



Deliverable 2.3

Success Stories

Version 2

WP2
Deliverable 2.3 AQUAEXCEL3.0 Success Stories
Lead Beneficiary: ERINN Innovation (previously named Intrigo)
Project Title: AQUAculture infrastructures for EXCELlence in European fish research 3.0
Call identifier:
Biological and Medical Sciences - Advanced Communities: Research infrastructures in aquaculture
Topic: INFRAIA-01-2018-2019
Grant Agreement No: 871108
Dissemination level: PUB
Date: 09.10.2025



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No. 871108 (AQUAEXCEL3.0). This output reflects only the author's view and the European Commission cannot be held responsible for any use that may be made of the information contained therein.

Summary

Objective

The overall objective of Deliverable 2.3 (M59) – Success Stories – is to showcase and document AQUAEXCEL3.0's most impactful Knowledge Outputs that were delivered throughout the lifetime of the project, as validated by a board of experts (Industry and Research Advisory Panel (IRAP)), in order to demonstrate their innovation potential, relevance, and applicability for the aquaculture sector.

Rationale

Success stories evidence concrete knowledge transfer, uptake by end users, and measurable industry impact. This deliverable provides 5 success stories that illustrate how the project generated real value for industry stakeholders and the wider aquaculture community, serving as a record of achieved impact.

To achieve this, AQUAEXCEL3.0 implemented a structured knowledge management and transfer methodology, designed to ensure that project outcomes were effectively captured, assessed and transferred towards end users who could maximise their value. ERINN coordinated the systematic collection and analysis of all Knowledge Outputs (KOs) generated through the Transnational Access (TNA) projects and the project's Joint Research Activities (JRA), as outlined in D3.1 Dissemination and Exploitation Plan. High-impact KOs were identified and selected for presentation at industry brokerage events throughout the project's lifetime. From the 15 KOs presented at these events, feedback gathered from attendees and follow-up surveys provided critical insights into uptake and applicability. The process enabled the identification of success stories, highlighting outputs with demonstratable industry relevance and impact.

Team involved in deliverable writing

ERINN Innovation

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1. Introduction

AQUAEXCEL3.0, a major European research initiative funded under Horizon 2020 (November 2020 – October 2025), has worked to strengthen and advance the European aquaculture sector. Over the course of the AQUAEXCEL3.0 project, 82 Knowledge Outputs have been collected and assessed. These KOs, which encompass outputs from both its Transnational Access (TNA) and Joint Research Activities (JRA), as well as relevant outputs from its predecessor project, AQUAEXCEL²⁰²⁰, were collected and analysed using a structured knowledge management and transfer methodology. High-impact outputs were identified with the support of the Industry and Research Advisory Panel (IRAP) and presented at brokerage events, where feedback and follow-up surveys provided valuable insights into their relevance and uptake. This process led to the selection of 5 success stories, showcasing project results with clear innovation potential, proven applicability, and measurable impact for industry end users and the wider aquaculture community.

By focusing on high-impact outputs and fostering strong industry-academia partnerships, AQUAEXCEL3.0 has positioned itself as a leading force in shaping the future of sustainable aquaculture.

2. Collection and Selection of Success Stories

2.1. Knowledge Management and Transfer Methodology

Throughout the project, Knowledge Outputs (KOs) from the Transnational Access (TNA) Program and the Joint Research Activities (JRA) have been collected through Impact Plans ([see D2.1](#)). The Impact Plans summarise the information about the KOs themselves, their themes and relation to the European Aquaculture Technology and Innovation Platform (EATiP) Thematic Areas and Goals, as well as details on potential end users, applications, potential impact and exploitation.

Members from the Industry and Research Advisory Panel (IRAP) ([see D2.2](#)), representing both academia and industry, performed a yearly assessment of newly generated KOs, through dedicated analysis meetings, with the eventual aim to transfer selected high-potential outputs to potential end users via AQUAEXCEL3.0 industry brokerage events. The owners of the selected KOs were aided by pitching workshops carried out prior to the events, to help them to pitch their exploitable results in a suitable manner to the target audience and hence maximise the potential uptake. The full methodology of the selection of these high-impact KOs has been detailed in D2.2.

At the end of this process, 20 selected potentially high-impact KOs were showcased at a series of AQUAEXCEL3.0 brokerage events, including Aquaculture Europe 2022 (September 27 - 30, 2022, Rimini, Italy), 2023 (September 18 - 21, 2023, Vienna, Austria) and 2025 (September 22- 25, 2025, Valencia, Spain), Aqua Nor 2023 (August 22 - 25, 2023, Trondheim, Norway) and AQUA 2024 (August 26 - 30, 2024, Copenhagen, Denmark). At the time of writing this deliverable, the final industry brokerage event (at Aquaculture Europe 2025, September 22 - 25, 2025, Valencia, Spain) had not yet taken place, where 5 additional KOs were expected to be presented.

2.2. Impact Monitoring & Selection Process

To assess the KOs presented during the brokerage events, audience feedback and scores were systematically gathered via Mentimeter (<https://www.mentimeter.com/>). This online survey was used to capture specific insights into relevance of the presented outputs to the attendees (depending on which type of end user they were), expected commercial potential and time frame for commercialisation (Appendix 1). Further data was collected by registering the discussions and interactions that occurred during each presentation, as well as immediately after, during the networking events that followed each brokerage event.

At regular intervals after the brokerage events, presenters were asked to assess the long-term impact of having presented their KOs (using surveys via Microsoft Forms (Appendix 2)). The purpose of these surveys was to gather data on whether the AQUAEXCEL3.0 brokerage events had facilitated uptake of their outputs by industry end users, had influenced research trajectories, facilitated new collaborations, or resulted in new projects or funding opportunities.

Data from both surveys (at the event and after the event) were compiled into a single, comprehensive Excel sheet to facilitate a complete review of all results (Appendix 3). A proposal was then put forward to select the highest-scoring KOs based on specific criteria: numerical scores, feedback from KO owners, supplementary information gathered from the brokerage event audience and potentially end users in the timeframe after the brokerage event.

The pitch presentations combined with the delivered feedback on impact provided a solid basis for the IRAP members to select a small number of "success stories" (see also Figure 1)

- **Round 1: Initial Selection and survey:** In the first round, five KOs that had been presented at brokerage events up until September 2023 were pre-selected for the IRAP members' review. In May 2024, a [Microsoft Forms survey](#) was sent out, which provided the reasoning for the pre-selected outputs and sought approval to label them as "success stories". The survey also included all other remaining outputs for a comprehensive evaluation.
- **Round 2: New Outputs and second survey:** The second round was initiated after three more KOs were presented at the AQUAEXCEL3.0 Brokerage Event in August 2024. To ensure these new additions underwent the same evaluation, [a second survey](#) was distributed to the IRAP members in June 2025. This survey contained the same kind of information as the first, allowing the members to provide their opinion on the new outputs. Based on the results of this second survey, two of the newly pre-selected outputs were also selected as "success stories."
- **Round 3: New Outputs:** Although the project is scheduled to end in October 2025, the same process was carried out and five more selected outputs were presented at the Innovation Forum during Aquaculture Europe 2025. While a survey wasn't feasible for these outputs this time, the positive reception confirmed the value of the work.

