

Project Name	Application Code	Project Code	Promoter	Partner	Donor Project Partner	NUT II	Sector	Project Abstract	Project Typology	Total Approved Expenditure	Eligible Expenditure Approved	Grant Rate	Approved Fund	Co-Financing Approved
AmpliAqua	EEA.BG.CALL2.038.2021	PT-INNOVATION 0092	BGI - Building Global Innovators para a Inovação no Alimento Sustentável	Food4Sustainability - Associação Aquilages - sociedade limitada, sucratal em Portugal	International Development Norway AS Murefish	Norte	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	BGI is the promoter of the project. It is a deep technology startup accelerator, spin-out of the Entrepreneurship and Innovation initiative from MIT Portugal (a partnership between MIT and the Portuguese Government). BGI is considered a TOP 20 Accelerator in Europe by Fundacity, and a TOP 50 Accelerator worldwide by Value AI. After 10 years of a high-level network comprising IT, National Government, Municipalities, or MIT, BGI started to focus on the Food and Agriculture industry. In 2016, BGI started to design an infrastructure that would work on thematic issues to develop food production techniques with the potential for carbon sequestration. The goal of this infrastructure was to solve large-scale problems in food systems based on organic products (fish, algae, vegetables), increasing the climate resilience of this type of systems. BGI will coordinate all the project, contributing with its extensive know-how in acceleration of start-ups and also be responsible for dissemination, exploitation of results and partnerships (commercial purposes but not limited to). Food4Sustainability is a collaborative laboratory, at Idanha-a-Nova, whose strategic and statutory objectives include contributing to the creation of a sustainable regional economy, promoting greater awareness of the benefits of consumption and production of sustainable foods including organic farming, as well as promoting a more informed community through education and development. F4S will contribute with highly qualified human resources comprising aquaponics, food science, food engineer and fresh greens production specialists. F4S has the knowledge related to modular waste management solution to balanced aquaponics systems. F4S will also provide the perfect location for such pilot namely in Idanha-a-Nova (an inland territory with long and hot summers, thus with water management issues). This partnership is expected to contribute to knowledge and experience sharing, greater cooperation in the sector, dissemination and exploitation of results. IDN is a spin-out of SINTEF Foundation, the largest contract research institute in Scandinavia, providing consulting and management services to projects that require international cooperation. It will engage experts to contribute to the main activities of the project namely: designing a Technical-Economic Simulation Model (TES) using System Dynamics methodology to design the overall consistent technical-economic model and for testing different solutions in the Aquaponics facility as a test facility environment will be developed and demonstrated to each of the subsystems of the AP system, such as fish tanks, anaerobic digester and hydroponic (HP) greenhouse; a Market Research & Business Model describing possible services to be offered by AmpliAqua project, mapping possible market segments in Europe for the identified services and describe Business Model alternatives. As a result of this partnership the project will benefit of strengthening.	Business development from early innovation stage up to testing of new technologies and supporting their first presentation to the market (piloting and demonstration facilities)	1 670 600,00 €	1 305 901,00 €	70,00%	914 131,00 €	756 469,00 €
AquaBreak - Aquaculture Living Breewater for Coastal Protection and Sea Decarbonation	EEA.BG.CALL2.026.2021	PT-INNOVATION 0092	HADES Portugal, Lda.	Instituto de Hidráulica e Recursos Hídricos	University of Stavanger	Alestejo	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	The increase in the world population of the last century and the expected for forthcoming years, together with the climate changes, boosted the urgent necessity to have a more effective, efficient and green food supply in the next decades. The rising population also pressured coastal zones, where 40% of the existing population lives. From such striking growth, two key trends emerge on a large-scale perspective, food scarcity and deterioration of coastal regions, which associated with the complex Climate Change scenarios of extreme environment phenomena, threatens the sustainability of coastal areas. The AquaBreak Project addresses these trends by industrially developing a patented eco-friendly and cost-optimized system to be used in offshore aquaculture activities, that also acts as a wave-based solution to promote wave energy dissipation to enhance coastal protection and sediment retention. For this purpose, the project will have 5 major activities, namely: Testing and characterization framework; Physical modelling testing; Numerical modelling optimization; Case study validation; and Dissemination. And five major milestones: Presentation of benchmark analysis and ADS testing and setup framework; Full-report of physical modelling; Final design and joints best solution; Validated ADS in TR1, 6; Market presentation. Moreover, the AquaBreak project levels intends to take the current TR14 product to TR16, with the ultimate goal of the R&D&I activities to reach the commercial stage of ADS (TR18) and market it to the direct beneficiary, companies operating on the aquaculture sector but, ultimately, all coastal areas will indirectly benefit from this solution. For this, there is strong support from the University of Stavanger, with wide experience in offshore structures modelling and structural design or composite materials. HRSI adds experience in coastal erosion processes, wave energy analysis and erosion mitigation strategies, including physical/numerical modelling studies.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	511 015,00 €	508 381,00 €	70,00%	355 827,00 €	155 148,00 €
