



Portfolio of Outputs and Next Steps

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

<https://bluebioeconomy.eu/value-creation-and-ecosystem-services-of-european-seaweed-industry-by-reducing-and-handling-potentially-toxic-elements-from-breeding-to-soil/>



Project consortium includes 2 large enterprises, 2 SMEs and 1 medium enterprise:



Outputs

Genetic parameters in sugar kelp help for selective breeding



Advancing to TRL 5

Knowledge on phenotypic measures, and genetic parameters of sugar kelp as basis for selective breeding for different traits (e.g. growth, Potential Toxic Elements (PTE) content).

Safe soil amendment application



Advancing to TRL 5

Fundamental studies to ensure safe application of seaweed and seaweed residues as soil amendments in relation to health and environmental risks completed.

Next Steps

PTE analysis, estimation of phenotypic variance and correlations, interaction between genotype and environment

Arsenic analysis in soil and crop samples (experiments)

Carbon sequestration study in soil following application of seaweed amendment

LCA, economic feasibility, cost-benefit analysis of ecosystem services, regulatory barriers, incentives

Dissemination (interviews, workshops, multi-stakeholder platform) and human capacity building