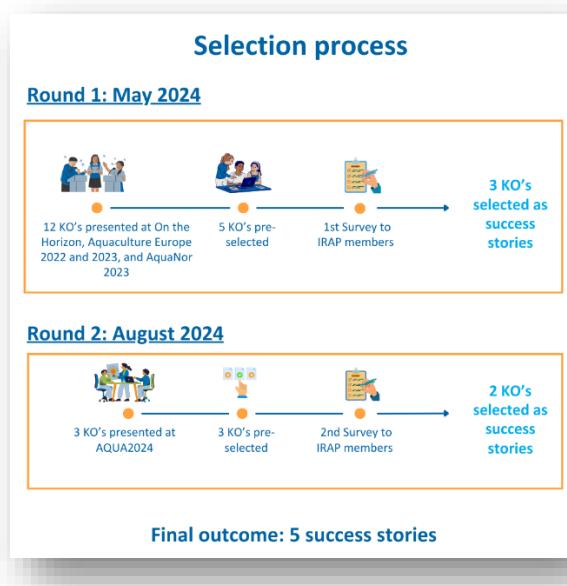


Figure 1. Overview of selected process for AQUAEXCEL3.0's Success Stories

2.3. AQUAEXCEL3.0 Success Stories/Selected Stories

Overall, 5 success stories were selected (see Table 1).

Table 1: Success stories

Success Story title	Output owner	Institution	Impact type
“Experimental assessment of the fish meal content requirements for Meagre (<i>Argyrosomus regius</i>) feeds”	Ramon Fontanillas	Skretting Aquaculture Research Center (Norway)	Feed innovation
“Benefit of krill meal inclusion on enhancing the growth of juvenile gilthead seabream by significantly reducing the feed conversion ratio”	Kiranpreet Kaur	Aker QRILL (Norway)	Feed innovation
“The use of Wood-based Yeast SCP (single-cell protein) as an ingredient for trout diets”	Ricardo Ekmay	Arbiom (USA)	Feed innovation
“Cryoplankton benefits in seabass aquaculture”	Konstantinos Tzakris	Planktonic (Norway)	Live feed technology
“Transforming food industry and agriculture waste into nutrient-rich alternative feed for fish: Case study with Black Soldier Fish Larvae”	Martin Kulma	Czech University of Life Sciences Prague (Czech Republic)	Waste valorisation

“Success Stories” owners received a certificate developed by EATiP (see Figures 2-5).



Figure 2. Kiranpreet Kaur (Success Stories owner) with Karla Corrales (ERINN)



Figure 3: Ramon Fontanillas (Success Stories owner) with Marieke Reuver and Karla Corrales (ERINN)

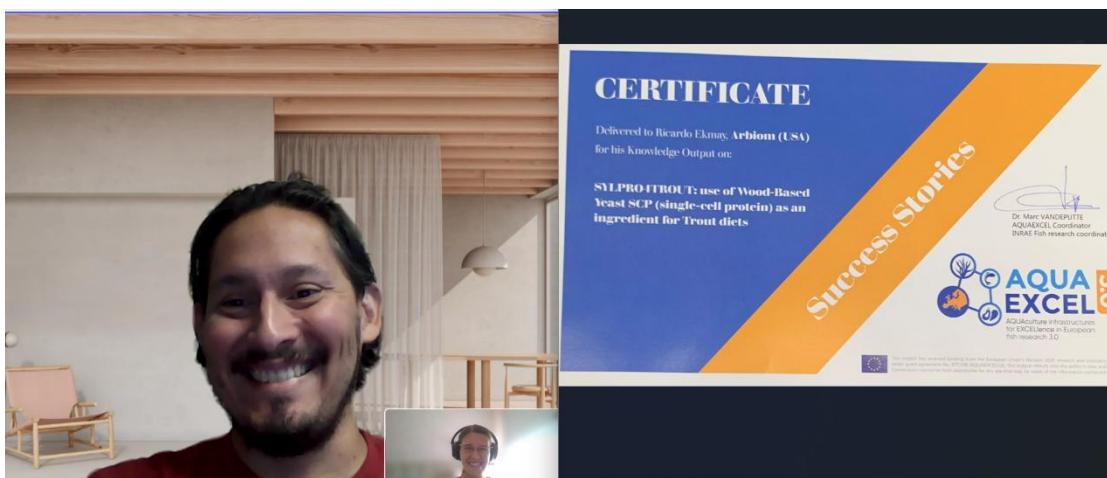


Figure 4: Screenshot of meeting between Success Story owner Ricardo Ekmay and Karla Corrales (ERINN)



Figure 5: Konstantinos Tzakris (Success story owner) with Marieke Reuver and Karla Corrales (ERINN)

3. Showcasing of Success Stories

3.1. AQUAEXCEL3.0 website

The AQUAEXCEL3.0 website includes a dedicated webpage ([Success stories - AquaExcel3.0](#)) to showcase the positive outcomes and research highlights from the AQUAEXCEL3.0 project. It features the five selected success stories, each providing a detailed summary of the specific research project. For each story, the page includes:

- **A main image** and the name of the featured researcher
- **A brief summary** of the researcher's background and professional goals/skills
- **A "The Solution" section** that explains the high-potential output
- **An "The Application" section** that describes how the output can be or is applied leading to real-world impact and benefits of the research for the aquaculture sector
- **A link to a video** of the researchers' presentation at the AQUAEXCEL3.0 Brokerage Events
- A link to the **full presentation** that was shared at the AQUAEXCEL3.0 Brokerage Events

- A link to the **Horizon Results Platform**, where the project's key findings are disseminated and the contact details of the researchers are available

The page is designed to demonstrate how the AQUAEXCEL3.0 outcomes have directly contributed to sustainable and impactful advancements in European aquaculture. Images of the dedicated section can be found below (Figures 6-9).

Experimental assessment of the fish meal content requirements for Meagre (*Argyrosomus regius*) feeds

Ramon Fontanillas

RAMON FONTANILLAS
Principal Researcher at Skretting Aquaculture Research Center



Ramon is an experienced Principal Researcher with a demonstrated history of working in the feed production industry, for more than 20 years. He is currently working in Skretting Aquaculture Research Center (Norway).

Ramon is skilled in Fish and Animal Nutrition, Product Development, Research and Development (R&D). He holds a strong professional profile with a Doctor of Philosophy - PhD focused in Fish and Animal Nutrition from Universitat Autònoma de Barcelona.

The Challenge: Meagre (*Argyrosomus regius*) is a species characterised by distinctly carnivorous feeding habits. Previous studies have shown that juvenile meagre have a high dietary protein requirement (50%). Previous work has also shown that it is possible to reduce fish meal inclusion in diets for rearing carnivorous fish, but for meagre information so far is scarce, and the reported minimum fish meal inclusion is around 30%. Further research is needed to be able to formulate nutrient well-balanced diets based on the knowledge of alternative protein sources (either plant or land-based animals by products). The objective of this study was to evaluate the effects of Fish Meal substitution with different vegetable protein blends on growth performance, voluntary feed intake, feed utilization and health on meagre.

The Solution: Ramon's research demonstrated that it is possible to decrease the fish meal inclusion from 40% down to 15% with either plant protein (i.e. wheat gluten, soy protein concentrate) ingredients or poultry by-products as part of a balanced diet in terms of amino acids, minerals and vitamins. There were no differences in growth performance, voluntary feed intake, feed utilisation or health.

The Application: This research offers a direct pathway for aquafeed producers to formulate more sustainable, plant-rich diets specifically tailored for meagre aquaculture. Meagre farmers can utilise these findings to adopt more environmentally sound and potentially cost-efficient feeding practices. Furthermore, Ramon's work provides a solid scientific foundation for aquafeed researchers to pursue further investigations into minimising or even eliminating fishmeal dependence in aquaculture feeds.

The Future: Achieving further validation through broader trials and successful demonstrations of these outcomes will be critical for the aquafeed industry to confidently adopt Ramon's formulations for commercial production. Ultimately, the widespread implementation of these findings promises a future where meagre feed production relies less on marine resources, contributing to a more sustainable and resilient aquaculture sector.

Learn more about Ramon's results on the [Horizon Results Platform](#)!



