SYNERGIES AND CLUSTERING BETWEEN MARITIME PROJECTS

Final Report

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EASME/EMFF/2020/3.1.12 - SI2.850620

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1 Executive Summary

Over the past few years, the direct management component of the European Maritime and Fisheries Fund[1] (EMFF) has contributed to the development of the EU Integrated Maritime Policy (IMP), by fostering integrated governance of maritime and coastal affairs, sustainable economic growth, employment, innovation and new technologies, while at the same time preserving the marine environment. Many actions and initiatives that have made it possible to achieve the ambitious goals of the IMP have been funded by the EU Commission through several rounds of calls for proposals designed with a bottom-up approach, where the Commission set some general overarching objectives, thus leaving a certain leeway to applicants when it came to developing projects and new ideas.

As the number of bottom-up projects funded through the EMFF has steadily increased over time, it is more important than ever to measure the actual impact of these projects even after their conclusion, and to maximise it by increasing their visibility, as well as by exchanging information, best practices and synergies with other EU project beneficiaries and funding programmes/initiatives.

With this goal in mind, CINEA and DG MARE launched the "Synergies and clustering between maritime projects" project. Its general objective was to provide a platform for exchange of information, best practices and synergies between EMFF-funded projects – as well as projects funded by other programmes – in a structured way, by setting up and developing a process for clustering projects by theme and challenge, as well as evaluating insights from their results.

Further specific objectives were instrumental in achieving the overarching goal of this project. The first was to gain a better understanding of the factors that facilitate – or hinder – the success of projects funded through the EMFF direct management component. In the "evaluation" task of "Synergies and Clustering", impact indicators helped to identify key common factors in successful projects. In the "clustering / visibility" task, content, such as short stories and video interviews, were disseminated online with a view to highlight the reasons behind the success of certain projects, and give them more visibility, thus enabling mutual learning. Building on the work of the first two tasks, "networking" addressed another specific objective of the project, i.e. to facilitate mutual learning to enable project beneficiaries to take advantage of insights and practices from other projects beneficiaries, including beneficiaries of projects funded by other EU funding instruments. It should be noted that projects under the scope of this "Synergies and Clustering" contract were quite heterogeneous in terms of objectives, type of participants or consortium composition as described in the summary table of calls for proposals below under section 2 : some aiming more at strengthening the knowledge-base and skills (e.g. blue careers, blue labs) while some others had clearly a commercial nature (e.g. blue economy window projects). This is important to take into account, especially as part of the evaluation task.

Evaluation

An Evaluation Question Matrix was developed under task 1 (evaluation). This included a set of indicators grouped under the following main categories: (i) impact on beneficiaries, (ii) sustainability, (iii) scalability, (iv) uptake, (v) knowledge transfer, (vi) networking and visibility, and (vii) synergies.

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[1] The EMFF was the fund for the EU's maritime and fisheries policies for 2014-2020. It was one of the five European Structural and Investment Funds (ESIF) which complemented each other to deliver more jobs, welfare and growth in the EU.

For this evaluation, survey responses were received from 71 out of 91 EMFF-funded projects in the scope of "Synergies and Clustering", and 64 interviews were conducted by the evaluation team.

The findings reveal that the majority of evaluated projects (66%) underwent changes in their Technology Readiness Levels (TRL), particularly within the "Ocean health and observation" cluster. A substantial percentage of projects (35%) generated new Intellectual Property (IP) and patents, with the "Renewable energy" cluster leading in this aspect. Notably, a significant outcome was the upskilling of staff and stakeholders across various sectors. Several projects indicated that the new skills and experience gained were widely transferrable among their current sector and other sectors and industries. Regarding revenue, many projects anticipated future positive changes, especially within the "Renewable energy" and "Bioeconomy, aquaculture, and fisheries" clusters.

Some 44% of projects stated that a change in revenue was not applicable to their project. This was evident particularly among projects which aimed at filling a knowledge gap and not at developing a marketable product. 86% of projects had devised post-project plans and activities, showcasing a proactive approach towards sustainability and future developments. Furthermore, 59% of projects demonstrated the potential for replication on a larger scale, both within and beyond the EU regions, suggesting the possibility to scale and adapt the project outcomes across different sectors and markets.

Clustering and visibility

Clustering projects was of special significance to facilitate and foster cooperation, networking and mutual learning as part of task 2 (clustering and visibility). As many projects, albeit emerging from entirely different calls for proposals, shared common traits, it was important to define coherent and cross-cutting thematic groupings. For this reason, it was proposed to use a double categorisation and cluster projects by theme and by challenge. Themes refer to blue economy sectors (bioeconomy, aquaculture and fisheries; renewable energy; sustainable tourism and cultural heritage; ocean health and observation; sustainable and smart transport) whereas challenges refer to cross-cutting issues that beneficiaries intended to address through their projects (digitalisation; investment and new business models; networking; blue careers; community and led-local development).

A community page was created on DG MARE's Maritime Forum to give visibility to successful projects. 8 cluster stories, 4 success stories and 3 video interviews were published.

Networking and synergies

The objective of task 3 (networking and synergies) was to establish a framework to foster networking and cooperation between project beneficiaries. These included beneficiaries of EMFF-funded projects as well as beneficiaries of projects funded by any other EU funding programme. Ten thematic and cross-thematic workshops were organised over the contract duration of 27 months.

In terms of synergies through these workshops, formal collaborations are yet to materialise, though anecdotal evidence suggests that workshops have facilitated awareness and contact among participants. Notably, in-person events, despite being less crowded, offered richer opportunities for interaction, and offered examples of post-event collaboration and networking. Remote and hybrid events, even when complemented with breakout sessions to encourage interaction, seemed to be better suited for gathering feedback rather than fostering networking. The success of live events, such as the workshop on algae and blue bioeconomy in December 2022, underscores the value of in-person gatherings.

Furthermore, the workshops proved instrumental in establishing synergies between different Directorates-General and services of the European Commission.

Conclusions and recommendations

The conclusions drawn from the feedback provided by project beneficiaries surveyed under the "evaluation" task, coupled with insights gained from the Synergies & Clustering project workshops, underpin a set of recommendations aimed at fortifying the impact and sustainability of EMFF and other EU grants:

1. Leveraging the extensive knowledge within the marine/maritime community to identify synergies is crucial. This can be done by creating a community of practice among various initiatives and stakeholders to enhance collaboration.

2. Synergies should also be created at the "territorial" level. There are several initiatives focusing on the regional/sea basin level within the EMFAF and other EU funds. These can potentially be good platforms to enhance sharing of information, gathering needs and organise clustering events.

3. Allowing for consultation with stakeholders and including synergies in the programming of EMFAF funds.

4. Encouraging dissemination of results, advocacy, outreach, and feedback to policy is also an important way to foster synergies by making the knowledge available to a vast range of users and facilitate further exploitation.

5. Organising remote and/or hybrid events when the primary aim is to gather feedback on a given topic, but keeping live events when the goal is to encourage networking between project beneficiaries.

6. Encouraging strategic intervention in projects and ask new roles to be added in the teams of projects in the form of dedicated community managers. These community managers should specialise in connecting stakeholders, bridging the gap between different sectors, ultimately enhancing the potential for successful projects.

7. Increasing dialogue between European Commission services. Such dialogue will foster exchange of information, facilitate relevant connections between stakeholders and can have a key role to include synergies by design in programming EU funds, to avoid duplication while facilitating knowledge/results sharing and more efficient use of EU funds.

8. Strengthening the position of the EU executive agencies in facilitating the coordination among funding programmes and support project coordinators.

9. Facilitating access to EU funding programmes by theme/topic or type of participant rather than by programme information. A single one-stop shop for EU funding opportunities would also be helpful. Ideally this should be complemented by a matchmaking facility.

10. Making the framework permanent: the evaluation of long-term impact of grants should not remain a one-off exercise, otherwise in a few years' time the situation would be again much like it was before the Synergies & Clustering project.

11. Coaching and/or mentoring activities could become part of each grant agreement, both for market-oriented and non-market-oriented projects, with a view to increasing the survival rate of projects after their grant period.

2 Summary of EMFF calls for proposals under the scope of this contract:

Call	Projects in the context of the IMP in the Black Sea and/or Mediterranean Sea regions (EASME/EMFF/2015/1.2.1.7.)
What?	Supporting concrete IMP approaches and initiatives, promoting job creation, innovation and entrepreneurship in the blue economy of the Black Sea and/or Mediterranean Sea
Who?	Public-private partnerships; consortia of maritime clusters
When?	November 2015
EU contribution	EUR 0.57 million
Projects funded	ArtReefs
Call	**Thematic Routes on Underwater Cultural Heritage (EASME/EMFF/2015/1.2.1.8)**
What?	Promoting the creation of touristic thematic routes on underwater cultural heritage and its preservation as a way to promote the competitiveness of the coastal and maritime tourism sector and to promote diversification in tourism offer
Who?	Public or private entities from at least 2 eligible countries, including non-EU countries

When?	March 2016
EU contribution	EUR 0.2 million
Projects funded	ATAS, NIRD, UCRCA
Call	**Blue Careers in Europe (EASME/EMFF/2016/1.2.1.2)**
What?	Contributing to filling existing skills' gaps by supporting activities that will increase the employability of various target groups in blue economy sectors (e.g. students, workers, unemployed people etc.). Projects must implement core activities related to initial and/or continuous education and/or training of current or future workers in blue economy sectors.
Who?	Public or private entities from EU Member States. The consortium must comprise at least: one educational/training organisation, a public or private VET provider and one company or chamber of commerce.
When?	May 2016
EU contribution	EUR 3.45 million
Projects funded	ASSESS, BBMBC, BLUE SMART, CETBC, Entrefish, MENTOR, PROCREW

Call	**Blue Technology: Transfer of innovative solutions to sea basin economies (EASME/EMFF/2016/1.2.1.3)**
What?	Supporting strategic transnational partnerships to develop joint roadmaps at sea basin level in order to coordinate investments for innovation in a specific high potential blue growth technology, domain or value chain
Who?	Public and private entities from eligible countries, including non-EU countries. Consortia of minimum 3 legal entities, i.e., cluster organisations and/or business network organisations all of which are providing or channelling cluster and network support services. Each entity must be located in a different EU Member State.
When?	September 2016
EU contribution	EUR 2.5 million
Projects funded	ENTROPI, InvertebrateIT, NeSSIE
Call	**Blue Labs: innovative solutions for maritime challenges (EASME/EMFF/2016/1.2.1.4)**
What?	Supporting a novel way of working, where young scientists supported by researchers, industry and local stakeholders, team up to develop innovative solutions to support the development of a sustainable blue economy, while preserving marine resources and ecosystems
Who?	Public or private entities from eligible countries, including non-EU countries. Consortia of minimum 2 entities, one of which must be a research/scientific institute and the other a public or private entity

When?	May 2016
EU contribution	EUR 1.7 million
Projects funded	AMALIA, ARCHEOSub, Lab4Dive, Litterdrone, SpilLess
Call	**Environmental monitoring of wave and tidal devices (EASME/EMFF/2017/1.2.1.1)**
What?	Contribute to increasing environmental data on the potential impact of wave and tidal devices, and to reducing uncertainty in modelling potential impacts of future wave and tidal devices
Who?	Private and public entities from EU Member States. Consortia of partners from at least 2 Member States are encouraged, but not an essential requirement.
When?	January 2018
EU contribution	EUR 1.5 million
Projects funded	SEA Wave, WESE

Call	**Sustainable Blue Economy (EASME/EMFF/2017/1.2.1.12)**
What?	Accelerate the implementation of the Integrated Maritime Policy and the deployment of the blue economy across Europe and in the Mediterranean as well as to contribute to the implementation of the Joint Communication on international ocean governance
Who?	Public or private entities from eligible countries, including non-EU countries. Consortia of minimum 2 entities
When?	February 2018
EU contribution	EUR 14.5 million
Projects funded	AFRIMED, AlgaeDemo, AQUA-LIT, BlueNET , Cluster ACT, CMES – WestMed, DEEP BLUE, DEMO-BLUESMARTFEED, DiveSafe, EASY FEED, ENSAMBLE, FTL-Fish, GREENing the BLUE, LEAPWind, marGnet, MedSkippers, NetTag, OCEANETS, OCEANMET, SpaceTech4Sea, SpecTUNA, VPSTTG
Call	**Blue Labs (EMFF-01-2018)**
What?	Promoting innovative "laboratories" to pilot new and economically viable solutions addressing selected maritime and marine challenges and opportunities. The focus of this action is to support young scientists supported by experienced researchers, industry and local stakeholders, to team up and develop innovative technologies, products and services in support of a sustainable blue economy, preserving marine resources and ecosystems.

