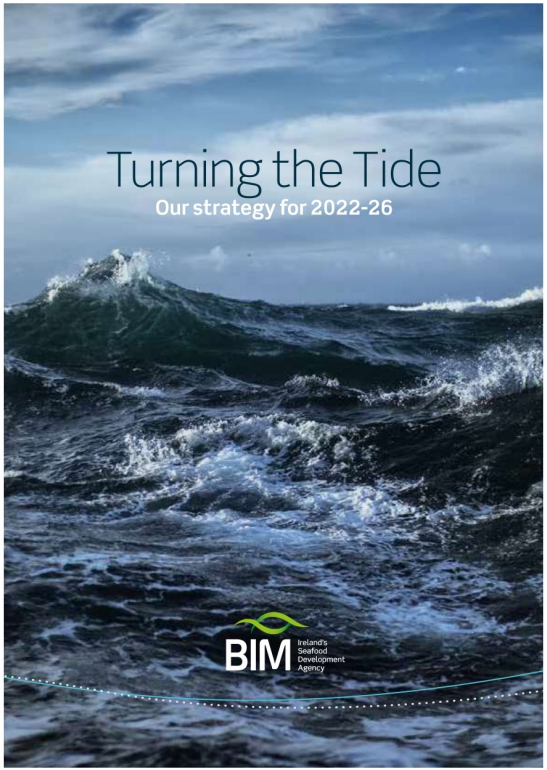
BIM

Ireland's Seafood Development Agency

Ireland's EU Structural and Investment Funds Programmes 2014 - 2020
Co-funded by the Irish Government and the European Union

An Roinn Talmhaíochta, Bia agus Mara
Department of Agriculture, Food and the Marine

EUROPEAN UNION
This measure is part-financed by the European Maritime and Fisheries Fund



Turning the Tide: BIM Strategy for 2022-2026

An ambitious plan to support the development of the aquaculture sector

- To provide leadership and support
- To deliver results with solutions that effect change
- To invest for long term growth
- To protect our environment and our sector

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Significant investment in 2023

- Through DAFM €4m invested under the Brexit Adjustment Reserve in 18 months
- Most investments were in low tech equipment
- Smart Aquaculture: technology that addresses key operational challenges

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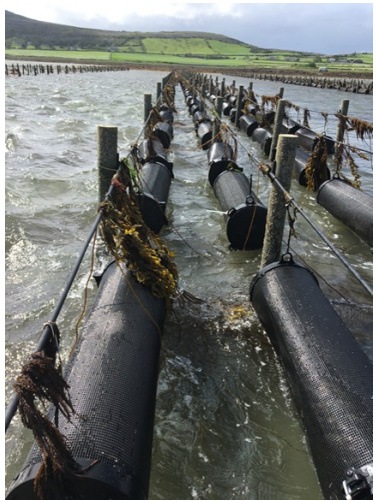
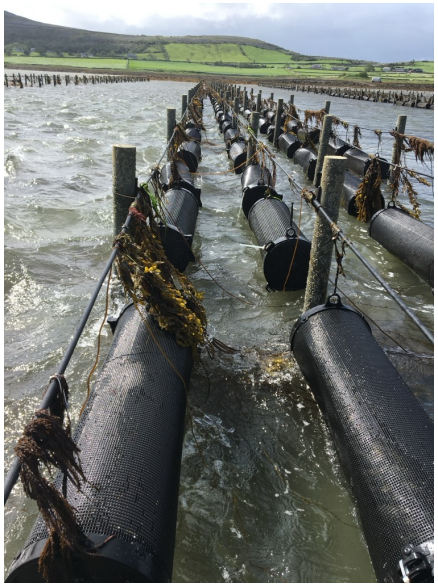
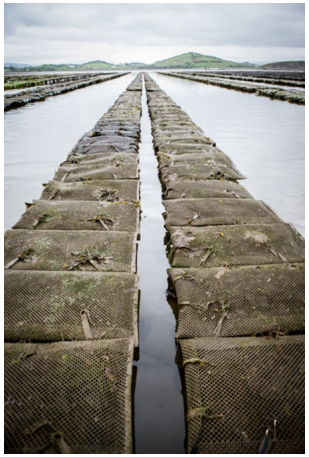
Oyster husbandry technology

- One system trialled in 2023, two further systems to be trialled in 2024
- Aim to improve productivity on oyster farms by minimizing production costs and maximizing the return per hectare
- Improve survival
- Increase the quality and value of the product
- Reduce the risk of any negative environmental impact from equipment failure