AQUAEXCEL3.0 Brokers Event - Aquafeed
Fish meal reduction for growing Meagre (*Argyrosomus regius*)



Innovation Forum "INNOVATIONS IN NUTRITION AND FEEDING"
Ramon Fontanillas, Skretting Aquaculture Innovation (Norway)

Figure 6. Success Story: Experimental assessment of the fish meal content requirements for Meagre

Benefit of krill meal inclusion on enhancing the growth of juvenile gilthead seabream by significantly reducing the feed conversion ratio (FCR)

Kiranpreet Kaur

KIRANPREET KAUR

Director of R&D at **Aker QRILL**



Kiranpreet Kaur is the R&D Director of **Aker QRILL (Norway)**, a company that was part of Aker BioMarine until September 2024. Kiran's academic journey began with a PhD in Molecular Genetics from the Birla Institute of Technology and Science, India. Her postdoctoral research includes positions at the University of Illinois, Peoria (2009-2010) and Oslo universitetssykehus HF (2010-2012). In 2012, Kiran joined the Norwegian University of Life Sciences as a researcher, where she played a key role in advancing salmon aquaculture, with a focus on innovative sea lice treatment strategies, until 2019. Her research led to the development of diagnostic assays for assessing sea lice sensitivity to chemical treatments—work that culminated in two patents held by the Norwegian company PatoGen AS.

Her leadership capabilities led her to Aker BioMarine in 2019, where she served as the Director of Research & Development for Salmonids until her current role at Aker QRILL. Kiran's career demonstrates a consistent trajectory of impactful contributions, solidifying her expertise in commercializing aquaculture research and development.

The Challenge: Feed is the most expensive part of fish aquaculture, attributing to around 60-70% of the production cost. Current fishmeal replacement feed recipes consist of high amounts of plant-based ingredients which are known to have low bioavailability of nutrients. Hence, it is important to produce feeds by including functional ingredients that could enhance the bioavailability and utilisation of nutrients by decreasing the feed conversion ratio (FCR), which would be beneficial towards improving fish health and performance. In addition, it would enable the industry to save costs by using less amounts of feed to achieve the desired weight of fish. This would be beneficial for the environment by reducing the wastage of feeds. Additionally, oxidative stress damage is an important issue among farmed fish, due to their continuous exposure to physical, biological, and chemical stressors. The objective of this study was to determine the potential of nutrients in krill meal towards improving the FCR in the feeds for juvenile gilthead seabream.

The Solution: Kiran's results demonstrated the benefit of krill meal inclusion on enhancing the growth of juvenile gilthead seabream by significantly reducing the FCR. The results indicated that krill meal inclusion enables the seabream larvae to better utilise the feed nutrients and hence reduced amount of feed would be needed, which is beneficial for the industry and for the environment.

The Application: Aquafeed researchers can use these results to build a further body of evidence on the effects of krill meal inclusion on FCR and the underlying mechanisms. Additionally, feed producers can use the results to include krill meal and reduce the volume of feed needed.

The Future: This groundbreaking work holds significant potential to reshape aquaculture practices. Firstly, the investigation into krill meal inclusion promises to deliver new knowledge regarding its effects on significantly reducing the Feed Conversion Ratio (FCR). This efficiency gain translates directly to lower feed costs and a reduced environmental footprint. This trial breaks new ground by being the first to scientifically demonstrate the specific effects of krill meal on oxidative stress levels in juvenile gilthead seabream, adding a crucial dimension to our understanding of its benefits beyond basic nutrition. Ultimately, the development and validation of new feed formulations, scientifically proven to offer these advantages, have a substantial potential impact on increasing overall productivity within the aquaculture sector.

Learn about Kiran's results on the [Horizon Results Platform](#)!

Watch on YouTube

KNOWLEDGE NEED

FEEDS ARE A BOTTLENECK FOR AQUACULTURE PRODUCTION

The essential part of Aquaculture
The most expensive part: 60%-70% of production cost
Urgent need for sustainable feeds with:

- Reduced FCR
- Reduced carbon footprint
- Improved growth & health of fish
- Reduced use of terrestrial ingredients

NEED FOR SUSTAINABLE & FUNCTIONAL ALTERNATIVE RAW MATERIALS

14% INCREASE BY 2020 (34 MILLION TONNES)

Figure 7. Success story: Benefit of krill meal inclusion

Transforming food industry and agriculture waste into nutrient-rich alternative feed for fish: Case study with Black Soldier Fly Larvae

Martin Kulma

MARTIN KULMA

Researcher at the Czech University of Life Sciences Prague



Martin Kulma, based in Czech Republic, is currently a Researcher at the **Czech University of Life Sciences Prague**, and a researcher at the National Institute of Public Health (Prague, Czechia).

Specialising in insects as food and feed, invasive insects and vector control, he's been involved in more than 40 publications indexed in the Scopus database.

The Challenge: One of the aquaculture industry's major challenges is the availability of fish meal and fish oil, which have fluctuating costs and sustainability issues. There is a substantial need for alternative fish feed ingredients that do not deplete marine resources, and which result in healthy fish. However, alternative ingredients in the fish's diet can lead to adverse effects, such as decreased digestion efficiency and increased susceptibility to diseases and stress. Research is needed to ensure that aquafeeds that utilise alternative ingredients can supply the same benefits as fish meal and fish oil, while maintaining high biological value and low competitiveness with human food. Optimum feed substitution levels for each fish species must also be established.

One such aquafeed alternative is insect-based meal, which has been approved by EU legislation in 2021. Larvae of the black soldier fly (BSFL), *Hermetia illucens* (Diptera: Stratiomyidae), are voracious feeders of organic material, which have recently been intensively studied for their capability to convert organic waste into high-quality protein, which, in turn, can be used as nutritious feed, including for fish. Due to the capability of BSFL to be cultivated on side streams of agriculture and food industry, they have the potential to become both environmentally friendly and feasible alternative feed. To fully exploit BSFL's potential to become feed component, there is a need to optimise their rearing technology, and diet is a key factor. Apart from various environmental elements, the bioconversion process using BSFL is known to be affected by the type, quantity, and quality of feed. To improve bioconversion efficiency in terms of reduction of waste-based substrates, knowledge of the proper feeding rate per larva is essential.

The Results: This project aimed to investigate the effect of incorporating waste and by-products from the agriculture and food industry (such as cabbage leaves, oversized fruits, coffee silvery film, apple pomace, brewery spents etc.) into the diet of BSFL on their performance and nutritional characteristics. Specifically, the goal was to increase the understanding of how varying feeding rates impact the growth, bioconversion factors, and nutritional composition of these larvae. The trial results for Martin's work showed that larval weight was influenced by diet, feeding rate, and time. In summary, the trial showed that by products from agriculture can be used for feeding BSFL, but further research is needed to optimize their content in the diet to reach at least similar parameters as those which are reached by insects farmed on commonly used feeds.

The Application: The results will help insect researchers achieve a better understanding of feeding the BSFL and can be used as a base to set-up further research to find the optimal levels of waste components in their diet. The goal would be to reach at least similar parameters as those that are reached by insects farmed using commonly used feeds. Additionally, the obtained data will provide insights into the potential of using local by-products from the agriculture and food industry in farming BSFL. Insect farmers can take up this output to improve BSFL's production by optimizing resource utilization and ultimately lowering production costs. By efficiently managing the amount of feed provided to insects, farmers can minimize waste.

The Future: With the growing understanding of insect nutrition, there is an increasing ability to advocate for insects as a viable source of both human food and animal feed. One promising development is the formulation of environmentally friendly diets for BSFL that maintain high biomass yields, offering significant potential for industrial application. Insect biomass conversion also supports a circular economic model by promoting sustainability and minimizing waste. The inclusion of the BSFL meal among aquafeeds presents a sustainable and cost effective alternative to the conventional sources.

Learn more about Martin's research on the [Horizon Results Platform](#)!

