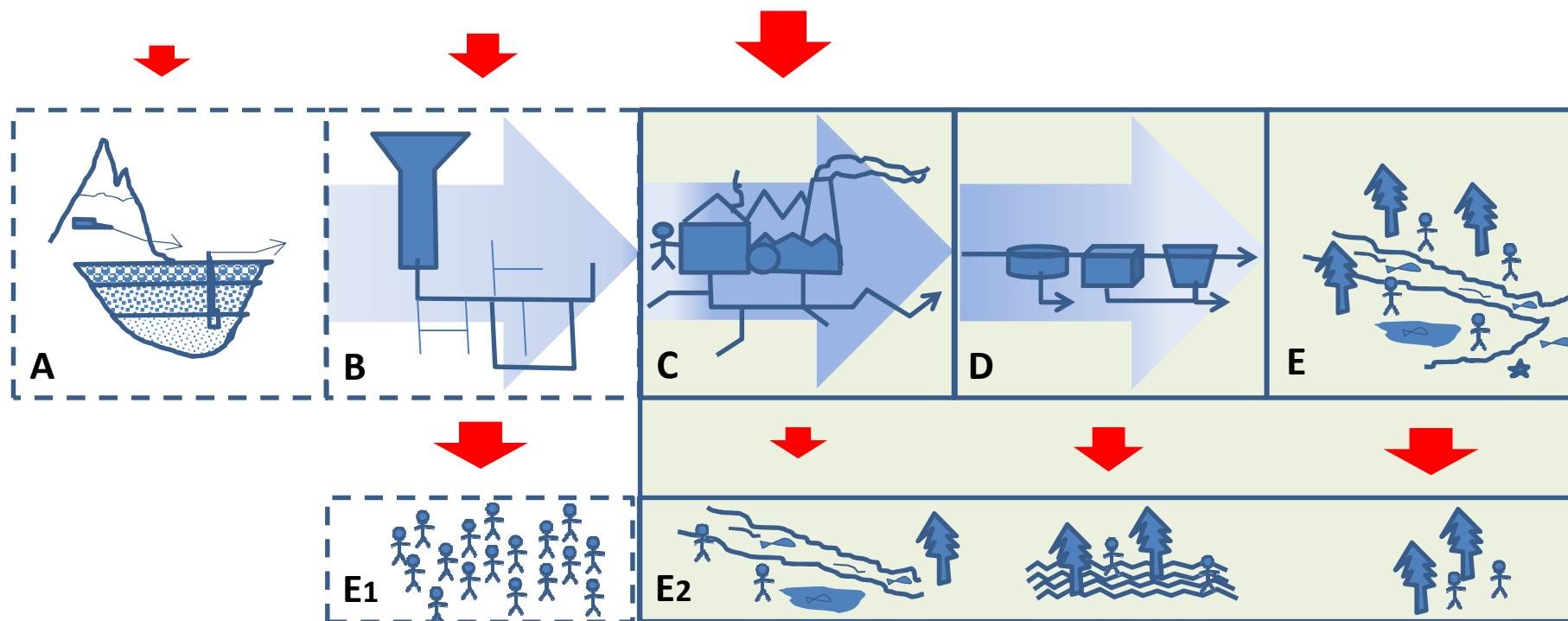


# HYDROSMART+ PROJECT for HORIZON 2020 CALL

SEARCHING BEST APPLICATION GUIDE FOR UPGRADE INTEGRATED WATER CYCLE MANAGEMENT...

