Interreg
Baltic Sea Region

Co-funded by
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SUSTAINABLE WATERS
AdvIQwater

Improving quality of BSR waters by advanced treatment processes

AdvIQwater

Kick-off meeting

08/02/2023

MEETING AGENDA

1. Introduction of participants
2. Presentation of the AdvIQwater project
3. Autopresentation of partners:
    - Gdansk University of Technology, Poland
    - University of Tartu, Estonia
    - Aarhus University, Denmark
    - Polish Ecological Club Pomeranian Branch
4. Discussion about the project (methods of project implementation, methods of cooperation and involvement of partners and associated partners)
5. Wrap-up session - summaries / conclusions / plan for partners

Partnership

Transnational cooperation within Baltic Sea Region

Associated Organizations

- EE ⇨ Türi Waterworks Company
- PL ⇨ Gdańskie Wodociągi S.A.
- PL ⇨ The "SWARZEWO" Water and Sewage Company
- DK ⇨ Herning Vand
- DK ⇨ Køge commune
- DK ⇨ Vandcenter syd
- EE ⇨ Humana

Partners

GDAŃSK UNIVERSITY OF TECHNOLOGY

TARTU ÜLIKOOL 1632 UNIVERSITAS TARTUENSIS

AARHUS UNIVERSITY

POLSKI KLUB EKOLOGICZNY

PP1 – Gdańsk University of Technology
PP2 – University of Tartu
PP3 – Aarhus University
PP4 – Polish Ecological Club Pomeranian Branch

Interreg Baltic Sea Region programme

- Interreg BSR supports smart ideas for a green and resilient Baltic Sea region

- **Four thematic priorities:**

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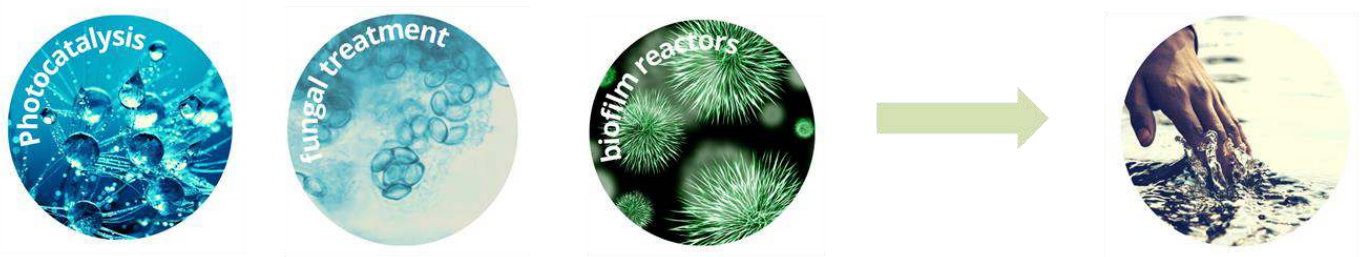
Improving quality of BSR waters by advanced treatment processes – acronim AdvIQwater

The **main objective** of the project is to highlight the **proactive** approach for sustainable use of the advanced treatment technologies to prevent micropollutants and emerging contaminants from reaching the Baltic Sea and to disseminate this knowledge to the Baltic Sea Region.

Advanced Treatment Processes → Improving **Q**uality of BSR **wate**rs



https://interreg-baltic.eu/project/adviqwater/

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Specific aims addressed by AdvIQwater project