Who?	Public or private entities from eligible countries, including non-EU countries. Consortia of minimum 2 entities from 2 different countries, one of which must be a research/scientific body and the other a business entity
When?	January 2019
EU contribution	EUR 5.5 million
Projects funded	BASTA, BIOGEARS, BlueRoSES, ExPloTect, FISH4FISH, MER-CLUB
Call	**Blue Careers (EMFF-02-2018)**
What?	Promoting innovative approaches to strengthen the cooperation between industry and education in order to bridge the gap between skills' offer and demand
Who?	Public or private entities from eligible countries, including non-EU countries. Consortia of minimum 2 entities from 2 different countries, one of which must be an educational/training organisation and the other a business entity
When?	January 2019
EU contribution	EUR 8.2 million

Projects funded	BAPSI, CTP, MarENet, MarLEM, NAUTILUS, ScienceDIVER, Sea of Experience, TEAMS
Call	**Blue economy (EMFF-03-2018)**
What?	Supporting demonstration projects based on innovative technologies testing/deploying/scaling-up of new industrial or service applications and solutions for the blue economy
Who?	Public or private entities from eligible countries, including non-EU countries. Single applicants (business entities) or consortia with at least one business entity
When?	January 2019
EU contribution	EUR 8.2 million
Projects funded	Aspiring wingsails, CORAL4HEALTH, DOCC-OFF, FreShER, MUSSELPRO, OpenMode, SEASTAR, SIMBIOSE, SMART-HATCHERY, STARFISH 4.0, T4BS, VesselsLife.com
Call	**Blue economy window call (EMFF-BEW-2019)**
What?	Supporting projects that accelerate innovation in the blue economy, demonstrate high potential in terms of company competitiveness and growth underpinned by a strategic business plan and which aim to create and maintain high quality jobs in the blue economy

Who?	SMEs from EU Member States. Exceptionally also SMEs from non-EU countries if their involvement is necessary in view of the nature of the action and in order to reach its objectives
When?	February 2020
EU contribution	EUR 22.5 million
Projects funded	Aerones, ATOMS, CleanerShip, FleetUSV, InnovaFeed, Photolicer, PowerFLEX, SATHScale, SEASAM-AI, WaveFarm, ZboxBlueLogistics
Call	**Blue economy window call (EMFF-BEW-2020)**
What?	Advancing market-readiness of new products, services or processes in the blue economy
Who?	SMEs from EU Member States. Exceptionally also SMEs from non-EU countries if their involvement is necessary in view of the nature of the action and in order to reach its objectives
When?	February 2021
EU contribution	EUR 20 million

Projects funded	ALGAENAUTS, CO2NTROL, ESENSE, KELP-EU, SEAFOOD ALGTERNATIVE, Seawing4Blue, ULVA FARM, WINNEW, AquaPekilo, TECOW
Call	**Ocean Monitoring (OM)**
What?	Increasing the amount of environmental data and improve knowledge on assessing possible impacts of ocean energy devices, contributing to reducing uncertainty in modelling potential impacts of future ocean energy devices, providing guidance to ocean energy developers and to public competent authorities in charge of licencing and maritime planning, informing stakeholders and helping feed the public debate
Who?	Public and private entities from eligible countries, including non-EU countries
When?	January 2020
EU contribution	EUR 2.3 million
Projects funded	SafeWAVE

3 Evaluation

3.1 Results

In total 91 projects were supported by the EMFF following several calls for proposals between 2016 and 2021. Overall, these 91 projects account for a total budget of EUR 122,206,989, of which EUR 87,508,353 were funded by the EMFF. The calls were distinguished by their bottom-up nature. Applicants were not asked to study a particular issue or develop a well-defined service or product but were free to propose any project that could lead to a new service or product for the blue economy. Some calls for proposals had a more narrow scope such as "blue careers" or "blue labs or marine litter", but most were general in scope.

An Evaluation Question Matrix was developed. This includes a set of indicators grouped under the following main categories:

- ➢ Impact on beneficiaries
- ➢ Sustainability
- ➢ Scalability
- ➢ Uptake
- ➢ Knowledge Transfer
- ➢ Networking and visibility, and
- ➢ Synergies

For this evaluation, survey responses were received from 71 of the 91 EMFF-funded projects and 64 interviews were conducted by the evaluation team.

A summary of the main findings can be found in chapter 7.2 Conclusions.

3.2 Challenges encountered

- Some of the project beneficiaries stated they were too tied up with their project/business to give an interview, though some other simply did not give any reason.
- Difficulty to evaluate the impact of a project that has just finished. Full impact probably materializes only a few years after project completion.

3.3 Conclusions

Technology Readiness Levels (TRL) and patents

66% of all projects reported a change in project TRL since the beginning of the project, and 30% stated a TRL change was not expected or applicable, i.e. knowledge-based projects (e.g. skills). 'Ocean health and observation[2]' clustered projects had the highest proportion of projects (89%) reporting a change in project TRL of 1 or more.

35% of projects developed new Intellectual Property (IP) or patents. Overall this equates to the development of at least 67 new products, IP assets and patents.

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[2] For more information on these projects, please see the cluster story : https://maritime-forum.ec.europa.eu/contents/cluster-story-ocean-health-and-observation_en and CINEA infographics : https://cinea.ec.europa.eu/publications/ocean-health-and-observation-projects-under-emff-infographic_en

'Renewable energy[3]' clustered projects reported the highest percentage of projects (67%) which developed 1 or more new project related assets.

More detailed information is avaiable in chapters 3.1 and 3.3 of the Annex to the Final Report.

Employment

The number of staff experiencing upskilling was one of the most positive outcomes reported by projects, with 90% of all projects stating that 1 or more staff had gained new skills through the project. Significant upskilling also extended to other stakeholders, particularly for projects with knowledge-based outputs. Several projects indicated that the new skills and experience gained were widely transferrable among their current sector and other sectors and industries. In this context, it is also important to recall the number of projects aimed at improving skills as a primary objective in the sample of EMFF projects[4].

It is encouraging to hear that over 50% of all projects reported an increase in project-related employment, with 14% of all projects stating they had achieved the highest reportable increase in project-related employment of over 40%. Renewable energy projects experienced the highest increase in employment, with 83% of projects reporting a positive increase in employment.

More detailed information is available in chapters 3.2 and 3.4 of the Annex to the Final Report.

Revenue

42% of all projects reported that new products were prepared for market, 24% of projects had products available on the market, and 11% of all projects reported they had achieved both national and export sales.

A large proportion of projects (44%) stated that a change in revenue was not applicable to the project. This was evident particularly among projects which aimed at filling the knowledge gap and not developing a marketable product. However, it should be considered that several projects considered a change in revenue as not applicable, as their project had not yet reached commercialisation or as products had only recently been made available to market. Such projects however expected to achieve a future change in project revenues once commercialisation has been achieved. A further 21% of projects reported no change in project revenue, mainly due to products not yet reaching the commercialisation stage or recently available for market.

The clusters reporting the highest percentage of projects experiencing a positive change in project related revenues were 'Renewable energy' projects (42%), then 'Bioeconomy, aquaculture and fisheries' projects[5] (36%) and 'Sustainable tourism and cultural heritage' projects[6] (33%). Profitability followed similar trends to revenue. Negative impacts on profitability were reported where the costs of R&D are yet to be recovered through sales.

Expected changes in project-related revenues are positive, with most projects (58%) expecting increased project revenues, and 24% expecting to see increased revenues of

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[3] For more information, see the cluster story : https://maritime-forum.ec.europa.eu/contents/cluster-stories-renewable-energy_en and CINEA infographics : https://cinea.ec.europa.eu/publications/innovative-solutions-offshore-renewable-energy_en

[4] See the cluster story on skills : https://maritime-forum.ec.europa.eu/contents/cluster-story-blue-careers-skills_en and CINEA infographics: https://cinea.ec.europa.eu/publications/emff-blue-careers-infographic_en

[5] See the cluster story on fishing and aquaculture : https://maritime-forum.ec.europa.eu/contents/cluster-story-fishing-and-aquaculture_en and on algae and blue bioeconomy : https://maritime-forum.ec.europa.eu/contents/cluster-story-algae-and-blue-bioeconomy_en

[6] See the cluster story on sustainable tourism : https://maritime-forum.ec.europa.eu/contents/cluster-story-sustainable-tourism-and-cultural-heritage_en

over 40%. Again the cluster with the highest expectations is Renewable Energy, reflecting the expected continuation of high growth in the sector.

More detailed information is available in chapters 3.2 and 3.4 of the Annex to the Final Report.

Post-project activities

Nearly all projects (86%) have developed (31%) or implemented post-project plans (55%) and carried out some form of post-project activity.

62% of all projects have either evidence of some form of commercialization plan; 30% of all projects having evidence of a commercialization plan in place and 32% having evidence of the implementation of a commercialization plan. Most of the remainder are projects without commercial expectations, i.e. knowledge-based projects. But there are examples of knowledge-focused projects carrying out post-project development.

It is highly positive to see that 80% of all projects either have a plan for follow on activities (35%) in place or have evidence of implementing follow-on activities (45%). However, many post-project activities included the production of new funding applications for follow-on projects.

59% of all projects have reported the potential for replication of the project at a larger scale and in other EU regions, with a further 39% of projects having evidence of achieving replication at larger scale and a similar proportion (35%) in other EU regions. Only 10% of all projects reported no potential for replication at larger scale. There is also the stated potential for the majority (62%) to replicate the project in other sectors and markets.

More detailed information is avaiable in chapter 4 of the Annex to the Final Report.

