ISIC Rev.4 Section E :

## Water supply, sewerage, waste management and remediation activities

### 36 – Water collection, treatment and supply

- Collection – rivers, lakes, rain water, etc.
- Treatment - purification, desalinisation
- Distribution – mains, trucks, irrigation canals for domestic and industrial use

#### *Exclusions:*

*Operation of irrigation equipment for agriculture*

*Treatment of waste water to prevent pollution*

*Long distance transport via pipelines*



# Regional implementation – industry

ISIC 4	NACE Rev.2	NAICS 2012
<b>E: Water supply, sewerage, waste management and remediation activities</b>	<b>E: Water supply, sewerage, waste management and remediation activities</b>	<b>22 Utilities</b>
		<b>221 Utilities</b>
<b>36 Water collection, treatment and supply</b>	<b>36 Water collection, treatment and supply</b>	<b>2213 Water, Sewage and Other Systems</b>
<b>360 Water collection, treatment and supply</b>	<b>360 Water collection, treatment and supply</b>	<b>22131 Water Supply and Irrigation Systems</b>
<b>3600 Water collection, treatment and supply</b>	<b>3600 Water collection, treatment and supply</b>	<b>221310 Water Supply and Irrigation Systems</b>



# Industry classification

## National dimension

### ➤ **Nace Rev.2**

- France : NAF 2008

### ➤ **Extended Nace Rev.2**

- Poland : PKD 2007 : Additional level but equivalent to Nace Rev.2
- Sweden SNI 2007
  - 36.001 – Ground water supply
  - 36.002 – Surface water supply

## International comparability

- Broadly comparable but different levels of detail exist



# Product classification

## CPC v.2

Division	Sub-class	Description
<b>18. Natural water</b>	18000	Natural water
<b>69. Electricity, gas and water distribution (on own account)</b>	69210	Water distribution through mains (excl steam & hot water) on own account
	69230	Distribution of steam, hot water and air conditioning supply through mains (on own account)
	69230	Water distribution, except through mains (on own account)
<b>86. Support services to agriculture, hunting, forestry, fishing, mining and utilities</b>	86330	Water distribution services through mains (on a fee or contract basis)
	86340	Distribution services of steam, hot water and air-conditioning supply through mains (on a fee or contract basis)
	86350	Water distribution services, except through mains (on a fee or contract basis)





# Product classification

## CPA 2008

Division	Category	Sub-category	Description
<b>36. Natural water, water treatment and supply services</b>	36.00.1		Natural water
		36.00.11	Drinking water
		36.00.12	Non-drinking water
		36.00.20	Treatment and distribution service of water through mains
		36.00.30	Trade services of water through mains



# Product classification

## National

- **CPA 2008**
  - France : CPF
- **Extended CPA 2008**
  - Poland : PKWiU 2008 : Additional level but equivalent to CPA 2008
  - More detailed than CPA

## International comparability

- CPC (and NAPCS)
  - based on characteristics and use of the product
- CPA
  - based on the industry-of-origin



# Turnover

Annual  
Structural  
Statistics

- Very good availability of industry data
- Census / survey
- Administrative data

Short-term statistics

- Low availability of detailed data
- Survey
- Administrative data

Product statistics

- Low availability
- Survey. Some EU countries PRODCOM surveys cover this sector

Other output measures

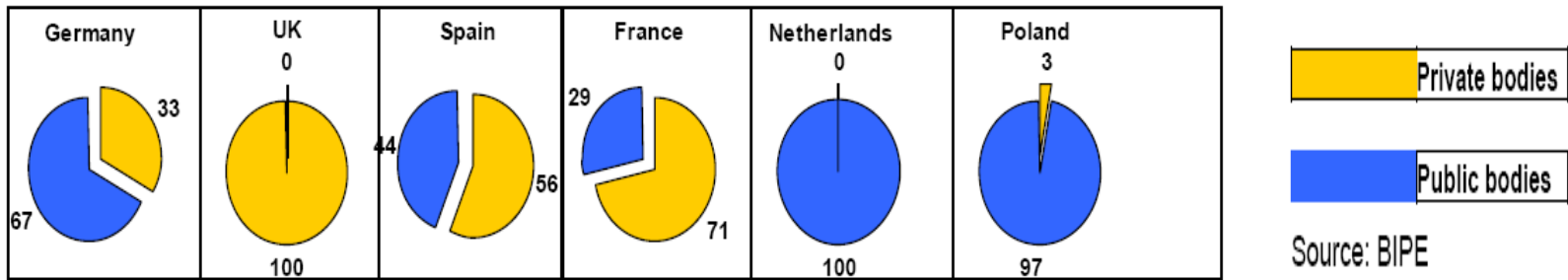
- Environmental accounts

# Turnover - issues

## Organisation of the industry

- Different levels of public/private ownership
- Activity may be recorded in 'Local Government' sector

Water management



## Secondary activity

- High share of sewerage activity recorded in this sector
  - ➔ Importance of product level information



# Turnover – recommended approaches

Category	Data Source	Level of Detail Collected	Frequency
Best	Survey/Census	Industry turnover <u>and</u> product turnover detail	Annual & sub-annual industry data
			Annual product data
Good	Survey/Census and Administrative (tax data, regulator, industry association data etc.,)	Industry detail <u>only</u>	Annual
Minimum	Administrative (tax data, regulator, industry association data etc.,)	Industry detail <u>only</u>	Annual
	Environmental accounts	<u>Product level</u>	Varies across countries



# Price Statistics

**Price** = Fixed charge (service) + usage fees (good)

- *Includes charges for sewerage & wastewater treatment*

## Data availability

- Industry – 60% of respondent countries
- Product (CPC) - 18%

## Collection of data

- Local authorities / municipalities / trade associations
- Traditional PPI surveys (Private sector ownership)
- CPI : price developments in water charges to households

## Pricing methods used

- Direct use of repeat services
- Unit value pricing



# Price Statistics - Issues

## Good or service ?

- Consumer consider water a 'good'. Producer – 'service' if water treated
- Quality adjustment ?
- Possible scale effect – price higher if you consumer less

## Target coverage

- B2B, B2ALL – market conditions

## Bundled service

- Sewerage is often bundled with water services

## Organisation of the industry

- Public sector involvement
  - market price may not be representative if large non-market activity

## Use of CPI

- Adjust to basic prices
- May not be good proxy for B2B



# Price Statistics – recommended approaches

Category	Data Source	Quality & accuracy	Cost
Best	PPI Inquiry - average price p/cubic metre by type of service and consumer - direct price of repeat services	Very good - if water plant has level of detail required	High
Good	CPI Price incurred for water services	Adequate - if adjusted to basic prices - if similar pricing exists for household and business users	Low
Minimum	Average price of water distributed - Revenues / volume of water distributed	Poor quality : - if product bundling - if different pricing for business & households - if subsidies	Low





# Main conclusions

## **Varying national practices**

- Natural environment
- Market organisation

## **International Classifications**

- Industry well harmonised
- Differences at product level

## **Output / Price measurement**

- Good availability at industry level
- Poor at product level

## **Main issues**

- Non-market activity
- Secondary activity in sewerage