



# European initiative on water reuse

**DEMOWARE Conference**  
**Innovation for**  
**a competitive water reuse sector**  
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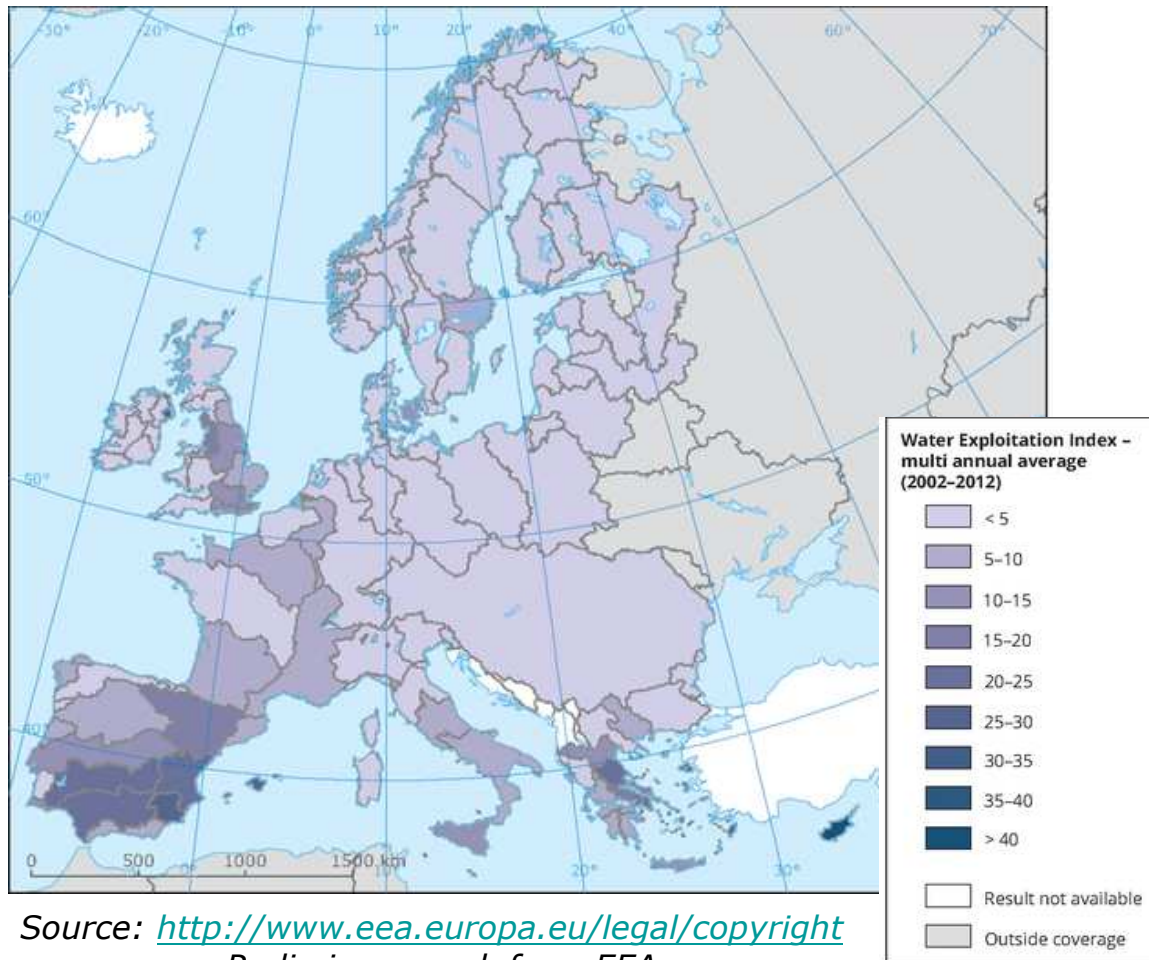


*EU initiative on Water Reuse*

# **POLICY BACKGROUND**



## Water scarcity and droughts continue to affect:



Source: <http://www.eea.europa.eu/legal/copyright>  
Preliminary work from EEA.

- 14% total population of Europe under water stress conditions during summer
- 20 river basin districts face structural water stress issues, mainly in the Mediterranean
- Agriculture in the Mediterranean region alone accounts for almost 75% of total water used for agriculture in Europe.