STARTING FROM INTERREG ITA-SLO (HYDROSMART 2016) CONCEPTS AND COLLABORATIONS

...THINKING ABOUT TESTING AND APPLYING NEW PARADIGMS OF IWC IN A «PILOT –MODEL AREA»

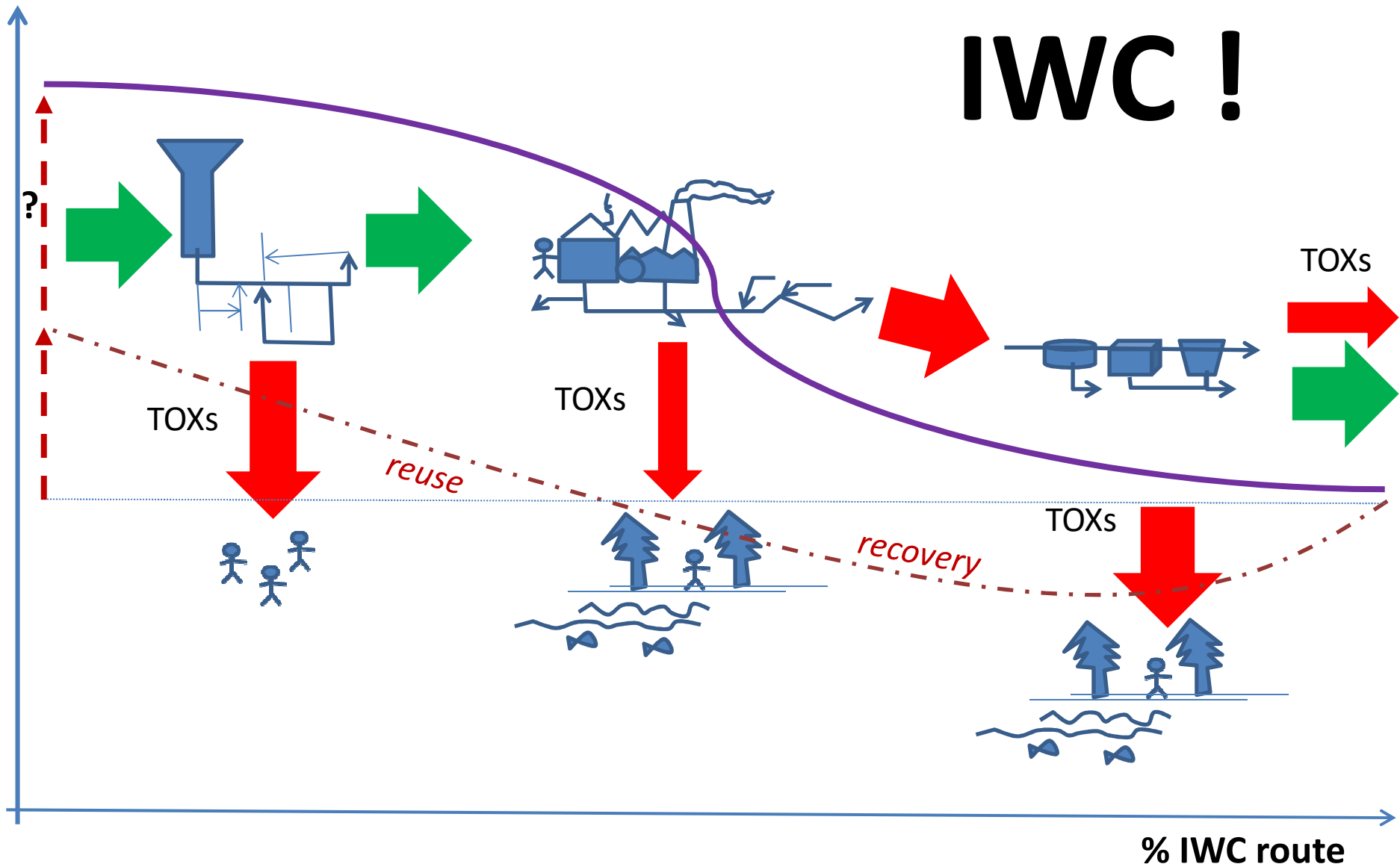


**WHAT AND WHERE OUR EXPERTISE ?**

**LET USE IT FOR WATER RECOVERY AND TOX CONTROL-REDUCTION !**

# INTEGRATED WATER CYCLE IMPACTS ON ENVIRONMENT (DEGRADATION LEVEL SCHEME ?)

% Purity level of water



