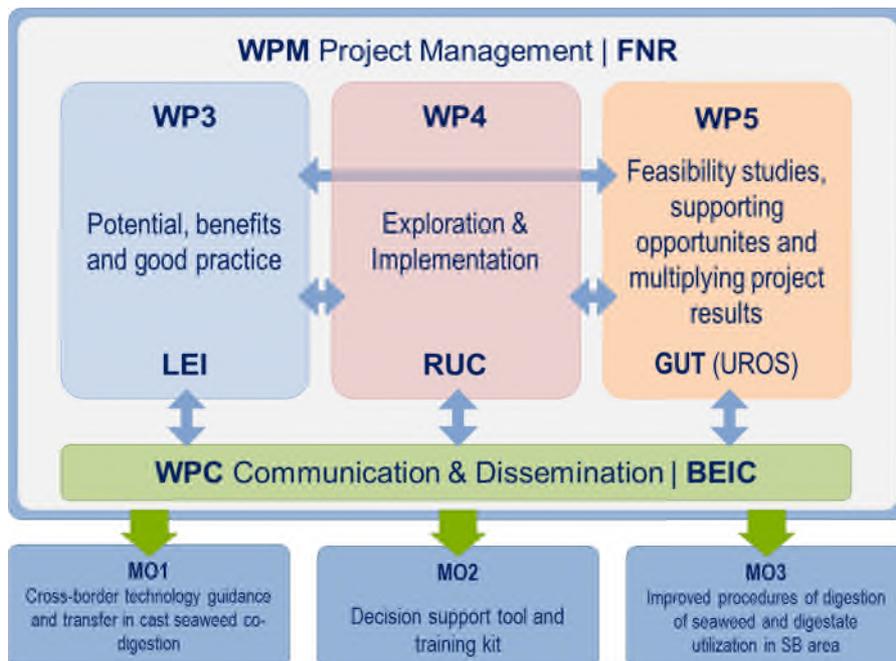


COASTAL Biogas - Cluster On Anaerobic digestion, environmental Services and NuTrients removAL

Summary

Eutrophication has both ecological and social consequences and is one of the major environmental problems in the Baltic Sea. At the same time there is a need for a transition from a fossil-based to a sustainable bio-based society. Anaerobic digestion offers many opportunities of relevance for the Baltic Sea Region since it transfers low quality resources/wastes into a renewable, high quality energy carrier that can be used for local electricity and heat supply, as transport fuel or for injection into the natural gas grid. In addition, the digestate can replace the fossil based artificial fertilizers, and hence close the nutrients loop which is fundamental for the circular bioeconomy. By using cast seaweed as substrate and utilizing the digestate as a fertilizer, nutrients are physically removed from the Baltic Sea and hence provide a powerful tool to mitigate eutrophication. In addition the inconveniences with rotting seaweed on the beaches are removed for the benefit of recreation, tourism and increased value of residential properties along the coast.

The COASTAL Biogas consortium overall consists of six partners: Agency for Renewable Resources (FNR | LP), the Baltic Energy Innovation Centre (BEIC | WPC), Lithuanian Energy Institute (LEI | WP3), Roskilde University (RUC | WP4), Gdańsk Technical University (GUT | WP5), and University of Rostock (UROS | supporting mainly in WP5, as well as WPC, WP3 and 4). Furthermore the project is supported by 10 associated partners and the Nordic Council of Ministers.



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Practically, experiences and results from industrial scale anaerobic co-digestion of cast seaweed in Denmark will be further improved and adapted to local conditions in the participating countries into the South Baltic (SB) Sea area, supported by technology implementation by informing responsible key institutions. Hence, COASTAL Biogas has three main outputs:

(1) Targeted technology transfer and cross-border cooperation in combination with feasibility studies and pilot testing will contribute to market uptake and the first step of a wider implementation of this new and innovative technology in the South Baltic Sea area.

(2) COASTAL Biogas will elaborate a decision support tool and a training kit, in order to multiply and share good practice results with relevant stakeholders.

(3) Moreover, the project will elaborate improved procedures for using seaweed as co-digestive, e.g. for municipalities and/or biogas operators in coastal areas of the SB Sea region and to create incentives in order to financially support innovative technology, i.e. collecting and cleaning methods, and the application in a biogas plant, including also technical and legal guidelines.

In the upcoming three years, COASTAL Biogas will offer several workshops, study tours and conferences also to the public; events will be announced on the project's website. You may also receive latest news about the project by subscribing to the half-yearly published newsletter. www.coastal-biogas.eu (available from ca. 08/2018 on)



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