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Report on Blue Bioeconomy Technology Networks screening



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ABSTRACT	This report provides comprehensive desk research on existing (blue) bioeconomy databases, networks, interactive platforms and reports/studies, which may be of value to the BlueBioClusters database/platform.
KEYWORDS	Blue Bioeconomy, networks, databases

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Table of Content

List of Figures	3
Acronyms	3
References	3
Executive Summary	4
Introduction	5
1. Blue Bioeconomy sector	6
2. List of existing Blue Bioeconomy databases	9
3. Profiles	11
4. Analysis	48
4.1 Data organisation	48
4.2 Target audience	50
4.3 Users' description.....	52
4.4 Services offered	54
4.5 Interface and design.....	55
5. Conclusion	60
Annex I	61

List of Figures

Figure 1 European bioeconomy: contribution of different sectors.	7
Figure 2. Sweden tech ecosystem - organisation of data by field of activity and logo.....	49
Figure 3. Ignite - organisation of event information using filters in the form of checkboxes.	50
Figure 4 Target audience per sector (Blue, Green & Blue, others)	51
Figure 5 Distribution of the target users' categories	52
Figure 6 Swedish Aquaculture Platform: Short users' description and link to company's website	52
Figure 7 SAFER : Short users' description and others main details.....	53
Figure 8 HUB AZUL : Detailed users' description	54
Figure 9 Distribution of the platforms, networks, databases offering services	55
Figure 10 CIIMAR - example of a modern design, with thematic colors and an original, intuitive layout.....	57
Figure 11 University Minho - example of a neutral search platform without colors and a very succinct design.....	57
Figure 12 Interactive maps examples SAFER and Inn2POWER	58
Figure 13 Users' interaction options examples (Inn2POWER, Manufacturing guide, Swedish Cleantech and LifeScience Scotland.....	59

Acronyms

BBC	BlueBioClusters
WP	Work Package
D	Deliverable
EU	European Union
ERANET	European Research Area Network
UX	user experience
UI	User interface
BBA	Blue Bio Alliance
SMEs	Small and Medium Enterprises
EEA	European Economic Area
KPI	Key Performance Indicator
PMBA	Pôle Mer Bretagne Atlantique
EEN	European Enterprise Network

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Executive Summary

This report was prepared under Work Package, 4 “Technology mapping and transfer”. Its aim is to identify and analyse existing blue bioeconomy technology databases, networks, interactive platforms and other potential tools that will support the development of the BlueBioCluster interactive platform “**The Blue Bioeconomy Hub**”. The report includes comprehensive desk research to present the State-of-the-Art as a benchmark to set a strong basis for developing the Blue Bioeconomy Hub. It includes sources of inspiration and elements to avoid in order to build a tool to map technology providers & users and boost discussion/interaction between the different actors within the Blue Bioeconomy sector, such as technology developers, users and other kinds of stakeholders, to increase uptake and development of suitable technologies to stimulate blue bioeconomy development in the regions.

The methodology encompassed identifying existing databases, networks, projects, and platforms related to the bioeconomy or bio-based industries (referred to as "Blue" in this context) in the European Union (EU). This included examining how these initiatives operate and are implemented. Additionally, the study also considered communities formed through ERANETs, Joint Programming Initiatives, and Joint Technology Initiatives, as these could provide valuable foundations for further development.

Once the identification phase was concluded, we reviewed the results and presented each of them in profile sheets, later categorised into 5 groups: 1) interactive platforms, 2) databases, 3) projects, 4) networks and 5) others. The analysis focused on 4 main aspects: 1) Data organisation, 2) Target audience, 3) User description, 4) Service offered and 5) Interface & Design. Finally, the report draws conclusions and makes recommendations on the most suitable approach for the development of the BBC platform: The Blue Bioeconomy Hub (later renamed BlueBioMatch), as well as the potential synergies and ways of collaboration with relevant initiatives.

Introduction

The Blue Bioeconomy Strategy for Europe highlights the crucial role of marine bioresources in addressing the societal, environmental, and economic challenges faced by the continent. The identification of future perspectives for blue biotechnology, aquaculture and fisheries should be closely aligned with the sustainable utilisation of marine bioresources in ways that establish new markets, generate revenues, and foster employment. Exploring the potential of marine biodiversity has increased in the last decades, indicating it to be an important source of novel natural compounds. Some of these compounds are already used in food, cosmetic, agricultural, chemical and pharmaceutical products, but their diversity has not been fully characterised and utilised. Further opportunities exist for the use of ocean bioresources in markets for industrial enzymes, functional foods, cosmeceuticals, biomaterials, bioprocessing and medical devices.¹ The EU (the EU Blue Economy Report 2023) highlights that 3.34 million people are employed across all sectors and that the blue bioeconomy generates around €523 billion in turnover and €129.1 billion in gross value added.

Despite the progress enabled by EU programmes, there remains a need to continue creating interaction and fostering innovation and capacity building between research and industry sectors. In this context, the BlueBioClusters (BBC) project aims to contribute to sustainable regional development and the EU Green Deal by enhancing the services of existing blue bioeconomy clusters across Europe for both public and private actors.

To increase the uptake of sustainable blue bioeconomy business opportunities in the BBC coastal regions, work package (WP) 4 aims at mapping technologies within the blue bioeconomy sector and promoting technology transfer between regions and sectors. All project partners are highly engaged in blue bioeconomy activities. Therefore, the first task of the WP consisted of identifying and analysing existing projects, networks, platforms, databases, and initiatives in and outside the BBC consortium. In addition to the specific mapping of blue bioeconomy databases and networks within task 4.1, deliverable D4.1 includes the analysis of the advantages and disadvantages of each of the activities mapped and indicates perspectives on future collaborations with these already existing initiatives (databases, platforms, networks). This will support the consortium in achieving high visibility a) in view of gaining supporters of the technology mapping and transfer activities, b) uptake of BBC's outputs/results also within other blue regions/clusters throughout Europe and c) integration of solutions into related public & private support and funding programmes and provide regional actors access to the technologies required to transition to blue bio-based solutions across the entire value chain, e.g., biomass production, processing, product manufacturing, and selling.

¹ Marine biotechnology strategic research and innovation roadmap, MarineBiotech Project, grant agreement No 604814

1. Blue Bioeconomy sector

The Blue Bioeconomy sector embeds the commercial use of all the marine living resources and encompasses the harvesting of renewable biological resources (primary sector), their conversion into food, feed, bio-based products, and bioenergy (processing) and their distribution along the corresponding supply chain.

According to the EU Blue Economy report (2023), The EU is the sixth largest producer of fishery and aquaculture products (behind China, Indonesia, India, Vietnam, Peru and the Russian Federation), covering around 2% of global production. However, overall production has been rather stable in the last few decades. The EU has slightly more than 56 100 active vessels landing about 3.9 million tons of seafood worth €5.8 billion; at the same time, the aquaculture sector reached a production of about 1.2 million tons worth €3.9 billion in 2020.

Another important sector of the blue bioeconomy is the blue biotechnology, which considers the non-traditionally commercially exploited groups of marine organisms and their biomass applications. Thus, it encompasses any economic activity associated with the use of renewable aquatic biological biomass, e.g. food additives, animal feeds, pharmaceuticals, cosmetics, energy, etc.²

Algae (macro- and micro-), bacteria, fungi and invertebrates are among the important marine resources included in the Blue Bioeconomy. This biomass is used for a variety of commercial applications, including food and food supplements, feed, cosmetics, fertilisers and plant biostimulants, and innovative commercial uses such as biomaterials, bioremediation or biofuels. These groups of organisms and derived compounds are important resources in relation to several EU priorities such as carbon neutrality, innovative, healthy and sustainable food systems and sustainable and circular bioeconomy. Hundreds of new compounds from the marine realm are being discovered every year, demonstrating the innovative nature and potential of the sector while new technologies are being researched to increase the quality and reliability of these compounds.³

The potential of blue biotechnology is a key enabling sector that supports the development of the bioeconomy. It is a multidisciplinary, knowledge—and capital-intensive sector that is relevant throughout the value chain and spans different subsectors (Figure 1). Exploiting the potential of marine living resources provides new opportunities for industry to further develop significant competitive advantage, stimulate growth, and create new jobs.

In this context, BBC WP4 will map the technology providers and users of the different regions in order to enable synergies and cooperation and promote commercial agreements between the concerned actors. The existing databases, networks, and platforms will set some ground bases for developing a performant and relevant interactive platform in the framework of the project: “The Blue Bioeconomy Hub” (later renamed BlueBioMatch). The different stakeholders will be approached to join the Hub and engage in interactions to contribute to the sustainable development of the blue bioeconomy sector in coastal regions and beyond.

² EU Blue Economy Report.2022. Publications Office of the European Union.

³ EUMOFA. 2020. Blue Bioeconomy Report. Luxembourg: Publications Office of the European Union.

