



InnovProtein EU Alliance

Joint Policy Roadmap 2026-2032

***'Advancing the Diversification of EU Protein
Production with Insects and Algae: Towards a More
Sustainable and Resilient Food System'***





PREAMBLE

The European Union (EU) is at a pivotal moment, facing significant challenges and opportunities in building a sustainable and resilient food system.

In the pursuit of an intentional 'Transition Decade', we propose the production of insect and algae protein as alternative protein sources that can be part of the solution to shape the future of food and feed in the EU.

By harnessing these sustainable protein sources, we can address pressing global issues, such as climate change, food security, and biodiversity conservation, while promoting a healthier, more sustainable diet for citizens.

The Alliance wishes to support the EU to accelerate the transition towards a more sustainable and resilient food system.

INTRODUCTION

This policy roadmap outlines the policy strategy to promote, on the political, societal and research & innovation dimensions, the production of proteins sourced from insects and algae at the European level.

By recognising the urgent need to address food security, climate change and public health, this roadmap aims to foster the development of these viable alternative and innovative protein sources as part of a global diversification and complementary strategy that enables the European Union, its citizens, and farmers to transition towards a more sustainable, resilient and healthier future.

I.I. OVERARCHING AND GROWING CHALLENGES

The European Union faces many challenges related to climate change, import dependency on critical raw materials, unhealthy diets, and more generally the need to transition towards a more sustainable and reliable food system.

Climate Change-induced **changing weather behaviour**, with more frequent and severe droughts and floods, affects farmers' crop yields and animal food production. Unpredictable weather patterns are causing shifts in agricultural zones by challenging the growth of traditional crops in certain regions. At the same time, warmer temperatures increase **pest and disease outbreaks**, threatening the entire food and feed production chain.

The Russian invasion of Ukraine shed light on the **fragility of our current food system**. The war disrupted traditional trade for several critical raw materials, showcasing the EU's dependency on imports for food and animal feed production, or even soil fertilizer.

Geopolitical instability and trade disruptions have further complicated the EU's trade landscape. The imposition of tariffs and trade barriers has created uncertainty for businesses and impacted the flow of goods. This situation has underscored the EU's vulnerability in relying on external markets for essential products and has prompted discussions about the need for greater self-reliance and diversification of supply chains. Increased competition for resources makes it imperative for the EU to strengthen its own production capabilities and seek new partnerships.



Nutritional and Health Concerns: At the same time, there is **growing concern about the nutritional quality of diets**, with many EU citizens consuming diets high in processed foods, sugars, and unhealthy fats. Poor dietary choices have contributed to rising rates of diet-related health issues, including obesity, diabetes, and cardiovascular diseases, obliging EU governments to promote health-related policies focusing on these concerns, aware of the **heavy economic burden on public finances**. Governments appeal to citizens for **more responsible consumption habits** to address health and environmental concerns.

I.II. POLICY CONTEXT

The EU's current political agenda remains firmly focused on structural policy reforms designed to bolster food security, tackle climate change, navigate geopolitical instability, and safeguard public health. Building on the European Green Deal, the European Commission has rolled out a series of flagship initiatives—including the 'Sustainable Food System Framework' and, more recently, the EU Plan to secure Europe's fertiliser supply and food security. Additional efforts, such as the renewed EU Protein Plan, the Biotech Act, the Food and Feed Simplification Omnibus, the Circular Economy Act, and the Bioeconomy Strategy, hold significant promise for advancing the valorisation and growth of the insect and algae sectors.

