



DELIVERABLE 4.2

INTERIM HACKATHON REPORT



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TABLE OF CONTENTS

TABLE OF CONTENTS	2
ABBREVIATIONS	4
LIST OF TABLES	5
LIST OF FIGURES	5
ACKNOWLEDGEMENTS	6
INTRODUCTION.....	8
1. BALTIC HACKATHON CHALLENGES.....	8
1.1 Aqua Medic Poland/AquaLoop Interreg South Baltic	9
Hackathon Challenge Title: What's the secret to building an energy-efficient recirculating aquaculture system (RAS) in the Baltic area?	9
1.2 Business Lolland-Falster/TETRAS Interreg Baltic Sea Region project.....	10
Hackathon Challenge Title: How can we make recirculating aquaculture system (RAS) production in the Baltic area sexy?	10
1.3 Business Lolland/Falster	11
Hackathon Challenge Title: Can we find a sustainable replacement for minerals (mica), used in cosmetics, in the Baltic?	11
1.4 Oficina Baltica Sp. z o.o/Klaipeda Science and Technology Park (Cool Blue Baltic project)	11
Hackathon Challenge Title: How can Baltic offshore wind farms be inspired to invest in regenerative ocean farming?	12
1.5 Fish Farm/K2	12
Hackathon Challenge Title: How can we raise healthier fish with fewer treatments in intensive recirculating aquaculture systems (RAS) in the Baltic area?	12
2. ATLANTIC HACKATHON CHALLENGES	13
2.1 AmpliAqua/ Building Global Innovators (BGI) - Sustainable Ventures.....	14
Hackathon Challenge Title: Sustainable upcycling of aquaculture nutrients into circular bio-based solutions	14
2.2 INOVA - Instituto de Inovação Tecnológica dos Açores	15
Hackathon Challenge Title: Detecting Microplastics in Food and Water: A Smart Monitoring Challenge....	15
2.3 European Marine Biological Resource Centre (EMBRC)	16
Hackathon Challenge Title: Tracking Marine Biodiversity: An Interactive Genomics Explorer for Europe ...	16
2.4 B2E Blue Bioeconomy CoLAB.....	17
Hackathon Challenge Title: From Sea to Dish - Intelligent Traceability for a Sustainable Ocean.....	17
2.5 Associação Portuguesa de Aquacultores.....	19
Hackathon Challenge Title: Let's improve aquaculture in Portugal?	19
3. BALTIC HACKATHON PARTICIPANTS.....	21
4. ATLANTIC HACKATHON PARTICIPANTS	23



5. BALTIC HACKATHON PROGRAMME	24
5.1 Day 1	24
5.2 Day 2	26
5.3 Day 3	27
6. ATLANTIC HACKATHON PROGRAMME.....	32
6.1 Day 1	32
6.2 Day 2	33
6.3 Day 3	34
6.4 Follow-Up and Next Steps	35
7. BALTIC HACKATHON SPONSORS & PRIZES	37
8. ATLANTIC HACKATHON SPONSORS & PRIZES.....	38
9. BALTIC & ATLANTIC HACKATHON WRAP UP VIDEO	40
10. BALTIC HACKATHON EVENT FEEDBACK & LESSONS LEARNED	40
10.1 Baltic Hackathon feedback in articles	41
10.2 Baltic Hackathon feedback form and analysis	42
11. ATLANTIC HACKATHON EVENT FEEDBACK & LESSONS LEARNED	50
11.1 Atlantic Hackathon feedback form and analysis.....	51
11.1.1 Main highlights for the participants.....	56
11.1.2 Areas to Improve in Future BBT Hackathons	56
12. Conclusion	57





ABBREVIATIONS

ABBREVIATION	DESCRIPTION
BBT	Blue Bio Techpreneurs
BBA	BlueBio Alliance
CDE/DEC	Communication, Dissemination and Exploitation
D	Deliverable
DMP	Data Management Plan
DEC	Dissemination Exploitation Communication
EC	European Commission
GA	Grant Agreement
M	Month
PC	Project Coordinator
PMBA	Pole Mer Bretagne Atlantique
PO	Project Officer
PP	Project Partner
SDU	University of Southern Denmark
SUB	SUBMARINER Network for Blue Growth EEIG
UG	University of Gdansk
WP	Work Package
WPL	Work Package Leader



LIST OF TABLES

Table 1 Challenge titles, owners, and Countries of the challenges represented at the BBT Baltic Hackathon.....	9
Table 2 Challenge titles, owners, and Countries of the challenges represented at the BBT Atlantic Hackathon .	14
Table 3 Breakdown of student participant degree categories.	22
Table 4 List of universities and institutions of participants in the BBT Baltic hackathon.	22
Table 5 Breakdown of student participant degree categories.	23
Table 6 List of universities and institutions of participants in the BBT Atlantic hackathon.....	24
Table 7 Rubrics for the judging panel	28

LIST OF FIGURES

FIGURE 1 LOGOS REPRESENTING THE CHALLENGES FEATURED IN THE BBT BALTIC HACKATHON.	13
Figure 2 Logos representing the challenges featured in the BBT Atlantic Hackathon.	20
Figure 3 Breakdown and summary of participants at the Nordic Hackathon.	21
Figure 4 Breakdown and summary of participants at the Atlantic Hackathon.	23
Figure 5 Arrival of participants, mentors, facilitators and jury members, and joint photo at the Faculty of Oceanography and Geography, University of Gdańsk.	25
Figure 6 joint photo at the Seaside, Gdynia.....	25
Figure 7 Bonfire and networking.	26
Figure 8 Hacking of challenges by the five groups.....	27
Figure 9 Pitching session on day 3.	29
Figure 10 Judging panel at the pitching session.	29
Figure 11 Price giving ceremony on day 3.	30
Figure 12 Baltic Hackathon 2025 final picture.	30
Figure 13 Individual group photos.	31
Figure 14 Welcoming ceremony and workshop with the official mascot “Captain Octávio”.....	32
Figure 15 Event Venue at Escola Superior de Turismo e Tecnologia do Mar – Politécnico de Leiria.	33
Figure 16 Hacking of challenges by the five groups, coffee break with salicornia and seaweed snacks and Berlengas Archipelago sunset networking event.....	34
Figure 17 Plenary, Pitching session and Winners on day 3.	35
Figure 18 Atlantic Hackathon 2025.....	36
Figure 19 Individual group photos.	36
Figure 20 BBT Baltic hackathon sponsors.	37
Figure 21 BBT Baltic hackathon prizes	38
Figure 22 BBT Baltic hackathon 1 st prize	38
Figure 23 Sponsors’ appreciation.	39
Figure 24 Winning group and challenge mentor.....	39
Figure 25 Articles after the event.	41

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- AquaLoop (Interreg South Baltic project)
- Business Lolland-Falster
- TETRAS (Interreg Baltic Sea Region project)
- Officina Baltica Sp. z o.o.
- Klaipeda Science and Technology Park / Cool Blue Baltic project
- Fish Farm “K-2”

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- Carlos Moniz - [INOVA - Instituto de Inovação Tecnológica dos Açores](#)
- Daniel Kumazawa Morais – [EMBRC](#)
- João Reis - [B2E Blue Bioeconomy CoLAB](#)
- Mariana Sá - [Associação Portuguesa de Aquicultores](#)

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INTRODUCTION

The **Blue Bio Techpreneurs (BBT)** project organised three hackathons (Nordic, Baltic and Atlantic) with a distinctive programme tailored for students, recent graduates, and professionals to address future challenges in the blue biotech sector. Each hackathon was a 48-hour event, approximately, where participants collaborated to develop innovative ideas and solutions for real-world problems. These challenges were presented by startups, companies, and institutions seeking fresh perspectives and creative solutions. Participants had the chance to apply and strengthen their transversal skills, including problem-solving and design thinking. At the same time, the BBT hackathons offered the private sector a unique opportunity to engage with young talent, fostering innovation and addressing pressing industry challenges.

The second BBT hackathon, the **Blue Bio Techpreneurs Baltic Hackathon**, was hosted by the University of Gdańsk in Borucino, Poland, from June 6 to 8, 2025. The third BBT hackathon, **Blue Bio Techpreneurs Atlantic Hackathon**, was hosted by BLUEBIO ALLIANCE and Pôle Mer Bretagne Atlantique in partnership with Ocean Hackathon® 2025 and its local edition in Peniche, facilitated by the Escola Superior de Turismo e Tecnologia do Mar – Politécnico de Leiria. This hackathon took place in Peniche, Portugal, from October 17 to 19, 2025.

This brief report highlights the key outcomes and lessons learned from the hackathons, which are now publicly available to inspire further engagement and innovation.



1. BALTIC HACKATHON CHALLENGES

The Baltic Hackathon focused on problems in the Baltic Sea basin and beyond. **Five challenges** represented by five companies from Poland, Denmark, and Lithuania, as well as international projects, were chosen for creative solutions by the hackathon

participants. Real-life selected challenges for the Baltic Hackathon addressed the needs of blue biotech actors from a circular and sustainable perspective. **Six mentors** representing those companies offered mentoring and skills-building support in solving the challenges, gaining perspectives for the participants' careers and access to the community of potential employers.

No.	Challenge Title	Owner	Country
1.	What's the secret to building an energy-efficient recirculating aquaculture system (RAS) in the Baltic area?	Aqua Medic Poland/ AquaLoop Interreg South Baltic	Poland + Interreg South Baltic area partners
2.	How can we make recirculating aquaculture system (RAS) production in the Baltic area sexy?	Business Lolland-Falster/TETRAS Interreg Baltic Sea Region project	Denmark + Interreg Baltic Sea Region partners
3.	Can we find a sustainable replacement for minerals (mica), used in cosmetics, in the Baltic?	Business Lolland-Falster	Denmark
4.	How can Baltic offshore wind farms be inspired to invest in regenerative ocean farming?	Officina Baltica Sp. z o.o./Klaipeda Science and Technology Park (Cool Blue Baltic project)	Poland, Lithuania
5.	How can we raise healthier fish with fewer treatments in intensive recirculating aquaculture systems (RAS) in the Baltic area?	Fish farm - "K-2"	Poland

TABLE 1 CHALLENGE TITLES, OWNERS, AND COUNTRIES OF THE CHALLENGES REPRESENTED AT THE BBT BALTIC HACKATHON

1.1 Aqua Medic Poland/AquaLoop Interreg South Baltic

Aqua Medic Poland has over 30 years of experience in saltwater aquatics. The company initially focused on commercial marine aquaculture, including filter systems for lobsters, oysters, and other seafood, as well as closed systems for public aquaria. Since 1992, Aqua Medic has expanded to develop and market complete systems, technology, and accessories for both hobby aquaria and large-scale aquaculture. Its product portfolio includes skimmers, filter systems, lighting, pumps, circulation equipment, and consumables. With a strong focus on environmental compatibility, Aqua Medic Poland designs products using materials and production techniques that minimise ecological impact while maintaining high performance.

AquaLoop (Aquaculture Expert Floor for Circular Economy Practice) is a 2023–2026 Interreg South Baltic Programme initiative that promotes circular-economy aquaculture in the South Baltic region. The project focuses on closing nutrient cycles, reusing waste streams, and generating valuable by-products, thereby reducing environmental impact and supporting sustainable food production. AquaLoop runs three cross-border pilot programmes: testing algae integration in recirculating aquaculture systems (RAS), improving nutrient efficiency in commercial aquaculture, and developing fish-shrimp-vegetable aquaponic systems, all aimed at demonstrating practical solutions for sustainable aquaculture.

Hackathon Challenge Title: What's the secret to building an energy-efficient recirculating aquaculture system (RAS) in the Baltic area?

Challenge owner:

Aqua Medic Poland, Poland www.aquamedic.pl

AquaLoop Interreg South Baltic Aqualoop.edu.pl

Disciplines: Aquaculture, Technology

Challenge short description:



All business units will face growing challenges from rising energy costs, which are unlikely to decrease. This is especially relevant for industries like indoor livestock production, including fish, shrimp, mussels, and other aquaculture species. Beyond labour costs, energy expenses will become a primary concern in business planning. As energy prices rise, financial performance will be affected, and a larger carbon footprint will result. In indoor livestock production, energy consumption is critical due to the constant operation of pumps, heating or cooling water, and maintaining optimal conditions. Therefore, energy efficiency has a direct impact on profitability. Adopting modern, energy-efficient technologies is essential, including energy-efficient pumps, heat pumps for water heating and cooling, photovoltaic (PV) systems, wind turbines, and water turbines for renewable energy, power storage systems (e.g., power banks), etc.

Solution:

The solution to the challenge was to design an energy-efficient Recirculating Aquaculture System (RAS) that maximises sustainability and reduces costs.

Mentor:

Bartosz Blum, CEO

1.2 Business Lolland-Falster/TETRAS Interreg Baltic Sea Region project

Business Lolland-Falster is a regional business organisation formed through a partnership between the municipalities of Lolland and Guldborgsund to support economic development on the islands. Acting as a hub for local SMEs, it offers advice, networking opportunities, and guidance for entrepreneurs, growing businesses, and companies undergoing ownership transitions. Operating at the intersection of public and private sectors, Business Lolland-Falster collaborates with local governments, educational institutions, and companies to attract investment, enable growth, and strengthen the regional business climate. Its initiatives include promoting green investments, supporting tourism, and fostering food-industry development.