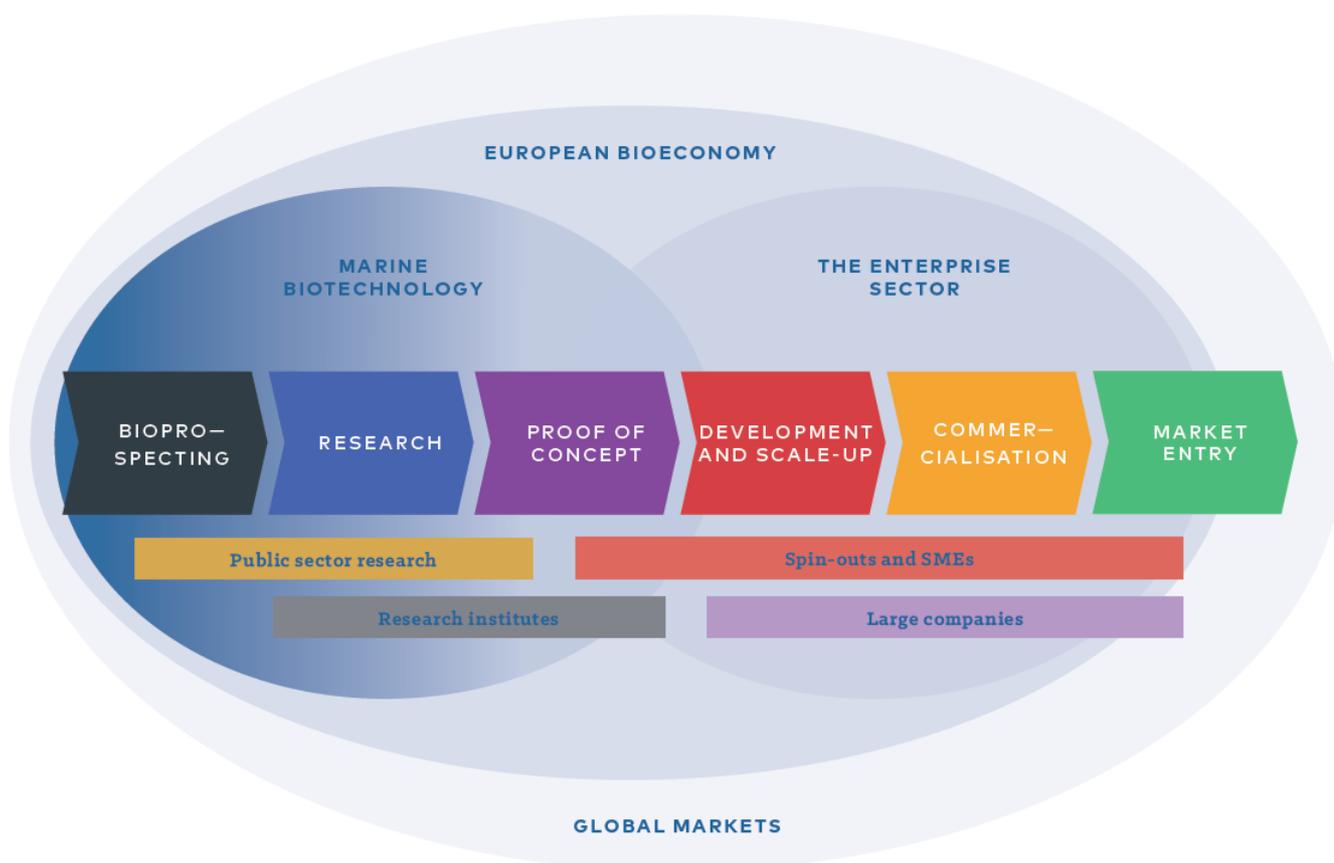


Figure 1 European bioeconomy: contribution of different sectors⁴.

2. Methodology

In order to develop a comprehensive list of existing Blue Bioeconomy databases, the following steps have been undertaken.

1. Definition of goals of the list

The primary objective of the list is to develop clear data storage that could support the consortium to stock and process information on existing initiatives (databases, networks, platforms, etc.) on blue bioresources and other related sectors in order to facilitate the definition of the BlueBioClusters platform and support the gather of relevant actors that would be interesting for the operation of the BBC platform. To reach this broad goal, the following tasks were implemented.

2. Develop a common vocabulary

We have developed a set of categories and sectors/subsectors among the consortium to represent a large perimeter in Europe. We established a common vocabulary and definition of the type of initiatives for data storage optimisation. The idea was to enhance productivity when filling out all the information, which should support an efficient reach and utility of the list afterwards.

⁴ Marine biotechnology strategic research and innovation roadmap insights.2016. MarineBiotech. European Commission's project 7FP grant agreement no 604814.

3. Define the list's rules

Ensure that the list contains all the data. It is important to define the perimeter and the definition of the information.

4. Ensure data quality

Data quality is extremely important. Poor data quality results in poor decision-making regarding potential collaborations or potential users for the BBC platform. All partners have gathered the information in their own networks and ecosystems, considering all the relevant actors in terms of innovation, such as governmental organisations, research and academia (universities, engineering schools), clusters and associations from industries as well as sectorial associations. Moreover, each partner has done the screening at the regional and national levels. Next, we have done consolidated work on a European level to seek clusters of actors and initiatives linked to our objectives:

- ERANETs.
- Joint Programming Initiatives.
- Joint Technology Initiatives.
- EU-funded projects on the European Commission funding and tenders' portal to gather aggregated data regarding projects and beneficiaries.
- EBN (European Business and Innovation Centre Network).
- EEN (Enterprise Europe Network).
- F6S network.
- ERRIN (European regions research and innovation network).
- CMPR (Conference of Peripheral Maritime Regions).
- European Commission directorates related to the blue bioeconomy: Climate, Infrastructure and Environment Executive Agency, Oceans and Fisheries, European Blue Forum.
- All relevant stakeholder networks from all the BBC partners

5. Gap analysis

This consists of a method of assessing the performance of the list and notably ensuring that the information gathered supports us in meeting the objectives; if not, what steps should be taken to meet them?

Key steps of a data gap analysis included:

- 1. Identify data needs in the first steps of the methodology.**
- 2. Assess current data sources and quality:** We have continuously checked the information gathering. During the BBC monthly meetings, the consortium shared questions and comments on the resources, the fulfilment of objectives, and the appropriate perimeter.
- 3. Determine desired outcomes:** once we gathered the first inputs, we started analysing the data. This allowed us to identify the gaps and prioritise them based on expected outcomes
- 4. Develop action plans and implement solutions:** Once the gaps were identified, we conducted desktop research to fill them. We also implemented a monitoring system to consider the different features that we identified as key in the platform's development. The components involved are data inventory, quality assessment, wide-ranging validation by stakeholders, gap identification, prioritisation criteria, action planning, and monitoring.
- 5. Provide efficient access**

An efficient implementation was developed. All partners had access to the list, and they worked on it on an ongoing basis during the first stages of the project.

6. Design

We have defined the categories and levels of information (mandatory, key, complementary, etc), and all the partners contributed to this. The definition of the profiles of types of databases (Interactive platform, database, network, others) and the key information that should be displayed to catch the relevant aspects of each quickly.

7. Implementation

All partners have screened their own innovation ecosystems using a quadruple helix approach, considering all the initiatives from governments, research and academia, industries, and society. Once all the partners added information to the database, we tested redundancy and identified and connected entries and their relationships. The implementation phase was conducted parallel to the gap analysis.

8. Analysis and results

Once the data was collected, an analysis was undertaken. We defined five major axes to provide a screen of the key aspects of the different initiatives (interactive platforms, databases, networks, projects and others) that will support the development of the BBC platform. Data organisation (Data Access and volume, Filters), Target audience (Target sectors, Users), Users' description, Services offered and Interface and design.

3. List of existing Blue Bioeconomy databases

The list of existing Blue Bioeconomy databases has been categorised by type and by relevance. (ex: the first position will be the most relevant one). The categories are:

- **Interactive platform:** a platform that lists organisations and members and offers the possibility of interaction between users directly via the platform.
- **Database:** A site that compiles precise data on a specific theme, such as a project or organisation database.
- **Network:** A large system consisting of many similar parts that are connected, considered as a group whose members exchange information.
- **Others:** projects or organisations linked to blue bioresources or sustainability organisations.

Interactive platform

- EATIP : European Aquaculture Technology and Innovation Platform
- SAFER : Smart Atlantic Seafood Clusters
- Swedish Cleantech
- Aquaculture Helix
- Hub Azul
- Blue demo network
- Aquaexcel 3.0
- Ignite Sweden
- Sweden Tech ecosystem
- Blue Invest
- ReSourcer
- Flemish Aquaculture Platform
- Manufacturing Guide
- Inn2POWER

Database

- BBC partner: Submariner Network
- Phyconomy
- SAIC

Project Database

- Ciimar: Interdisciplinary Centre of Marine and Environmental Research
- Bluebio Cofund
- University of Minho
- EurOcean
- Marine and environmental Sciences Centre (MARE)
- B2BE

Network

- BioMarine Community
- ZEVinnovation
- Algae UK
- SSIA: Scottish Seaweed Industry Association
- Life Sciences in Scotland
- BBC partner, BlueBio Alliance
- BBC : Iceland Ocean Cluster
- IBioIC
- European Bioeconomy Alliance
- BTCA : Blue Tech Cluster Alliance
- BIC: Bio-Based Industries Consortium
- EEN: Enterprise Europe Network

Others

- BH4S : BusinessHub4 Sustainability
- Blue Cloud
- Ocean Data Factory Sweden
- Blue economy Cluster Builder
- IncubAzul

4. Profiles

The listed initiatives (interactive platforms, databases, project databases, networks, and others) were analysed according to different criteria. Dedicated data sheets were created, providing general information, description, contact, number of users, possible advantages and challenges of these initiatives and relevant points to bear in mind regarding the target audience, data, interface & design, users' description and services. Moreover, a keynote will be provided to identify important aspects of each or potential synergies to be pursued.