Figure 8. Success Story: transforming food industry and agriculture waste into nutrient-rich alternative feed for fish

CryoPlankton benefits in seabass aquaculture

Konstantinos Tzakris



Konstantinos Tzakris, based in Norway, is currently the Technical Manager at **Planktonic AS**. Konstantinos brings experience from previous roles at AVRAMAR and Selonda SA. Konstantinos's professional purpose is to advance fish and shrimp aquaculture, ensuring it's both highly productive and profitable for businesses, while also being environmentally responsible. He believes this sector offers excellent opportunities for employees to contribute meaningfully. He holds a BSC in Fisheries and Aquaculture from the Alexander Technological Educational Institute of Thessaloniki and specialized in Sustainable aquaculture (University of St Andrews). He also carried out an MBA in Business Administration by the Hellenic Open University.

The Challenge: CryoPlankton (innovatively cryopreserved barnacle zooplankton, produced by the Norwegian company Planktonic) is already widely and successfully used as the standard live feed in several fish species in Europe, due to the rich nutritional quality and the simplicity of preparation compared with traditional live food items. It is also used in some fast-growing warm water species with great success. The short and long-term benefits of CryoPlankton are well documented e.g. in ballan wrasse (*Labrus bergylta*), where growth is superior compared to the larvae fed traditional live feeds while reports suggest that organogenesis completes in a shorter time frame. Despite the evidence of CryoPlankton superiority to conventional live feeds, there is a lack of scientific documentation of CryoPlankton benefits in Mediterranean species, including seabass aquaculture, especially regarding the long-lasting effects of the early-stage diet under industrial conditions. The main reason is that industrial operations of seabass aquaculture are complex and there is limited opportunity to perform long-term studies where all parameters in the hatchery and on-growing stage are under control. For this reason, the aim of Konstantinos's project was to study the long-term effects of Cryoplankton live-feed hatchery diets on European seabass.

The Results: The project's results showed significant differences in the hatchery period KPIs and long-lasting effect of the CryoPlankton-fed treatments. In the hatchery period, the weight was almost 50% higher than the control. The growth rate of the CryoPlankton-fed animals during the hatchery period was significantly higher and while it was reduced during the on-growing, it remained evident giving 12% larger fish by the end of the trial after a year.

The Application: Seabass hatchery managers and producers can use the output to improve the production of seabass, including simplification of the process of producing larvae using a standardised methodology. The use of CryoPlankton in commercial seabass hatcheries produce similar results to this study, although the expected results in each case may vary due to the scale effect and different setups. Additionally, fish researchers can take up the output to conduct further research to understand how CryoPlankton can benefit other species within established or specialized industries. Further research is planned to understand how CryoPlankton can benefit seabream, in collaboration with research centres and universities.

The Future: The integration of CryoPlankton into commercial seabass hatcheries is already delivering demonstrable biological and economic gains. By streamlining larval-rearing protocols and consistently boosting key performance indicators, the CryoPlankton technology reduces operational complexity while lowering the unit cost of juveniles. When these efficiencies compound over successive production cycles, CryoPlankton transforms seabass farming from a margin-sensitive venture into a reliably profitable enterprise, opening a new chapter for the long-term sustainability of the sector.

Learn more about Konstantinos's results on the [Horizon Results Platform](#)!

Figure 9. Success Story: CryoPlankton benefits in seabass aquaculture

The use of Wood-Based Yeast SCP (single-cell protein) as an ingredient for Trout diets

Ricardo Ekmay

RICARDO EKMAY

Senior Vice President of
Research & Development
at Arbiom



Ricardo is the Senior Vice President of Research and Development at **Arbiom (USA)**, a company that develops high-quality protein for human and animal food. In this role, he leads a team of scientists to develop and optimize Arbiom's proprietary technology, which converts underutilised materials into single-cell protein powered by fermentation. He also serves as an Adjunct Assistant Professor at the University of Arkansas, where he shares his expertise and passion for science with students and researchers. He holds a PhD and a MS in Poultry Science from the University of Arkansas, and a BSc in Animal Science from Cornell University.

The Challenge: The global demand for high-quality, protein-rich foods continues to increase as the global population grows, along with income levels. Aquaculture is the fastest growing animal protein industry in the world and can help fulfil some of this demand. One of the key challenges though is sourcing a sustainable, renewable protein ingredient. Therefore, the development of alternative protein sources (with a reduced climate impact) is needed to ensure long-term food security in Europe. To ensure nutritional adequacy of an alternative protein for production animals, and to limit effluent production, dedicated trials determining nutrient bioavailability are required. Single cell protein (SCP) products, protein meals based on microbial or algal biomass, have the potential to fulfil this need. The implementation of alternative protein sources in aquaculture requires in-depth evaluation of their nutritional adequacy. There is limited knowledge on the use of SCP in aquaculture, especially commercially relevant species to Europe such as Rainbow trout. Therefore, a dose-response trial in Rainbow trout is warranted.

The Solution: Ricardo's research focuses on "lignocellulosic biomass", which is the most abundant, renewable carbon source that can be used for the production of proteins. Therefore, one of the more promising alternative proteins is a single-cell protein (SCP) cultivated on hydrolysed lignocellulosic biomass.

The Application: Aquafeed manufacturers will be able to prioritise alternative ingredients within their internal feed development programs. Fish farmers will be able to uptake the protein products to use in their farms.

The Future: The alternative protein market in Europe will continue to grow, leading to less dependence on non-European products and greater competitiveness at a global level. This shift can contribute to a more sustainable aquaculture industry, lessening the pressure on wild fish stocks and improving the environmental footprint of farmed seafood. Additionally, research like Ricardo's can contribute to offer consumers a wider range of choices and potentially mitigating some of the environmental concerns associated with conventional fish farming practices.

Learn more about Ricardo's results on the [Horizon Results Platform](#)!



Beyond insect flour, use of wood-based Yeast SCP (single-cell protein) as an ingredient for Trout diets
Innovation Forum "From Policy to Solutions"
Ricardo Ekmay, Arbiom Inc.

SOLUTION/RESULT

SYLPRO
Commercial plant coming soon!



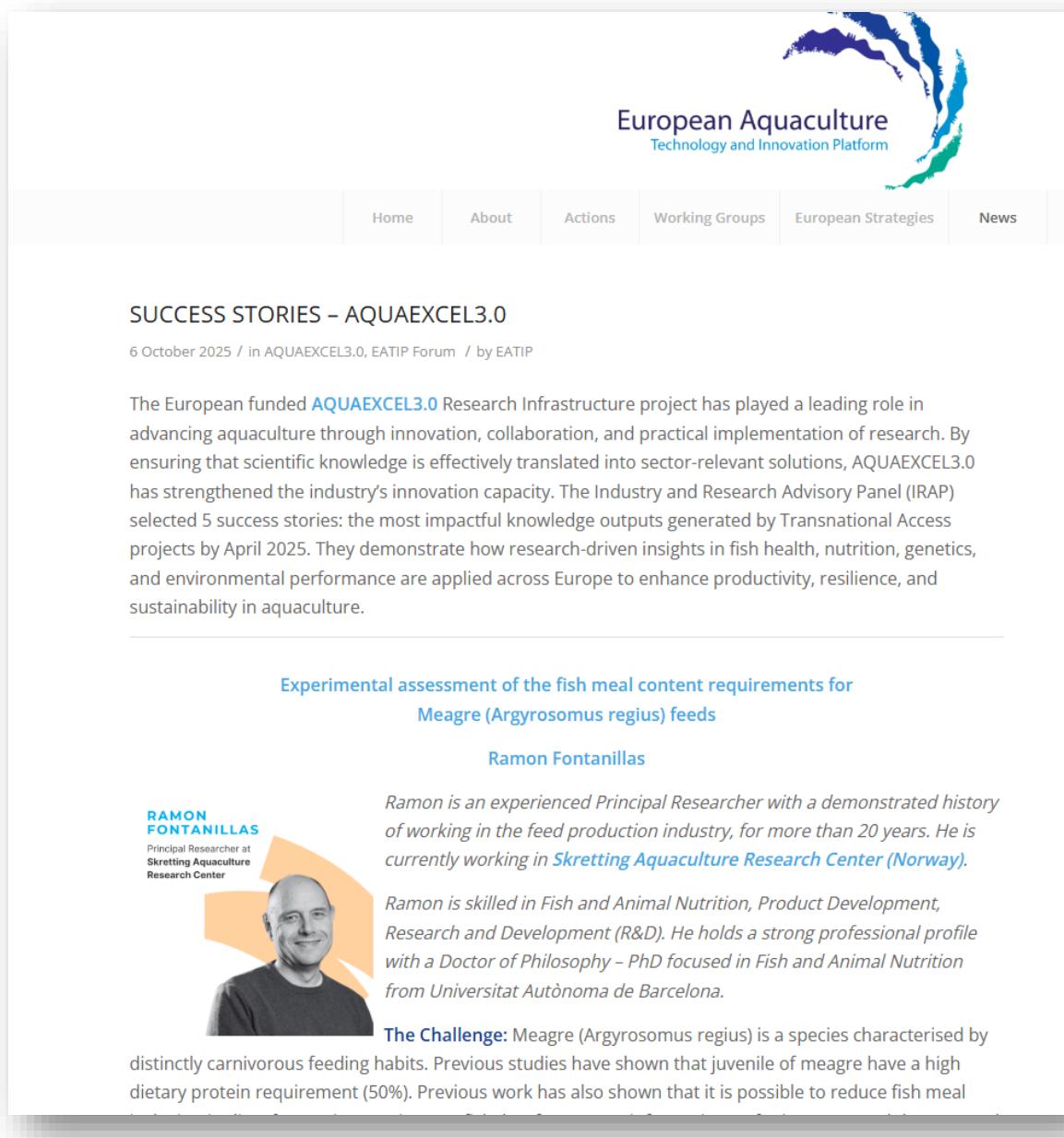
Component	PB	PS TYPE	PS FV28	FM	SFTY10
Dry Matter	19.40	21.41	21.41	21.41	21.41
Cod/Protein	19.40	21.41	21.41	21.41	21.41
Energy	19.40	21.41	21.41	21.41	21.41
Ash	48.31	48.31	48.31	48.31	48.31

