

Event report

## **Blue Bioeconomy ERA-NET Cofund**

**Final meeting, 19 March 2024 – Norway House, Brussels, Belgium**

### **Introduction**

The Final meeting of the Blue Bioeconomy ERA-NET Cofund was organized in Brussels on 19 March 2024, to mark the end of the Horizon 2020 initiative. The meeting focused on the science-policy aspects and learnings from the ERA-NET, and was for actors in the science-policy landscape who work on developing and implementing partnerships, coordinating portfolios, developing international calls and preparing for Horizon Europe and the upcoming Framework Programme 10.

### **Event report**

The event was hybrid and the recording is available for limited use on the BlueBio website.

**Video presentation of the BlueBio cofunded project results**

### **Introduction**

*Ingeborg Korme (BlueBio coordinator)*

Welcomed the participants, happy to share the experiences and learnings from BlueBio after these 5,5 years with challenges like the COVID-19 pandemic and the Russian invasion in Ukraine. The work in the blue bioeconomy will continue to create a more sustainable and sound sector for society and business, to contribute to future research and development.

### **Welcome**

*Eva Falleth (Research Council of Norway Executive Director)*

Started off highlighting how the blue bioeconomy has always been important and that the progress has been greatly helped by BlueBio. Addressing all links in the value chain has been essential, you see that from the contributions of the funded projects in all sectors. The connections between the actors will continue after the end of BlueBio.

**Video presentation of the BlueBio 3<sup>rd</sup> Additional Call project SeaSoilDemo**

## **Session 1: The BlueBio story: Working strategically with calls**

### **The value of the value chain approach**

*Ingeborg Korme (Research Council of Norway)*

BlueBio used a value chain approach to identify research and innovation needs, not just in the first call, but in all subsequent calls. BlueBio recommends building the subsequent calls on prior efforts,

the first call and calls from previous instruments. BlueBio built its cofunded call on the foresights from earlier ERA-NETs COFASP and ERA-MBT. After the cofunded call, funding gaps were identified, and these topics were chosen for the two consecutive calls. Being consistent with subsequent calls enables true integration of cross-cutting issues. Building the additional calls on the topics that were underfunded in the first call led to more focused calls that ensured funding in the needed areas, but it was also more challenging to recruit both funders and to get a satisfactory number of applications. Clearing new roads is challenging work. Cross-cutting topics like enabling technologies and capacity building were included in the calls and afterwards followed closely in evaluations. This led to proper integration of the topics in the projects. In contrast RRI and ethics was not integrated as well in the evaluation of the projects and the integration was correspondingly poorer.

## **Integrating industry in R&I projects**

*Milvia Soumbounou (CDTI)*

As a representative of a business public entity belonging to the Ministry joining a cofunding scheme like an ERA-NET gives access to resources (financial resources, expertise and infrastructure), market validation and real-world testing for industry actors. Industry involvement in R&I projects fosters collaboration and enhances impact.

## **Amplifying project reach and knowledge impact through additional calls**

*Majbritt Bolton-Warberg (Marine Institute)*

The 3<sup>rd</sup> Additional Call was planned to be a conventional joint call, but there were issues both with priorities of the funding partners and availability of funds. We modified the call to make it simpler and more streamlined, with shorter timelines and smaller scales. The one-stage call, where only BlueBio-funded partners were eligible, had call topics that were identified from the needs of the consortium or interactions with the funded projects. This flexible approach allowed the last call to amplify the impact of the funded projects and led to more out-of-the-box thinking, on a very small budget. The call was enabled both by having a third additional call in the grant agreement and from explicit milestones on alternative funding methods and sources.

## **Panel**

*Nikos Zampoukas (DG RTD), Mercedes Groba (EIT Food), Samuele Ambrosetti (BIC), Thorsten Kiefer (JPI Oceans), Ingeborg Korme (moderator)*

### Ingeborg Korme: How to work strategically with calls?

Mercedes Groba: 1. You need to have a strategy in mind, be purposeful in your efforts, understand the objectives and what the organisation wants; 2. You need networks and collaborations, and partners that will help you with funding projects, 3. You need to align your projects with call criteria.

Samuele Ambrosetti: BIC has a bottom-up approach, where the call topics always come from described needs and challenges from the research community and industry.

Thorsten Kiefer: JPI Oceans pools the member's resources into different funding models: cash in form of a call; expertise in form of an expert group; infrastructure to be shared. JPI Oceans is a platform

for the countries to identifying joint priorities. Focused calls are important, wide and general calls have less investments.

