

# WssTP

## The European Water Platform

# Why are we here?

- WssTP is the **recognized voice and promotor of water-related RTD and innovation in Europe.**
- Recognized by the EC **European Technology Platform for Water**
- **WssTP Water Vision**
  - ✓ The Value of Water
  - ✓ Water-Smart Society
- **Mission:**
  - ✓ Improve **coordination and collaboration** in the water sector and water using sectors;
  - ✓ Enhance **performance** of the European water sector and water using sectors;
  - ✓ Contribute to solving **societal challenges** through RTD&I.



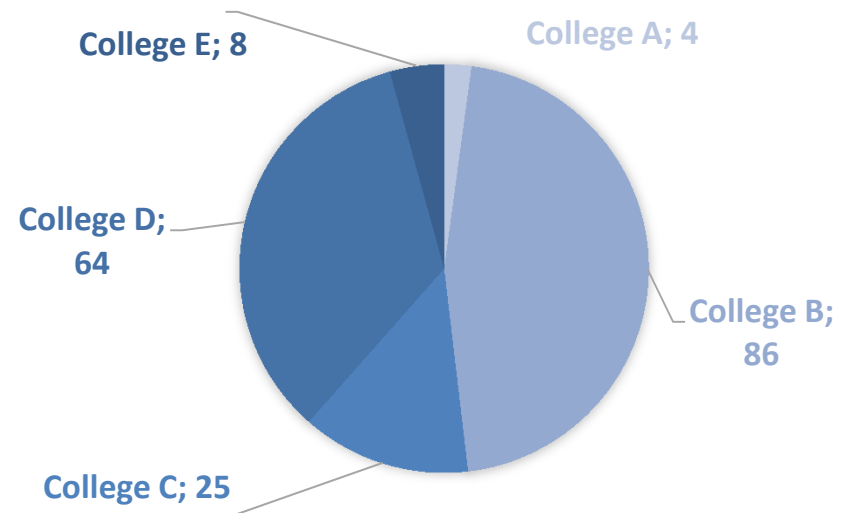
# WssTP membership

## WssTP Colleges

College A: Multinational corporations  
College B: Research & Technology developers  
College C: Utilities  
College D: Suppliers & SMEs  
College E: Large water users

College F: Public Authorities  
College G: Civil Society Organisations

## Members Per College



187 members



25 countries



+5% in 2017



Whole Water cycle

# WssTP Programmes



## Collaboration Programme

Aims to **network and collaborate** to:

- address the water challenges
- shape project consortia.



## Advocacy Programme

Make sure that:

- the **value of water & the Smart Water Society** are promoted
- WssTP members can voice their matters



## Market Programme

Aims to **bring R&I solutions to the market** in Europe and beyond.

### Water Knowledge Europe



### Water Innovation Europe



### Water Market Europe



## INNOVATIONS TASKFORCE

### RESEARCH & DEVELOPMENT & LIVINGLABS

#### CLUSTER 1: the Value of Water

Socio- economic and governance models for water smart society

#### CLUSTER 2: Smart Water treatment

technologies to enable multiple waters and recycling of water

#### CLUSTER 3: Digital Water

smart ICT & Decision Support systems for water

#### CLUSTER 4: the Value in Water

solutions to capture and valorize energy & materials in water

#### CLUSTER 5: Hybrid Grey and Green infra

solutions for integrated human built and nature based water infrastructure

#### CLUSTER 6: Water Innovation System

water stewardship, standardization, knowledge Sharing and advocacy

#### CLUSTER 7. Water-Smart INDUSTRY

Integrate solutions for industrial end-user needs

#### CLUSTER 8. Water-Smart CITY

Integrate solutions for City end-user needs

#### CLUSTER 9. Water-Smart RURAL

Integrate solutions for Rural end-user needs

Vertical Clusters:  
Market & Livinglabs driven

Horizontal Clusters:  
Research and Knowledge driven

### 3 overall functions (fine-tuned per cluster):

#### 1. COLLABORATE (SIRA)

- S.o.a./ requirements reports
- Tech workshops
- Incubate R&D projects
- H2020 & FP9 topics
- Update SIRA

#### 2. ADVOCATE

- Communication plan
- Advocacy Workshops

#### 3. INNOVATE

- Incubate technology transfer projects
- Set-up VC events
- Initiate large investment plans (e.g. LLL, infra) with financiers (EIB etc.)



