

# New BlueBio project: SeaSoil - Value creation and ecosystem services of European seaweed industry by reducing and handling potentially toxic elements (PTE) from breeding to soil

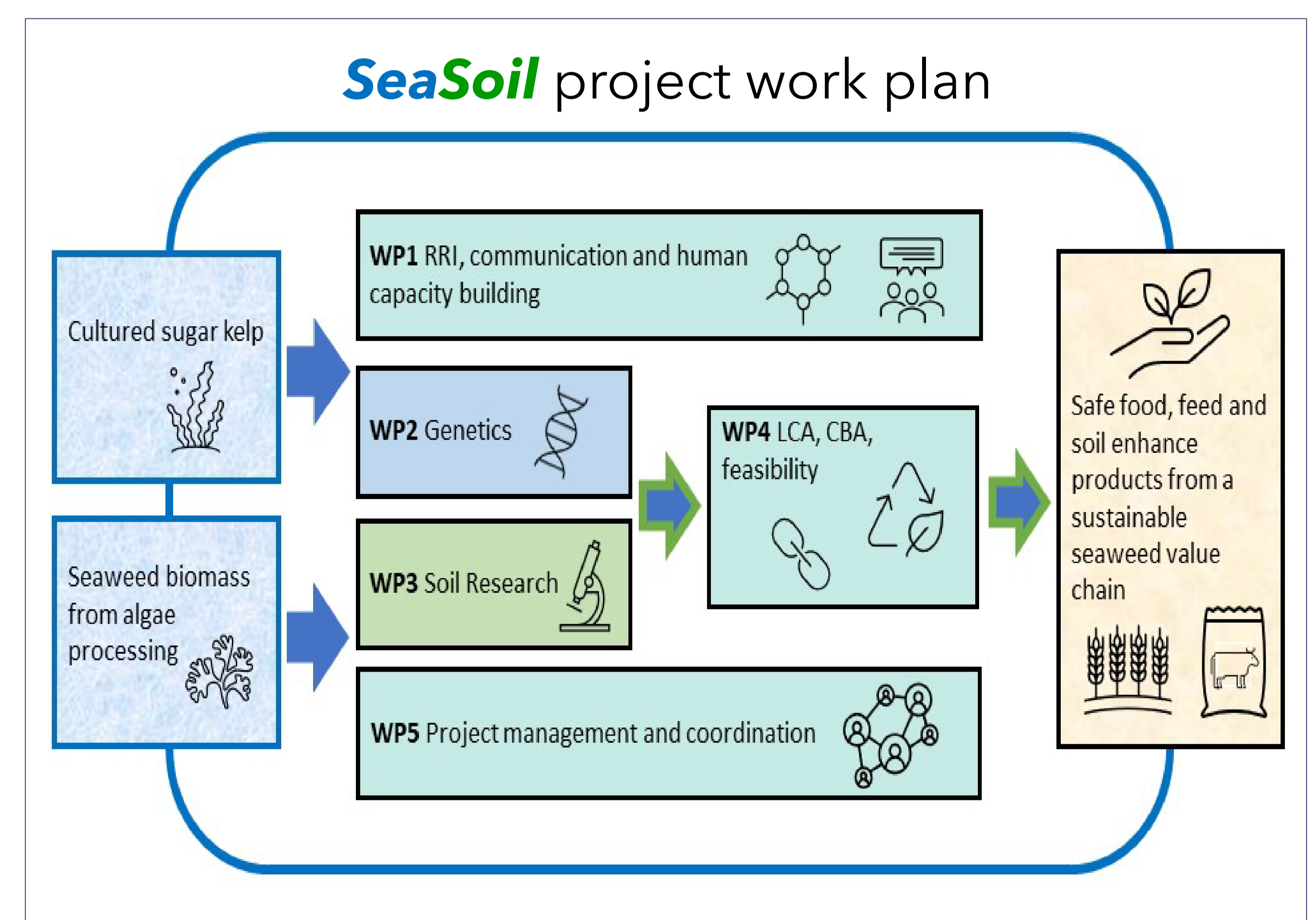
## About the Project:

The **SeaSoil** project will promote value creation, including ecosystem services, and further expansion of the seaweed industry in Europe by closing knowledge gaps on potential toxic elements (PTE) in farmed sugar kelp and Arsenic (As) in seaweed material applied to soil for fertilisation and enhancement purpose and for Carbon Sequestration and Storage (CSS).

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## Objectives:

1. Estimate heritabilities and genetic correlations in contents of Cd, As and I in sugar kelp (*Saccharina latissima*) from two areas in Norway, and evaluate potential selection response of their reduced contents (WP2)
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)
3. Estimate the potential of seaweed amendments for CSS in agricultural soils (WP3)
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)
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).



## Partners:

### Norway

Nofima - I. Olesen, M. Lillehammer, E. Hogrenning, L. Carraresi, I. Kvalvik  
NORSØK - A.K. Løes  
NMBU - Å.R. Almås, S. Navrud  
Ocean Forest - H. Sveier  
Algea - O. Biondi  
Nutrimar - A. Szczybelski

### Estonia

EMU - K. Kauer

### Ireland

ATU - C. Hannon  
Donegal Seaweed - M. O'Boyle  
OGT - D. Murrin

### Croatia

Fazos - V. Ivezic

### Denmark

Aarhus University - M. Lamandé, M. Trydeman Knudsen, L. Mogensen

## Coordinator:

Nofima - Ingrid Olesen

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