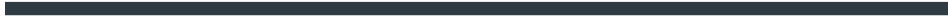# CONTRIBUTION OF **ACCESS2SEA** TO A **MORE COMPETITIVE** AND **SUSTAINABLE AQUACULTURE** **IN** THE ATLANTIC AREA

www.access2sea.eu

ACCESS2SEA PROJECT RESULTS

CONTENTS

1 DEFINITION OF A FRAMEWORK FOR THE DEVELOPMENT OF ACCESS2SEA:

ACTION PLANS FOR THE ATLANTIC AREA

ATLANTIC AREA PROGRAMME 2014-2020

The Atlantic Strategy and the 2013 – 2020 Action Plan

In 2011 the European Commission adopted an Atlantic Maritime Strategy in response to repeated calls from stakeholders for a more ambitious, open and effective cooperation in the Atlantic Ocean Area. The strategy, consistent with the EU 2020 agenda and its flagship initiatives, grouped the identified challenges and opportunities facing the Atlantic region under five main thematic headings.

....

The EU's 2013-2020 Atlantic Action Plan set out practical steps to be taken in the 5 Member States with Atlantic coasts (Ireland, France, Portugal, Spain and UK) and their outermost regions in order to boost the Atlantic Ocean Area's sustainable blue economy by 2020. **Its priorities were:**

- Promote entrepreneurship and innovation.

- Protect, secure and enhance the marine and coastal environment.

- Improve accessibility and connectivity.

- Create a socially inclusive and sustainable model of regional development.
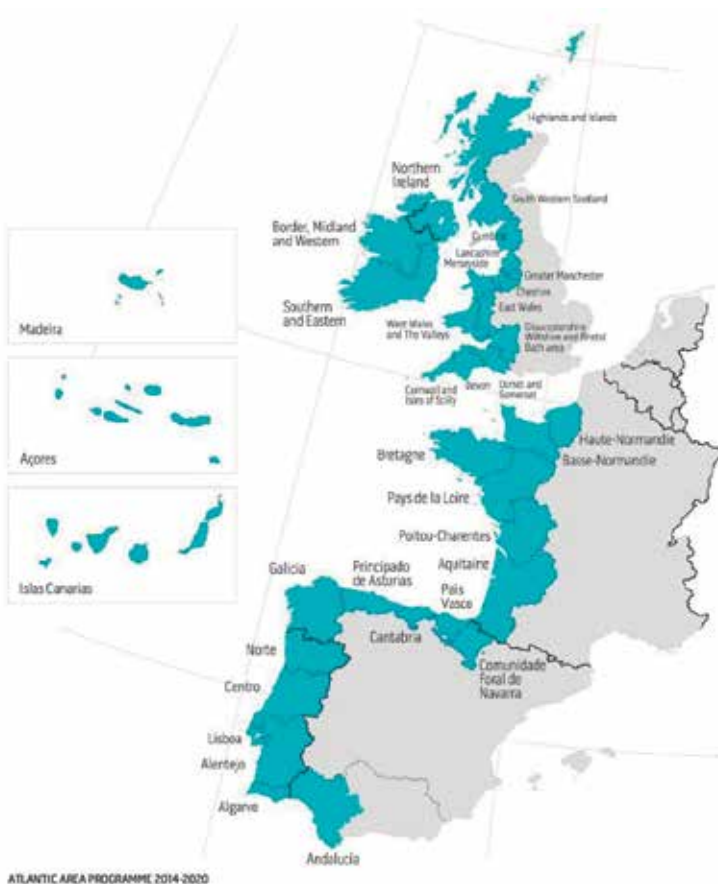
1.1

WHAT IS INTERREG ATLANTIC AREA?

As part of the European Union's Cohesion Policy, Interreg Atlantic Area supports transnational cooperation projects in 36 Atlantic regions of 5 countries: France, Ireland, Portugal, Spain and the United Kingdom, contributing to the achievement of economic, social and territorial cohesion. The Programme overall objective is to implement solutions to answer to regional challenges in the fields of innovation, resource efficiency, environment and cultural assets, supporting regional development and sustainable growth.

With a total budget of EUR 185 million, which comprises a fund allocation above EUR 140 million from the European Regional Development Fund (ERDF), the Programme focuses on four main priorities axes and specific objectives related.

PROGRAMME PRIORITIES:

Priority 1:
Stimulating innovation and competitiveness (EUR 62.8 million)

Priority 2:
Fostering resource efficiency (EUR 39.7 million)

Priority 3:
Strengthening the territory's resilience to risks of natural, climate and human origin (EUR 20.3 million)

Priority 4:
Enhancing biodiversity and the natural and cultural assets (EUR 52.6 million)

Priority 5:
Technical Assistance (EUR 9.9 million)

PROJECT FACTS

Interreg Atlantic Area — European Regional Development Fund — EUROPEAN UNION — **access 2sea**

9

Partners

from Spain, Portugal, France, Ireland and United Kingdom

SPAIN

WALES

IRELAND

Fundación Bahía de Cádiz para el Desarrollo Económico
Fundación Centro Tecnológico de Acuicultura de Andalucía

Swansea University

Údarás na Gaeltachta
Innovation & Management Centre WestBIC

PROJECT TITLE:
NEW OPPORTUNITIES FOR MORE COMPETITIVE AND SUSTAINABLE BLUE GROWTH IN THE ATLANTIC AREA.

ACRONYM:
ACCESS2SEA

PROGRAMME:
INTERREG ATLANTIC AREA

48months
Duration:
March 2019 to February 2023.

Lead partner:
Fundación Bahía de Cádiz para el Desarrollo Económico (CEEI Bahía de Cádiz), Spain.