InFishMix - Combining Insects for a Novel Circular Strategy Towards Fish Growth and Robustness	EEA.BG.CALL2.014.2021	PT-INNOVATION 0094	Thunder Foods Lda	Ingredient Odyssey, Lda. Centro Investigação Interdisciplinar Iga+ Motic Universidade do Porto	Norwegian Research Centre	Alestejo	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	Considering population growth and the resulting increase in demand for animal protein, we need to ensure that food production is sustainable and based on circular economy principles. The EU imports around 70% of the products of the aquaculture industry (e.g. live fish) for sustainable and local sources, such as insects. The production of insects is carried out according to principles of circular economy, using by-products from the agri-food sector as substrate, using nutrients that would otherwise be discarded. Studies support the use of insects in aquafeeds, and in some cases it has even been shown to support animal welfare. However, different insects have different nutritional profiles, not always perfectly suited to aquafeeds, and have also different needs at a productive level. Thus, the objective of this project is to develop a new tailor-made protein source for use in aquafeeds for salmon and sea bass on different insects, also testing an innovative approach for the simultaneous production of these insects, approved for use in aquaculture: <i>Tenebrio molitor</i> , <i>Hermetia illucens</i> and <i>Musca domestica</i> . This approach will optimize the protein's amino acid profile to meet the specific needs of two species of great importance at the European level, salmon, and sea bass, and to optimize the insect production process, using bio-resources as efficiently as possible, reducing production costs, resulting in a new, more sustainable and economical ingredient. To this end, zootechnical trials will be carried out to assess the performance of this ingredient in aquafeeds. These tests will be followed by a "stress challenge" which will assess the impact on fish health, animal welfare, and stress response. The quality and food safety of fish will also be evaluated to ensure that the final consumer has access to a superior quality product. The Norwegian partner will be in charge of the salmon trials, thus strengthening the relationship between Portugal and a Donor State.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 697 530,00 €	1 287 326,00 €	70,00%	901 128,00 €	796 402,00 €
FLYPASS - Foil boat using clean energy for Passenger transportation	EEA.BG.CALL2.011.2021	PT-INNOVATION 0095	Composite Solutions Lda	Mobyfly Portugal, Unipessoal, Lda. Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência	Convis Norway AS	Centro	Shipbuilding and shipping (development of innovative products and technologies)	Maritime transport is currently responsible for more than 3% of global CO2 emissions, and the total emissions of this sector continues to increase and are expected to reach 5% by 2050. Currently, and only in the EU, maritime transport is responsible for the emission of 4 % of greenhouse (GHG) gases. Maritime transport is thus facing a considerable pressure for efficiency and innovative solutions, not only in terms of GHG emissions but also in terms of intelligence and life cycle management. In order to contribute to a more sustainable, safe, intelligent and managed maritime transport, this project aims to develop a Zero Emissions prototype for passenger transport, equipped with high efficiency navigation systems (i.e., foils) that further reduce its footprint at the same times brings added value in operational and financial perspectives (i.e., less energy consumption for navigation, less charging cycles, increased battery lifespan, increased speed), less time per trip, more trips per day, ...). The prototype will also be equipped with assisted or semi-autonomous systems that perceive the environment and support the human decision in terms of navigation, complex maneuvers and docking, improving the intelligence of these solutions and de-risking their market introduction. The advanced sensing system, collecting data from the structure, critical equipment of the prototype and the environment, plays a fundamental role in terms of management and decision support, comprising the real-time assessment and alarms to the medium- and long-term management of the equipment and critical components (from predictive and preventive maintenance to the full life cycle management). This project aims to achieve several innovative developments that push further the efficiency and de-risking in the maritime passenger transport industry through the development and adaptation of solutions to the concrete requirements and constraints of the technologies underneath. This partnership between SMEs and research institutions from Portugal and Norway is extremely important for the interconnection, creation and exploration of added value, by joining complementary competencies to address the specific needs of products aimed for the in global markets.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 672 716,00 €	1 413 682,00 €	69,60%	983 869,00 €	688 847,00 €
Innovative and unexploited source of high added-value cosmetic products	EEA.BG.CALL2.027.2021	PT-INNOVATION 0096	Messosystem, S.A	Universidade dos Açores Universidade do Minho	Nofima AS	Norte	Blue biotechnology	Physalis Physalis project aims to take advantage of the potential existing in one of the most dangerous and valuable marine species that occupy our coasts – the Portuguese man-of-war – by developing a mass extraction process of collagen for commercial purposes (new products for medical and cosmetic industry). It is also intended to extract other toxins with interest for industries such as biomedicine and pharmaceuticals. For this, a consortium composed of 4 key entities was assembled: two Portuguese Research Centres (Centro de Biotecnologia dos Açores - University of Azores and Centro de Engenharia Biológica - University of Minho), one Norwegian Research Institute (Nofima - The Norwegian Institute of Food, Fisheries and Aquaculture Research), and a Portuguese company dedicated to the creation and commercialization of high-quality