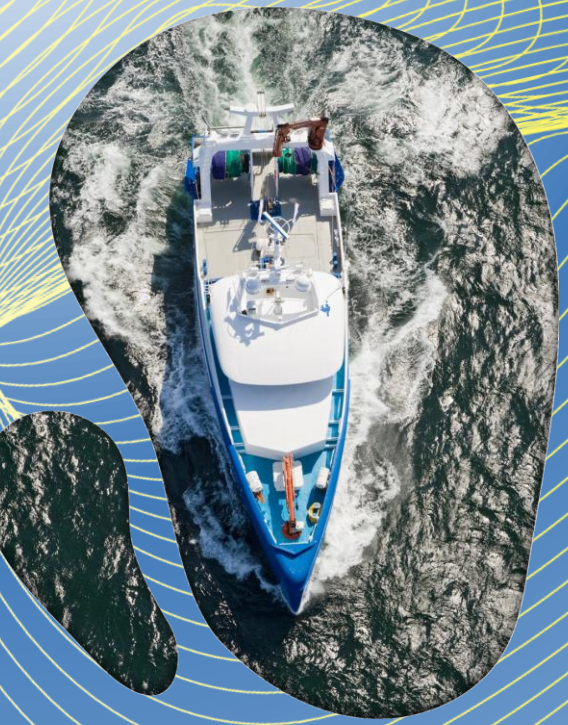

JOINING FORCES for the ENERGY TRANSITION in EU FISHERIES and AQUACULTURE

Directorate-General for Maritime Affairs and Fisheries (DG MARE)

Energy Transition Partnership in EU Fisheries and Aquaculture Workshop on Skills

Friday 19 April 2024,
09h00 –13h00
#ETP_FishAqua

Maritime Affairs And Fisheries

European Commission

Agenda

8h30 – 9h00	*Registration & Welcome coffee*
9h00 – 9h30	Welcome and introduction to the day (Moderated by Stephen DAVIES (DG MARE)) Delilah AL KHUDHAIRY (Director Directorate A: Maritime Policy and Blue Economy) / Sven Langedijk (Unit A4: Economic Analysis, Markets and Impact Assessment) Icebreaker Introduction to the challenge of skills
9h30 – 10h00	Presentations: ○ Training program to sector workers - *Green to blue* ○ Training program in eco-driving – *Amarree* ○ Training program in aquaculture – *BlueAquaEdu*
10h00 – 10h10	*Coffee break*
10h10 – 10h50	Presentations of skills tools and resources and examples: ○ *Sea-Ranger* perspective ○ Sustainable fisheries training - *Catching The Potential* ○ Educational program for sustainable jobs in Blue Economy - *BOUTCAR* ○ Offshore Renewable Energies partnership in the Pact for Skills - *Flores*
10h50 – 11h	*Coffee break*
11h00 – 12h30	Breakout session Identification of current & future gaps, challenges and opportunities in skills within the sector and amongst the workforce
12h30 – 12h50	Presentation of Conclusions and Recommendations by the different groups
12h50 – 13h00	*Closing, incl. Next Steps*
13h00 – 14h00	*Light lunch networking*

European Commission

We count on you too!

How to connect to Slido:

Sli.do

1. WiFi: ECvisitor (Password: Welcome)
2. Go to Slido.com (or scan the QR code)
3. Fill in the code: #ETP_FishAqua
4. Answer the questions!

We invite you also to use social media with **#ETP_FishAqua**

Maritime Affairs And Fisheries

slido

European Commission

Warm-Up question

What skill do you believe is vital for the energy transition in fisheries and aquaculture? [*If desired, multiple, one-word answers are possible*]

Maritime Affairs And Fisheries

Energy Transition in EU Fisheries and Aquaculture

Communication on Energy transition of EU fisheries and aquaculture
Four main areas to accelerate the transition

Governance framework

Improve the governance framework & coordination/ cooperation between stakeholders

Close the gaps in both available technology and knowledge through R&I

Research and Innovation

Energy efficiency

+

Energy transition

Carbon neutral by 2050

Improve the business environment, including in financing opportunities and awareness

Financing

Develop skills and a workforce that is prepared and ready for the energy transition

People & Skills

SKILLS

Needs:

- Re-skilling and up-skilling of the current workforce;
- Younger generation, women & dynamic workforce;
- New knowledge, skills and qualifications to adopt new technologies and practices.
- Up-to-date education and vocational training systems to train and re-train workers for new and sustainable activities
- Relevant large-scale skills partnerships ?

Actions to follow-up:

- Blue career calls
- Fishers of the future project
- Virtual academy possibility

Agenda

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europêche

GREEN to BLUE
Improvement of sustainability competences in the field of fisheries and aquaculture

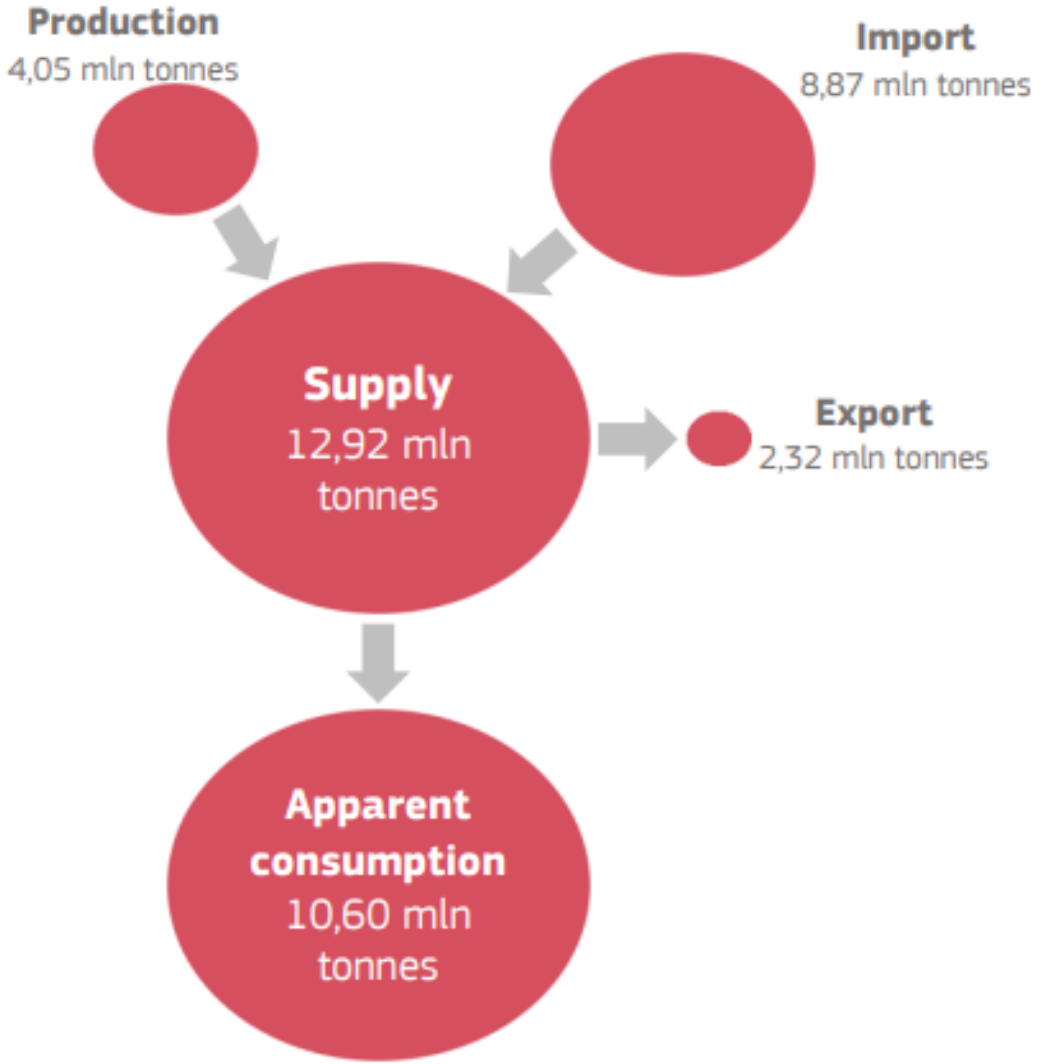
By Rosalie Tukker - EUROPECHE

> **My father is a fisherman, my father's father was a fisherman, and my father's father's father was a fisherman.**
>
> *- Viking Kellgren -*

TOTAL FISHERY AND AQUACULTURE PRODUCTS

EU SUPPLY BALANCE (2021, LIVE WEIGHT EQUIVALENT, FOOD USE ONLY)

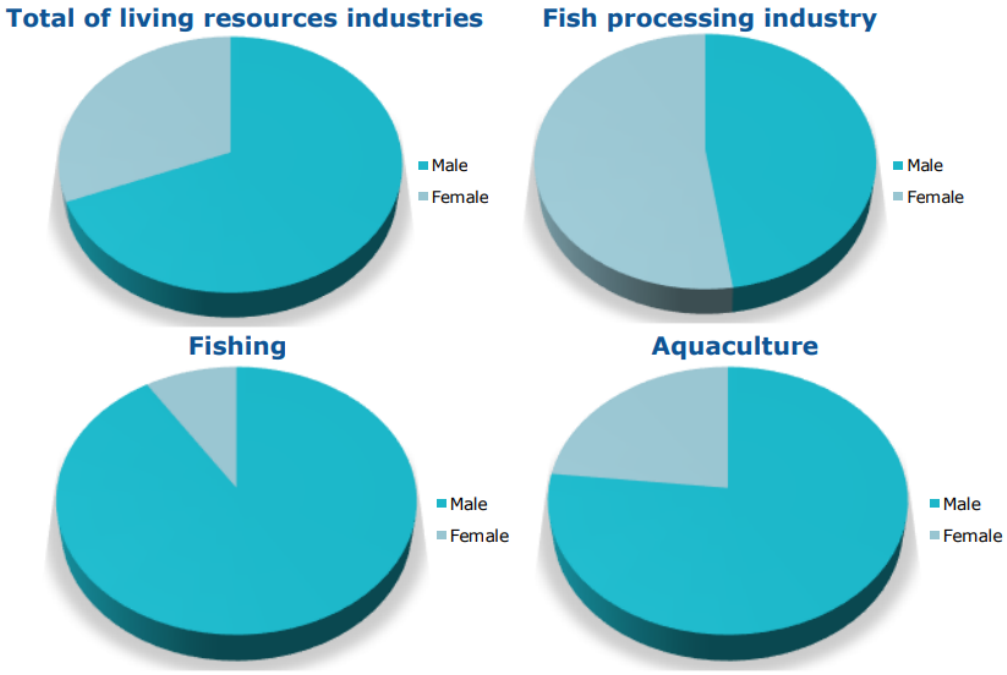
Source: EUMOFA, based on EUROSTAT (online data codes: fish_ca_main, fish_aq2a and DS-045409) and FAO data. Details on the sources and on the methodological approach used for assessing the production method of imports and exports and the destination use of catches can be found in the Methodological background.



Co-funded by the European Union

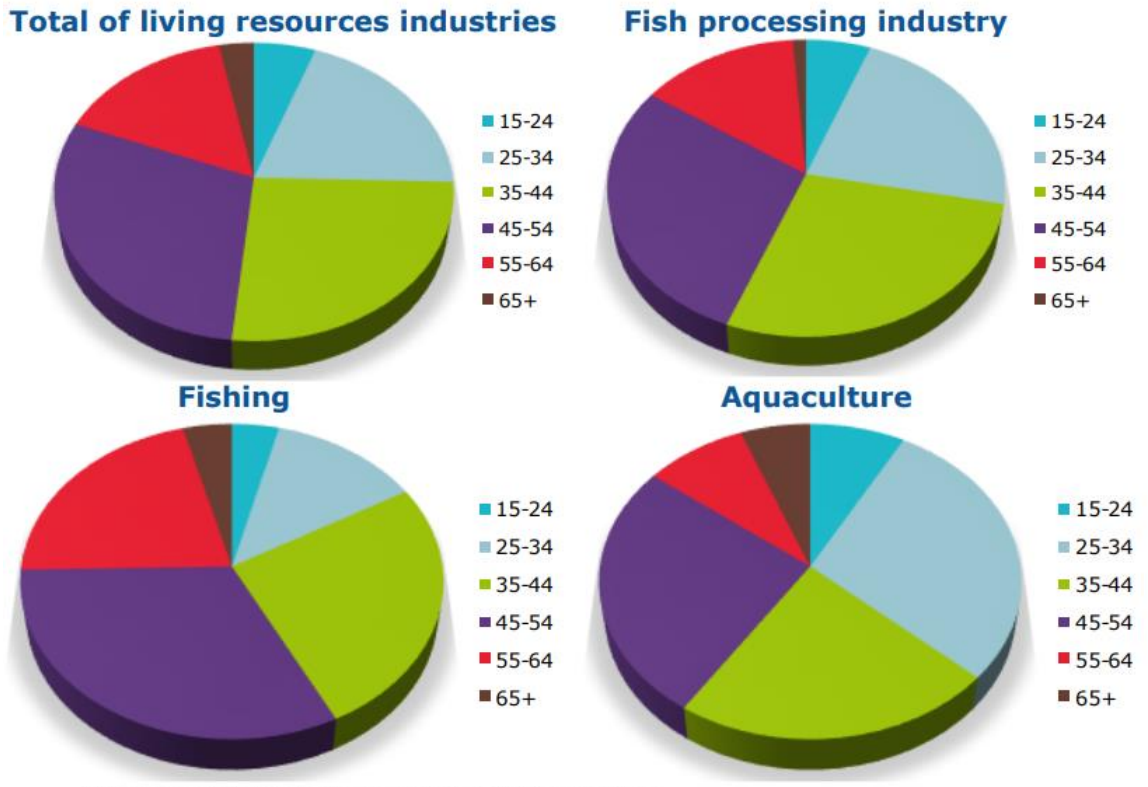
Average Fisher and Fish Farmer Profile

Gender distribution, 2016



Source: Eurostat (Labour Force Survey) and own calculations.

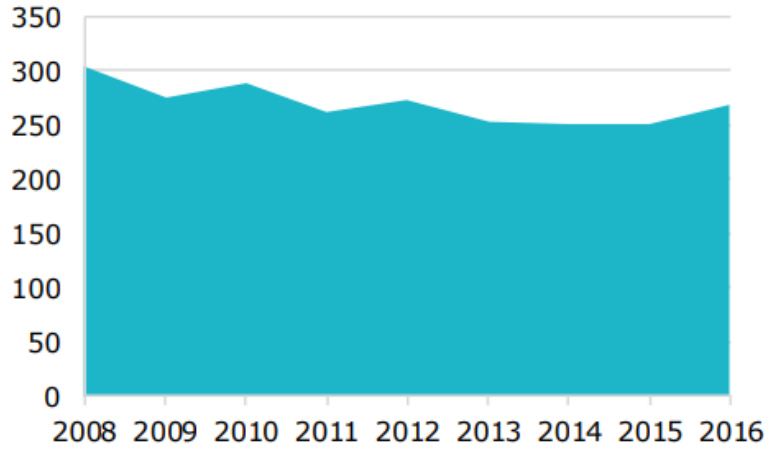
Age distribution, 2016



Source: Eurostat (Labour Force Survey) and own calculations.