4   Clustering & visibility

4.1 Results

Clustering projects was of special significance to facilitate and foster cooperation, networking and mutual learning as a key aspect of this contract. As many projects, albeit arising from entirely different calls for proposals, shared common traits, it was important to define coherent and cross-cutting thematic groupings. For this reason, it was proposed to use a double categorisation and cluster projects by theme and by challenge.

Themes refer to blue economy sectors, whereas challenges refer to cross-cutting issues that beneficiaries intended to address through their projects.

Themes are:

- Bioeconomy, aquaculture and fisheries
    - o   Algae and blue bioeconomy
    - o   Aquaculture and fisheries
- Renewable energy
- Sustainable tourism and cultural heritage
- Ocean health and observation
- Sustainable and smart transport

Challenges are:

- Digitalisation: projects that deal with the process of converting information from a physical format to a digital one, or, more generally, that incorporate digital technologies into existing business processes, with the goal of improving them.

- Investment and new business models: this category includes projects that aim to (i) develop new business models, (ii) optimise existing business models to improve profitability and / or "bankability"; reduce capital expenditure (CAPEX) and / or operational expenditure (OPEX).

- Networking: mostly non-commercial projects that aim to develop maritime networks across Member States, third countries, and sea basins.

- Blue careers, skills and next generation challenges: projects focusing on marine and maritime careers, by developing skills and increasing employability, especially for the younger generations.

- Community led-local development: projects promoting bottom-up and participatory approaches to local development in the maritime domain.

In many cases, projects were eligible under more than one cluster in both categorisations. Further, beneficiaries were also clustered in categories such as:

- Association

- (Maritime) Cluster

- Company

- Fisheries Local Action Group (FLAG)

- Non-profit

- Public-private partnership

- Research

- University

By combining 'themes with 'challenges', it was possible to create "smaller", more effective and more heterogenous clusters that offered more options for workshop themes. For instance, the double categorisation made it possible to organise a workshop aimed at beneficiaries of fisheries, aquaculture and tourism projects which dealt with digital technologies.

A table with all projects clustered by theme and challenge is provided in Annex 2 – Clustered projects.

On the other hand, to give visibility to successful projects, a community page was created on DG MARE's Maritime Forum. 8 cluster stories, 4 success stories and 3 video interviews were published on the Maritime Forum:

Table 1 Cluster stories

Topic	Published on
Renewable Energy	17/12/2021
Algae and blue bioeconomy	25/01/2022
Fishing and aquaculture	08/02/2022
Sustainable Tourism and Cultural Heritage	15/03/2022
Blue Careers & Skills	18/03/2022
Maritime Transport	07/04/2022
Ocean Health and Observation	17/05/2022
Digitalisation	20/07/2022

Table 2 Success stories

Title	Published on
OpenMode: the future of aquaculture is here	21/02/2023
BBMBC: From a blue career project to a Mundus master	21/04/2023
STARFISH 4.0	December 2023
NAUTILUS : Training the water sports professionals of tomorrrow	Published on DG MARE newsletter

4.2 Challenges encountered

- It was somehow difficult to identify success stories, i.e. stories about projects that have produced tangible results after the grant period. More than an issue with the projects themselves, this seems to be due to the fact that several projects were still ongoing during the contract period or had just finished. To fully appreciate the success of a project and draft a compelling story about it, more time would be needed, so as to make it possible for project beneficiaries to produce and advertise results.

- Some potential success stories had already been covered in DG MARE's newsletter. In principle, it was decided to avoid giving additional visibility to projects that had already received a lot of attention, so as to cover as many projects as possible. In practice, however, this situation reduced the number of

suitable projects – and stories – considerably. To mitigate this issue, cluster stories were published instead of individual success stories.

4.3 Conclusions

Overall, despite the above-mentioned challenges, the work was rather successful. The content created and disseminated on the Maritime Forum was regularly shared by both CINEA and DG MARE via their Twitter accounts, where stories were usually among the most liked content.

Further, cluster stories were also linked by CINEA to present topic-related infographics presenting the portfolio of EMFF-funded projects, such as:

- Green shipping projects in the EMFF portfolio

- Blue careers projects in the EMFF portfolio

- Ocean Health and Observation projects under EMFF

- EMFF projects: Innovative Solutions for Offshore Renewable Energy

- Algae projects funded under EMFF/EMFAF

5 Networking & synergies

5.1 Results

The objective of this work package was to establish a framework to foster networking and cooperation across project beneficiaries. These included beneficiares of EMFF-funded projects as well as beneficiaries of projects funded by any EU funding programme.

A Coherence Panel was established. This was made up of representatives of the European Commission/Executive Agencies in charge of managing funding programmes, and its role was to take an overall look at the projects considered under the Synergies & Clustering project and point out duplications, potential collaborations and synergies. Coherence panel representatives were invited as speakers to the workshops, to suggest projects from other programmes to be invited at workshops or to contribute to the discussions.

10 workshops were organised:

- The first workshop, titled '**EMFF Integration, Scaling Up and Cooperation with other EU Funding Instruments Workshop**' took place on 28 February 2022. The objective of the workshop was to contextualise the landscape in which EMFF projects are operating and to explore opportunities for future EMFF projects under the workshop headings "Integration, Scaling up and Cooperation".

  A total of 74 attendees participated in the workshop, representing European Commission funding programmes as well as beneficiaries from both EMFF projects and projects from other funding mechanisms. During the workshop there were a series of presentations and case studies, followed by plenary discussions. Facilitated breakout sessions were held to capture insights from participants on building cooperation across funding programmes and overcoming challenges in the current funding system. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the Maritime Forum.

- The second workshop on '**Blue Skills**' took place on 22 March 2022 online. The aim of this thematic workshop was to identify and facilitate opportunities for synergy and cooperation between the 18 EMFF funded blue skills projects and

projects funded under other funding mechanisms which aim to develop blue skills at national and trans-national level.

A total of 66 attendees participated in the workshop, representing European Union funding programmes as well as beneficiaries from both EMFF projects and skills projects from other funding programmes. A mixed methodological approach was used to drive engagement and participation in the virtual setting. A recording of the workshop, a workshop report and PDF copies of all presentations delivered on the day are available on the Maritime Forum.

- The third workshop on '**Financial Engineering**' took place on 5 May 2022 online. The aim of this cross-thematic workshop was to address a shortcoming identified in many projects, namely: *what happens when the grant support ends?* There is often limited forethought and/or financial literacy to consider how to further develop projects following grant funding.

  A total of 68 attendees participated in the workshop, representing European Union funding programmes as well as beneficiaries from both EMFF projects and projects from other funding programmes. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the Maritime Forum.

- The fourth workshop on '**Sea-basin Dimension**' took place on 7 July 2022 online. This workshop explored synergies and clustering between EMFF projects and with 'Seabasin assistance mechanisms'[7] at sea basin level. The workshop presented success stories, information and funding options for project coordinators to consider with the objective of establishing synergies and increasing cooperation within and between sea basins.

  A total of 59 attendees participated in the workshop, representing project beneficiaries both from EMFF and other funding programmes, sea-basin Assistance Mechanisms, and European Commission / CINEA policy officers. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the Maritime Forum

- The fifth workshop on **Offshore Renewable Energy** took place on 4 October online, and aimed to explore options and opportunities for cooperation between offshore renewable energy projects funded by both the EMFF/EMFAF and other funding programmes. A comprehensive agenda included an overview of the policy context and landscape, as well as a series of successful stories presented by beneficiaries. Further, the workshop was supported by an interactive session to enable participants to share their own experiences on whether and to what extent cooperation between project beneficiaries is possible.

  A total of 56 attendees participated in the workshop. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the Maritime Forum.

- The sixth workshop on "**Algae and Blue Bioeconomy**" took place as a hybrid event in Rome on 12 December 2022. The workshop explored exchange of information, synergies and clustering between projects dealing with algae as well as with the blue bioeconomy in general. The main goal was to establish a framework to foster information exchange, networking and cooperation across projects and beneficiaries. After the workshop, EU4Algae's first public event took place.

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[7] https://westmed-initiative.ec.europa.eu/assistance-mechanism/ ; https://atlantic-maritime-strategy.ec.europa.eu/en, https://black-sea-maritime-agenda.ec.europa.eu/

A total of 22 attendees participated in the workshop (10 in-person and 12 online). A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the [Maritime Forum](#)

- The seventh workshop on **Investment Readiness and New Business Models** took place as a hybrid event in Brussels on 8 March 2023. The workshop followed up on the Workshop on Financial Engineering and was organised together with BlueInvest. The aim of the workshop was to help EMFF/EMFAF project beneficiaries understand the key elements to frame their projects in the right way to raise interest from potential investors. A bespoke collaborative exercise was carried out to provide practical insights into investor readiness. The workshop presented success stories, information and options for project coordinators to consider with the objective of becoming "investor ready" as well as of establishing synergies and stimulate potential cooperation in the blue economy. Right after the workshop, participants were invited to a networking cocktail with BlueInvest investors, where they had a chance to put in practice the lessons learned during the workshop. A recording of the workshop and copies of all presentations delivered on the day are available on the [Maritime Forum](#).

- The eight workshop on **Ocean Health & Observation** took place on 17 April 2023 online. The workshop aimed to explore options and opportunities for cooperation between projects dealing with ocean health and observation, funded by both the EMFF/EMFAF and other funding programmes. A comprehensive agenda included an overview of the policy context and landscape, as well as a series of successful stories presented by beneficiaries. Further, the workshop was supported by an interactive session to enable participants to share their own experiences on whether and to what extent cooperation between project beneficiaries is possible.

  A total of 37 attendees participated in the workshop. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the [Maritime Forum](#).

- The ninth workshop on "**EMFF Blue Economy Calls**" took place in Brussels on 10 May 2023. The workshop sought to elicit feedback from selected project beneficiaries on blue economy calls for proposals, by building on their valuable experience and advice. 9 EMFF project beneficiaries were identified as "champions", based, among other things, on the success of their projects, their sectors, the call they belonged to as well as on the work of the "Synergies and Clustering" contractor.

  A total of 28 attendees participated in the workshop (17 in-person and 11 online). The workshop was upon invitation only.

- The tenth workshop on "**Digital Transformation in Traditional Blue Economy Sectors: Fishing, Aquaculture and Coastal Tourism**" took place online on 28 June 2023. The workshop sought to explore exchange of information, synergies and clustering between projects dealing with digitalisation in traditional blue economy sectors, funded by both the EMFF/EMFAF and other funding programmes. It presented success stories, information and funding options for project coordinators to consider with the objective of establishing synergies and stimulate potential cooperation in the field of digitalisation.

  A total of 48 attendees participated in the workshop. A recording of the workshop, a workshop report, and copies of all presentations delivered on the day are available on the [Maritime Forum](#).

5.2 Challenges encountered

- It was somehow difficult to convince project beneficiaries to attend in-person events, even when offering to refund travel expenses. To mitigate this issue, in-person events where organised back to back with other major sector events.