cosmetic products (Messosystem). The project will start by the optimization of the extraction of collagen and other toxins from the P. Physalis (A1). Subsequently, it would be required to prepare collagen oligopeptide-rich hydrolysates and perform its functional evaluation (A2) to assess the hydrolysates bioactivities. Then, Messosystem will lead the development of cosmetic formulations and new products for skin regeneration (A3) using the collagen hydrolysates previously produced. Simultaneously, the extraction of other toxins will be assessed (A4), trying to identify toxins with potential to be applied in cosmetic and health industries. The laboratory work performed regarding the extraction of collagen will conduct to the development of a small pilot plant system (A5) at Nofima facilities for mass production of collagen. Finally, it is devoted to the project management and dissemination. Nofima will have a critical role in the execution of the pilot plants since they have the expertise and proper facilities that make it possible to carry out experiments and to test extraction and hydrolysis methods tested at lab scale in University of Minho.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 784 070,00 €	1 221 468,00 €	70,00%	855 027,00 €	929 043,00 €

Bring Euro-native clam species from "farm to fork"	EEA.BG.CALL2.034.2021	PT-INNOVATION-0097	Oceano Fresco S.A.	International Iberian Nanotechnology Laboratory Universidade Católica Portuguesa	Nofima AS Maritech Systems AS	Centro	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	As the world population grows, demand for food increases just as much, both in quality and in quantity. Within this context, bivalves which filter-feed on phytoplankton, are the most sustainable source of animal protein. However, new gaps along the value-chain exist that need to be overcome to increase the shellfish industry standards and to support the production, packaging, and supply of European autochthonous species such as <i>Ruditapes decussatus</i> and <i>Venerupis corrugata</i> . The ATLANTICLAM project aims to bring Euro-native clam species from "farm to fork", in an integrated, differentiated and consumer-oriented way. The project intends to solve the main obstacles to a wide dissemination and consumption of Euro-native clam species: availability all-year round – addressed by R&D activities in ATI 1; difficulty to match production with market demand – addressed by R&D activities in ATI 2; lack of trust on the source/origin of the clams - addressed by R&D activities in ATI 3; lack of trust on the quality and freshness of the clams - addressed by R&D activities in ATI 4; lack of solutions to increase the in-home consumption of clams - addressed by R&D activities in ATI 5. Thus, the project will achieve the development of: 1) an improved breeding program and production optimization of clam elite stocks; 2) a smart model to predict demand and plan the harvesting and supply chain of European clams; 3) a new QR-code consumer interface, with data about all the product chain and source; 4) new chilled clam line up and new sustainable and innovative packaging; 5) new recipes and commercial concepts. With a consortium between Oceano Fresco, Nofima, Maritech, INI, and ESB-UCP, ATLANTICLAM will strengthen both bilateral relations and international cooperation between Portugal and Norway, sharing know-how and disseminating knowledge across borders.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 395 744,00 €	1 394 411,00 €	70,00%	976 088,00 €	419 656,00 €
WAVY drifter based Nearshore Observation System	EEA.BG.CALL2.013.2021	PT-INNOVATION-0098	OCEANSCAN Marine Systems & Technology, Lda	Universidade do Porto Instituto Hidrográfico Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência	Norwegian Research Centre	Norte	Robotic related to marine and maritime technologies WAVY-NOS is a radically new approach to in situ monitoring of littoral areas. Instead of following pre-set trajectories, multiple surface drifters are deployed simultaneously for taking observations with different sensing payloads. Multiple deployments of the drifters, either simultaneous or sequential, will compensate for the uncertainty in drifter trajectories. WAVY Echo drifters will carry echosounders. WAVY Listener drifters are equipped with hydrophones and WAVY Imager will carry bottom-mounted video cameras. All data will be stored onboard, but positions and alarms will be sent at a low rate to a Mission Centre via GSM. With WAVY-NOS, coastal waters will become more accessible to common users, from both the technical and the financial points of view. The products and methods developed within the Project will become available for pre-commercial services. The project brings together 3 Portuguese research institutions: * FEUP, who will develop improved drifter localization, logging of acquired data and real-time communications with the onboard software; * INESC-TEC, who will be responsible for the Mission Centre that allows capturing, annotating, reviewing and publishing the data acquired by the drifters. * IRI, who will be responsible for field testing the developed prototypes and validate the acquired data. It will also lead the engagement of end-users via the organization of co-design workshops. The NORCE Norwegian Research Centre will be an important part of the consortium, being responsible for data interpretation of hydrophones and echosounders, as well as its selection and adaptation. The technological development proposed by WAVY-NOS will bring additional innovation in products, services and processes of DMST, the Project Promoter. DMST will be in charge of project management, dissemination and business development. Moreover, DMST will lead the mechanical design, integration and onboarding of the NOVFEED project aim to develop innovative IT tools to address one of the main challenges faced aquaculture nowadays – feeding optimization – towards a more sustainable growth of this industry. NOVFEED main objective are: - Develop, apply and launch two innovative IT tools, FEEDNETCS and FIT feeding tables, to optimize feed management in Atlantic salmon and meagre rearing operations; - Study