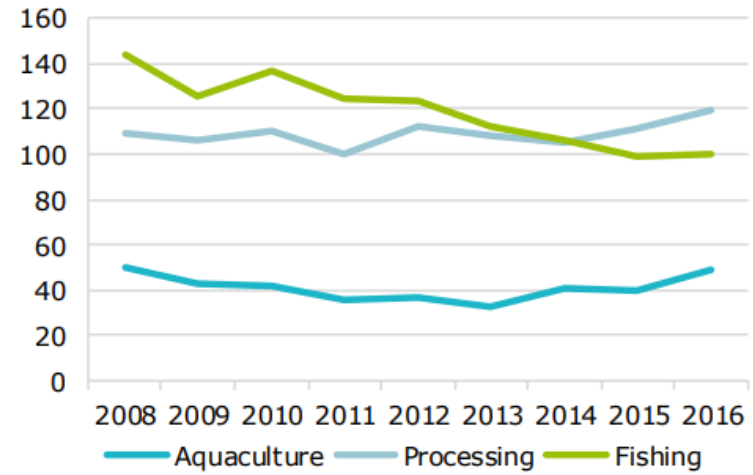
Source: DG MARE, European Commission, Employment in the EU living resources sectors (April 2019).

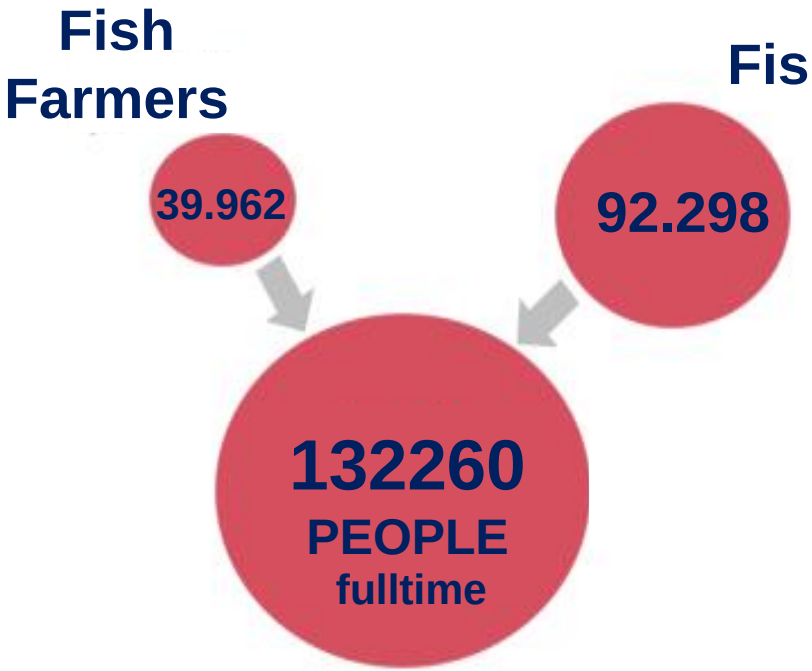
Total employment, thousand FTEs



Source: Eurostat (Labour Force Survey) and own calculations.

Breakdown by subsector, thousand FTEs





Source: DG MARE, European Commission, Employment in the EU living resources sectors (April 2019).
Source: European Commission, Directorate-General for Maritime Affairs and Fisheries, *Facts and figures on the common fisheries policy – Basic statistical data – 2022*, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2771/737237

Co-funded by the European Union

"We're not many - young people fishing. I think it's because it's physically hard work, and you don't know for how many years you can do it. It's a big risk to start." - Marie Kellgren

Source: Denis Loctier, Euronews (2020), Family-run fisheries struggle as new generation casts net wider.

“The sector needs to make use of all the tools available to bring change […]. In particular, upgrading skills through initial and life-long learning, as well as training, […] will make fishers and aquaculture farmers more efficient and **resilient** […]”

“The Common Fisheries policy today and tomorrow”, 21 February 2023, COM(2023)103

Innovative skills framework programme with a dual character

Educate

On matters related to:

- Marine ecosystems
- Plastic Pollution
- Sustainable fisheries management
- Climate Change
- Importance cooperation and communication

Connect

- Bridge the gap
- Communication
- Accept other opinions
- Find solutions

Some fruitful results

Suggestions for collaboration between the sectors and academics

Increased demand from trainees to conduct the training in other communities

Request from the academics to make more frequent visits to the fishing reserve to collect data and work with the fishing community

Acceptance of fisher's requests on the port authorities

With proper dialogue and cooperation

We can make the future of fisheries & aquaculture sustainable

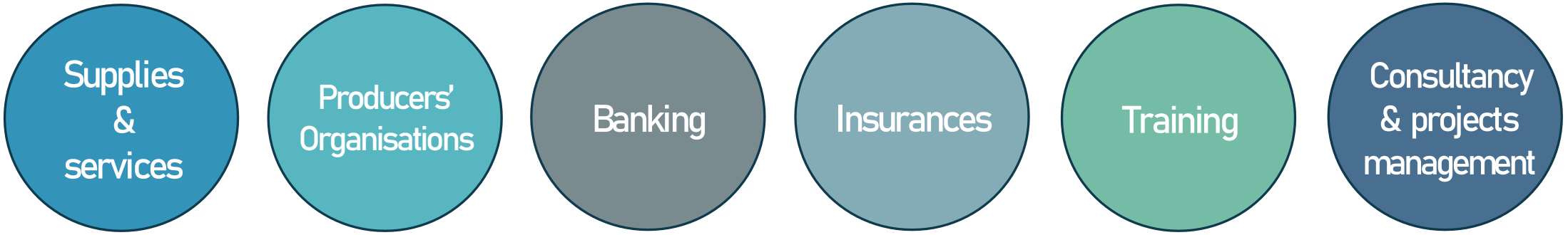
Supporting the saving energies for French fishing fleet with dedicated tools

Energy Transition Partnership - Skills
Workshop Friday, 19 April 2024

Coopération Maritime in a few words

French national association, born in 1897, bringing together the cooperative movement of artisanal fishing and marine cultures

- 88 member cooperatives, specialized in several activities :



- Our missions :

Unify the action of our member cooperatives and support their development

Defend and promote the cooperatives and their members (fishermen and shellfish farmers)

Develop and support projects of collective interest for artisanal fishing and marine cultures

Context : the energy crisis impacting the French fishing fleet

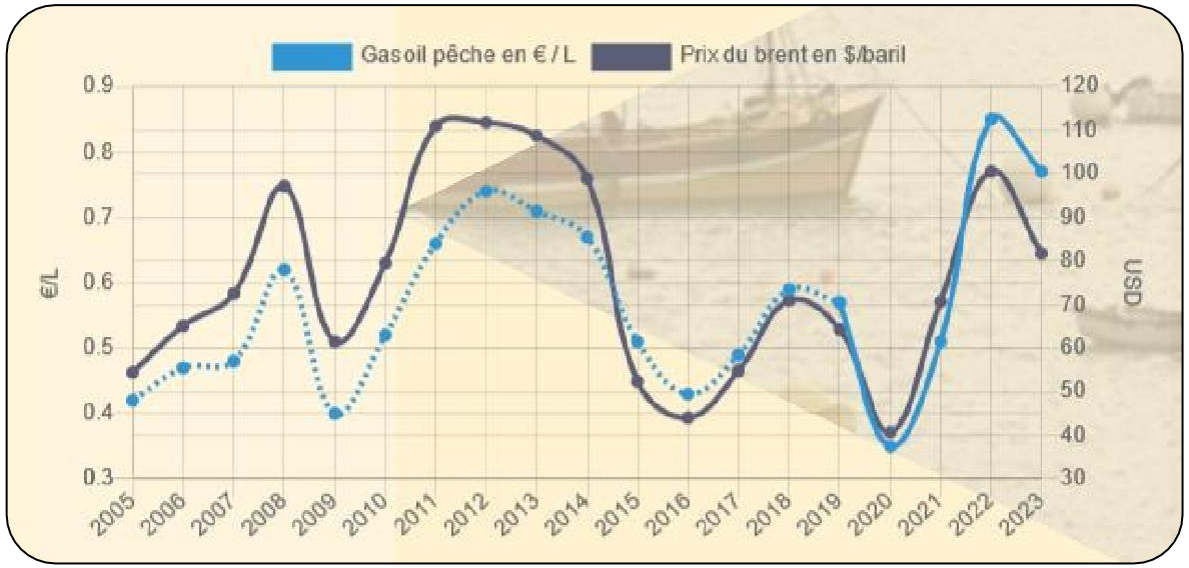
13 777 French fishermen
+ 1 job at sea generates 3 jobs on land

4 193 active fishing boats (Metropolitan France)

Average age : **32** years

100% dependent on fossil fuel (mostly marine diesel)

Vessels using towed gears represent **30%** of the fleet and consume **70%** of the total fuel volume



2021 : 0,51 €/L 2022 : 0,85 €/L 2023 : 0,78 €/L

Decarbonization is a vital issue for the fishing and aquaculture sector

Energy transition is a long-term key challenge (must prepare it now)

SAVING ENERGIES IS A CURRENT AND WILL STAY A PERMANENT CHALLENGE

Dedicated tools to improve fishermen skills on saving energies

Goal : Empowered fishermen by proposing them decision support systems

Installation of analytic econometers

- Indicate real time fuel consumption
- Propose multiple navigation scenarios based on the speed and the fuel consumption
- Record data for long-term analysis

Adapting your speed can save 5 to 7 % fuel consumption on average (up to 20 %)

Online trainings

- Raise awareness on saving energies challenge
- Present all fuel expense items, on how tackle each of them
- Remind the good practices to avoid waste energy onboard

Interactive MOOC (available on phone and computer) with the most concrete and current cases

+ In-class trainings done in schools for future fishermen !

Dedicated tools to improve fishermen skills on saving energies

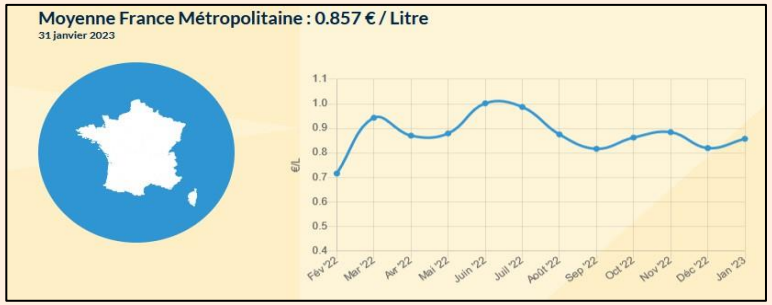
Goal : Empowered fishermen by proposing them decision support systems

Interactive brochure of saving energies measures

- Search engine to filter solutions adapted to your type of vessel
- Solutions classified : construction, gears, exploitation or equipment
- For each solution : description, estimated fuel saving, conditions of installation and literatures

We aim to add financial items : estimated costs, financial supports and analysis of the Return of Investment

National fishing fuel observatory



- National fuel price trend monitoring (twice a week)
- Regional fuel price monitoring (monthly)
- Fuel consumption monitoring for different fleet

Reference tool, used by fishermen and their organisation, research centers, administrations, journalists.

Our approach : several projects carried out

AMARREE → ReMoVe → Local projects

Report Modal et Verdissement des flottes de transport massifié

2019 - 2022

- Creation of saving energies tools
- Collect of data and analysis
- Feedbacks from the fishing sector
- Forming a network and a community

2023 - 2025

- Tools optimisation : focus on more current and appropriatefeatures
- Creation of specific trainings for high schools
- Engage more fishermen, using communication and ambassadors

Expected to come soon

- Create physical receptions in fishing ports
- Support individually each fisherman using numerical tools
- Energy performance diagnosis to target solutions for a vessel

Thank you for your attention

See more information :

www.amarree.fr

www.cooperationmaritime.com

Contact us :

gaetan.vallet@cooperationmaritime.fr

mathilde.gueguen@cooperationmaritime.fr

Blue Career Centre for Aquaculture Education supported by a gamification approach and distance learning platform

Eleni (Helen) MILIOU and George TRIANTAPHYLLIDIS
Agricultural University of Athens

ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
AGRICULTURAL UNIVERSITY OF ATHENS

elenmi@aua.gr gvtrianta@aua.gr

Energy Transition Partnership in EU Fisheries and Aquaculture workshop on skills, Brussels, Belgium, 19 April 2024

The BlueAquaEdu project is funded by the European Union under agreement ID 101124699.

The AIM

Contribute to the development of the next generation of aquaculture blue skills.

Provide opportunities for attractive, sustainable careers of aquaculture professionals that will support the **European Green Deal** initiatives.

BlueAquaEdu will address the lack of a comprehensive “skills ecosystem” for professionals in the Blue Economy of the Aquaculture sector and promote the **Farm to Fork Strategy.**

Develop an e-platform that will enable pooling/sharing of educational resources and merge traditional (i.e., curricula/courses) as well as innovative learning (e.g., gamification, digital tools, curriculum through micro-credentials) and career development tools and benefits from trans-national cooperation among key stakeholders in the knowledge triangle (education/training providers, industry and public authorities).

BlueAquaEdu will focus on the Aquaculture sector as well as on the post-harvesting value chain and valorisation of the processing by-products.

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

The objectives of BlueAquaEdu include

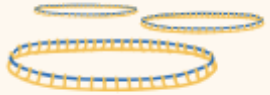
Develop a Gamification Application for cages and recirculating aquaculture system technologies and 5 fish species.

Develop 5 common training programs for aquaculture (cage farming, hatcheries, RAS), the post-harvesting value chain and valorisation of processing by-products.

Attract skilled mentors with practical experience in selected sectors.

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

The key figures of the BlueAquaEdu project



3

Common training/mentoring theme

will be developed for aquaculture (cage farming, hatcheries, RAS) as well as 1 for the post-harvesting value chain and 1 for the valorisation of the processing by-products (5 in total)

160

Participants to target

will be developed for aquaculture (cage farming, hatcheries, RAS) as well as 1 for the post-harvesting value chain and 1 for the valorisation of the processing by-products (5 in total)

1

BlueAquaEdu e-platform created

500

Students/individual beneficiaries

to be reached with the tools developed during the project.