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secretariat@eatip.eu

Possible
Synergy

+100
users

- **Description:** “EATIP is an international non-profit association dedicated to developing, supporting and promoting aquaculture and, especially and specifically, technology and innovation in aquaculture in Europe to:
 - Establish a strong relationship between aquaculture and the consumer
 - Assure a sustainable aquaculture industry
 - Consolidate the role of aquaculture in society”
- **Data:** Alphabetical organisation of the different structures and players on the platform, no filters to refine the search
- **Target Audience:** Companies, institutions, universities, associations, federations, organisations & observers with a declared and professional interest in the sustainable development of European aquaculture
- **Interface:** Simple, uncluttered, interactive interface
- **User’s description:** Short description of members in mirror image of their logo. Then redirect to their website for more information
- **Services:** EATIP holds thematic Forums on key topics in collaboration with its Mirror Platforms and some EU projects. They also support all initiatives promoting aquaculture farms & innovation across Europe

Advantages

Key player in the aquaculture sector
 Brings together many of the platforms
 listed in the benchmark

Challenges

No challenges

- It is an interactive platform that plays an important role in the field of aquaculture, and consequently for the Blue Bio economy Hub
- Synergy possible due to the variety of relevant stakeholders it brings together

- **Description:** It is an online platform, repertory of seafood technology providers in the Atlantic Area. SAFER is an Interreg Atlantic Area project (2017-2023) in which different users can access to a catalogue of services for the Seafood sector in order to increase the SMEs competitiveness and promote transnational cooperation.
- **Data:** Few filters but one regarding "service type" is interesting to identify this and other relevant filters for the BBC database /Open access data "The Blue Bioeconomy Hub"
- **Target Audience:**
 - Seafood Sector
 - Technology suppliers (add info on the Database - showcase their services)
 - Technology user (find a service or a product)
- **Interface:** Logos are too small on each presentation page / interactive map to see where are located all the technologies
- **User's description:** Website, small description, contact, keywords
- **Services:** No extra services included in the database

Advantages

Technologies for the Seafood sector, close relation with BBC partners to seek for synergies in the future

Challenges

Limited to 4 countries (Ireland, France, Spain, Portugal)
Other services are included, not only technologies

- A map of users could be transferred nicely to the Blue Bioeconomy Hub
- The search criterion concerning the type of service could be quite relevant for the users needs and the technologies' providers offer
- The user pages are succinct; more information on the platform may be pertinent



contact@swedishcleantech.com

Possible
Synergy

users
unclear

- **Description:** Swedish Cleantech is a platform that gathers information about Swedish cleantech and Swedish companies within the cleantech sector. It is a searchable platform for technology providers and users within several cleantech sectors including water/wastewater, sustainable materials and more
- **Data:** Many filters to search for information: company type, company size, country, turnover, employees, global goals (sustainable development goals)
- **Target Audience:** Companies and users from cleantech-sector
- **Interface:** Clear presentation, reactivity, logo for each member, beginning of the resume on the main page
- **User's description:** Name, address, turnover, company size, sectors, "visit website", resume, access to all social media accounts
- **Services:** Button "request a meeting" with the members

Advantages

Broad range of cleantech solutions;
possible transferability to blue bioeconomy;
collaborates with European Enterprise
Network EEN

Challenges

Limited focus to Swedish companies;
very broad, not only blue
bioeconomy

- Good organization, but too many filters. However, some of them are interesting to keep for the Blue Bioeconomy Hub
- The idea of direct interaction between members using the "request a meeting" button is a good way of making the platform interactive



geral@forumoceano.pt

Possible
Synergy

+ 1000
users

- **Description:** Hub Azul is a Digital platform designed to quickly map business data from the Blue Economy and matchmaking business between startups, SMEs and investors
- **Data:** Big amount of data, many ways to search for information: filters, categories, different pages, etc. One part for free access to data / another part accessible if you create an account
- **Target Audience:** Start-ups, investors, large companies - Business to business or business to consumers
- **Interface:** Graphics, easy access to data, logo
- **User's description:** Launch date, employees, marketplace, localisation, description, market cap, ownership, website, key words, ...
- **Services:** Maybe in the advanced options

Advantages

Worldwide platform managed by blue ocean cluster in Portugal: with 1045 startups registered on the platform, close to 1200 investors and more than 100 large companies. And includes KPIs and metrics (e.g., of which 800 have raised capital)

Challenges

Similar name and search tools of Blue Bioeconomy Hub
Necessary to log in to have access to all options

- Defining whether the user is addressing other companies or consumers (B2B or B2C) is a good idea for the Blue Bioeconomy Hub.
- This platform is an example of the problem of multiple filters. Too many filters can lose the user
- An interesting aspect is the "similar companies" information when accessing a company's profile.



+ 44 (0) 20 7687 2020
hello@crowdhelix.com

Possible
Synergy

~ 700
users

Description: The Aquaculture Helix is an international Open Innovation community of specialists in aquaculture and related disciplines. The Helix was launched as a focus for impact and dissemination services in support of the ASTRAL project's ambition to foster a collaborative ecosystem along the Atlantic.

Data: data organized by forum of interest. They host 49 active Helixes, which are international communities of researchers and innovators collaborating on a topic. Many different forums on various themes

Target Audience: Research and technology organisation, corporate, SME, Associate, Specialist

Interface: Very modern interface with easy access to data / easy, fast and fluid information retrieval

User's description: Logo, name, country - accessible only if you create an account

Services: Enables entities to connect with each other, thematic forum, access to user information, proposal of opportunities via the platform, events.

Advantages

Range of services and infrastructures suppliers to support transition for the blue economy and a showcasing of suppliers in Portugal (to be confirmed)

Challenges

Only Portuguese (to be confirmed), under a re-definition process, need to register to have all information

- Platform for data exchange and sharing
- Large network, not particularly on topics related to the blue bioeconomy
- Clear and inspiring interface



project@bluebioalliance.pt

Possible
Synergy

users
unclear

- **Description:** Blue demo network is a network that aims to promote and make accessible a set of Portuguese infrastructures and services to startups that focuses on the blue bioeconomy
- **Data:** We need to register if they want to have access to data
- **Target Audience:** Startups focused on blue economy
- **Interface:** One needs to register if they want to have access to the platform
- **User's description:** One needs to register if they want to have access to the platform
- **Services:** Platform where services can be requested such as: business support, mentoring, marketing en sales, process technology and testing, bioresources and production

Advantages

Range of services and infrastructures suppliers to support transition for the blue economy and a showcasing of suppliers in Portugal (to be confirmed)

Challenges

Only Portuguese (to be confirmed), under a re-definition process, need to register to have all information

- The sticking point for analysing this platform is the need to register in order to access it
- A good service offering that could provide inspiration for the Blue Bioeconomy Hub



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Possible
Synergy

150
users

- **Description:** Aquaexcel 3.0 is a project designed to align research with industry needs. It aims to stimulate the aquaculture sector in particular. As part of the project, an interactive map has been created, listing various data concerning aquaculture-related organisations
- **Data:** Organisation as a map / Few filters: areas of expertise, specific species, type of site, type of water / Open access data
- **Target Audience:** University, research institute, industries and others
- **Interface:** Different logo for each organisation type, unintuitive button, old-fashioned writing
- **User's description:** Organisation details - name, address, website, key areas of expertise, main species, type of site, type of water, localisation on the map
- **Services:** No services included apart from the ability to compare two different organisations using a button on the map

Advantages

Feature a EU-wide interactive map of aquaculture-related stakeholders

Challenges

Not all project regions represented

- Organisation of data and users in the form of curated maps, adding interactivity for users



No contact

Potential
Synergy

+6000
users

- **Description:** Ignite Sweden is a non-profit initiative that aims to foster innovation by connecting startups with large companies and public organisations
- **Data:** We need to register if we want to have access to the data
- **Target Audience:** Only startups established in Sweden and registered as limited companies are eligible to participate in most of the proposed activities, but corporates and incubators are welcome to join as well
- **Interface:** Colors appealing, easy access, short description and explanations
- **User's description:** We need to register if we want to have access to the data
- **Services:** Matchmaking meeting, sessions, coaching

Advantages

Ignite has connected over 1,300 startups with nearly 290 companies and 42 public organisations, resulting in over 6,000 meetings and, above all, more than 453 business collaborations

Challenges

Swedish scope,
Some pages are only in Swedish
and can't be translated on the
website, not specifically blue
economy

- Good example of explanative video about the platform
- FAQ interesting to keep for Blue Bioeconomy Hub



No contact

Possible Synergy

+6000 users

- **Description:** Sweden Tech ecosystem is a Digital platform designed to quickly map business data from Sweden Tech Ecosystem and matchmaking business between startups, SMEs and investors.
- **Data:** Big among of data, many ways to search for information: filters, categories, different pages, etc. One part for free access to data / another part accessible if you create an account
- **Target Audience:** Start-up, investors, large companies to businesses or consumers linked to Sweden tech ecosystem
- **Interface:** Graphics, easy access to data, logo
- **User's description:** Launch date, employees, marketplace, localisation, description, market cap, ownership, website, key words
- **Services:** Maybe in the advanced options

Advantages

Digital meeting place for Sweden's flourishing tech ecosystem, where you can find data on startups, scaleups and funding – and much more. Open for everyone and free of charge to access. Powered by Dealroom which allows investors access to information about funding rounds

Challenges

Swedish scope,
Not specifically blue, blue companies can list under categories such as food and biotech, no contact info

- Same as HubAzul - dealroom.co
- "Definition B2B or B2C" can be transferred to the Blue Bioeconomy Hub
- Too much information and criteria to be replicated on the Blue Bioeconomy Hub
- Link to "similar companies" good for facilitating networking on the platform
Good to keep the mapping of logos regarding their working areas



No contact

Possible
Synergy

users
unclear

- **Description:** Blue Invest is a very broad blue economy database financed by DG MARE featuring companies, technology providers, startups and a library of resources to access finance and business opportunities.
- **Data:** Access to data only if we are user, not accessible as a guest
- **Target Audience:** Entrepreneurs, investors, corporates and innovation stakeholders who want to connect to the blue economy
- **Interface:** Access only if we are user, not accessible as a guest
- **User's description:** Access only if we are user, not accessible as a guest
- **Services:** Business-to-investor matchmaking / Networking, knowledge exchange and links to relevant accelerators, incubators, clusters and business networks / Online learning, training opportunities and coaching / Events and growth opportunities