the effects of dissolved oxygen levels on feed intake, and its inclusion in these innovative products for precision aquaculture. To achieve these objectives the project was divided in 6 major activities (ATIs), including Industrial Research activities (ATI1, ATI2, ATI3) for knowledge/data generation and mathematical modelling; and Experimental Development activities (ATI4) for the implementation and demonstration of the IT tools, in order to reach a complete and qualified system (TRL3). ATI5 and ATI6 focuses on the dissemination, exploitation and marketing of project results, and on management activities, in order to ensure an effective execution of all tasks. The project consortium is made up of 5 entities (SPAROS, IPMA, SEaEnte, IMR and UIB) and it was formed by its complementary expertise. All entities will bring great potential to achieve the project's objectives and will benefit from it. SPAROS will have the opportunity to develop and demonstrate its IT tools for Atlantic salmon and meagre, and thus improve its positioning within the European aquaculture market. IPMA, IMR and UIB will have the opportunity to conduct novel research on Atlantic salmon and meagre nutrition, which will contribute to consolidate their role as scientific knowledge builders and communicators. SEaEnte will have the opportunity to improve its knowledge on meagre production and, specifically, to optimize its feeding management. In addition, the knowledge transfer envisaged in this cooperation will strength and leverage future relations among the entities of both states (donor and beneficiary).	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 169 506,00 €	1 167 756,00 €	70,00%	817 430,00 €	352 076,00 €	
Novel tools for intelligent feeding management in Atlantic salmon and meagre farming	EEA.BG.CALL2.003.2021	PT-INNOVATION-0099	Sparos Lda	Instituto Português do Mar e da Atmosfera, I. P. SEaEnte-food, Lda	Institute of Marine Research/Havforskningsinstitutt et University of Bergen	Algarve	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	The technological development proposed by WAVY-NOS will bring additional innovation in products, services and processes of DMST, the Project Promoter. DMST will be in charge of project management, dissemination and business development. Moreover, DMST will lead the mechanical design, integration and onboarding of the NOVFEED project aim to develop innovative IT tools to address one of the main challenges faced aquaculture nowadays – feeding optimization – towards a more sustainable growth of this industry. NOVFEED main objective are: - Develop, apply and launch two innovative IT tools, FEEDNETCS and FIT feeding tables, to optimize feed management in Atlantic salmon and meagre rearing operations; - Study the effects of dissolved oxygen levels on feed intake, and its inclusion in these innovative products for precision aquaculture. To achieve these objectives the project was divided in 6 major activities (ATIs), including Industrial Research activities (ATI1, ATI2, ATI3) for knowledge/data generation and mathematical modelling; and Experimental Development activities (ATI4) for the implementation and demonstration of the IT tools, in order to reach a complete and qualified system (TRL3). ATI5 and ATI6 focuses on the dissemination, exploitation and marketing of project results, and on management activities, in order to ensure an effective execution of all tasks. The project consortium is made up of 5 entities (SPAROS, IPMA, SEaEnte, IMR and UIB) and it was formed by its complementary expertise. All entities will bring great potential to achieve the project's objectives and will benefit from it. SPAROS will have the opportunity to develop and demonstrate its IT tools for Atlantic salmon and meagre, and thus improve its positioning within the European aquaculture market. IPMA, IMR and UIB will have the opportunity to conduct novel research on Atlantic salmon and meagre nutrition, which will contribute to consolidate their role as scientific knowledge builders and communicators. SEaEnte will have the opportunity to improve its knowledge on meagre production and, specifically, to optimize its feeding management. In addition, the knowledge transfer envisaged in this cooperation will strength and leverage future relations among the entities of both states (donor and beneficiary).	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 430 660,00 €	1 426 493,00 €	70,00%	998 545,00 €	432 115,00 €
Custodian - Sensory Network Platform for Sustainable Fishing	EEA.BG.CALL2.010.2021	PT-INNOVATION-0100	SOLVIT - Innovation on Telecommunications LDA	AD AIR Centre - Associação para o desenvolvimento do Atlântico International Research Centre LOTACOR – Serviço de Lotas dos Açores, S.A. Docupisca - Portos e Lotas, S.A Instituto Superior de Engenharia de Lisboa Livision - Engenharia de Sistemas, Lda. Associação Parque de Ciência e Tecnologia da Ilha Terceira	Norwegian University of Science and Technology	Região Autónoma dos Açores	Environmental monitoring and surveillance activities	The project will develop a system (Custodian), consisting of three low-cost devices and a web platform for tracking small vessels and buoys. This will aid fishermen in their operations and equipment management, as well local authorities and businesses bringing all parts together to optimize this industry and minimize losses and pollution. During testing of the prototypes, fishermen might encounter savings due to: i) the faster location of the fishes gear, potentially saving approximately 12€ of fuel per launch; ii) recover of potentially lost nets (50 % success rate would lead to 5% increase on net income); iii) fishermen testing the prototype of the service that provides real-time market pricing may also experience an increase in net profit due to the timely choice of market based on the current catch (tentative quantifications of the extra income generated by this would be too speculative at this stage). Activities: Development of Research, Requirements and Specifications; Device Design, Development, Validation and Certification; Research and Investigation of New Knowledge and Integration on the Platform; Study the Expansion of Custodian to Other Atlantic Markets; Study the Integration of Custodian with Other Platforms; Promotion and Communication. Deliverables: Trial Report; Functional, Technical and Potential Integration Reports; Device Specification, EU declaration of conformity; Devices' Hardware Platform Specification; Platform Administration and User Manual; Data Models Report; Security threats report; Market and Compatibility Report; 3 Events; promotion and communication material.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	984 171,00 €	935 963,00 €	70,00%	655 174,00 €	328 997,00 €