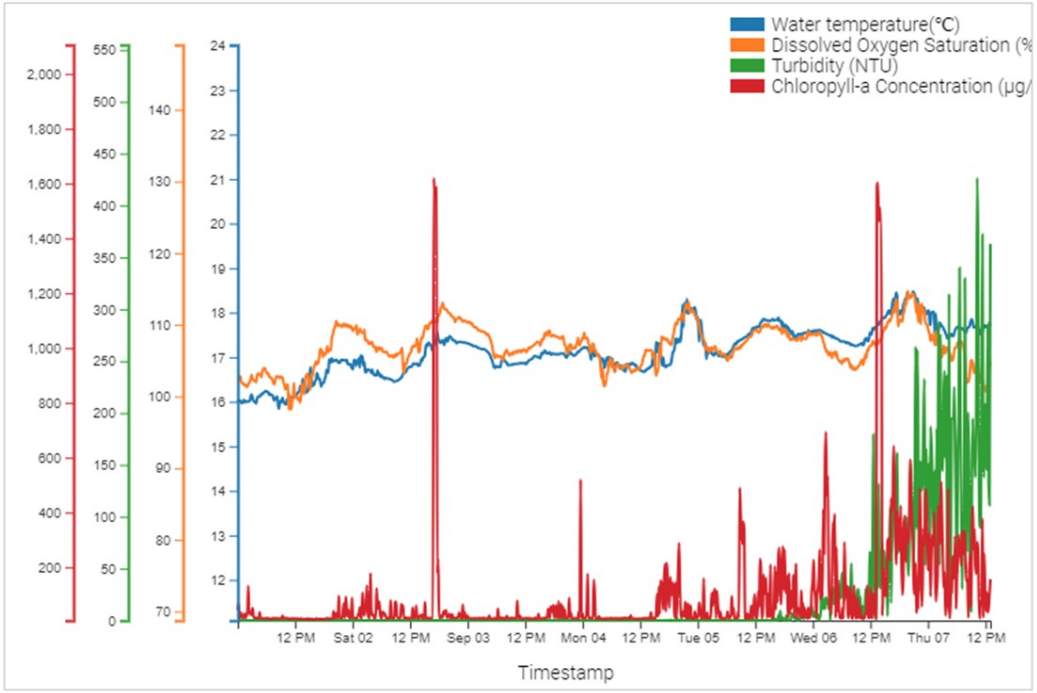


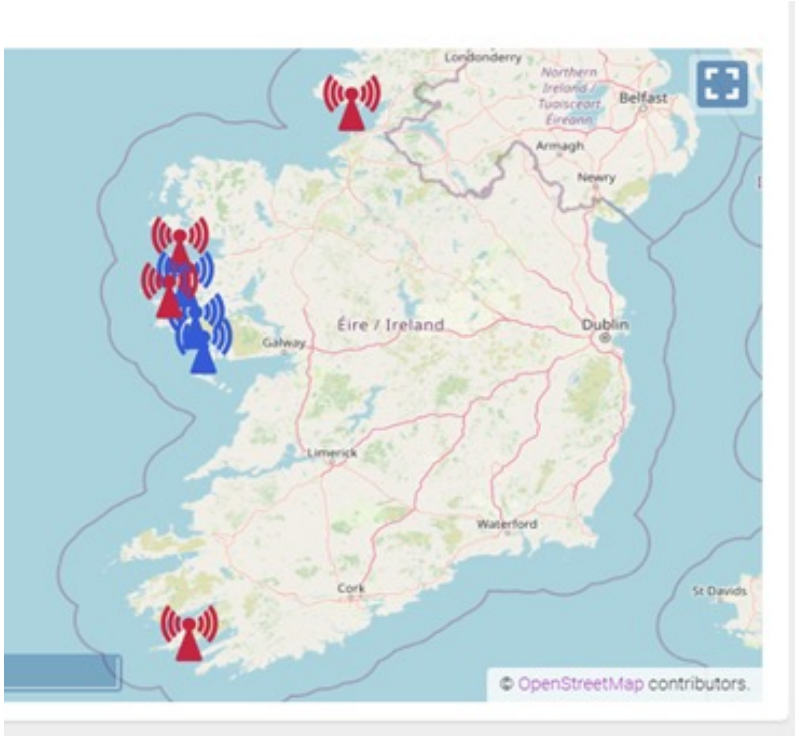
Review of Alternative Husbandry Technologies