Advantages

High number of users, investors and startups, EU initiative, similarities: mentoring, coaches, events

Challenges

Already established network that could be difficult to attract

- A great database to get in touch with in the framework of the Blue Bioeconomy Hub
- Many proposed services that can be linked to the Blue Bioeconomy Hub



No contact

Possible
Synergy

+35
users

- **Description:** ReSourcer is a marketplace that connects buyers and sellers and makes it easier to find documentation on raw materials. This is how they increase the value and utilization of biological residual raw materials.
- **Data:** Organised as a marketplace, with products offered for sale by organisations
- **Target Audience:** Sellers and buyers on bioeconomy resources
- **Interface:** Modern design, specified pictures for each bioresources, clear context, easy access
- **User's description:** Sellers' page: logo, website, registered as, address, map, bioresources concerned / Products page: biological stability, usage potential, Availability, shape, content, location of the seller
- **Services:** Bringing buyers and sellers together via the platform / No other services specified

Advantages

They want to create marketplace for raw material

Challenges

Primary focus on Norway

- Good synergies for the Blue Bioeconomy Hub
- Easy access to data, and consistency to be maintained for the Blue Bioeconomy Hub



info@aquacultuurvlaanderen.be

Possible
Synergy

+50
users

- **Description:** The Flemish Aquaculture Platform aims to outline the aquaculture landscape in Flanders, which has gained dynamism and entrepreneurial strength in recent years. This website aims to collect as much information as possible, without filter or censorship, about and for the Belgian aquaculture sector and its export products. The Flemish Aquaculture Platform also organises an annual symposium and a number of networking events where all stakeholders and interested parties are invited to participate.
- **Data:** 53 Flemish companies ranked by alphabetic order or using filters: consulting, education and events, microalgae, production systems and technologies, ornamental fish and fishing, nutrition. And, a list of projects in the same format
- **Target Audience:** Companies from the aquaculture sector
- **Interface:** Interface that works, few visual searches, simple but effective
- **User's description:** Logo, name, button "more info", access to the website of the company
- **Services:** Meeting room. They also organise an annual symposium and several networking events where all stakeholders and interested parties are invited to participate

Advantages

Inventory of all aquaculture actors in Flanders
Also including land-based and freshwater aquaculture

Challenges

Local scope, no synergies with Blue Bioeconomy Hub

- High potential synergies
- Regarding filters, poor organisation, only super imposed keywords, to be avoided in the Blue Bioeconomy Hub



No contact

No
Synergy+6000
users

- **Description:** Manufacturing Guide is a platform for product development and manufacturing within Sweden's borders to strengthen Swedish industry and Swedish innovation and contribute to more sustainable products
- **Data:** Data organised according to suppliers, materials, manufacturing processes and locations
- **Target Audience:** Product developers, manufacturers and innovation supporting suppliers from Sweden mostly
- **Interface:** Old design, no colors, blurred pictures and logos
- **User's description:** Logo, launch date, employees, localisation, descriptive summary, revenue, social media, email, contact person, companies' additional information
- **Services:** Button "connect this supplier to my account"

Advantages

For the technology transfer between sectors a range of industry sectors and manufacturing technologies

Challenges

Primary focus is Sweden.
Not specifically blue, blue companies can check here for suppliers for production technology solutions, limited number in the blue sectors

- Interface design to avoid

No contact

No
Synergy# users
unclear

- **Description:** Inn2POWER is a North Sea region project. The aim of our project is to expand the capacity for innovation and to improve access to the offshore wind industry and green hydrogen for SMEs by connecting offshore wind and green hydrogen businesses in the North Sea Region.
- **Data:** Filters only on supply chain: supply chain sector, supply chain role, supply chain category / Research by keyword
- **Target Audience:** The offshore wind and green hydrogen industry (SME's) in Europe
- **Interface:** Filters don't work / Interactive map
- **User's description:** Description, supply chain information, contact, button "introduce me"
- **Services:** Possibility to connect directly on the platform with other organisations (no need to register)

Advantages

Focus on Small and medium enterprises (SME's) collaboration, big company directory

Challenges

Topic is out of the scope of blue bioeconomy

Primarily focus in the North Sea

- History page of the platform and the project on the main page, it may be interesting to recall the BBC project on Blue Bioeconomy Hub



info@submariner-network.eu

Possible
Synergy

users
unclear

- **Description:** The Submariner Network promotes innovative approaches to the sustainable use of marine resources and offers a cooperation platform to related actors and initiatives in the Baltic Sea Region
- **Data:** Organised by filters: clients, business area, range of employees, topics, applications, resources, company location.
- **Target Audience:** Blue bio economy industries, research centers, ...
- **Interface:** Colors appealing, easy access, short description and explanations
- **User's description:** Description and information in question form
- **Services:** N/A

Advantages

Blue biotech companies
Include products and services
Networking tool, Submariner
is BBC coordinator

Challenges

Duplicate the information in another
database

- Good organisation, good to keep as an example in general
- Good to keep the idea of questions for the company informations/details

No contact

Possible
Synergy

+1000
users

- **Description:** Phyconomy is a data-driven platform to help fill the information gap in the seaweed industry. The database also tracks investments in the seaweed economy, as well as information on algae species, harvesting volumes and more
- **Data:** Well organised data, global and broad information / Many filters, possibility to download list of data
- **Target Audience:** Seaweed industries /professionals
- **Interface:** Not interactive, no pictures/logos/photos, only raw data
- **User's description:** Much information on user's description: headquarter, value chain, website, species, production process, investors, development stage, start-up
- **Services:** N/A

Advantages

Global. Broad information about seaweed - investment insights, harvesting species data.

Easy to navigate

Challenges

Focus only on seaweed

- Inspiration for the Blue Bioeconomy Hub database on organising data
- Lots of information in the database
- Possible synergies with listed companies
-



info@sustainableaquaculture.com

Possible
Synergy

270
users

- **Description:** The SAIC Consortium is a collaborative body of over 270 businesses and organisations, from SMEs to large multinationals, and from cutting-edge research institutes to Scotland's oldest universities. Consortium Forum, available to all employees of a SAIC Consortium member organisation.
- **Data:** Available only to members
- **Target Audience:** Aquaculture professionals and academics
- **Interface:** Available only to members
- **User's description:** Available only to members
- **Services:** New funding opportunities, sector news, events

Consortium forum: network, discuss on key topics, career and funding opportunities
Help get you in touch with other Consortium members for future collaboration.

Advantages

Targets one of the project regions,
network of professionals

Challenges

Scotland-specific

- The services offered are practical and in line with the aims of the Blue Bioeconomy Hub



secretariado@ciimar.up.pt
(+351) 22 340 18 00

Possible
Synergy

+100
users

- **Description:** The Interdisciplinary Centre of Marine and Environmental Research (Ciimar) is a leading research and advanced training institution of the University of Porto, working at the frontier of Ocean Knowledge and Innovation. They have a database with European projects.
- **Data:** No filters, only titles and/or logo from project. Projects ordered according to the European funds to which they belong.
- **Target Audience:** University, research institute, industries and others
- **Interface:** Squares per project filling the page. Intuitive, dynamic.
- **User's description:** No user's description but project description: Principal investigator, lead institution, research team, website, description, programs
- **Services:** N/A

Advantages

Member of BBA network Ciimar fosters an integrated approach to Ocean and coastal areas promoting the understanding and knowledge of Biological, Physical and Chemical dynamics of these environments and the impact of natural and human activities

Challenges

No challenges

- Possible synergy by taking into account the partners involved in the projects
- Good source of inspiration for the platform, interesting interface with an original presentation of projects that makes the platform interactive.



bluebio@bluebio.eu

Possible
Synergy

29
users

- **Description:** Bluebio Cofund aims to establish a coordinated R&D funding scheme that will strengthen Europe's position in the blue bioeconomy. The available database is a product of the "related activities" implemented within the ERA-NET COFUND BlueBio and comprises research projects funded at international and national level in Fisheries, Aquaculture, Seafood Processing and Marine Biotechnology and that were active in the period 2003-2022
- **Data:** Filters on search, call, priority area
- **Target Audience:** Fisheries, Aquaculture, Seafood Processing and Marine Biotechnology industries, research institute, and others
- **Interface:** Good quality pictures for all project, same design for all
- **User's description:** No user's description but project description: Name of the project, picture, description, link to website, coordinator, partners, priority area, acronym, funding, project overview (PDF)
- **Services:** N/A

Advantages

Horizon project already in development and with activities that can match with BBC interest and agenda

Challenges

Maybe conflict of interest

- Information of interest to the blue economy community
- Strong synergy possible
- Well-coordinated platform in terms of data and design



gcii@reitoria.uminho.pt

Possible
Synergy

27
users

- **Description:** University of Minho is a Public Foundation governed by private law, under the legal Regime of Higher Education Institutes. They propose a database on innovation and scientific development projects and the internationalisation of research activities in progress or already completed
- **Data:** Filters on main scientific area, on funding entities or intermediate bodies, search by term (project, principal investigator, ...). Statistical data on different areas: project per programme, project coordinated by them/as partner
- **Target Audience:** University, research institute, industries and others
- **Interface:** Website speed problem, no search button, site often under maintenance
- **User's description:** N/A
- **Services:** N/A

Advantages

Member of BBA network (all players in the marine bioresources and blue biotech value chain) with a research maritime center - ECOMARE

Challenges

Not all information available online

- Problems accessing information due to technical issues may be a major obstacle to the Blue Bioeconomy hub
- The descriptive section with graphs and statistics is an interesting part that could be kept



+351213924497
info@eurocean.org

Potential
Synergy

5
users

- **Description:** EurOcean is an independent, non-profit, scientific organisation with the mission to support advances in European marine science and technology, by fostering information exchange, interaction and innovation among its network members, the ocean community and broader society
- **Data:** Few data: only 5 projects with filters "on going" / "sort projects by"
- **Target Audience:** Ocean science and technology organisations
- **Interface:** Quite appealing design and easy access, simple interface with logo, picture for each project.
- **User's description:** Project description only
- **Services:** Communication, Dissemination & Outreach, Project Development, Education and Training, Knowledge Management, Business Consultancy

Advantages

Range of services very complete;
European consortium projects.