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# WssTP Working Groups

Working Group	Lead Member	Lead Person
Bathing Water	KWB	Pascale Rouault
Ecosystem Services	Luleå University	Lena Goldkuhl
Emerging Compounds	Deltares	Leonard Osté
Green Infrastructure	SINTEF	Mehdi Ahmadi
Climate Action	CEH	Alan Jenkins
Oil gas and mining	aquateam	Eilen Arctander Vik
Renewable Energy and Desalination	PSA-CIENAT	Guillermo Zaragoza
Resource recovery	Wetsus	Martijn Bijman
Urban Water Pollution	University of Bath	Jan Hofman
Water & Energy	DVGW	Tobias Martin
MENABIO (membrane, Biotech. and Nano.) - <i>NEW</i>	IRSA	Gilbert Rios
Water & ICT	CETaqua	Rafael Giménez
Water & Industry	Wetsus	Albert Jansen
Water and Agrifood	Bioazul	Antonia Lorenzo
Water and infrastructure - <i>NEW</i>	UPONOR	Ilari Aho
Water Beyond Europe	UNESCO-IHE	Gaetano Casale
Water-Energy Food Biodiversity Nexus	WUR	Floor Brouwer
Water Security - <i>NEW</i>	TBC	TBC
Water Reuse - <i>NEW</i>	TBC	TBC





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# MEP Water Group

## ■ Key characteristics

- ✓ Initiated as the Intergroup Water by MEP Richard SEEBER (EPP, AT) during the 6<sup>th</sup> legislature of the European Parliament
- ✓ Currently chaired by MEP Esther DE LANGE (EPP, NL)
- ✓ WssTP as management body

## ■ Mission

- ✓ Raise the profile of water as a cross-cutting topic in EU decision-making.
- ✓ Promote the sustainable management of Europe's water resources.

## ■ Activities

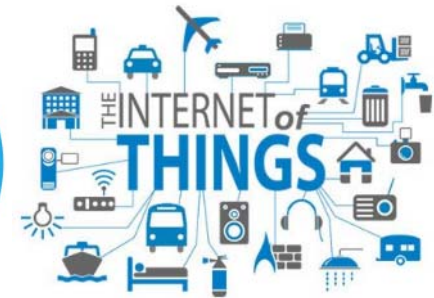
- ✓ **Plenary sessions/events** open to the wider public to raise awareness about the water topic.
- ✓ **Breakfast meetings** on specific issues, to discuss with MEPs about the water sector.
- ✓ **High-profile dinners** with senior level participants to discuss water related issues.



# A new WssTP Vision

A new WssTP water vision after 10 years

1. **New societal developments** e.g. towards circular economy, the emerging IoT, demographic changes, SDGs
2. **New insights in technological capabilities and prospects** e.g. (waste) water treatment, digital solutions for water management
3. **Increased awareness and urgency** to deal with the impact of human behaviour on our environment and the effect of climate change events on our water system

