

# Fishing for sustainability!



## SAMS PILOT PORT A' BHULTIN

SAMS operates two experimental seaweed farms – being the only ones of their kind in Scotland – and is developing an industry leading seaweed nursery. The main site in Port A' Bhuiltin (PaB) has served as pilot for various research projects aiming to optimize seaweed cultivation practices and productivity.



Site:

**SAMS pilot Port A' Bhuiltin**

Location:

**Port A' Bhuiltin, Scotland UK**

Activity:

**Coastal seaweed aquaculture and co-culture with shellfish**

Operated by:

**The Scottish Association for Marine Science (SAMS)**

Building upon this work, the IMPAQT project explores the potential for co-cultivation of extractive aquaculture species (seaweeds and shellfish) in an IMTA concept. Together with extensive monitoring of environmental cultivation conditions and performance of the stock, IMPAQT results will provide important information for the sustainable and effective development of this aquaculture sector.

## PILOT SETUP

PaB has a lease area of 30 hectares, with currently one 100m x 100m grid system in place. The grid facilitates up to 24 100m-long growing lines for the cultivation of kelp (*Saccharina latissima*, *Alaria esculenta* and *Laminaria digitata*). Using different seeding methods, the seaweed cultures are seeded onto the growing lines and left to grow until harvest the following year. In co-location with seaweeds, native oysters (*Ostrea edulis*) are deployed in floating trestles extracting particulate organic matter from the water column.



## OUTCOMES

The Impaqt Intelligent Management System (IMS) reports environmental and stock information in real-time, and provides the operator with management actions

Stock analyses capabilities inform the operator about the optimum time points for deployment and harvest

Informs on stock welfare conditions and growth based on analysis of all data gathered

The challenges of sensor fouling was underlined

Continuous monitoring of operational data helps to minimize environmental impacts

Informs on IMTA processes and raises consumer knowledge on seaweed and IMTA food production



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 774109