Recent and ongoing policy developments relevant to our sectors include:

- **Revision of the EU Protein Plan:** A key moment to secure formal recognition of alternative protein sources as essential for protein autonomy, food security, and sustainable agriculture. The upcoming revision is expected to adopt a more comprehensive approach, considering all viable sources of protein—beyond traditional plant materials—including alternative sources such as insects, algae, yeast, and microbial proteins.
- **Post-2027 Common Agricultural Policy (CAP):** Discussions around the future of the CAP offer important windows of opportunity to embed sustainability, innovation, and resilience more deeply across the EU's food systems. This includes advocating for the inclusion of insect and algae proteins in agri-environmental schemes and securing support mechanisms that reward EU made circular, sustainable and resilient protein production.
- **EU Algae Initiative:** Serving as a blueprint for sector-specific support, this initiative addresses the wide range of scientific, technical, economic, and social issues hindering algae sector development. The insect sector demands such a vision to enable the prosperous development of this sector which can contribute to both food & feed and soil fertilizer needs.
- **EU Bioeconomy Strategy and EU Life Sciences Strategy:** When applied to the agrifood sector, these initiatives—by supporting innovative and sustainable protein sources such as insects and algae—could enhance the EU's agrifood resilience and sustainability.
- **EU Startup and Scale-Up Strategy:** Critical for unlocking finance, regulatory clarity, and growth conditions for biotech-driven protein innovators to scale production across Member States.
- **Revision of the Common Fisheries Policy and the European Maritime, Fisheries and Aquaculture Fund (EMFAF):** Targeted financial support measures to foster the development of alternative, sustainable, aquafeed ingredients like insect and algae proteins.
- **Biotech Act II:** By simplifying rules, fostering market-creating incentives, and linking approval processes to sustainability goals, the Act is positioned as a strategic catalyst to help these industries scale up and effectively contribute to Europe's green transition.



- **Circular Economy Act:** can boost the insect and algae sectors by positioning them as strategic pillars of a more resilient, low-dependency food system, while simultaneously unlocking dedicated public funding, R&D support, and potential public procurement contracts to help these emerging industries scale up and close the cost gap with conventional imports like soy.

In this context, proteins sourced from insects and algae are increasingly recognised as strategic solutions to reduce import dependency and support the EU's environmental and agricultural sustainability goals.

These policies are crucial for enhancing the competitiveness of our sectors while aligning with the European Commission's current focus on agricultural sustainability and innovation. By promoting the adoption of novel protein sources such as insects and algae, we can significantly contribute to the EU's ambitious objectives in several key areas:

1. **Food Security and Supply:** The integration of insects and algae protein into the food system can bolster the EU's food security by providing alternative, sustainable sources of nutrition. This diversification helps ensure a stable supply of food, particularly in the face of global challenges such as climate change and geopolitical tensions.
2. **Healthier Diets:** Novel protein production from these sources can promote healthier dietary choices among EU citizens. By offering nutritious alternatives to traditional protein sources, we can help address public health concerns related to diet-related diseases and improve overall well-being.
3. **Diversification of the EU Protein Plan:** Incorporating insects and algae protein into the EU protein plan enriches the variety of available protein sources. This diversification not only enhances food options for consumers but also supports the EU's goals of reducing dependency on conventional protein sources, thereby fostering a more resilient food system.
4. **Resilience in Animal Feed Production:** Utilising insects and algae protein can enhance the resilience of the EU's animal feed production. These sustainable protein sources can reduce reliance on imported feed ingredients, contributing to greater self-sufficiency and sustainability within the agricultural sector.
5. **Promotion of a Sustainable Agrifood System:** By embracing innovative protein production methods, we can advance the EU's sustainability goals, ensuring that agricultural practices are environmentally friendly and economically viable. This shift supports the transition towards a more resilient and sustainable agrifood system that meets the needs of both current and future generations. Additionally, the incorporation of these novel protein sources provides farmers with new income streams, allowing them to diversify their operations and reduce financial risks associated with traditional crop and livestock production. This not only enhances farm viability but also encourages rural development and job creation in emerging sectors.