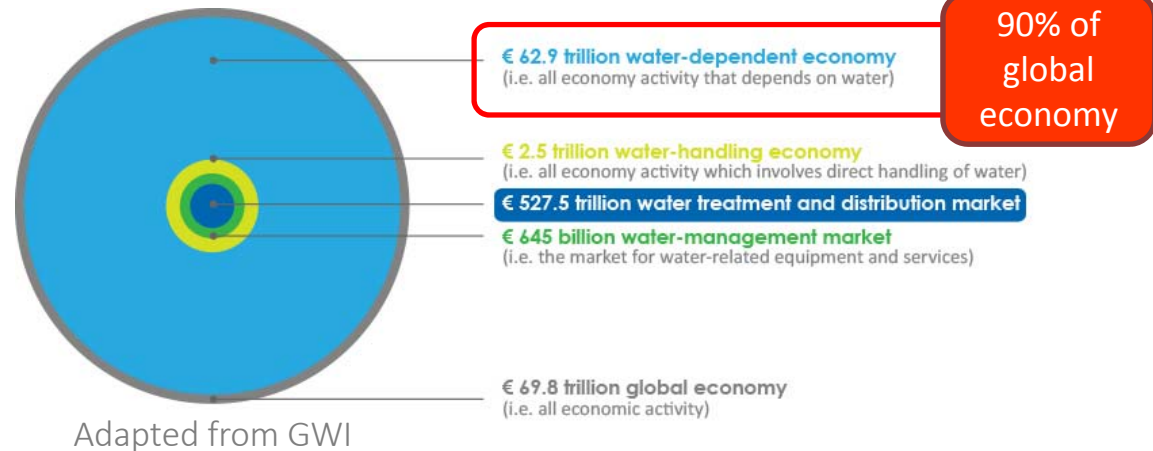




# Importance & Challenges

## EMPHASIS & RECOGNISE THE TRUE VALUE OF WATER:

*Without water almost everything else in the 68.8 Trillion Euro global economy would fail!*



### Trends and Challenges:

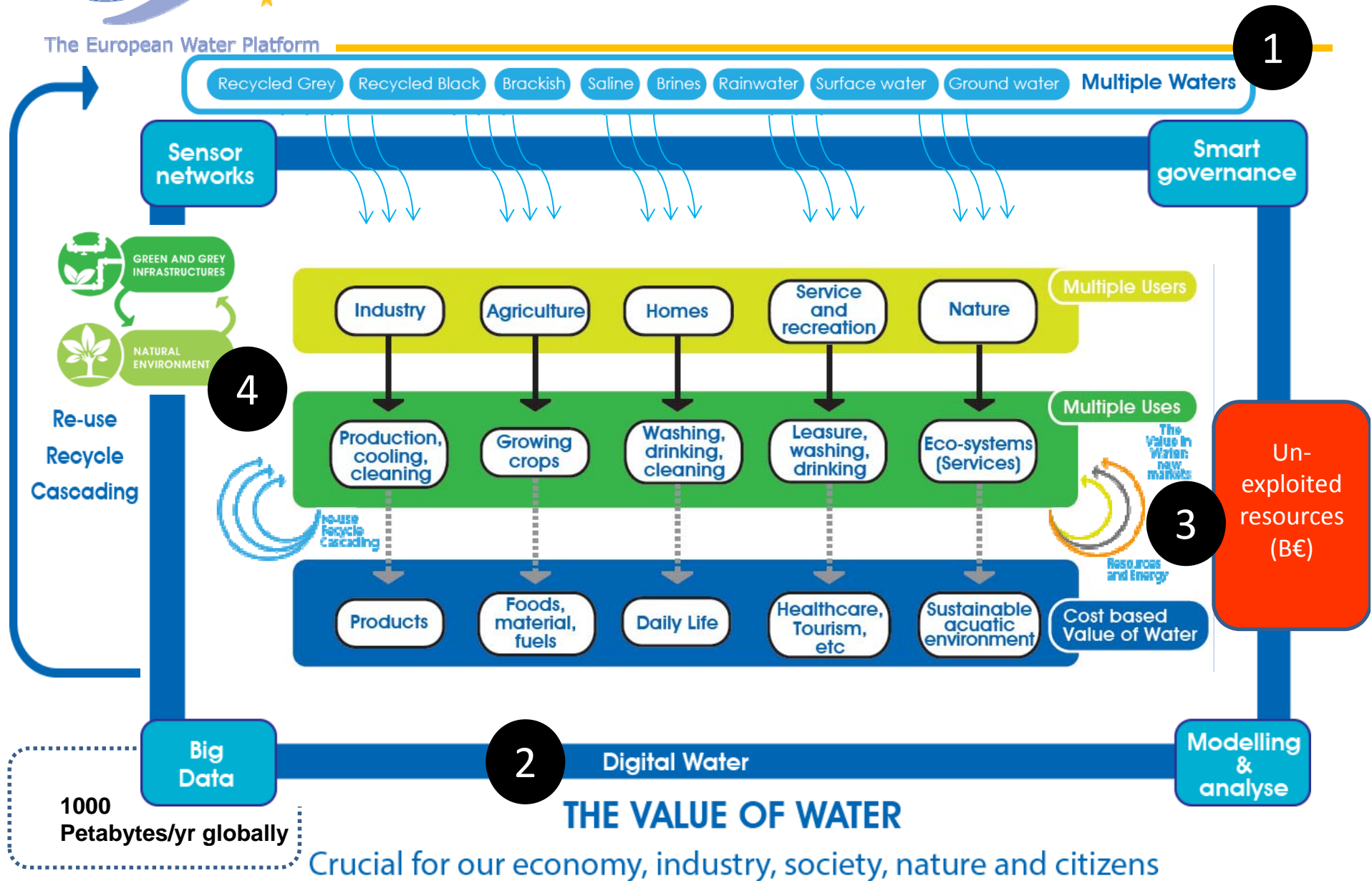
- world-wide growth in **water use** with 55% by 2050
- Diffuse **pollution**: affects 90% of river basin districts, 50% of surface water bodies and 33% of groundwater bodies across the EU
- Europe **water demand**: stabilise towards 2050 at around 1000 km<sup>3</sup>/yr
- **Water scarcity** is already a serious problem in 11% of EU, grow to 30% in 2030
- Increasing effects and costs (60%) of **climate change** due to floods and droughts