1.4 M
Total Project Budget: Access2Sea is a project, co-financed 75% by ERDF through the Interreg Atlantic Area Programme.
• ERDF: 1.400.329,44 €
• Total Costs: 1.867.105,32 €

4
Associated partners from France, Spain and Ireland.

Tecnopole Quimper-Cornuaille
Investir en Finistére

University of Algarve
Centro Interdisciplinar de Investigacao Marinha e Ambiental da Universidade do Porto

2. INTRODUCTION AND PROJECT BACKGROUND

Marine aquaculture (fish, shellfish, algae farming) is a leading sector of the Blue Economy of the Atlantic Area that has an important tradition in many EU countries and is relevant on many of its coasts. Aquaculture has the potential to boost economic development and job creation by the sustainable exploitation of the Atlantic Area natural assets. As only 10% of the seafood on the Atlantic coast is of aquaculture origin, there is a great opportunity to increase the aquaculture production in this area.

AQUACULTURE INNOVATION HAS A KEY ROLE to play in the success of blue growth and sustainability, contributing to competitiveness as well as protecting and providing services to marine and coastal ecosystems. The aquaculture industry is looking for alternatives that promote economically profitable farming with a very low environmental footprint, committed to animal welfare and nutritional quality of the product.

ACCESS2SEA enhances the attractiveness of the Atlantic coast for aquaculture SMEs by enabling new business opportunities and providing sustainable and easier access to it.

2.1 **AIMS** OF THE PROJECT
The main objective is to promote the exploitation and preservation of the natural assets of the Atlantic Area through:

1
Release existing regulatory, technological, acceptability and planning barriers to new and ongoing investment in the sector.

2
Disseminate existing and new technical, planning and development solutions to current challenges.

3
Provide support to aquaculture SMEs with the aim of creating new and sustainable investment opportunities for them in the Atlantic Area.

4
Enhance cooperation between stakeholders to improve collaborative relationships and facilitate innovation and knowledge transfer in the aquaculture sector.
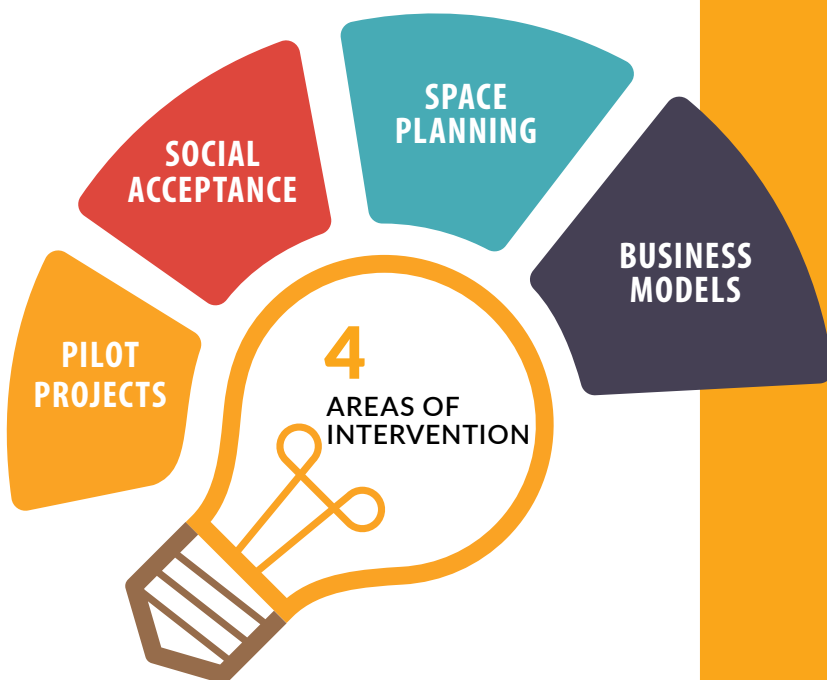
2.2 THE COMMON CHALLENGE OF THE PROJECT

The common challenge addressed by the project is the need to improve the performance, sustainability and social acceptance of the Aquaculture activities and business, once this sector potential was not yet fully unlocked in the Atlantic area.

To achieve the specific objectives proposed, the project **combines four areas of intervention.**

In this context Access2Sea is incharged of reinforcing the fact that the Member States of the EU are leaders in technology and research, have well-trained human resources, and the environmental conditions are appropriate for growing many of the species most demanded nowadays by the consumers.

SOCIAL ACCEPTANCE

SPACE PLANNING

BUSINESS MODELS

PILOT PROJECTS

4
AREAS OF INTERVENTION

CHALLENGE

3. METHODOLOGY AND STRATEGIES

FOR A MORE COMPETITIVE AND SUSTAINABLE AQUACULTURE GROWTH IN THE ATLANTIC AREA

"

This methodological guide details and explains all the steps to launch a project: from ratios and data to technical and legal indicators.

One of the objectives of Access2Sea is to improve the business environment and the growth and job creation of the aquaculture sector in the project territories. To this end, aquaculture companies and related entities in the different regions have been involved in the progress of the project through a series of strategies.

3.1 TRANSFER METHODOLOGIES IN SPATIAL PLANNING

Investir in Finistère with its partner Technopole Quimper-Cornouaille and with the support of professional federations and experts had published a guide to support aquaculture farms to set up an onshore aquaculture site with sea water supply. This methodological guide "Access2Sea's experimental approach to testing new aquaculture sites" details and explains all the steps to launch a project: from ratios and data to technical and legal indicators, including practical analysis grids.

This methodology provides relevant information to:

• Entrepreneurs embarking on an aquaculture project on land that requires seawater pumping, either linked to an offshore concession or on their own and in different activities: shellfish farming, algae farming, fish farming, marine biotechnologies according to your specific needs.