TETRAS (Technology transER for Thriving Recirculating Aquaculture Systems) is an Interreg Baltic Sea Region project running from 2023 to 2025, aimed at making land-based RAS more sustainable and resource-efficient. The project emphasizes industrial symbiosis by reusing water, heat, and other by-products from nearby industries to reduce environmental impact and improve RAS economics. Through several pilot studies, TETRAS develops practical solutions, business models, and policy recommendations to encourage the adoption of circular, energy-efficient aquaculture practices across the Baltic Sea region.

Hackathon Challenge Title: How can we make recirculating aquaculture system (RAS) production in the Baltic area sexy?

Challenge owner:

Business Lolland-Falster, Denmark - <https://businesslf.dk/>

TETRAS Interreg Baltic Sea Region project - <https://interreg-baltic.eu/project/tetras/>

Disciplines: Business and Marketing, Aquaculture

Challenge short description:

Recent media coverage in Denmark has painted a one-sided and often negative picture of aquaculture, including Recirculating Aquaculture Systems (RAS), causing public perception to sour. The portrayal of RAS production in the national press has raised concerns about sustainability, animal welfare, and the environmental impact of such systems. With these controversies in mind, many consumers are skeptical about the legitimacy and benefits of RAS-produced fish. The key question remains how to rebuild consumer confidence and persuade them to see RAS-produced fish as a viable and responsible option.

Solution:

The solution to the challenge was to develop an informative approach that addresses misconceptions and shifts the narrative, helping consumers better understand the benefits and sustainability of Recirculating Aquaculture Systems (RAS).

Mentor:



Freya Robinson, Project manager (TETRAS project)

1.3 Business Lolland/Falster

Business Lolland-Falster is a regional business organisation formed through a partnership between the municipalities of Lolland and Guldborgsund to support economic development on the islands. Acting as a hub for local SMEs, it offers advice, networking opportunities, and guidance for entrepreneurs, growing businesses, and companies undergoing ownership transitions. Operating at the intersection of public and private sectors, Business Lolland-Falster collaborates with local governments, educational institutions, and companies to attract investment, enable growth, and strengthen the regional business climate. Its initiatives include promoting green investments, supporting tourism, and fostering food-industry development.

Hackathon Challenge Title: Can we find a sustainable replacement for minerals (mica), used in cosmetics, in the Baltic?

Challenge owner:

Business Lolland-Falster, Denmark - <https://businesslf.dk/>

Disciplines: Aquaculture, Pharmaceutical, Technology

Challenge short description:

The mineral mica, commonly used to give makeup its shimmer and sparkle, is often mined under deplorable conditions, with widespread reports of child labor and unsafe working environments. Despite growing awareness of these issues, finding makeup products free from mica remains a significant challenge, as the mineral is deeply embedded in the beauty industry. The harsh realities of mica mining conflict with the growing trend towards ethical consumption, leaving a gap in the market for alternatives. With the beauty industry's global reach, the demand for truly sustainable, and renewable makeup products is rapidly growing. Yet, a mica-free alternative has global potential as an enabler for production of truly cruelty-free, sustainable and renewable make-up, with an almost limitless market potential.

Solution:

The solution to the challenge was to develop a sustainable, ethical alternative to mica that meets the beauty industry's demand for sparkle, from the Baltic aquatic resources.

Mentor:

Anette Løttrup-Moore, Business developer

1.4 Officina Baltica Sp. z o.o./Klaipėda Science and Technology Park (Cool Blue Baltic project)

Officina Baltica Sp. z o.o. is a Polish maritime-technology company based in Gdynia, specializing in advanced solutions for ocean monitoring and marine research. Founded by scientists and engineers, the company develops unmanned surface vehicles (USVs), measurement systems, and software that support environmental monitoring, hydrography, and data collection. Collaborating closely with research institutions and industry partners, Officina Baltica provides modern, cost-efficient alternatives to traditional marine survey methods while promoting innovation in ocean technology.

Klaipėda Science & Technology Park is a key Lithuanian partner in the COOL BLUE BALTIC initiative, which promotes regenerative ocean farming (ROF) and sustainable blue-economy practices across the Baltic Sea. Klaipėda Science & Technology Park supports the development of community-led ocean farms that combine ecosystem restoration with new business opportunities. COOL BLUE BALTIC develops common licensing frameworks, funding and crowdfunding mechanisms, data-sharing platforms, and training tools, enabling fishers and coastal communities to adopt regenerative aquaculture while transforming traditional livelihoods into sustainable, ecosystem-friendly enterprises.



Hackathon Challenge Title: How can Baltic offshore wind farms be inspired to invest in regenerative ocean farming?

Challenge owners:

Officina Baltica Sp. z o.o., Poland - <https://officinabaltica.pl/>

Klaipeda Science and Technology Park, Lithuania, Cool Blue Baltic project

Disciplines: Aquaculture, Technology, Business and marketing

Challenge short description:

Regenerative ocean farming has gained momentum in countries like Denmark and Finland, where community-driven initiatives and technological innovations support sustainable marine cultivation. However, Lithuania and Poland faces considerable challenges in adopting similar solutions. Unlike Denmark, which has successfully integrated small-scale farming with fisheries and developed blue community gardens, Lithuania lacks a well-established marine aquaculture sector. The country's coastal conditions, such as strong waves, ice drifts, and open-sea exposure, create significant risks for traditional farming methods, while the low salinity of the Baltic Sea limits the range of viable marine species. In Poland, legal restrictions only allow mariculture in existing construction zones. Offshore wind farms will be places where mariculture can potentially be introduced. However, there is little interest from developers as they do not see the economic advantages of such investments.

Solution:

The solution to the challenge was to develop a comprehensive concept or service that overcomes key barriers in Lithuania and Poland, driving sustainable growth and attracting investor interest.

Mentors:

Aleksandra Zgrundo, CEO & Erika Zavackienė, Project manager - <https://kmtp.lt/en/home/>

1.5 Fish Farm/K2

Fish Farm K2 is a modern aquaculture company focused on producing high-quality fish in carefully controlled environments. Utilizing advanced technologies such as RAS (recirculating aquaculture systems), precise water-quality monitoring, and optimized feeding practices, K2 ensures the health and growth of its fish. By emphasizing both efficiency and sustainability, the farm minimizes environmental impact while maximizing productivity. Its commitment to innovation and responsible practices allows K2 to supply fresh, healthy fish to both local and international markets, meeting the growing demand for sustainable seafood.

Hackathon Challenge Title: How can we raise healthier fish with fewer treatments in intensive recirculating aquaculture systems (RAS) in the Baltic area?

Challenge owner:

Fish farm - "K-2", Poland - www.k-2.vip

Disciplines: Pharmaceutical, Aquaculture

Challenge short description:

Intensive aquaculture systems require specialized measures to maintain fish health and control parasites. Farmers often face the challenge of balancing the need to control parasites and diseases while avoiding overreliance on treatments that could harm fish and surrounding ecosystems. Intensive systems can create conditions where fish are more susceptible to diseases and parasites, raising the question of how to manage these issues in a way that minimizes external interventions. This leads to the consideration of alternative methods. However, the practical application of these alternatives is often complicated by factors such as cost, scalability, and the specific requirements of different fish species.

Solution:



The solution to the challenge was to develop a feasible method that controls parasites effectively and promotes the long-term health and welfare of the fish without the detrimental impacts of substance use.

Mentor:

Marcin Juchniewicz, Farm manager



FIGURE 1 LOGOS REPRESENTING THE CHALLENGES FEATURED IN THE BBT BALTIC HACKATHON.

2. ATLANTIC HACKATHON CHALLENGES

The Atlantic Hackathon focused on addressing challenges within the Atlantic Sea Basin and beyond. **Five real-world challenges**, proposed by companies from France and Portugal, were selected for participants to develop creative solutions. Notably, one challenge originated from the Azores, an outermost region of the European Union. This inclusion was significant because it reflects the EU's commitment to ensuring that innovation and sustainable development reach all territories, including remote and peripheral regions. By integrating challenges from the Azores, the hackathon promoted territorial cohesion and highlighted the importance of addressing unique local needs while fostering collaboration across the entire European maritime space.

These challenges reflected the needs of blue biotech actors from a circular and sustainable perspective. Five mentors representing these companies provided guidance and skills-building support throughout the event, helping teams tackle complex problems while offering participants valuable career insights and access to a network of potential employers.

No.	Challenge Title	Owner	Country
1.	Sustainable upcycling of aquaculture nutrients into circular bio-based solutions	AmpliAqua Building Global Innovators (BGI) - Sustainable Ventures	Portugal
2.	Detecting Microplastics in Food and Water: A Smart Monitoring Challenge	INOVA - Instituto de Inovação Tecnológica dos Açores	Portugal
3.	Tracking Marine Biodiversity: An Interactive Genomics Explorer for Europe	European Marine Biological Resource Centre (EMBRC)	France
4.	From Sea to Dish - Intelligent Traceability for a Sustainable Ocean	B2E Blue Bioeconomy CoLAB	Portugal
5.	Let's improve aquaculture in Portugal?	Associação Portuguesa de Aquacultores	Portugal

TABLE 2 CHALLENGE TITLES, OWNERS, AND COUNTRIES OF THE CHALLENGES REPRESENTED AT THE BBT ATLANTIC HACKATHON

2.1 AmpliAqua/ Building Global Innovators (BGI) - Sustainable Ventures

Hackathon Challenge Title: Sustainable upcycling of aquaculture nutrients into circular bio-based solutions

Challenge Owner:

[AmpliAqua®](#) is a pioneering pre-commercial research and development (R&D) unit that champions innovation and sustainability in land-based aquaculture. It is promoted by the accelerator Building Global Innovators (BGI) - Sustainable Ventures. This state-of-the-art unit, located at the port of **Nazaré, Portugal**, is tackling the challenges of traditional aquaculture by developing and validating cutting-edge solutions for resource circularity and environmental impact reduction, aligning with the European Green Deal.

AmpliAqua's innovative approach centers on an advanced Recirculating Aquaculture System (RAS) that integrates several sustainable components:

- Advanced filtration and nutrient concentration equipment.
- Units for producing hydroponic greens and microalgae.

This setup creates a symbiotic, multi-trophic system that allows for the valorisation of by-products, contributes to CO₂ mitigation (through algae and plant capture), and minimizes greenhouse gas emissions. The system is designed to be modular and replicable globally. Furthermore, AmpliAqua, in partnership with BGI and others, is actively advancing the sector through:

- Developing and validating new feed formulations.
- Creating a sophisticated system for monitoring, data collection, and automation (digitalization).

Planning the construction of an Emerging Species Hatchery to boost local sustainable production.

AmpliAqua is not just a unit; it is a vision to establish a knowledge and production hub for aquaculture, accelerating the industry's transition to a sustainable and efficient bioeconomy.

Disciplines: Fishing and aquaculture, Circular Economy,

Challenge short description:

Despite its high nutrient content, this side stream remains largely underutilized. The challenge is to develop a sophisticated digital tool to profile, match, and optimize effluents for applications such as bioponic agriculture (basil and arugula), where nutrient requirements are well-defined. Key tasks include mapping the biochemical composition of effluents (N, P, K, micronutrients, pH), developing a database or algorithm to align effluent profiles with crop needs, assessing environmental impacts of valorisation pathways (fertigation, bioplastic production), and proposing a technically and economically viable business model. This initiative integrates aquaculture data, sustainability science, and product innovation to transform byproducts into valuable agricultural inputs and actionable intelligence.

Solution:

The expected solution was to produce a prototype of a digital tool, which could take the form of an algorithm, database, or web-based application, designed specifically to connect aquaculture effluent profiles with circular economy applications. This tool would concentrate on enhancing plant nutrition through the utilization of real data derived from nutrient-rich effluents, focusing particularly on the cultivation of basil and arugula within our IMTA system. Anticipated outputs would include:

- Matching logic/ algorithm: A well-defined mechanism that correlates the composition of effluents with the nutrient demands of various crops, ensuring that each plant receives exactly what it needs for optimal growth;
- Visual dashboard/interface: A user-friendly visual dashboard or interface that empowers producers and innovators to make informed decisions based on real-time data and insights.

Mentor:

Paulo Frias. AmpliAqua.

2.2 INOVA - Instituto de Inovação Tecnológica dos Açores

Hackathon Challenge Title: Detecting Microplastics in Food and Water: A Smart Monitoring Challenge

Challenge Owner:

[INOVA - Instituto de Inovação Tecnológica dos Açores](#) is a key technological infrastructure in the Azores, Portugal, dedicated to promoting innovation and development crucial for the region's businesses and economy.

Its mission is to support the Azores' agro-industrial sector and other technological areas by providing high-quality Research, Technological Development (R&DT), and technical services. This work is underpinned by a commitment to integrity, impartiality, and adherence to the NP EN ISO/IEC 17025 standard.

INOVA's capabilities and facilities are vital for modernising the regional economy, including:

- Accredited laboratories for chemical and microbiological analyses, metrology, and environmental studies.
- An industrial pilot plant equipped for R&DT projects in key Azorean products, such as cheese and dairy products, and the processing of meat and fish.
- Experimental fields featuring greenhouses and hydroponic systems, focused on developing and promoting new technologies for traditional and specialised crops.