Excellent digestibility
Torula yeast effectively replaced FM and plant proteins; improved performance over plant protein-only diets

Figure 10. Success Story: the use of wood-based yeast SCP

To increase reach in the final months of the project, a link to this section will be included in the official AQUAEXCEL3.0 Newsletter (October 2025) and a dedicated [news item](#) has been published on the website to further promote project success stories.

EATIP showcased the success stories through its website ([Success stories – AQUAEXCEL3.0 – EATIP – European Aquaculture Technology and Innovation Platform](#) – Figure 11), internal membership communication channel and will be further promoted via the Aquaculture Assistance Mechanism repository and social media channels.



SUCCESS STORIES – AQUAEXCEL3.0

6 October 2025 / in AQUAEXCEL3.0, EATIP Forum / by EATIP

The European funded **AQUAEXCEL3.0** Research Infrastructure project has played a leading role in advancing aquaculture through innovation, collaboration, and practical implementation of research. By ensuring that scientific knowledge is effectively translated into sector-relevant solutions, AQUAEXCEL3.0 has strengthened the industry's innovation capacity. The Industry and Research Advisory Panel (IRAP) selected 5 success stories: the most impactful knowledge outputs generated by Transnational Access projects by April 2025. They demonstrate how research-driven insights in fish health, nutrition, genetics, and environmental performance are applied across Europe to enhance productivity, resilience, and sustainability in aquaculture.

Experimental assessment of the fish meal content requirements for Meagre (*Argyrosomus regius*) feeds

Ramon Fontanillas

Ramon is an experienced Principal Researcher with a demonstrated history of working in the feed production industry, for more than 20 years. He is currently working in **Skretting Aquaculture Research Center (Norway)**.

Ramon is skilled in Fish and Animal Nutrition, Product Development, Research and Development (R&D). He holds a strong professional profile with a Doctor of Philosophy – PhD focused in Fish and Animal Nutrition from Universitat Autònoma de Barcelona.

The Challenge: Meagre (*Argyrosomus regius*) is a species characterised by distinctly carnivorous feeding habits. Previous studies have shown that juvenile of meagre have a high dietary protein requirement (50%). Previous work has also shown that it is possible to reduce fish meal

Figure 11. Success Stories section on EATiP Website

3.2. Horizon Results Platform

The Knowledge Outputs related to the 5 Success Stories have also been uploaded to the Horizon Results Platform, using a dedicated template created by ERINN (Appendix 4), outlining the following information:

- A description of the result
- Contact details of the main researcher involved
- Result contributors
- Result type/ Business Sector (S)/ EC Policy Areas
- Needs of the output owners and target audience
- Contributions to Sustainable Development Goals
- R&D, Technology and Innovation aspects
- Investment needs

The platform also includes the link to the brokerage event presentations of each of the outputs. The links to each of the results can be found here:

1. [Experimental assessment of the fish meal content requirements for Meagre \(*Argyrosomus regius*\) feeds | EU Funding & Tenders Portal](#)
2. [Benefit of krill meal inclusion on enhancing the growth of juvenile gilthead seabream by significantly reducing the FCR | EU Funding & Tenders Portal](#)
3. [Use of Wood-Based Yeast SCP as Protein Source for Trout Diets | EU Funding & Tenders Portal](#)
4. [CryoPlankton benefits in seabass aquaculture | EU Funding & Tenders Portal](#)
5. [Transforming food industry & agriculture waste into nutrient-rich alternative feed for fish: Case Study with BSF Larvae | EU Funding & Tenders Portal](#)

While specific, real-time user numbers can be difficult to find for the Horizon Results Platform database, a summary of the platform's reach and audience based on available information is found here:

- As of a June 2023 report, the HRP attracted approximately 5,000 visitors per month ([The Horizon Results Platform: A Value Proposition | European Cluster Collaboration Platform](#))
- The platform has been designed to connect a diverse range of stakeholders who can help turn research into tangible impact, including: investors, industries and SMEs, policymakers, researchers and academia and the general public.
- The inclusion of AQUAEXCEL3.0's selected high-impact Knowledge Outputs in the platform makes it possible for the KO owners to be involved in active events that are organised by the European Commission, such as matchmaking and brokerage events, media campaigns (e.g. Euronews) and potential collaborations with partners such as Enterprise Europe Network.

3.3. Social media

The AQUAEXCEL3.0 Success Stories were promoted on the project's social media platforms, LinkedIn and X, resulting in approximately 1,630 impressions at the end of September 2025. This visibility will be further amplified through additional promotional activities until the project concludes.

AQUAEXCEL3.0

1,623 followers
2d • Edited • 

🚀 Throughout the AQUAEXCEL3.0 project, our mission has been to drive the future of European aquaculture through cutting-edge research and collaboration.

Thanks to providing researchers and industry professionals with access to top-tier facilities, we have fostered ground-breaking discoveries and sustainable solutions.

We're proud to showcase the latest achievements from the project in the AQUAEXCEL3.0 "Success Stories" section. Discover how these projects are transforming the industry, from developing sustainable feed alternatives to advancing fish welfare and health.

Read the stories and get inspired: <https://lnkd.in/dRnaTU8t>

#SuccessStories #Research #Aquaculture #Innovation



Success stories - AquaExcel3.0
aquaexcel.eu

Figure 12. Post on AQUAEXCEL3.0's LinkedIn page, regarding success stories

AQUAEXCEL3.0

@AQUAEXCEL3

We're proud to showcase the latest achievements from the project in the AQUAEXCEL3.0 "Success Stories" section. Discover how these projects are transforming the industry, from developing sustainable feed alternatives to advancing fish welfare and health.



aquaexcel.eu
Success stories
The European funded project AQUAEXCEL3.0, involving 28 European partners, has been instrumental in propelling the ...