- 10 workshops over a 2-year projects may have been too ambitious, considering that we needed to wait at least six months to have some results to present at the first workshop. This, together with the fact that the cohort of projects was limited and some project beneficiares attended more than one event, produced a certain "workshop fatigue". The first few workshops tended to have more participants, whereas towards the end of the project fewer participants showed interest.

- In some cases, project beneficiares noted that Synergies & Clustering workshops overlapped with other similar EC events and workshops. Better coordination in terms of agenda-setting would be needed to counteract such overlaps.

5.3 Conclusions

Overall, there was a clear split between project beneficiaries: some of them were really proactive and found the workshops useful to learn about new projects and potentially establish synergies with other beneficiaries. Some other beneficiaries, on the other hand, remained relatively lukewarm about networking options and did not engage with the Synergies & Clustering team when invited to workshops, nor with other project beneficiaries. The relatively high number of workshops certainly did not help in this sense, and for the future it might be wiser to have fewer but more focused workshops.

In terms of synergies established between project beneficiaries through the Synergies & Clustering workshops, at the time of writing there is no evidence of formal collaboration, though anecdotal evidence from project beneficiaries suggests that in some cases workshops made it possible to become aware of other projects and beneficiaries. Some beneficiaries did indeed report that, after the workshops, they got in touch with other beneficiaries to explore possibilities for cooperation.

In this sense, it should be noted that, albeit less "crowded", in-person events still tend to offer more opportunities for interaction between participants. Remote and hybrid events can be made more interactive by organising breakout sessions, with smaller groups of participants split in different rooms. This approach was adopted for a number of Synergies & Clustering workshops as well, but overall in-person events are better suited for networking, with most interaction taking place after the event itself or during coffee breaks. The workshop on algae and blue bioeconomy was a good example of this approach. It took place as a live event back-to-back with EU4Algae first meeting in Rome in December 2022. While only 10 beneficiaries attended on site, the quality of the discussion and the feedback gathered during the event were of special significance, as recognised by the beneficiaries themselves.

The workshop on blue economy calls, which also took place as a live event in Brussels in May 2023, was particularly interesting in terms of feedbak received, but it was the exception rather than the rule, as it was a closed workshop where beneficiaries were invited individually and refunded their travel and accomodation expenses.

For the future, an option may be to organise remote and hybrid events whenever the primary aim is to gather feedback on a given topic, whereas networking events should continue to take place live. Further, events where participants are invited individually might be characterised by more productive discussions, probably due to an increased sense of belonging.

When it comes to project clusters and their interaction during workshops, no specific differences could be appreciated, and it cannot be argued that beneficiaries from certain

blue economy sectors are more proactive or more willing to cooperate than others. In fact, more than to clusters and blue economy sectors, differences in the level of involvement seem to be due to individual propensities of project beneficiaries, with some of them actively engaging in cooperation and promotion activities, and some others exclusively focusing on their projects.

Likewise, there does not seem to be a clear difference in results between thematic and cross-thematic workshops. Generally speaking, participation and engagement seemed to be more linked to the timing of the workshop than to other factors, with the first workshops being somehow more lively, and the latest starting to show the above-mentioned "workshop fatigue".

Last but not least, the Synergies and Clustering workshops were also useful to establish synergies between different DGs and services of the European Commission or different institutions of the European Union. A notable example was the workshop on financial engineering, which opened a communication channel between BlueInvest and the European Investment Bank. Furthermore, throughout all workshops held during the project, several other initiatives funded by the European Commission were invited either to present their activities or to interact with project beneficiaries. Examples are BlueInvest, EU4Algae and the Sea Basin Assistance Mechanisms. Preliminary results on blue careers projects from Synergies and Clustering were also presented at an EMFAF Infoday on Blue careers and Regional flagships calls for proposals in 2022. In fact, those very preliminary results informed the text of the call for proposals itself, by adding the delivery of a legacy and/or business plan as a requirement for project beneficiaries to obtain their grant.

6   Recommendations

In this chapter are presented two distinct sets of recommendations. The first set comes from the Coherence Panel[8] and various members of the European Commission, including DG MARE and other DGs. These recommendations were gathered during the final event of the Synergies & Clustering project. The second set of recommendations is based on the feedback received from project beneficiaries surveyed under the evaluation task, as well as on the conclusions of the workshops held throughout the Synergies & Clustering project.

Recommendations from the Coherence Panel

1. **Leverage the extensive knowledge within the marine/maritime community to identify synergies is crucial**: create a community of practice among various initiatives and stakeholders to enhance collaboration would be needed. A number of strategic initiatives already exist (Mission Ocean implementation platform, Sustainable Blue Economy Partnerships (SBEP), the regional Mission Lighthouse CSAs, Assistance mechanism etc.…) in support of synergies across EU programmes and as such should be fully acknowledged to avoid duplications (e.g. repositories of good practices exist in different EU funding initiatives and could be assessed to identify areas of potential synergies with EMFAF priorities). These strategic initiatives should be encouraged to come together regularly to exchange and provide updates.

2. **Create synergies at the territorial level**. There are several initiatives focusing on the regional/sea basin level within the EMFAF and other EU funds. These can potentially be good platforms to enhance sharing of information, gathering needs and organise clustering events.

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[8] The Coherence Panel was composed of representatives of the European Commission and its role was to take an overall look at the EMFF projects considered under this service contract and point out duplications, potential collaborations and synergies

Sea Basin Strategies and their assistance mechanisms funded under the EMFAF, as well as other regional initiatives such as INTERREG, SBEP, lighthouses under the Mission "Restore Our Ocean and Seas", could play a role in this process. A number of successful actions promoted under the Sea Basin Strategies and Assistance Mechanisms can be used and replicated to enhance synergies, such as designing roadmaps with EU (and international) funding programmes and initiatives, in order to maximise synergies, and align with Blue Economy priorities and needs. Activities such as signing Memoranda of Understanding, (e.g., between the WestMed Initiative and INTERREG EUROMED), hackathons with local stakeholders, exchanges with managing authorities (ERDF etc.), sea basin or national workshops, or specific thematic technical groups, can be also used in this regard.

Regional contacts should be well informed and guided through the different possibilities of EU funds and networking/synergies. There should be a mentoring system/support enabling to support at regional level those contacts who have less experience.

3. **Allow for consultation with stakeholders and include synergies in the programming of EMFAF funds** . Consult with stakeholders and identify jointly the areas for greater added value for EMFAF future calls could be useful also to strengthen synergies across existing actions and projects (see different types of synergies below). Indeed, synergies can take place in various settings, and these should ideally be considered when launching a new EMFAF action to embed synergies with other programmes and maximise impact of a project depending on their objective and type (regional, commercial, cooperation …). A number of specific elements for potential synergies should be further considered when launching/implementing actions under the EMFAF:

   - TRL (i.e., support for further commercialisation of services/products), with synergies from EMFAF to other funds or vice-versa

   - Territorial levels (e.g., from sub-national to international or across sea basins or across EU) which may allow for synergies with S3 Platforms, KICs, ERDF, etc.

   - Spill-overs (i.e., ideas generated by previous projects that may result in new project submissions even under the EMFAF or under other funds)

   - Value chains (i.e., solutions initially funded could be merged with other projects to address different or broader value chains across blue economy sectors)

   - Land-sea interaction (similarly to the above, innovative solutions could expand their scope to address broader areas and address broader challenges)

4. **Encourage dissemination of results, advocacy, outreach and feedback to policy** is also an important way to foster synergies by making the knowledge available to a vast range of users and facilitate further exploitation.

   For example, carry out portfolio analysis, mapping existing databases, promote success stories, produce regular policy briefs on specific topics/areas can be useful tools to promote cross-programme synergies and maximise knowledge sharing while avoiding future duplications.

   Project portfolio overviews and publications are important for illustrating and guiding actions related to synergies and complementarities, such as further exploiting project results. However, they necessitate consistent investments in terms of effort at the policy officer and project officer levels, along with the appropriate assistance in utilising various IT or publication tools to acquire the necessary updates on funded projects.

Although portfolio analysis overviews are informative, they are however not sufficient for better insight in project outcomes, impacts, etc. This is where cluster seminars and reports are helpful to explain results and explore synergies and increase efficiency. Proposals to organise cluster meetings on a certain theme scanning relevant projects from various funding sources is an interesting approach in this context. (e.g., Sustainable Blue Economy Partnerships (SBEP) portfolio analysis).

The key also lies in providing a space for networking and also carefully selecting cluster event participants based on the event's objectives, whether it's a focused thematic gathering or an attempt at cross-fertilization. Flexibility in this regard is essential, as unexpected synergies can arise when diverse experts come together, even if they initially seem unrelated. While inclusivity is important, target individuals with relevant expertise can enhance the effectiveness of such events. The future work of the SBEP on thematic portfolio analysis for example can be a testbed for this. Other developing initiatives should also be monitored so as to leverage the best fora according to the needs of the users/policymakers.

5. **Organise remote and/or hybrid events** when the primary aim is to gather feedback on a given topic, but keep live events when the goal is to encourage networking between project beneficiaries.

6. **Encourage strategic intervention in projects** and ask new roles to be added in the teams of projects in the form of dedicated community managers. These community managers should specialize in connecting stakeholders, bridging the gap between different sectors, ultimately enhancing the potential for successful projects. There is a need for adaptability and understanding within the complex landscape of European funding schemes. In addition, projects should be asked to include a certain % of their effort into clustering and synergies to exchange and invest time in joint project cluster discussion and production of joint feedback-to-policy material. Finally, organising clustering activities requires a lot of coordination and secretarial support. This should also be addressed and catered for by specialised staff while the work on the content should be left to the experts/scientists in one specific area.

7. **Increased dialogue between European Commission services**. Such dialogue will foster exchange of information, facilitate relevant connections between stakeholders and can have a key role to include synergies by design in programming EU funds, so as to avoid duplication while facilitating knowledge/results sharing and more efficient use of EU funds. Although synergies are easier to achieve in smaller settings, one should explore methods to structure interactions at higher levels. Specific groups around key sectors/policy areas could be envisaged (MSP, aquaculture, transport/ports, energy, etc.), so as to specifically discuss thematic synergies. Structured exchange between colleagues working on relevant sectors for the blue economy is another option (e.g., EISMEA on Tourism, Waterborne transport in CINEA, RTD on MPAs). Periodic engagement with strategic initiatives could also allow greater exchange on how to align ongoing actions.

8. **Strengthen the position of the EU Executive agencies in facilitating the coordination among funding programmes and support project coordinators**. The agencies are well-positioned to facilitate coordination among different funding programmes and provide valuable support to project coordinators. Strengthening the role of agencies in guiding coordinators and informing them about various funding schemes can enhance the utilization of available resources. Additionally, promoting interactions between programmes like EMFAF and Horizon Europe through agencies can further foster synergies and policy feedback, ultimately maximising the impact of EU-funded projects and EU public money. Consideration should also be given to the role of project

advisors, both within and outside the Commission, in driving and supporting these synergies within agencies.