• Technicians from public organizations and communities who are supporting a project in their territory or who wish to equip a site.

Access2Sea's experimental approach to testing new aquaculture sites is an open access document available at project website.

3.2 SOCIAL ACCEPTANCE STRATEGY

Access2Sea created a social acceptability strategy, defining objectives action lines and indicators in order to highlight the sector's sustainability and the importance of fish consumption. Thus, contribute for changing of public opinion, through:

• Regional campaigns for changing the image of aquaculture fish within the consumers.

• The support of the administration to the companies using socially responsible techniques and ecologically sustainable.

The elaboration of the acceptance strategy plan was based on the results obtained from the SWOT analysis and after considering the cases of success detected (available in section 4.2).

ACCESS2SEA SOCIAL ACCEPTANCE STRATEGY

	Strategic Line **1**	Strategic Line **2**	Strategic Line **3**
	ECONOMIC ASPECTS To Increase Sales and Producer's Revenues	**PRODUCTIVE AND ECOLOGICAL ASPECTS**	**GOVERNANCE ASPECTS**
ACTION LINES	A.L.1 Regional Campaigns for Changing the Image of Aquaculture Fish within Consumers	A.L.1 Application of existing tools for sustainable development of the Aquaculture Sector	A.L.1 Technical workshops about removable installations and offshore aquaculture
	A.L.2 Online Training to Consumers "Say Yes to Sustainable Aquaculture"	A.L.2 Fish Welfare online tools for improving aquaculture social acceptance"	A.L.2 SME Support for Business Development, Planning and Licensing
		A.L.3 Communicating sustainable aquaculture through comics	A.L.3 Jointly definition of fiscal or social benefits for sustainable aquaculture producers

3.3   ACCESS2SEA TECHNOLOGY TRANSFER ROADMAP

As part of the work program, this action involved the Project Partners who committed themselves to researching and analyzing new aquaculture techniques that are being developed in their regions. This research aims to promote a more sustainable industry by facilitating the dissemination of techniques that may be of value to meet the needs of companies in other territories of the Atlantic Area Region.

A Technology Transfer Roadmap was developed as part of the Access2Sea Business Models work package. This is a methodology for the transnational transfer of sustainable business techniques across the partner regions.

1. Map existing sustainable aquaculture techniques

2. Engage with Research Facilities to identify new emerging techniques

3. Knowledge Sharing with Stakeholders incluidng companies, researchers and State agencies

4. Identification of funding sources to support the piloting of new techniques

5. Technology transfer for pilot implementation

6. Measure and evaluate key performance indicators of technology transfer

8 KEY LEARNINGS FOR DEVELOPING THE AQUACULTURE SECTOR:

1 A COMPETITIVE, SUSTAINABLE ROUTE TO MARKET SHOULD BE AVAILABLE.
The access route to market or its competitiveness market may change over time.

2 PUBLIC INVESTMENT IS REQUIRED TO ENSURE AN ENABLING ENVIRONMENT FOR BUSINESS TO COMMENCE AND THRIVE.

3 ENABLE THE AVAILABILITY AND USE OF TECHNOLOGY.
to enhance production techniques, quality, innovate and grow the business.

4 INCUBATOR AND ACCELERATION PROGRAMMES FOR AQUACULTURE SECTOR
will be helpful in supporting the business development capacities.

5 MAXIMISE THE CONNECTIONS WITH R&D FACILITIES LOCALLY, NATIONALLY AND INTERNATIONALLY.

6 FOSTER DIRECT SALES: LESS QUANTITY FOR MORE PER UNIT.

7 ENCOURAGE THE EVOLUTION OF AQUACULTURE SPECIFIC FINANCIAL INSTRUMENTS
that recognises risks and timetables associated to the sector (until the business demonstrates its capacity to engage with normal finance providers)

8 SUPPORT THE DEVELOPMENT OF CULTURALLY SENSITIVE BUSINESS MODELS
that maximise horizontal and vertical integration in the value chain where appropriate.

4. BEST PRACTICES OF ACCESS2SEA IN THE ATLANTIC AREA

4.1 SPATIAL PLANNING

In order to boost the sustainable development of the aquaculture sector, access to areas for aquaculture installation is essential. Nevertheless, territorial management is dealing with use conflicts for marine space (such us tourism, small-scaled fisheries, maritime transport…) and water supply.

Therefore, the discipline that may solve discrepancies is the implementation of Marine Spatial Planning (MSP) and spatial planning tools concerning environmental, social, governance and economic approach.

The application of worldwide MSP is quite widespread, and international organisations such as the FAO, the European Union and UNESCO are working on it. Hence, the degree of implementation varies greatly depending on the continents and countries assessed, and is closely linked to the availability of existing cartographic data at the national level in each country. For this reason, a generical spatial planning methodology to improve the access to the sea for aquaculture producers it was elaborated for Atlantic area regions.

WP4 general aim proposes spatial planning tools to improve the access to the sea for aquaculture producers and the possibility of transferring them to other Atlantic area regions