Challenges

Size of the database

- Small database that can still provide inspiration, scale to be adapted to the Blue Bioeconomy Hub framework
- Keep design to be inspired for Blue Bioeconomy Hub



+351 968 768 949

Possible
Synergy

27
users

- . **Description:** It is a Marine and environmental Sciences Centre (MARE)
- . **Data:** A place for maritime-related projects. No specific data organisation, just project information.
- . **Target Audience:** N/A
- . **Interface:** Simple interface without interaction
- . **User's description:** No user's description but project description: Title, summary, beginning & end, principal investigator, coordinator, partners, website, funding
- . **Services:** N/A

Advantages

Member of BBA network
Governmental

Challenges

Not interactive, more descriptive

- Possible synergy by taking into account the partners involved in the projects
- Avoid the interface



info@b2be-facilitator.be

Potential
Synergy

users
unclear

- **Description:** "The B2BE Facilitator wants to connect producers of valuable biomass with companies looking for (components from) biomass for the production of innovative, bio-based products. The B2BE Facilitator does this each time around a concrete theme and concrete business cases, in a defined time frame of 6 months.
- **Data:** No open-access data available
- **Target Audience:** Entrepreneurs from agriculture, horticulture, the maritime sector and the food industry with industrial partners around green innovations in the fossil-free "bio-economy".
- **Interface:** Classic/simple website
- **User's description:** N/A
- **Services:** Connection between interested parties through well guided workshops, identify any technical, logistical and legal obstacles

Advantages

Knowledge on processing technologies

Challenges

Not specifically blue, but bioeconomy in general

- The B2BE Facilitator will actively maintain and expand that network by monitoring technological developments at home and abroad so Blue Bioeconomy hub can draw on its strategy to expand its linked network

[BioMarine
Community](#)

contact@biomarine.org

Possible
Synergy

users
unclear

- **Description:** BioMarine Community is an organisation at the crossroads of research, business, and investment. The socio-economic approach is designed to optimize and accelerate business opportunities as well as the development of small innovative companies. They are developing partnerships to extend the scope of its activities, notably with media, technology and finance.
- **Data:** Available only for premium users
- **Target Audience:** Innovative start-ups linked to blue economy
- **Interface:** Available only for premium users
- **User's description:** Available only for premium users
- **Services:** Biomarine consulting, community network, Biomarine events, exhibit hall

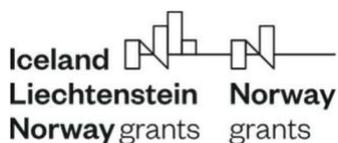
Advantages

Big community including blue biotech companies

Challenges

Global community, so a bit dispersive;
Some information only accessible to premium users.

- Operating mode based on a "normal" profile and a "premium" profile, which does not seem to be the intention of the Blue Bioeconomy Hub



No contact

No
Synergy

+100
users

- **Description:** "ZEVinnovation is a transnational partnership project funded by the EEA and Norway Grants Fund for Regional Cooperation. The project is supported by multi-disciplinary partners from across the EEA committed to bringing together best enterprises with a significant potential for innovation and development."
- **Data:** Access to data only if we are user, not accessible as a guest
- **Target Audience:** N/A
- **Interface:** Access only if we are user, not accessible as a guest
- **User's description:** Access only if we are user, not accessible as a guest
- **Services:** Technology advisory / Funding & Investments / Business support / Market analysis / Networking & Internalization / IP rights and Protection / Legal advisory

Advantages

Focus on matchmaking between mentors and businesses

Challenges

Beyond the BBC scope
Limited information as a guest

- Many proposed services that can be linked to the Blue Bioeconomy Hub



info@ibioic.com

Possible
Synergy

+200
users

- **Description:** Algae UK is a network supporting researchers and others interested in the exploitation of algal products and processes in industrial biotechnology
- **Data:** Sections for projects, funding, opportunities, news, events ...
- **Target Audience:** Researchers and others interested in the exploitation of algal products and processes in industrial biotechnology
- **Interface:** Classic/simple website
- **User's description:** N/A
- **Services:** funding, networking, information, community

Advantages

UK-wide network with focus on macro and micro algae.

Challenges

Closes in 2025
Focus on algae

- Interesting to be able to create a synergy with the companies of this network before the platform closes



info@ssia.scot

Possible
Synergy

+50
users

- **Description:** The Scottish Seaweed Industry Association (SSIA) is an organisation dedicated to the growth and innovation of the seaweed industry. They are committed to the sustainability of the industry by promoting research, educational programs, and advocacy. Members come from all sectors of the industry, ranging from seaweed harvesters to processors and distributors
- **Data:** N/A
- **Target Audience:** Seaweed and aquaculture businesses
- **Interface:** Classic/simple website
- **User's description:** N/A
- **Services:** Networking opportunities / Support and advice / Sharing of information / Access industry knowledge / Brand recognition / Advocacy and representation

Advantages

Scottish industry association mainly focused on seaweed farming

Challenges

Focus on seaweed and Scottish actors

- Interesting to be able to create a synergy with the companies of this network



lssilg@scotent.co.uk

No
Synergy

+50
users

- **Description:** Life Sciences in Scotland works in partnership with the Scottish government, academia, health professionals the Life Science in Scotland Industry Group helps to promote Life Science companies of scale and with international importance.
- **DATA:** N/A
- **Target Audience:** bio hubs, incubators, innovation centers, enterprise agencies and companies
- **Interface:** Classic/simple website
- **User's description:** N/A
- **Services:** N/A

Advantages

Provides database of current life science networks in Scotland including bio hubs, incubators, innovation centres, enterprise agencies and companies
Has the largest concentration of animal health and aquaculture researchers in Europe.

Challenges

Focus on Scotland
Little information on stakeholders

◦ Interesting to be able to create a synergy with the users of this network

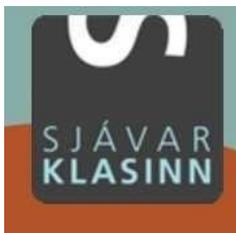
BLUEBIO ALLIANCE

project@bluebioalliance.pt

Possible
Synergy+150
users

- **Description:** BBC partner, BlueBio Alliance is a network that links players in the transition for the blue biotechnology economy: Startups/SME, Research Foundations, Large companies, BusinessAssociations and foundations.

Network



No contact

Potential
Synergy+70
users

- **Description :** The IOC is an innovation hub that connects member companies in the blue economy and those companies' integral to the innovation and startup ecosystem. This includes 70 members from early-stage startup to established international SMEs and companies. The company list is composed of primarily Icelandic companies but there is also representation from international companies. BBC partner.
- A wide range of companies within our network which are encouraged through cluster and networking activities to collaborate and knowledge share. There is a wide range of topics within the blue economy covered in house which enables cross-pollination ideas and cross-sectoral networks.



info@ibioic.com

Possible Synergy

200 users

- **Description:** IBioIC is a networking and support organisation that connects industry academia and government to bring biotechnology processes and products to the global market.

UK-wide network with specific focus on biotechnology

Network



European Bioeconomy Alliance

hello@bioeconomyalliance.eu

Possible Synergy

users unclear

- **Description:** The European Bioeconomy Alliance is a unique cross sector alliance dedicated to mainstreaming and realising the potential of the bioeconomy in Europe.



No contact

Possible Synergy

users unclear

- **Description:** BTCA mission is to “promote sustainable investment & growth of the knowledge-based ocean and water industries, to the mutual benefit of all parties, through active regional, national and international collaboration”.
- The BlueTech Cluster Alliance (BTCA) is a global network of industry-led BlueTech clusters that are committed to collaboration, developing joint-projects, promoting each other's member companies, and sharing information. PMBA is member of this network.

Network



info@biconsortium.eu

Possible Synergy

users unclear

- **Description:** The Bio-based Industries Consortium (BIC) is a non-profit organisation set up in Brussels in 2013 to represent the private sector in a Public-Private Partnership (PPP) with the European Commission, focused on strengthening the bio-based industries sector in Europe.



<https://een.ec.europa.eu/local-contact-points>

Possible Synergy

users unclear

- **Description:** "The Enterprise Europe Network (EEN) helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions.

The Network is active worldwide. It brings together experts from member organisations that are renowned for their excellence in business support.

Member organisations include:

- chambers of commerce and industry
- regional development organisations
- universities and research institutes
- innovation agencies"



<https://bh4s.no/about-us/contact>

No
Synergy

users
unclear

- **Description:** BH4S originates from the competence environment in Møre og Romsdal county in Norway. The main goal is to develop knowledge, skills and foster cooperation to transform businesses through business models that contribute to solving the challenges highlighted in the UN's Sustainable Development goals for 2030.
- **DATA:** N/A
- **Target Audience:** Businesses of all kinds
- **Interface:** N/A
- **User's description:** N/A
- **Services:** Provision of documents, a business model (for sustainable development) and a toolbox for implementing sustainable development objectives.