9. **Facilitate access to EU funding programmes by theme/topic or type of participant rather than by programme information**. Stakeholders would rather be interested in looking for funding opportunities according to their sector or type of entity (SME, regional authority, etc.) than by EU programme, as currently displayed by the Funding and Tenders Portal. Further, drafting "synergistic calls" would ensure wider coverage of topics, especially if these calls are more oriented to clusters than to programmes. This would also imply stronger involvement and engagement from all actors concerned, and it would streamline funding to guarantee support to all project phases until commercial maturity is reached. The idea of "synergies by design" refers to the ex-ante identification of the impacts expected by the projects from early innovation stages to success as a business, by designing funding schemes that would enable to adequately accompany a project down the path to commercialization.

Recommendations based on the project beneficiaries' feedback and conclusions of the workshops

1. **Make the framework permanent**: the evaluation of long-term impact of grants should not remain a one-off exercise, otherwise in a few years' time the situation would be again much like it was before the Synergies & Clustering project. In fact, it would be necessary to have a stable framework, whereby at regular intervals an assessment of the impact of grants is carried out. A limitation of the Synergies & Clustering project was that some projects had just finished when their beneficiaries were interviewed, and thus it was unlikely that any impact could have already materialised. Regular evaluations would circumvent this issue and provide more robust results.

2. **One-stop shop for EU funding opportunities**. In alignment with recommendation #9 of the Coherence Panel, project beneficiaries have emphasized that there are many funding opportunities at EU level. However, it is not always straightforward to make sense of the full landscape for those who are not fully familiar with the ecosystem. Ideally, it would be good to have a single portal grouping all funding options, regardless of the funding programme, which potential beneficiaries can browse by topic, rather than by funding instrument. Through a series of questions, a "wizard" should funnel beneficiaries to available funding opportunities at a given moment.

3. **Matchmaking facility**: if the one-stop shop proposed in recommendation #1 is put in place, it might be complemented with a matchmaking facility, similarly to what is being done, for example, by BlueInvest. Rather than matching project beneficiaries with investors, however, the matchmaking facility should facilitate networking and matchmaking between project beneficiaries themselves, regardless of the funding instrument.

4. **Organize dedicated networking events**: to be noted that this is in contrast to the "workshop fatigue" and low engagement rate mentioned as challenges under task 3 "Networking". At the same time, as previously noted, there indeed is a group of project beneficiaries who lamented the lack of networking events and advocated having more workshops similar to those organised during Synergies & Clustering, as – they stated – those were among the few occasions they had to get in touch with other project beneficiaries and learn about what they were doing.

5. **Coaching and/or mentoring**: the workshop on financial engineering and the workshop on investment and new business models revealed that, among the reasons why certain projects are not followed up after the grant period, is the

fact that beneficiaries in some cases did not put in enough effort in their post-grant strategy, that is the set of activities required to become financially self-sufficient. Further, in the specific case of projects developing products and/or services for the market, it turned out that often SMEs might not be familiar with the world of finance and thus find themselves unprepared when trying to raise capital on the market to scale up their project, or they are simply not aware of the different options they may use. In this sense, to maximise the impact of grants – and ultimately to achieve the policy goals that inform the very idea of instituting grants – coaching and mentoring activities should become part of each grant agreement, both for market-oriented and non-market-oriented projects, with a view to increasing the survival rate after the grant period.

6. **Need for establishing targets and baselines**: by definition, grants (should) support highly innovative and risky projects, whose failure rate tends to be quite high. In the US, it is calculated that on average around 50% of startups fail within 5 years since birth[9], and this figure includes all startups, not just the most innovative ones. Therefore, it's important to establish what the realistic expectations are. The fact that most beneficiaries do not happen to scale up their business after a grant is a normal pattern.

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[9] https://www.bls.gov/bdm/us_age_naics_00_table7.txt

7   Annex I – Evaluation Summary

7.1   Standard Evaluation Criteria

As specified in the technical specifications for this contract, '*This work package will allow complementing the interim evaluation by collecting insights from projects funded under the bottom-up calls that were not included in the scope of the previous interim evaluation mainly for timing reasons.*'[10] This evaluation was therefore focused on the beneficiary views on the impact of the funding and on aspects to inform the wider networking and synergies aspects as part of this contract.

The survey and associated questions are structured around criteria agreed with DG MARE and CINEA at the outset of the project, namely:

1. Economic impacts (current and future)
2. Sustainability
3. Scalability
4. Uptake
5. Knowledge transfers
6. Networking and visibility

Only the views of project beneficiaries were sought in relation to these aspects via the EU Survey and interviews. The evaluation did not directly address the standard evaluation criteria or seek the views of other stakeholders, as a full evaluation may do. However, to help inform the wider evaluation of EMFF funding, this section uses the results from this evaluation to provide comments in relation to the standard evaluation criteria:

- effectiveness (whether the EU action reached its objectives)
- efficiency (what are the costs and benefits)
- relevance (whether it responds to stakeholders' needs)
- coherence (how well it works with other actions)
- EU added value (what are the benefits of acting at EU level)

7.1.1   Effectiveness

As specified in the technical specifications:

'*Calls for proposals launched by the European Commission under the EMFF, follow either a top-down approach to investigate or solve a specific problem (i.e. the recyclability of fishing gear, support to the implementation of the Maritime Spatial Planning Directive) or follow a bottom up approach aiming to kick-start new ideas to support the goals of the maritime policy.*'[11]

The projects supported and evaluated here are part of the latter bottom-up projects and are therefore broad and varied in their objectives with a focus on innovation associated with EU maritime policy. In effect this means these are innovation projects associated with maritime sectors and issues, as evidenced by the clusters that have been defined in this project.

Each project set its own objectives and the application & approval process ensured these were aligned with EU maritime policy objectives. While many experienced delays, to

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[10] https://etendering.ted.europa.eu/cft/cft-document.html?docId=76246 p.2

[11] Ibid, p.1

date only two of the 91-funded projects were terminated. The great majority of projects were therefore completed and 66% of projects reported an increase in Technology Readiness Level (TRL). Not all projects have resulted in products to be taken forward to commercialization, but 66% of projects reported that products were available or being prepared for market. Additionally, 35% of projects developed at least 67 new IP assets or patents.

The EU's Integrated Maritime Policy (IMP) (COM(2007) 0575) is a policy framework aiming to foster the sustainable development of all sea-based activities and coastal regions by improving the coordination of policies affecting the oceans, seas, islands, coastal and outermost regions and maritime sectors, and by developing cross-cutting tools. The main objectives are set out in the table below with comments on where the projects funded here may have contributed to those objectives.

Table 3: EMFF Blue Economy fundings contribution to Integrated Maritime Policy Objectives

IMP Objective[12]	EMFF-funded Blue Economy Project Contribution
Maximising the sustainable use of the oceans and seas in order to enable the growth of maritime regions and coastal regions as regards shipping, seaports, shipbuilding, maritime jobs, the environment and fisheries management;	As evidenced by the clusters developed, funded projects cover a wide range of blue economy sectors. The intent of these projects is to develop innovative knowledge or technologies that would ultimately contribute to growth in maritime and coastal regions. As highlighted in section 3, over 50% reported an increase in project-related employment, which can be assumed to be 'maritime jobs'.
Building a knowledge and innovation base for maritime policy through a comprehensive European Strategy for Marine and Maritime Research (e.g. the Maritime Strategy Framework Directive (2008/56/EC) and the Horizon 2020 programme;	Around 35% of the evaluated projects created knowledge-based outputs, which were then disseminated. Several projects have continued and expanded with follow-on funding from Horizon 2020/Horizon EU.
Improving the quality of life in coastal regions by encouraging coastal and maritime tourism, creating a Community Disaster Prevention Strategy and developing the maritime potential of the EU's outermost regions and islands;	An early call was for projects on 'Underwater cultural heritage', with 3 projects funded in the Adriatic (ATAS), Greece (UCRCA) and Western Black Sea (NIRD). These developed and promoted sustainable tourism products. There are 6 further projects included in the 'Sustainable tourism and cultural heritage' cluster. None of the projects are associated with the EU's outermost regions and islands.

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[12]https://www.europarl.europa.eu/factsheets/en/sheet/121/integrated-maritime-policy-of-the-european-union#:~:text=The%20EU's%20Integrated%20Maritime%20Policy,and%20by%20developing%20cross%2Dcutting

Promoting EU leadership in international maritime affairs through enhanced cooperation at the level of international ocean governance and, on a European scale, through the European Neighbourhood Policy (ENP) and the Northern Dimension	This objective is less applicable to the bottom-up projects supported through EMFF.
Raising the visibility of maritime Europe through the 'European Atlas of the Seas' internet application, as a means of highlighting the common European maritime heritage, and by celebrating an annual European Maritime Day on 20 May.	This contract itself, through organising workshops, publishing success stories and social media posts has contributed to raising the visibility of Maritime Europe. The project team and many of the funded projects have attended and participated in the European Maritime Day in diverse settings: workshops, pitching sessions etc..

Sections 3.5 to 3.7 of the Annex to the Final Report summarise the success factors and challenges that influenced the effectiveness of the projects.

7.1.2 Efficiency

There has been no attempt in this evaluation to assess the costs and benefits in relation to the funding provided. Section 3.2 of the Annex to the Final Report details the economic impact on beneficiaries, which provides indication of the efficiency of these projects. Project beneficiaries were also asked to predict what economic impact is expected in the next five years (section 3.3 of the Annex to the Final Report).

In terms of financial benefit, 44% of projects stated that a change in revenue was not applicable to the project (e.g. knowledge-based outputs that could not be monetised) or expected (e.g. the project was not at the stage enabling commercial development). As is usually the case with 'seed-funding', some innovative products may prove to be non-viable.

The clusters with the highest increase in revenue are 'Renewable Energy', 'Bioeconomy aquaculture and fisheries' and 'Sustainable tourism and cultural heritage' and here we may expect a number of outputs to result in very positive cost-benefit ratios in relation to the funding provided. It should, however, be recognised that the funding is only a proportion of research and development costs.

50% of the 71 projects surveyed stated that a change in project profitability was not applicable to the project, with a further 20% reporting that no changes in project profitability had occurred. It is however important to consider that this is not indicative of poor financial success for most projects: many projects had either only just begun selling or achieving their first sales, and so had limited information to determine project profitability. Additionally, many beneficiaries consider that the costs of R&D, marketing and so on, must first be covered before "true profitability" is achieved.

The percentage of projects reporting a positive change in project profitability were relatively low by cluster. Sustainable tourism and Cultural heritage recorded the highest percentage of projects (33%) and had the only project reporting an increase of over 40% in project related profitability. Presumably this is due to the ability for this cluster's project outputs to be immediately commercialised rather than progressing along the TRL process.

In terms of the development of new products and services, 35% of all projects that had stated that new project related assets had been developed, 6% of which reported the development of 5 or more new assets. By cluster Renewable energy, Bioeconomy,

aquaculture, & fisheries, and Sustainable and smart transport clustered projects experienced the highest levels of projects reporting the development of new project related products and services. In terms of market readiness and sales, 42% of all projects reported that new products were prepared for market, and a further 24% of projects stated products were available for market. In terms of sales, 11% of all projects reported they had achieved both national and export sales. Sustainable tourism and cultural heritage, sustainable and smart transport and bioeconomy, aquaculture, and fisheries' clustered projects achieved the highest levels of commercilaisation success.

