water efficiency initiatives and water scarcity management

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Contents

- Overview of economic aspects of water in France (cost recovery)

- Developing a sustainable water resource programme (water scarcity)
Water price in France...

- Includes drinking water and waste water
- Is based on metering
- Can include a non proportional part (less than 40%) depending on investments
Average water price in France:
€3 / m³

- Including 5% VAT and 15% water agencies charges

- 40% = drinking water
- 60% = waste water
What about industrial users and farmers?

- **Industrial users** can use drinking water supply and public treatment plants or carry out specific abstraction and/or treatment.
  - They pay special abstraction and/or pollution charges in case of private solution.
  - **Farmers** pay abstraction and/or pollution charges at a lower level.
Contents

- Overview of economic aspects of water in France (cost recovery)
- Developing a sustainable water resource programme (water scarcity)
Severe droughts: comparison between 1976 or 2005 and the average of the last 50 years
Demand management according to the 1992 Water Act

- 3 thresholds based on monitoring (river flow, groundwater table)
  - 1 = no garden watering, no washing cars, no irrigation 1 day a week
  - 2 = no irrigation 3 days a week
  - 3 = no irrigation at all (at sub basin level)

- Advantages = transparency + you can anticipate
- Disadvantages = no specific measures + good practice not taken into account
National management plan for water scarcity (October 2005)

- **France** = 3000 m³ / inhabitant / year
- **26 measures**: many of them were decided within the [new Water Act (December 2006)](#)

- **3 main issues**
  - In case of drought, drinking water supply comes first
  - Demand and resource management
  - Implementing and promoting different kinds of measures
Item 1: priority to drinking water supply
- New contracts for hydroelectricity will stipulate the volume of water which will be available for drinking water.

Item 2-1: demand management
- Raising public awareness
- Label for cities taking part in a flower competition
- Good practice for golf course keepers and managers
- Reduction of abstraction licences for industries in case of drought
Item 2-2: irrigation management (50% of annual consumption and 80% of summer consumption)

- **Demand management:**
  - training + agri-environment (+ compulsory measures)

- **Resource management:**
  - financing new storage of irrigation water **IF**
    - existing demand management programme
  - ecological balance at basin level
  - acceptable cost recovery
Item 3- water efficiency and better use of available resources

- **Rainfall harvesting**: new tax refund
- **Grey water recycling and waste water reuse**: under instruction by Health Department
- **new programme to reduce leakage**

- **Desalination**: implemented in islands
- **Groundwater**: research programmes on increasing natural storage or increasing sustainable abstraction
Conclusion: 
Water framework directive

- **WFD Art 13-5** « river basin management plans may be supplemented by the production of more detailed programmes and management plans for sub-basin, sector, issue or water type, to deal with particular aspects of water management. »

- **Drought Management Plans**: ongoing discussions

thank you for your attention