Nikos Zampoukas: The European Commission has an inclusive but slow process to develop the Framework Programme calls. It is a structured process to develop a strategic funding programme, and there are many possibilities to structure intervention areas, develop activities around policies like the fisheries policy, algae initiative, guidelines for sustainable aquaculture, and food framework. The Commission listens to everyone and co-creates with everyone, and then defines a challenge or problem to address. Horizon Europe is more focused on academia, but also tries to stimulate industry.

Ingeborg Korme: Industry usually moves fast, how do you facilitate industry involvement?

Nikos Zampoukas: Not the strongest point of Horizon Europe, as big projects cannot be very fast, but there are other instruments of Horizon Europe like European Innovation Council, which foster higher TRL to help industries to get involved and increase their revenue. We want to see more industry-led projects in the future, and less research institute lead projects.

Samuele Ambrosetti: In BIC the coordinators are usually from the industry, to ensure close connections to the needed solutions. To be agile and quick to fund new necessary solutions and relevant topics, BIC has more flexibility and adapts calls to current situations (example Suez canal). Usually large companies are leading the collaborations, but SMEs are included. Calls are developed through the annual program, with proper industry involvement. This results in projects of interest for industry that close the gaps. BIC has been looking into cascade funding, to reach other stakeholders and fund more open innovation.

Mercedes Groba: To attract industry involvement, ensure the calls are substantial enough to capture their interest. Partnerships are essential for commercializing your solutions. Currently, we (EIT Food) have €30 million available in open calls until 2025.

Ingeborg Korme: How to achieve agility in R&I funding?

Thorsten Kiefer: JPI Oceans looks for niche topics and uses co-design in the processes. Sometimes there is more impact in smaller funds that hit exactly right.

Samuele Ambrosetti: Balance of cross-cutting or niche topic calls, and ambitions for the call and number of submitted proposals that reflect what you want to achieve.

Mercedes Groba: To make Research & Innovation (R&I) funding more agile, it's really important to write clear and consistent call guidelines across consecutive calls. This way, there's less confusion, and applicants can quickly grasp the requirements, speeding up their proposal preparation. Keeping the criteria consistent across calls lets applicants build on what they've learned before, making it easier to develop their proposals and improve their quality. Simplifying the application and evaluation processes, giving regular and constructive feedback, and creating flexible funding frameworks that adapt to changing industry needs all help make the funding process more agile and effective.

### Ingeborg Korme: What is your favourite funding mechanism?

Nikos Zampoukas: Innovation actions that are closer to the market.

Thorsten Kiefer: Focused calls, that have a clearer expected impact/outcome.

Samuele Ambrosetti: Open innovation concepts and innovation actions to bridge the way to the market.

Mercedes Groba: My favourite funding mechanism? It's got to be targeted calls that are closely aligned with market needs. These focused calls are super effective because they prioritize projects that have a clear path to commercialization. By concentrating resources on initiatives that are near-market ready, this approach not only speeds up the development and deployment of innovative solutions but also ensures that funded projects have a higher chance of making a real-world impact and being successful. It's all about bridging the gap between research and the market, making it easier to deliver tangible benefits to society and the economy.

### **Video presentation of the BlueBio Cofunded call project MedSpon**

## **Session 2: Thinking outside the box: additional activities**

Interactive session where there were four topics. The participants were divided in four groups and spent 15 minutes discussing each topic. The topic discussions were summarized in plenum.

### **Finding the holy grail: creating synergies between projects**

*Maarten Uyttebroek (Flanders FOOD) and Inderjit Singh Marjara (RCN)*

e-coffee meetings were organised to create synergies among funded partners, allowing more project participants to meet and discuss their projects directly. The meetings allowed knowledge sharing and collaboration between the projects. The online format has been very flexible and a final e-coffee meeting will be organised in May on Life Cycle Assessment (LCA).

The format was very good. The idea for e-coffee meetings and creating synergies was part of the Description of Work in WP7, but the pandemic accelerated the implementation of this knowledge exchange. It is easy to organise, the same framework was used every time, the target group was clear, and it was a great way to show who is doing what. It fostered knowledge sharing, networking, and new ideas. The interactions might have been different if there were also in-person meetings, but the online format made it accessible for more people. The meetings were quite popular, and it could have been considered to open more of them for external participants. But it was important to create a safe and confidential space to share project results.

The e-coffee meetings offered a space for knowledge sharing, networking, brainstorming and opportunities to come up with new ideas. There were no in-person meetings, but the online format opened it up to more people. The format could be continued in later cofunding mechanisms, having webinars that cover different topics and issues, and that go beyond the current instrument, by inviting projects from calls from other programmes.