I.III. THE OBJECTIVE OF THE ROADMAP

Considering the above, **this comprehensive policy roadmap outlines a set of policy activities fully aligned with the mentioned policy initiatives, aiming to support the development of alternative and innovative protein production from insects and algae.** We believe that our sectors can support the diversification of protein production, enabling the European Union to become less dependent on traditional animal-based protein while ensuring that farmers become more resilient and reduce their eco-footprint by promoting environmentally friendly local supply chains for animal feed or soil fertilizer.

Additionally, our sectors offer a unique opportunity to enrich EU citizens' diets with nutritious and sustainable food products. The historical consumer equation of insects and algae protein



has evolved, with their potential uses gaining growing attention more recently. The diversification of protein production with the contribution of insects and algae protein, supported by a proper policy framework, research, education, and awareness, can bring about several significant societal benefits.

The European Union can play a crucial role in supporting the development of alternative protein production from insects and algae by developing a favourable regulatory framework that promotes innovation, investment, and market growth for these growing industries. Only with a long-term approach, we envisage pathways to achieve cost parity for our sectors, which would accelerate the EU transition to a Sustainable and Resilient Food System.

In this document, we outline some key actions that our sectors can take to empower the EU to promote the development of insect and algae alternative protein production.

OUR SYNERGETIC CONTRIBUTION IMPROVES THE SUSTAINABILITY AND RESILIENCE OF THE FOOD SYSTEM

- Insects and algae offer complementary contributions to a resilient protein ecosystem
- Both sectors support the EU's climate, health, and food system transformation objectives
- Together, they foster innovation and reduce strategic vulnerabilities.

II.I. MAKE OUR FOOD SYSTEM MORE SUSTAINABLE

REDUCE THE ENVIRONMENTAL FOOTPRINT OF FOOD PRODUCTION

The production of protein from insects and algae has a significantly lower environmental footprint compared to traditional livestock farming. These sources require less land, water, and energy, and they produce fewer greenhouse gas emissions. By integrating these proteins into the food system, the EU can make substantial progress toward its climate goals and reduce the overall environmental impact of food production.

PROMOTE CIRCULAR AGRICULTURAL PRACTICES

The production of protein from insects and algae supports the EU's commitment to a circular economy by utilising organic waste and by-products from agricultural processes. This approach reduces waste and enhances resource efficiency, contributing to sustainable practices and minimising the environmental impact of food production. In a circular agricultural economy, organic waste streams can be used to cultivate algae or feed insects, which can then be transformed into animal feed, food products, or soil fertilizers. These alternative protein sources and their circular practices effectively close nutrient loops and valorise food waste.

II.II. ENHANCING RESILIENCE IN THE EU FOOD SYSTEM THROUGH PROTEIN DIVERSIFICATION

Diversifying protein sources by incorporating insects and algae is essential for strengthening the resilience of the EU's food system. This approach reduces dependence on a limited range of conventional proteins, allowing the EU to better adapt to disruptions and challenges.

Local production of these alternative proteins can significantly decrease reliance on imported feed and food, enhancing food sovereignty and mitigating supply chain vulnerabilities.



Additionally, cultivating insects and algae creates new economic opportunities for farmers and entrepreneurs, diversifying income streams and supporting rural development.

These alternative proteins complement traditional sources, providing nutritional benefits even at low inclusion rates. Their integration into the food supply chain contributes to reducing the EU's reliance on resource-intensive livestock production, promoting more sustainable and climate-friendly food systems.

In summary, embracing insects and algae as protein sources is crucial for building a more resilient, sustainable, and secure food future for the EU.

REDUCE THE DEPENDENCY ON ANIMAL FEED

Insects (e.g. mealworms, black soldier flies, crickets) and algae are protein-rich animal feed sources, rich in omega-3 fatty acids, B vitamins, and other minerals and nutrients that are beneficial for the health and growth of animals. Insects are especially highly digestible for poultry, fish, and livestock. Algae-based feed can serve as an alternative to fish meal.