30

Months of project duration

8

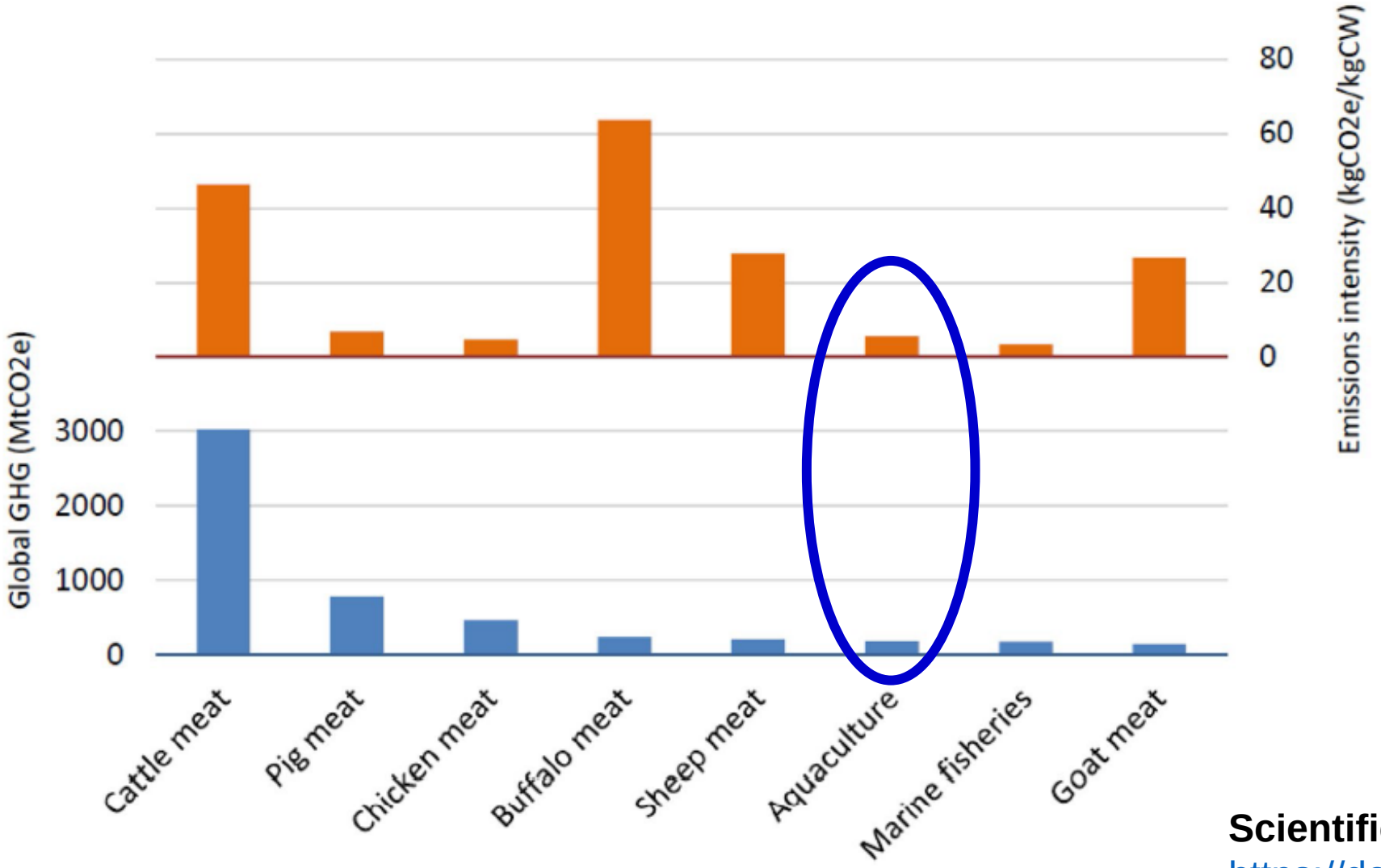
Partners

997€

Thousand European Commission funding

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

Global emissions from animal production



Total global emissions and emissions intensity of aquaculture (2010), terrestrial meat (2010) and marine fisheries (2011).

Scientific Reports | (2020) 10:11679 | https://doi.org/10.1038/s41598-020-68231-8

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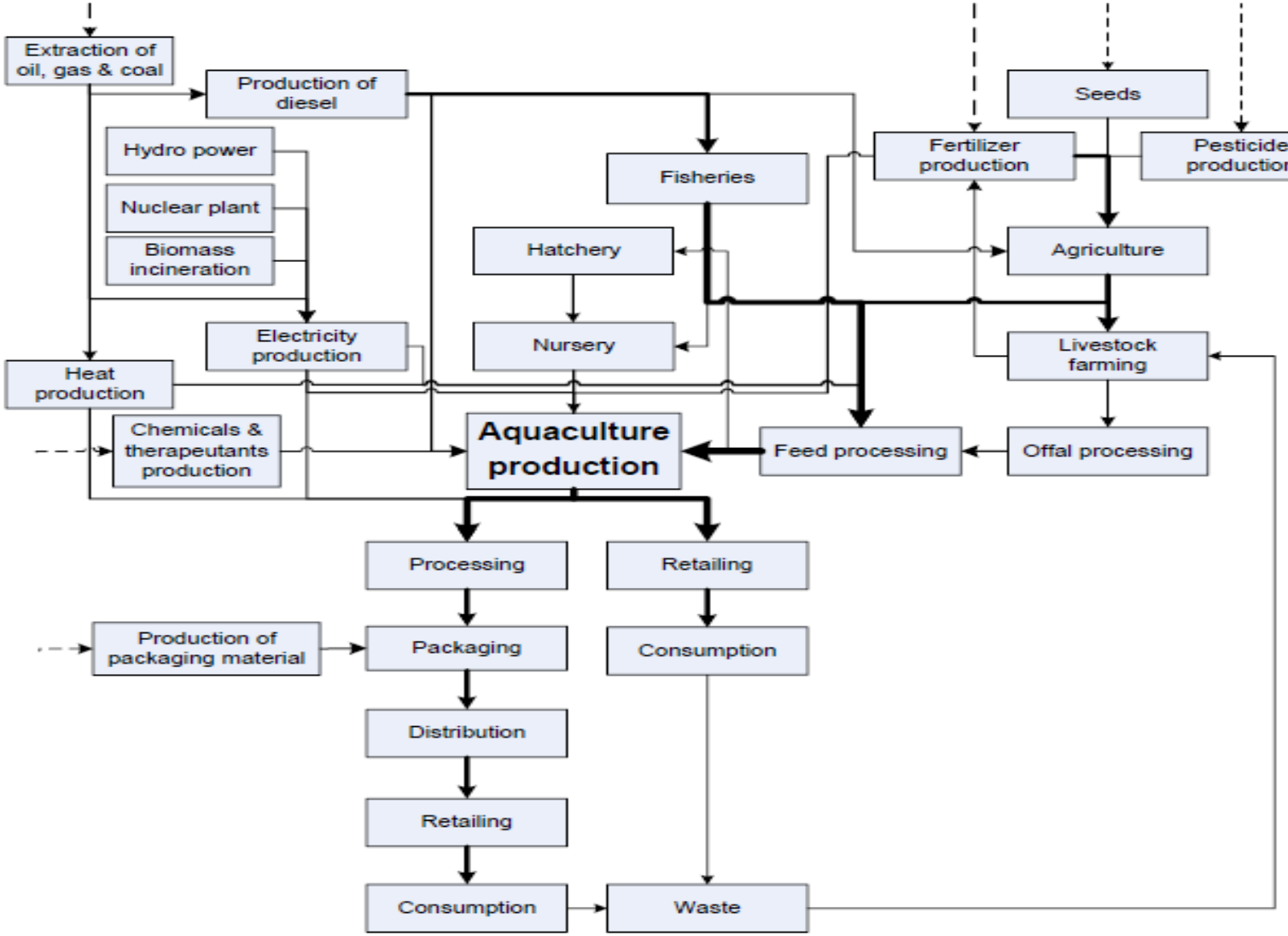
Global emissions from aquaculture production



Inputs to the aquaculture chains that may impact GHG emission

Scientific Reports | (2020) 10:11679 | https://doi.org/10.1038/s41598-020-68231-8

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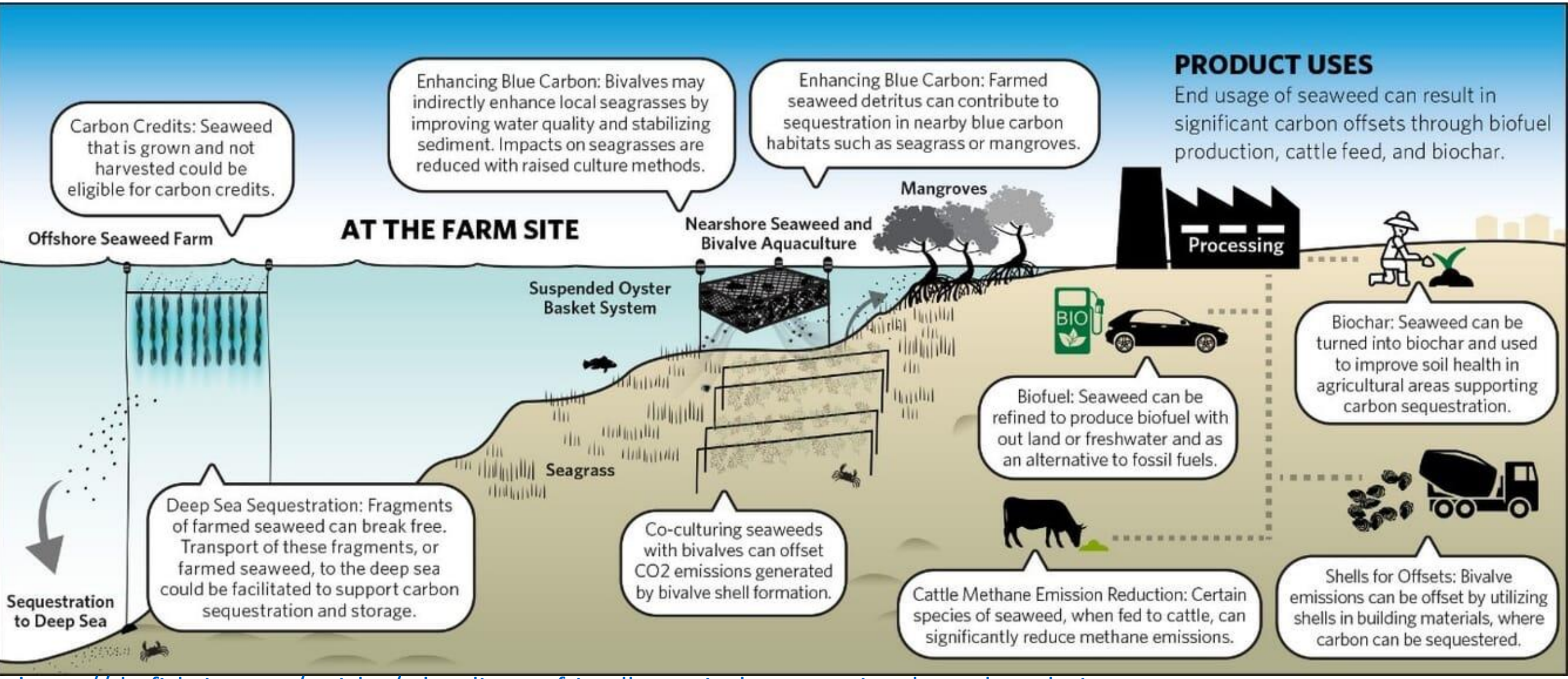
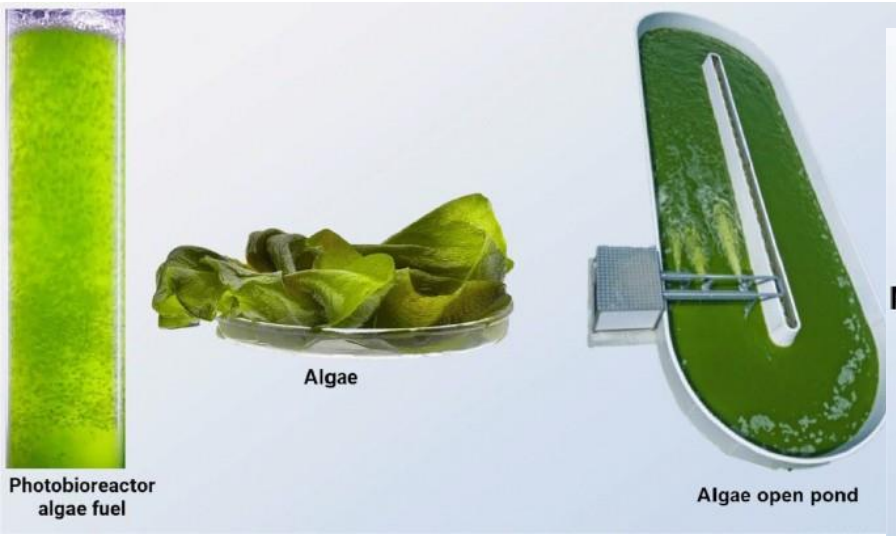
Global emissions from aquaculture production

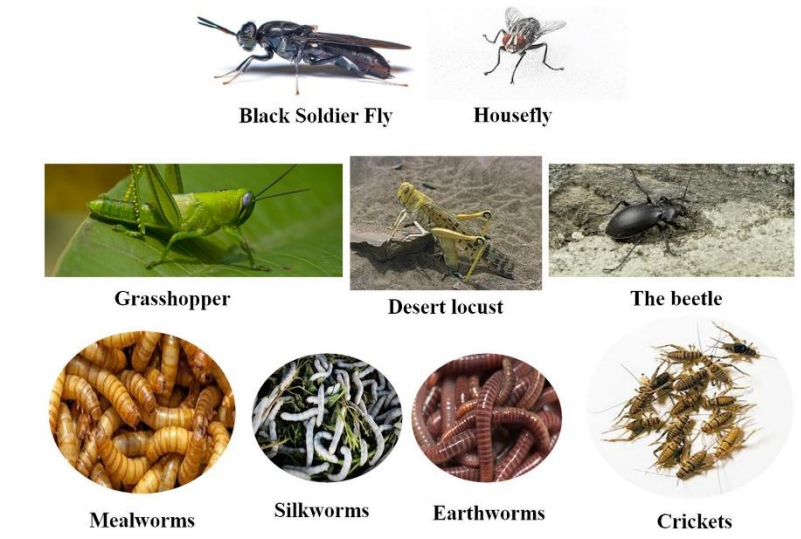


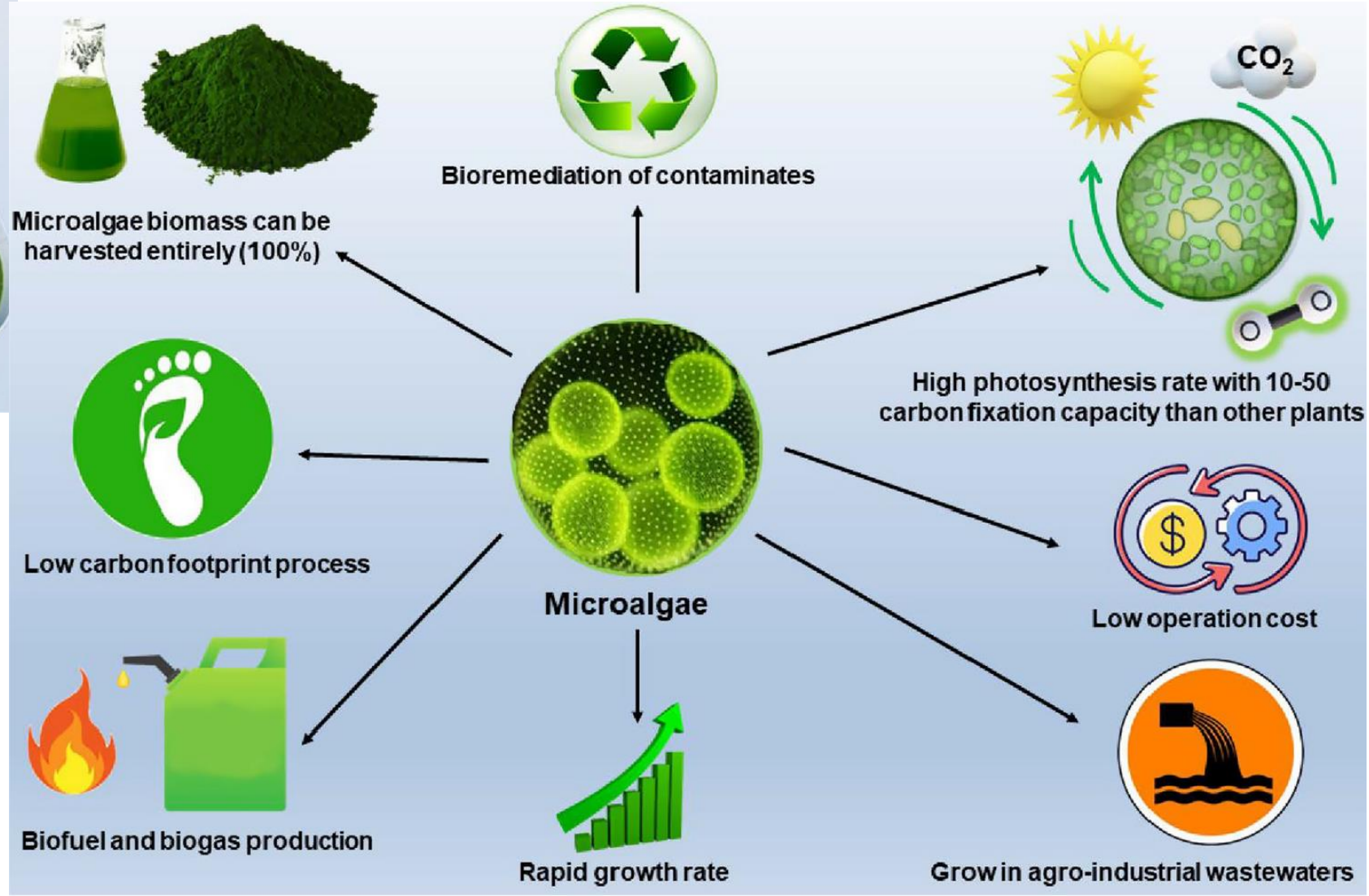
https://thefishsite.com/articles/why-climate-friendly-mariculture-requires-bespoke-solutions