WP4 SPATIAL PLANNING

1 Marine Spatial planning (MSP) general guidelines

2 Best practices of MSP identified in the Atlantic coastal area

3 Guidelines to the establishment of adequate site for aquaculture

4 methodologies analyzed

6 CASES OF STUDY of 5 Atlantic coast countries:

- 🇵🇹 PORTUGAL
- 🇪🇸 SPAIN
- 🇫🇷 FRANCE
- 🇮🇪 IRELAND
- 🏴󠁧󠁢󠁷󠁬󠁳󠁿 WALES

Allocated Zones for Aquaculture (AZA) criteria analysed
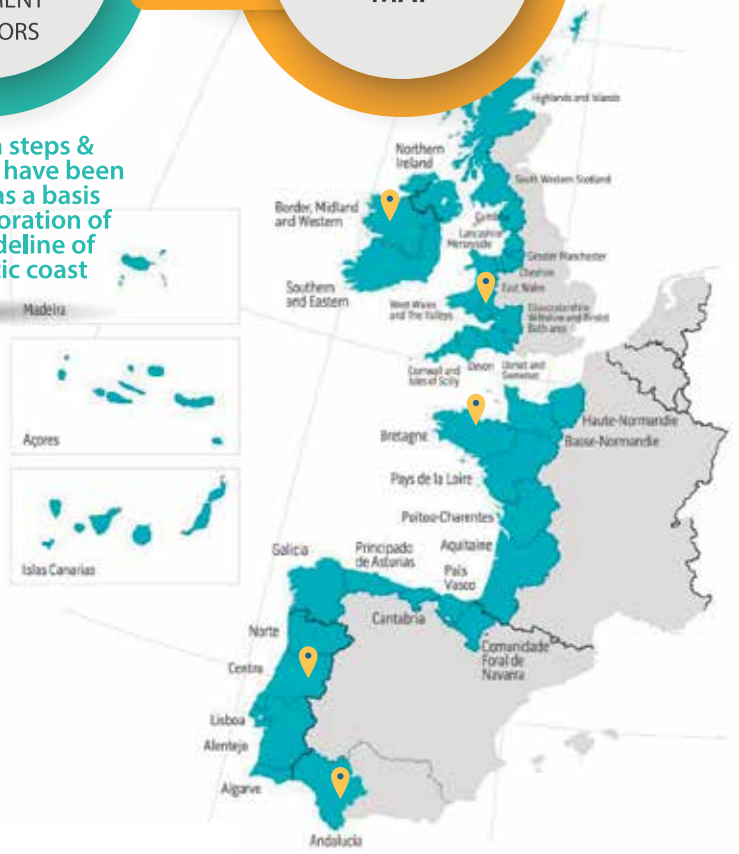
PILOT PROJECT (WP7)

Access2Sea experimental approach to expertise new aquaculture sites

KEY TRANSFERRING ASSESSMENT INDICATORS

9 common steps & 13 indicators have been identified as a basis for the elaboration of a MSP guideline of the Atlantic coast

OPPORTUNITIES MAP

4.2 SOCIAL ACCEPTANCE

In this section, we focused on the area of Social Acceptance where the partners have initially worked on identifying success cases. In order to detect the weaknesses, threats, strengths and opportunities of the aquaculture sector in the Atlantic Region a SWOT analysis was carried out.

Strengths

- Environmental impact
- Human resources
- Access to research and technology
- Business improvement

Weakness

- Spatial Planning and facilities available
- Regulation
- Knowledge of citizens
- Knowledge exchange among stakeholders
- Diseases

Opportunities

- Diet improvement
- Human resources
- Business improvement
- Knowledge of citizens
- Improve Knowledge exchange among stakeholders

Threats

- Regulation
- Conflict of interests among stakeholders
- Diseases
- Access to Finance

Once the analysis has been carried out, six case studies have been identified to help assess the current situation of the sector with the aim of analyzing what aspects can improve social acceptance in aquaculture.

- CASE STUDY 1: Promotion of Aquaculture Sea Bream in Madeira Island (Portugal).

- CASE STUDY 2: The Salmon Aquaculture Industry in Chile.

- CASE STUDY 3: The European Campaign about Aqualculture to promote fresh, local, healthy fish and shellfish from the farmers in the water - #FarmeintheEU.

- CASE STUDY 4: Social Acceptability in Aquaculture in Monastir's Bay: Tunisia.

- CASE STUDY 5: Breizh Mer: Social Acceptability of Offshore Windmills in Brittany.

- CASE STUDY 6: The Social Acceptability Strategies on renewable energy project on the French Coastal Area.

5. PILOTS PROJECTS

Based on the results of the work carried out during the execution of the project, the partners have worked together, sharing their knowledge, experiences, methodologies and tools, to develop pilot projects that must respond to the key fields of the project:

- **Take advantage of business opportunities detected.**
- **Support sustainable aquaculture activities (new and existing).**
- **Improve the social acceptance of these activities.**

The knowledge generated by the development and implementation of the pilots has been disseminated through scientific articles and technical reports where the main results and areas for improvement are presented.

THE ACCESS2SEA PILOTS:

PILOT 1: EXPERIMENTAL APPROACH TO EXPERTISE NEW AQUACULTURE SITES

PILOT 2: AQUACULTURE ACTIVITIES INSTALLATION

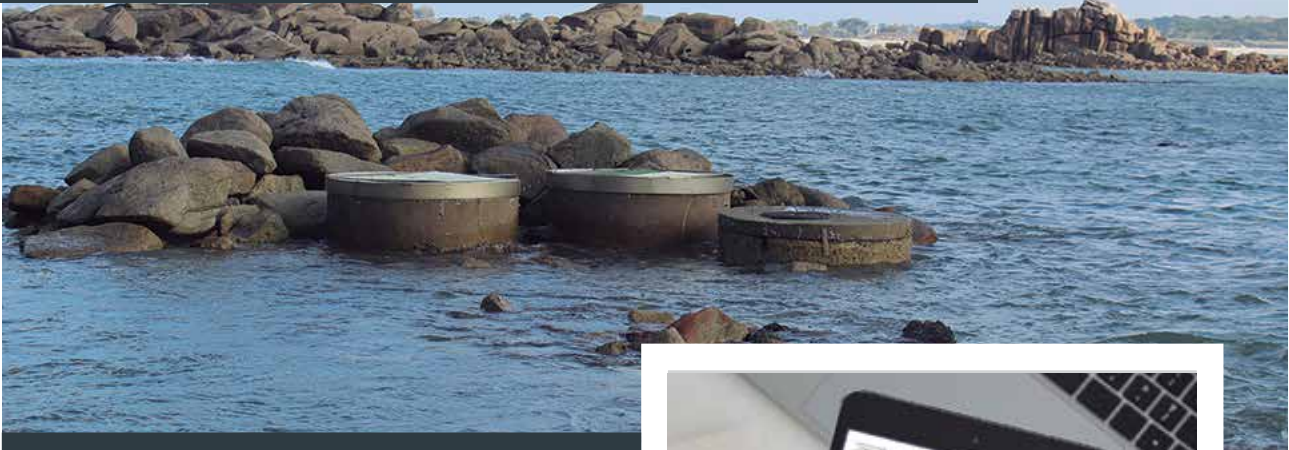**PILOT 3: SUSTAINABLE AQUACULTURE ACTIVITIES**