## **Human Capacity Building within and between projects**

*Bernardo Patti (CNR)*

Human Capacity Building has been an integrated part of BlueBio, but has been severely impacted by the COVID-19 pandemic. Despite these challenges, there was much capacity building activity both in the funded projects and in BlueBio.

The impacts of HCB are difficult to measure, but at least includes mobility between research and industry. These mobility initiatives need funding, but it is difficult to ensure funds in calls and in the budgets of the projects. It is important to have student involvement, but their time must be well spent. Science communication training should be included in summer school programmes to amplify outreach and facilitate measurement of impact.

## **Commercialisation support to R&I projects**

*Majbritt Bolton-Warberg (Marine Institute)*

All projects needed to increase their technology readiness level (TRL) during the project. Of the 19 cofunded projects, 18 were coordinated by research performing organisations and one by an industry actor.

To support the funded projects, we needed to understand the business and support landscapes available in the European blue bioeconomy. After interviewing accelerators, venture capital funds and industry associations, it was clear that a project survey was necessary, to better know the status of the funded projects and what they wanted to do. In mapping their current TRL, possible scale-up needs and who owned the IPR, a webinar on commercialisation was organised and project commercialisation factsheets (1-page) were developed for each of the funded projects, with the help of the project coordinators. The projects' needs were very diverse, some needed market research, some needed to work closer with research, so including some of these topics in our 3<sup>rd</sup> Additional Call suited many of the projects.

The participants found the commercialisation factsheets very useful, especially when combined in thematic bundles. It was highlighted that we must find a way to continue the commercialisation journey in the long-term (2 years after the end) and build on good work. It is difficult to assess until after the projects have finished, but giving an extra boost for commercialisation is a good idea

It was suggested that starting the work on the commercialisation aspects earlier, from how to disseminate the fact sheets, thinking about next steps earlier is a lesson, keeping more information about the companies (possibly in a database), would be beneficial.

There were many concrete ideas about the factsheets and how to promote them further, to link them with DG MARE's BlueInvest to better disseminate them, and to include something similar in the Sustainable Blue Economy Partnership. In the factsheets themselves contact details of companies would be helpful.

## **Regulatory barriers to enable a circular blue bioeconomy**

*Ingeborg Korme (RCN)*

From the end-term meeting of the projects funded under the cofunded call, a number of barriers for the products and solutions from the projects were identified. Some of these barriers were regulatory, and the novel food regulation and animal by-product regulation were significant.

As a response, BlueBio published a policy brief where two central areas were highlighted: "Clearing the way for algae as an ingredient", and "Aquaculture and fisheries side-streams: shifting from waste to resources". The policy brief was presented at a breakfast meeting in the European Parliament on 31 January, "Connecting the dots for a circular blue bioeconomy – from science to policy and regulatory solutions". The aim of the process is to have actual policy impact, both with direct contact with DG SANTE and DG MARE, the Hungarian Presidency to the EU and through the Common Fisheries Policy Advisory Councils.

The participants were asked if they have you done something similar and their thoughts on including policy work in projects. Suggestions for including policy work in projects included funding risk assessments, including more social science and more law related research, funding meetings with regulatory bodies, financial support to hire professional lobbyists to work for you independently on the topic. It is possible to facilitate policy influence also by fostering dialogue between research and industry, or with policymakers. But it depends on the policymakers' interest in the topic to push it forward, so choice of policymakers is essential.

There needs to be a loop of information from which topics to address, to designing calls around these and taking multidisciplinary into account, to how to make legislation sufficiently open to allow market access for innovation while on the same time safe. There is a component of teaching researchers to reach out with their results too.

**Video presentation of the BlueBio 3<sup>rd</sup> Additional Call project Soundscapes**

## **Session 3: The impact of BlueBio**

### **The impact of funded projects**

*Abraham Trujillo (AEI)*

The potential impact of BlueBio projects has been analysed in Deliverable 4.4 "Assessment report of potential impact of projects under the cofunded call" and is based on the 19 projects funded under the cofunded call. The preliminary analysis was presented in the session, structured in three pillars:

- I. Impact on new products, services and improved processes: the projects' contribution to the sustainable and efficient use of by-products, generation of knowledge-intensive products, and process improvements and optimisation were summarised. A full overview is available in the public deliverable on the BlueBio website.
- II. Improvement in Human Capacity Building: there has been an increasing number of attendees in HCB activities. A total of 29 researchers participated in mobility activities. A full overview is available in the public milestone on the BlueBio website.
- III. Industry involvement and stakeholder engagement: the mandatory involvement of industry partners in the projects, and the demand to increase Technology Readiness Level was essential. It was useful to use existing industry contacts from COFASP and ERA-

MBT, and engaging with European associations to foster commercialisation and address the regulatory framework barriers.