In conclusion, insects and algae offer sustainable and nutritionally valuable options for animal feed production. These alternative feed ingredients can help address the challenges of traditional feed production, such as resource scarcity and environmental impact, while providing essential nutrients for livestock, poultry, aquaculture, and other animals in the agricultural industry.

MAKE HEALTHY AND WELL-BALANCED DIETS AVAILABLE TO EU CITIZENS

Insects and algae are nutritious protein sources. Rich in essential amino acids, healthy fats, vitamins, and minerals, integrating insect or algae-based protein products into diets supports a more balanced diet for EU citizens. Insects diversify the protein supply, reducing the EU's heavy reliance on conventional animal-based proteins. Insect-enriched products, such as cricket flour, insect protein bars, and snacks, present unique and attractive alternatives for consumers. Algae also present a valuable source of plant-based protein, with various species offering different nutritional profiles. Algae-based protein powders, algae-based meat substitutes, and algae-infused food products diversify the EU's protein offerings, catering to diverse dietary preferences.

ENRICH THE NUTRITIONAL VALUE OF TRADITIONAL FOOD PRODUCTS

These sustainable protein sources can be transformed into nutritious and appealing food products that align with health objectives, helping to mitigate the prevalence of diet-related health issues. Insects and algae are particularly versatile, making them easy to incorporate into a wide range of traditional food items. By diversifying the EU's protein landscape, these innovative sources provide consumers with more options for maintaining a healthy diet. The inclusion of insects and algae in the EU protein plan not only broadens the spectrum of available protein sources but also reduces reliance on conventional protein options. This diversification strengthens the resilience of the food system, ensuring it can better withstand challenges such as market fluctuations and environmental pressures. Ultimately, embracing these alternative proteins contributes to a more sustainable and secure food future for all EU citizens.



ENHANCE FOOD SAFETY

Insect or algae protein Novel Food products are subject to EU's food safety regulations, providing consumers with safe and nutritious options. Insects and algae can be produced efficiently and sustainably, providing a reliable source of protein that can help meet the growing demand for food in the EU. Their ability to thrive in diverse environments and utilise organic waste as feedstock makes them an attractive option for bolstering food supply chains, particularly in times of crisis or supply chain disruptions.

WHO ARE WE?

The InnovProtein EU Alliance represents a joint initiative between IPIFF and EABA, the EU-level organisations representing the insects and algae sectors, respectively.

Created on 1 December 2021, the InnovProtein EU Alliance aims to support the evolving objectives of the EU's food policy framework, including the transition towards a resilient, sustainable, and health-focused food system. The Alliance advocates for enabling conditions that accelerate the development and uptake of innovative protein sources across Europe.

Our sectors provide 'Innovative' protein sources, which may be used for food and/or feed purposes, inspired by nature, encompassing products of both vegetal and animal origin. Their high nutritional performance and functional benefits (e.g. help to address certain deficiencies in human diets, improving animal/zootechnical performance, or boosting the immune system) represent a reliable opportunity for tackling EU and global challenges, namely by reducing the EU dependency on critical raw materials used for food and animal feed production.

III.I. OUR JOINT MISSION

Following the joint presentation addressed during the IPIFF Annual Conference on the 1st of December 2021, IPIFF and EABA have decided to delineate a joint roadmap on common interests and objectives. InnovProtein EU aligns with the overarching objectives of the European Commission by supporting the transition towards more sustainable food supply chains in the EU. This commitment reflects a shared goal of promoting environmentally friendly practices and enhancing the resilience of the food system.

III.II. AREAS FOR COOPERATION

Collaboration in the sectors of alternative proteins, such as insects and algae, can take place across several key areas:

1. **Collaborative Research, Development, and Funding:** Joint efforts in research and development can drive innovations in production techniques, nutritional enhancements, and processing methods within the alternative protein sectors. By collaborating with universities, research institutions, and industry partners, we can accelerate advancements while also pooling resources to attract funding and investment. This collaborative approach will enhance our ability to secure financial support through joint grant applications and investment proposals, ultimately fostering the growth of these sectors.
2. **Regulatory Frameworks:** Working together to navigate and influence regulatory policies can help create a supportive environment for the development and commercialisation of



alternative proteins. This includes advocating for clear guidelines on safety, labelling, and sustainability standards.