PILOT 4: AQUACULTURE ACTIVITIES ON SOCIAL ACCEPTANCE

PILOT 5: FEED INTAKE REGULATION AS A TOOL FOR WASTE MANAGEMENT IN FISH PRODUCTION

5.1 PILOT 1: EXPERIMENTAL APPROACH TO EXPERTISE NEW AQUACULTURE SITES
INLAND AQUACULTURE INSTALLATION.

01

PARTNERS:

**INVESTIR EN FINISTÈRE (IEF)
AND TECHNOPOLE QUIMPER-
CORNOUAILLE (TQC).**

AIM. This pilot action aims to:

- Increase the knowledge and skills of the project partners regarding the identification of the best sites and technical requirements for installing aquaculture projects.

- Raise awareness of public authorities in local areas to consider the installation of aquaculture activities through clarification on the stage required to install an inland aquaculture site in coastal areas.

TASKS:

In order to verify the suitability of an aquaculture site, the profitability of the project regarding the supply of raw seawater and the discharge of treated water must be examined. The process to identify methodological steps was obtained from the use of different criteria:

- Regulatory Constraints
- Implementation facilities
- Conditions of establishment / exploitation

- Pumping conditions
- Water Quality
- Risks of conflict of use

RESULTS

Thanks to the support of local aquaculture stakeholders and a consortium of aquaculture consultancy firms, a technical document has been elaborated that explains the different stages to be analysed when installing an inland aquaculture site.

The document is published as **"Methodological guide: set up an on-shore aquaculture site with sea water supply".** It is destinated to aquaculture entrepreneurs and technicians of public organizations in coastal areas that can support creations of aquaculture sites in their territory.

This guide was distributed in English and French.

02

5.2 PILOT 2: AQUACULTURE ACTIVITIES INSTALLATION. *TECHNOLOGY AND ADVICE FOR SME*

PARTNERS:

CTAQUA AND CEEI

AIM

The main objective is to provide a local SME with macroalgae cultivation techniques and advice to improve its productivity, sustainability and profitability, through:

- species diversification proposal to include macroalgae culture, technical and commercial alternatives.
- implementation of the Access2Sea Business Model (WP6)

TASKS

The main tasks were proposed to improve and implement new seaweed cultivation techniques indoors (laboratory conditions) and outdoors (earthen ponds).

- Design and test new cultivation systems
- Testing feasibility of novel species
- Increase growth rate efficiency
- Accelerate seaweed processing (dryer prototype)

In addition to carry out a technical and business model evaluation of SME to capitalise the knowledge acquired.

Innovative technique
NOVEL SUBSTRATE (seeding strings)
- *Codium tomentosum*
- *Codium decorticatum*

Innovative species
NOVEL HIGH-VALUED SEAWEED SPECIES
(Laboratory and earthen ponds cultivation)
- *Codium tomentosum*
- *Codium decorticatum*
- *Gracilariopsis longissima*
- *Chondracanthus teedei*

Innovative system
STRAIN COLLECTION AND VEGETATIVE CULTIVATION (earthen ponds cultivation)
- *Gracilariopsis longissima*
- *Chondracanthus teedei*
- *Gracilaria gracilis*

RESULTS

A technical report that gathers the identification of local SME bottlenecks, providing cultivation alternatives (tested in lab conditions and in situ), besides the outcome's evaluation was elaborated.

PARTNERS:

ÚDARÁS NA GAELTACHTA INNOVATION AND MANAGEMENT CENTRE WESTBIC

AIM

To build a bespoke smart unit that includes a cold room, a dryer for algae and an ice plant for fish. By using renewable energy and smart technology these infrastructures and facilities will maximise the quality, viability, and allow higher survival rate of shellfish during transport to markets.

TASKS:

Novel live holding system which allows for continuity of supply of product to the market and customers, will incorporate the following functions:

- Storage
- Live holding
- Real time monitoring of biometric data during storage maintaining water quality parameter
- Controlled temperature
- Dispatch
- Processing/packaging

03

5.3 PILOT 3: SUSTAINABLE AQUACULTURE ACTIVITIES PILOT PROJECT *COLD STORAGE SOLUTION*

RESULTS:

- An increase in the quality, viability, and shelf-life of the goods.
- Capitalisation of knowledge and process through the sharing of data with key partners
- Development agencies to boost transferability that can be used in other locations.
- To sustain the livelihood of the local community through allowing for further added value revenue streams
- The improvement in the process as a direct effect of the implementation of technology and innovation in the Business.
- Increase in revenue.
- A sales and marketing plan to capture new markets and maintain them.

04 ⭐⭐⭐

5.4 PILOT 4:
AQUACULTURE ACTIVITIES SOCIAL ACCEPTANCE
LUMPFISH WELFARE WATCHER

PARTNER:

SWANSEA UNIVERSITY

AIM.
The aim of the pilot was developing tools to help farmers monitor the welfare of lumpfish and take remedial actions.