The limitations to measuring impact were highlighted. KPIs for impact measurement have to be designed and agreed by the whole consortium before the projects are funded, so it is difficult to create KPI's that perfectly measure the impact of the projects. The KPIs are also interpreted by the project coordinators, which introduces variation. Certain KPIs are difficult to measure and provide ambiguity instead of providing a clear picture on the impact of a funding programme, like "stakeholder engagement" and "interaction between projects". How much contact is enough to count it? There are impacts that are qualitative, and therefore challenging to compare with quantitative KPIs. The impact of the published policy brief or how BlueBio activities have contributed to build the European blue bioeconomy community is difficult to quantify.

With no possibility of long-term follow-up of projects some impacts may appear later, which makes it difficult to consider them.

## **Maximising impact of a H2020 consortium**

*Gianna Fabi (CNR)*

BlueBio was established as a coordinated R&D funding scheme, to contribute to SDG 2 and 14, policymaking, new products, and to improve skills. The purpose was to create and upscale bio-based products and services, so they could reach the market. With between 1 and 5 companies in each project, 28 products or processes are close to reaching the market.

There has been an increase in professional skills, with 3 training courses organised and 70 PhD and MSc students educated. An important driver for this has been the mandatory inclusion of HCB activities in the funded projects.

Central to the success of the funding scheme, was establishing a clear plan and vision for consecutive calls. It was especially important to identifying funding gaps after the initial call. This enabled precise and focused scope in the additional calls. Cross-cutting drivers must be included in the call text, to ensure execution and monitoring. Interaction with the funded projects on commercialisation, HCB, monitoring, and responsible research and innovation (RRI), and the forward looking activity leading to a published SRIA on blue bioeconomy, have enabled understanding of R&I gaps.

Results from BlueBio have been disseminated at 18 workshops and one event in the European Parliament. BlueBio has contributed to policymaking both through the EU Parliament event and through interactions with SCAR FISH members, through influence on national and EU policy processes and with actions taken by BlueBio projects (Policy Briefs and White Papers).

Particular best practices were the value chain approach to funding and creating synergies between the projects, portfolio analysis of funded projects, the system for creating synergies between projects, commercialisation support of funded projects with creation of commercialisation factsheets, mandatory inclusion of HCB, the close follow-up and monitoring of projects, RRI activities and forward looking process.

## Panel

*Maris Stulgis (DG MARE), Charlotte Jagot (CINEA), Inga Bruskeland (ERA Learn), Margherita Zorgno (Sustainable Blue Economy Partnership), Ingeborg Korme (moderator)*

### Ingeborg Korme: How should we measure impact?

Maris Stulgis: BlueBio already measured the impact and presented it quite well. The key to measure impact is to make stakeholders aware in an easy and accessible way about the results and impacts, and this is what BlueBio has done. You need to see the innovation in the project results, and do successful marketing. When stakeholders are aware of the results they will have a post-project life. EU4Algea is a good example where dissemination is important to cross-fertilise the results, with added value from supporting the industry. Impact can be a project going from TRL 5 to TRL 8.

Charlotte Jagot: You need a monitoring strategy and you need to have KPIs. EIT Food commissioned a project of about 24 months, called “Synergies of maritime projects”, to assess 90 funded projects using a set of indicators. Need infrastructure that reaches over many years with stable funding, so they can analyse portfolios and projects from other funding programmes, that can get key contracts and identify funding gaps. The design of a call is essential, in R&I projects and skills projects, the KPIs must be included in the call from the beginning.

Inga Bruskeland: ERA Learn offers a monitoring tool on their platform. This new toolbox is made to monitor new partnerships, policy impact included. A coordination and support action for partnerships is necessary for awareness, to gather information and create reports. We need actions that can strengthen impact and structure enhanced impact activities, so they can be utilised when organising a partnership or call. Having a support system or additional activities to support what is happening in the projects is important, especially if there are topics you want to elevate to policy level.

Margherita Zorgno: There is a monitoring programme in SBEP with KPIs that relate to funded projects. Quantitative KPIs are easier to measure, while qualitative impact is more difficult to measure. They try to measure more qualitative KPIs, but it is difficult to measure how much the partnership is influencing the national actions in the blue field for instance.