Through these resources, INOVA plays a strategic role in ensuring the quality and competitiveness of Azorean products, driving the region's commitment to quality, innovation, and a sustainable future.

Disciplines: Pollution

Challenge short description:

The increasing presence of microplastics in food and water poses a critical threat to public health, food safety, and the environment. Current laboratory detection methods are costly, time-consuming, and accessible to only a few entities. This challenge invites the development of an innovative digital, technological, or data science-based solution to support the detection, analysis, tracking, or monitoring of microplastics in food or agricultural water resources, with a focus on regions such as the Azores. Potential approaches include data-driven predictive models to identify contamination sources and risks; applications or platforms integrating environmental and laboratory data; prototypes of accessible sensors or preliminary detection methods; traceability systems for microplastic presence in the food supply chain; and impact visualizations to support public decision-making or consumer awareness. This initiative could assist institutions like INOVA in expanding their accredited laboratory capacity for microplastic analysis in food and water, thereby enhancing the quality of products under the "Azores" label.

Solution:

The solution was to develop a simple digital tool that supports the creation and visualization of a laboratory methodology for detecting microplastics in food and water. The goal was not to build the full scientific method, but to create a first digital step that helps organize and communicate the process. This could include a prototype that maps the laboratory workflow (from sample collection to analysis), a basic data simulation with fictional sample results, and/or a simple dashboard or interface to register and view microplastic data. The result would serve as a foundation for future lab implementation, team training, and project communication.

Mentor:

Carlos Moniz, INOVA

2.3 European Marine Biological Resource Centre (EMBRC)

Hackathon Challenge Title: Tracking Marine Biodiversity: An Interactive Genomics Explorer for Europe

Challenge Owner:

The [European Marine Biological Resource Centre \(EMBRC\)](#) is a pan-European Research Infrastructure (ERIC) dedicated to pioneering marine biology and ecology research across Europe and beyond. Its headquarters is in **Paris, France**, though its network spans over 80 marine stations and institutes across 10 European countries.

EMBRC's central mission is to accelerate knowledge of marine biodiversity, ecosystems, and their responses to environmental pressures, with the goal of promoting the sustainable use of marine resources and fostering a Blue Economy. The Centre achieves this by providing researchers from academia and industry with a unified, high-quality gateway to a diverse portfolio of services, including:

- Ecosystem Access: Facilitating in-situ research and sampling across a range of marine habitats, from the Arctic to the tropics, using coastal research vessels and scientific dive teams.
- Biological Resources: Providing access to marine organisms, including wild-type samples, extensive culture collections of microorganisms, and marine model organisms for experimental studies.
- Cutting-Edge Technology: Offering access to advanced facilities and platforms for molecular biology and omics, bioassays, imaging, and structural analysis.
- Data and Training: Advancing data handling through the EMO BON Observatory (a genomics biodiversity network) and supporting the next generation of 'blue workers' through specialized training platforms. By enabling this vital research, EMBRC drives scientific innovation that delivers sustainable solutions in the key sectors of food security (aquaculture), human health (bioprospecting), and environmental protection.

Disciplines: Climate, Marine Sciences, Fishing and Aquaculture, Ports and Coastal environments, Pollution, Conservation and Protection, Circular economy, Spatial planning

Challenge short description:

This challenge invites a multidisciplinary team to create an interactive web tool to explore Europe's marine biodiversity using data from EMO BON, EMODnet, and Global Fishing Watch. Users will be able to visualize species locations, track changes in diversity and community structure, identify biodiversity hotspots, and analyze correlations with environmental conditions and human activities. The prototype should filter by species, time, or region, compare trends, and support frameworks like MSFD, EOVs, and EBVs. Apply data science, genomics, and visualization to help tell the story of Europe's changing oceans and contribute to marine conservation and open science.

Solution:

The solution of this project aimed to prototype an interactive online platform (web dashboard) that could:

- Geolocate marine species observed through EMO BON
- Enable temporal and spatial filtering of biodiversity indices
- Display human activity overlays from Global Fishing Watch
- Incorporate environmental context layers from EMODnet (e.g., temperature, salinity)
- Visualize trends and indicators relevant to EOVs, EBVs, and the MSF,

The output would be a working front-end prototype with map-based visualization, species search, and temporal comparison tools, supported by scripts for integrating genomic, environmental, and fishing data.

Mentor:

Daniel Kumazawa Morais, *EMBRC*

2.4 B2E Blue Bioeconomy CoLAB

Hackathon Challenge Title: From Sea to Dish - Intelligent Traceability for a Sustainable Ocean

Challenge Owner:

[**B2E – Blue Bioeconomy CoLAB \(Collaborative Laboratory\)**](#) is a private, non-profit association in **Porto, Portugal** dedicated to forging a new, sustainable blue bioeconomy by uniting the core pillars of the sector.

The CoLAB's mission, encapsulated by the phrase "Inspired by the Ocean, Driven by the Market, Powered by Knowledge," is to establish crucial synergies between academia and business. Its primary focus is on boosting innovation and creating economic and social value in three high-potential areas: Natural Marine Resources, Marine Biotechnology, and Sustainable Aquaculture.

B2E serves as a vital bridge, connecting research and education with innovation and business to accelerate the transition of marine science into tangible, marketable products and services. Its core activities include:

- Research-to-Market Acceleration: Identifying ocean-inspired, bio-based products with commercial potential and supporting their scale-up and market entry.
- Sectoral Focus: Promoting the sustainable management of wild marine resources and the development of sustainable, controlled-condition production methods, such as aquaculture.
- Biorefinery and Circularity: Fostering biorefinery frameworks to ensure the full valorisation of marine biological resources, aligning strongly with circular economy principles.
- Public Engagement: Actively supporting educational and outreach initiatives, such as ocean literacy programs, to raise consumer awareness and engage the community, particularly youth, in sustainable innovation.

By mobilizing a strong network of partners—including leading universities, research centers, and private companies—B2E is working to position Portugal as a global pioneer in a sustainable, innovative, and decarbonizing Blue Bioeconomy.

Disciplines: Climate, Fishing and Aquaculture, Ports and Coastal environments, Conservation and protection, Raising awareness of maritime areas, Circular economy, Sustainable Choices

Challenge short description:

In today's conscious consumer market, seafood transparency is crucial, yet current traceability systems are fragmented and hard to interpret. The challenge is to design an intuitive prototype (e.g. app, website, QR code system, or digital panel) that reveals the full journey of seafood, from harvest to table. The solution should translate complex traceability data into clear visualizations, incorporate sustainability metrics (carbon footprint, fishing impacts), social responsibility indicators (fair labor, community benefits), and nutritional information, while remaining accessible to non-specialists and based on real-world data.

Solution:

Design an intuitive and engaging prototype (app, website, QR code system, digital panel, or other innovative solution) that could reveal the complete journey of seafood products - from harvest to table. A digital representation of the journey, from catch/production (aquaculture) to consume.

- Capture point, boat, type, Aquaculture production.
- Discharge
- Transport
- Retail

Mentor:

João Reis, B2E Blue Bioeconomy CoLAB

2.5 Associação Portuguesa de Aquacultores

Hackathon Challenge Title: Let's improve aquaculture in Portugal?**Challenge Owner:**

[Associação Portuguesa de Aquacultores \(APA\)](#) - Portuguese Association of Aquaculturists is the key representative entity for the aquaculture sector in **Portugal**, representing approximately 90% of the industry. Its primary commitment is to advocate for the benefits of aquaculture and to promote economic growth through the responsible and sustainable production of high-quality fish and seafood. The APA serves as the collective voice for aquaculturists, uniting all stakeholders—producers, researchers, and related businesses—with the overarching purpose of contributing to sustainable production. The Association is actively involved in:

- Policy and Advocacy: Engaging with governmental bodies, regulatory agencies, and international organizations to help shape and develop policies that drive the growth of aquaculture in Portugal. This includes addressing key issues such as the availability of aquatic areas for farming and relevant legislation.
- Knowledge Transfer and Innovation: Organizing specialized seminars, conferences, and workshops to promote continuous innovation and professional development within the sector. These events focus on critical themes like the sustainability of fish feeds, applied research, and technological advancements (such as Recirculating Aquaculture Systems - RAS).
- International Cooperation: Facilitating the exchange of ideas and best practices with international associations and producers to strengthen the national sector and foster global competitiveness.
- Sectoral Development: Supporting associated members in finding solutions to challenges in production, quality, and market access, with a special emphasis on the production of flatfish, bivalves (oysters, mussels), algae, sea bass, and sea bream.

The APA positions aquaculture as a crucial pillar for Portugal's Blue Economy strategy, emphasizing its role in achieving food security and environmental sustainability through efficient, high-quality production.

Disciplines: Climate, Marine Sciences, Fishing and Aquaculture, Ports and Coastal environments, Safety and security at sea,

Challenge short description:

Climate change is reshaping marine ecosystems, with rising sea temperatures intensifying harmful algal blooms (HABs) that produce marine biotoxins. These toxins threaten marine life, human health, and aquaculture, particularly in Portugal, where bivalve farming (mussels, clams, oysters) is vital yet highly vulnerable. As filter feeders, bivalves accumulate toxins, leading to harvest bans and economic losses. Existing monitoring tools are often reactive, complex, and inaccessible to small producers. To address this, BlueSentinel proposes an AI-powered mobile and web application that predicts sea temperature fluctuations and biotoxin occurrences in real time. Using public historical datasets from marine and environmental platforms, the system provides interactive visualizations, localized forecasts, and early alerts, helping producers and authorities respond proactively and support sustainable aquaculture.

Solution:

The solution is a mobile application designed to connect aquaculture effluent profiles with crop nutrient requirements

Mentor:

Mariana Sá, Associação Portuguesa de Aquacultores



FIGURE 2 LOGOS REPRESENTING THE CHALLENGES FEATURED IN THE BBT ATLANTIC HACKATHON.



3. BALTIC HACKATHON PARTICIPANTS

The Baltic Hackathon created a fruitful dialogue between academia and the industry and featured direct interaction between actual start-ups/companies and students of different disciplines. The Baltic Hackathon brought together a total of **45 participants**, including 25 individuals who were MSc, or PhD students (Table 2) from 17 universities across **15 European countries**. The event was further enriched by the participation of **6 mentors**, who presented the challenges and guided the students alongside **11 project partners** and committee members. Together, the group represented **23 nationalities**, with a notable emphasis on gender diversity of 62% of participants were female (Figure 2 and Table 3).



BBT Baltic Hackathon: who was there?

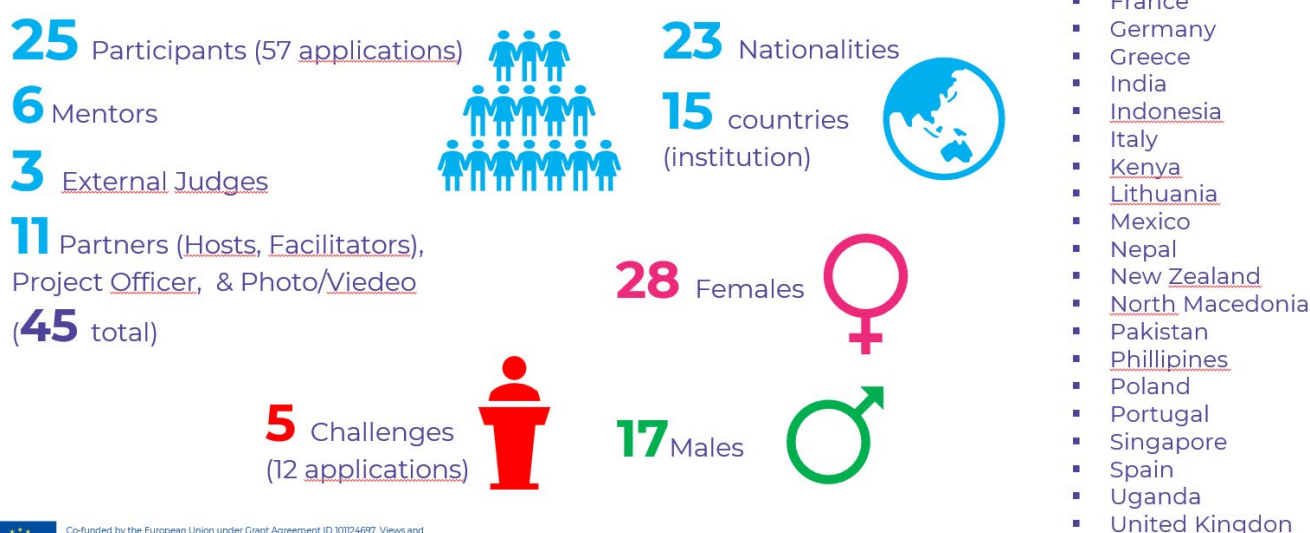


FIGURE 3 BREAKDOWN AND SUMMARY OF PARTICIPANTS AT THE NORDIC HACKATHON.



Study degree	No. of participants
Masters	15
PhD	10

TABLE 3 BREAKDOWN OF STUDENT PARTICIPANT DEGREE CATEGORIES.