It is therefore likely that we may expect a number of project related projects and services to result in very positive cost-benefit ratios, in relation to the funding provided; as new products achieve market sales and success, they will ultimately contribute to further capital generation, aiding the development and longevity of the beneficiary projects after funding has ended. Additionally, the development of both national, European, and intenational sales markets for project products will not only lead to greater returns for projects, but will likely lead to greater project expanison both physically as operations scale to meet increased market demands, but also economically through the increased revenues and sales this will likely bring.

Employment related changes were one of the most significant benefits to beneficiaries, with over 50% of the 71 projects reporting an increase in project-related employment, and 90% of all projects stating that 1 or more staff had benefitted from upskilling through the project. Renewable energy projects overwhelmingly experienced the highest increase in employment (83%) with 100% of all Sustainable tourism and cultural heritage, 96% of all Bioeconomy, aquaculture, and fisheries and 92% of all Renewable energy clustered projects reporting staff had benefitted from upskilling.

There are other, less tangible, but significant benefits resulting from the projects, particularly the knowledge-based projects, which should also be considered such as upskilling and operators in the maritime sector using the information provided to make more informed choices.

7.1.3   Relevance

The relevance of the funding programme is evident in addressing the need to support innovation in the blue economy, which has several emerging economic sectors and established maritime sectors that all must innovate to address future challenges such as climate change and decarbonisation. Direct economic returns are not guaranteed, making investment in R&D high risk and there is a continued need for public funding to support innovation.

With a view to maintain the relevance of the programme to beneficiaries, a workshop on future calls was conducted in May 2023 to discuss future stakeholder needs. The eight successful project beneficiaries concurred that overall the broader scope of later calls enabled a wide range of stakeholders to apply. The earlier, more targeted calls pre-defined the 'need' of stakeholders by specifying what type of projects the call should fund.

EMFF funding enabled the development of prototypes for large scale demonstrations and testing, which supported transition to the next stage and demonstrated its effectiveness to the consumer, helping build trust and achieve new investments and sales.

Project beneficiaries were asked what could be improved for future calls:

- **The need for R&D project specific grants or reducing the TRL required to be eligible for calls**; Beneficiaries with research and development focused projects highlighted that a major issue is the lack of calls specifically for R&D projects. Many calls, including Horizon 2020/EU programme, are very technology/TRL centric and want to move TRLs forward. Research projects find it hard to incorporate TRL change into their project, or many are starting at a TRL of 0. Consequently, many are ineligible for many calls. This is important to

address as ground level R&D is often needed for further developments within projects and so it may not be possible for projects to fund their necessary research. Moving away from a TRL focus on calls or providing more R&D specific calls would help open funding for more research-based projects.

- **A tiered system for funding calls**; Beneficiaries highlighted the need for a wider range of funding opportunities to meet the needs of projects at various stages of their development cycles. This included funding calls which considered the success of prior projects in the evaluation process, and offer continued funding for successful projects which need additional funding e.g. "capitalization calls". Specific funding calls for new upcoming projects (e.g., bridge funding), or low-level innovation grants which would enable projects to reach their prototype stage and assist in helping projects demonstrate their projects successes to potential consumers and investors.

- **Increasing the duration of projects**; Funding periods need to be sufficient to allow adequate testing of potential solutions and prototypes with stakeholders to ensure that their market readiness is accelerated.

- **Calls which allow for cooperation with Research institutes and SMEs**; Beneficiaries highlighted the need for calls which enable the establishment of small consortia between SMEs/start-ups and research entities. Several projects stated that the success of their project was due to cooperation between SMEs and research institutes, with research institutes in particular helping absorb the administrative burden linked to grant management. However, large projects, such as the ones funded under Horizon, have an inertia and complexity that was not present in the sustainable blue economy calls EMFF had in the past. Many small businesses lack the capacity to deal with the administrative burden of grant management, but research institutes were unable to apply for further calls. Thus many projects lose skilled partners and effective working relationships from current calls. If calls aided SMEs with the administrative burden and included research institutes, it would be of great benefit to many projects and would be an entry point for many (small) organisations and consortia to EMFF.

7.1.4 Coherence

There has been no consideration in this evaluation as to how well these bottom-up project align with other actions, specifically the top-down activities funded through the EMFF direct management budget. However some general statements on coherence can be made.

In 2021 the EU published its strategy: A New Approach to a Sustainable Blue Economy[13], stating: "Rather than an exhaustive action plan, the new approach provides coherence across the blue economy sectors, facilitates their coexistence and looks for synergies in the maritime space, without damaging the environment. It also underlines the need for investment in research, skills and innovation." This illustrates that there is strong overall coherence between this funding programme (and indeed this Synergies and Clustering contract) and the EU's overall approach to the Blue Economy.

The project application, evaluation and approval process ensured that the projects were coherent with EU policies, particularly ensuring alignment with the EMFF and the IMP policy. This indicates good internal coherence with EU policies and activities. However section 3.7 of the Annex to the Final Report on 'external barriers and challenges' and comments from stakeholders related to other funding sources such as the European Investment Council, illustrates that some improvements in overall coherence can be made.

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[13] https://oceans-and-fisheries.ec.europa.eu/ocean/blue-economy/sustainable-blue-economy_en

7.1.5   EU Added-value

The funding support provided by the EU was further enhanced by DG MARE's efforts to encourage synergies between other EMFF-funded projects and projects funded under different EU programmes. Around a third of project beneficiaries indicated some co-operation/collaboration had been achevied (section 5.3 of the Annex to the Final Report describes this further).

A workshop on future calls was conducted in May 2023 to discuss stakeholder needs. The main points that emerged from this discussion (with around eight successful project beneficiaries) are:

- EMFF funding enabled the development of **prototypes for large scale demonstrations and testing**, which supported transition to the next stage and demonstrated its effectiveness to the consumer, helping build trust and achieve new investments and sales.

- Beneficiaries stated that funding under EMFF and similar funding mechanisms such as the Blue invest fund is very appealing to potential clients and investors; acceptance to EMFF is viewed as **highly prestigious and a sign of the quality of the project.**

7.2   Conclusions

In total 91 projects were assisted by the EMFF under several Blue Economy calls between 2016-2021, with calls being either general or specifically related to a theme such as 'blue careers' or 'blue labs'. For this evaluation, survey responses were received from 71 of the 91 EMFF-funded projects and 64 interviews were conducted by the evaluation team.

7.2.1   Impact on beneficiaries

- Almost a quarter of respondents reported delays and extensions, which were primarily due to Covid-19 restrictions. Other causes of delay were regulatory in nature, such as receiving the necessary permissions to deploy equipment in the marine environment.

- 66% of all projects reported a change in project TRL since the beginning of the project, and 30% stated a TRL change was not expected or applicable, i.e. knowledge-based projects. 'Ocean health and observation' clustered projects had the highest proportion of projects (89%) reporting a change in project TRL of 1 or more.

- 35% of projects had developed new Intellectual Property (IP) or patents. Overall this equates to the development of at least 67 new products, IP assets and patents. 'Renewable energy' clustered projects reported the highest percentage of projects (67%) which had developed 1 or more new project related assets.

- 42% of all projects reported that new products were prepared for market, 24% of projects had products available on the market, and 11% of all projects reported they had achieved both national and export sales.

- The number of staff experiencing upskilling was one of the most positive outcomes reported by projects, with 90% of all projects stating that 1 or more staff had gained new skills through the project. Significant upskilling also extended to other stakeholders, particularly for projects with knowledge-based outputs. Several projects indicated that the new skills and experience gained were widely transferrable among their current sector and other sectors and industries.

- It is encouraging to hear that over 50% of all projects reported an increase in project-related employment, with 14% of all projects stating they had achieved the highest reportable increase in project-related employment of over 40%. Renewable energy projects experienced the highest increase in employment, with 83% of projects reporting a positive increase in employment.

- A large proportion of projects (44%) stated that a change in revenue was not applicable to the project. This was evident particularly among projects which aimed at filling the knowledge gap and not developing a marketable product. A further 21% of projects reported no change in project revenue, mainly due to products not yet reaching the commercialisation stage or recently available for market.

- The clusters reporting the highest percentage of projects experiencing a positive change in project related revenues were 'Renewable energy' projects (42%), then 'Bioeconomy, aquaculture and fisheries' projects (36%) and 'Sustainable tourism and cultural heritage' projects (33%). Profitability followed similar trends to revenue. Negative impacts on profitability were reported where the costs of R&D are yet to be recovered through sales.

- Expected changes in project-related revenues are positive, with most projects (58%) expecting increased project revenues, and 24% expecting to see increased revenues of over 40%. Again the cluster with the highest expectations is Renewable Energy, reflecting the expected continuation of high growth in the sector.

7.2.2   Future Project Development

- Nearly all projects (86%) have developed (31%) or implemented post-project plans (55%) and carried out some form of post-project activity.

- 62% of all projects have either evidence of some form of commercialization plan; 30% of all projects having evidence of a commercialization plan in place and 32% having evidence of the implementation of a commercialization plan. Most of the remainder are projects without commercial expectations, i.e. knowledge-based projects. But there are examples of knowledge-focused projects carrying out post-project development.

- It is highly positive to see that 80% of all projects either have a plan for follow on activities (35%) in place or have evidence of implementing follow-on activities (45%). However, many post-project activities included the production of new funding applications for follow-on projects.

- 59% of all projects have reported the potential for replication of the project at a larger scale and in other EU regions, with a further 39% of projects having evidence of achieving replication at larger scale and a similar proportion (35%) in other EU regions. Only 10% of all projects reported no potential for replication at larger scale. There is also the stated potential for the majority (62%) to replicate the project in other sectors and markets.

7.2.3   Networking & Synergies

- 84% of coordinators stated that the project had planned (23%) the transfer of knowledge or had implemented this (61%) and a further 10% plan to do so. The 'Ocean health and observation' cluster reported the highest percentage of projects (78%) which could evidence the implementation of knowledge transfer plans.

- Many report the publication of all outputs on the project website as well as actively sharing knowledge through events that they have organized themselves or have been invited to. Several were able to share website statistics to show

substantial levels of interest in the project. Two thirds of projects have project outputs that are freely accessible and 11% have outputs that can be purchased.

- More virtual events were planned and attended during the Covid pandemic, which had the benefit of attracting more attendees than in-person events. However, several beneficiaries noted that in person attendance at stakeholder workshops, seminars and conferences were the most successful and preferred method of project communicating project activities and results.

- Networking events and conferences attended by projects included the likes of the European Maritime day, WestMed, POSINONEIA, and Blacksea-connect. Attending such events was highlighted as key to creating networks. This is particularly important for beneficiaries delivering projects within an industry they had little prior experience or knowledge of.

7.2.4   Comparative Analysis

Across all projects:
- Across all projects, strong positive correlations (above 0.5) are associated with **Impact** and **Scalability** in terms of economic change and sustainability. This is logical as the projects with the largest impact and the ability to scale up are expected to have the greatest potential for increases in revenue and profits.

