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How to achieve full cost recovery

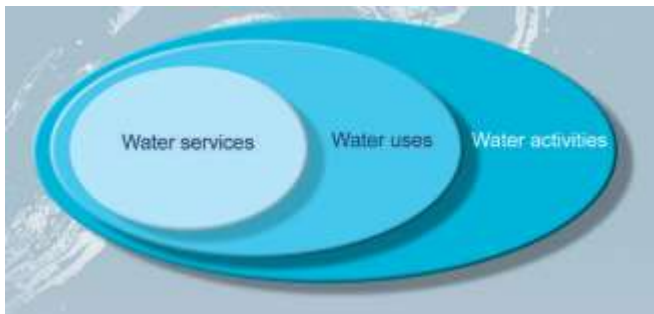
17th November 2015



Cost recovery analysis & WFD

Article 9.1

“Member States shall take account of the principle of recovery of the costs of water services, including environmental and resource costs, having regard to the economic analysis conducted according to Annex III, and in accordance in particular with the polluter pays principle.”



WFD article 2-38

“Water services” means all services which provide, for households, public institutions or any economic activity:

- (a) abstraction, impoundment, storage, treatment and distribution of surface water or groundwater,
- (b) waste-water collection and treatment facilities which subsequently discharge into surface water.

“Members States shall ensure by 2010 an adequate contribution of the different water uses, disaggregated into at least industry, households and agriculture, to the recovery of the costs of water services, based on the economic analysis conducted according to Annex III and taking account of the polluter pays principle.”

Cost recovery analysis & WFD

Provision of article 5:

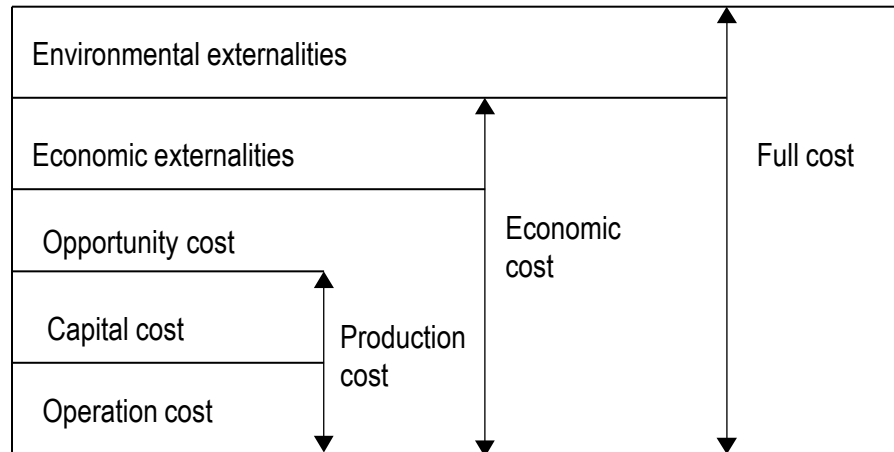
- Cost recovery analysis as part of the economic characterisation of the River basin
- To be updated every 6 years
- To be conducted at the scale of the River basin

Cost recovery analysis provides useful information for:

- Implementation of incentive water-pricing policies (art.9)
- Funding possibilities of programmes of measures
- Exemption justification (on grounds of disproportionate costs, art.4)

What costs are we talking about?

“Full cost”... What is it exactly?



- Maintenance and operating costs (opex)
- Capital costs (capex): depreciation, new investment and opportunity costs (benefits that could have been drawn from an alternative use of the capital for another purpose)
- Environmental costs (market and non-market damage incurred by environmental degradation caused by the services)
- Resource costs (quantification of the costs borne by other activities due to the over-use of the resource by the service in question)

Cost recovery analysis

To cover opex, capex and environmental and resources costs, water and wastewater utilities can use 3 sources of funding (OECD, 2009):

Tariffs

- Tariffs: user fees or contributions (access to a service - connection charges - and service delivery – flat/volumetric charge)

Taxes

- Taxes: funds raised by national, regional and/or local taxes used to fund WSS sector

Transfers

- Transfers: grants from foreign sources, official development assistance and private philanthropic contributions

Loans, bonds and private investors are not considered as transfers as they need to be repaid by a combination of the 3Ts.

Cost recovery analysis

Examples of funding sources assessment:

Table 5.6 Proportion of sources of financing for the selected water utilities (*)

	BWB (Germany)	BMO (France)	City of Barcelona (Spain)	Vitens (Netherlands)	BW (United Kingdom)
Tariffs	100 %	87 %	46 %	100 %	100 %
Taxes		13 %	20 %		
Transfers			34 %		

Note: (*) The data in Table 5.6 highlight different sources of financing for the selected water utilities as reported in their financial statements for the year 2010. In order to understand these figures, the reader should be aware of some of the limitations regarding data, especially in the analysis of static or very short time-series. This table seems to imply that funds are only at play in certain EU Member States. However, because of the long-term nature of the types of investments that are needed in the water sector, caution is advised in drawing conclusions. The table shows that Barcelona has received subsidies, but only because their loans were reported in 2010. Longer time-series would be needed to identify other heavy transfers received by the other companies.

