

EU Research and Innovation Priorities for Circularity in the Water Sector



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Bertrand Vallet

Policy Officer

B1 Circular Economy & Bio-based Systems

DG Research and Innovation

Overview

- Circularity and water in Horizon 2020 projects
- Horizon Europe: looking forward
- Future perspectives
- Conclusion

Circularity and water in Horizon 2020 projects

- Circular economy was a key topic of Horizon 2020
- Resource recovery was the focus
 - Water
 - Biogas
 - Nutrients
 - Materials
- Prevention of pollution was also looked at to foster circular economy

Circularity and water in Horizon 2020 projects

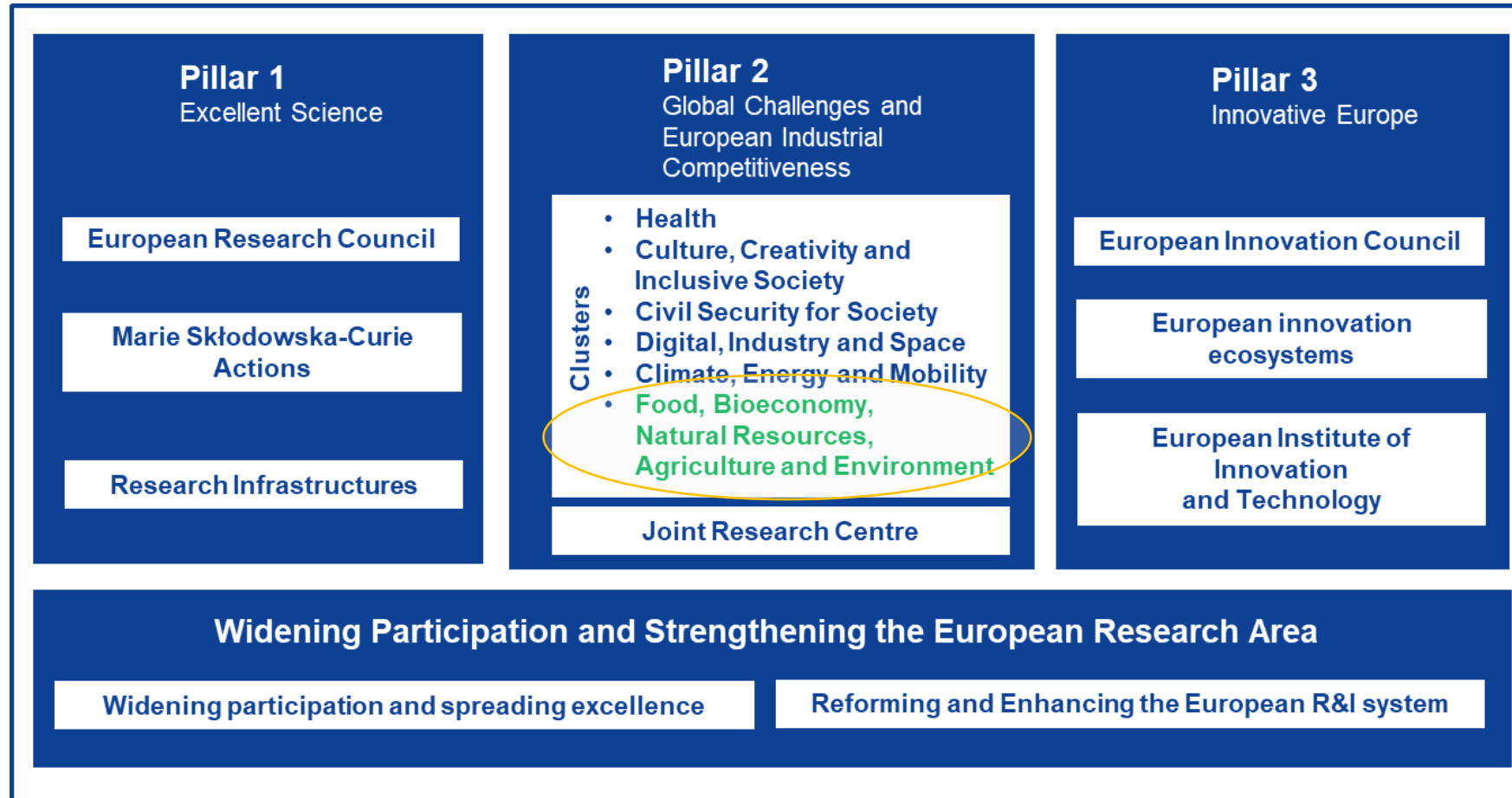
Resource recovery and reuse



Pollution prevention



Horizon Europe: looking forward



Water in Cluster 6 Work Programme

- €109,5 million for Water in the work Programme 2021-2022
- €97 million for Water in the work Programme 2023-2024.
- European co-funded partnership Water Security for the Planet - [Water4All](#)
 - €20 million for 2021-2022 + €36 million for 2023-2024
 - Overall commitments €400-500 million from 2021-2027 (EU + MS);
- Partnership for Research and Innovation in the Mediterranean Area - PRIMA
 - Overall €494 million under H2020, discussion on-going for extending to Horizon Europe
- Mission “Restore our Ocean and Waters”
 - €350 million in seed funding for the period 2021-2023, including €43 million in [2023](#)

€655,5 million
for water in
HE 2021-2024

Cluster 6 Work Programme 2023-2024

- **Harnessing the innovation potential and market uptake of successful circular economy water related projects**
- Preventing and managing diffuse pollution in urban water runoff
- New circular solutions and decentralised approaches for water and wastewater management
- Holistic approaches for effective monitoring of water quality in urban areas
- **Additional activities for the European Partnership Water Security for the Planet (Water4All)**
- **Improve the reliability and effectiveness of alternative water resources supply systems and technologies**

Future perspectives

- Large scale implementation of circular systems for water and water sludge reuse.
- Resilience of water resources systems in the context of climate change and the emerging energy and food crisis
- Alternative water supply solutions
- Digital technologies/Artificial Intelligence and Machine Learning
- Knowledge and innovation on micropollutants in water systems
- Climate neutrality of water services

Conclusions

- Horizon 2020 developed some of the circular solutions available today for wastewater treatment.
- Current programme Horizon Europe is building on these projects to enhance the functioning of the market for recovered resources.
- Future programme will deepen the complex issues related to water management, including the place of wastewater services in the circular economy.

Useful links

- Horizon 2020 Water Portfolio
 - https://research-and-innovation.ec.europa.eu/system/files/2022-03/water_research_and_innovation_projects_2014-2020.pdf
- Horizon Europe work programme
 - https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes_en
- Water4All Partnership
 - <https://www.water4all-partnership.eu/>

Thank you



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