S/N	University/Programme	No. of participants
1	University of South Bohemia, Czech Republic	1
2	University of Liège, Belgium	1
3	Technical University of Denmark (DTU), Denmark	3
4	University of Gdańsk, Poland	3
5	Alfred Wegener Institute/Humboldt University of Berlin, Germany	1
6	Ghent University, Belgium	3
7	Universidad de Murcia, Spain	1
8	Nantes University, France	1
9	Klaipeda University, Lithuania	1
10	University of Southampton, UK	2
11	RWTH Aachen University, Germany	1
12	Universidad de Vigo, Spain	1
13	Aalborg University/Leibniz Institute for Baltic Sea Research, Denmark/Germany	1
14	Lappeenranta-Lahti University of Technology LUT, Finland	1
15	La Rochelle University, France	1
	Ss. Cyril and Methodius University in Skopje, North Macedonia	1
16	University of Udine, Italy	1
17	University of Barcelona, Spain	1

TABLE 4 LIST OF UNIVERSITIES AND INSTITUTIONS OF PARTICIPANTS IN THE BBT BALTIC HACKATHON.

4. ATLANTIC HACKATHON PARTICIPANTS

The Atlantic Hackathon fostered a productive dialogue between academia and industry, featuring direct interaction among startups, companies, students from diverse disciplines, and recent graduates. The event brought together **49 participants**, including 21 BSc, MSc, and PhD students (Table 6) from **9 universities across three European countries**. It was further enriched by the participation of **5 challenge owners**, who presented real-world problems and guided teams, and **8 coaches**, 4 of whom were Blue Bio Techpreneurs project partners, who provided continuous support. Additionally, 5 jury members joined 7 project partners and committee members to evaluate the final pitches. Altogether, the group represented **13 nationalities** (Figure 4 and Table 5), creating a truly international and interdisciplinary environment.

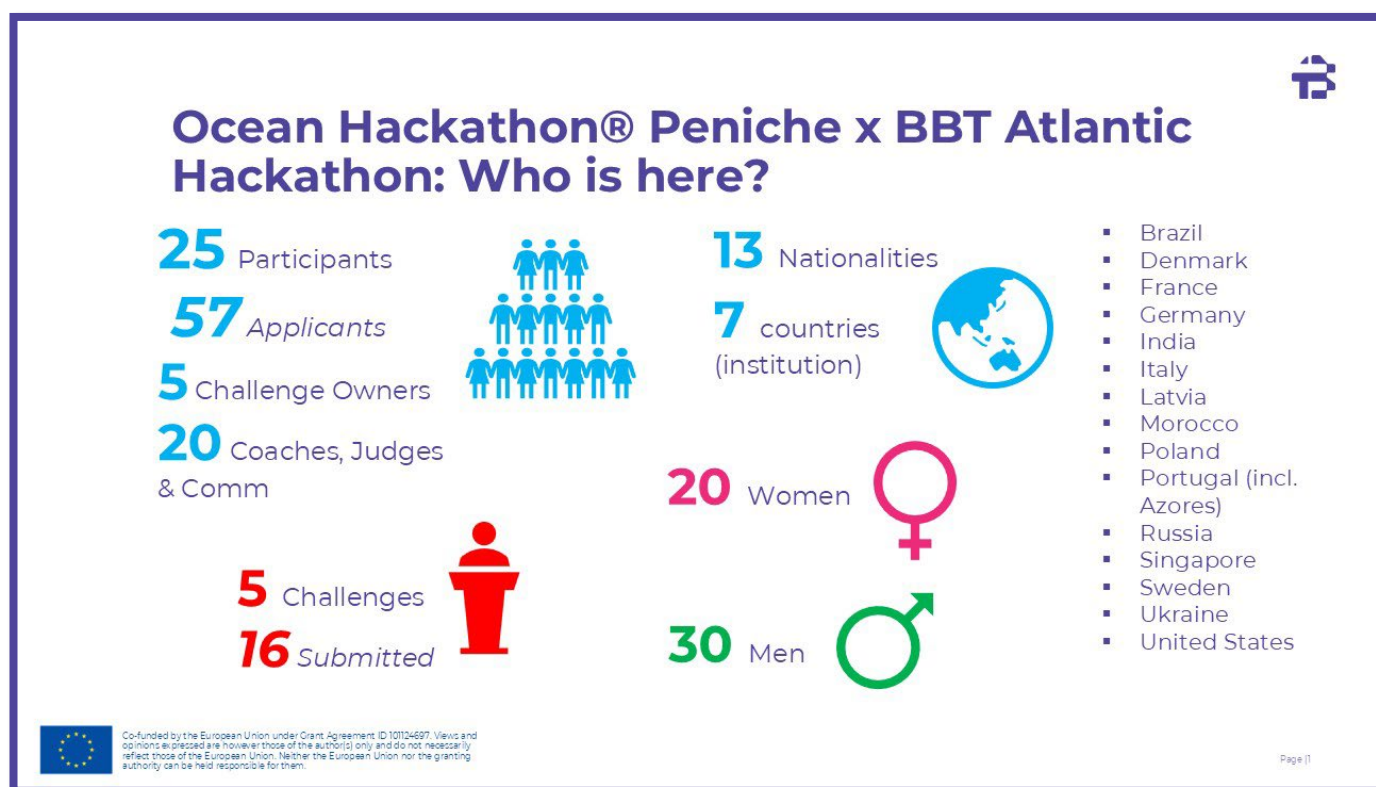


FIGURE 4 BREAKDOWN AND SUMMARY OF PARTICIPANTS AT THE ATLANTIC HACKATHON.

Study degree	No. of participants
Bachelors	6
Masters	11
PhD	3

TABLE 5 BREAKDOWN OF STUDENT PARTICIPANT DEGREE CATEGORIES.

S/N	University/Programme	No. of participants
1	Instituto Politécnico de Bragança	5
2	Politécnico de Leiria - Escola Superior de Turismo e Tecnologia do Mar (ESTM)	4
3	UAc -Universidade dos Açores	2
4	Free University of Bozen-Bolzano	2
5	NOVA School of law and NOVA SBE	2
6	Universidade de Aveiro	2
7	Politécnico de Leiria	1
8	University of Lisbon / Técnico IST	1
9	La Rochelle University (France)	1

TABLE 6 LIST OF UNIVERSITIES AND INSTITUTIONS OF PARTICIPANTS IN THE BBT ATLANTIC HACKATHON.

5. BALTIC HACKATHON PROGRAMME

The program for the Baltic Hackathon was carefully structured based on the methodology developed by SDU (BBT Hackathons work package lead), while still adapted to the Polish context. The program included an event kick-off and introduction to introduce the event, rules, schedule, and goals as an opportunity for participants to meet, followed by a pitching session where mentors presented their challenges to the teams.

The program included work blocks with milestones during which teams could develop their projects, and mentors and project partners could provide guidance, answer questions, and offer technical or strategic advice. Finally, a block for pitch presentations was scheduled. Working sessions were accompanied by socialising breaks, offering participants, mentors, and project partners a chance to network.

5.1 Day 1

The hackathon kicked off at the Faculty of Oceanography and Geography, University of Gdańsk, where all the participants were welcomed at the registration with some collaterals sponsored by the University of Gdańsk and the Polish Trout Breeders Association. Registration was followed by welcoming speeches from UG representatives, BBT Coordinator & Project Officer, followed by challenge pitches by mentors and participants/challenge groups presentations.

Networking, getting to know the groups, a finger food buffet, a joint photo and a walk to the seaside followed the formal presentations. This informal setting provided an excellent opportunity for participants to meet and engage with one another and with mentors and BBT partners.

After that, the group proceeded to the hotel accommodation close to the event venue, - Centre for Water Monitoring and Protection University of Gdańsk, Hotel Adler - where the day ended with dinner and a networking bonfire.



FIGURE 5 ARRIVAL OF PARTICIPANTS, MENTORS, FACILITATORS AND JURY MEMBERS, AND JOINT PHOTO AT THE FACULTY OF OCEANOGRAPHY AND GEOGRAPHY, UNIVERSITY OF GDAŃSK.



FIGURE 6 JOINT PHOTO AT THE SEASIDE, GDYNIA.



FIGURE 7 BONFIRE AND NETWORKING.

5.2 Day 2

The day began with the welcome of the BBT Baltic Hackathon participants to the Centre for Water Monitoring and Protection, University of Gdańsk, by the Director of the centre.

Later, during the first session, **Session 1: Challenge solution**, participants had the opportunity to get to know their group members and mentors while learning about their challenge in detail. The focus was on understanding the final pitch deliverables and preparing to work independently in the next session. By the end of the session, teams were ready to begin developing their solutions.

Session 2: Solution design and feedback followed after a coffee break, where the groups worked on their solutions independently, mentors provided feedback on the initial ideas, helping teams refine their solutions. By the end of the session, participants were expected to have a clear direction for their projects.

After a lunch break, participants dove into the final session of the day, **Session 3: Solution Design, Pitch Preparation & Pitch Practice**, focused on refining the solutions and preparing the pitch presentations. Teams worked independently to develop their presentations, with mentors providing feedback and guidance. By the end of the session, teams were prepared to continue refining their presentations through the evening, with a final pitch practice scheduled for the next morning.

The day concluded with a dinner buffet, and after dinner pitch preparations and practice.



FIGURE 8 HACKING OF CHALLENGES BY THE FIVE GROUPS.

5.3 Day 3

The final day of the hackathon began with the introduction of the Jury panel and **Session 4: Pitching session** began, where each team had 10 minutes to present their solutions to the panel.

The format and style of the **final pitch** were flexible and up to the creativity and preference of the team, however the **Final Pitch requirements and sections were set:**

1. A max 10 min Power Point Presentation with 5 sections followed by a 3 min Q&A.
2. All group participants should pitch (e.g. one section per student).
Mentors/challenge owners cannot participate in the final pitch.

Section Requirements:

3. Section 1 – Problem Definition and Context
Briefly describe the challenge or problem being addressed.
Contextualise the importance of solving this issue within the relevant field or industry.
4. Section 2 – Proposed Solution
Outline the proposed solution or innovation.
Highlight how it addresses the problem defined in the previous section.
5. Section 3 – Implementation Strategy
Detail the steps or methods for implementing the solution.
Include potential tools, technologies, or resources needed.
Include prototype/examples the group made if ready.
6. Section 4 – Impact and Benefits
Explain the potential impact of the solution.

Discuss short-term and long-term benefits and any broader implications for the industry or community.

7. Section 5 – Feasibility and Sustainability

Assess the economic, environmental, and social sustainability of the solution.

Discuss the feasibility of the solution in terms of resources, time, and technology required.

After the pitching session, scoring took place performed by 6 judges, according to the Rubrics (Table 7), and the winners were announced.

Each judge can score 1 – the lowest to 5 – the highest number of points for each category (max. 35 points).	
The group will receive the average number of points awarded by all judges in each category. Teams with the highest number of points across all categories will receive a prize (Master, Expert and Advanced level awards).	
<u>Section 1 - Problem Definition and Context</u> : The problem/challenge is clearly defined, and the group demonstrated an understanding of its seriousness and scale of the problem.	1-5 points
<u>Section 2 - Proposed Solution</u> : The proposed solution is well-explained. It effectively addresses the problem defined in the previous section. The solution is innovative.	1-5 points
<u>Section 3 - Implementation Strategy</u> : The steps/methods for implementation are detailed and clear. Relevant tools, technologies, or resources are mentioned. Prototypes or examples are presented (if applicable).	1-5 points
<u>Section 4 - Impact and Benefits</u> : The potential impact of the solution is explained. Both short-term and long-term benefits are discussed. The broader implications for the industry/community are addressed.	1-5 points
<u>Section 5 - Feasibility and Sustainability</u> : The solution's sustainability is assessed (economic, environmental, social). The feasibility of the solution in terms of resources, time, and technology is discussed.	1-5 points
<u>Presentation Quality</u> : The delivery is clear and engaging. Each group participant was included in the pitch. Presenters maintained eye contact, composure, and engagement. The presentation is well-organized and structured.	1-5 points
<u>Questions & Answers</u> : The presenters are able to effectively answer questions. The group demonstrated a good understanding of the project in the answers.	1-5 points

TABLE 7 RUBRICS FOR THE JUDGING PANEL

The final part of Day 3 was the award **ceremony**. The winners were:

1st place: Group 3 – Challenge: Can we find a sustainable replacement for minerals (mica), used in cosmetics, in the Baltic?

2nd place: Group 5 – Challenge: How can we raise healthier fish with fewer treatments in intensive recirculating aquaculture systems (RAS) in the Baltic area?

3rd place: Group 2 - Challenges 2: How can we make recirculating aquaculture system (RAS) production in the Baltic area sexy?



FIGURE 9 PITCHING SESSION ON DAY 3.



FIGURE 10 JUDGING PANEL AT THE PITCHING SESSION.



FIGURE 11 PRICE GIVING CEREMONY ON DAY 3.



FIGURE 12 BALTIC HACKATHON 2025 FINAL PICTURE.



FIGURE 13 INDIVIDUAL GROUP PHOTOS.