Source: EEA.

Cost recovery analysis

Making the link between pricing mechanisms and costs covered:

Table 1.1 Pricing mechanisms for different types of water services (*)

Water service	Pricing mechanism	Cost types covered (°)
Water abstraction	Tax or charge	E&R
	Water trading	E&R
Water supply/consumption	Water price/tariff	C&I; O&M
	Tax on water use	E&R
Sewage	Sewage charge	C&I; O&M
Wastewater treatment	Wastewater charge	C&I; O&M
Water pollution	Water pollution charge/tax	E&R
Quantitative water management	Water system charge	C&I; O&M

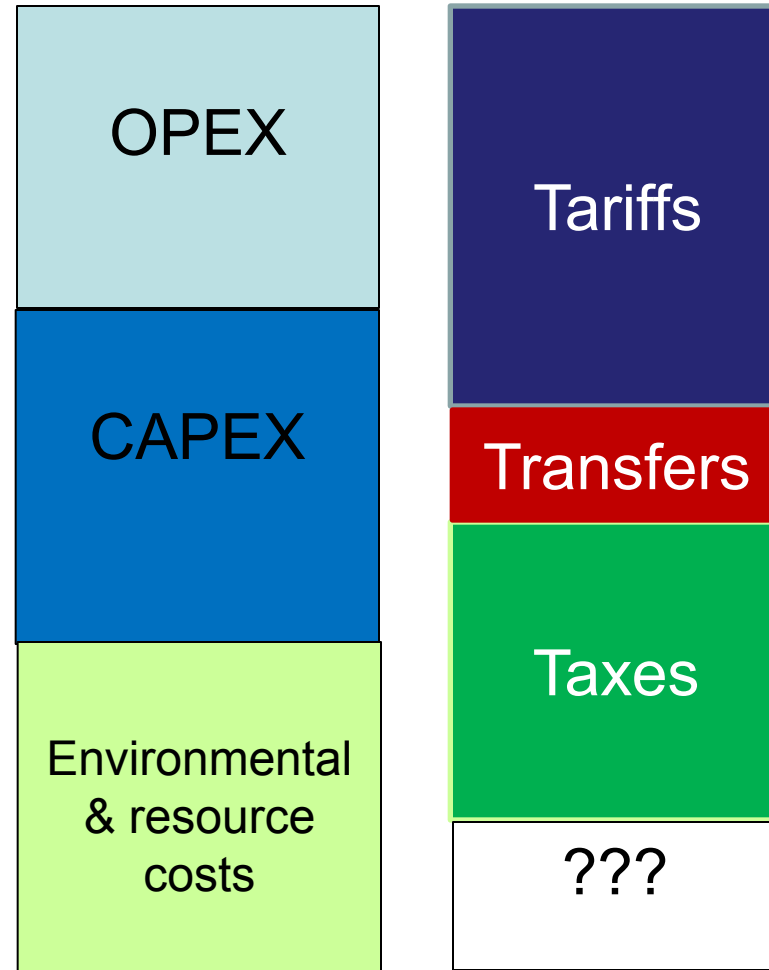
Note: (*) See link to OECD/EEA database for further information on pricing instruments (<http://www2.oecd.org/econinst/queries/>).

(°) C&I: capital and investment costs; O&M: operational and maintenance costs; E&R: environmental and resource costs.

Source: EEA.

Cost recovery analysis

- Assessing for each user category (HH, industry, agriculture)
- Costs generated to use the service (opex, capex, env/res. costs)
- Funding through 3Ts, identifying public funding (tax payer), transfers, possible cross-financing