ND4Aqua - SMART SOLUTIONS TO CONTROL NITROGEN LEVELS IN THE AQUACULTURE INDUSTRY	EEA.BG.CALL2.036.2021	PT-INNOVATION 0101	Nitrogen Sensing Solutions	PLANTIC - ACTIVIDADES PISCICOLAS, S.A. Riasacur Unipessoal, LDA	Norwegian Institute for Water Research Marienmenne RASLAB AS	Centro	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	Aquaculture is the world's fastest growing agriculture sector. To support that growth the industry needs to find innovative solutions to challenges, such as sustainability, disease, lack of space for expansion, and limited freshwater availability. Recirculating aquaculture systems (RAS) have been the answer to those problems. These systems are designed to control culture conditions for intensive farming, while increasing biosecurity levels, minimizing water consumption, and managing waste streams. Clearly, a shift from open farming to a sustainable land-based aquaculture, is happening in Norway and other parts of the globe. But in Portugal, only two companies (both our partners), are operating with RAS. As so, more is needed in Portugal, to further advance this production sector. RAS themselves are stimulating demand for technology innovation in areas like aqua tech. Still, there are no real-time sensors for the quantification of highly toxic nitrogen compounds (ammonia, nitrite, nitrate) that can accumulate in closed systems. So, the main goal of this project is the development of innovative sensors to quantify such compounds, using a technological platform (electrochemical biosensors) that is mastered by the start-up Nitrogen Sensing Solutions (promoter). Our first product will be a portable nitrite biosensor - the ND2Aqua - that will be launched on the market by the end of the project (T18, S). Our second product will be a standalone device that is able to monitor the three N-nutrients in real-time, the ND4Aqua. Finally, a prototype of an automated sampling system specifically designed to integrate and connect the sensors to the tanks will be developed, fulfilling the specific needs of the RAS industry (both products will reach T18, S by the end of the project). Our Portuguese (AQUINDOVA and RIARESEARCH) and Norwegian (NIVA and RASLAB) partners will play a fundamental role in validating/demonstrating/ prove the technology in operational environments, thereby strengthening the scientific and technological relationships between the two States. Ultimately, we will be able to create products of high value for the Blue Growth sector (willingness to pay was confirmed through a recent market study), thereby fostering the innovation and business development, and leveraging the competitiveness and sustainability of Portuguese SMEs.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 138 762,00 €	1 136 629,00 €	70,00%	935 641,00 €	403 121,00 €
MICROBOOST - Microalgae as fish health boosters via aquafeeds	EEA.BG.CALL2.030.2021	PT-INNOVATION 0102	Alimicroalgae - Natural Products S. A.	Sparos Ltda - Associação Oceano Verde - Laboratório Colaborativo para o desenvolvimento de tecnologias e produtos verdes do oceano CIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental	Norwegian Institute for Water Research University of Bergen	Centro	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	MICROBOOST project is in the scope of fishery/aquaculture (development of innovative products in fishery/fish farming sectors) and #Bluebioeconomy. The project aims to develop innovative research on microalgae functionality and understand their bioactivity on fish immune performance. At least four products will be developed: a new microalgae biomass (E. gracilis), a new blend (E. gracilis and Nannochloropsis sp) and two bioactive aquafeed supplements for aquaculture applications derived from these microalgae. MICROBOOST is led by Alimicroalgae, a large industry located in Portugal. Alimicroalgae provides excellence in microalgae cultivation and is considered a European reference for microalgae industrial production. Alimicroalgae's mission is rooted in the desire to cultivate sustainable, global, green solutions, and to develop commodities by boosting microalgae's natural intrinsic features and capabilities. MICROBOOST will develop tight cooperation between the following partners: Alimicroalgae: one of the largest European producers of microalgae, NIVA: Norway's leading institute for fundamental and applied research on marine and fresh waters, SPAROS: a science and technology company specialized in nutritional solutions for aquaculture, Green Collab: a collaborative platform which bridges algae research and industry to drive algal biotechnology solutions, CIMAR: a leading research and advanced training institution focused on ocean knowledge and innovation, and Uilbergan: a Marine research reference with solid aquaculture knowledge. The new products proposed in MICROBOOST will compete in the aquaculture market, backed with a solid scientific and technical basis behind the immunomodulating activity claims. MICROBOOST'S Business Plan demonstrates that the production and sales of the products that will result from the implementation of this two-year project will result in a significant impact in the Promoter's profitability and cash generation from 2024 onwards.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 703 170,00 €	1 438 490,00 €	68,64%	987 410,00 €	715 760,00 €
