WFD’s implementation

Economic Analysis: cost-recovery

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Agence de l’eau Artois-Picardie

EURORIOB, Krakow, 25-30 September 2004
Presentation’s content

1. The economic analysis in the WFD
2. Cost recovery: what are the objectives
3. Illustration: French districts
4. Comments and conclusions
## Economic analysis in the WFD

<table>
<thead>
<tr>
<th>Activities</th>
<th>Content</th>
<th>Stakes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic characterisation of water uses</td>
<td>Set of economic indicators (GPD, Turnover, added value, Employment)</td>
<td>• link Economic data with Pressure &amp; Impact data</td>
</tr>
</tbody>
</table>
| Assessment of the current level of cost-recovery for water services | For each water services, identification of financial flows and contribution of the 3 main economic sectors | • current cost recovery  
• sustainability of the services  
• financial equity between the 3 sectors |
| Provide elements for the baseline scenario development | Which trends for economic driving forces for 2015                      | • which impact of economic drivers on pressures                         |
Article 9 : the objectives

- To take into account the principle of recovery of the costs of water services
- To ensure by 2010
  - Incentive water pricing policies for users to contribute to the environmental objectives established under Art. 4
  - An adequate contribution of the different water uses to the recovery of the costs of water services, disaggregated into at least industry, households and agriculture and taking account of the Polluter-Pays Principle (PPP)

pricing is a « basic » measure (Art. 11-3b)
Article 9: The activities

At district level to report on

Financial costs

Pricing

Environmental costs

It’s also to report on

Sustainability (renewal costs)

External or Crossed subsidies

PPP implementation
Article 9 : The activities

Costs Incomes

Costs
- Capital costs
- Operating costs
- Environmental & Resource costs

Incomes
- Full costs
- Taxes
- Prices (sales)
- Subsidies

Contributions per sector?

Cost-recovery assessment per sector?

Industry
Households
Agriculture

Financial costs

Cost-recovery assessment per sector?
Article 9 : The activities

Cost recovery = 3 questions :

- description of financial flows linked with water services ? Water pays Water ?
- Cross-subsidies between economic sectors ? Polluter Pays Principle implementation ?
- Sustainability of water services ? To which extent the incomes of water services covers the renewal costs of the infrastructures?
Water services : tarification

Water price (water + Sewerage) for public services in Artois-Picardie basin
Water services: tarification

**Revenu net imposable moyen par masse d'eau en 1999**

- Inférieur à la moyenne du bassin
- Supérieur à la moyenne du bassin (12 723 €)
- Supérieur à la moyenne nationale (14 802 €)
- Secteurs hors bassin administratif

**Water price**

- Inférieur à 0,6 €
- Entre 0,6 et 1 €
- Entre 1 et 1,2 €
- Entre 1,2 et 1,3 €
- Supérieur à 1,3 €

**Les services d’assainissement de l’eau**

**Incomes per household**
### Illustration: Water accounts

#### Water field expenses

6 french river basins

<table>
<thead>
<tr>
<th></th>
<th>SP Water Sew</th>
<th>Individuel Sew</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Operating Exp</strong></td>
<td>6 600</td>
<td>130</td>
</tr>
<tr>
<td><strong>Capital exp/an</strong></td>
<td>4 400</td>
<td>660</td>
</tr>
<tr>
<td><strong>Patrimony</strong></td>
<td>210 Md</td>
<td>25 Md</td>
</tr>
</tbody>
</table>
Illustration: Water accounts

Cost recovery calculation

- Functionment
- Maintenance
- Fixed capital
- Consumption

- Pricing
- Subsidies

COSTS

INCOMES
## Illustration: Water accounts

### Incomes

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount (M€)</th>
</tr>
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<tbody>
<tr>
<td>sales</td>
<td>9 200</td>
</tr>
<tr>
<td>« Régies »</td>
<td></td>
</tr>
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<td>Water dist.</td>
<td>1 700</td>
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<td>sewerage</td>
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### Total incomes

- Total incomes: 9 700
### Illustration: Water accounts

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Water price accounts for 98% of the incomes

- **300 balance subsidies** (general budget)
- **10** rainflows subsidies (cpte 7063)
- **170** other subsidies
## Illustration: Water accounts

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<td>➔ sales 9 200</td>
<td>➔ functionment and maintenance costs 1 800 M€</td>
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<td>Private del. 4 800 M€</td>
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**Total incomes 9 700**
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| Total incomes 9 700 | Dépenses 9 700 |
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Patrimony assessment lead to a needed fixed capital consumption of 3 100 M euros minimum

3 800 M euros minimum (available for savings (available for renewal and new works))
Million Million

Water agencies

Regions

Municipalities

Departments

920

75

50

Investments: 4360

Water and sewerage public services

Users (households, industry, agriculture, ...)

85% of the works are financed through water price

Illustration: Water accounts

FNDAE

General budget
(taxes)

FNDAE

if en
Environmental costs

Full Costs

Maintenance Costs

Renewal Costs

Environmental Costs

Mitigation costs

Environmental damages
Environmental costs

Full Costs

Maintenance Costs

Renewal Costs

Environmental Costs

Mitigation costs
Denitrification costs, …

Other mitigation costs
Buying mineral water, …
Environmental costs

Full Costs

Maintenance Costs

Renewal Costs

Environmental Costs

Environmental damages

Methods ? Data ?

For 2004 :

- synthesis of studies
- a database
- built capacity for cost-benefit analysis
Environmental costs

Illustration: Artois-Picardie Basin

Costs linked with bad quality of surface water = 80 M€/an
   Method: contingent valuation with guidance value

Costs linked with bad quality of bathing water = 40 M€/an
   Method: assessment of turnover losses for economic sector
Comments and conclusions

- importance of getting through the cost-recovery steps by steps (the 3 questions)

- environmental and ressource costs pragmatic and iterative approach

- Link the cost recovery activities with the ongoing activities of the WFD’s implementation
Thanks for your attention !