- A correlation between **scalability** and **uptake** is also evident for knowledge-based projects, which are more likely to be 'taken up' by those outside the project consortium if the projects outputs are already being shared more widely.

- Weak negative correlations between **economic change** and **knowledge transfer** are identified and understandable as these relate to knowledge-based outputs without the potential for commercialization.

Notable for specific clusters:
- *Bioeconomy, fisheries and aquaculture* clustered projects, show a moderately positive correlation (0.49) was evident between **Scalability** and **Knowledge transfer** suggesting that greater scalability enabled projects to have greater outreach to undertake more knowledge transfer activities.

- *Ocean health and observation* clustered projects reported very strong positive correlation (0.75) between **Sustainability** and **Synergies**, suggesting projects which engaged in more synergies achieved greater project sustainability. A strong positive correlation (0.54) was also evident between **Economic change** and **Knowledge transfers**, which likely suggests that the more knowledge transfer that is conducted, the greater economic success Ocean health and observation projects were able to achieve. A similar relationship was evident between scalability and synergies. A moderately negative correlation (-0.47) was evident between **Impact** and **Knowledge transfer**, which may be expected as those projects that achieved lower levels of project development were less inclined to engage in knowledge transfer. While understandable, from an innovation perspective it is also very useful to learn lessons from projects that do not achieve what was intended as well as those that do.

- *Renewable energy* clustered projects show a very strong positive correlation (0.8) between **Economic change** and **Networking**, suggesting that projects which attended or organised more networking events saw greater levels of economic success, likely as a result of increased project awareness and through meeting a greater number of prospective clients. A strongly positive correlation (0.7) was also evident between project **Impact** and **Synergies**, suggesting that projects which had formed synergies with other projects saw greater project impacts, such as TRL change and the development of new IP assets.

- *Sustainable tourism and cultural heritage* clustered projects had a strong positive correlation (0.7) between **Uptake** and **Knowledge transfers**, logically greater

knowledge transfer should result in more uptake. A similarly strong positive correlation (0.7) was evident between **Uptake** and **Synergies** (0.64): projects which engaged in more synergies were able to achieve greater project uptake. A moderately negative correlation (-0.5) is evident between **project Impact** and **Synergies**, which could suggest that projects which underperformed struggled to find synergies or did not look to engage in such activities.

7.2.5   Success factors & Challenges

- Project coordinators identified a range of factors contribuiting to a successful project and what challenges were faced:

  - ➤ Team – an appropriate range of skills and commitment of consortium partners.

  - ➤ Planning – good project design and active project management.

  - ➤ Engagement – effective communication with all relevant stakeholders.

  - ➤ Market intelligence – through continued engagement with stakeholders in the relevant sector to assure beneficiaries of demand.

  - ➤ Investment & finance – sourcing sufficient financing from additional investors.

- The internal challenges faced by projects can be summarized as:

  - ➤ R&D unknowns – attempting new things brings challenges and uncertainties, e.g. number of prototypes required and timings.

  - ➤ Budgeting – dealing with rising costs of materials and logistics.

  - ➤ Partners – lack of engagement/commitment from certain project partners; the ability to provide the expected skills and services to the project; language barriers.

  - ➤ Upscaling – the ability to grow the project to a scale that enables commercialization due to a lack of staff skills, capital or other limits to scaling up processes.

- Most internal challenges were overcome or mitigated to some extent, except for some more fundamental aspects such as insufficient budget or the lack of all necessary skills within consortium.

- Covid dominated external challenges faced by the projects, along with market changes, a worsening economic outlook, the ability for users to take up new technology, public sector challenges (delays in permitting), a lack of economic incentives for uptake of innovative products and some legislative barriers to innovative solutions and new qualifications.

8   Annex 2 – Clustered projects

Project	Code	Cluster	Theme_1	Theme_2	Challenge_1	Challenge_2	Sea basin	Type of beneficiary
Aerones	959016	Renewable energy	Renewable energy		Digitalisation	Investment and new business models	Baltic Sea	Company
AFRIMED	789059	Bioeconomy, aquaculture and fisheries	Algae		Investment and new business models	Networking	Mediterranean	Research
AlgaeDemo	789783	Bioeconomy, aquaculture and fisheries	Algae		Investment and new business models		North Sea	Research
ALGAENAUTS	101038250	Bioeconomy, aquaculture and fisheries	Algae	Blue bioeconomy	Investment and new business models		Not relevant	Company
AMALIA	750419	Bioeconomy, aquaculture and fisheries	Algae	Blue bioeconomy	Investment and new business models	Digitalisation	Not relevant	Company
AQUA-LIT	789391	Ocean health and observation	Ocean health	Ocean observation	Investment and new		Not relevant	Company

Synergies and Clustering between Maritime Projects

AquaPekilo	101038541	Bioeconomy, aquaculture and fisheries	Aquaculture		business models Investment and new business models		Not relevant	Company
ARCHEOSub	749264	Sustainable tourism and cultural heritage	Cultural heritage		Digitalisation		Mediterranean	Company
ArtReefs		Sustainable tourism and cultural heritage	Sustainable tourism		Networking		Mediterranean	Company
Aspiring wingsails	863746	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Atlantic Ocean	Company
ASSESS	750174	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges	Sustainable and smart transport	Adriatic	Cluster
ATAS	742066	Sustainable tourism and cultural heritage	Sustainable tourism	Cultural heritage	Digitalisation	Investment and new business models	Adriatic	Public-private partnership

ATOMS	958976	Renewable energy	Renewable energy		Investment and new business models		Not relevant	Company
BAPSI	863545	Bioeconomy, aquaculture and fisheries	Fisheries	Aquaculture	Blue careers, skills and next generation challenges	Blue careers, skills and next generation challenges	Mediterranean	Association
BASTA	863702	Ocean health and observation	Ocean health	Ocean observation	Digitalisation		Mediterranean Sea	Research
BBMBC	749359	Bioeconomy, aquaculture and fisheries	Blue bioeconomy		Blue careers, skills and next generation challenges	Blue careers, skills and next generation challenges	Not relevant	University
BIOGEARS	863708	Bioeconomy, aquaculture and fisheries	Aquaculture	Ocean health	Investment and new business models		Atlantic Ocean	Research
Blue RoSES	863619	Sustainable tourism and cultural heritage	Cultural heritage	Sustainable and smart transport	Digitalisation	Investment and new business models	Mediterranean Sea	Research
Blue SMART	750010	Bioeconomy, aquaculture and fisheries	Aquaculture		Blue careers, skills and next	Blue careers, skills and next	Adriatic	University

					generation challenges	generation challenges		
BLUENET	788894	Ocean health and observation	Ocean health	Ocean observation	Investment and new business models	Networking	Not relevant	Cluster
CETBC	749363	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges	Blue careers, skills and next generation challenges	North Sea	Association
CleanerShip	958949	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Not relevant	Company
Cluster ACT	789644	Sustainable and smart transport	Sustainable and smart transport	Sustainable tourism	Networking		Mediterranean	Cluster
CMES - WestMed	789500	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges	Networking	Mediterranean	Research
CO2NTROL	101038570	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models	Digitalisation	Not relevant	Company

CORAL4HEALTH	863656	Bioeconomy, aquaculture and fisheries	Blue bioeconomy		Investment and new business models		Not relevant	Company
CTP (Catching the Potential)	863529	Bioeconomy, aquaculture and fisheries	Fisheries		Blue careers, skills and next generation challenges		North Sea	Non-profit
DEEP BLUE	789633	Several	Several		Blue careers, skills and next generation challenges	Networking	Mediterranean	Research
DEMO-BLUESMARTFEED	789750	Bioeconomy, aquaculture and fisheries	Aquaculture		Investment and new business models	Digitalisation	Mediterranean	Company
DiveSafe	789635	Sustainable tourism and cultural heritage	Cultural heritage	Sustainable tourism	Digitalisation		Mediterranean	Company
DOCC-OFF	863696	Renewable energy	Renewable energy		Digitalisation		Atlantic Ocean	Association
EASY FEED	670818	Bioeconomy, aquaculture and fisheries	Aquaculture		Investment and new business models		Not relevant	Company

Synergies and Clustering between Maritime Projects

ENSAMBLE	789295	Bioeconomy, aquaculture and fisheries	Fisheries		Community-led local development	Networking	Mediterranean	FLAG
Entrefish	750011	Bioeconomy, aquaculture and fisheries	Fisheries	Aquaculture	Blue careers, skills and next generation challenges		Mediterranean	Company
ENTROPI	751867	Renewable energy	Renewable energy	Aquaculture	Investment and new business models		Atlantic	Public-private partnership
ESENSE	101038191	Renewable energy	Renewable energy	Ocean health	Digitalisation	Investment and new business models	Not relevant	Company
ExPloTect	863693	Ocean health and observation	Ocean observation	Ocean health	Investment and new business models		Baltic Sea	Research
FISH4FISH	863697	Bioeconomy, aquaculture and fisheries	Blue bioeconomy	Ocean health	Investment and new business models		Mediterranean Sea	University
FleetUSV	958948	Ocean health and observation	Ocean observation		Investment and new business models		Atlantic Ocean	Company

FreShER	863724	Renewable energy	Renewable energy		Investment and new business models		Not relevant	Company
FTL-Fish	670718	Bioeconomy, aquaculture and fisheries	Fisheries		Investment and new business models		North Sea	Company
GREENing the BLUE	789508	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Not relevant	Company
InnovaFeed BEW 2019	958945	Bioeconomy, aquaculture and fisheries	Aquaculture	Blue bioeconomy	Investment and new business models		Atlantic Ocean	Company
INvertebrateIT	751532	Bioeconomy, aquaculture and fisheries	Aquaculture		Networking		Not relevant	Company
KELP-EU	101038311	Bioeconomy, aquaculture and fisheries	Algae	Blue bioeconomy	Investment and new business models		Not relevant	Company
Lab4Dive	753851	Sustainable tourism and cultural heritage	Cultural heritage		Investment and new business models	Digitalisation	Mediterranean	Company

Synergies and Clustering between Maritime Projects

LEAPWind	789307	Renewable energy	Renewable energy		Investment and new business models			Not relevant	Company
Litterdrone	749553	Ocean health and observation	Ocean observation	Ocean health	Digitalisation			Not relevant	Association
MarENet	863595	Several	Several	Several	Blue careers, skills and next generation challenges	Networking		Atlantic Ocean	University
marGnet	789314	Ocean health and observation	Ocean health		Digitalisation			Mediterranean	Research
MarLEM	863713	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges			Atlantic Ocean	Company
MedSkippers	789395	Sustainable tourism and cultural heritage	Sustainable tourism		Networking	Blue careers, skills and next generation challenges		Mediterranean	Company
MENTOR	749365	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next			Not relevant	University