All-weather offshore platform for wind blade maintenance	EEA.BG.CALL2.009.2021	PT-INNOVATION 0103	Eptune Engineering, LDA	OnRope, Unipessoal LDA	International Development Norway AS/ Mørefish	Norte	Ocean renewable energy sector	The offshore wind energy market has been growing on an average of 24% each year since 2013 and is expected to grow at a compound annual growth rate of 13.5% from 2019 to 2026. Technology developed for inspection and maintenance of wind towers has only been receiving more attention lately. The principal solutions comprehend either the usage of suspension on cable or elevating metallic platforms, but only the last represent a more robust solution. None of the available platforms at the market answer positively to three fundamental problems: adaptation to any given profile of the blades, possibility to operate in any climate conditions, stability and smooth elevation. AFLAT proposes to develop a patentable lightweight and all-weather platform for offshore wind blade maintenance. It should be articulated, so it can easily adapt to any given shape, comprehend a magnetic system for fixation to tower, an elevation system to overcome obstacles and include an outer habitat that can create an isolated environment by using a patented pending sealing system that is water-proof and adapts to any blade's profile. The project will be focused in increasing the technology level of a series of innovative technologies. The product shall be developed until T18, shortly before the start of certification activities that are mandatory to test the product on real environment. This project aims to develop a product that is used to benefit the Blue economy through the production of clean and sustainable energy. This growth in energy production is related to the decrease in down time and the seasonality of maintenance times. The team is experienced and have performed various contacts with interested parties on this solution. This project includes a partnership between Eptune Engineering and OnRope that gives the project a harmony and balance between the needs of the stakeholders of all sizes, and the operational needs.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	414 886,00 €	397 194,00 €	69,52%	276 112,00 €	138 774,00 €
Blue Control Centre: The connected aquaculture platform	EEA.BG.CALL2.044.2021	PT-INNOVATION 0104	Ubiwhere, S.A.	University of Agder Landbasert Akvakultur Norge	Centro	Fisheries/aquaculture (development of innovative products and technologies in fisheries/ fish farming sector)	Connectivity is becoming a fundamental asset for every sector. Many experts have stated that the next industrial revolution enables everything to be connected and a part of a nuclear, value-driven, highly technological ecosystem. Aquaculture is a very demanding process since it requires a fully balanced and healthy ecosystem. Changing one of the many parameters in a fish tank can have tragic consequences if done wrongly. We propose to connect aquaculture to a platform that allows real-time decision making and impact measurement of the necessary indicators in fish tanks. Such a platform must be deeply rooted on best of breed sensors and telecom grade networks to allow for highly precise, real-time measurements. In this sense, Ubiwhere is partnering with two Norwegian entities to create a connected, edge computing aware platform to aid the day to day operations of aquaculture sites. Such a platform builds upon the vast experience that Ubiwhere has in other sectors ranging from cities to telecommunications. All in all, the project aims at creating the Blue Control Centre: The connected aquaculture platform to enable aquaculture companies to address the current market quick for sustainable products whilst lowering the OPEX costs of having the personnel to provide measures on the many fish tanks owned by these companies. From the operational standpoint, Blue Control Centre excels in creating the basis for: (1) connect aquaculture to remote decision making; (2) act in real time; (3) learn from past decisions; and (4) expand the business with more ease.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 336 736,00 €	1 334 236,00 €	70,00%	933 965,00 €	402 771,00 €	
Blue Project, Bioeconomy, People, Sustainability, Health	EEA.BG.CALL2.002.2021	PT-INNOVATION 0105	Gulmarpeixe - Comércio de Produtos Alimentares, S.A	TINTEX Textiles, S.A. Universidade do Minho INSTITUTO POLITÉCNICO DE VIANA DO CASTELO Município de Espinho Associação Empresarial de Portugal VISUAL THINKING - Digital Organization, Lda	Matis	Norte	Fish and seafood transformation industry	The Blue project Project explores the concept of circular and Blue economy, in a total synergy between the promoter and the various project partners, from the use of Atlam Bontofo fish, which is abundant on the North Atlantic coast. Considering that, so far, its nutritional qualities are not yet recognized and used, the project proposes to create a fresh fish processing unit, which will allow the skinning, filleting, defrosting, of the best method to preserve the freshness of the fish, packaging and marketing. Equally important, a by-product will be generated and later reused for feeds research. Blue Project also aims to educate towards sustainability and promote a change in attitude and behavior in the face of current world problems, to prepare citizens to have a conscious, dynamic and informed citizenship in the face of current problems for the future. Fully integrated with emerging environmental concerns, this partnership recognizes that health and the promotion of well-being must occupy a central place in the policies of territories and communities. Blue Project aims to promote healthy and environmentally conscious food choices; create synergies that promote the consumption of local and seasonal products; contribute to a collaborative economy and sustainable consumption, based on the context of school canteens in the municipality of Espinho and with potential for replication; namely in the educational context of families; reduce food waste; implement awareness and education actions for food sustainability with the active collaboration of schools, private institutions of social solidarity and other players directly linked to the context of the network of school canteens in the municipality and exploring potential consumers at national and international level within the scope of the project.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	924 306,00 €	924 306,00 €	70,00%	647 014,00 €	277 292,00 €