TASKS:
- Biometric and welfare data as recorded from fish hatcheries and salmon farms
- An initial prototype of the scoring index was presented in a workshop and optimized following farmers recommendations.
- Once the LOWSI was optimised we worked with fish farmers, software developers, and designers to create the tool.

RESULTS

The **Lumpfish Welfare Watcher** is a web-based application created through four innovative tools:

1. A diagnostic welfare scoring chart that can be used by fish farmers on site.
2. An e-training platform.
3. A Body mass index (BMI) calculator to detect underweight lumpfish.
4. A Rapid Welfare Assessment tool for lumpfish to calculate Operational Welfare Score Index (LOWSI) based on four visual indicators (skin damage, eye condition, caudal fin damage and suction disc deformities)

The Lumpfish Welfare Watcher application package includes a user manual, a lumpfish Welfare chart and an e-training course.
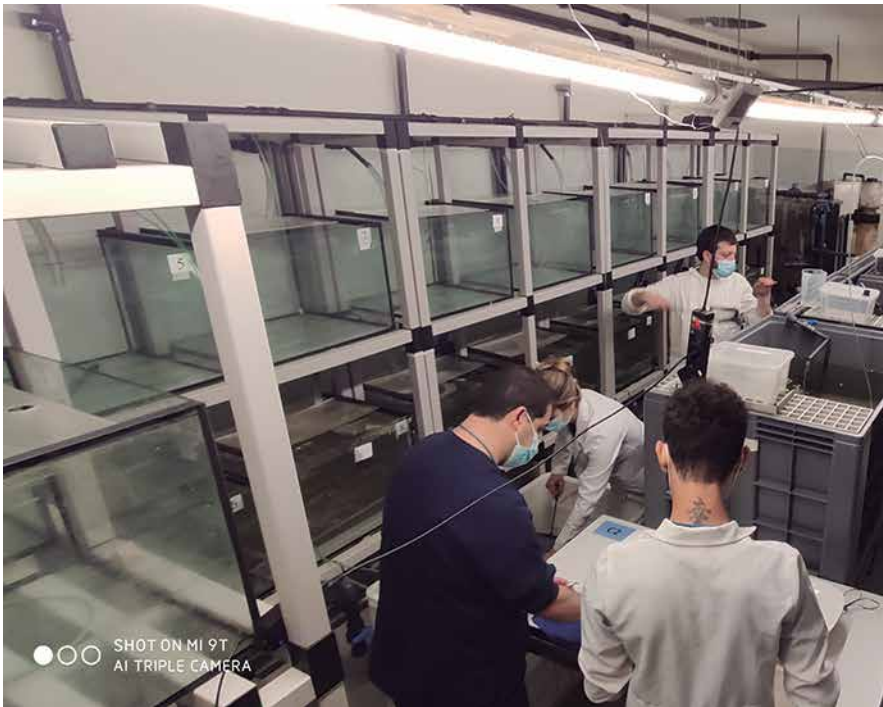
05 🐟

## 5.5 PILOT 5: FEED INTAKE REGULATION AS A TOOL FOR WASTE MANAGEMENT IN FISH PRODUCTION

PARTNER:

CIIMAR

AIM

Develop a simulation model based on experimental data of feed intake in order to minimize the waste of unconsumed fish feed. Hence, provide information and guidance for reducing aquaculture productive costs.

TASKS

Three fish trials were carried out to gather experimental data to

- support the development
- validate of a numerical model
- foresee an optimization of fish intake accordingly to fish weight, water temperature and salinity
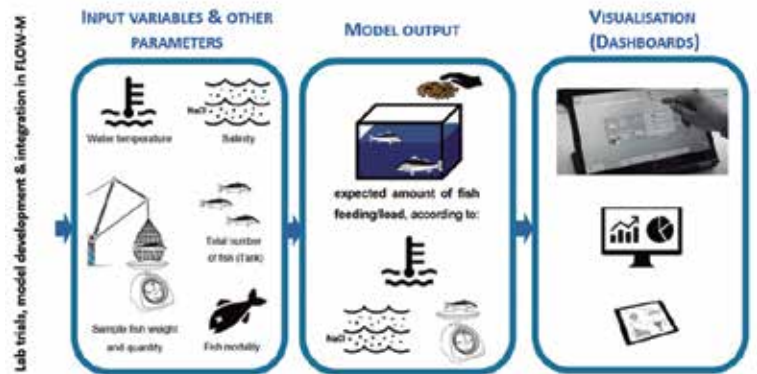
RESULTS

A novel interface with the integration of the numerical model was designed and tested to calculate and predict maximum feed intake in marine fish under different husbandry conditions (temperature and salinity).

1 AQUACULTURE SOCIAL ACCEPTABILITY

STEP 02
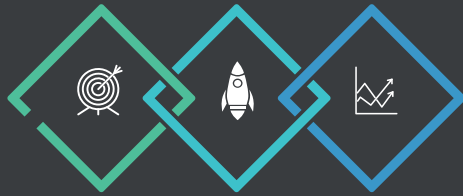**6 CASES OF STUDIES** to improve social acceptance in aquaculture

STEP 01
SWOT Analisis

SOCIAL ACCEPTABILITY STRATEGY

It has been developed considering economic, environmental and governance aspects gathered in:

3 MAIN STRATEGIC OBJECTIVES

8 LINES OF ACTIONS

26 NDICATORS

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03 **PILOT ACTION**
SUSTAINABLE AQUACULTURE
Cold storage solutions