# INTEGRATED WATER CYCLE IMPACTS ON ENVIRONMENT (NEW INNOVATION CONCEPTS ?)

## INPUT

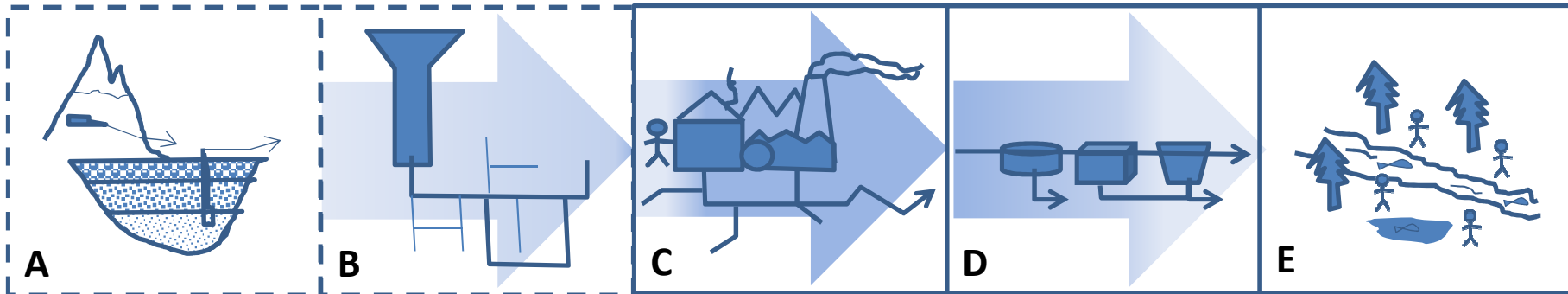
aquifer  
characterization  
aquifer model

waterworks  
characterization  
waterworks  
simulation

sewage  
characterization  
sewage modeling

treatment  
characterization  
treatment processes  
simulation

residuals  
characterization  
residuals  
control/forecast



Ecological Gain  
Resource Gain  
et al.

Resource Gain  
Health concern  
et al.