Advantages

They feature a several business models, which could be interesting for BBC stakeholders
Sustainability aspects: SDGs

Challenges

Not marine-focused
Little information on stakeholders

- Documents on business models are interesting to revise and evaluate relevance for the Blue Bioeconomy Hub

- **Description:** Blue Cloud is a federated European FAIR and Open Research Ecosystem for oceans, seas, coastal and inland waters. Data, products, and resources of interest for the blue-cloud community can be found there
- **DATA:** Access to data only if we are user, not accessible as a guest
- **Target Audience:** Everyone linked to research oceans, seas, coastal and inland water ecosystems
- **Interface:** Classic design, old, colors not very appealing
- **User's description:** Every catalogue item is accompanied by a rich description : title, creator, accessibility properties, technical properties, legal and ethical attributes, intellectual property aspects

Services: N/A

Advantages

They feature a "Blue Cloud" of databases, which is very wide-reaching

Challenges

Research-focused

- Documents on ocean research that could be interesting to the BBC scope
- Researcher community relevant for the Blue Bioeconomy Hub



No contact

Possible
Synergy

users
unclear

- **Description:** Ocean Data Factory Sweden is the national marine data lab in Sweden. Their mission is to enable data-driven innovation by both commercial and non-commercial actors to ensure that the ocean and its resources are managed in the best possible and most sustainable way



info@scottishblueeconomy.co.uk

Possible
Synergy

+70
users

- **Description:** The Blue economy Cluster Builder is a three-year project to introduce the benefits and applications of biotechnology to new sectors and markets in Scotland. They support the growth of the Scottish bioeconomy by connecting the right people and resources, delivering awareness raising events and activities and through signposting to funding opportunities. The BCB is a three-year, ERDF funded collaboration between the Industrial Biotechnology Innovation Centre, KTN and Scottish Enterprise.



No contact

Possible Synergy

users unclear

- **Description:** IncubAzul is a project intended to be a flagship model for the promotion of the Blue Economy throughout Spain. With its principal focus on the seas and oceans, it seeks to cultivate the conditions required to attract and foster talent and ideas.

5. Analysis

Five axes of analysis were defined to provide an overview of the key aspects of the different initiatives (interactive platforms, databases, networks, projects and others) that will support the development of the Blue Bioeconomy Hub within the BBC framework. This deeper assessment of the information and identification of elements will be considered to define the best strategy and features for the Blue Bioeconomy Hub and, therefore, support the achievement of the project objectives.

5.1 Data organisation

Data organisation is defined as the process of sorting raw data into several categories and then arranging them. This is key for the user as notably, the time spent searching for any information from a data source/ database that has not previously been structured, grows as time goes on and the amount of data expands. Therefore, the organisation of the data from the beginning is a major aspect of the development of a high-performance Blue Bioeconomy Hub. Data organisation involves categorising and arranging raw data.

It is recommended that the data be organised in the most logical and orderly way possible so that anybody who has access to it can quickly find what they are searching for.⁵ Below, we present different characteristics and ways to organise the data found in the reviewed initiatives.

Data Access and volume

Considering the analysis of the different initiatives identified, different types of data access can be envisaged:

- Accessible Open Data without constraints.
- Accessible Data through the registration: some basic information requested.
- Accessible Data through the registration: detailed information requested
- Limited or unlimited access to data under some subscription conditions and, in some cases, even paid premium offers.

Data volume differs amongst the different initiatives. Data types and the detail level are important in data collection. Some platforms offer a wide range of data on projects, members, and related organisations; some are lighter, and others focus on a few specific data. It is, therefore, important to be able to organise this data in a logical way for users.

Filters

Finding the right data is one of the key priorities of all the initiatives analysed. This has been confirmed because all of them, without exception, feature a search method either

⁵ Data Organization: How to Organize plus Best Practices. 2023. Fabyio Villegas

with a research tool or based on predefined filters, making it easy to find the data that users look for.

The definition of filters is, therefore, crucial to the development of a platform. A good balance is critical to meeting the users' needs. Too many filters or not enough could mislead the user, as they may not find exactly what they are looking for.

Among the platforms analysed, some relevant filters stand out and would be adaptable to the Blue Bioeconomy Hub:

- Service type
- Company type / company size
- Number of employees
- Main scientific area / business area
- Topics / keywords
- Applications resources
- Company location

Inspiring platforms for DATA

Swedish cleantech - for data organisation and examples of filters

Hub Azul - for data organisation and graphic illustrations

Sweden Tech ecosystem - for data organisation and graphic illustrations

Examples to illustrate data organisation

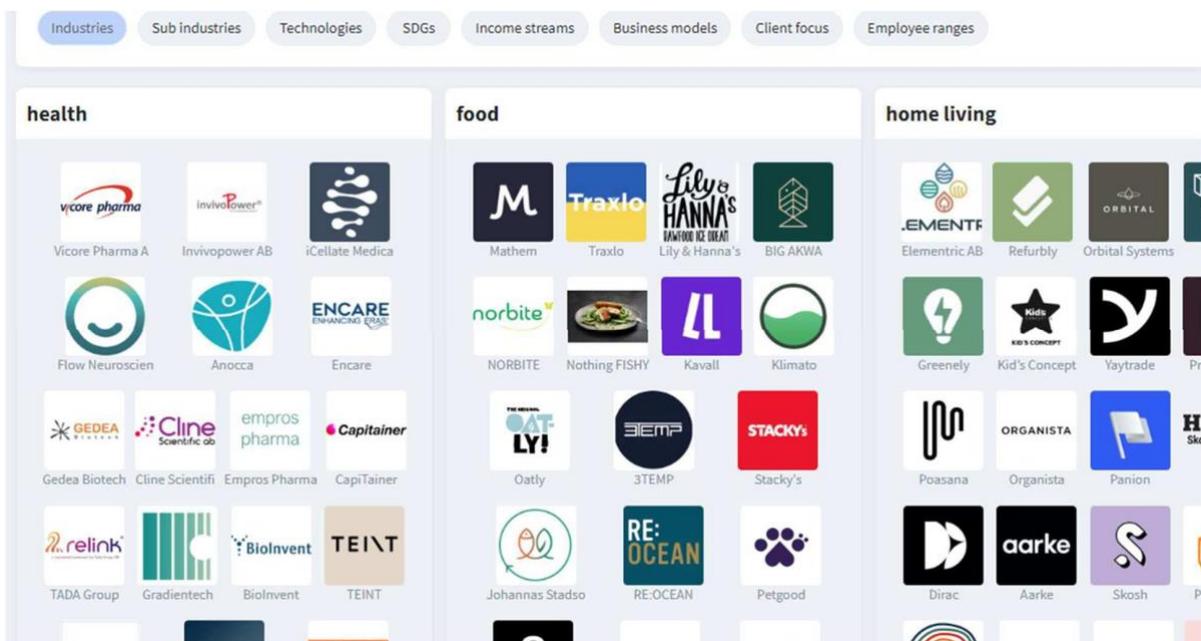


Figure 2. Sweden tech ecosystem - organisation of data by field of activity and logo



Filter by type

Matchmaking Webinar Workshop Conference Other

Startup Participants

Swedish International



Figure 3. [Ignite](#) - organisation of event information using filters in the form of checkboxes.

5.2 Target audience

Target audiences are the people most likely interested in the Blue Bioeconomy Hub. Identifying the target audience of the interactive platform will support engagement strategies and define the core users. Defining a target audience allows more intentional and personal outreach to those most likely to use the platform. The best way to find the target audience is by first thinking about the specific needs the Blue Bioeconomy Hub fulfils. The BBC project aims to provide regional actors access to the technologies required to transition to blue bio-based solutions across the entire value chain, stimulate and accelerate the development of a sustainable blue bioeconomy by enabling startups and SMEs to develop their circular, promising business ideas and identify and strengthen blue bioeconomy efforts and their political and societal uptake. The project also aims to foster effective stakeholder engagement through dedicated activities and the exploitation of synergies and results beyond the project's lifetime within and by other blue bioeconomy regions and actors. Thus, the Blue Bioeconomy Hub's target audience is quite wide and diverse. It can be segmented into reference, intent, location, interests, and more categories. Regarding the initiatives analysed, two important elements emerge from the target audience section:

- Target sectors
- Users

Target sectors

Although this analysis is focused on the blue bioeconomy, we opened the research to other sectors in case some technology transfer could be done and to be inspired by what is done under other sectors. In terms of target sectors, as illustrated in Figure 4, 61.1% of the initiatives analysed are dedicated solely to the blue sector, and it is with these that there will be the greatest potential synergies. In this same category, there are a variety of platforms covering different areas of the blue economy: aquaculture, offshore wind, macro

and microalgae, ocean knowledge, seafood, marine bioresources, fishery, etc. However, 36,1% represent Green, Blue and other sectors. Those initiatives are more linked to sustainable development or technology advances but provide potential technology transfers. Finally, only 1 database is for the green and blue sectors.