### Needs for innovation:

- Novel solutions and routes towards important **reduction of fresh-water extraction** from our natural eco-system, while **making available sufficient water sources** for the European and global economy
- Innovations to secure protection of our **natural environment, resilience and reduced vulnerability** against external events (climate, terrorism)



# WssTP Innovation Concepts



# Key Impact Parameters

KIP 1: Reduce impact of Europe's water Footprint

KIP 2: True value of water and boost water market

KIP 3: Resilience, stability and sustainability

**1. Reducing the impact of Europe's society on our natural water resources by 50% (>650km<sup>3</sup>/yr)**

- Increasing re-use from the current 5% to up to 30%,
- Reduce water "loss" from average 20% to lower levels
- much higher levels of alternative water sources (brackish, saline water and brine and rain water) – up to 15% of water demand
- Reducing the amount of water used for energy production with 10 - 20% (currently 25% of the overall water use)

**2. Exploit the European Model** in a global 650 B€ water management market

- new **advanced water technologies**, management models, infrastructures and systems to exploit in a in the global water-management market
- 5-10 times increase in the valorisation in water (**heat, energy, nutrients, minerals, (critical) metals, chemicals** in a multi-Billion global market)  
- > new business and jobs

**3. Securing long term resilience, stability and sustainability**

- Reduce impact and damage due to climate change events with 50%
- Source protection, minimising residual contamination
- New economic, investment and governance models and harvesting the value in water, as new sources for economic sustainability



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# Water Governance Objectives

