



# Water Europe

The voice and promoter  
of water-related innovation and RTD in Europe.



Water infrastructure  
account for  
**3,7%**  
of global electricity  
consumption



- Recognized voice and promoter of water-related RTD and innovation in Europe

- Mission:

- ✓ Improve **coordination and collaboration** in the water ecosystem in the EU and beyond;
- ✓ Enhance **performance and competitiveness** of the water ecosystem;
- ✓ Contribute to solving **global water challenges** through RTD&I.





# Water Europe

The European Association of the innovative  
water ecosystem



## **WE Collaborate**

The Water Europe Collaboration programme allows our members to network and collaborate along the water value chain to address the water challenges and shape successful project consortia.



## **WE Advocate**

The Water Europe Advocacy Programme is all about making sure that the value of water for our society is reflected in European policies and funding programmes.



## **WE Market**

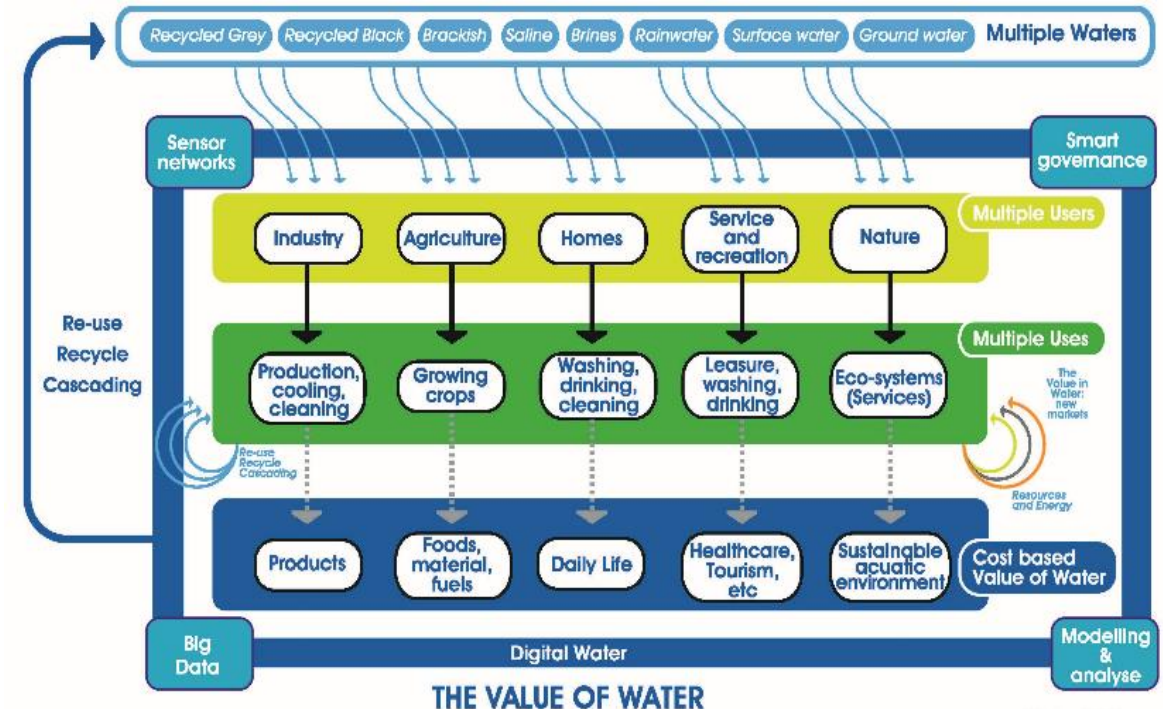
The Water Europe Market Programme enables our members to bring their research results and innovative solutions to the market in Europe and beyond.



# Water-Smart Society

## Water-Smart Society

- a society in which the **true value of water** is recognised and realised;
- all available water sources are managed in such a way that **water scarcity and pollution of water resources** are avoided;
- Water and resource loops are largely closed to foster a **circular economy** and optimal resource efficiency,
- the water system is **resilient** against the impact of climate change events.
- A society in which **all relevant stakeholders** are involved in the governance of our water system.