Real time monitoring network





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Shellfish monitoring network 2024

- System will be deployed in six CLAMS areas.
- Aqua Troll 800 data sondes with telemetry integrated with existing structures.
- Real time monitoring of temperature, conductivity/salinity, Chlorophyll a, oxygen, turbidity and pH
- Data that is at a relevant scale for both farm and bay level management decisions.
- Will allow you as producers to access data daily and thus inform husbandry practices

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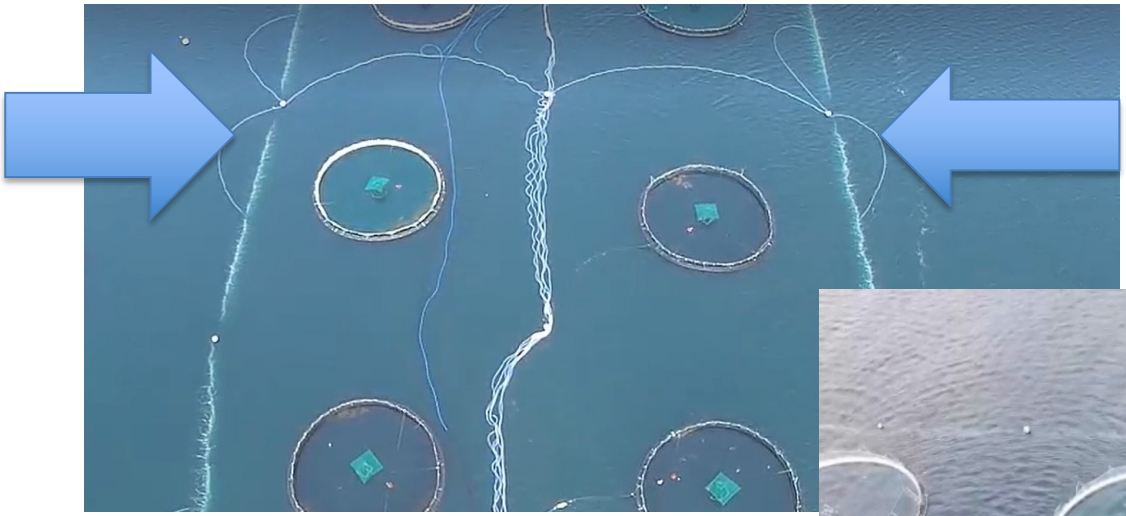
Bubble curtain – technical refinements