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

Reducing emissions from aquaculture production







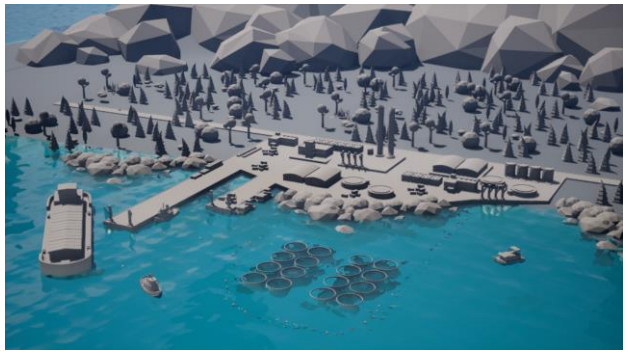
The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

BlueAquaEdu focus for skills & energy transition

Explain the focus of your works in terms of skills and your main target, for Energy Transition Partnership in EU Fisheries and Aquaculture

BlueAquaEdu's focus is to provide information and educational support to attract individuals to the aquaculture sector, including the energy transition. This includes offering explanations of key concepts, sharing best practices, and providing resources for skills development in areas such as renewable energy integration, energy efficiency, and environmental sustainability.

BlueAquaEdu will include elements of analysing data related to energy consumption, renewable energy production and environmental impacts within the aquaculture sector. By processing and interpreting this data, the serious game will help young people to identify trends, assess the effectiveness of energy transition initiatives and make them to get acquainted with decisions to optimize energy management strategies.



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How BlueAquaEdu tackles energy transition

Explain how you tackle the topic in regards at the energy transition in the sector, and if you are not currently working on it, how is it conceived to be involved in the future

Combining a Blue Career Centre for Aquaculture Education with a focus on energy transition in the sector through gamification and distance learning platforms presents an innovative approach to addressing sustainability challenges.

Curriculum Integration: BlueAquaEdu will incorporate modules or courses specifically dedicated to energy transition within the aquaculture sector. These could cover topics such as renewable energy integration, energy-efficient practices in aquaculture operations and the environmental impact of different energy sources.

Gamification for Engagement: Using gamification elements such as badges and points BlueAquaEdu will incentivize learning and engagement with the energy transition content. For example, learners could earn points for completing modules on renewable energy technologies or for participating in virtual simulations of energy-efficient aquaculture systems.

Demonstration of Best Practices: BlueAquaEdu will showcase real-world case studies and best practices from sustainable aquaculture operations that have successfully implemented energy transition initiatives. These will include examples of farms using renewable energy sources such as solar or wind power, as well as innovative approaches to energy efficiency (vessels that use batteries etc).

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

BlueAquaEdu and skills for energy transition

What are the main needs that you see in the sector of fisheries and aquaculture regarding skills and specifically focusing on the energy transition

In the aquaculture sector, there are several key needs in terms of skills development, particularly when focusing on the energy transition:

Understanding of Energy Efficiency Practices: With the increasing emphasis on sustainability and cost-efficiency, there's a need for individuals who can implement energy-efficient practices in aquaculture facilities. This includes optimizing the use of energy-intensive equipment such as pumps, aerators and heating systems.

Knowledge of Environmental Impact Assessment: As the industry seeks to minimize its environmental footprint, there's a need for professionals who can conduct comprehensive assessments of the environmental impacts associated with different energy sources and aquaculture practices. This includes evaluating factors such as carbon emissions, habitat disturbance and water quality.

Data Analysis and Monitoring Skills: Effective energy management requires the ability to collect, analyse and interpret data related to energy consumption and production in aquaculture operations. Professionals with skills in data analytics and remote monitoring technologies are essential for optimizing energy usage and identifying areas for improvement.

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

BlueAquaEdu and challenges for skills for energy transition

The main challenges that you have encountered, and how do you envision the skills in the sector in view of the energy transition

Some of the main challenges encountered in addressing skills development in the fisheries and aquaculture sector, particularly concerning the energy transition, include:

Lack of Awareness & Education: Many individuals within the industry may not be fully aware of the importance of energy transition initiatives or the potential benefits of adopting renewable energy sources and energy-efficient practices.

Technical Complexity and Training Needs: Implementing renewable energy systems and energy-efficient technologies often requires specialized technical knowledge and skills. Training programs must be developed to equip individuals with the necessary expertise to design, install and maintain these systems effectively.

Financial Barriers: The upfront costs associated with transitioning to renewable energy sources or investing in energy-efficient equipment can be prohibitive for some aquaculture operators, particularly small-scale operations or those operating on tight budgets. Access to financing options and incentives for adopting sustainable energy practices can help overcome these financial barriers.

Infrastructure Limitations: In some regions, the lack of appropriate infrastructure, such as access to reliable electricity grids or suitable sites for renewable energy installations, can hinder efforts to transition to more sustainable energy sources. Addressing these infrastructure limitations may require collaboration between stakeholders at the local, regional and national levels.

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

BlueAquaEdu and challenges for skills for energy transition (continued)

How do you envision the skills in the sector in view of the energy transition

Envisioning the skills needed in the sector in view of the energy transition involves preparing individuals to address these challenges effectively. This includes:

Equipping individuals with a **comprehensive understanding of renewable energy technologies**, energy efficiency principles and environmental considerations relevant to aquaculture operations.

Providing hands-on training and practical experience with renewable energy systems, energy monitoring tools, and data analysis techniques.

Fostering collaboration and knowledge sharing among industry stakeholders, research institutions, and government agencies to promote innovation and best practices in sustainable energy management.

Cultivating a mindset of continuous learning and adaptation to ensure that professionals in the sector remain responsive to evolving technological, regulatory and market trends.

Developing leadership and advocacy skills to empower individuals to drive positive change within their organizations and communities by championing the adoption of sustainable energy practices.

The BlueAqua Edu project is funded by the European Union under agreement ID 101124699.

Blue Career Centre for Aquaculture Education supported by a gamification approach and distance learning platform

https://blueaquaedu.eu/

Thank you very much!

Eleni (Helen) MILIOU and George TRIANTAPHYLLIDIS
Agricultural University of Athens

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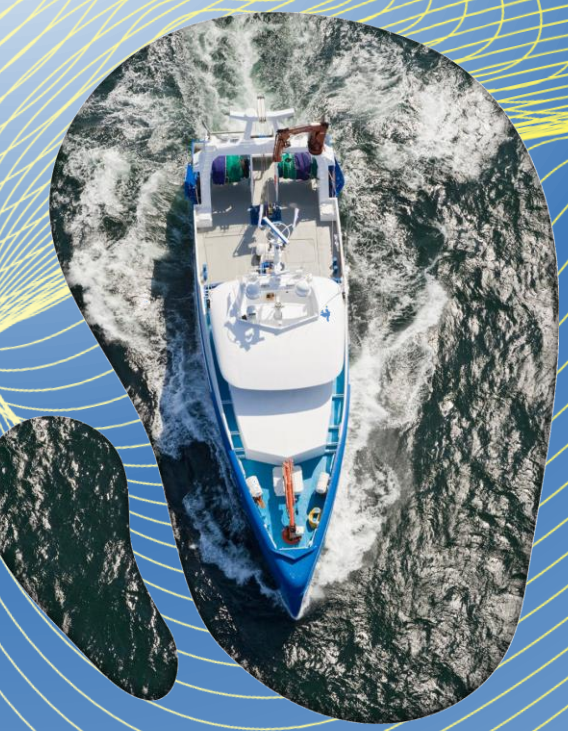
The BlueAquaEdu project is funded by the European Union under agreement ID 101124699.



JOINING FORCES for the ENERGY TRANSITION in EU FISHERIES and AQUACULTURE

Coffee break

COOPÉRATION MARITIME

Maritime Affairs And Fisheries

European Commission

Coastal fishermen &
Forester of the sea

Mecklenburg- Vorpommern

Baltic sea

The question of the last few years/decades has been: How can the actual fishermen be helped?

The new question is (also):

What do we have to do to attract **new blood and get young people interested** in coastal fishing again so that extinction can be prevented?

What makes a profession attractive?

- Work content
- Earning opportunities
- Image
- Tradition & Future

Unfortunately fishing alone is no longer attractive enough for young people

challenge 1

Less fish and less catch quotas

No chance to live from fishing allone

Average age of the fishermen: 57

Almost no young talent

Coastal fishing is dangered to die out

What can we do, to make the profession more attractive for young people?

challenge 2

1.900 km coastal line

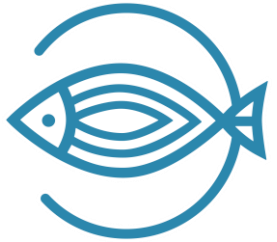
The area within the 3sm zone is almost twice as big as the forest of MV

Research vessels can not cover this area

We don´t know enough about the coastal sea areas

Usage of the knowledge of the coastal fishermen for research and the protection of the sea

(Coastal) fishermen are dying out
- loss of competence
- loss of presence/culture



No structured, full-scale and long-term marine monitoring and data collection

Marine projects suffer from a lack of support from operational experts (e.g. seagrass projects, aquaculture)

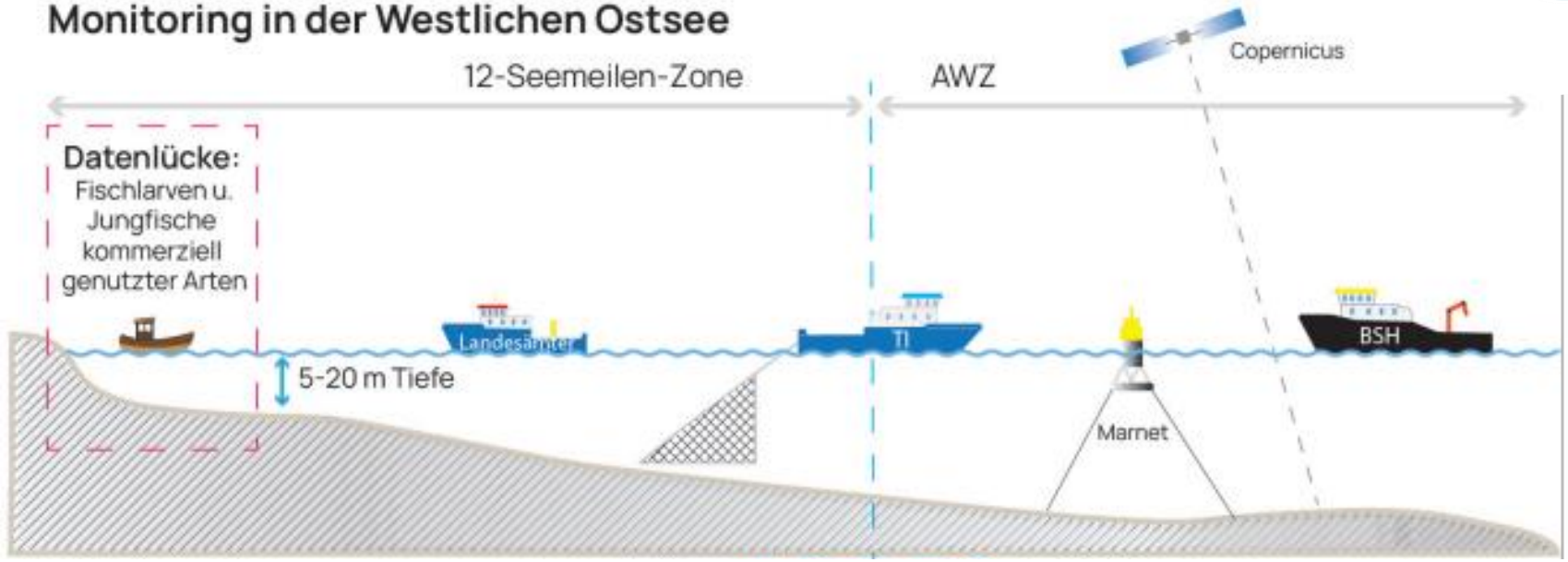
No neutral (state) authority for operational support of marine issues (e.g. compensation from investors)

New job profile of the (coastal) fisherman possible

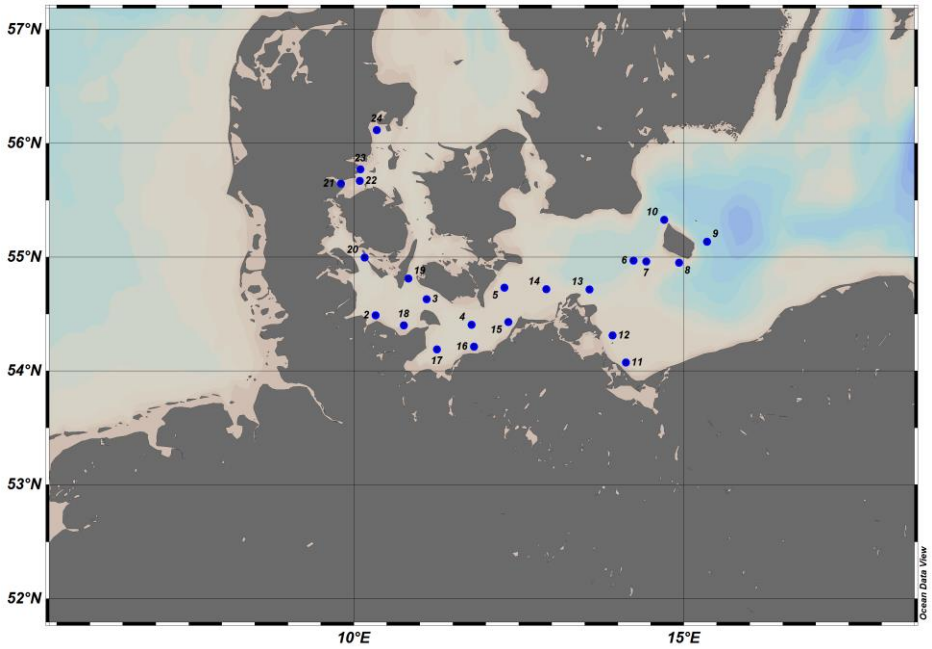
Fachwirt
„Fischerei und Meeresumwelt“

The Forester of the sea

Monitoring in der Westlichen Ostsee



Example for projects



i.e.: Project „habbal“: Determining the effect of the spread of harmful algal blooms of the Alexandrium pseudogonyaulax species on biodiversity and human health

Example for projects

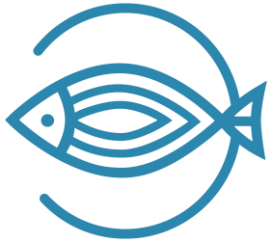
i.e.: Project „fisherboat 2.0“:

Development of sensor technology on board of a fishing boat to monitor marine data and by-catch

Development of new catching technology

Only two examples for possible projects

Energy transition



- The technology of the actual boats is very old

- Different areas of application
  - passive fishery close to the coast (few hours of operation)
  - active fishery out in the sea (days of operation)

- Running projects: methanol, diesel-electric

- Key question for a fisherman: How can I finance such investment?