# Water-Energy Nexus



# +35%

projected increase  
of global energy  
demand by 2035



# +55%

projected increase  
of global water  
consumption by  
2050

# +35%

projected increase  
of global energy  
demand by 2035



Deficit of  
**55%**  
Between water  
supply and  
demand by 2050



## Water footprint of energy source



# How can we do it ?



“

Climate change and environmental degradation are an existential threat to Europe and the world. To overcome these challenges, the European Green Deal will transform the EU into a modern, resource-efficient and competitive economy, ensuring:

- no net emissions of greenhouse gases by 2050
- economic growth decoupled from resource use
- no person and no place left behind

”

## European Green Deal



fresh air, clean water, healthy soil and biodiversity



cleaner energy and cutting-edge clean technological innovation



renovated, energy efficient buildings



longer lasting products that can be repaired, recycled and re-used



healthy and affordable food



future-proof jobs and skills training for the transition



more public transport



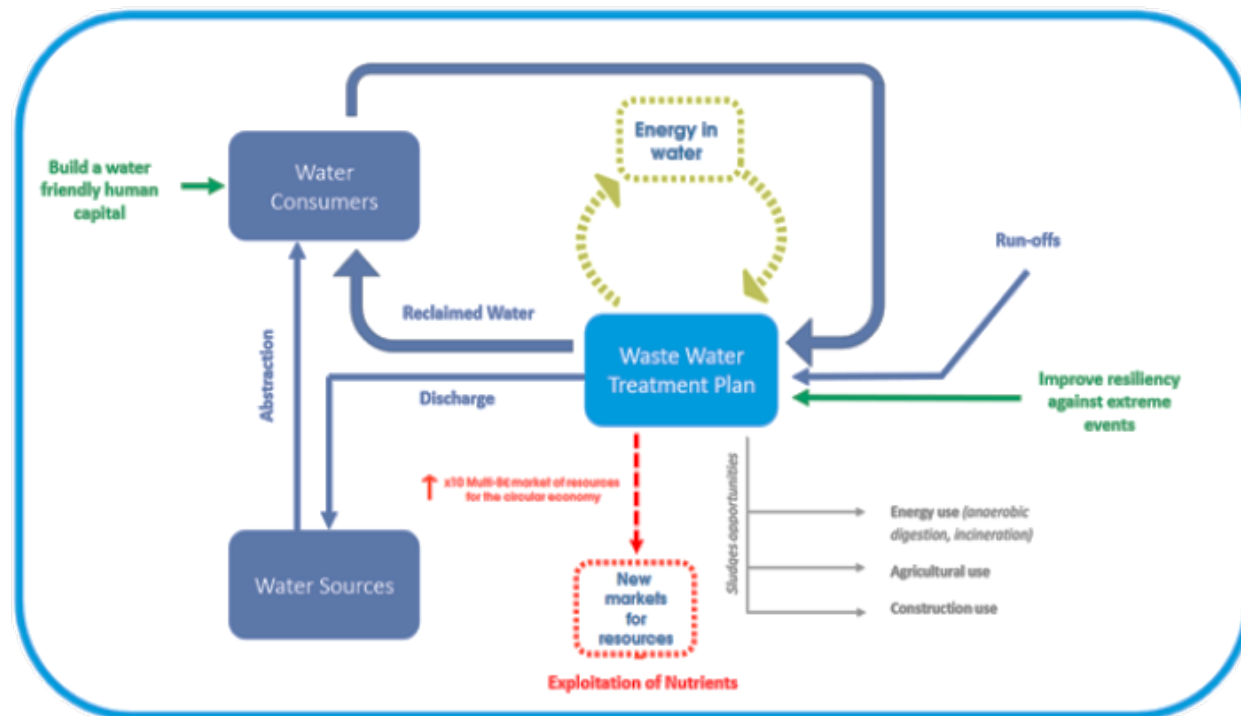
globally competitive & resilient industry



