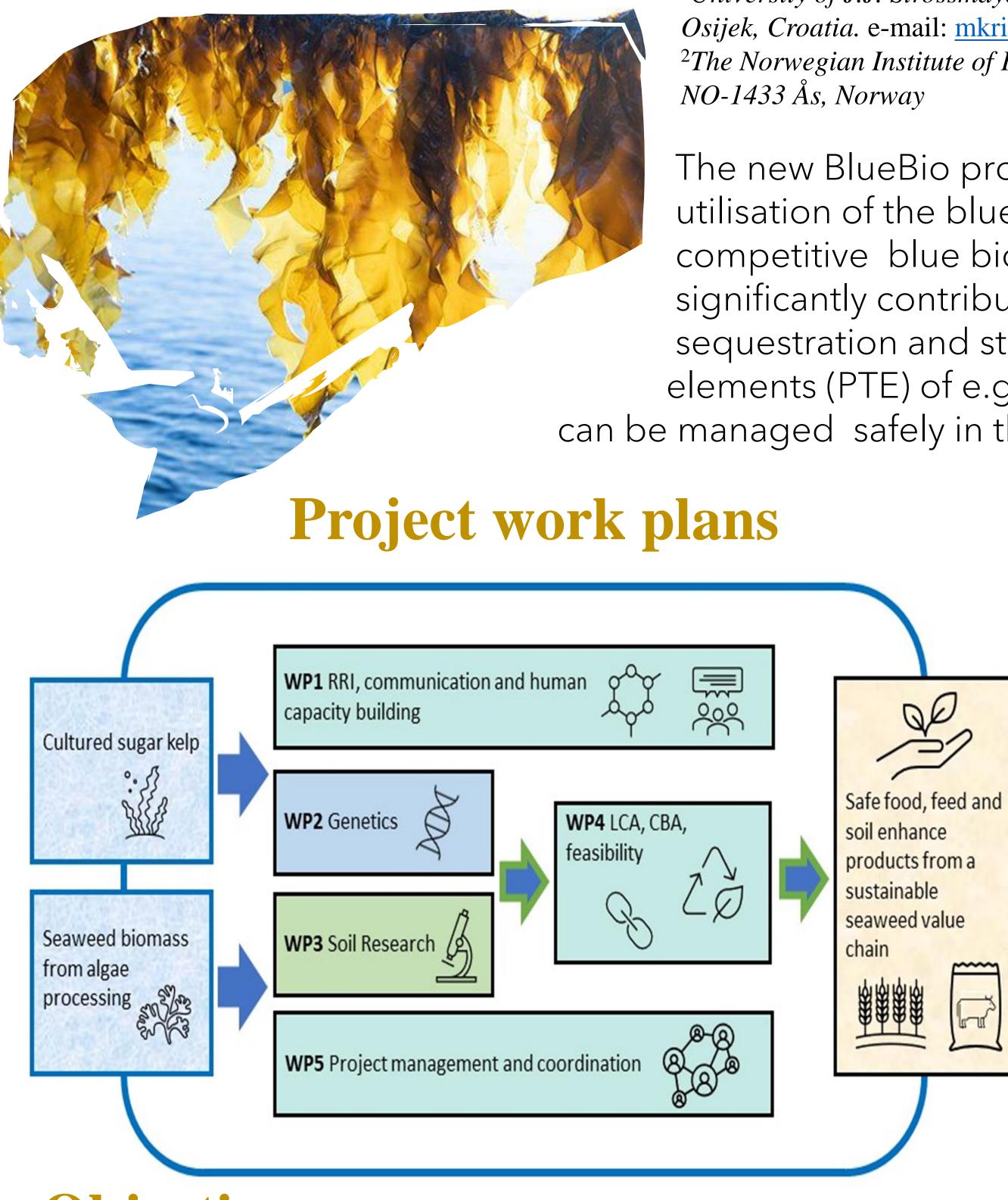
## Value creation and ecosystem services of European Seaweed industry by reducing and handling potentially toxic elements from breeding to soil