Only a solution that combines ecological and financial aspects is a good solution

Sea Ranger

Fisheries and environment

- Monitoring of fish habitats, fish population
- monitoring and active biotope maintenance
- Supporting the state and science in environmental monitoring
- Production of marine organisms (e.g. use of aquaculture on land and in the sea)
- Projects to adapt fishing methods and fishing technology/boats

Fachwirt
„Fischerei und Meeresumwelt“

Forester of the sea

Tourism

- Presence on the coast and in the ports
- Communication with and support of interested tourists
- Support with projects

Fisheries in transition

- Maintaining fishing as the country's core competency
- Preservation of moorings, boats, fishing technology
- Diversification and marketing

Training content (8 weeks plus 4 weeks practical sessions)

Environment and law

- Legal basics
- Marine biology basics
- Basics of environmental monitoring
- Production of marine organisms

Communication and public relations

- Basics of communication
- Basics of public relations
- Project management

Fisheries in transition

- Historical fishing vessels and fishing techniques
- Diversification and marketing strategies
- Changes in the marine environment

Schedule

10/16/23: Start of training (until 06/24)

Next Steps

- The Sea Ranger will start their job in July 24
- The Sea Ranger MV e.V. will organize their work
- The Sea Ranger will get a fix income per month for his work

For more information please contact:

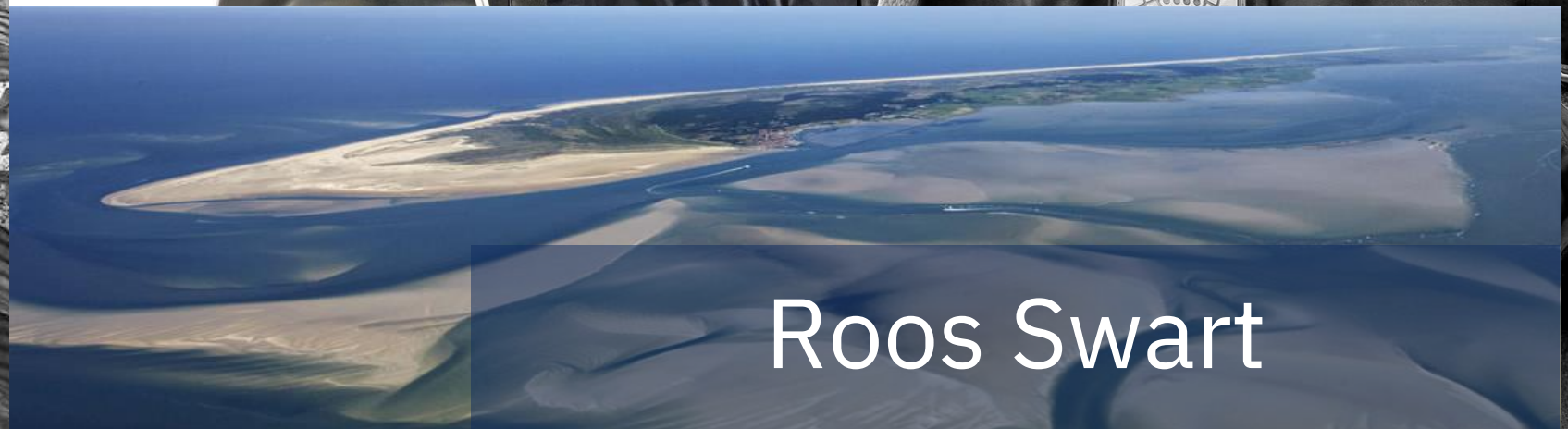
Oliver Greve
Sea Ranger MV e.V.
Alter Holzhafen 1
23966 Wismar

+49 3841 – 227085
+49 1520 – 685 2818
info@searanger-mv.de

www.searanger-mv.de

Sustainable fisheries training

Roos Swart • April 19, 2024



Roos Swart

ProSea

Our mission

Through education, we inspire maritime professionals to take their responsibility in the transition to a sustainable maritime sector.

- Shipping
- Maritime services
- Fisheries

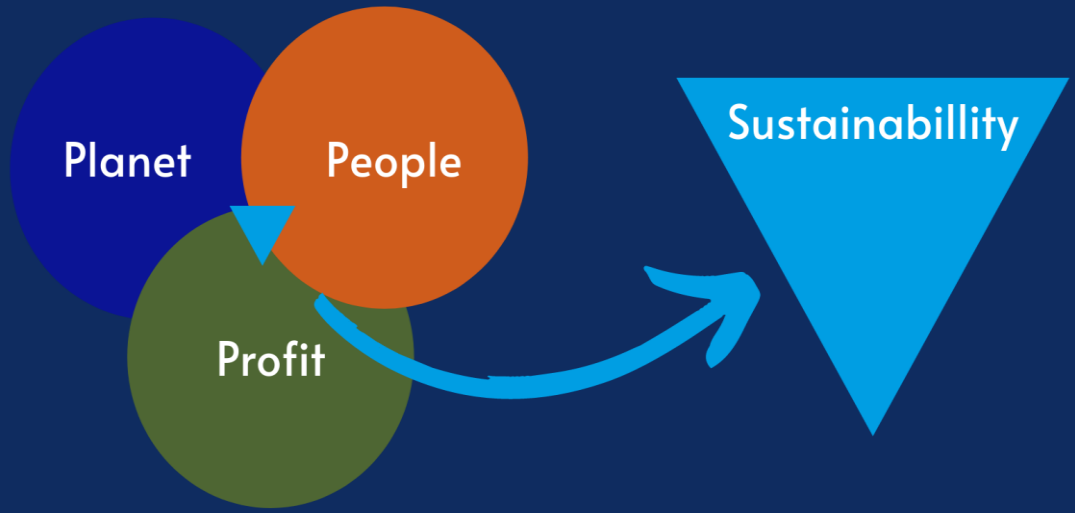
proSea
marine education

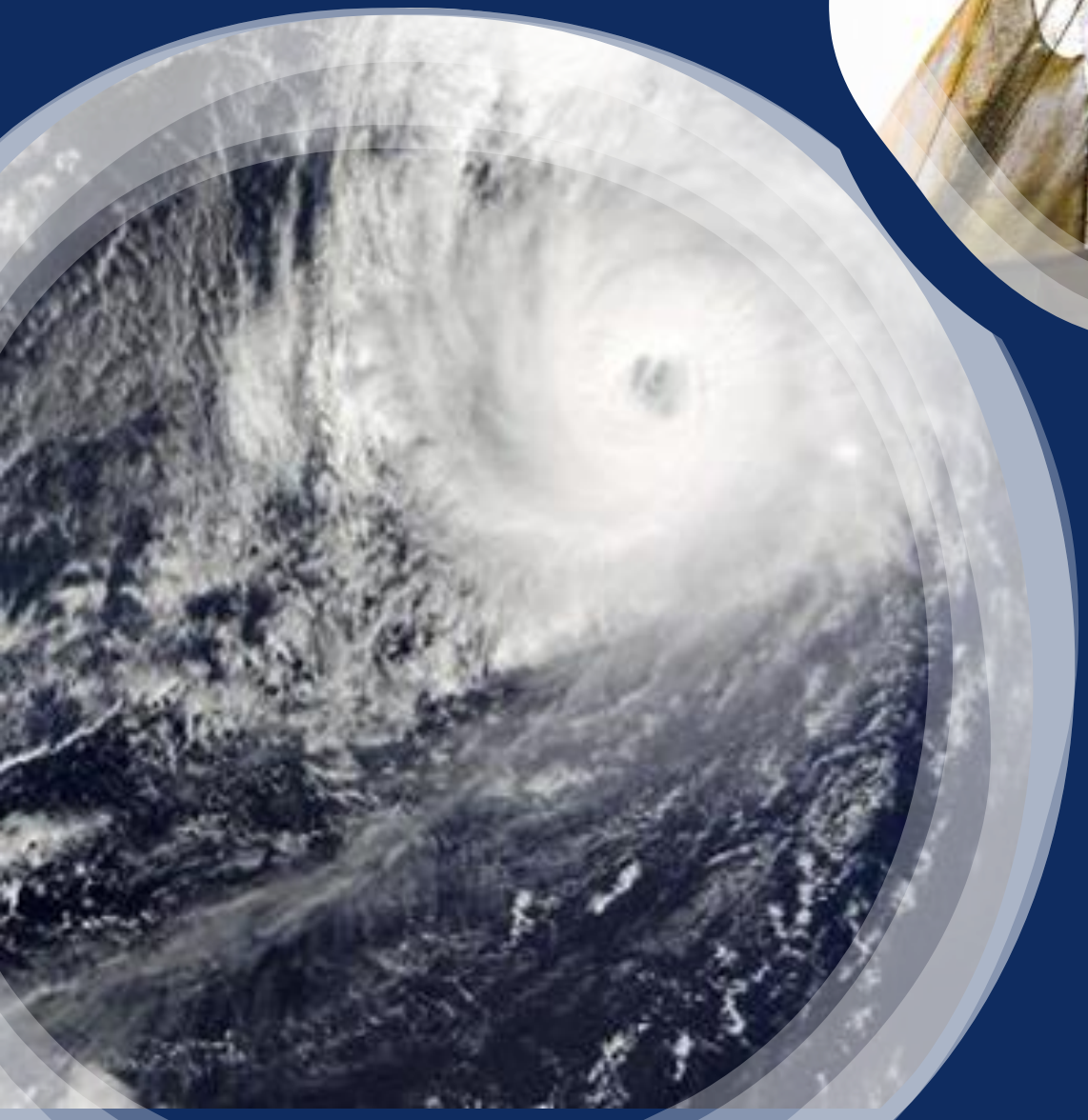
Sustainable fisheries

How to get there...

Sustainable fisheries training

Marine conservation, social acceptance and economic viability are complementary





Fishing and the energy transition

How to address the energy transition in fisheries training?

Fit for purpose

A solution is not the solution for everyone!


ΚΑΘΑΡΙΖΩ


GV 461599


CC919999
SCOMBRUS

Challenges

- Training pathways and requirements differ in EU
- No ‘one solution fits all’ approach
- Strategy on how to address the energy transition

Recommendations

- Address energy transition as part of **sustainable development**
- **Build infrastructures** on training/certification to develop skills
- Embed topic in existing structures to prevent **training overload**
- Think about '**why**' they would need to know '**what**'

People make the difference!

Equip them with knowledge and skills to do so!


Questions
proSea
marine education

The future of the ocean is the future of education

Blue Jobs through Blue Careers

An opportunity to support the transition in fishery and aquaculture sectors

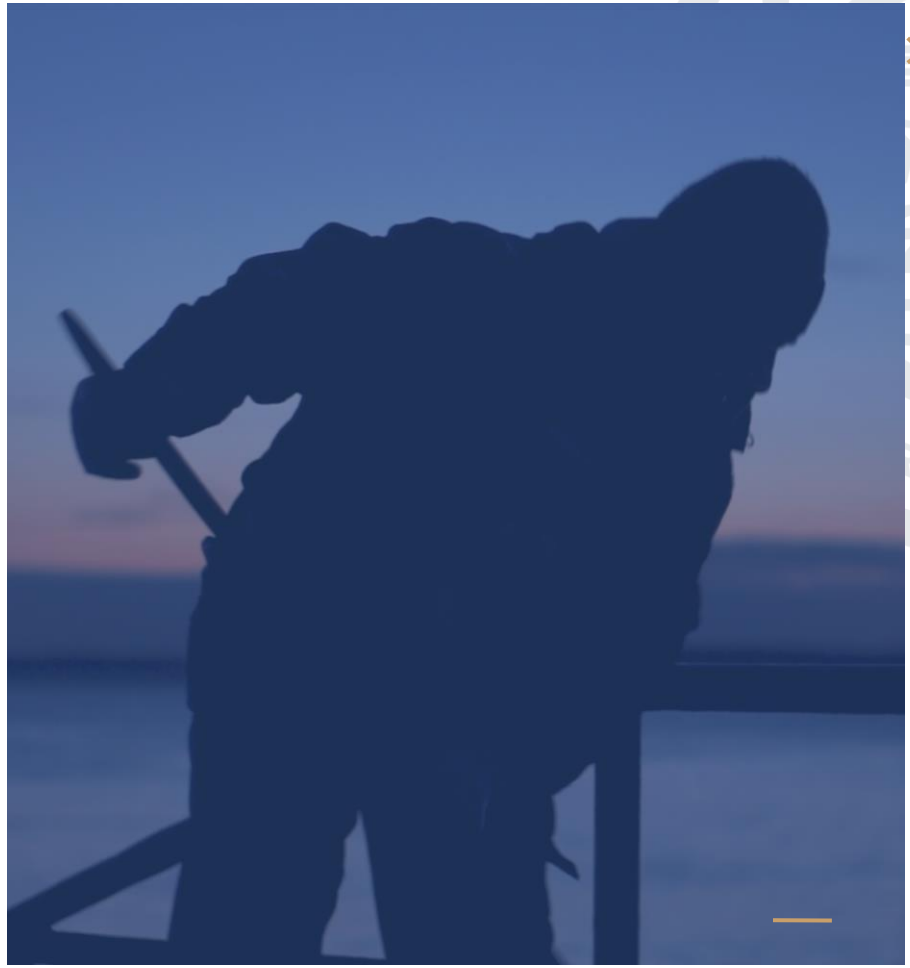
19/04/2024

Bruxelles - Belgium

BOUTCAR in a nutshell

OBJECTIVE:
provide training and professional profile responses to the challenges facing the Mediterranean and Atlantic basin, for a sustainable blue economy.

GAPs IDENTIFIED:
- Skills mismatch (educational/training offer vs. labour market) and lack of communication / cooperation.
- Lack of attractiveness and awareness of career opportunities in the blue economy.
- Lack of ocean culture (Ocean Literacy).



Inspiring data

MRE = -10% annual greenhouse gas emissions
Aquaculture +52% of all fish and shellfish for human food by 2025
Intra-Mediterranean maritime trade flows = 25% of global traffic
Marine litter = 0.57 million tons of plastic dumped into Mediterranean

BOUTCAR

Main outcomes expected

A Establish **roadmaps for developing specific curricula and core competences**.

Laying the foundations for academic universities and vocational training centres to incorporate new blue careers into their training offer, adapted to the requirements and demands of industries related to the blue economy.

B Establish a **dialogue to identify training needs** not only with business owners but also with their customers.