# 65

Utilities achieve  
net-zero carbon  
infrastructure  
worldwide

## Urban Wastewater Treatment Directive





# 3/4

Risks identified by  
the IPCC report  
are water related



# 3/4

Risks identified by  
the IPCC report  
are water related

## Industrial Emissions Directive

Cost of inaction is

**x5**

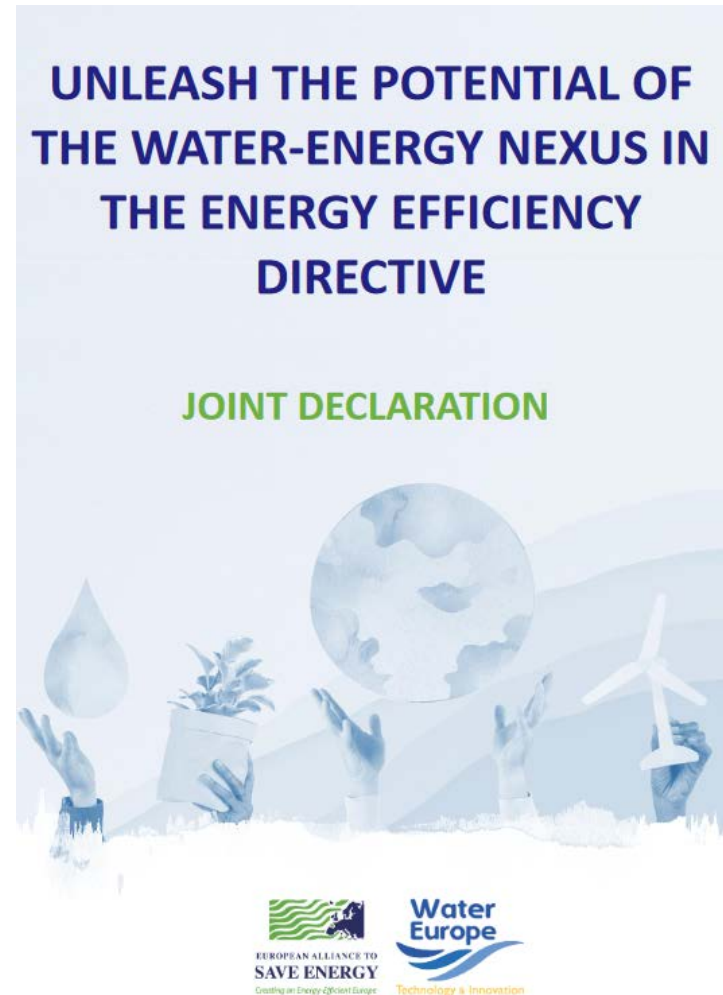
More expansive  
than the  
investment to  
tackle water –  
related risks