### Ingeborg Korme: How to we make sure knowledge is sustained when it is project funded?

Inga Bruskeland: ERA-LEARN started in 2009 to provide a platform for essential information, especially on monitoring, but despite these resources connecting people is necessary in addition. Even if you build on existing resources you lose the history, so you need the people.

Margherita Zorgno: The SBEP partnership builds on existing projects and programmes and we see knowledge exchange. Sharing best practices is essential, for instance some recommendations from BlueBio have already been taken up in SBEP.

### Ingeborg Korme: What is your favourite example of measuring impact?



Charlotte Jagot: It is very effective to have a specific presentation during info day (call launch) for the need of having a business plan. You must inform applicants well in advance about requirements, to measure impact properly later.

Inga Bruskeland: You must evaluate and know which structures are enhancing impact and then a support system to push applicants to get the impact you want. You need additional activities in addition to the calls, dissemination of activities and results, and to be involved in the policy level.

Margherita Zorgno: Intangible impact is challenging to measure when SBEP lasts seven years. Will try to measure the impact while the partnership is still running, like the impact of project results on R&I programmes on national level.

Maris Stulgis: You must make it simple for the funded projects to measure their project's impact, so you can aggregate the reports.

**Video presentation of the BlueBio 1<sup>st</sup> Additional Call project TraceMyFish**

## Looking to the future of the blue bioeconomy

*Nikos Zampoukas (DG RTD)*

We are halfway through the Horizon Europe programme and there are already discussions on the next framework programme, to better meet our future challenges. The next step is to establish an expert group to discuss R&I in Europe for the next framework programme FP 10.

There is a need for better funding streams and alignment of different funding streams. To improve, events like the Partnership stakeholder forum last December are organised. There is also an argument to make for how to incorporate national financing, but both form and function must be considered. This should also include a focus on industries. Stakeholders are looking to US and Australia, because there is much to be learned outside of the EU.

## Closing the meeting

*Ingeborg Korme (coordinator)*

Ingeborg thanked the participants for their active participation, the presenters for their contributions and the BlueBio partners for all their efforts. She also thanked Kristin Thorud, the previous coordinator, for her excellent work building and steering BlueBio. She set the tone for the consortium.

The Final meeting marks the end of an era, but there is a bright, circular and biobased future ahead. JPI Oceans will take over the follow-up of the running projects, so there will be more impact from BlueBio. There are more opportunities in future, and we hope that the participants will take with them learnings from BlueBio, to be more agile and enhance funding opportunities. Then we will be able to change the world with R&I, sharing and exchanging knowledge.

## Annex



### Algalres' experience

**Project: Increasing Echinoderm Value Chains inEVal**

*"We see it as **very positive** that public and private research entities participate alongside private companies (especially SMEs)"*

*"For **SMEs to have their own project is very important** for us. Not just being a mere demonstration piece for research conducted by other entities, but being able to participate in the idea, because then issues of interest to us are addressed, which we can then take to a final TRL, which is what matters"*

*"Regarding the national monitoring and the ability to report in their **own language**, for SMEs and MICRO-SMEs like us, and we believe for Spanish companies in general, this is essential. **Communication is much closer and direct** this way, and the problems and doubts that arise are understood and resolved much more quickly. At least that is the experience we have with CDTI"*

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019126.

### Maximising the impact of BlueBio: what we have learnt

**BUILDING THE COFUNDED CALLS**

- 1 Establishing a clear plan and vision for consecutive calls.**  
Building on prior efforts ensures stability for applicants and a clearer path to achieve long-term strategic goals.
- 2 Identifying gaps after the initial call enables more precise and focused scopes in subsequent calls.**  
It was more challenging to engage funders, but it **increased the BlueBio impact** on challenging topics.
- 3 Drivers that are believed to be essential for the impact of the funded projects must be included in the call text and followed up on while monitoring the projects.**
- 4 Complementary precision funding can increase the impact of already funded projects.**  
Targeted calls must be developed with deep understanding of the projects.

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 101019126.

### SeaSoilDemo results and output

- The ley survived most applications, except fermented seaweed where only perennial weeds survived (coach grass); however this canopy produced a high yield at the 2<sup>nd</sup> cut
- All materials increased ley yields at 1<sup>st</sup> and 2<sup>nd</sup> cut, except the highest application of dry seaweed residue (4 kg DM/m<sup>2</sup>) at the 2<sup>nd</sup> cut
- High loads of dry material were not decomposed during the summer and became smeary
- Higher concentrations of As, but not Cd in grass amended with seaweed
- Simple field experiments very useful to engage the industry
- Videos will become a good communication product

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