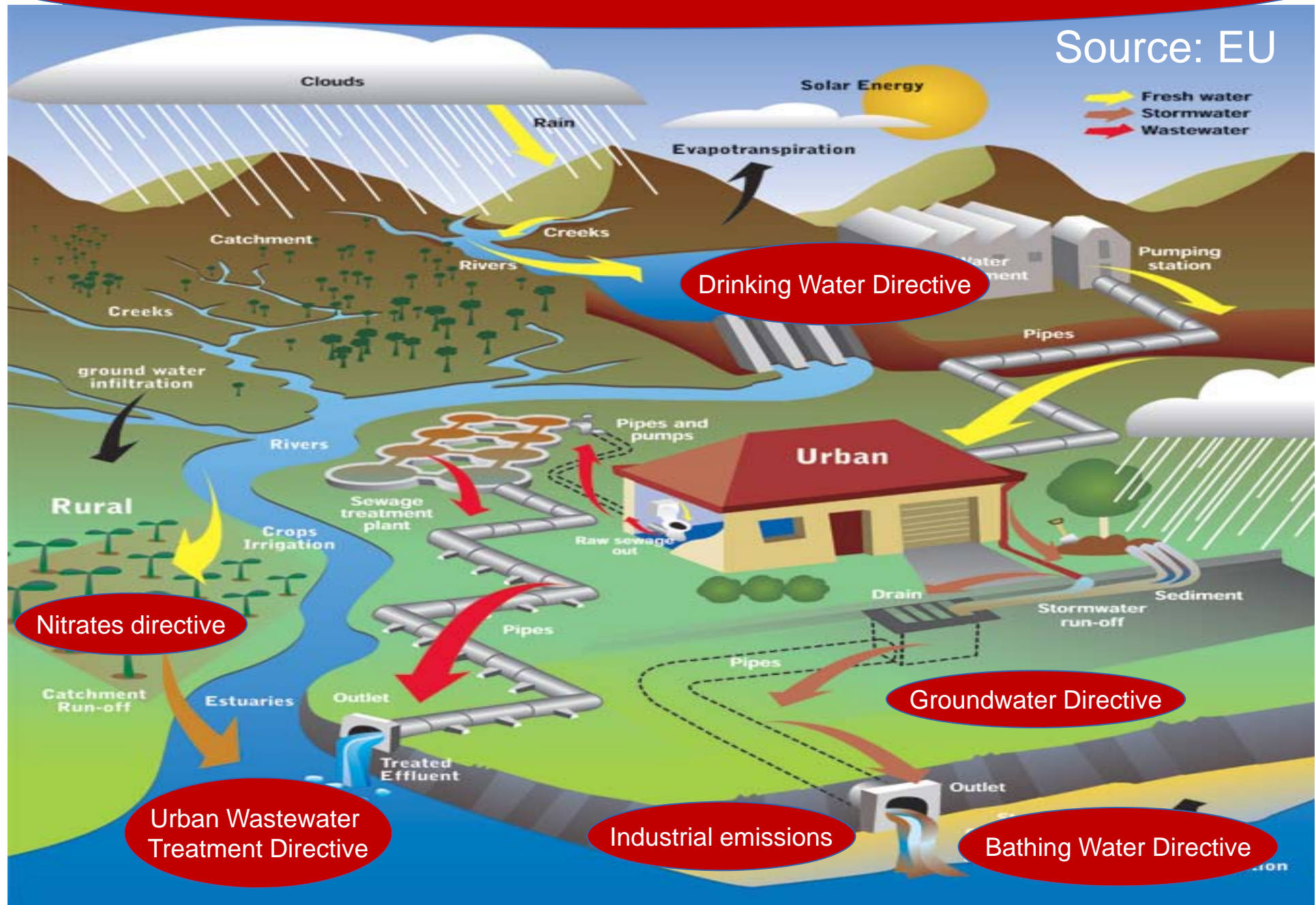
- The **protection** of water uses **against pollution** and **excessive use**,
- The **protection** of water-related **ecosystems** and their services,
- Safeguarding and restoration of the **hydrological cycle**,
- The provision of **adequate water supply**,
- The **management** of water services,
- The management of **trade-offs** balancing water supply and demand,
- **Prevention** of **disasters** and adaptation to climate change.





# Water Framework Directive

Source: EU





# Mission Criteria

- EU added value
- Set a direction (EU Policy priorities, UN 2030 Agenda for Sustainable Development, Carbon Neutral Sweden 2045)
- Clear R&I focus
- Citizen priorities, final user relevance
- Ambition: Transformative, leveraging large-scale investments by different actors (innovators, researchers, public authorities, citizens) across sectors, disciplines and countries
- Stimulate efforts and investments at national and regional levels
- Synergies with other funds



# Why a Water Mission ?



1.2 billion people in the world at **risk from flooding** today, up to 1.6 billion by 2050

€ 436 billion lost during the last 35 years due to **floods and droughts** in Europe