# 11

## Recommendations

## Energy Efficiency Directive

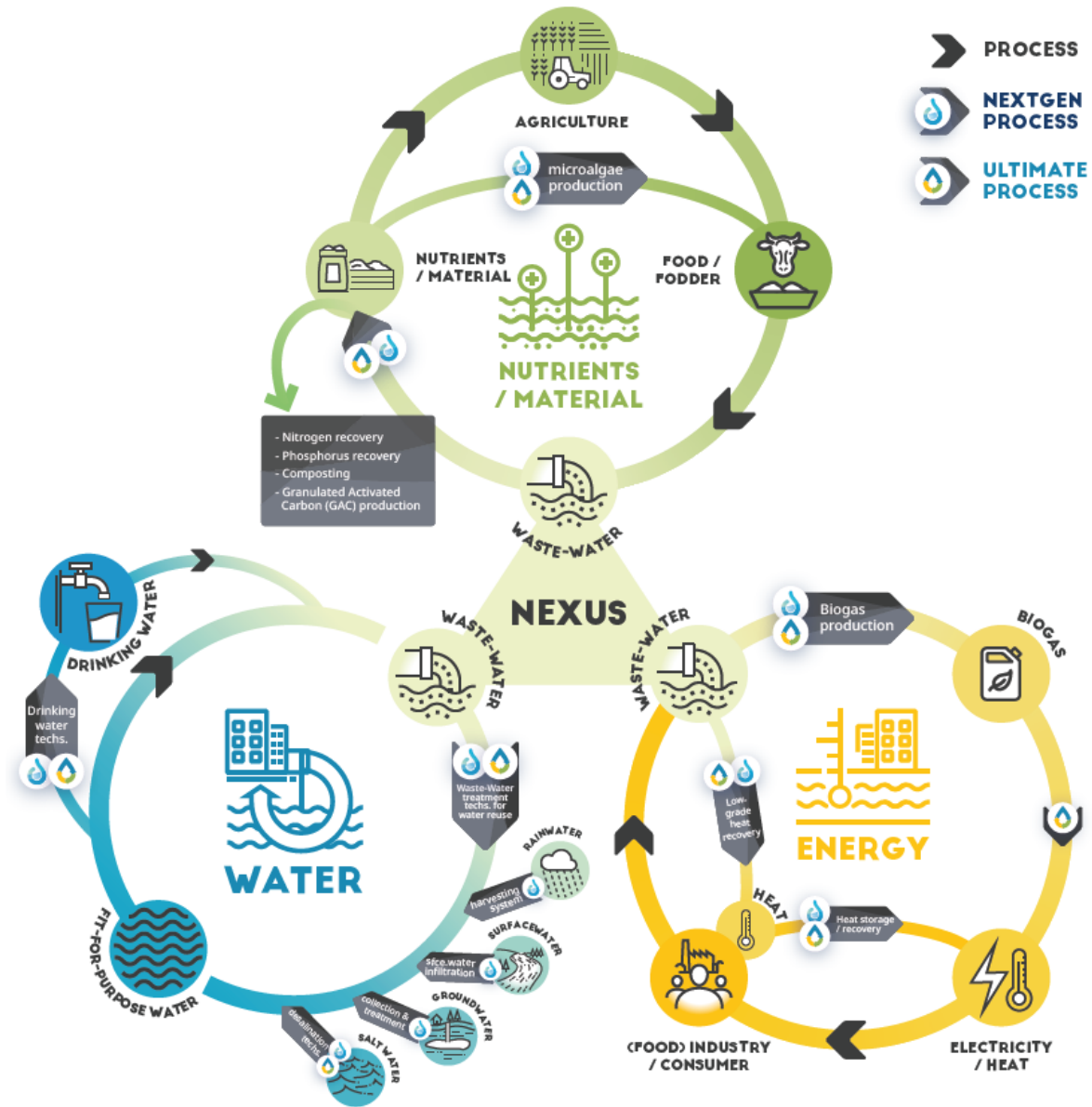




# How can we achieve it in Europe ?



# Cooperation between EU projects on the water-energy nexus





## Timisoara WWTP key innovations and actions

- Demonstrate sludge management with production of by-products and energy via pilot-scale testing of thermochemical conversion.
- Feasibility study of water reuse. Investigate potential applications for effluent from the Timisoara and other AQT WWTPs. Assessment of options in the urban, industrial and agricultural sector.