## Water reuse as a strategic option:

*Provide not only significant environmental benefits:*

- Encourage efficient resource use
- Reduce pressure on EU water resources
- Positive contribution to the quality of EU waters
- Increase the recycling of nutrients
- ...

*But also social and economic:*

- Rapidly growing global water market:  $\pm$  1 trillion € by 2020
- Stimulate the development of innovative technologies
- Create between 10.000-20.000 new jobs
- ...

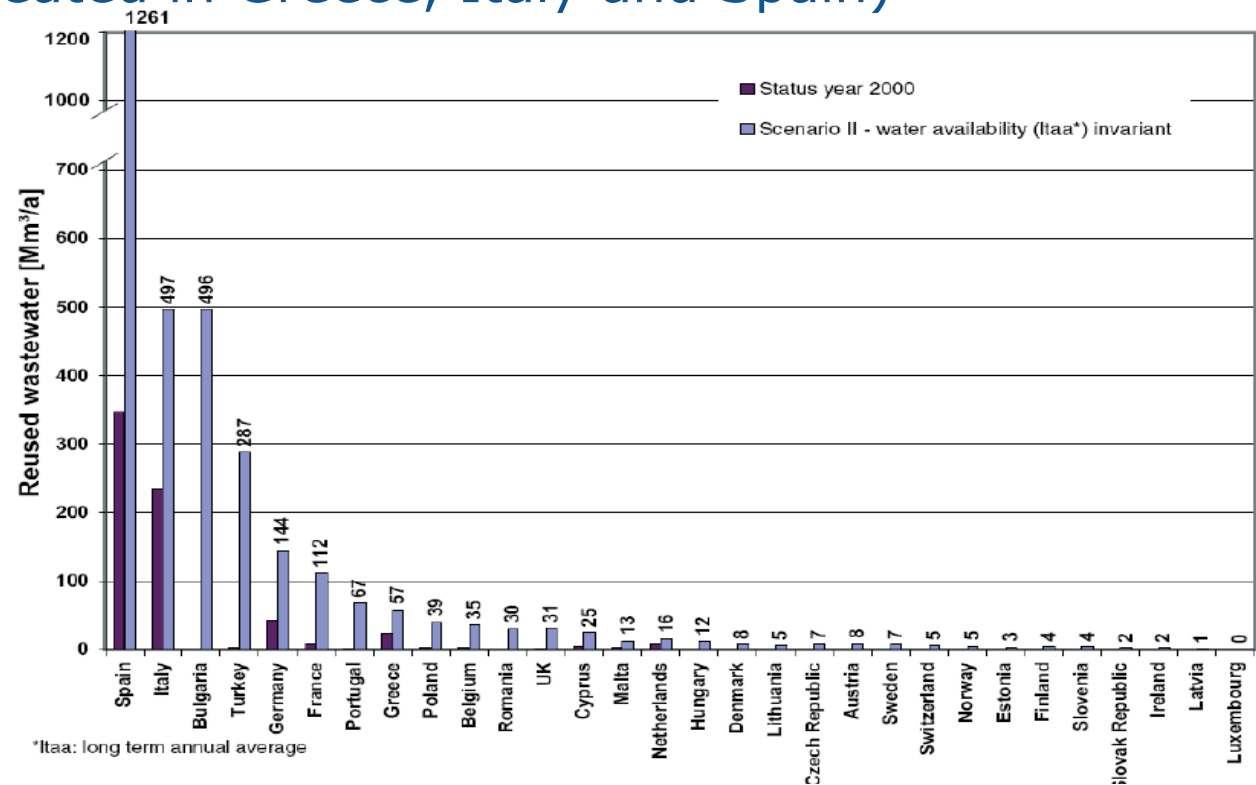


## Water reuse as an untapped potential:

- ❑ In Europe: 1 billion m<sup>3</sup>/year in 2006 =
  - 2.4% of the total volume of treated effluents produced (5 to 12% of treated in Greece, Italy and Spain)
  - ~ 0.4% of annual EU freshwater withdrawals