11% of European population affected by **water scarcity** in 2017

66% of **freshwater consumed** by Agriculture in Europe, up to 80% in the world

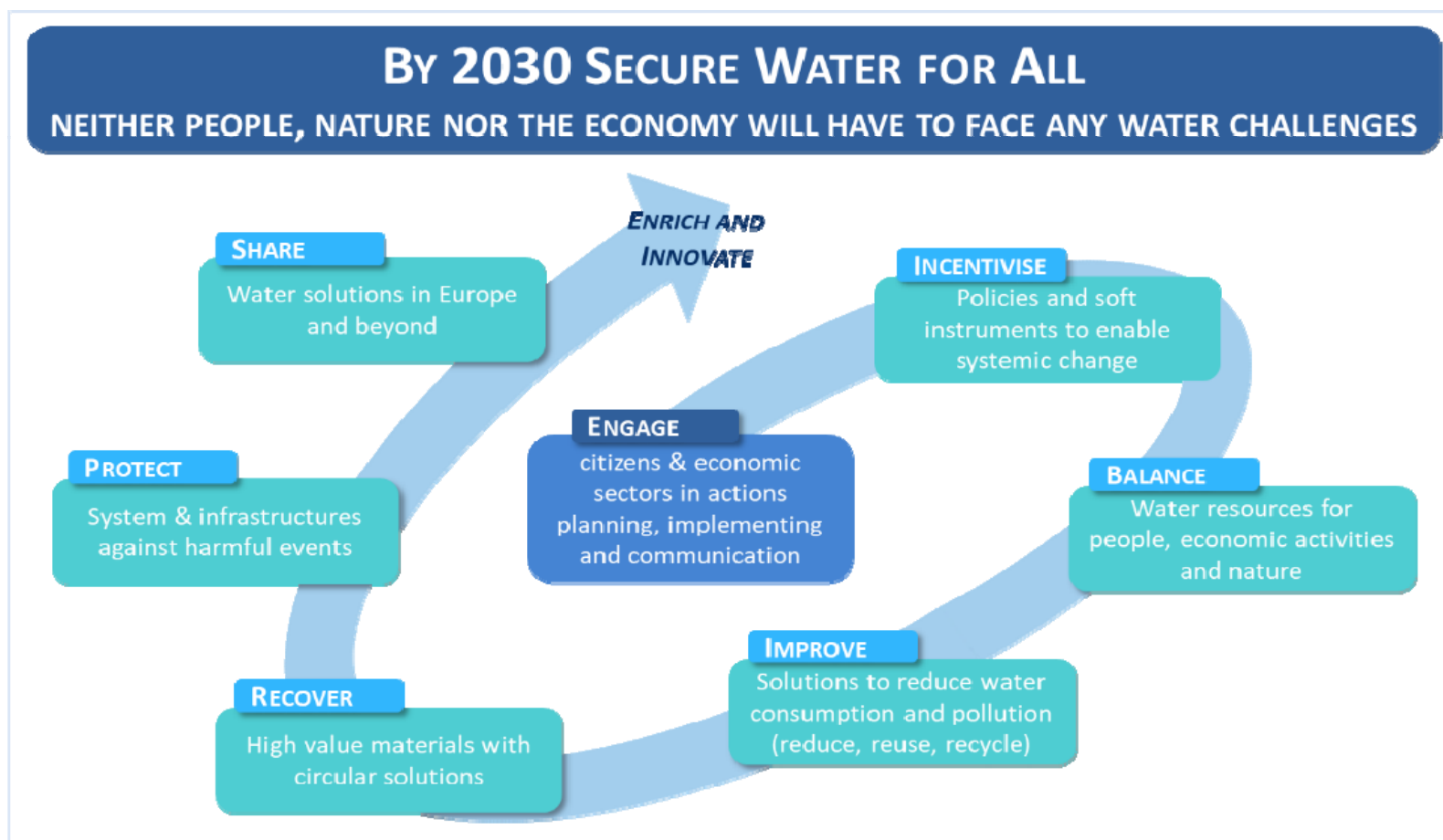
60% of European water bodies still of an **insufficient quality**

78% of global employment is **water-dependant**

1.88 million signatures to the **Right2Water** citizen initiative

844 million people in the world **without water access**, 2,3 billion **without sanitation**

# Secure Water For All



Water becomes  
a new oil as the  
World runs dry



Download the  
WssTP Water Vision