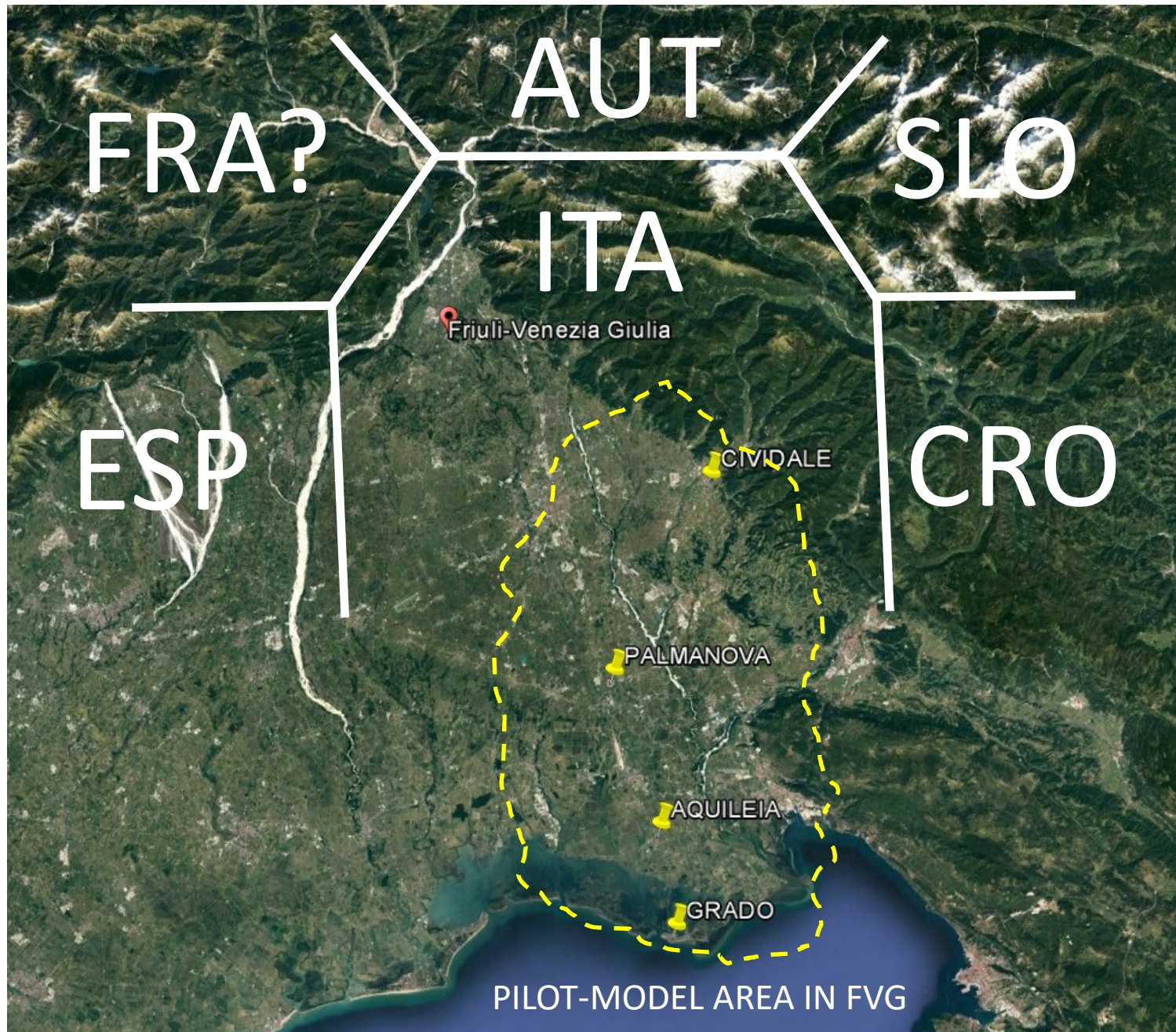
Ecological Gain  
Economic Gain  
Health concern  
et al.

Energetic Gain  
Resource Gain  
et al.

Resource Gain  
Ecological Gain  
Health concern  
et al.