6. ATLANTIC HACKATHON PROGRAMME

The Atlantic Hackathon program was designed to keep participants engaged and productive. It began with registration and an opening ceremony introducing the event's goals, rules, and partners, followed by a pitching session where challenge owners presented their topics and teams introduced themselves. An ideation workshop and team-building activities encouraged collaboration before moving into structured work blocks focused on solution design and pitch preparation. Coaches and challenge owners provided guidance throughout, while social breaks and networking moments fostered informal exchanges. The final day featured pitch rehearsals, presentations to the jury, scoring, and a closing ceremony with prizes, creating an inspiring environment for innovation and teamwork.

6.1 Day 1

Day 1 of the Atlantic Hackathon began with registration and a welcoming ceremony introducing the event's goals, rules, and partners. Participants then joined a pitching session where challenge owners presented their topics and teams introduced themselves. After a coffee break and group photo, an ideation workshop and team-building activities encouraged collaboration and creativity. Once the ice was broken and ideas were flowing, the teams dove straight into their hackathon challenges. The day wrapped up with dinner and networking, setting the stage for an inspiring weekend.



FIGURE 14 WELCOMING CEREMONY AND WORKSHOP WITH THE OFFICIAL MASCOT “CAPTAIN OCTÁVIO”.

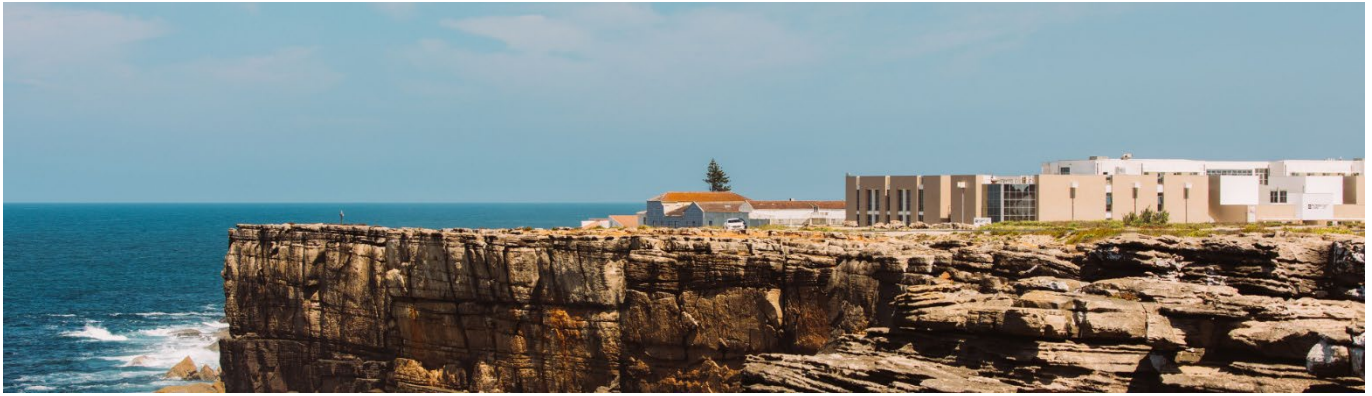


FIGURE 15 EVENT VENUE AT ESCOLA SUPERIOR DE TURISMO E TECNOLOGIA DO MAR – POLITÉCNICO DE LEIRIA.

6.2 Day 2

Day 2 began with a breakfast buffet and a short kick-off session where participants reviewed the schedule and the expected outcomes. Teams then moved into their working spaces for the first major development phase.

The morning session focused on solution design, encouraging participants to brainstorm, structure ideas, and align with pitch requirements. Coaches and challenge owners provided feedback and answered questions to guide technical and strategic decisions. After a coffee break boosted by blue bio-based snacks provided by innovative local companies incorporating salicornia and seaweed into their products, teams refined their concepts and began drafting their pitch presentations, deciding roles and responsibilities for each section.

Lunch offered a moment to recharge before diving into the afternoon phase, which was dedicated to further refining solutions and preparing the pitch deck. This session marked the last opportunity for direct input from coaches and challenge owners, ensuring teams were ready for the final presentation.

The day concluded with a sunset networking event overlooking Berlengas Archipelago, a UNESCO Biosphere Reserve (designated in 2011) and has been a Portuguese Natural Reserve since 1981. Group photos were taken followed by dinner and informal exchanges, creating a balance between intense work and social interaction. By the end of the day, teams had a clear direction and were prepared to continue refining their pitches through the evening, with practice scheduled for the next morning.



FIGURE 16 HACKING OF CHALLENGES BY THE FIVE GROUPS, COFFEE BREAK WITH SALICORNIA AND SEAWEED SNACKS AND BERLENGAS ARCHIPELAGO SUNSET NETWORKING EVENT.

6.3 Day 3

The final day of the Atlantic Hackathon began with breakfast and pitch practice, giving teams time to rehearse and refine their presentations. Coaches and challenge owners provided last-minute feedback during individual practice sessions to ensure clarity and confidence.

At 9:30am, the session began with a plenary session where João Rito, founder of [SEAentia](#), sharing his inspiring journey as a blue bio entrepreneur, offering valuable insights into innovation and sustainability in the ocean economy. After a presentation of the jury members and the prize awaiting the winning team, a chance to travel to Brest to compete in the Grand Finale of the Ocean Hackathon, the pitching session began!

Each team presented its solution to the jury within five minutes, followed by questions from the jury panel. Presentations followed a similar structure: defining the challenge and its context, outlining the proposed solution, and detailing the implementation strategy, including tools, technologies, and prototypes where available. Teams also highlighted the expected impact and benefits of their solutions, addressing both short-term and long-term outcomes, and assessed feasibility and sustainability from economic, environmental, and social perspectives. The maturity of the solutions given the short time constraints were striking. Several solutions involved detailed data to support their pitch and demonstrations of their solutions' user interface. Pertinent questions and remarks from our jury of experts underlined the quality of projects and while identifying areas for learning and improvement, a substantive contribution to the experience of the hackathon for participants.

After all pitches were delivered, the jury scored the projects and pitches based on clarity, innovation, and technical quality. Judges remarked upon the impressive quality of the solutions developed in such a short time frame. Their discussions and individual scores rendered a remarkably tight result, with first and third place winners separated by less than 1 point out of 34 total.

In the end, the solution **Circularponic**, responding to the challenge brought by AmpliAqua | Building Global Innovators (BGI) - Sustainable Ventures, won the day, with winners presented with a ceremonial ticket to the Ocean Hackathon® Grand Finale in Brest (2nd December 2025), where their travel and accommodation would be covered. Second and third place winners received local-themed gifts and recognition for outstanding teamwork and creativity.

The event concluded with lunch and packing up before transportation back to Lisbon Airport, marking the end of a weekend dedicated to ocean innovation and collaboration.



FIGURE 17 PLENARY, PITCHING SESSION AND WINNERS ON DAY 3.

6.4 Follow-Up and Next Steps

Following their return home, all participants received soft copy certificates of participation recognizing their engagement with the event and thanking them for their commitment and the quality of their work. In addition to the quantitative score attributed by the jury, each team's coach also provided qualitative feedback on several dimensions of the project developed during the hackathon. Such detailed qualitative feedback allowed for an additional opportunity for learning and third-party feedback on solutions.

BBT partners also contributed to preparing the winning team for the next step of the competition in Brest, notably offering guidance for pitch refinement and communicating expectations for the Grand Finale in Brest where the Blue Bio Techpreneurs team has high hopes for an excellent performance and experience for Circularponic.



FIGURE 18 ATLANTIC HACKATHON 2025



FIGURE 19 INDIVIDUAL GROUP PHOTOS.

7. BALTIC HACKATHON SPONSORS & PRIZES

We would like to extend our special appreciation to our generous sponsors for their invaluable support of the Blue Bio Techpreneurs hackathon.

We gratefully acknowledge our **Prize and Collateral Sponsors**: the **Polish Trout Breeders Association**, the **University of Gdańsk**, the **Centre for Sustainable Development (UG)** and the **Technology Transfer Office (UG)**, which played a crucial role in making this event a success. Their contributions not only enhanced the experience for all participants but also demonstrated their strong commitment to the blue economy and sustainable practices. This support underscores the importance of cross-sector collaboration in driving innovation and growth within the blue biotechnology sector.

The prizes, generously provided by sponsors, included:

- 3rd place - Fish mugs
- 2nd place - Thermo mugs
- 1st place - Powerbanks & two 90-minute mentoring sessions for the winning team (by Centre for Sustainable Development, UG & Technology Transfer Office, UG):

“Development of the BBT Baltic Hackathon winning challenge solution and its alignment with the SDGs” and *“Transforming the BBT Baltic Hackathon winning challenge solution into a startup”*. The sessions took place online on the 15th and 23rd of October 2025, and the participants were granted certificates of participation after the sessions.

All the participants also received certificates of participation, and 3 winning groups received winner certificates. “Thank you” tokens of appreciation were also granted to the mentors and facilitators of the event.



FIGURE 20 BBT BALTIC HACKATHON SPONSORS.



FIGURE 21 BBT BALTIC HACKATHON PRIZES



FIGURE 22 BBT BALTIC HACKATHON 1ST PRIZE

8. ATLANTIC HACKATHON SPONSORS & PRIZES

We would like to express our sincere appreciation to our generous sponsors for their invaluable support of the Atlantic Hackathon. **Horta da Ria**, **WISSI**, **Thai Union**, and **SEAentia** (Figure 21) played a crucial role in making this event a success. Their contributions not only enhanced the experience for all participants but also demonstrated their strong commitment to the blue economy and sustainable practices. This support underscores the importance of cross-sector collaboration in driving innovation and growth within the blue biotechnology sector.

The winning team of the Atlantic Hackathon won the right to represent the local edition of the Ocean Hackathon® in Peniche at the *Grand Finale in Brest on December 2nd 2025*. The winning teams from each edition local edition of Ocean Hackathon® Challenge will come together for a final pitch competition in front of an international jury. The top three pitches will then

receive a financial prize. This follow up opportunity is a significant added value for the participating team and provides an additional stage for disseminating the results of the Blue Bio Techpreneurs project.



FIGURE 23 SPONSORS' APPRECIATION.



FIGURE 24 WINNING GROUP AND CHALLENGE MENTOR.

9. BALTIC & ATLANTIC HACKATHON WRAP UP VIDEO

As part of the Blue Bio Techpreneurs (BBT) deliverables, we produced **two short videos** ([Baltic Hackathon](#) and [Atlantic Hackathon](#)-coming soon) summarising the second and last of the three planned hackathons for BBT, the Baltic and the Atlantic Hackathons. These videos provide an engaging overview of the hackathon, showcasing its objectives, activities, and outcomes.

The short video serves as a dynamic promotional tool, designed to quickly capture the essence of the hackathon for a broad audience. It highlights key moments, challenge topics and the collaborative spirit of the event. The long video offers a more detailed narrative, including in-depth insights into the challenges, the interdisciplinary approach to problem-solving, and the tangible outcomes of the hackathon. Together, these videos aim to raise awareness of the BBT initiative, attract future participants and partners, and establish a clear understanding of the value and impact of such events within the blue bioeconomy sector. Available through the project website.

10. BALTIC HACKATHON EVENT FEEDBACK & LESSONS LEARNED

The Baltic Hackathon was, according to the event organisers, project partners, mentors and participants, a highly successful event (10.1 Baltic hackathon feedback form and analysis). Its success was the culmination of several months of dedicated efforts in organisation, communication, and promotion, both before and after the event.

The organisation of the Baltic Hackathon (the second hackathon in the series) was significantly informed by the framework prepared by SDU, the lead partner of BBT Hackathons, and incorporated feedback collected from participants of the Nordic Hackathon.

Insights from the Nordic event's anonymous feedback forms, covering aspects such as organisation, mentor-student cooperation, goal achievement, networking opportunities, and career orientation, were carefully reviewed and integrated into the planning and execution of the Baltic Hackathon. This allowed the organisers to build on the strengths of the first event and address areas identified for improvement, ensuring an even more engaging, well-structured, and goal-oriented experience for all participants.

Some challenges during the organisation were still encountered during the preparation and execution:

- **Clearly explaining and communicating:** Effectively communicating the value and significance of blue bioeconomy hackathons to both industry partners and participants. Thanks to the summary and highlight video from the first BBT Nordic Hackathon (available on the BBT YouTube channel: <https://www.youtube.com/playlist?list=PL-bT8PVdyzmslw1CbKDBZsUWwIBc9nN4o>), which effectively illustrates what a hackathon involves, what participants and challenge owners can expect, and the benefits they can gain, it was possible to attract strong interest from both groups. Effective communication among partners, particularly with the lead partner, SUBMARINER, responsible for project communication, along with the use of all available networks for outreach and information sharing, contributed to a highly successful pool of applications from both challenge owners and participants.
- **Availability of Challenges and Mentors, ensuring a diverse selection of blue bioeconomy challenges:** Securing the interest of the challenge between potential participants within the region and beyond, as well as commitment of mentors to attend in person. 5 challenges were selected (out of 12) for the event, ensuring good communication with the mentors in advance, good challenge preparation, their willingness to participate and be engaged.
- **Diversity and Participant Alignment:** Ensuring a diverse selection of highly motivated participants and matching them to chosen challenges. This alignment was essential to guarantee a strong fit, foster interdisciplinary collaboration, and

facilitate effective knowledge transfer and creative problem-solving. 25 participants (out of 57 applications) were chosen based on evaluation rubrics, evaluated by 4 evaluators.