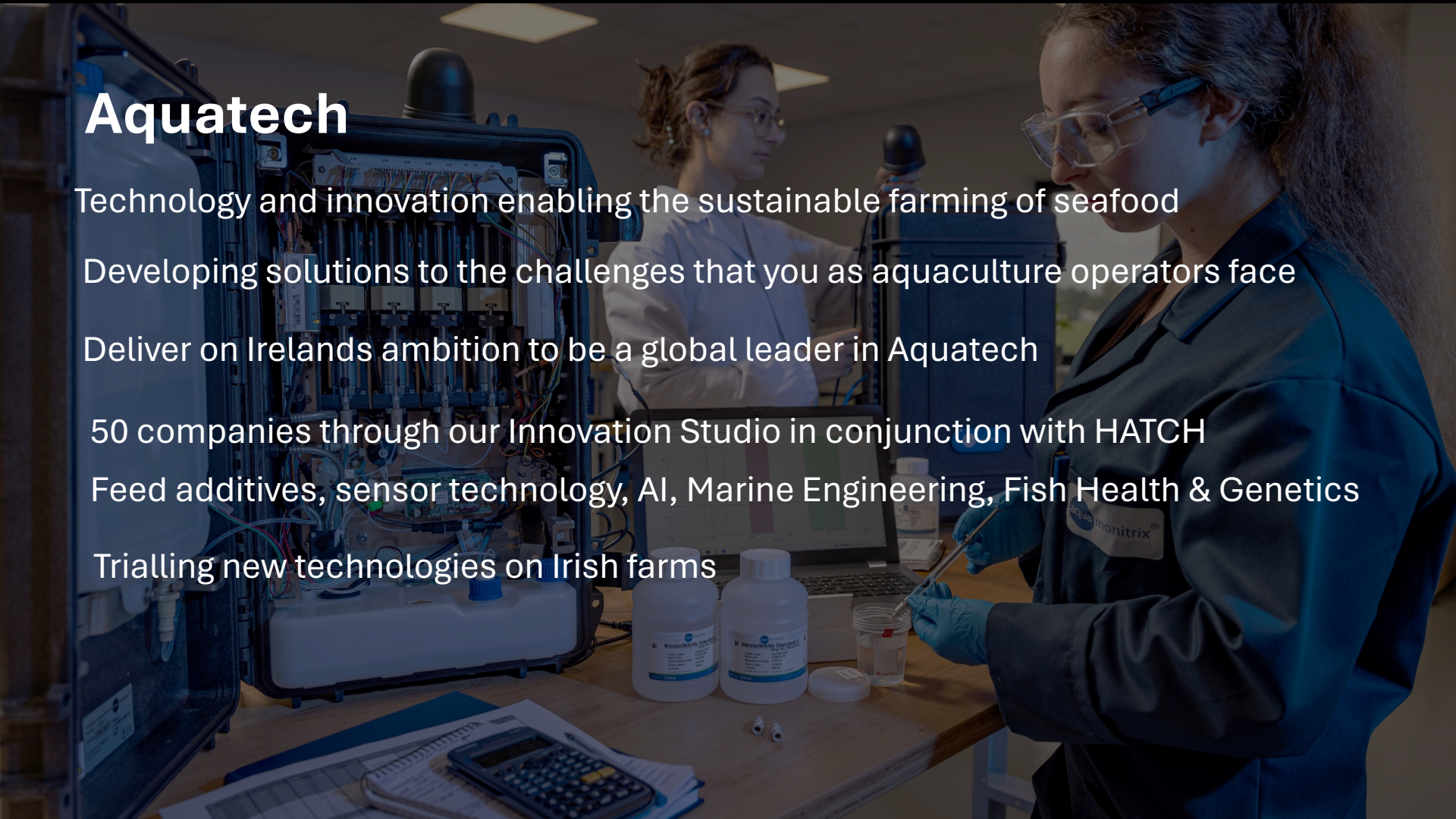


2022

2023

E-DNA project 2024

- Trial using eDNA methods in target bays to identify potentially harmful planktonic species
- Deliver reporting techniques and methods that would provide finfish sector with efficient, expedient and accurate information of presence of certain phytoplankton and zooplankton in proximity to their sites.



Aquatech

Technology and innovation enabling the sustainable farming of seafood

Developing solutions to the challenges that you as aquaculture operators face

Deliver on Irelands ambition to be a global leader in Aquatech

50 companies through our Innovation Studio in conjunction with HATCH

Feed additives, sensor technology, AI, Marine Engineering, Fish Health & Genetics

Trialling new technologies on Irish farms

LPAS System

AI based identification system for phytoplankton

Test systems operated on 5 sites

Can identify up to 20 species of harmful phytoplankton

Work ongoing to develop continuous real time sampling

Blood Biomarker analysis

Identifying fish welfare issues through blood serum analysis

Available across all finfish sites

Identify precursors to disease and stress

Develop a dashboard based fish health management system

WellFish Tech

Ubotica

Space tech company

Early warning system for shellfish and finfish

Launching its own satellite in March

Information relayed to ground within minutes instead of days

Auranta

Feed additives company

Provides product to south American shrimp sector

Reinforces the natural immune response

Developing a product for Rickettsia in salmon

auranta
SUSTAINING HEALTH NATURALLY

Konree Innovation

Developing technology to eliminate sea lice

Utilising AI and Robotics

Improve overall Fish Health

Konree Innovation

Building Social License

We cannot grow the sector without this

Peer reviewed papers from mining in Canada to aquaculture in Scotland, Tasmania and the US confirm that it is built on **trust**

1. Transparency of operations and processes from operators
2. Publication of data by the State
3. Education and promotion

Building Social License for Aquaculture

We will continue to engage with you to help **build trust** and bring **positive messages** into communities

We need to collaborate as a sector and focus on this as a **key activity** for 2024

TASTE THE ATLANTIC
A SEAFOOD JOURNEY

Clean Oceans Initiative

- 17 tonnes of marine litter collected by the aquaculture sector through CLAMS groups at 29 clean up days.
- Single Use Plastics Directive- information and fact sheets disseminated through CLAMS
- Recycling of mussel barrels, rope and oyster bags trialled.

“We must speak about the real potential to restore environmental health and improve human wellbeing through sustainable aquaculture production. This is the only way that we can show the world that aquaculture has earned its seat at the table of global food conversations”
Jennifer Bushman