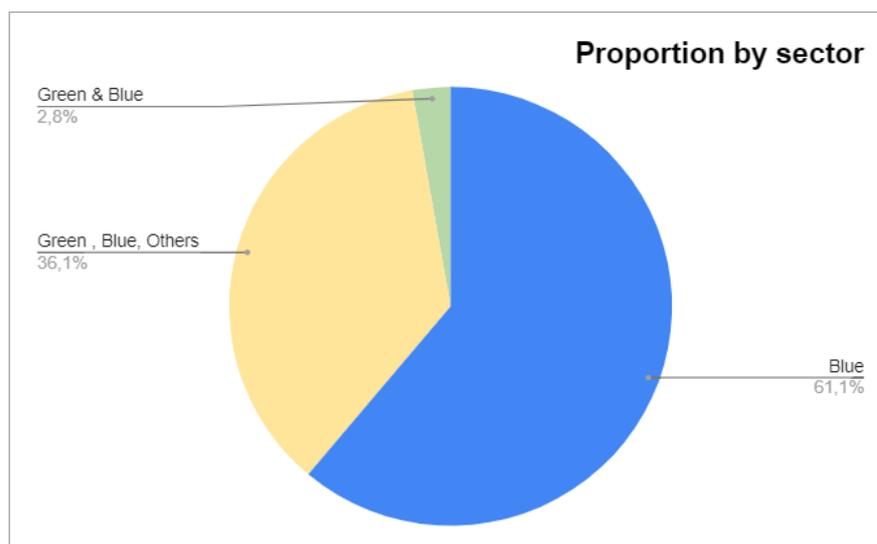


Figure 4 Target audience per sector (Blue, Green & Blue, others)

Users

Regarding the type of user or target audience, we identified 3 kinds of users:

- 1) Technology providers (Big companies/ SMEs, Startups/ Academia with commercial ambitions, Technology Transfer communities, Business Support Organisations),
- 2) Technology users (Regional Blue Bio Companies/NGOs/Social Enterprises/Associations, Policymakers and regulatory bodies: European Commission, National Ministries, Regional Authorities, CPMR, other relevant Projects & Initiatives, Investors, and the Public, Media)
- 3) Research & Academia (Research center, Universities, Independent research organisations, think tanks, research social enterprises etc.).

In Figure 5, we can conclude with certainty that almost all platforms have both technology providers and technology users as recipients since this represents over 83% of the total audience. This is due to the desire to create a maximum exchange between all the parties involved in the target sector.

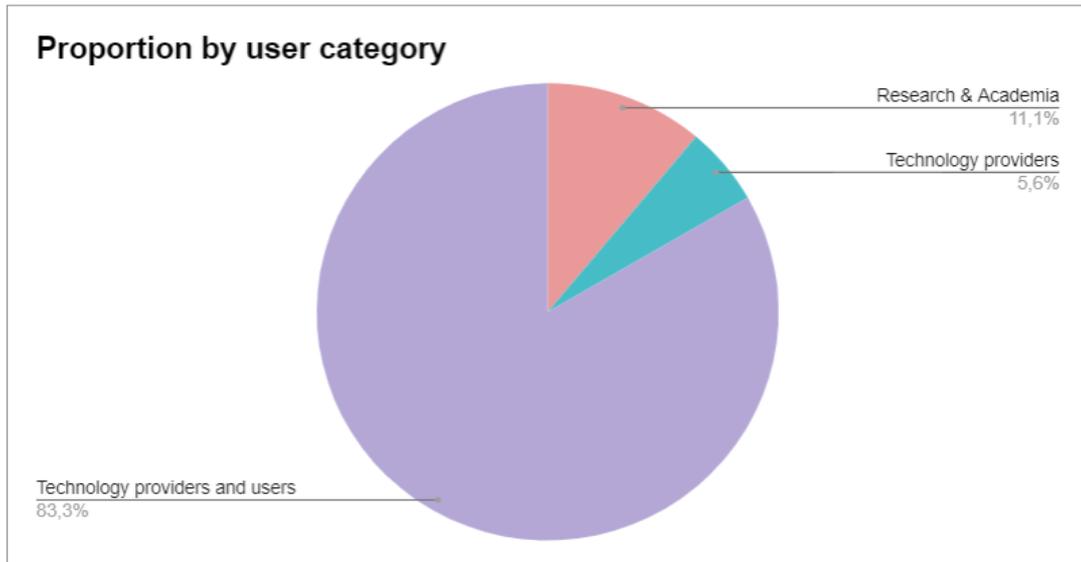


Figure 5 Distribution of the target users' categories

5.3 Users' description

For this aspect, only the initiatives with a description of their users have been analysed. The description of the user is an important aspect because it is linked to the kind of information that is requested from the users in order to be integrated in the platform (i.e., logo, name, website, employees, social media accounts, etc.). At the same time, it shows what kind of information could be relevant or not for the Blue Bioeconomy Hub.

Regarding the analysed initiatives, several options have been selected for the users' description:

- Short description or no description, but a link to the registered user's website, as in Figure 6. Sometimes, in order to access the descriptions, it is mandatory to create an account on the platform.

Adisseo - Nutriad



Leading specialist in the development, production and marketing of animal and aqua feed additives around the world. [Nutriad's Aquaculture business unit](#) offers species-specific R&D capabilities, innovative products and nutritional/technological expertise to the Aquaculture industry. In 2018, the company was taken over by Adisseo, an international company specializing in animal nutrition. Their range is thoroughly tested for durability and the support and promotion of animal health.

[MORE INFO](#) →

Anko Projects Vof



Company focused on the commercial cultivation of *Spirulina*, a micro-algae that produces high concentrations (60 to 70%) of very high-quality proteins.

[MORE INFO](#) →

Figure 6 Swedish Aquaculture Platform: Short users' description and link to company's website

- Short description including company name, logo, short explanatory text and contact details or social networks, as seen in Figure 7.

Aim and Application	Support in real time, the capture process data into management information. By connecting people, information and equipment, the fishermen have the capacity to innovate and control operations.
Region	Norte
Keywords	fishermen, norte,
Service Provider	Foodintech Lda
Contact	Miguel Fernandes
Website	www.flowtech.pt

Figure 7 SAFER : Short users' description and others main details.

- Detailed description including all essential elements such as company name, logo, short explanatory text, and contact or social networks. As well as detailed analysis such as turnover, number of employees, launch date, and some other additional information. HubAzul has a very detailed user description example (Figure 8).

Companies > Algopack

ALGO pack ✓

A solution that uses no plastic, but is made from seaweed: the brand has absolutely no petrol derivatives in its composition.

Launch date: 2013
Employees: 2-10 people

Company register number 523912137
Onnaing Hauts-de-France (HQ) [View more](#)
<http://algopack.com> [Twitter](#) [LinkedIn](#)

Tags: B2B, manufacturing, commission, real estate, bluetech, seaweed

Dealroom.co signal: 13

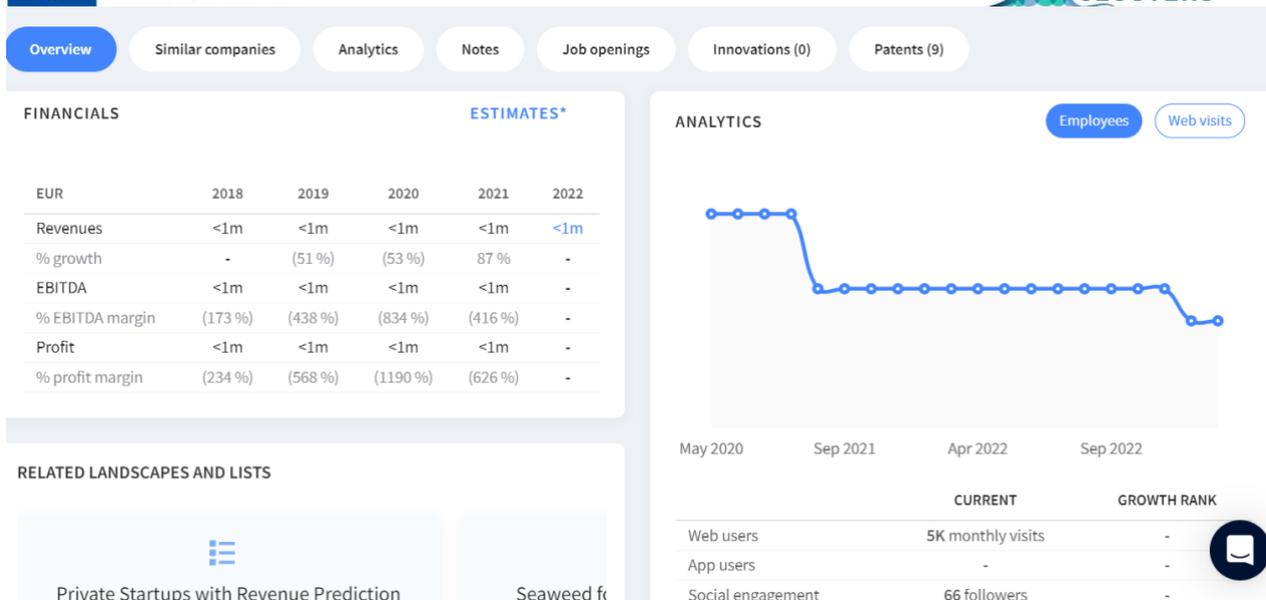


Figure 8 HUB AZUL : Detailed users' description

5.4 Services offered

Some interactive platforms and networks propose services for users, such as networking events, forums, interactions, meetings, mentoring, etc. However, 56.4% of the initiatives analysed do not offer any services (Figure 9).

Services offered include:

- networking
- matchmaking
- business support
- mentoring
- forum
- market analysis
- coaching
- online learning
- training activities

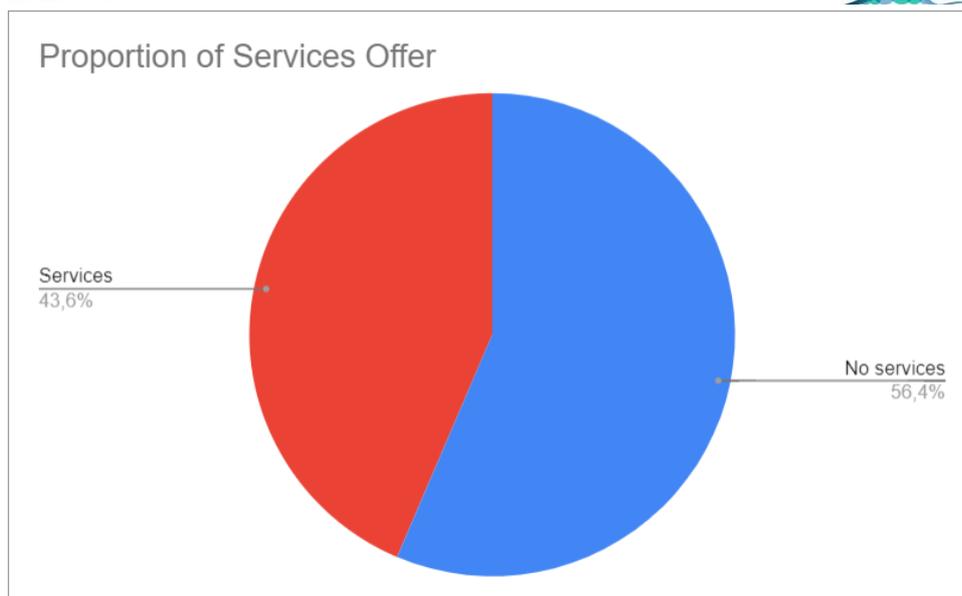


Figure 9 Distribution of the platforms, networks, databases offering services

5.5 Interface and design

The interface and design are key to the development of a successful platform. The visual aspects of the Blue Bioeconomy Hub (design, colours, visuals, etc.) are crucial to the engagement of the different types of stakeholders.