## Relevant Sectors

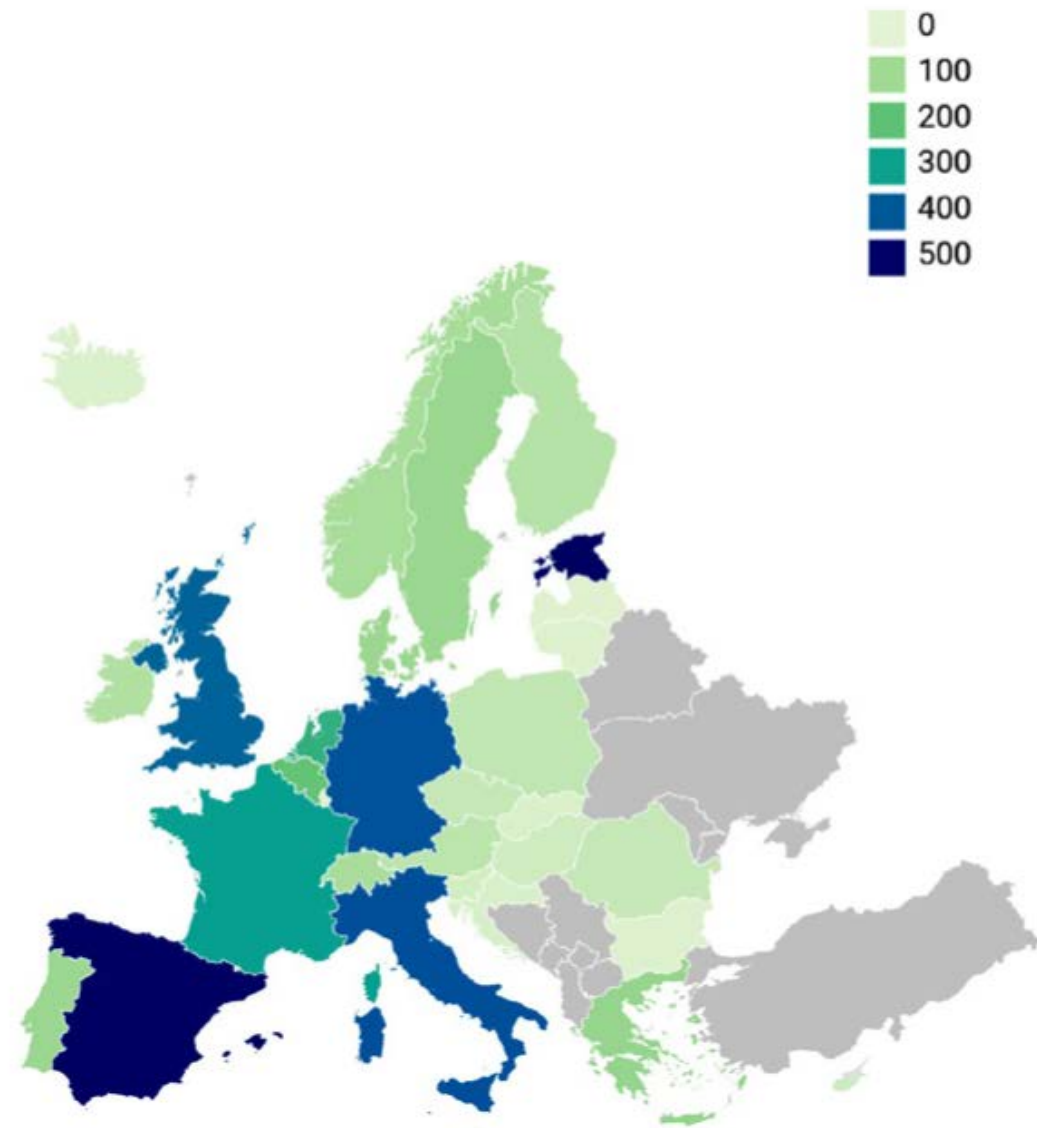
- Agriculture
- Municipal sector
- Water sector
- industry



**70%+**  
Water Europe's  
members  
participated in  
H2020 project from  
2014 to 2019



# Total number of H2020 water project participations per EU/EFTA country





## The Water-Oriented Living Labs model

- effective methodology for developing and implementing complex solutions in multiple and evolving real-life contexts
- take R&D out of laboratories and sets it in real-life contexts.
- allows for a better understanding of what triggers innovations and of those innovations that prove to be successful in different contexts.
- an inclusive collaborative ecosystem, with an effective governance, based on the quadruple helix actors


**105**  
**Water-Oriented  
Living Labs  
identified in  
Europe**



# Thank You

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