C Develop a **training pathway for young people and adults** who want **to engage in the blue economy** by providing them with the content, skills and competences necessary for attractive and sustainable jobs.

Main impacts to be generated

- Contribute to the retraining and upskilling of active workers and especially older ones through cooperation between education and industry to help the active workforce acquire the necessary environmental and sustainability skills and become familiar with modern standards, principles & practices.

- Developing transversal and inter/multidisciplinary skills and competences to further boost the digitalisation and greening of jobs, also by promoting the use of competence frameworks, such as GreenComp and DigComp.

- Generate impacts also on local policies, transposing what has been learned through the project from an EU level to a local and national level, in order to capitalise and intervene through a constructive dialogue on what are the future agendas linked to fisheries and aquaculture policies in education and training and for the development of the sector.

- Consolidating a network that has the ambition of drawing a new line in terms of dialogue between the business world and the world of education and training, thus enabling a greater capacity of the education system to respond to the demands of the professional world and for both to be able to anticipate the changes that are taking place in the Blue economy.

Partners

DEMETRA FORMAZIONE

ARVI fundada en 1964 COOPERATIVA DE ARMADORES DE PESCA DEL PUERTO DE VIGO

legacoop agroalimentare | associazione distrettuale Nord Italia

MARE Soc. Coop. a r.l.

cff centre formació folgado

SGS

SQLearn e-learning experts

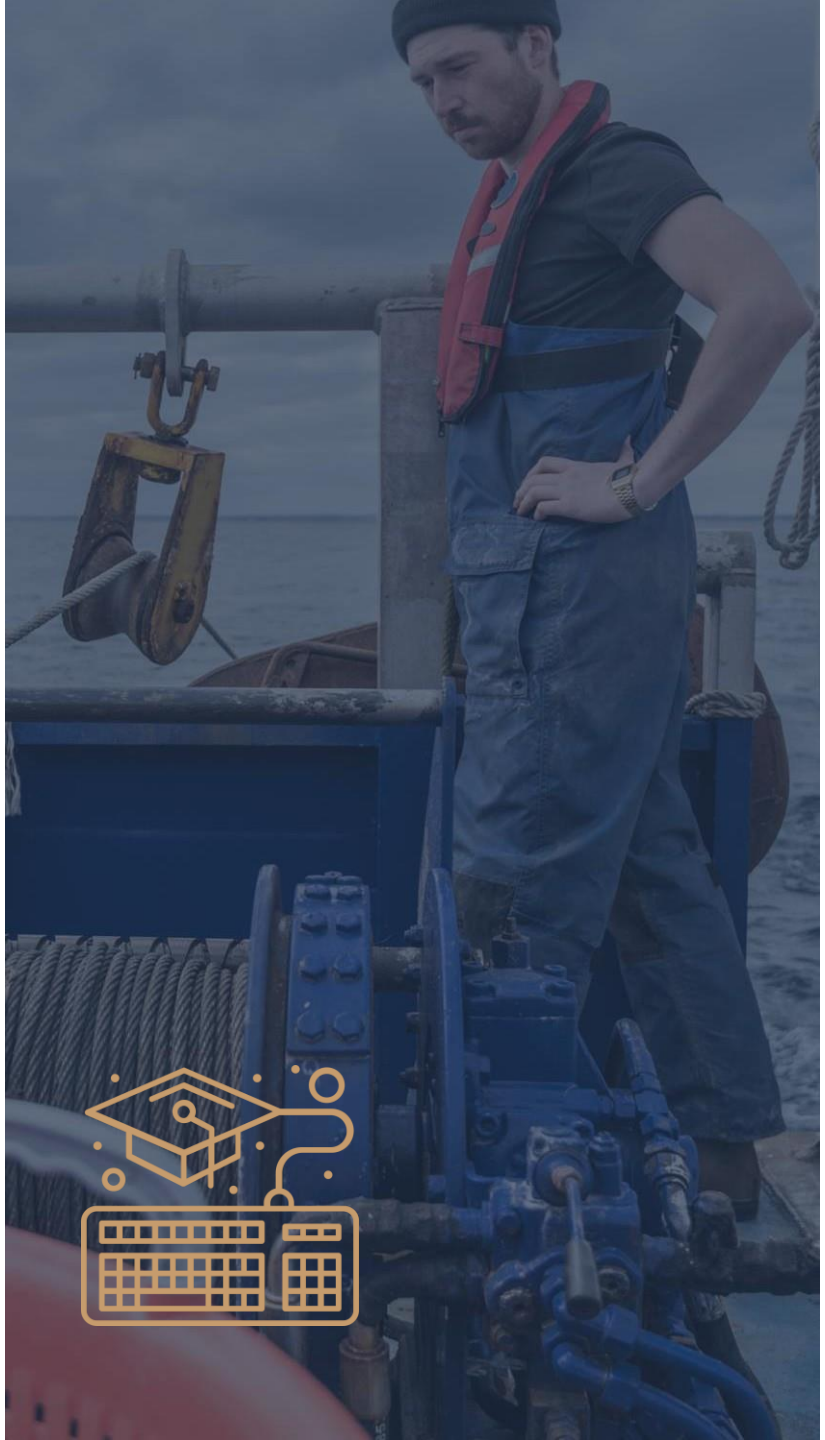
E-SCHOOL EDUCATIONAL GROUP

europêche

ALMA MATER STUDIORUM UNIVERSITÀ DI BOLOGNA A.D. 1088

ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ 19 64 UNIVERSITY OF PATRAS

UNIVERSITY OF PATRAS ΠΑΝΕΠΙΣΤΗΜΙΟ ΠΑΤΡΩΝ



What we found out so far

WP2 - Analysis of European training programmes including blue careers

- One of the first activities implemented is a detailed study of the blue education and training offer for fishery and aquaculture sector in the Consortium countries, aiming to show, in a structured way, educational training related to fishing and aquaculture, along with its deficiencies in blue economy subjects.

Outcomes of the first research

From a cross-reading of the data and information collected by the partners we can recognize some common traits in relation to the educational and training offer in the Blue Economy sector

UPDATE CURRICULUM

Professional education and training courses or non-university training, which - where present in the national or regional repertoires - are **often dated and not updated with the requests deriving from the business world and the job market.**

GREEN & DIGITAL

General **lack of green and digital skills** in the profiles trained, especially the lowest qualifications (EQF 3 to 5). Much is left to individual training initiatives, managed by employer organisations or organisations active in the field of research and protection of the sea

MULTI DISCIPLINARY

Public universities lack connections with local industry, showing a **deficiency in the social role** that they must play in terms of intercepting the needs and requirements of the territory **to promote its competitiveness**.
Furthermore, a lack of open exchange with experts from the sector and from other EU countries is a constraint.

PRACTICAL & THEORETICAL

Given a complete training course, where practical activities (e.g., internships or apprenticeships) are also included in the curricular program, **it is easier for the person to be recognized more quickly for the role** for which they have been hired.

A territorial perspective on energy transition

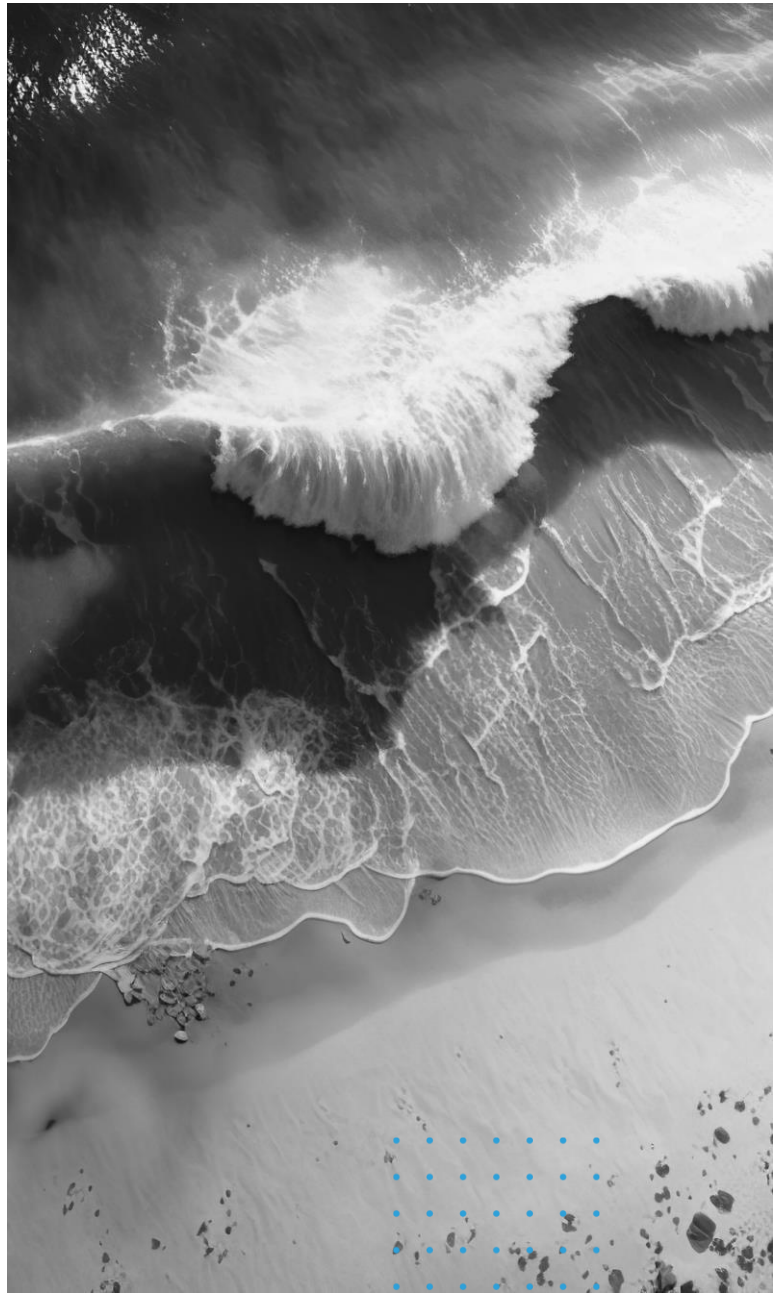
The Emilia-Romagna case

One of the main motivation that guided the Italian partners in participating in the Blue Careers call is linked to the need of intercepting the changes that are taking place in the field of **renewable energy and which impact the maritime sector**. We are talking about the new offshore wind farms that will be built off the coast of the Adriatic Sea.

For these new infrastructures, fundamental for reducing gas emissions, not to be perceived as something to be opposed by fishing and aquaculture operators, it is essential to work in synergy with the companies that are developing these MRE projects and with them build training opportunities that become new economic opportunities for those who work at sea.

Therefore, one of the areas on which the training developed by the project will focus will certainly be that linked to operations at sea in areas subject to the installation of renewable energy infrastructures, to allow working safely on the one hand and to activate virtuous collaborations with the managers of the systems.

Currently, a collaboration protocol is being developed which will allow on the one hand to generate space for fishing and aquaculture activities within the facilities, with operators who will only be allowed access to the areas if duly trained, but at the same time they are designing new strategies for the renewal of the small-scale fishing fleet.




The future of the ocean is the future of education
BOUTCAR
BLUE JOBS THROUGH BLUE CAREERS
THANK YOU

ENERGY TRANSITION PARTNERSHIP
SKILLS WORKSHOP

Location: DG MARE ROOM J99 00/53
Rue Joseph II, 99
Brussels, Belgium

Date: Friday, 19 April 2024

Time: 09.00 – 13.00 CET

Offshore Renewable Energies partnership in the Pact for Skills: FLORES and related projects

By Lucía Fraga Lago

Head of the Training department at CETMAR

FLORES
Offhore Renewable Energies partnership in the Pact for Skills

Co-funded by the European Union

CETMAR
CENTRO TECNOLÓGICO DEL MAR

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THE ORE

A very diverse ecosystem, with multiple technologies in different levels of maturity

WIND WAVES TIDES SUN CURRENTS AND MORE

124K new jobs expected by 2030

The Offshore Renewable Energies (ORE) sector today accounts for around 80,000 jobs and is expected to reach 204.000 workers by 2030

- Significant challenge to meet the increasing demand for qualified professionals with the actual skills of our population.

- **ORE Skills partnership aims to underpin the skilling process for the new jobs expected in the ORE, and contribute to improve up-skilling opportunities in the field of the actual workforce.**

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Offshore Renewable Energies partnership

Background

WORKING TOGETHER UNDER A PACT FOR SKILLS

2020 **Launch of the P4S** in the EU Skills Agenda

Coordination supported by the MATES blueprint project

FLORES Offhore Renewable Energies partnership in the Pact for Skills

2023 **Launch of the FLORES project**

mates

2018-2022 **Blueprint project:** Skills strategy in the maritime technologies:
- Shipbuilding
- ORE

PACT FOR SKILLS Leader

An initiative of the European Commission

2021 **ORE Skills Large Scale Partnership** submission with 13 partners

SHOREWINNER

2024 **Will set 5 Centres of Vocational Excellence in the Southern European Community for Offshore Wind Energy.**

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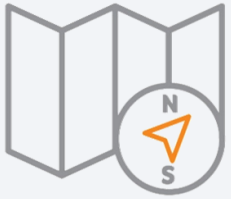
Main outcomes form the blueprint in shipbuilding and offshore renewable's

VALIDATED Strategy and Ation Plan



Maritime Technologies Skills Strategy with 32 recommendations to the main stakeholders groups. A final version of the report will be released with the inputs of reviewers from both sectors.
Long-term Action Plan and Sustainability

Marine Training

All results transferred to the Marine Training Platform. 946 trainings addressing ORE and SB, classified (EQF level, Country, language…). All training materials produced.