Figure 13. Post on AQUAEXCEL3.0's X page, regarding success stories

3.4. Events and additional transfer activities

Project Legacy and Dissemination

To ensure these achievements have a lasting impact, our key findings and success stories will continue to be shared publicly on the project's website, aquaculture repositories and social media channels leading up to the project's conclusion in October 2025. This will include targeted content designed to

reach a broad audience of industry partners, researchers, policymakers, and the public. By sharing the project's results, the aim is to accelerate the adoption of sustainable practices and inspire further research, thereby ensuring the legacy of AQUAEXCEL3.0.

The following activities are planned for the final months of the project to further its legacy:

- AQUAEXCEL3.0 Final Meeting (Paris, France): All success story owners have been invited to the final meeting from October 14-16 in Paris. They will participate in a dedicated WP2 session, presenting their outputs to the entire consortium and joining a panel discussion on how transnational access and the project benefited their work.
- Social Media: A series of posts will be scheduled to individually highlight each success story, showcasing their key findings and impact to a broader audience.
- AQUAEXCEL3.0 Newsletter: The success stories will be featured as a major outcome of the project, highlighting their role in achieving its overall goals.
- AQUAEXCEL3.0 and EATiP Website: In addition to the dedicated news articles published on both the project's and platform's websites to feature the success stories, related publications from the final project event will be widely disseminated.
- EATiP Basecamp article: Sharing of the AQUAEXCEL3.0 success story portfolio and final brokerage event results with the EATiP membership community, including its regional Mirror Platforms, requesting further dissemination among the cluster members.
- Aquaculture Assistance Mechanism repository: request to include the 5 Success Stories to be uploaded to the dedicated aquaculture community repository – through the same information as was included for the Horizon Results Platform (see 3.2).

Additional Transfer Activities

Additionally, two dedicated meetings were organised by ERINN to facilitate a discussion between the project's Knowledge Owner (KO), TNA Manager Laura Gasco, and representatives from the company Nordic Bioventures. These meetings, a direct result of the company's expressed interest in the "Black Soldier Fish Larvae" success story, served as a crucial step toward exploring further collaboration, which ultimately led to a potential partnership between the TNA Manager and Nordic Bioventures.

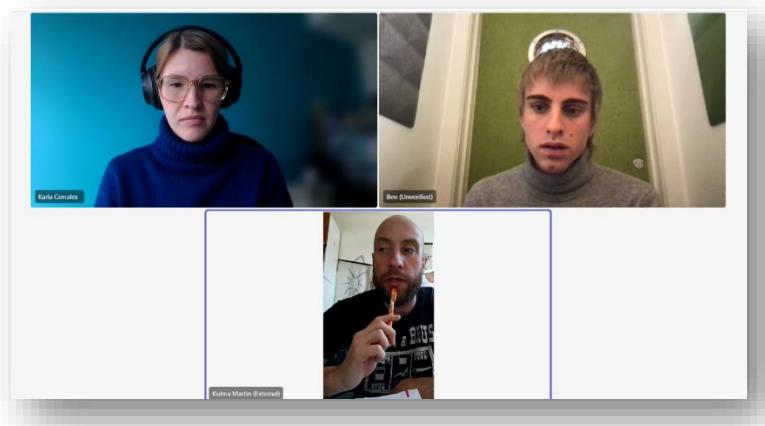


Figure 14: Screenshot from meeting between Benjamin Aust (Nordic Bioventures), Martin Kulma (Czech University of Life Sciences Prague) and Karla Corrales (ERINN Innovation)

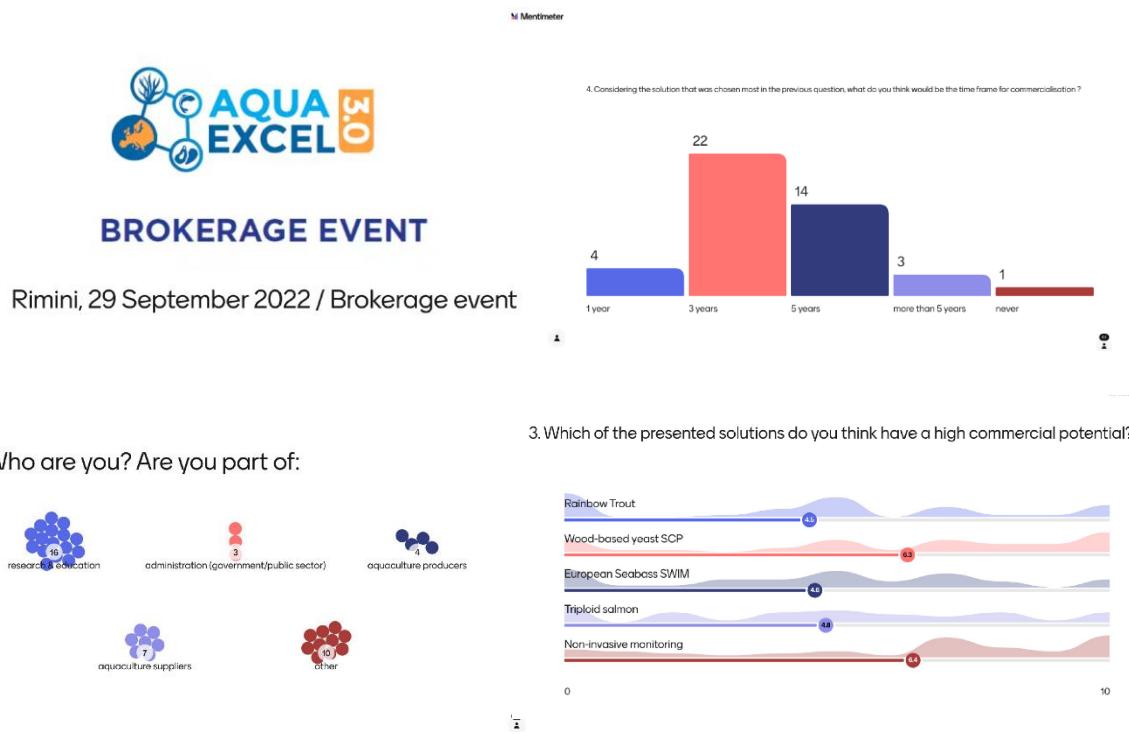
4. Conclusion

The 5 Success Stories presented in this deliverable highlight tangible impacts of AQUAEXCEL3.0 on the aquaculture sector. These stories were selected from 82 Knowledge Outputs (KOs) and subsequently showcased at 4 brokerage events, demonstrating a focused effort to channel research findings towards end users. By applying a structured knowledge management and transfer methodology, the project ensured that research outputs were not only captured and assessed but also directed where they could have the greatest benefit. The resulting Success Stories demonstrate how selected outputs have achieved real uptake and applicability, validating their innovation potential and industry relevance. Beyond documenting outcomes, this quantitative process reinforces the project's legacy by providing clear evidence of knowledge transfer, measurable impact, and lasting value for the European aquaculture community.