- **Challenge Information and data protection:** Gathering detailed information about the challenges prior to the event, ensuring some data confidentiality and protocols in case of further actions. To stay in line with the confidentiality constraints and intellectual property rights all participants were required to sign a Non-Disclosure Agreement, and other relevant documentation.

10.1 Baltic Hackathon feedback in articles

After the event, 2 articles were initiated by the participants, one by a student participant who is an active member of the European Aquaculture Society and the second by a Jury member, an editor of the Fish Industry Magazine. Thanks to their initiative 2 articles on the BBT Baltic Hackathon were published: “Young Innovators Tackled Blue Economy Challenges at the Blue Bio Techpreneurs Baltic Hackathon” and “Students’ Innovations for the Development of Aquaculture and Blue Economy” (pol. “Innowacje studentów dla rozwoju akwakultury i błękitnej gospodarki”).

Ochrona środowiska

Innowacje studentów dla rozwoju akwakultury i błękitnej gospodarki



W dniach 6-8 czerwca 2025 r. Uniwersytet Gdański gościł wyjątkowe wydarzenie – BBT Baltic Hackathon. Wydarzenie, realizowane w ramach projektu BlueBioTechpreneurs (BBT), skupiło się na poszukiwaniu innowacyjnych rozwiązań dla sektora błękitnej gospodarki, w tym w szczególności akwakultury. Unikalny charakter hackathonu podkreślały zgłoszone przez europejskich przedsiębiorców rzeczywiste wyzwania, którym należało sprostać. Spośród 12 zgłoszonych problemów wybrano 5 najbardziej aktualnych, obejmujących m.in.: efektywność energetyczną systemów RAS, poprawę wizerunku akwakultury w oczach konsumentów, zastępowanie kontrowersyjnych minerałów w kosmetyce zasobami z Bałtyku, rozwój upraw regeneracyjnych na farmach wiatrowych oraz poprawę zdrowotności ryb w intensywnych systemach chowu.

W hackathonie wzięło udział 25 studentów studiów magisterskich i doktoranckich z 15 krajów Europy, wyłonionych spośród 50 kandydatów. Zespoły uczestników tworzone tak, by zapewnić interdyscyplinarność oraz różnorodność kompetencji.

Oficjalne otwarcie odbyło się na Wydziale Oceanografii i Geografii UG w Gdyni. Następnie uczestnicy przenieśli się do Centrum Monitoringu i Ochrony Wód UG w Borucinie, gdzie przez 48 godzin intensywnej pracy, wspierani przez mentorów, opracowywali swoje propozycje. Nad przebiegiem całego wydarzenia czuwały organizatorzy: Barbara Dmochowska oraz

Hanna Łądkowska z Uniwersytetu Gdańskiego.

Finałowa sesja pitchingowa pokazała nie tylko wysoki poziom merytoryczny, ale również kreatywność i zaangażowanie uczestników. Każdy zespół przedstawiał problem, proponowane rozwiązanie, strategię wdrożenia, potencjalne efekty oraz ocenę wykonalności i zrównoważone podejście.

Jury, w skład którego weszli eksperci z całej Europy, w tym przedstawiciele partnerów projektu oraz środowiska naukowego i biznesowego, stanęło przed trudnym zadaniem wyboru najlepszych projektów. Wśród jurorów znaleźli się: dr Hannah Yeo (University of Southem Denmark), dr Diana Almeida (BlueBio Alliance, Portugalia), dr Konstantinos Madias (SUBMARINER Network for Blue Growth, Niemcy), dr hab. Anna Dziadkiewicz, prof. UG, dr Tomasz Zarzycki (RTB House) oraz Tomasz Kulkowski (redaktor naczelny Magazynu Przemysłu Rybnego).

Pierwsze miejsce zdobył zespół, który zaproponował przełomowe rozwiązanie: zastąpienie minerału (miki), stosowanego w kosmetykach, krystaliczną celulozą pozyskiwaną z bałtyckich glonów *Cladophora*. Projekt spotkał się z dużym uznaniem jury za potencjał technologiczny, rynkowy i środowiskowy. Drugą nagrodę przyznano zespołowi pracującemu nad metodami poprawy zdrowotności ryb w intensywnych systemach RAS przy ograniczonej liczbie zabiegów leczniczych (wyzwanie zgłoszone przez polską hodowlę pstrągów „K-2”). Na trzecim miejscu uplaso-

wał się projekt dotyczący sposobów podniesienia atrakcyjności produkcji w systemach RAS w regionie Morza Bałtyckiego poprzez zmianę percepcji społecznej i budowanie zaufania konsumentów (wyzwanie Business Lolland-Falster i projektu TETRAS).

Główną nagrodą dla zwycięzców były sesje mentoringowe ufundowane przez Centrum Zrównoważonego Rozwoju oraz Centrum Transferu Technologii Uniwersytetu Gdańskiego. Pozostałe nagrody oraz upominki zostały zapewnione dzięki wsparciu Uniwersytetu Gdańskiego i Stowarzyszenia Producentów Ryb Łososiowatych.

Zarówno uczestnicy, jak i organizatorzy oraz partnerzy zgodnie podkreślali znakomitą atmosferę, profesjonalizm przygotowania oraz wysoki poziom prezentowanych projektów. Spotkanie pokazało, że młode pokolenie naukowców, pełne pasji i interdyscyplinarnej wiedzy, świetnie odnajduje się w rozwiązywaniu realnych problemów sektora akwakultury i szerzej pojętej biogospodarki morskiej.

Patrząc na efekty BBT Baltic Hackathon 2025 można być spokojnym o przyszłość innowacyjnej akwakultury w Europie – w rękach tych młodych ludzi jest ogromny potencjał, który warto dalej rozwijać i wspierać.



BAGIA DMOCHOWSKA | UNIVERSITY OF GDAŃSK & KONSTANTINOS MADIAS, SUBMARINER NETWORK

From June 6-8, 2025, the University of Gdańsk hosted the Blue Bio Techpreneurs Baltic Hackathon, a three-day event organized under the Blue Bio Techpreneurs project, co-financed by the European Maritime, Fisheries and Aquaculture Fund (EMFA) for 2021-2027.

The event brought together some of Europe's brightest young minds to develop practical, innovative solutions for real-world challenges in the blue economy, focusing on sustainable aquaculture and marine biotechnology.

Diverse Talent, Real Impact
Selected from 68 high-quality applications, 25 students from 12 countries representing marine and coastal programs in marine science, biotechnology, and aquaculture gathered for a fulfilling weekend. They worked alongside mentors and members from various



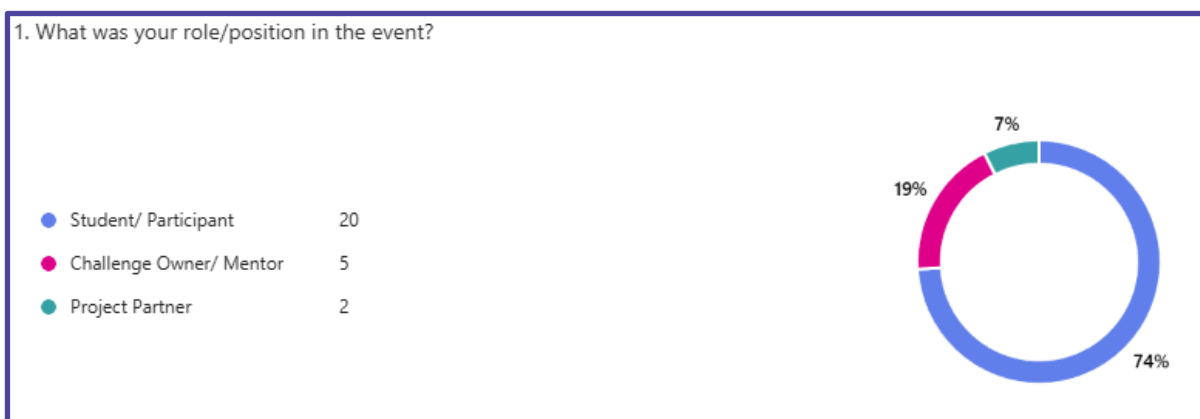
FIGURE 25 ARTICLES AFTER THE EVENT.

10.2 Baltic Hackathon feedback form and analysis

Insights from the Baltic Hackathon were collected after the event through anonymous feedback forms, covering organisation, mentor-student cooperation, goal achievement, networking opportunities, and career orientation. 27 answers were carefully reviewed to build on the strengths of the second BBT hackathon event and address areas identified for improvement for any future actions.

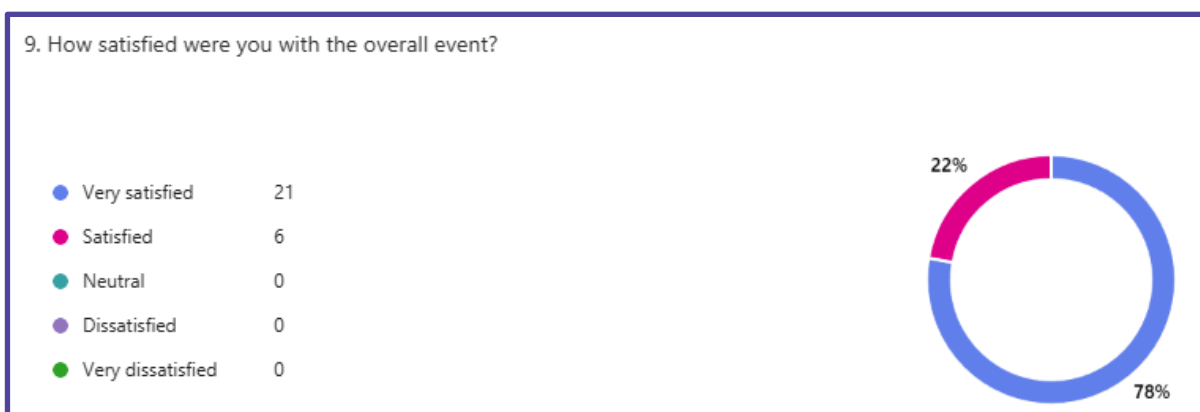
Feedback survey participation

20 participants, 5 mentors and 2 project partners (facilitators at the event) provided their feedback (question 1).



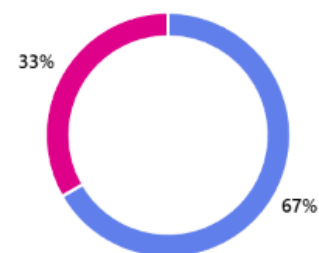
Satisfaction

The **overall satisfaction** with the event was very high (question 9). And the expectations of all responders were met (question 11). What is very important, for 93% of the responders participating in the hackathon contributed to their knowledge/skills in the blue bioeconomy sector (question 17).



11. Were your expectations for the event met?

- Exceeded expectations 18
- Met expectations 9
- Did not meet expectations 0



17. Do you feel that participating in this hackathon contributed to your knowledge or skills in the blue bio/tech industry?

- Yes 25
- Maybe 2
- No 0



Highlight of the event

Survey responders provided a wide **variety of highlights** (question 10).

10. What was the highlight of the hackathon for you?

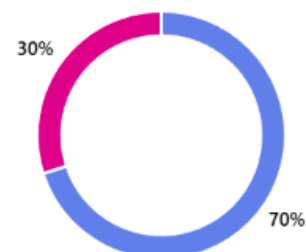
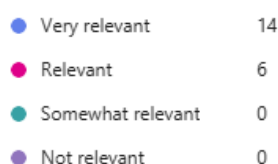
1	anonymous	The day two work and exchange whit another student and mntors
2	anonymous	Networking and connections. It was also inspiring to see the passion and creativity when you put different minds together..
3	anonymous	Bonfire
4	anonymous	The goals and solutions presented in the end reflecting a big commitment from all participants.
5	anonymous	The opportunity to network and work together with different across different fields.
6	anonymous	The atmosphere created was exceptional. I was able to connect with people that i have just met, which does bot happen so often!
7	anonymous	Collaboration of students on solving challenges
8	anonymous	Seeing the students develop their solution from nothing to something really great that could be applied in the real world
9	anonymous	Final presentation sunday morning and the networking on saturday night.
10	anonymous	the challenge definitely

11	anonymous	mentored/judged by businessmen/women. It bridges the gap between the scientific ideas of marine resources from the Baltic Sea to the valorization in industrial scale, in a very intense/limited time for brainstorming.
12	anonymous	The team, so accommodating and attentive.
13	anonymous	The management
14	anonymous	The second day that we were working for the solution of the challenge
15	anonymous	Event presentation
16	anonymous	the presentation of solutions
17	anonymous	The collaborative session
18	anonymous	the mentors, and hackathon topics.
19	anonymous	Project presentations
20	anonymous	The organization was done well, and they went above and beyond to be kind and engaging
21	anonymous	Meeting with new people having same background as mine
22	anonymous	Networking :)

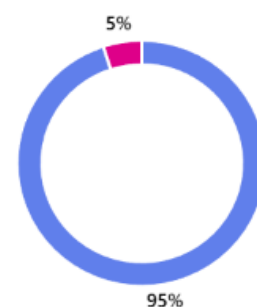
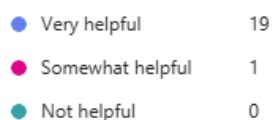
Challenges & mentors

Both: **relevance of the challenges** and **mentors' availability and helpfulness** were evaluated very high, with 70% of responders answering very high relevance, 30% - high relevance and 95% answered that the mentors were very helpful. (questions 2 and 3). Also, participants found the timeline of event sufficient to work on the solutions for the challenges (question 4). To the question on the sufficiency of the variety of challenges 8 out of 11 responders answered that "YES", the remaining 3 provided additional improvements (question 5).