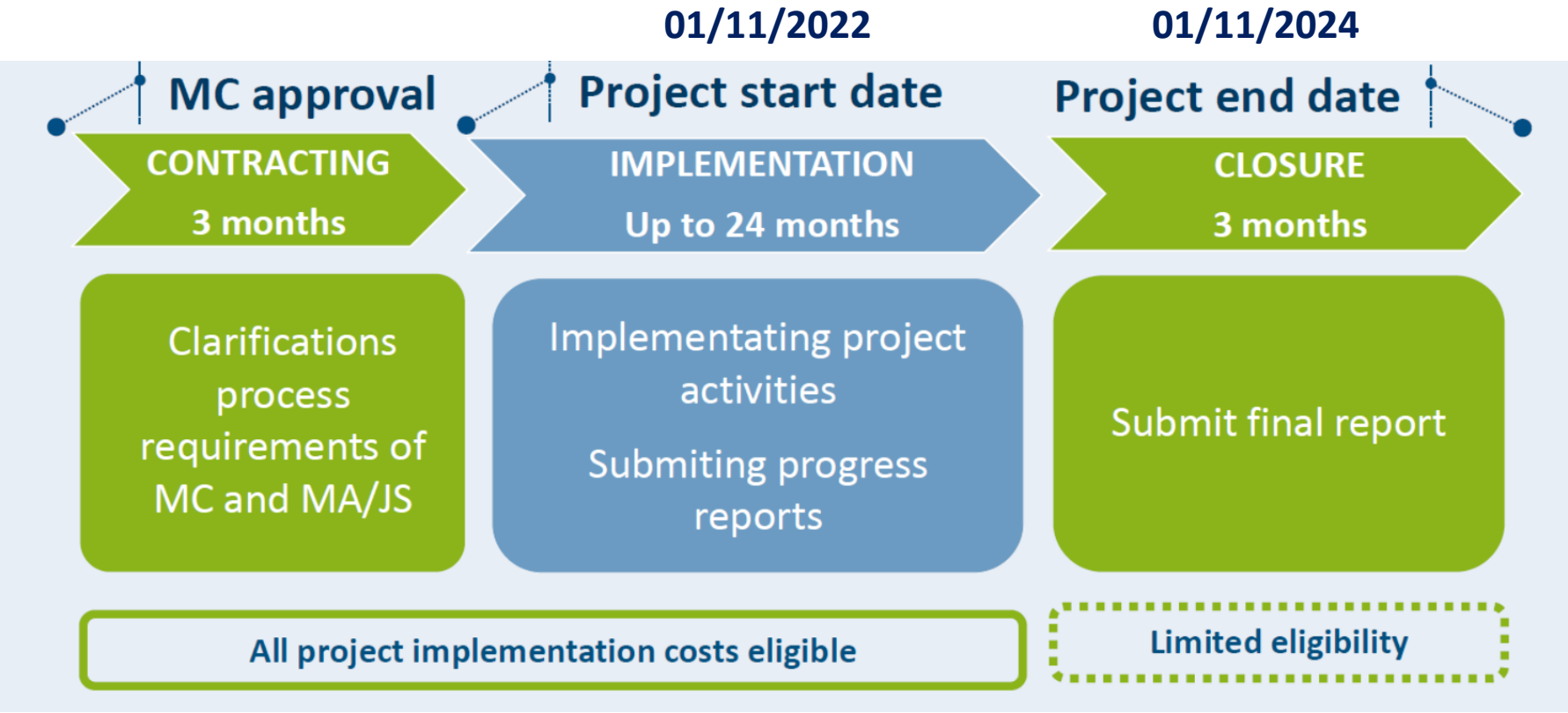
Building trust that could lead to further cooperation initiatives

- Development of possible combined solutions for pharmaceutical and heavy metals pollution treatment based on the tested advanced treatments
- Social campaigns during local events and in social media about the current state of water pollution and the importance of challenge them by advanced treatment
- Contributing new solutions to the policy development process of HELCOM