- ❑ Achievable potential in Europe

→ 6 billion m<sup>3</sup>/year by 2025



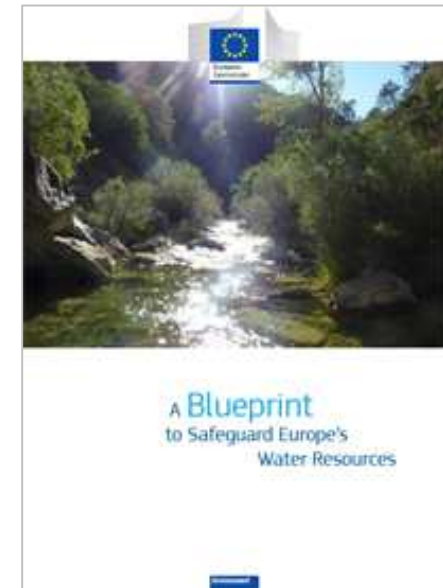
Source: Hochstrat et al., 2006

## Water reuse in the 2012 Blueprint

***EC Communication: "A Blueprint to safeguard Europe's water resources"***  
*(November 2012):*

- interesting option to address water scarcity
- untapped potential in many situations
- lack of consideration in water management, lack of harmonized standards

→ opportunity for an EU action



## Water reuse in Sustainable Development Goals



- Initiative of **United Nations** to end all forms of poverty, fight inequalities and tackle climate change
- **2030 Agenda for Sustainable Development**
- **17 SDGs** adopted in September 2015

### SDG 6: Ensure access to water and sanitation for all



#### Target:

- *By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, having the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.*

- ...



# Water reuse in Circular Economy

- **EC Communication: "Closing the loop – An EU action plan for the Circular Economy" (December 2015):**
  - **Chapter 4. From waste to resources: boosting the market for secondary raw materials and water reuse**
  - List of follow-up initiatives (Annex):
    - 1. Reuse in integrated water planning and management → CIS Guidance**
    - 2. Minimum quality requirements for water reuse for irrigation & GW recharge → legislative proposal**
    - 3. Water reuse in industrial activities → BREFs**
    - 4. Support to research and innovation**
    - 5. EU funds for investments in water reuse**







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# **PROGRESS & NEXT STEPS**





# 1. Reuse in integrated water planning and management

*Development of the **CIS Guidelines on Integrating Water Reuse into Water Planning and Management in the context of the Water Framework Directive***

- *Better integration in water planning management and considered by MS in implementation of EU water legislation*
- *Promote a common understanding of reuse in WFD context and good practice*
- *Based on experience in MS and third countries*
- *Endorsed by MS water directors in June 2016*





## 2. Minimum quality requirements for water reuse in irrigation and aquifer recharge

- *Addressing the lack of a coherent and comprehensive legislative framework within the EU.*
- *Focus on 2 uses of most relevance at EU level: agriculture and on ground water recharge.*
- *Timeline:*
  - **Inception Impact Assessment** published → April 2016 ✓
  - **Technical proposal by JRC and** consulted with the independent **Scientific Committee on Health and Environmental Risks** (SCHER) → end 2016
  - **Consultation** of MS and organizations via the CIS → 2016-2017
  - **Proposal for an EU legislation** → mid 2017

## 3. Water reuse in industrial activities

- *Look into further integration of water reuse in the development and review of BREFs for relevant industrial sectors under the scope of the Industrial Emissions Directive (2010/75/EU).*
- *Most relevant sectors:*
  - **Food, Drink and Milk**
  - **Textiles**
  - **Industrial cooling systems...**



## 4. Support to research and innovation

- *Active field for research and innovation what could enhance the competition in a world market*
- *European Innovation Partnership (**EIP**) **Water** → Water Reuse as a top priority area:*
  - *Numerous Action Groups on Water Reuse*
  - *Conference in Leeuwarden in February 2016*
- *Increasing visibility of funding opportunities in:*
  - **The new Horizon 2020** → calls to include Water Reuse in the Circular Economy topics
  - **The European Regional Development Fund (ERDF)** → smart specialization strategies of MS and regions
  - **LIFE - Programme for the Environment and Climate Action** → investigate pilot projects in this field



## 5. EU funds for investments in water reuse

- *EU funding for Water Reuse infrastructure available:*
  - **European Regional Development Fund (ERDF)**
  - **Cohesion Fund (CF)**
  - **European Agricultural fund for Rural Development (EARDF)**
- *Encouraging MS to use these opportunities and prioritize Water Reuse investments in their Operational Programmes*
- *Check the opportunities in the **European fund for Strategic Investments (EFSI)***





**Thank you  
for your attention!**

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## **Access to documents**

*Dedicated EC Internet page:*

<http://ec.europa.eu/environment/water/reuse.htm>