2. How relevant and useful did you find the challenges presented during the hackathon?

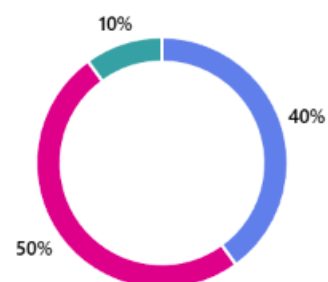


3. Were the mentors and experts available during the hackathon helpful?



4. Did you feel the project timeline was sufficient for the complexity of the challenges?

● Yes	8
● Mostly	10
● No	2

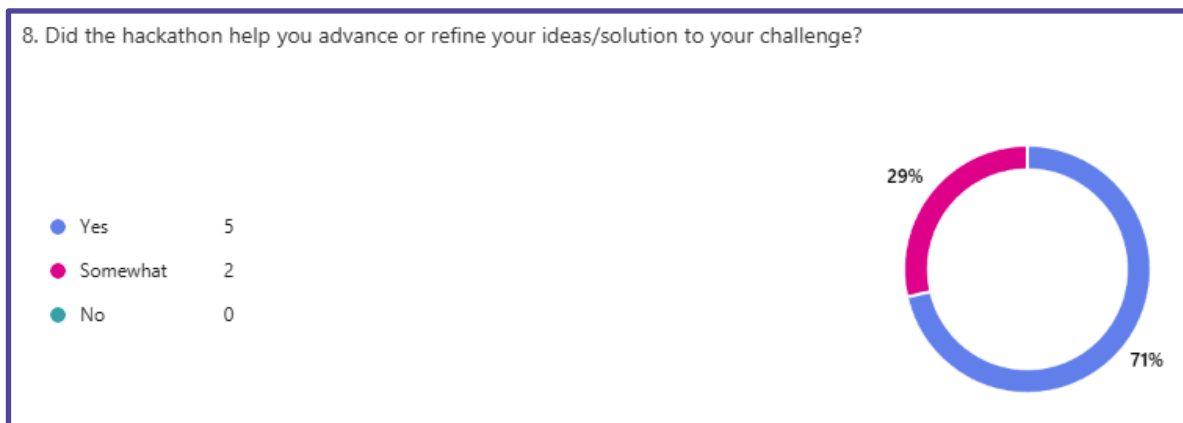
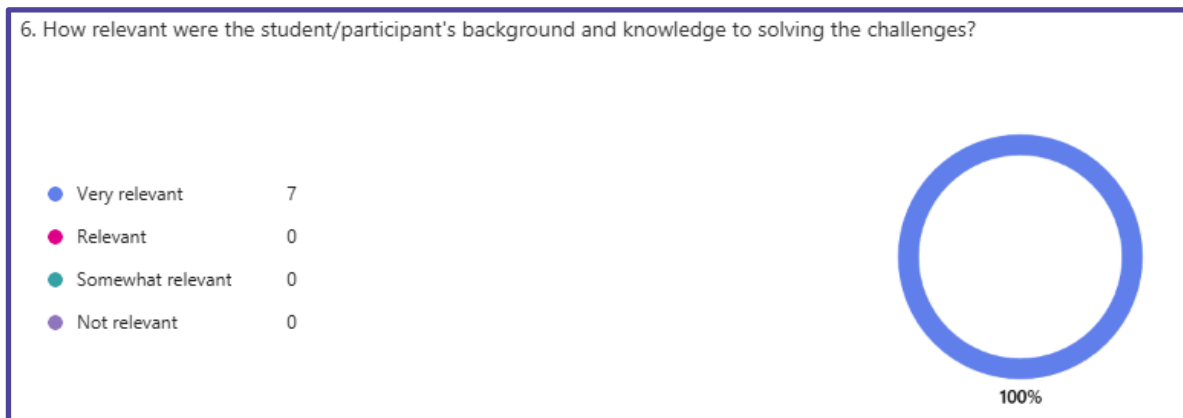


5. Was the variety of challenges sufficient? If no, what other topics/industries you wish had been covered?

1	anonymous	I would say quite consistent because it has allowed us to have several approaches to potential that the blue economy offers by developing the talents of entrepreneurs.
2	anonymous	YES
3	anonymous	Yes.
4	anonymous	Application of aquaculture in food/fashion industries
5	anonymous	Policies improvement perhaps, or bridging politics and science in the administrative areas.
6	anonymous	Yes
7	anonymous	Yes, the variety of challenges was good and covered interesting areas, especially for in topics like aquaculture innovation.
8	anonymous	Yes
9	anonymous	yes it was sufficient, interesting, knowledgeable.
10	anonymous	Topics were very RAS focused and with the exception of question 3. A better diversity might have made the event more challenging and competitive
11	anonymous	Yes, The challenges cover all the aspects of Blue Biotech

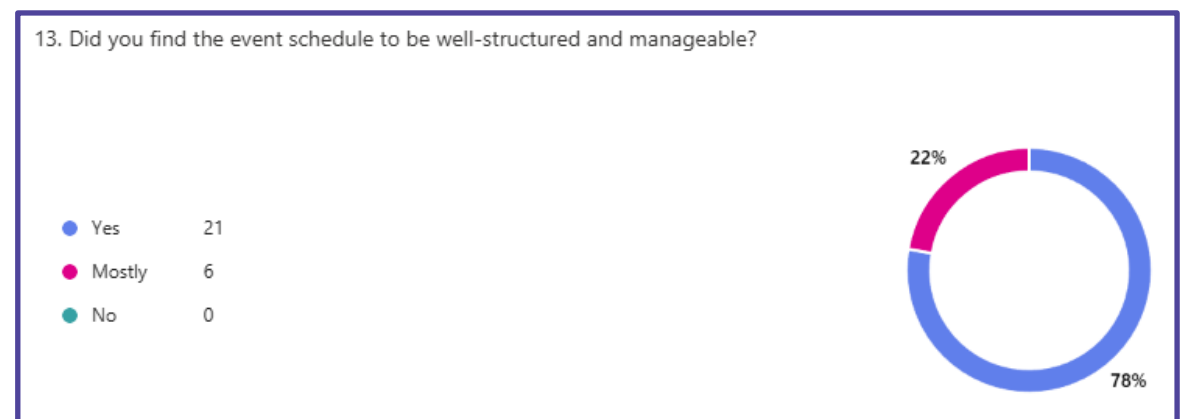
Participants

As for the **relevance of the participants background** for the event, all answers were positive (question 6). Also, responders admitted that the event helped them to advance or refine solutions to the challenges (question 8).



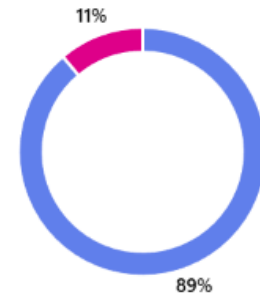
Organisation and communication

Organisation of the event was highly evaluated (question 13), as were the venue and facilities (question 14), and pre-event communication (question 12).



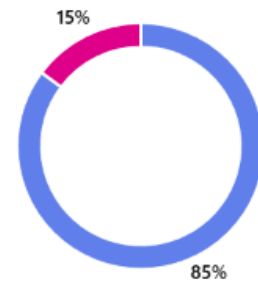
14. Were the venue, facilities and resources (WiFi, workspaces, equipment) sufficient for your needs?

● Yes	24
● Mostly	3
● No	0



12. How would you rate the pre-event communication (emails, information, etc.)?

● Excellent	23
● Good	4
● Fair	0
● Poor	0



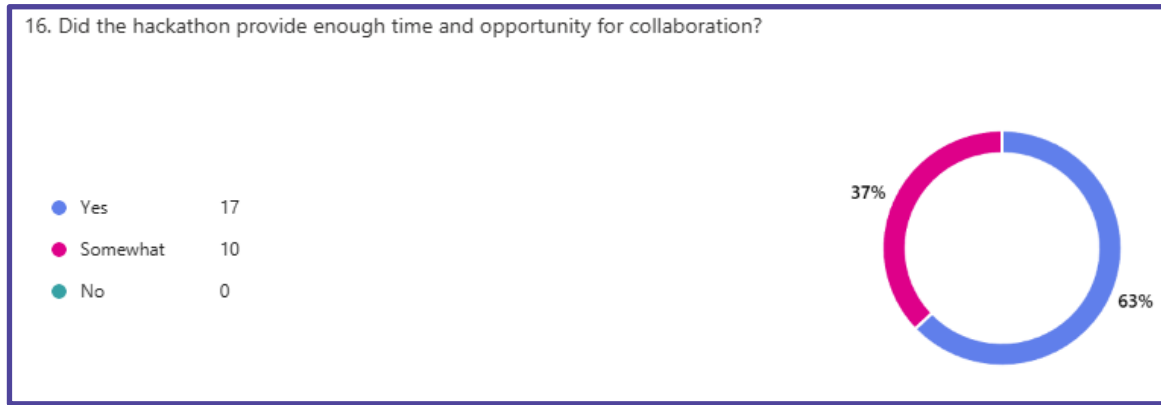
Networking and communication

Networking and cooperation at the event were highly valued by the responders (question 15, and question 16).

15. Did you find value in connecting with other participants, mentors, or partners?

● Yes	25
● Somewhat	2
● No	0





Further recommendations

Most of the responders agreed that **topics, tools and resources covered/included in the event were sufficient** (question 19) but still provided a variety of **valuable recommendations** for the future events (question 18).

19. Were there any topics, tools, or resources you wish had been covered or included?

1	anonymous	No
2	anonymous	students from engineering, and business administration, communication
3	anonymous	workshop on pitch performance / communication
4	anonymous	NO
5	anonymous	Content wise, it was perfect :)
6	anonymous	Properties for pitching (e.g. lego, cardbox, playdough)
7	anonymous	I'm good
8	anonymous	More pharma driven topics
9	anonymous	I have not any other topics i believe it included a lot of it
10	anonymous	Yes
11	anonymous	not really
12	anonymous	nope everything all perfect
13	anonymous	Nope
14	anonymous	No

18. What could we improve for the next two editions of the Blue Bio Techpreneurs Hackathon?

1	anonymous	For me, time is the real limiting factor. I would suggest that, in advance of the initial contact meeting, the groups formed could have a second meeting with their mentors to begin preparing the work. Also, increase the time for presentations.
2	anonymous	I think more days of working would be needed
3	anonymous	Equal relevant challenges,for example challenge 3 were not related to RAS system which others have,so was little unfair
4	anonymous	more mentors, who are in the topic of challenges.
5	anonymous	More days :)
6	anonymous	Nothing. Everything was well organized
7	anonymous	Being only 5 challenges, i would not offer 3 prizes, i would offer the first instead. Belonging to one of the challenges that did not make it onto the podium, i felt some non-spoken disappointment coming from our mentors. I do believe that if the objective of the hackathon is that networking, creating too much competition numbs that objective. If there were more challenges, like 8 or 7, then its perfect! But being only five, makes it like the 2 non prized are left out... For me was perfectly fine! I was just happy to be there! But yeah.. i had that inner gut feeling from our mentors, even tough they did not spoke up.

8	anonymous	It might have been nice to have the opportunity for the students to pitch one last time to their mentor before they presented
9	anonymous	A bit extended days for brainstorming the ideas on-site with the mentors.
10	anonymous	A little time for social program or event.
11	anonymous	The rooms for accommodations
12	anonymous	Maybe an extra day to have more collaboration with the mentors, colleagues
13	anonymous	Try to make challenges with the same specificity level
14	anonymous	not host it during a holiday weekend
15	anonymous	Perhaps a somewhat more guided start into the group work or a "reminder" of the expected business context of the outcome, considering the tight schedule (we got somewhat lost in technicalities within my group)
16	anonymous	timeline was less it make as stressed, but overall it was nice experience.
17	anonymous	Diversity of questions. Checking the questions and there was some miscommunication between mentor expectations and possible project solutions. Better signposting to the building and spaces to work after the main day. More photography

18	anonymous	Some challenges were very broad like the wind farms and some are very narrow like Mica.. So may be next time the challenges are of same pitch same level.
19	anonymous	Considering that there are only 5 groups, I believe that only one award is enough as, by giving 3, only 2 groups get left out, making it somewhat unpleasant.

11. ATLANTIC HACKATHON EVENT FEEDBACK & LESSONS LEARNED

The Atlantic Hackathon was considered by organizers, partners, and participants to be a highly successful event, reflecting months of preparation and collaboration. Its success was driven by strong engagement from challenge owners, coaches, and participants, as well as innovative activities such as the Lego Serious Play workshop, which received excellent feedback for fostering team cohesion and creativity.