Asian radar acoustics technology for environmental risk monitoring to support sustainable development of offshore renewable energy facilities	EEA.BG.CALL2.016.2021	PT-INNOVATION-0106	Srøin LDA	Norwegian Institute for Nature Research	Área Metropolitana de Lisboa	Environmental monitoring and surveillance activities	This project focuses on the development of an innovative solution, involving the use of radar technology, sound cameras and microphones. Such a development will enable a complete and thorough environmental monitoring and surveillance of seabirds and migrating land birds in the marine environment, cataloguing the various species and providing crucial and necessary information for decision making. This innovative technology will allow the identification of seabirds and migratory birds that usually forage close to the offshore wind farms, contributing effectively to the reduction of seabird mortality and the conservation of protected species, as well as providing an important support tool in the development of offshore wind farms. In the phase of implementation of an offshore wind farm, this new solution will allow to improve the layout of the parks to avoid corridors for the passage of birds and, in this way, to reduce the turbines downtime (since depending on the birds' species and the laws of the country, the turbines may be forced to stop when birds approach, to avoid deaths). When already in operation, and since the solution allows the identification of seabird species, this technology will provide crucial information for decision making, allowing us to decide on the need to stop the park / turbine operations due to the passage of sea birds depending on the conservation status of the species present. This is particularly important since the park's operation downtime may represent significant losses in energy production, so it is necessary to optimize according to the degree of protection of the marine species. This project results from a partnership and exchange of knowledge between a Portuguese SME and a Norwegian Research Institute. This Norwegian Institute (NINA) is the donor partner. NINA researchers involved in the project have expertise in ornithology and statistical and spatial modeling as well as processing avian radar-based bird data. In the project NINA will be responsible for post-processing risk monitoring, mapping the distribution of birds and to predict avoidance and collision risk to direct mitigation efforts.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	959 356,00 €	930 833,00 €	70,00%	651 983,00 €	307 773,00 €
Automatização da logística de contentores entre o navio e o comboio	EEA.BG.CALL2.043.2021	PT-INNOVATION-0107	ANTÓNIO PÓVOAS - BRIDGE CONSTRUCTION SYSTEMS - PORTUGAL, LDA	ADMINISTRAÇÃO DOS PORTOS DO DOURADO, LEIXÕES E VIANA DO CASTELO, S.A. MEDWAY - Operador Ferroviário de Mercadorias	International Development Norway AS/ Mørefish	Norte Commercial ports	This new project aims to demonstrate that when using automated guided vehicles – AGV SSL – (Autonomous Guided Vehicle equipped with Side Sliding Loader System), it is possible to automate all container handling operations from the ships to any other means of transportation, either a truck or a train, as it can be seen in the following video: https://1drv.ms/v/s!AmWiyqrJL8CkXVhV7YdWd0077e-oaIu3z For demonstrating the goals of this project an AGV SSL prototype will be built, and using it, the circuit of transferring the containers from the ship to the train will be shown by two different ways: -Containers direct transference from ship to train -Containers transference from ship to train using an intermediate stop (buffer). Innovative lateral loading system allows the use of electric trains and catenary inside ports and logistic areas, diminishing pollutant emissions. It is also no longer necessary to change locomotives of trains from electric to diesel in ports or logistic areas, what reduces cost and time necessary to load trains. Having electric freight trains running inside logistic terminals and ports will contribute strongly for achieving the goal of the European Commission of transferring 50% of the freight transportation from road to rail and to waterborne transports, for distances greater than or equal to 300 km. Portuguese Partners – Port of Leixões and railway operator Medway – will allow to develop the demonstrator in a real environment, by doing a complete container circuit of the container: Ship – Buffer – Train using the AGV SSL to carry the container from the ship to the train and reverse. Norwegian partner – IDN – will develop the software to self-drive the vehicle – and will be responsible for the project results dissemination all around Scandinavian countries helping the international promotion at their ports.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	1 067 399,00 €	1 067 399,00 €	60,19%	642 494,00 €	424 905,00 €
Cross-shore features and internationalization of the COAST	EEA.BG.CALL2.008.2021	PT-INNOVATION-0108	R5e Consulting Engineers, Lda	R5m Marine Solutions Lda Universidade de Aveiro	Vatnaski ehf.	Centro Maritime digitalization	Cost-benefit assessments to assess the execution of coastal interventions are increasingly common at both national – and at an international level. The AX-COAST is a project that aims to contribute for the improvement of an innovative tool in the field of cost-benefit assessments of coastal interventions. The COAST is an integrated tool for this kind of assessment, combining 3 modules: shoreline evolution module; coastal defence structures pre-design module; cost-benefit module. The proposal is to add the cross-shore processes into the shoreline evolution module, opening the possibility to effectively apply the COAST to a wider selection of coastal areas and to do deeper analysis to critical interventions, by assessing the benefits of where to deposit the sediments on the beach. The integration of cross-shore functionality will be led by the University of Aveiro, who has experience in both longshore