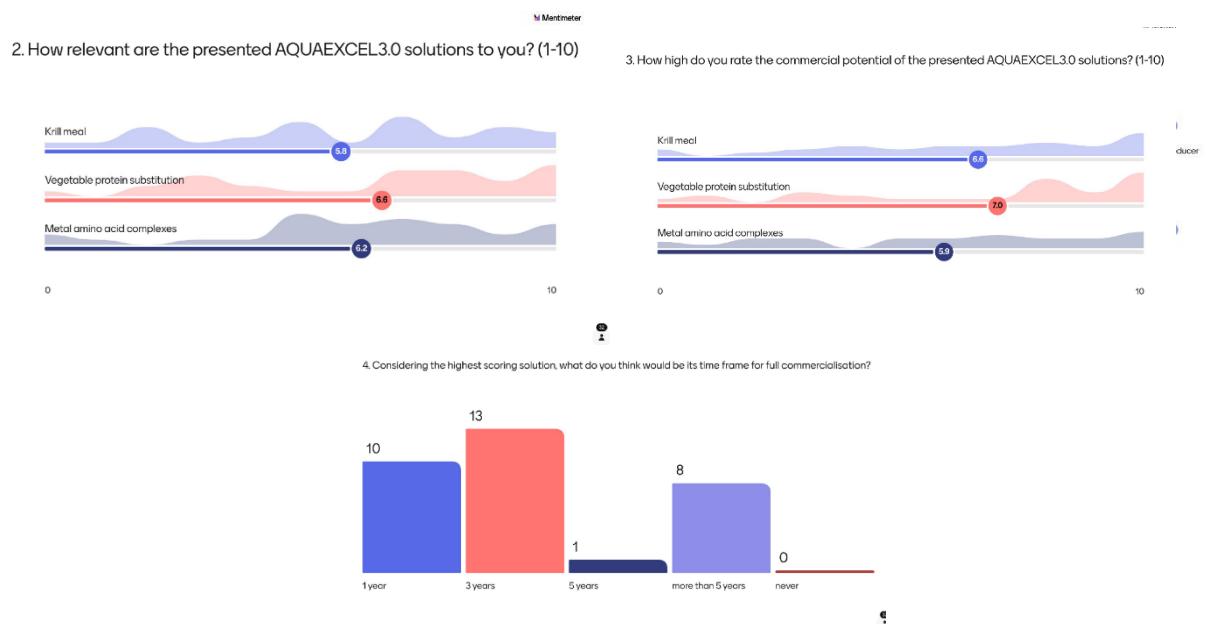
5. Appendix

Appendix 1: Mentimeter results

1. Aquaculture Europe 2022 Brokerage Event (Rimini, Italy)

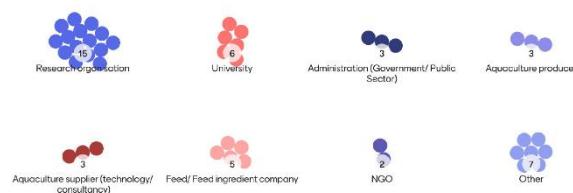


2. Aquaculture Europe 2023 Brokerage Event (Vienna, Austria)

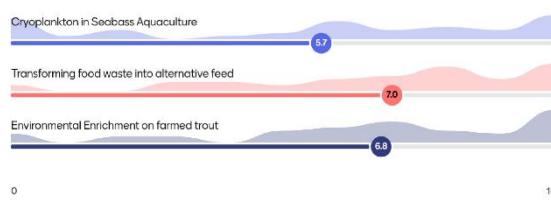


3. AQUA2024 Brokerage event (Copenhagen, Denmark)

1. Who are you? Are you part of:

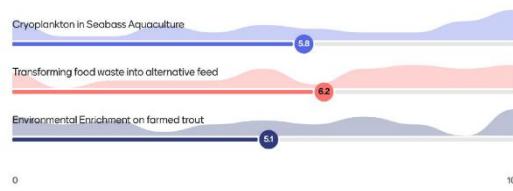


2. How relevant are the presented AQUAEXCEL3.0 solutions to you? (1-10)

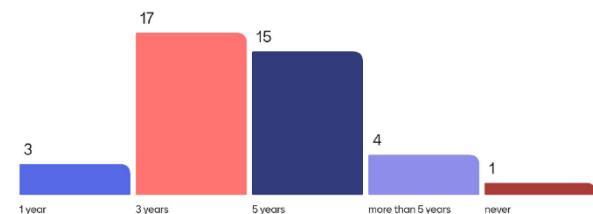


Mentimeter

3. How high do you rate the commercial potential of the presented AQUAEXCEL3.0 solutions? (1-10)



4. Considering the highest scoring solution, what do you think would be its time frame for full commercialisation?



Appendix 2: Microsoft Forms survey

AQUAEXCEL3 - Presenter survey

As a presenter at one of the AQUAEXCEL3 Brokerage events, you are requested to complete this survey:

a. straight after the presentation, and
b. about 1 year after the presentation.
Other time laps are also possible.

The questions below relate only to the Brokerage event where you presented the outcomes from AQUAEXCEL.
All responses will be handled confidential and in line with EU and GDPR policies. They will provide important input to assessing the innovation potential of the EU funded AQUAEXCEL3 project.
For more information, see www.aquaexcel.eu

When you submit this form, it will not automatically collect your details like name and email address unless you provide it yourself.

* Required

1. Your Name *

Enter your answer

2. Your e-mail address *

Enter your answer

3. Name of presenter at Brokerage event (if different from yourself)

Enter your answer

4. Month & Year of the Brokerage Event *

Enter your answer

5. Project Type *

Select your answer

6. Project ID (for Transnational access) or WP number (for Joint Research Activity) *

Enter your answer

7. When are you replying to this survey?

*

Straight after the Brokerage event (1 month or less)

About 1 year after the Brokerage event

Other

You can print a copy of your answer after you submit

8. Please provide feedback on the AQUAEXCEL Brokerage event you presented at. From lowest (1) to highest (5) score. *

	1	2	3	4	5
Your overall opinion of the event	<input type="radio"/>				
The type of audience - relevance to your work	<input type="radio"/>				
The level of engagement	<input type="radio"/>				
the feedback received during the Brokerage event	<input type="radio"/>				

9. Do you have any other comments about the Brokerage event? You can write them down here.

Enter your answer

10. Did you receive any direct reaction during / after the Brokerage event? *

- Yes
- No
- I don't know

11. If so, how many different entities expressed interest in your result (company/institution/individual)?

- 1
- 2-4
- 5 or more

12. Please enter the type of entities (company / institution / other) who have expressed interest in your result (tick off all)

- Aquaculture producer / producer association
- Technology provider
- Service provider
- Feed supplier
- Investor
- Research institution or university
- Public body
- NGO
- Other

13. Were any of these contacts new to you?

- Yes
- No
- Maybe

14. Please enter any aspects of your project that were of particular interest to potential end users

Enter your answer

15. Have you engaged in any follow-up activity related to your presentation? *

- Yes
- Not yet, but I plan to
- No, not yet
- No, I don't think there will be any follow-up activities