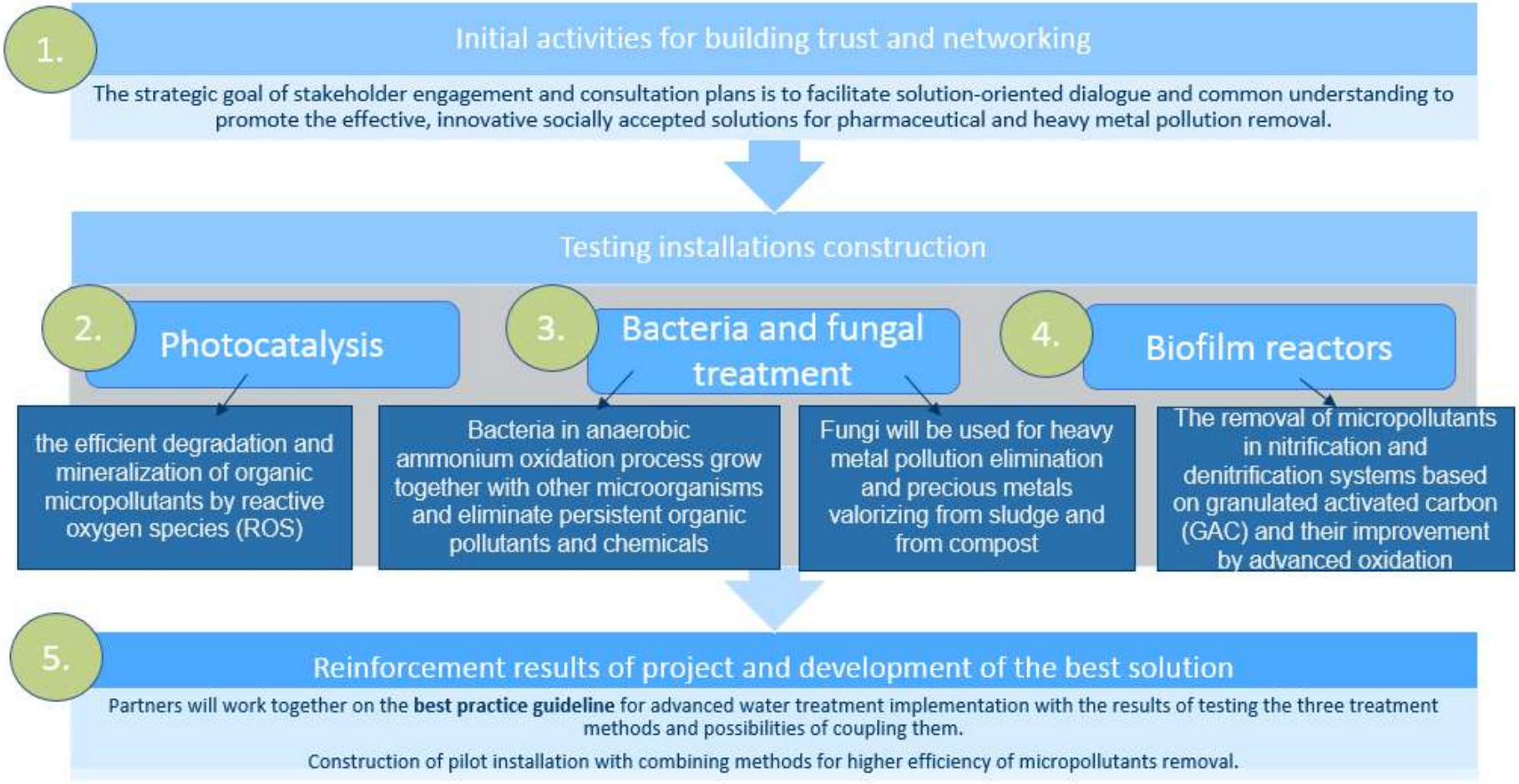
Initiating and keeping networks that are important for the BSR

- Establishing a new network of Partner's and TG for discussion about the current state of WWTP and the need for the improvement of treatment with advanced technologies. Network aims to interact and explore new cooperation, innovation and business development opportunities
- Contributing and proposing possible solutions on advanced processes, inspiration and encouragement for contribution and benefitting from advanced technologies development

Project phases



Steps towards improving quality of BSR waters by advanced treatment processes



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Work plan overview

WP1		From 06.2022 to 03.2023	From 04.2023 to 09.2023	From 10.2023 to 03.2024	From 04.2024 to 12.2024
A1.1.	Initial activities for building trust and networking	✓	✓	✓	
A1.2.	Photocatalytic degradation of active pharmaceutical ingredients; testing installation construction	✓	✓	✓	
A1.3.	Explore the possibilities of bacteria and fungal treatment testing installation construction	✓	✓	✓	
A1.4.	Explore the possibilities of biofilm reactors to remove micropollutants, testing installation	✓	✓	✓	
A1.5.	Reinforcement results of project and development of the best solution			✓	✓
O1.5.	**Combining advanced treatment methods, selection the most efficient, best practice guideline - output**				✓

Final remarks

- Pro-active solutions for sustainable use of the advanced treatment technologies.
- Description of the key criteria with respect to local requirements related to the performance of wastewater treatments plants, involvement of local government.
- The importance of associated partners in decision making regarding treatment technology.
- Our approach is hybrid system: solar-driven photocatalysis (GdanskTech), fungal treatment (Tartu University), and biofilms (Aarchus University) will be tested to pilot to introduce practical and durable outputs and solutions for sustainable waters.
- Main features of the advanced solutions and implementation potential will be adressed.
- Demonstrations will provide an opportunity to recommend/implement these advanced systems by WWTPs.
- Experience and best practices will be contribute to share network.

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