Cold storage solutions

Development
1. Design
2. Equipment and materials
3. Setting up

RESULT:
Smart facility for storage and processing of algae and shellfish

---

04 **PILOT ACTION**
ACTIVITIES SOCIAL ACCEPTANCE
Lumpfish welfare watcher

Lumpfish welfare watcher

Development & testing
1. Lumpfish welfare e-learning.
2. Body mass calculation index (BMI)

RESULT:
Lumpfish welfare scoring assessment tool to be used by the industry

---

2 AQUACULTURE SPATIAL PLANNING

STEP 03
Elaboration of a specific MSP strategy for Atlantic region

STEP 02
Identification of bottlenecks and Assessing existing MSP methodology

STEP 01
Current Marine Spatial Planning (MSP) situation in each region

OPPORTUNITIES' MAP

It provides territorial opportunities available for installing aquaculture business, regarding:

SPACE SPATIAL TOOLS

9

5

REGIONS OF THE ATLANTIC AREA

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01 **PILOT ACTION**

NEW AQUACULTURE SITES
Methodological guide: set up an on-shore aquaculture site with sea water supply

Inland aquaculture installation

Development
1. Compile relevant information
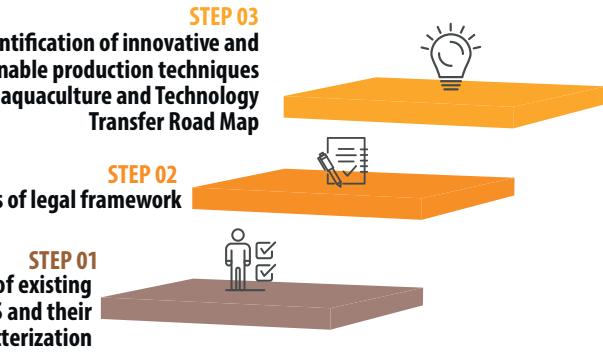2. Technical development
3. Feasibility study

RESULT:
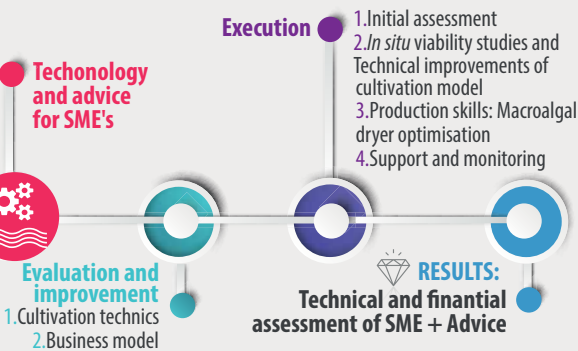**Methodological guide: set up an on-shore aquaculture site**

3

Ider sustain for

Analysis

Inventory c SMES charac

B P

Supp Ac

02 **P**

05 **PI O w**

BUSINESS SUPPORT

STEP 03
...ntification of innovative and ...nable production techniques ...aquaculture and Technology Transfer Road Map

STEP 02
...s of legal framework

STEP 01
...f existing ...s and their ...terization

...USINESS SUPPORT TO AQUACULTURE ENTERPRISE
...roposition of innovative and more efficient business models

8
Key learnings
for developing the Aquaculture sector

189

...SMES
...ported by
...cess2sea
...Partners

...ILOT ACTION AQUACULTURE ACTIVITIES INSTALLATION

Techonology and advice for SME's

Execution
1.Initial assessment
2.*In situ* viability studies and Technical improvements of cultivation model
3.Production skills: Macroalgal dryer optimisation
4.Support and monitoring

Evaluation and improvement
1.Cultivation technics
2.Business model

RESULTS:
Technical and finantial assessment of SME + Advice

03   **PILOT ACTION**   **SUSTAINABLE AQUACULTURE**
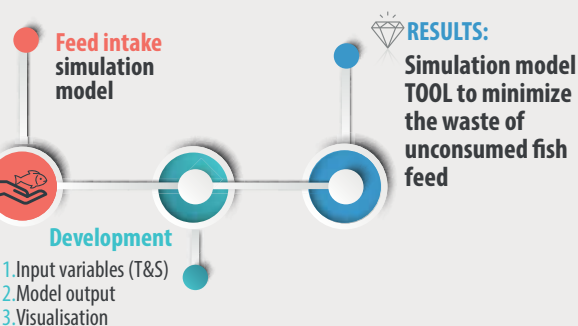Cold storage solutions

...ILOT ACTION FEED INTAKE SIMULATION MODEL
...Optimization of fish intake model accordingly to fish weight, ...water temperature and salinity

Feed intake simulation model

RESULTS:
Simulation model TOOL to minimize the waste of unconsumed fish feed

Development
1.Input variables (T&S)
2.Model output
3.Visualisation

6.
MAIN RESULTS AND CONCLUSIONS

- Access2sea has succeeded in providing new opportunities for the Aquaculture sector to boost sustainable blue growth in the Atlantic region by integrating three different disciplines such as social acceptance, marine spatial planning, and business model development.

- Access2sea have detected that the implementation of Marine Spatial Planning (MSP) provides an opportunity to address some of the planning constraints faced by the sector. The practical cases analysed in the framework of the project and coming from different countries and scenarios, allowed us to extract relevant methodological aspects increasing the guarantees of success of aquaculture projects on the European Atlantic coast.

- Access2sea has identified that licensing requirements in term of spatial planning must be simplified and accessible to encourage aquaculture entrepreneurship.

- Access2sea pilot projects have demonstrated that the innovation in terms of technical designs and modelling tools supported by financial advice ensure competitivity and market diversity.

- Access2sea pilot project results have provided to the aquaculture sector and the general public interested access and advice for the implementation of several tools in order to identify novel business opportunities.