MATES Skills Strategy is being transferred to the Large Scale Partnerships addressing Maritime Technologies in the **Pact for Skills**:
- Shipbuilding Partnership: coordinated by Sea Europe
- Offshore Renewable Energies (ORE) Partnership: Coordinated by CETMAR VISION

Organisations involved in the capacity building process for the ORE are invited to join us in the Pact for Skills. Contact: partnerships@oreskills.eu

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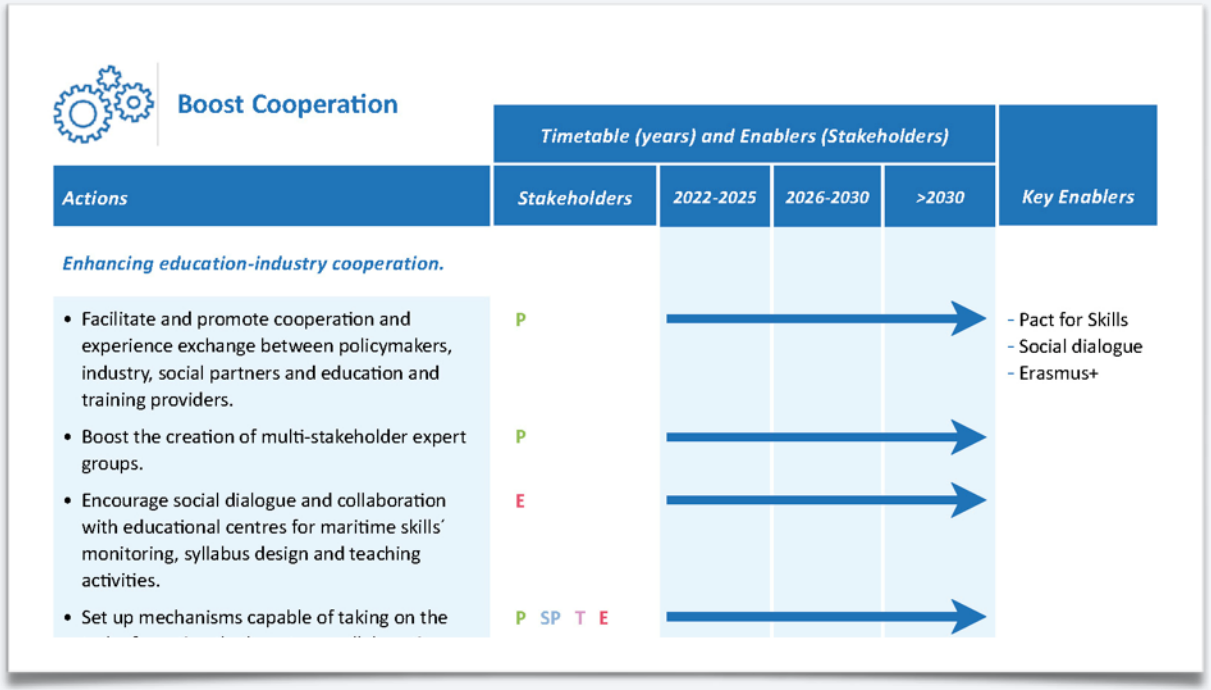
mates

A rapid glimpse on the recommendations from the Maritime Technologies Skills strategy

MATES Strategic Recommendations

- Boost Cooperation
- Attract Talent
- Promote Skills Intelligence
- Improve Training offer
- ORE
- Digitalisation
- Multipurpose Skills
- Active Learning
- Mobility

Actions from the Long Term Action Plan



Boost Cooperation

Actions	Timetable (years) and Enablers (Stakeholders)				Key Enablers
	Stakeholders	2022-2025	2026-2030	>2030	
Enhancing education-industry cooperation.					
• Facilitate and promote cooperation and experience exchange between policymakers, industry, social partners and education and training providers.	P	→	→	→	- Pact for Skills - Social dialogue - Erasmus+
• Boost the creation of multi-stakeholder expert groups.	P	→	→	→	
• Encourage social dialogue and collaboration with educational centres for maritime skills' monitoring, syllabus design and teaching activities.	E	→	→	→	
• Set up mechanisms capable of taking on the	P SP T E	→	→	→	

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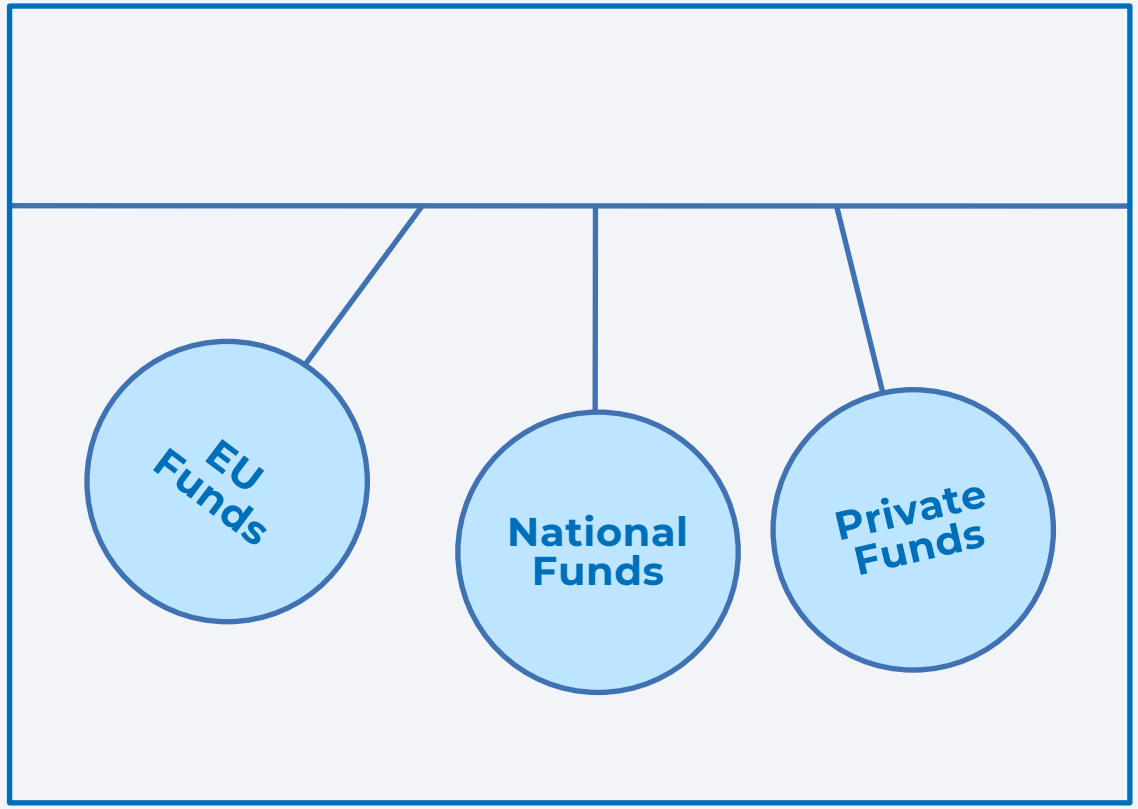
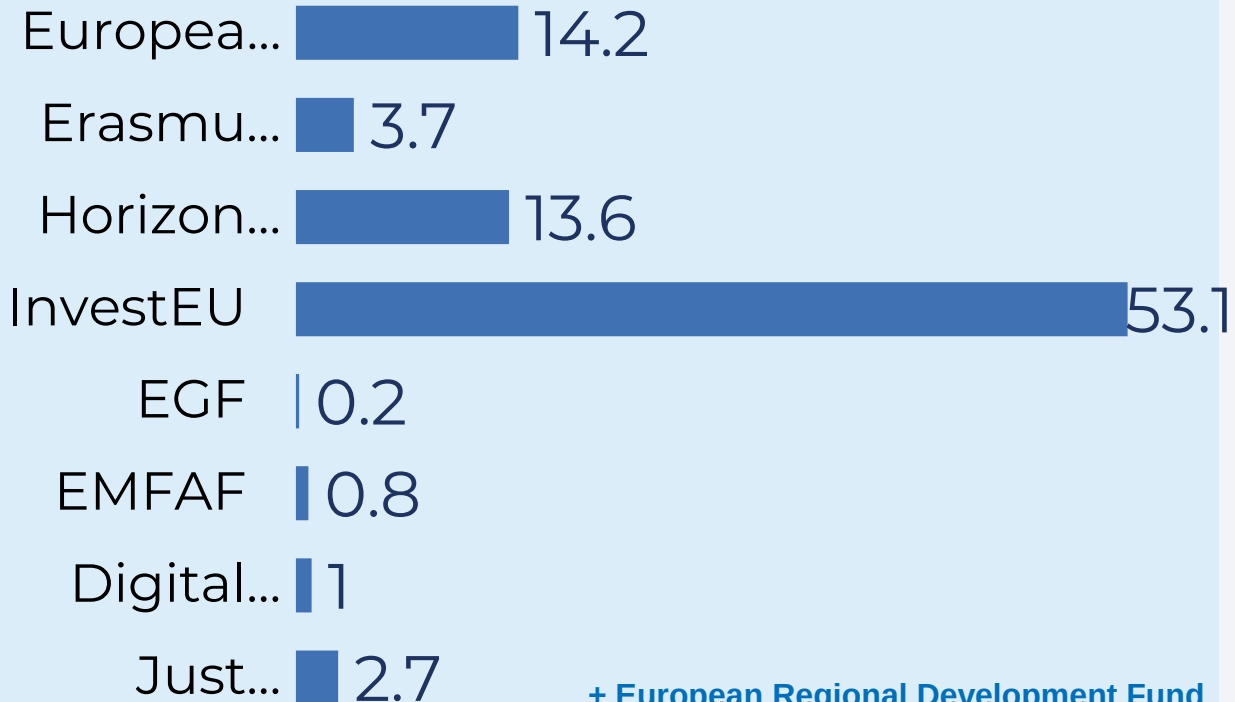
Available instruments and funding opportunities

Pact for Skills: Unlocking Investment



Average annual Budget for 2021-2027 in € billion



+ European Regional Development Fund
+ Technical support instrument

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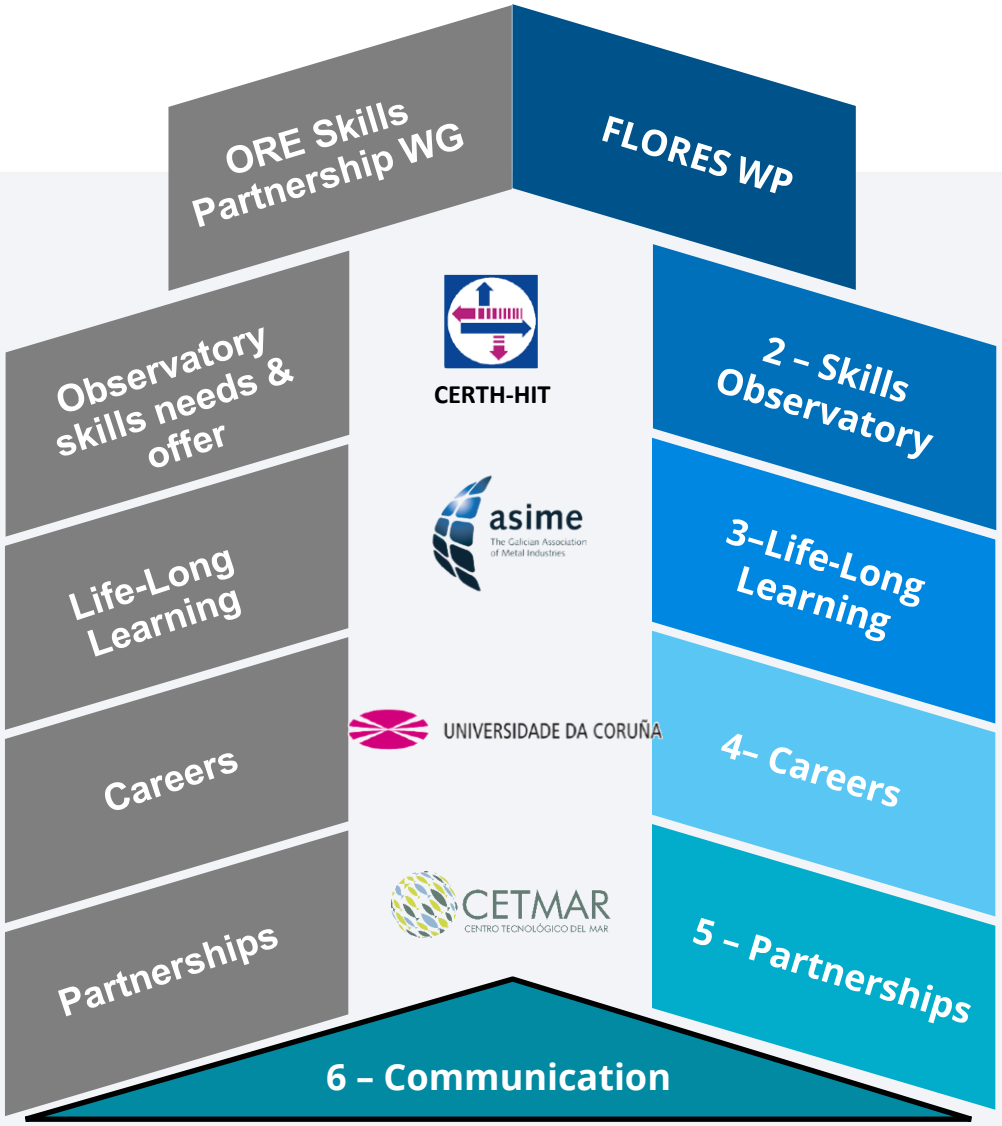
FLORES

The project main purpose

Conceived to support the internal organisation of the ORE Skills partnership

Feeding the Working Groups and developing innovative solutions with the potential to be mainstreamed in the sector and its value chain.

- **2 Years project**: 2023 - 2024
- **700,000€ funding** from Erasmus+ through the European Education and Culture Executive Agency (EACEA).



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https://oreskills.eu/news/

EXPECTED RESULTS

The working groups main purposes and results

For more updates, **subscribe to our newsletter**:

Your email OK

OBSERVATORY

SKILLS

CAREERS

ENDURING PARTNERSHIPS

An observatory developing skills intelligence for the ORE sec

- Analysis of present skills needs
- Map of the training offer
- Future trends and their impact in the skills needs

Stimulating dedicated training offers for the ORE for the ORE sector:

- Guidelines to promote innovative approaches in Life-Long Learning
- Repository of training materials for the ORE
- Helpdesk promoting LLL and VET standards

Promoting career and job opportunities in the ORE for the ORE sector:

- Multilingual educational materials: card game + video-interviews with ambassadors + educational materials
- Update to the ESCO Occupational Profiles

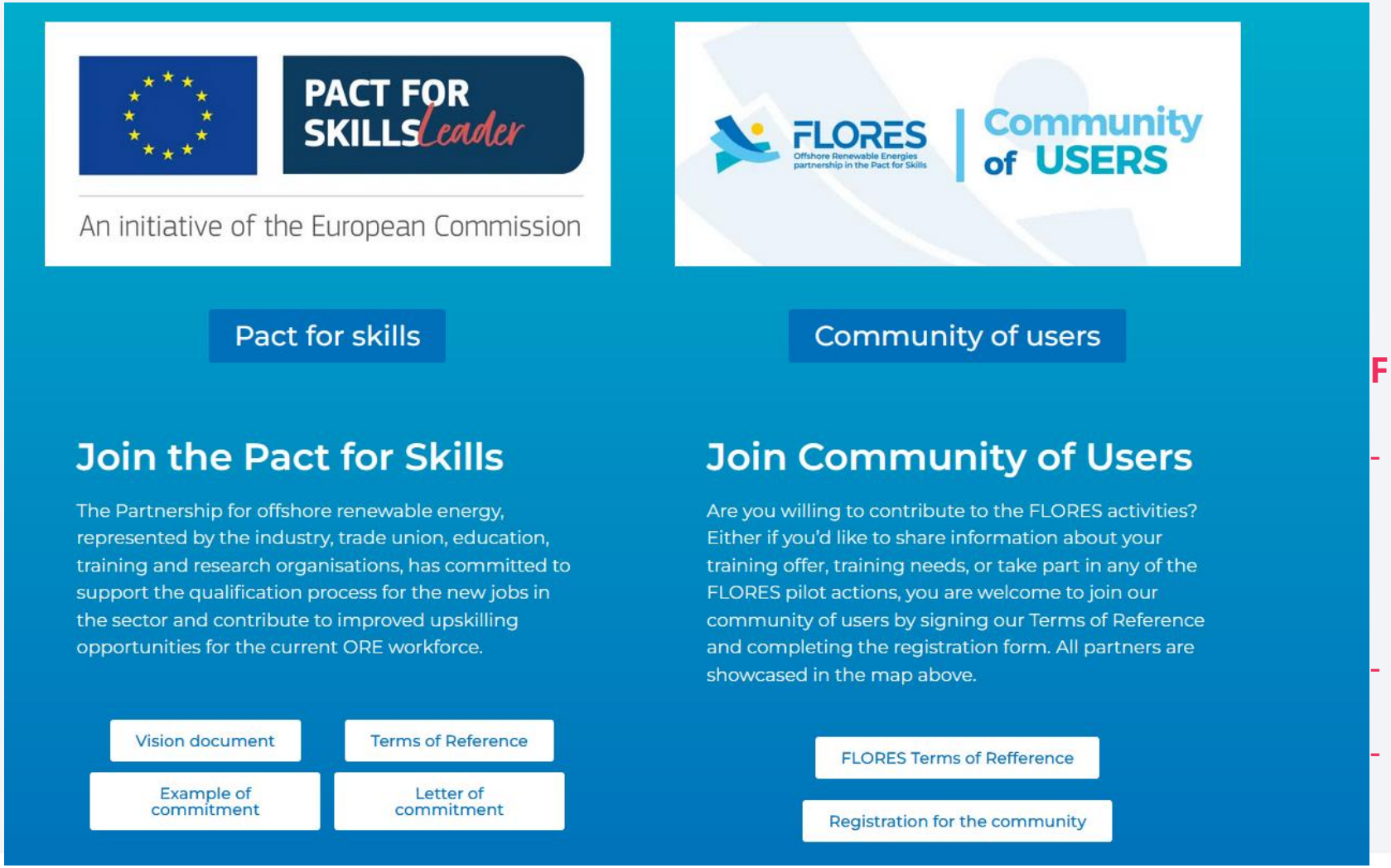
Creating alliances to ensure the regional approach:

- Building a community of users & Pilot Actions
- Adaptations of the training offer and supporting materials
- Analysis on how to overcome barriers for the partnerships

1 Pilot in the Baltic
2 Pilot in the Atlantic
1 Pilot in the Mediterranean

FLORES Communities of users

https://oreskills.eu/community-pilot-actions/



Large scale Partnership:

- **Access to EC support services**
- **A specific commitment to contribute to the activity is requested**

FLORES community:

- **Involvement in Pilot Actions & invitation to test project deliverables**
- **No commitment required**
- **1st step to evaluate the interest in the P4S**

FLORES Offshore Renewable Energies partnership in the Pact for Skills

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CONNECTED ACTIVITIES AND RESULTS

GREEN VET Network: The multi-sectoral exploitation of Blueprint project results with a GREEN Skills scope

GREEN MISSION

Pioneer innovative policy approaches for a **greener education and training practices**

Mainstream these approaches across various systems, countries and 6 industrial sectors

- Integrate core green skills into VET curricula, HE and training programs
- Provide Recommendations to VET
- To Create a NETWORK of GREEN Education Organizations
- Award a "green" label to national training organizations for their sustainability

Shipbuilding ORE

Results

Document Report on skills needs for the Green Transition

Strategic Plan for establishing the Green European VET Network

Coming soon: Guidance document for the uptake of green skills and best practies by VET Systems

GREEN the Greener European VET Network

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CONNECTED ACTIVITIES AND RESULTS

Green Diving: Enhancing green skills, sustainability & attractiveness of Maritime VET

A bottom-up approach in the maritime VET Centres, addressing:

- Fisheries
- Navigation
- Boatbuilding
- Ocean Literacy

Results

Available in English, Latvian, Portuguese, Spanish and Galician

- ✓ Digital Tollkit for Green Skills: class-plans for teachers
- ✓ Green Diving Train the Trainers Course "TRANSITION TO GREEN SCHOOLS: ENVIRONMENTAL AWARENESS AND SUSTAINABILITY"
- ✓ Green Diving Repository of supporting materials
- ✓ Action Plan for Greener Maritime VET Centres

GREENDIVING

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Get in **touch**.

Contact us for any question our query you may have of ORE skills, trends or partnerships, we are here to help you.

Website www.oreskills.eu
Mail info@oreskills.eu

FLORES
Offhore Renewable Energies partnership in the Pact for Skills

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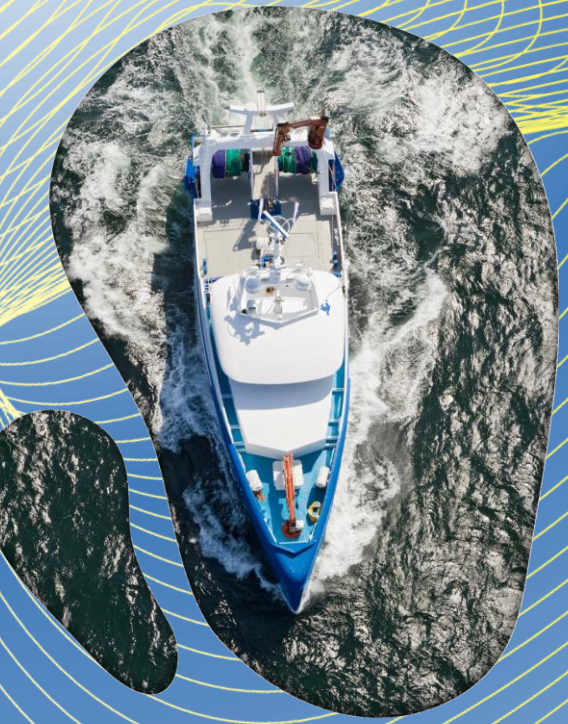


JOINING FORCES for the ENERGY TRANSITION in EU FISHERIES and AQUACULTURE

Coffee break

Maritime Affairs And Fisheries

European Commission

slido

European Commission

Breakout session question #2

What word or short phrase best describes for you the main challenge/obstacle related to skills?

[Multiple answers are possible!]

Maritime Affairs And Fisheries

Review Breakout sessions housekeeping rules

- Search your group! Participants with the same colour of your badge
- Each group will have max 15 participants
- There will be a facilitator from the organization team to each group
- Each group appoints 1 rapporteur. The rapporteur's role is to make sure it takes all the comments of the group and at the end of the day presents the 3 main conclusions from the group (in 2 minutes)
- Group discussion: 11h – 12h30
- Resume in plenary: 12h30 – 13h00

I: Identification of skills related challenges & knowledge gaps – Guiding questions

1. From your experience, what are the main **challenges** you encounter when **accessing the available training and skilling opportunities** for the energy transition in your sector?

2. In which areas do you find is **the lowest amount of relevant training and skilling course** available (e.g. alternative fuels, new gears, digital tools)?

3. How do you judge the preparedness of the workforce for the **digital, sustainable, and innovation challenges** in the sector?

II: Skilling solutions and possible future synergies – Guiding questions

1. For the current state of the transition in your sector, where do you believe is the **most potential for skilling and training, for accelerating the energy transition** in the sector?
2. How can the sector use **synergies from the other maritime sectors on skilling and training** and how can this help **advance the energy transition** in the EU fisheries and aquaculture sector?
3. What are the most **important actions** in the **short term** that could be taken to overcome the current **challenges in the availability and accessibility of skilling and training opportunities**? What could the **medium- to long-term actions** to be?

Breakout sessions wrap up: Presentations of Conclusions and recommendations

- ✓Let’s recap Breakout session I and Breakout session II !
- ✓Can you tell us, in 2 minutes, what are the 3 main ideas that have emerged within your group discussions?

slido

European Commission

Workshop appreciation question #3

What topic(s) should be addressed in future workshops?

Maritime Affairs And Fisheries

Closing

- Online evaluation survey where you can provide also your feedback to the questions (within the next 2 weeks)
- Call for the ETP support group: stay tuned!
- Update of the compendium (online)
- Next ETP workshop:
  - After summer

Updates in our Energy Transition Partnership website and by e-mail

Thank you very much

for your active participation !

Useful links

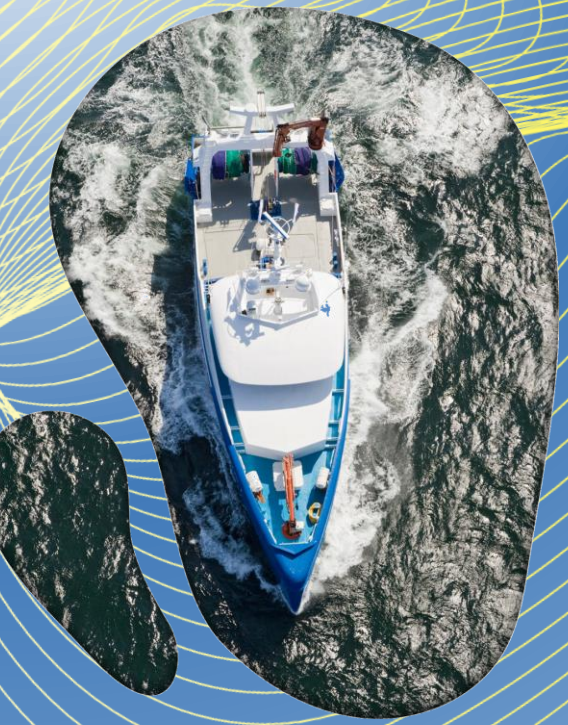
Energy Transition

https://blue-economy-observatory.ec.europa.eu/energy-transition-partnership_en

Contact us

MARE-ENERGY-TRANSITION@ec.europa.eu

Maritime Affairs And Fisheries



JOINING FORCES for the ENERGY TRANSITION in EU FISHERIES and AQUACULTURE

Thank you

Enjoy your lunch

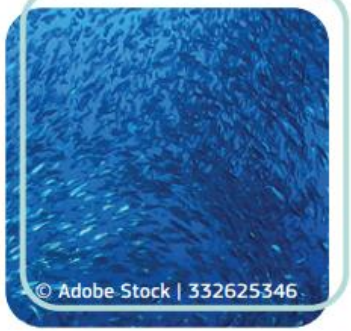
Maritime Affairs And Fisheries

European Commission

- **BACKGROUND SLIDES**

Main objectives

#EUGreenDeal



Continue rebuilding fish stocks to sustainable levels → long-term fish availability and prosperity for fishers and communities.

Reduce environmental and climate impacts of fisheries and aquaculture activities → protecting 30% of the EU's seas, with 10% being strictly protected by 2030 as defined by the EU Biodiversity Strategy.

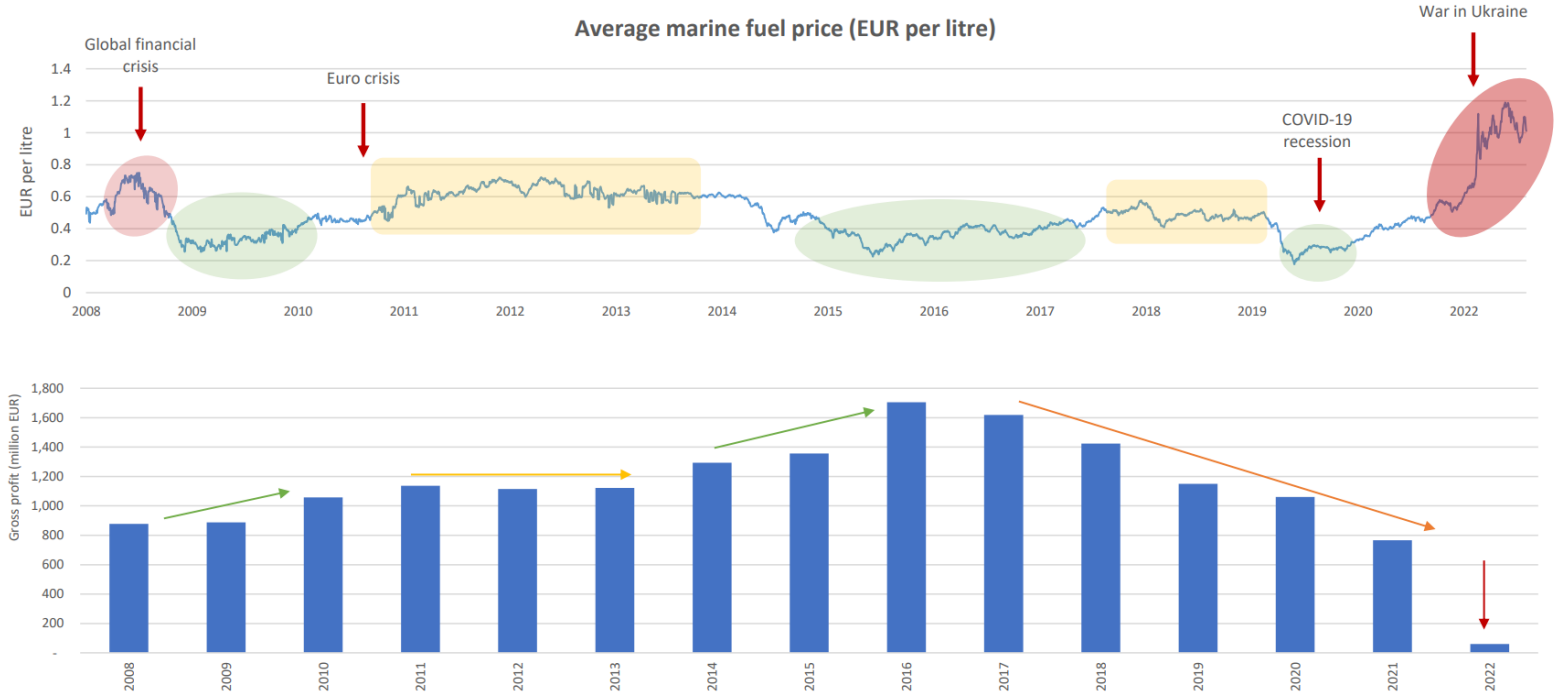
Increase the sector's energy efficiency to become more resilient, less dependent on fossil fuels and climate-neutral by 2050.

Make the fishing profession more attractive.

Why this Communication on Energy Transition in the EU Fisheries and Aquaculture sector?

https://europa.eu/!WjCTHj

Energy transition in EU fisheries and aquaculture Why an action plan?

- 

*Energy prices

*Economic viability of the sector

Why this Communication on Energy Transition in the EU Fisheries and Aquaculture sector?

European Commission

- The recent **increased energy prices** from fossil fuels are a threat to the profitability and viability of the sector

- Need to **break away** from the **fossil fuel dependency**

- February 2023, **Communication on the energy transition in the fisheries and aquaculture sector** (https://oceans-and-fisheries.ec.europa.eu/system/files/2023-02/COM-2023-100_en.pdf), as part of the "Fisheries and Ocean Package".

- **Dual objective of the Communication** :

  (i) Increase the future **resilience of the sector**

  (ii) Reducing carbon footprint of fisheries and aquaculture products

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Energy Transition Partnership

ETP: Governance and Stakeholders

- Voluntary network of stakeholders
- Collaboration and knowldege sharing
- Align intentions with other partners
- Develop activities to deliver on the objectives of the Partnership
- Work on Common strategies and milestones
- Contribute to the Roadmap

- ***Workshops***
- ***Voluntary Team work & ETP support group***
- ***Stakeholder groups***

Timeline and Next steps

Jun/2023 – Launch of ETP

Jun /2023 - **User-friendly web tool to assess the impacts of fuel prices**

30 Sep 2023 - **Consulting stakeholders**

Oct 2023 – **ETP Website**

11 Oct 2023 **Workshop in EURegions week**

Nov/2023 - **Guide & database on EU funding and financing instrumen ts**

28 Nov 2023 – 1st **Workshop on financing of energy transitio n**

Dec 2023 - **EU-wide study on the available technologies for the energy transition**

Q1+Q2 2024 – **Workshops**

Q1+Q2 2024 – **Working with the Communit y**

End of 2024 – **Roadmap**

- Exploring options with EIB/EIF;
- Living labs;
- Interregional cooperation;
- Promote grants;
- Blue Invest
- Virtual academy