However, several lessons emerged that will guide improvements for future editions:

- **Planning and Task Definition:** When collaborating with external organizations, early planning revealed gaps in detailing tasks and responsibilities. Initial meetings should include a comprehensive roadmap covering all phases of the event. Each task must be clearly defined and assigned to a responsible person to avoid ambiguity. Future editions will benefit from appointing a dedicated program manager with authority to approve changes and maintain consistency.
- **Coordination and Communication:** Communication with external partners can be challenging and may be improved by establishing two committees to enhance collaboration:
 - **Organizing Committee** with weekly meetings on operational matters.
 - **Advisory Committee** with monthly meetings for strategic oversight.
- **International Participation and Timeline:** The Ocean Hackathon® timeline was challenging to make compatible with international travel planning, leaving insufficient time for participants to secure affordable flights. This resulted in some withdrawals.
- **Team Composition and Dynamics:** Diversity of profiles was a strength, fostering interdisciplinary collaboration. However, participants naturally had different expectations and interpretations of the intensive hackathon experience, making it necessary to provide common support measures to ensure everyone felt comfortable and engaged during the event.

Positive Highlights

- **Continuous presence of challenge owners** was highly valuable, enabling early problem detection and better collective effort management.
- The **Lego Serious Play workshop** stood out as an effective team-building activity, reducing stress and sparking creativity, some teams even outlined prototype concepts during the session.
- **Coaches provided strong support**, particularly in business development and market strategy, which participants appreciated.
- **Networking opportunities**, including social breaks and the Berlengas Archipelago sunset gathering, were praised for creating an informal yet productive environment.
- Feedback from participants included comments such as *“This is the best hackathon I’ve ever attended”* and requests for advice on organizing similar events at their home institutions. Co-organizers expressed satisfaction with collaboration and a desire to work together again.

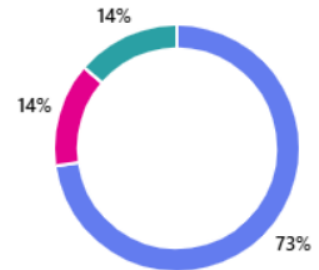
Feedback Collection

An anonymous feedback form was circulated among participants, mentors, and partners to evaluate aspects such as organization, mentor-student cooperation, networking, and career orientation. Responses will inform future improvements and help maintain high standards for upcoming hackathons.

11.1 Atlantic Hackathon feedback form and analysis

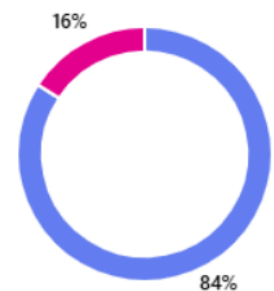
1. What was your role/position in the event?

Student/ Participant	16
Challenge Owner/ Mentor	3
Coach	3
Judge	0



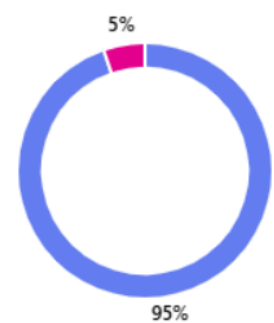
2. How relevant and useful did you find the challenges presented during the hackathon?

Very relevant	16
Relevant	3
Somewhat relevant	0
Not relevant	0



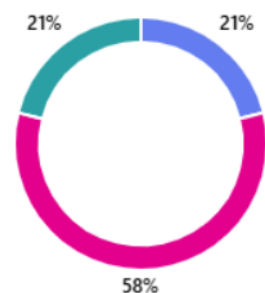
3. Were the challenge owners and coaches available during the hackathon helpful?

Very helpful	18
Somewhat helpful	1
Not helpful	0



4. Did you feel the project timeline was sufficient for the complexity of the challenges?

Yes	4
Mostly	11
No	4



5. Was the variety of challenges sufficient? If no, what other topics/industries you wish had been covered?

[More details](#)

11
Responses

Latest Responses

"Yes"

"Yes. Solutions focused on removal of pollutants could be also interesting"

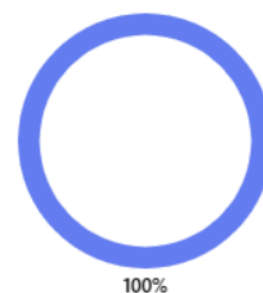
...

3 respondents (27%) answered Yes for this question.

not many people
enoughf
challenges
good
removal of pollutants
Navigation and security
marine spaces
Solutions
Yes
aquaculture
business model
data availability
Restoration
people
limit
tourism
interesting
workshop

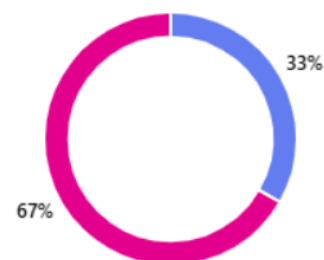
6. How relevant were the student/participant's background and knowledge to solving the challenges?

Very relevant	3
Relevant	0
Somewhat relevant	0
Not relevant	0



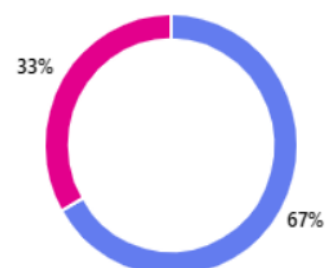
7. Did you feel the event timeline was sufficient for the complexity of the challenges?

Yes	1
Mostly	2
No	0



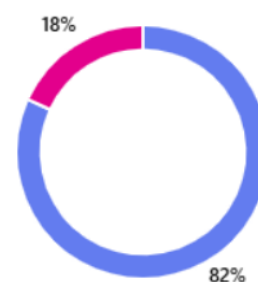
8. Did the hackathon help you advance or refine your ideas/solution to your challenge?

Yes	2
Somewhat	1
No	0



9. How satisfied were you with the overall event?

Very satisfied	18
Satisfied	4
Neutral	0
Dissatisfied	0
Very dissatisfied	0



10. What was the highlight of the hackathon for you?

19
Responses

Latest Responses

"Work with other person for the same goal!"

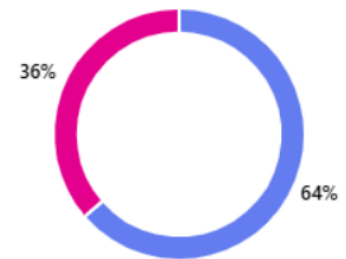
"Working in team"

"Collaboration and open mind"

...

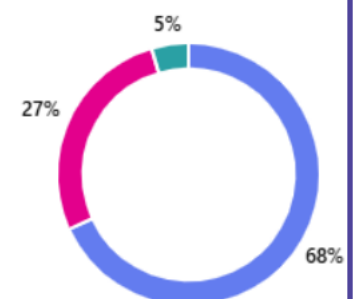
11. Were your expectations for the event met?

Exceeded expectations	14
Met expectations	8
Did not meet expectations	0



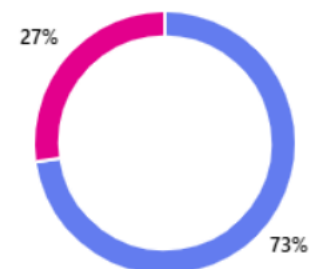
12. How would you rate the pre-event communication (emails, information, etc.)?

Excellent	15
Good	6
Fair	1
Poor	0



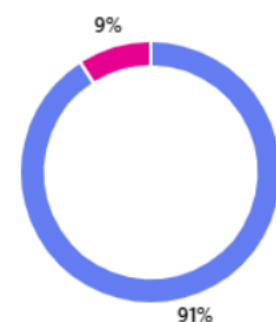
13. Did you find the event schedule to be well-structured and manageable?

Yes	16
Mostly	6
No	0



14. Were the venue, facilities and resources (WiFi, workspaces, equipment) sufficient for your needs?

Yes	20
Mostly	2
No	0



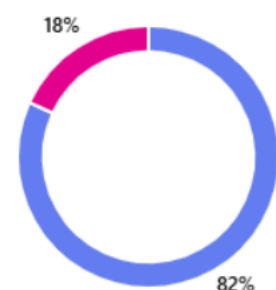
15. Did you find value in connecting with other participants, mentors, or partners?

● Yes	22
● Somewhat	0
● No	0



16. Did the hackathon provide enough time and opportunity for collaboration?

● Yes	18
● Somewhat	4
● No	0



17. Do you feel that participating in this hackathon contributed to your knowledge or skills in the blue biotech/blue bioeconomy sectors?

● Yes	21
● Maybe	0
● No	1



18. What could we improve for similar events in the future?

[More details](#)

13
Responses

Latest Responses
"Nothing to declair."
"Coffee on time :)"
...

5 respondents (38%) answered time for this question.

Congratulations for the team
staffs are nice
great job
better infrastructure
sleep maybe
little more time
base of data
better project
specific data
time
data for each challenge
challenge
Coffee on time
unexpected circumstances
incredible persons
different areas
better base
diferent challenges
Introduze more time

11.1.1 Main highlights for the participants

As shown by the feedback collected from participants in the Atlantic Hackathon, the event was widely appreciated for its dynamic structure and engaging challenges. Respondents highlighted the collaborative environment, with many valuing the opportunity to work closely in teams and achieve rapid progress in a short time. Networking was a recurring theme, as participants enjoyed meeting people from diverse backgrounds and exchanging ideas with experts and challenge owners.

The presence and active involvement of challenge owners throughout the hackathon were frequently mentioned as a key strength, ensuring teams had access to critical information and guidance. Participants also praised the team spirit, openness, and integration between mentors and teams, which fostered creativity and problem-solving.

Final pitch presentations were described as an exciting and rewarding conclusion, giving teams the chance to showcase their solutions and celebrate their efforts. Many respondents expressed that the hackathon was a valuable and enjoyable experience, emphasizing the well-structured program, supportive staff, and smooth logistics. Comments such as "Networking!", "Collaboration and open mind," and "This is the best hackathon I've ever attended" that were collected by the organizers at the event, reflect the positive atmosphere and impact of the event.

Overall, participants appreciated stepping out of their routine to gain new perspectives and develop innovative solutions. The feedback indicates strong enthusiasm for future hackathons and gratitude for the professionalism and dedication of the organizing team.

11.1.2 Areas to Improve in Future BBT Hackathons

While participants expressed high satisfaction with the Atlantic Hackathon, several areas for improvement were suggested to enhance future editions:

1. More Time for Project Development

The most frequent request was for additional time to work on solutions. Participants felt that the schedule was intense and suggested extending working sessions or adding flexibility to accommodate unexpected circumstances. While extending the overall duration is not possible under the hackathon framework, optimizing time allocation within the existing schedule will be considered.

2. Dedicated Spaces for Teamwork

Some participants noted that working in a shared room limited in-depth discussions. This was a limitation of the venue for this edition, although quieter spaces for teams to collaborate effectively were facilitated when requested.

3. Improved Data Availability

Several respondents highlighted the need for more specific and comprehensive datasets for each challenge. Ensuring early confirmation of data access and providing a stronger data foundation will be a priority.

4. Infrastructure and Comfort

Feedback included suggestions for better sleeping arrangements and timely coffee breaks. While hackathons are inherently intense, the organization provided travel and accommodation scholarships to all participants. However, some participants opted to stay overnight at the venue, which led to the comments for the need to improve rest facilities for those choosing this option.

5. Additional Workshops and Activities

Participants expressed interest in more workshops covering diverse topics and team-building activities at the start of the event to ease participants into collaboration. Although, tying this point back to the first, this will be a challenge to implement under the hackathon framework. One solution could be online workshops before the hackathon.

Positive Note

Several participants stated that “everything was perfect” and praised the organization, staff support, and overall experience, reinforcing that the event was well-executed despite these improvement opportunities.

12. Conclusion

The Blue Bio Techpreneurs Hackathons, held in both the Baltic and Atlantic regions, have successfully fostered innovation, collaboration, and the application of design thinking in addressing real-world challenges within the blue bioeconomy. These hackathons brought together a diverse group of students, professionals, and industry leaders, all working towards sustainable and circular solutions in aquaculture, marine biodiversity, and sustainable farming practices.

Participants from across Europe developed innovative solutions, offering valuable insights into areas like energy-efficient aquaculture, sustainable mineral replacements, and advanced traceability systems. These challenges not only contributed to the advancement of the blue economy but also provided a platform for the next generation of blue bioeconomy professionals to showcase their talents and engage with industry leaders and mentors.

Feedback from both events highlighted the positive impact of the hackathons on participants' professional development, fostering skills such as problem-solving, teamwork, and entrepreneurial thinking. The active involvement of mentors and challenge owners throughout the events ensured that participants had the guidance and support they needed to succeed.

Despite the overall success, areas for improvement were identified. These included the need for more time to develop solutions, better infrastructure for team collaboration, and the availability of more comprehensive datasets for challenges. These insights will be invaluable in enhancing future editions of the hackathons, ensuring they continue to offer an inspiring, collaborative, and impactful experience.

Overall, the Blue Bio Techpreneurs Hackathons have proven to be a significant milestone in advancing blue bioeconomy innovation and creating a space for future leaders to connect, learn, and make lasting contributions to the sector.