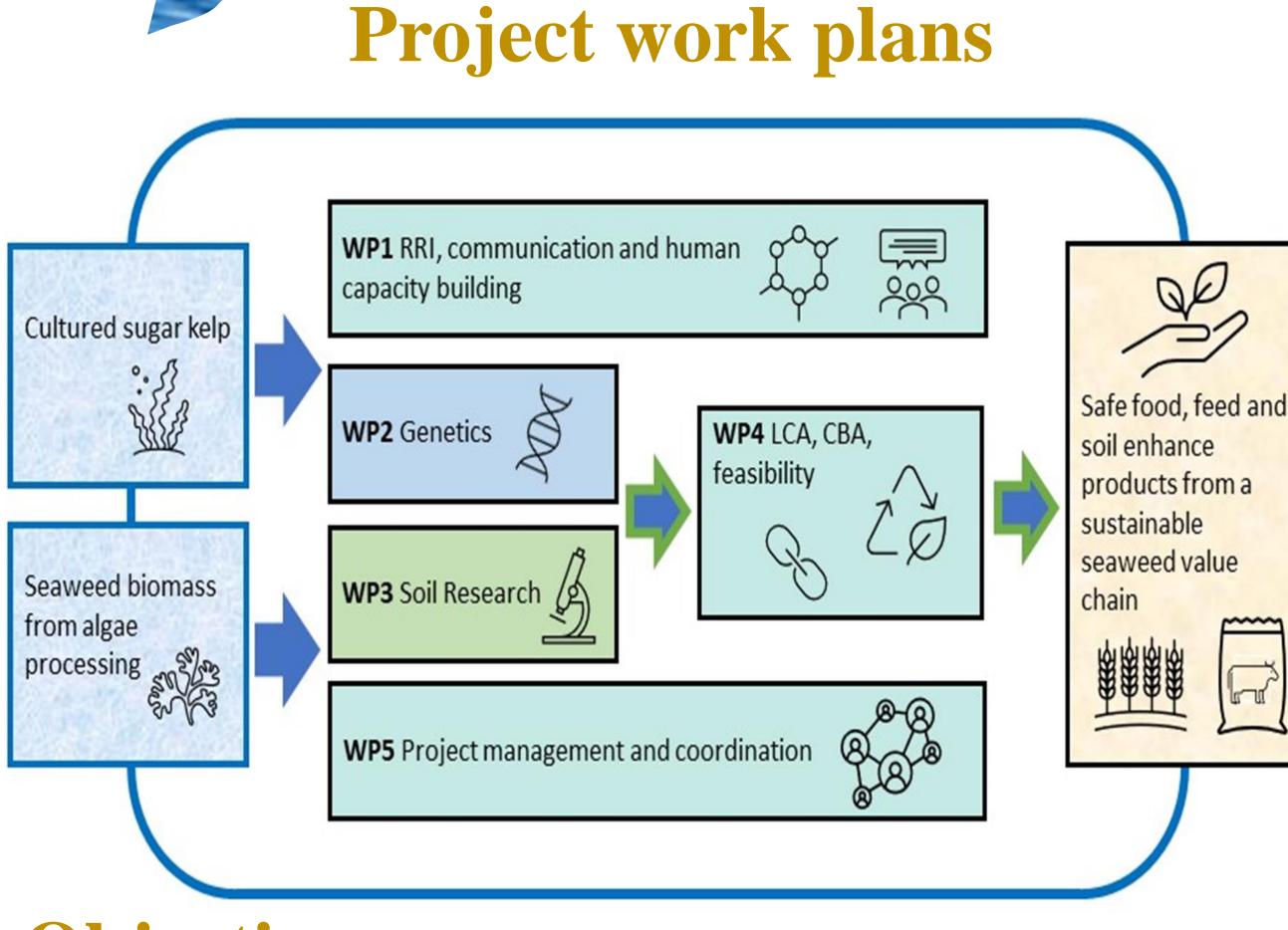
 ${\it Marija Kristic^1, Vladimir Ivezic^1, Vladimir Zebec^1, Jurica Jovic^1, Meri Engler^1, Ingrid Olsen^2}$ 



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The new BlueBio project - SeaSoil will deal with pressing issues regarding utilisation of the blue biomass, seaweed, to promote the sustainable and competitive blue bioeconomy in Europe. The low trophic seaweed may significantly contribute to the food system as well as the carbon sequestration and storage (CSS) in agricultural soil when potentially toxic elements (PTE) of e.g. inorganic arsenic (As), cadmium (Cd) and iodine (I) can be managed safely in the food supply system.

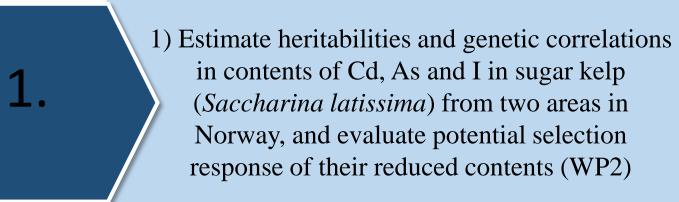




**Objectives** 

2.

3.



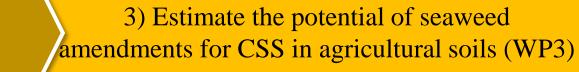
4) Study the impact of seaweed production on the environment (primarily climate change) using LCA, and conducting a cost-benefit analysis of the seaweed industry, including ecosystem services (WP4)

4.

5.

6.

2) Study the impact of seaweed application rate and water saturation on the As dynamics in soil to determine chemical reactivity and potential bioavailability of labile As using an outdoor container experiment with different soil types and two crops (WP3)



5) Study the economic feasibility, and regulatory incentives, for production and use of (residual) biomass from farmed seaweed (WP4)

6) Ensure multi-actor approach and integrated cooperation, communication and human capacity building in line within Responsible Research and Innovation (RRI) (All 5 WPs)

## **Project partners**

The project mobilizes a total of 12 partners (including five industry partners) from five countries (Norway, Denmark, Ireland, Croatia, and Estonia), covering a broad range of disciplines and expertise, to ensure food and feed safety of seaweed products and realize the potential of the seaweed value chain to support the European circular bioeconomy.

Norway - Nofima, Norsok, NMBU, Ocean Forest, Algea, Nutrimar

Croatia – FAZOS

## **Project impacts**