We have implemented a user experience (UX) approach to include perceptions of utility, ease of use, and efficiency of the data platforms, network websites, and simple databases. Moreover, we also focused on a user interface (UI) approach to support the design of the Blue Bioeconomy Hub by anticipating what users might need to do and ensuring that the interface has elements that are easy to access, understand, and use to facilitate user's needs. UI combines concepts from interaction design, visual design, and information architecture.

Design

There is significant variation between the different sites and platforms analysed. It's clear that careful design makes all the difference to the user experience.

In our view, contemporary design is the key to an eye-catching and visually pleasing experience.

Platforms or sites with high-quality photos, logos, or images also caught our attention the most.

Interface

As previously mentioned, the user experience is greatly influenced by the ease of use of the interface. The analysis indicates that certain platforms have interfaces that are cumbersome or overly complex, which negatively affects the smoothness of the user experience. Consequently, this hinders the learning curve for users and ultimately fails to cultivate user loyalty.

The simplicity of the interface goes hand in hand with the interaction created. Interaction tools between the site and users encourage exchange and appropriation of the site or platform.

Several tools stand out from the benchmark:

- A map to situate the various organisations identified.
- Buttons for user interaction, such as “request a meeting”, “introduce me”, or “connect this supplier to my account”.

What are the inspiring platforms about DESIGN and INTERFACE?



What to avoid concerning DESIGN and INTERFACE?



Design comparison



Figure 10 CIIMAR - example of a modern design, with thematic colors and an original, intuitive layout

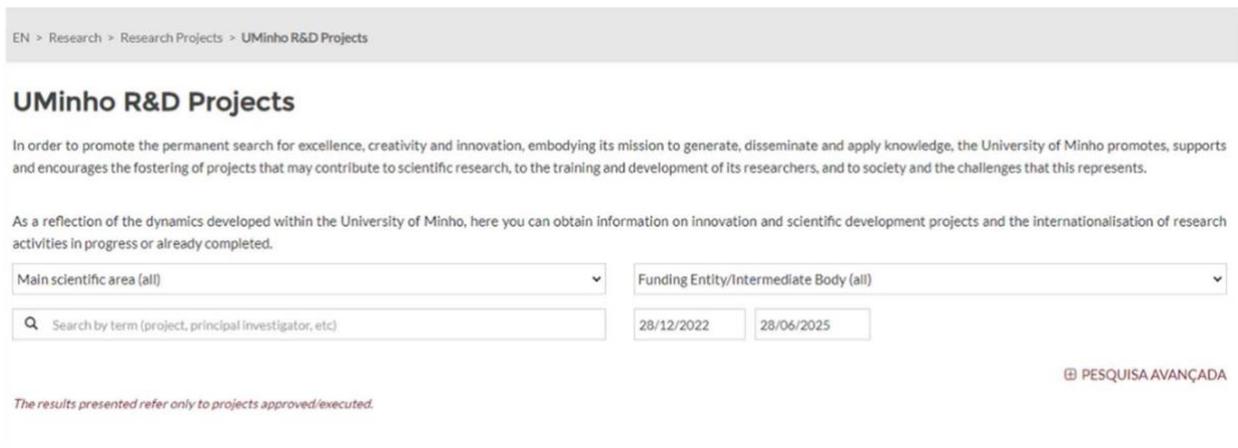


Figure 11 University Minho - example of a neutral search platform without colors and a very succinct design.

Some examples of interactive maps and tools...

SAFER - Map and search features to browse the range of capabilities and services offered by the SAFER project partners

Project Services
SAFER Innovation Services

Use the map and search features below to browse the range of capabilities and services offered by the SAFER project partners

Search

Region

None selected

Service type

None selected

Clear All

Search

Service	Description	Service type	Region
Flow F - Fishing	An IT solution that supports the record of data during the capture process	Technology	Norte
Remote sensing	The use of small sensors to gather data from remote locations	Technology	Donegal

Search by Capability Reset Filter

Search by Supply Chain Sector

Offshore Wind Hydrogen

Search by Supply Chain Role

Consultant Design & Engineering Installation

Manufacture / Supply Operator Research & Development

Service Provider Support Organisation System Integrator

Test & Demonstration Training & Education Other

Search by Supply Chain Categories

Design Development & Financing

Accountancy, Financial, Insurance & Tax

Feasibility / Front End Studies Interface Management

Planning & EIA Certification & Due Diligence (planning phase)

Other

Components Supply

Bearings Bolting's, Fixings & Fasteners Brakes

Cables & Connectors Compressors Electrolysers

Watersupply System Brine Dispersal Systems Tank Storage

Floating Structure Membranes Stacks

Fabrication & Construction Forging & Casting

Foundations & Piles Gears & Gear Boxes Generators

Grid Interface / Substations Metal Materials Nacelles

Non-Metallic Materials Publications & Technical Manuals

Rotor Blades Surface Treatment Topside / Deck Structures

Towers Scour Protection Lightning Protection Other

Inn2POWER - Map to search the European offshore wind and green hydrogen supply chain for partners and customers and browse the innovation challenges posed to the industry to reduce costs to the sector.

Figure 12 Interactive maps examples SAFER and Inn2POWER



For an introduction to MORPHOSENSE, please complete the following details

Your Name *

Your Company Name *

Your Email Address *

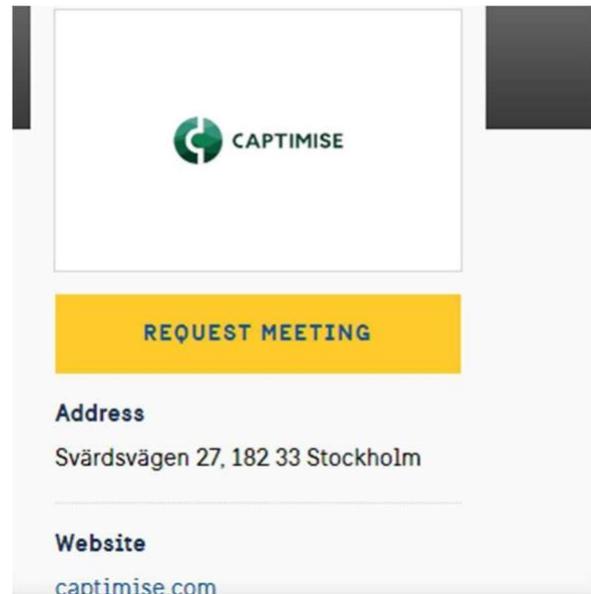
Your Telephone Number

I am interested in connecting with MORPHOSENSE to: *

Inn2POWER - option to introduce yourself to a target organisation or person with a short questionnaire providing key information

Connect this supplier to my account

Manufacturing guide – Option to connect to supplier via interactive button



Swedish Cleantech - Option to request a meeting via an interactive button located directly on the organisation's profile



LifeSciences in Scotland – three different buttons to “connect to” depending on the target

Figure 13 Users' interaction options examples (Inn2POWER, Manufacturing guide, Swedish Cleantech and LifeScience Scotland)

6. Conclusion

The report highlights the key points and perspectives for the next phases of the BBC platform: “The Blue Bioeconomy Hub” (later known as BlueBioMatch), the main features with some examples to be inspired by, as well as elements to avoid. The deliverable gives an overview of the existing blue databases, interactive platforms, networks, project databases and others that allow a definition of the BBC strategy in terms of Data organisation, Target audience, Users’ description, Services offered and finally, the Design and Interface of the platform.

Potential synergies with these existing initiatives have been identified.

Moreover, the main features have been identified and will continue to be analysed to be implemented or not in the “Blue Bioeconomy Hub,” along with the main sources by which to be inspired. (Annex I)

Annex I

Features 	 Blue Bioeconomy Hub	Sources / examples 
Detailed users' description	IN PROGRESS	Aqua Excel 3.0 Submariner Catalogue Manufacturing guide
Modern design		BlueBio cofund eurOcean
Clear and intuitive filters	IN PROGRESS	Sweden Tech Ecosystem Hub Azul Phyconomy
Fluid interface		Crowdhelix ReSource
Interactive platform	IN PROGRESS	Swedish Cleantech Cimarr
Partner mapping	IN PROGRESS	SAFER Aqua Excel 3.0
Focus on Blue sector		Eosc Submariner Catalogue EATIP
Focus on other sectors		Hub Azul Swedish Cleantech Manufacturing guide
Developped services to users	IN PROGRESS	BlueDemo Network SAIC ZEVinnovation
Registration form to access the platform		SAIC Blue Demo Network Eosc
Presentation page of the platform	IN PROGRESS	EATIP ZEV innovation Hub
video on the project / about the platform		Ignite Inn2Power