and cross-shore evolution models and is the author of the COAST. Moreover, in collaboration with Vatnaski, a donor partner, a methodology for using data processed from global datasets to apply the COAST will be developed, taking advantage of the large experience of this partner in the subject. This partnership will also contribute for the COAST tool to be introduced into Iceland, potentially opening the door for applications in the country. The project management will be promoted by R5e Consulting Engineers, who has a vast experience in project management and has the objective of promote the sustained growth of R5m Marine Solutions as a company. The R5m Marine Solutions will be responsible for the characterization of socio-economic and environmental benefits of the case study and overall application of the COAST. The successful conclusion of this proposal will allow the internationalization of the COAST and ultimately contribute for coastal management policies.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	936 028,00 €	926 924,00 €	70,00%	648 847,00 €	287 181,00 €
Development of modular systems, based on plastic waste, for the promotion and monitoring of marine life	EEA.BG.CALL2.001.2021	PT-INNOVATION-0109	GNVWARE, LDA	ASSOCIAÇÃO UNIVERSIDADE-EMPRESA PARA O DESENVOLVIMENTO TECNOLÓGICO BEYONDCOMPOSITE - COMPOSITE ENGINEERING SOLUTIONS, LDA CIMAR - Centro Interdisciplinar de Investigação Marinha e Ambiental	Resource International	Norte Blue biotechnology	DISAPPEARANCE OF NATURAL CARBON SEPARATION SYSTEMS • Increased CO2 - It results in a decrease in pH in the oceans, bringing negative consequences for the balance of the marine system. Global warming resulting from high CO2 also contributes to the increase in sea temperature which intensifies this imbalance. • Marine waste - Due to the high consumption and the lack of capacity to keep materials in a closed cycle through recycling and also the result of some maritime activities, a part of the waste ends up in the oceans. The following strategic results are then expected to be achieved: • Increase the competitiveness of Portuguese companies in the area of blue growth; • Support resource efficiency in companies in the maritime sector; • Strengthen cooperation on marine and maritime issues; • Increase collaboration between the beneficiary and the donor States involved in this Program. The Gnuware promoter will be responsible for defining the product concept and developing the solution design. Fibrenamics (Techninho) - R&D Institute, will be responsible for studying the processes of recycling, transformation and valorisation of plastic residues, in EcoComposites material system. Resource (Iceland), as an international partner, will contribute with its experience in mapping the main oceanic areas where there is a marked deposition of plastic products, as well as in the definition of requirements and studies for the treatment and recycling of plastic waste. CIMAR will complement the research and development required in the scope of the identification of species and respective conditions for the growth of algae and corals on EcoComposites materials. BeyondComposite will be in charge of developing modular reef systems, based on recycled polymer material, and in accordance with the previously defined Design proposal, in order to carry out the industrialization of the product, a fundamental premise for the realization of this project.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	706 546,00 €	706 546,00 €	70,00%	494 583,00 €	211 964,00 €
Processamento extensivo da biomassa de microalgas para a extração de proteínas com propriedades nutritivas, nutracéuticas e farmacêuticas	EEA.BG.CALL2.005.2021	PT-INNOVATION-0118	PHYTOALGAE, LDA	Universidade da Madeira	Região Autónoma da Madeira	Blue biotechnology	The need for this project (PhyTanUTRE) arises from the company's current capacity to produce microorganisms with high nutritional and economic potential, microalgae and cyanobacteria, and to want to diversify and differentiate in the national and international market. The main objective being to produce food supplements with high added value, derived from the protein fraction and which has a high nutraceutical and pharmaceutical capacity. These compounds are known for their great human nutritional capacity and diversity of applications in industry and human health, in the case of enzymes, its production and enrichment in the biomass production phase can be modeled according to the cultivated microorganism and nutrients made available in the culture medium. In this way, protein-based products can be developed, with a high market value, differentiated from the others and with great biological capacity for the health of the world population. The Phytoalgae company's interest in developing these highly innovative and differentiated products is aimed at increasing its microalgae production capacity and consequently producing food supplements rich in proteins and value-added enzymatic products, becoming in the short term market leader in an economic niche in strong expansion. The protein products to be developed in the course of this project will originate from microalgae cultivated in planar photobioreactors, in which the nutrients made available in the culture will be targeted for optimization. The direct beneficiaries of this project will be the consumers of these target markets, as they will have at their disposal new nutraceutical, natural and biological products, manufactured in such a way as to provide a superior and differentiating level of quality, always accompanied by the "Made in Portugal" seal. The partnership between the company Phytoalgae and the University of Madeira will allow for a reinforcement of the investigation and analytical characterization of these products, as well as the implementation of high parameters of productive quality and biological certification in the production of biomass and the manufacture of products.	Develop innovative products/ technologies/ processes for the Blue Growth sector;	560 000,00 €	560 000,00 €	70,00%	392 000,00 €	168 000,00 €
									22 263 201,00 €	20 283 938,00 €	1317,95%	14 066 907,00 €	