- Access2sea has identified that strategic engagement and cooperation between all stakeholders to participate in decisions concerning aquaculture farms is essential for effective spatial planning, as well as contributing to improve social acceptance.

7.DISSEMINATION AND COMMUNICATION

A.   CAPITALIZATION

During the implementation of the project, the partners have worked on a strategy to capitalise on the results based on the available knowledge that feeds Access2Sea from previous projects and other EU strategy projects, research papers and scientific articles.

Each partner has created Local follow up committees (LFC) to evaluate the different methodologies, procedures and actions to be implemented in each region. Periodically, they have met with their LFCs to share the results of the studies carried out and generate new opportunities.

Action for Change Action Plan

The Action Plan for Change represents a formal commitment by the association to continue the work of Access2Sea beyond the project completion date. To ensure the long-term impact of Access2Sea's results, the Association is committed to:

- Involve relevant bodies in Access2Sea outreach events.
- Disseminate the tools created within the framework of Access2Sea and make them available to local SMEs.
- Maintain the Access2Sea website.
- Keep the map of opportunities updated with the latest opportunities in the regions.
- Disseminate the results of Access2Sea as part of annual international maritime events.
- Work to make aquaculture SMEs visible to international markets.
- Keeping the association alive by organizing occasional meetings.

B

COMMUNICATION

MATERIALS
————

A wide set of communication material has been designed to facilitate the scope of project information, results and conclusions. The contents have been disseminated to different skateholders member of public to improve the attractiveness of the Atlantic area for the development of sustainable aquaculture. **We have developed communication materials** (leaflets, brochures, etc.) which type and languages was defined according the communication target groups. In addition, all the materials are open access and available for download as pdf from the Access2Sea project website at www.access2sea.eu
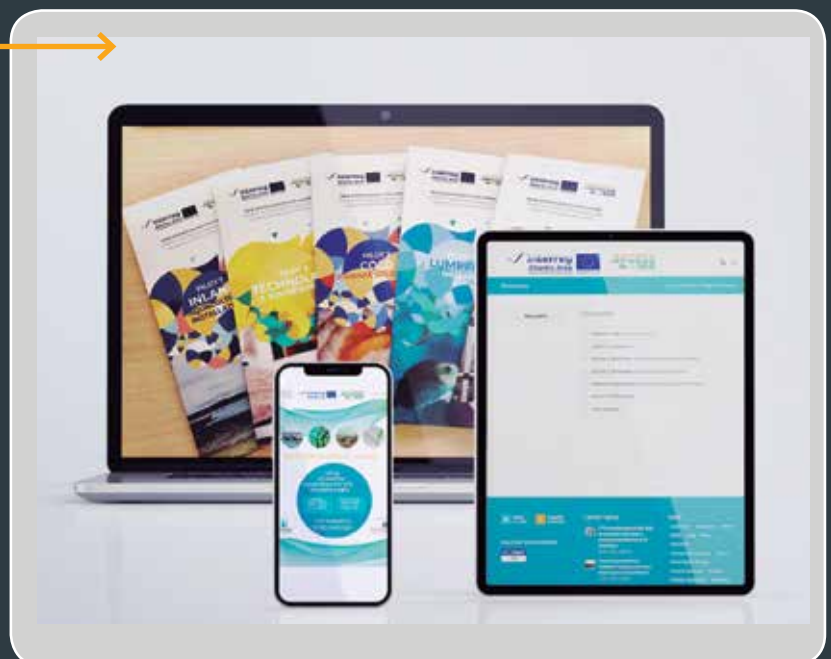
WELCOME!

Discover how our communication activities contributed to a more competitive and sustainable aquaculture in the Atlantic Area

START ->

Project Events

14 ACTIONS for the dissemination and capitalisation of results.

659 PARTICIPANTS

• • • • • • • • NEXT

Targeted events

5 ACTIONS actions to disseminate and capitalize on the results have been carried out in each region.

361 PARTICIPANTS

• • • • • • • • NEXT

Online presence

374 POSTS in Twitter and LinkedIn
332 FOLLOWERS

234 POSTS on our WEBSITE
8.129 VISITORS

7 NEWSLETTER
43 SUSCRIBERS (45.6% open rate)

• • • • • • • • NEXT

Traditional media

We have released a total of:

11 PRESS RELEASES
3 ADVERTISEMENT
1 ARTICLES

• • • • • • • • NEXT

Local follow-up committees

All the partners have held a total of:

17 meetings with experts from each of the regions to publicize and monitor the actions carried out.

260 PEOPLE attended these meetings

Knowledge transfer

At the beginning of the Project, a transnational knowledge transfer workshop was held in Brest, attended by a total of :

18 participants of different nationalities.

Prospective missions

4 Interregional learning missions to international aquaculture good practices territories

24 Beneficiary companies participated in cross-border, transnational or interregional research projects.

Business support

165 Number of ENTERPRISES benefiting from Business Support Activities delivered by the partners

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TOTAL

PEOPLE BENEFICIARIES OF THE PROJECT:

1487

C

NETWORKING

Dissemination and communication have provided a wider scenario for networking stablishment. Numerous skateholders, academia, industry and direct SMEs among others have showed interest and have contacted the project partners for information and support in development of business models, social acceptance and spatial planning of the aquaculture sector.

ACCESS2SEA PROJECT PARTNERS:

SPAIN — CEEI (Centro Europeo de Empresas e Innovación), ctaqua (CENTRO TECNOLÓGICO DE LA ACUICULTURA)

WALES — CSAR

IRELAND — Údarás na Gaeltachta, WestBIC

FRANCE — Technopole Quimper-Cornouaille, INVESTIR EN FINISTERE

PORTUGAL — UAlg (UNIVERSIDADE DO ALGARVE), ciimar

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