## OUTPUT

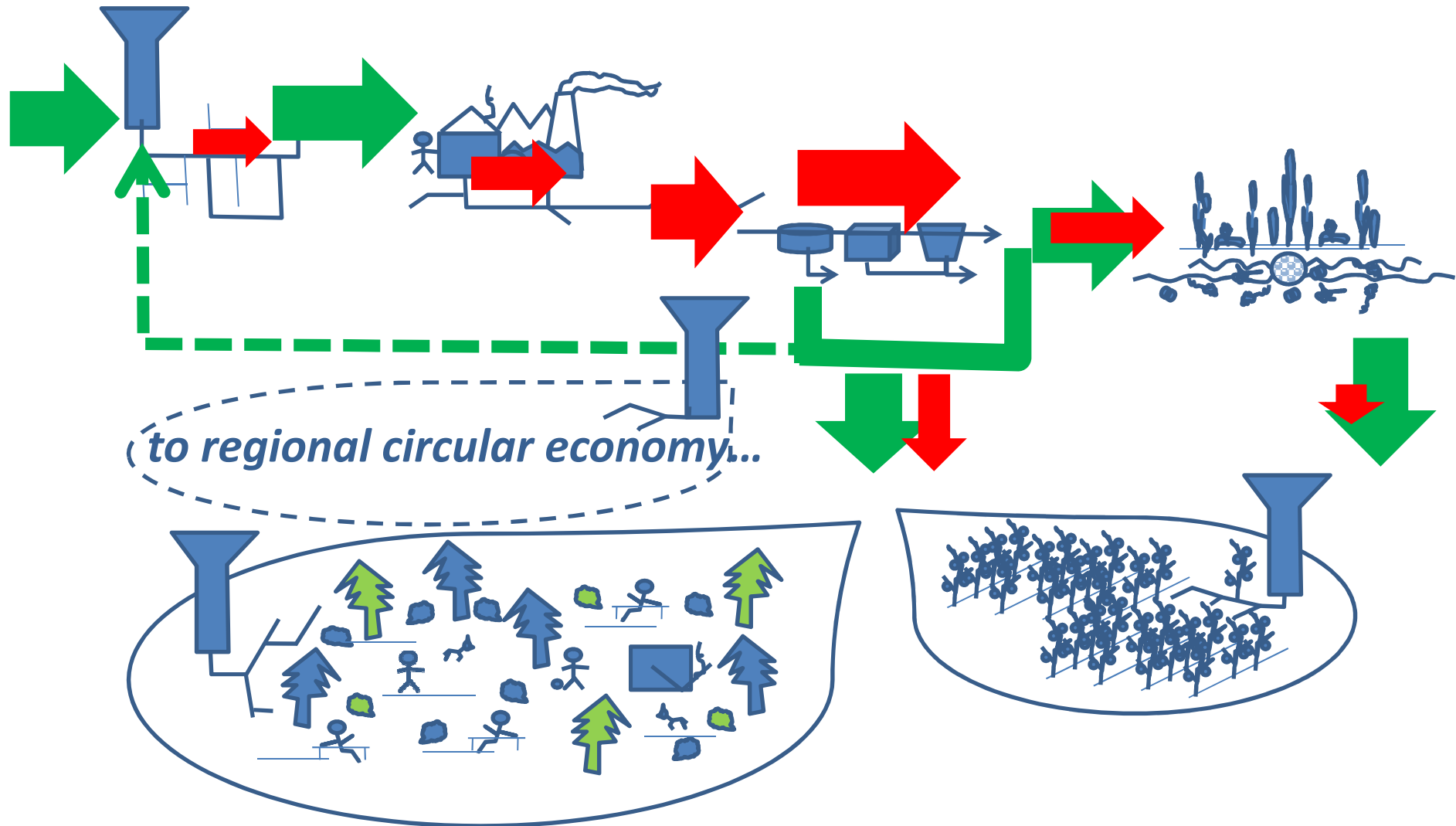
AIMING TO WATER RECOVERY-REUSE PROJECT (IN VINEYARDS AND GARDENS IN FVG AREA?)



# NEW HYDROSMART CONCEPTS LEAD TO NEW REUSE PLANNING



...treating wastewater and controlling residuals to reach safe reusable water for vineyards irrigation and garden embellishment in recreational/touristic areas and other applications in circular economy



## **Water in the context of the circular economy:**

*Towards the next generation of water systems and services – large scale demonstration projects (2017):*

- recovery water/sludge from IWC
- recovery nutrients from IWC
- improving water/wwater systems
- vineyards and gardens application
- test in pilot areas

● **Projects should build on experience already gained in areas where integration of various aspects of water management and other economic and social activities is already taking place at different levels, with replication potential in other areas of Europe or at wider scale, thus demonstrating a real added-value at EU level.**

● **Where relevant, integrated environmental impact assessments and risk assessment of potential harmful substances should be considered. Relevant socio-economic issues, in particular, regulatory/governance issues, social behaviour and acceptability should also be addressed, requiring the participation of social sciences and humanities disciplines such as political sciences, economics, governance and business studies.**

● **To enhance the systemic approach and the transformation of water services toward a more circular economy approach, digital technologies and ICT tools should be also considered. Activities aiming at facilitating the market uptake of innovative solutions, including standardisation, should also be addressed.**

● **'Innovation Deal' an innovative better regulation instrument is understood, in the form of voluntary agreements with external stakeholders to identify and overcome regulatory barriers to innovative solutions that would enable policy or legislative objectives to be better achieved.**