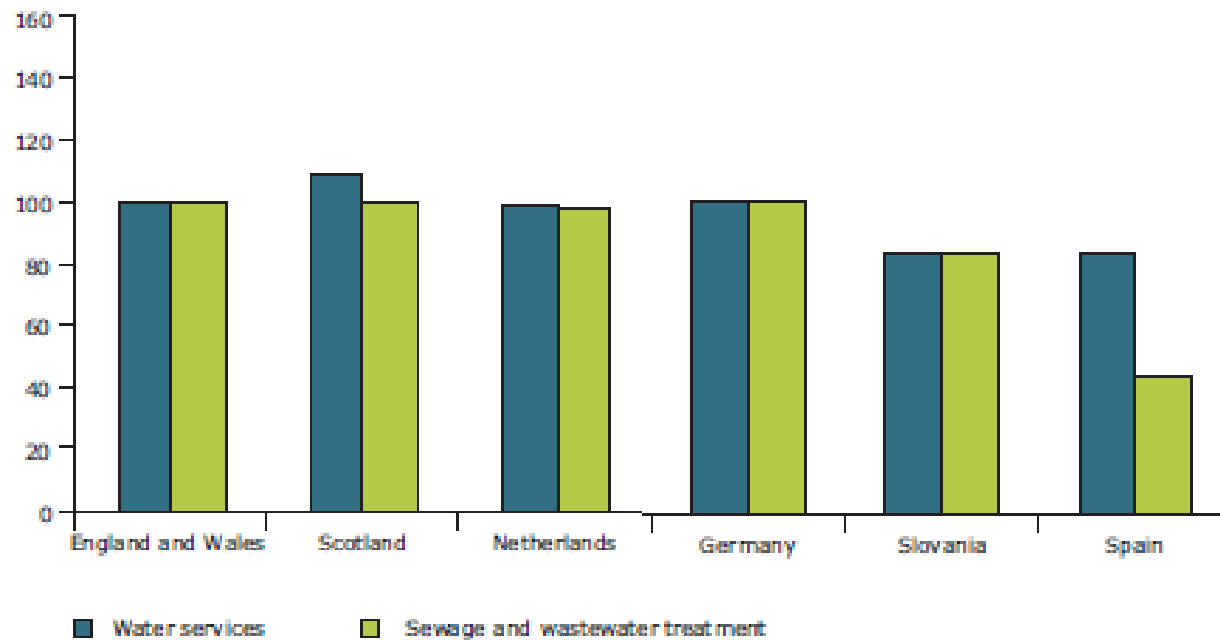


Cost recovery analysis

Assessment of cost recovery ratio through tariffs for HH

Figure 5.2 Cost-recovery levels for water and sanitation services in the domestic sector

Cost recovery levels %



- When higher than 100%: cross-financing other users
- When lower than 100%: cross-financing from other users, funding from taxes and/or transfers

Cost Recovery Analysis & WFD

Some attempts to assess environmental costs...

Table 5.5 Time changes in reported expenditures (as % of total expenditures) for selected water utilities

		2005	2006	2007	2008	2009	2010	2011	2012
BWB (Germany)	Operating expenditure	-	62 %	61 %	61 %	62 %	62 %	-	-
	Environmental charges and taxes	-	9 %	8 %	8 %	8 %	8 %	-	-
	Capital expenditure	-	30 %	31 %	31 %	30 %	30 %	-	-
BMO (France)	Operating expenditure	-	-	45 %	41 %	43 %	51 %	-	-
	Environmental charges and taxes	-	-	-	-	-	-	-	-
	Capital expenditure	-	-	55 %	59 %	57 %	49 %	-	-
City of Barcelona (Spain)	Operating expenditure	51 %	47 %	54 %	55 %	45 %	-	-	-
	Environmental charges and taxes	26 %	30 %	28 %	28 %	25 %	-	-	-
	Capital expenditure	23 %	23 %	18 %	17 %	29 %	-	-	-
Vitens (Netherlands)	Operating expenditure	-	-	58 %	58 %	57 %	58 %	-	-
	Environmental charges and taxes	-	-	20 %	20 %	20 %	19 %	-	-
	Capital expenditure	-	-	22 %	22 %	23 %	23 %	-	-
BW (United Kingdom)	Operating expenditure	72 %	69 %	69 %	70 %	70 %	71 %	64 %	61 %
	Environmental charges and taxes	-	-	-	-	-	-	-	-
	Capital expenditure	28 %	31 %	31 %	30 %	30 %	29 %	36 %	39 %
SW (Scotland)	Operating expenditure	-	46 %	49 %	47 %	46 %	46 %	45 %	-
	Env. Charges and taxes	-	-	-	-	-	-	-	-
	Capital expenditure	-	54 %	51 %	53 %	54 %	54 %	55 %	-

Source: EEA based on national data.

Cost recovery across Member States

Some observations and concluding remarks...

OPEX

Recovery of opex is the rule in most EU MS, with exception for irrigation sector (e.g. France, Spain and Italy)

CAPEX

Recovery of capex not yet the rule in all countries (esp. Spain for wws and in new EU MS with high level of EU transfers)

Clear definition of costs to include in capex calculation may be required: depreciation cost (historical costs without VAT), replacement/renewal costs, new infrastructure investments

Cost recovery across Member States

Some observations and concluding remarks...

ENVIRONMENTAL COSTS

- Most EU MS have environmental charges/taxes on abstraction/pollution to internalize part of current environmental and resource costs.
- But no evidence of the extent to which these environmental and resource costs are being fully covered.
- Cost recovery implemented in households & industry to a greater or lesser extent.
- For agriculture, in many countries, water charged only to a limited extent.



Thank You

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