Appendix 3: Excel sheet used to facilitate review of results from surveys

Thematic area	Title	Monitoring results during brokerage event (Ratings are 0-10, with 10 highest relevancy/rating)	Other feedback from audience (discussions)	KO owner monitoring results	Justification choice
Sustainable feed	Experimental assessment of the fish meal content requirements for Meagre (<i>Argyrosomus regius</i>) feeds	Aquaculture Europe 2023: <ul style="list-style-type: none"> Relevancy to audience: 6.6 (highest of 3 presented) Rating of commercial potential: 7 (highest of 3 presented) 	It was remarked that the kind of research he did is very important, to produce more aquaculture feed. Positive interactions overall during the discussion	The outcome of the TNA project has led to innovations in his own company (Skretting Aquaculture Innovation (Norway)). Aquaculture producers/producer association have expressed an interest in the OUTPUT	Highest score on commercial potential from mentimeter and outcome has led to innovation in company
Sustainable feed	Benefit of krill meal inclusion on enhancing the growth of juvenile gilthead seabream by significantly reducing the feed conversion ratio (FCR)	Aquaculture Europe 2023: <ul style="list-style-type: none"> Relevancy to audience: 5.8 (lowest of 3 presented) Rating of commercial potential: 6.6 (2nd of 3 presented) AquaNor: Do you support including krill in diets/formulations: 75% said yes, 9% said no and 16% don't know	At AE2023, there was a lot of discussion focused on questioning the sustainability of the solution. Presenter insisted that the krill is sustainable and responsibly-sourced	The outcome of the TNA project has led to innovations in her own company (Aker BioMarine ASA, Norway: Ingredient supplier for aquaculture feed). There has been no external follow-up/response to the OUTPUT yet	High score on commercial potential and support for take up by industry from mentimeter and outcome has led to innovation in company
Sustainable feed	SYLPRO4TROUT: use of Wood-Based Yeast SCP (single-cell protein) as an ingredient for Trout diets	Aquaculture Europe 2022: <ul style="list-style-type: none"> Relevancy to audience: 4.6 (4th of 5 presented) Rating of commercial potential: 6.3 (2nd of 5 presented) 	During the discussions, the OUTPUT owner commented that the product is already patented. To be fully commercial, they need to upscale from lab to commercial production, whereby fermentation capacity and suitable infrastructures are critical. He highlighted that a new commercial plant is in development	Speaker received 1 direct reaction after the event, from an investor.	High score on commercial potential from mentimeter and outcome has led to follow-up in company
Technology & systems	FISHSCAILED: Non-invasive fish identification - scale patterns	Aquaculture Europe 2022: <ul style="list-style-type: none"> Relevancy to audience: 7.1 (highest of 5 presented) Rating of commercial potential: 6.4 (highest of 5 presented) 	The speaker explained that more direct involvement from companies is needed to develop the tool at an industry scale.	The presenter received several direct reactions during and right after the brokerage event, from up to 4 entities, although mostly research based. They were interested in the idea and concept	High score on commercial potential from mentimeter and several positive interactions afterwards
Health & welfare	Dietary effects on growth, survival and behavioural responses in lumpfish (<i>Cyclopterus lumpus</i> L.)	The large majority of the public (70%) regarded the presented information as largely impactful or promising for the industry, whereas some (18%) thought it needs further development to be useful.	The online format of the event did not lend itself for discussions	Follow up after 1 year was science related, no industry follow-up/interest	Survey results show high relevance for the industry (although survey set up was different from later surveys, so difficult to compare).





Appendix 4: Horizon Results Platform template



Horizon Results Platform (HRP) Template Key Exploitable Results (KERs) Collection for Horizon Results Platform

Contact information

Name	
Email	
Work Package Task Number (if relevant)	

SECTION 1: Result title, target audiences and needs:

Title of result (120 characters)*

Message/ Teaser to potential user (1000 characters)*

Video/Image section*

Result Type*
Choose an item.



EU Missions *You can select more than 1

Please select, if applicable, the main EU Missions that your project result significantly contributes to. To find out more about the EU Missions please consult the dedicated website. Please be aware that your declared contribution to the EU Mission(s) will be validated by the European Commission before publication on the official platform website. It is the result of this validation by the EC that will be the final, published version.

Choose an item.

Choose an item.

Choose an item.

Target audiences * You can select more than 1.

The fields "Target Audiences", "Our needs" should be used together to denote who you are targeting and what specific needs you have from a fixed drop-down list. You will also have the optional field "Specifically looking for..." where you can be more specific in what you are looking for.

Choose an item.

Choose an item.

Choose an item.

Our needs are * You can select more than 1.

Choose an item.

Choose an item.

Choose an item.

We specially need/are looking for *

Please enter more specific details in terms of which audience you are targeting and what your precise needs are.



SECTION 2: About us

Main project*

AQUAculture infrastructures for EXCELlence in European fish research 3.0

Result Contributors* In this section, the platform only allows us to include official partners of the project, so we have included the TNA facility here. Please let us know if you are uncomfortable with this affirmation.

Owners for exploitation* In this section, the platform only allows us to include official partners of the project, so we have included the TNA facility here. Please let us know if you are uncomfortable with this affirmation.

Which entity(ies) (among the “Result contributors”) will have rights to exploitation of the Intellectual Property?

Start-up created for further exploitation? Optional
Testimonials/References? Optional
a) Title

Here, you could provide the links to references from your peers, customers or partners, your certifications, honorary memberships, awards, related newspaper or journal articles, or any references and credentials to make your profile more credible and attractive.

b) Link
Find us on Optional
a) Description
b) Link

SECTION 3: result description and influence

Result description (1200-character limit)***Business Sector(s)/ Policy Area(s)***

Please select up to three most relevant European Commission Policy areas (see related link [here](#)).

Choose an item.

Choose an item.

Choose an item.

Tags/Keywords***Contribution to UN Sustainable Development Goals* Please list up to three most relevant UN Sustainable Development Goals your result contributes to.**

You may consult the relevant [United Nations Webpage](#) for more detail on these.

Choose an item.

Choose an item.

Choose an item.

Radical Innovation Breakthrough? Optional

A comprehensive foresight analysis funded by the EC has led to the categorisation of 100 so called Radical Innovation Breakthroughs (RIBs) categories. If applicable, please select those RIB's most relevant to your result (up to 3). These RIB's will be included in your list of tags. For more information, please consult [Horizon scanning study](#).

Has your result had or you expect it to have significant influence on policy-making?*
Options:

Choose an item.

Other information/data to share: Optional

a) Text

Here you may provide links to datasets, databases, documents, analyses or any other types of results that you would like to openly share and that can be used by any user of this Platform.



b) Link

SECTION 4: results and business maturity and exploitation outlook

Result Maturity*

Choose an item.

Current Stage and Next Steps*

Elaborate more on the stage of R&D and the specific funding you seek. Also make sure to select the relevant values for your Target Audiences: 'Private Investors' and/or 'Public or private funding Institutions' and/or 'Other actors who can help us fulfil our market potential'.

Do you already have customers for this result?*

Choose an item.

Unique value proposition*

What is the unique value proposition of your result? You are again addressing potential partners and/or investors, so make sure you have a consistent message throughout your profile. Pay particular attention to the consistency with your 'Message/Teaser to the potential user', as well as your selected 'Target Audiences' and selection of 'Tags / Keywords'

Do you have a scalable business model?*

Choose an item.

Please elaborate on the Scalability **
Is your result replicable?*

SECTION 5: investors corner

What level of investment (EUR) are you currently looking for?*

Choose an item.

I can provide the following upon request by an interested party.*

Please provide the necessary information where relevant.

Choose an item.

* Compulsory response in Horizon Results Platform

**Only compulsory if the answer to the previous question is “yes”



Replicability refers to the ability of your product, service or business to be replicated and sold and delivered consistently and reliably, to serve (theoretically) infinite customers (multiple markets) the exact same service or product, to the exact same standard, every time.

Choose an item.

Please elaborate on the Replicability**

Is your result and your business model sustainable in the long-term?*

According to the latest definition found in <https://sustainablebusinessmodel.org/>, "A business model for sustainability helps describing, analyzing, managing, and communicating (i) a company's sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries." In simple terms, a sustainable business model focuses on adding value to stakeholders, the environment and society.

Choose an item.

Please elaborate on Sustainability**

Are you targeting geographical markets?*

Choose an item.

What are the main geographical markets you are targeting? Please include the countries you are targeting**

Document Information

EU Project	No 871108	Acronym	AQUAEXCEL3.0
Full Title	AQUAculture infrastructures for EXCELlence in European fish research 3.0		
Project website	www.aquaexcel.eu		

Deliverable	N°	D2.3	Title	Success Stories
Work Package	N°	2	Title	Industry-driven innovation and sustainability
Work Package Leader	EATiP			
Work Participants	ERINN, CCMAR			

Lead Beneficiary	ERINN Innovation, Partner Number
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Due date of deliverable	30.09.2025
Submission date	09.10.2025
Dissemination level	PU ¹
Type of deliverable	R ²

¹Dissemination level (DELETE ACCORDINGLY): **PU**: Public, **CO**: Confidential, only for members of the consortium (including the Commission Services), set out in Model Grant Agreement, **CL**: Classified, information as referred to in Commission Decision 2001/844/EC

² Nature of deliverable (DELETE ACCORDINGLY): **R**: Report, **DEM**: Demonstration, pilot, prototype, plan design, **DEC**: Website, patent filing, market studies, press & media, videos, **Other**: Software, technical diagram, etc., **Ethics**: Ethics deliverable