MER-CLUB	863584	Bioeconomy, aquaculture and fisheries	Blue bioeconomy	Ocean health	generation challenges Investment and new business models		Atlantic Ocean	Research
MUSSELPRO	863681	Bioeconomy, aquaculture and fisheries	Blue bioeconomy		Digitalisation	Investment and new business models	Atlantic Ocean	Company
NAUTILUS	863524	Sustainable tourism and cultural heritage	Sustainable tourism		Blue careers, skills and next generation challenges		Mediterranean Sea	Association
NeSSIE	752861	Renewable energy	Renewable energy		Investment and new business models		Not relevant	Public-private partnership
NetTag	789121	Ocean health and observation	Ocean health	Fisheries	Digitalisation		Atlantic	Research
NIRD	742021	Sustainable tourism and cultural heritage	Sustainable tourism	Cultural heritage	Community-led local development		Black Sea	Public-private partnership

Synergies and Clustering between Maritime Projects

OCEANETS	789390	Ocean health and observation	Ocean health		Investment and new business models		Not relevant	Association
OCEANMET	789296	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models	Digitalisation	Not relevant	Company
OpenMode	863562	Bioeconomy, aquaculture and fisheries	Aquaculture	Blue bioeconomy	Digitalisation	Networking	Not relevant	Company
Photolicer	958981	Bioeconomy, aquaculture and fisheries	Aquaculture		Investment and new business models		Atlantic Ocean	Company
PowerFLEX	959001	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models	Blue careers, skills and next generation challenges	Baltic Sea	Company
PROCREW	755137	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges		Not relevant	University
SafeWAVE	101000175	Renewable energy	Renewable energy		Networking	Blue careers, skills and next	Atlantic Ocean	Research

					generation challenges			
SATHScale	958938	Renewable energy	Renewable energy		Investment and new business models	Digitalisation	Atlantic Ocean	Company
ScienceDIVER	863674	Sustainable tourism and cultural heritage	Cultural heritage	Ocean observation	Blue careers, skills and next generation challenges	Networking	Not relevant	University
Sea of Experience	863551	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges	Networking	Mediterranean Sea	University
SEA Wave	787660	Renewable energy	Renewable energy	Ocean health	Networking		Not relevant	Company
SEAFOOD ALGTERNATIVE	101038453	Bioeconomy, aquaculture and fisheries	Algae		Investment and new business models		Not relevant	Company
SEASAM-AI	958930	Ocean health and observation	Ocean observation	Ocean health	Digitalisation		Mediterranean Sea	Company
SEASTAR	863731	Bioeconomy, aquaculture and fisheries	Aquaculture		Digitalisation		Not relevant	Company

Synergies and Clustering between Maritime Projects

Project	ID							
Seawing4Blue	101038256	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models	Digitalisation	Not relevant	Company
SIMBIOSE	863737	Renewable energy	Renewable energy	Ocean health	Investment and new business models		Outermost	Company
SMART-HATCHERY	863709	Bioeconomy, aquaculture and fisheries	Aquaculture		Digitalisation		Atlantic Ocean	Company
SpaceTech4Sea	789154	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Not relevant	Company
SpecTUNA	789312	Bioeconomy, aquaculture and fisheries	Fisheries		Digitalisation	Investment and new business models	Not relevant	Company
SpilLess	749374	Ocean health and observation	Ocean health	Ocean observation	Investment and new business models	Digitalisation	Atlantic	Company
STARFISH 4.0	863550	Bioeconomy, aquaculture and fisheries	Fisheries	Ocean observation	Digitalisation	Community led-local development	Mediterranean	Company

T4BS	863621	Sustainable tourism and cultural heritage	Sustainable tourism		Community-led local development	Digitalisation	Black Sea	Company
TEAMS	863555	Sustainable and smart transport	Sustainable and smart transport		Blue careers, skills and next generation challenges		Baltic Sea	University
TECOW	101038671	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Not relevant	Company
UCRCA	742020	Sustainable tourism and cultural heritage	Sustainable tourism	Cultural heritage	Investment and new business models		Mediterranean	Company
ULVA FARM	101038333	Bioeconomy, aquaculture and fisheries	Algae		Investment and new business models		North Sea	Company
VesselsLife.com	863565	Sustainable and smart transport	Sustainable and smart transport		Digitalisation	Investment and new business models	Not relevant	Industry
VPSTTG	789473	Renewable energy	Renewable energy		Investment and new business models		Atlantic	Company

Synergies and Clustering between Maritime Projects

WaveFarm	958970	Renewable energy	Renewable energy		Investment and new business models		Baltic Sea	Industry
WESE	787640	Renewable energy	Renewable energy	Ocean health	Digitalisation		Atlantic	Association
WINNEW	101038351	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		North Sea	Company
ZboxBlueLogistics	958961	Sustainable and smart transport	Sustainable and smart transport		Investment and new business models		Mediterranean Sea	Industry

9 Annex 3 – Projects included in the evaluation

Name of project (Project Acronym)	Project website address	Project start date	Project end date
AFRIMED	http://afrimed-project.eu/	16/01/2019	31/12/2022
AlgaeDemo	www.algaedemo.eu	01/01/2019	31/12/2022
ALGAENAUTS	www.algaenauts.eu	01/10/2021	30/09/2023
AMALIA	http://amaliaproject.eu/	01/02/2017	31/03/2019
AQUA-LIT	www.aqua-lit.eu	01/01/2019	31/12/2020
ARCHEOSub	http://www.archeosub.eu/index.php/en/	01/02/2017	31/12/2018
ArtReefs	www.artreefs.eu	01/08/2016	31/07/2018
ASSESS	http://assess.dia.units.it/	01/02/2017	28/02/2019
ATOMS	https://esteyco.com/projects/atoms/	01/09/2020	30/04/2023
BAPSI	https://bapsi.eu/	01/11/2019	30/04/2022
BASTA	https://www.basta-munition.eu/	01/12/2019	30/11/2022
BBMBC	https://www.bbmbc.eu/fr/accueil.html	01/01/2017	31/12/2019
BEW	https://innovafeed.com/partenaires/	22/09/2020	22/09/2023
BIOGEARS	www.biogears.eu	01/11/2019	30/04/2023
Blue Career Centre of Eastern Mediterranean and Black Sea (MENTOR)	http://www.bluecareers.org/	01/03/2017	28/02/2019
Blue Education for Sustainable Management of Aquatic Resources - BLUE SMART	https://bluesmart.hr/en/	01/01/2017	31/12/2018
Blue RoSES	www.blueroses.eu	01/12/2019	31/05/2022
BLUENET	https://www.bluenetproject.eu/	01/01/2019	30/06/2021
Catching the Potential - CTP	https://catchingthepotential.eu/	01/11/2019	31/10/2023
Cluster ACT	http://clusteract.eu/	01/01/2019	31/12/2021
CMES - WestMed	www.cmeswm.com	01/01/2020	30/06/2022
Cooperation in Education and Training for Blue Careers (CETBC)	www.stc-group.nl/bluecareers	01/01/2017	31/12/2018
Coral4Health	Zoan Biomed.com	01/11/2019	31/10/2021
DEEP BLUE	https://blueskills.ogs.it/deepblue	01/01/2019	30/06/2019
DEMOBLUESMARTFEED	https://bluesmartfeed.eu/	01/01/2019	30/09/2022
DiveSafe	https://divesafe.eu/	01/01/2019	31/03/2022
ENSAMBLE	www.ensamble.eu	01/01/2019	31/05/2021
Entrefish	entrefish.eu	01/03/2017	28/02/2019
ENTROPI	https://www.mseinternational.org/projects/?story_id=55	01/04/2017	31/03/2019
ESENSE	https://elwave.fr/elwave/projet-esense/	01/09/2021	31/08/2023
ExPloTect	www.explotect.eu	01/12/2019	30/11/2022
FISH4FISH	http://fish4fish.dbcf.unisi.it/	01/11/2019	31/10/2022
Fresher	https://fresher-project.eu/	01/11/2019	30/09/2022
FTL-Fish	https://sntech.co.uk/blog/boulogne-sur-mer-research-trip-part-two/	01/01/2019	31/12/2019
Invertebrate IT	https://invertebrateitproject.eu/	01/04/2017	01/03/2019
Kelp-EU	https://oceanium.world/kelp-eu/	01/10/2021	31/12/2023
Lab4Dive	https://lab4dive.gr/en/	01/03/2017	28/02/2019
Leapwind	www.eirecomposites.com/leapwind/	01/01/2019	31/12/2020
Litterdrone	https://litterdrone.aebam.org/	01/02/2017	31/01/2019
MarENet	https://www.marenet.org/home/	01/11/2019	31/10/2021
marGnet	www.margnet.eu	01/01/2019	31/12/2020
MarLEM	https://grupoqualiseg.com/en/marlem-en/	01/11/2019	30/04/2023
MER-CLUB	www.mer-club.eu	01/11/2019	30/10/2023
NAUTILUS	https://nautiluscert.eu/	01/11/2019	31/01/2023
NetTag	https://nettag.ciimar.up.pt/	01/01/2019	30/06/2021
OCEANETS	http://oceanets.eu/	01/01/2019	30/06/2021
OPENMODE	www.open-mode.eu	01/11/2019	31/10/2021
PHOTOLICER	www.PHOTOLICER.com	01/12/2021	12/02/2023
SafeWAVE	https://www.safewave-project.eu/	01/10/2020	30/09/2023
SATHScale	https://sathscale.eu/about-the-project/	01/11/2020	31/10/2023
Seafood Alternative	https://www.olalafoods.fr/fr/	01/08/2021	31/07/2023
SEAWING4BLUE	https://www.airseas.com/seawing4blue	01/09/2021	31/08/2023
SMART-HATCHERY	https://www.smarthatchery.eu/	01/11/2019	30/10/2021
SpaceTech4Sea	https://www.oceanfinance.gr/business-development/spacetech4sea/	01/01/2019	30/06/2022
SpecTUNA	https://spectuna.com/	01/01/2019	30/06/2022
SpilLess	https://spilless.ciimar.up.pt/	01/02/2017	31/03/2019
STARFISH 4.0	https://www.starfish-ssf.eu	01/12/2019	31/05/2022
Sustainable Innovation in la Martinique: BIOfouling Solutions for clean Energy (SIMBIOSE)	https://www.simbiose-biofouling.eu	01/11/2019	29/02/2024
Tourism 4.0 for the Black Sea (T4BS)	https://www.t4bs.eu/	01/11/2019	31/12/2021
UCRCA	www.diveinhistory.com/	01/01/2017	30/04/2018
ULVA FARM	www.nordicseafarm.com	01/10/2021	31/12/2023
VESSESLSLIFE	https://vesselslife.com/	01/11/2019	31/03/2021
VPSTTG	www.simecatlantis.com	01/01/2019	31/12/2021
WaveFarm	www.wavefarm.eu	01/11/2020	31/10/2023
WESE	https://wese-project.weebly.com/	01/11/2018	31/10/2021
EASYFEED	www.easyfeed-project.eu	01/01/2019	31/12/2020
TECOW	http://www.tecow.eu	01/11/2021	30/11/2024
Offshore Robotic Blade Care System (Aerones)	https://aerones.com/cases/	01/10/2020	30/06/2024
Cross-sectoral skills for the Blue Economy labor market (ScienceDIVER)	www.sciencediver.eu	01/11/2019	30/04/2023
TEAMS	www.project-teams.eu	01/11/2019	31/10/2022
MUSSELPRO	https://www.musselpro.com/	01/11/2019	30/04/2023

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