

# Industrial exploitation and replicability in EU countries

## Main results / outcomes

SEA2LAND shows that fishery and aquaculture side streams can be safely transformed into high quality BBFs, closing nutrient cycles in seven EU maritime regions. Partner workshops and one to one meetings with producers, farmers and policy makers confirmed that processing technologies already recover enough nutrients while cutting waste disposal and CO<sub>2</sub> emissions.

From a technical perspective, stabilization, odor control, and tailor-made formulations now make it possible to produce BBFs that enhance soil health and boost crop yields. Economically, centralized collection and shared equipment help reduce production costs and EU funding programs along with carbon farming premiums, can bridge remaining financial gaps. On the regulatory side, the new Fertilising Products Regulation (EU 2019/1009) provides a clear path to CE marking. Its alignment with organic standards and REACH accelerates market entry, although national regulations still require further streamlining.

## Practical recommendations

To ensure steady volumes and justify investments in advanced processing lines, it is essential to cluster biomass by pooling fish waste at the regional level. Starting with pilot fields is also key: collaborative trials with local farmers build trust, help determine application rates, and make adoption easier, with many farmers continuing using them. It is important to take full advantage of available funding to attract private investors. Clear labelling is crucial as well: obtaining CE marking along with organic or ecolabel certifications helps reassure buyers and unlock export opportunities. Finally, communicating the benefits through simple, compelling key messages helps fishermen, enterprises and growers understand the added value of this products.



Figure 1: Face-to-face interaction in Croatia



Figure 2: Agenda for the interaction in Belgium

## About this abstract

**Authors:** Joaquín Romero, Carlos Fuertes (Fertinagro Biotech)

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**SEA2LAND** project is a collaborative Innovation Action (IA) funded by the EU in the frame of the Horizon 2020 programme. The project aims to provide solutions to help overcome challenges related to food production, climate change and waste reuse. Based on the circular economy model, SEA2LAND promotes the production of large-scale fertilisers in the EU from own raw materials. This solution is expected to reduce the soil nutrient imbalance in Europe.

The project is running from January 2021 to June 2025.

**Website:** [www.sea2landproject.eu](http://www.sea2landproject.eu)



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# Explotación industrial y replicabilidad en los países de la Unión Europea

## Principales resultados

SEA2LAND demuestra que los subproductos de pesca y acuicultura pueden transformarse en BBFs, cerrando los ciclos de nutrientes en regiones marítimas de la UE. Se han realizado talleres y reuniones individuales con productores, agricultores y responsables de políticas, confirmando que las tecnologías de procesamiento permiten la recuperación de nutrientes reduciendo la generación de residuos y CO<sub>2</sub>.

Desde la perspectiva técnica, la estabilización, el control de los olores y formulaciones a medida permiten producir BBFs que mejoran la salud del suelo y aumentan el rendimiento de los cultivos. Económicamente, la recogida centralizada y el uso compartido de equipos ayudan a reducir los costes de producción, y los programas de financiación junto con incentivos pueden cubrir los déficits financieros. En el plano regulatorio, el nuevo Reglamento sobre Productos Fertilizantes proporciona una vía clara hacia el mercado CE. Su alineación con las normas de agricultura ecológica y REACH acelera la entrada al mercado, aunque las regulaciones nacionales aún requieren una mayor armonización.

## Recomendaciones prácticas

Para garantizar volúmenes constantes y justificar las inversiones en las líneas de procesamiento, agrupar la biomasa recopilando conjuntamente los residuos a nivel regional. También son clave los ensayos piloto con agricultores locales, que generan confianza, ajustan las dosis de aplicación y facilitan la adopción. Además, un etiquetado claro que permita obtener el mercado CE junto con certificaciones ecológicas u orgánicas ayuda a generar confianza en los compradores y a abrir oportunidades de exportación. Finalmente, comunicar los beneficios mediante mensajes clave sencillos y atractivos permite que tanto pescadores, como productores y agricultores comprendan el valor añadido de estos productos.



Figure 1: Interacción cara a cara en Croacia



Figure 2: Agenda para la interacción en Bélgica

## Acerca de este resumen

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