3. **Market Development and Education Initiatives:** Collaborative marketing initiatives and educational programs can significantly enhance awareness and acceptance of alternative proteins among consumers, food manufacturers, and retailers. By developing joint campaigns that highlight the nutritional, sustainability, and environmental benefits of these protein sources, we can effectively engage stakeholders. Additionally, training workshops for farmers, entrepreneurs, and food industry professionals will further deepen understanding of the benefits and applications of alternative proteins, fostering a more informed market.

III.III. OVERALL AIMS

The InnovProtein EU Alliance calls for the full integration of the insect and algae protein sectors into the EU's future-proof food policy framework. In light of the European Commission's priorities and upcoming initiatives, several key opportunities should be pursued:

- **Revision of the EU Protein Strategy:** a key moment to secure formal recognition of alternative protein sources as essential for protein autonomy, food security, and sustainable agriculture.
 - Despite the initial version of the Plan referencing alternative protein sources solely as a target for research and innovation investment, it is essential to engage proactively with the Member States (Council) and Members of the European Parliament. The aim should be to advocate for a more comprehensive approach to alternative proteins within the proposed framework—one that includes concrete support measures for scaling up production. In particular, insect-based and algae-derived proteins should be explicitly considered as eligible recipients of support under the Common Agricultural Policy (CAP), in line with multiple institutional recommendations calling for their strategic development.
- **Adoption of the Sustainable Food System Framework:** an opportunity to embed low-impact, circular protein production into the future architecture of EU food policy.
- **Implementation of an EU Plan to ensure Soil Fertilizer and Food Security:** to position decentralised, resource-efficient protein systems as part of the EU's resilience strategy.
- **Roll-out of the EU Startup and Scale-Up Strategy:** critical for unlocking finance, regulatory clarity, and growth conditions for biotech-driven protein innovators to scale production across Member States.
- **Common Agricultural Policy (CAP) post-2027:** Advocate for the inclusion of insect and algae proteins in agri-environmental schemes. Secure support mechanisms that reward circular, sustainable protein production aligned with biodiversity, soil health, and resource efficiency goals.
- **Revision of the Common Fisheries Policy and EMFAF:** Advocate for targeted financial support for alternative, sustainable aquafeed ingredients like insect and algae proteins.
- **Expected improvements to novel food and feed authorisation processes:** aiming to streamline approval timelines and reduce regulatory uncertainty while maintaining high safety and sustainability standards.



HARNESS THE NUTRITIONAL AND ENVIRONMENTAL POTENTIAL AND BENEFITS OF INNOVATIVE PROTEIN SOURCES VIA APPROPRIATE R&D EFFORTS

- Considering the novel factor of our sectors, advocate for innovation and research funding, where needed, towards a consolidated development of these sectors both in terms of food and animal feed production.

SUPPORT THE CREATION OF EDUCATIONAL ACTIVITIES AND AWARENESS-RAISING CAMPAIGNS

- Work towards a conducive narrative to allow a wider consumer acceptance of food products from our sectors.
- Include insect and algae protein as part of National and European dietary guidelines.

THE PARTNERS OF THE ALLIANCE



IPIFF, THE INTERNATIONAL PLATFORM OF INSECTS FOR FOOD AND FEED

The International Platform of Insects for Food and Feed (IPIFF) is the umbrella organisation of the European insect-producing sector towards European institutions. Bringing together more than 60 members – most of which are European insect-producing companies – IPIFF promotes the use of insects and insect-derived products as a top-tier source of nutrients for human consumption and animal feed.

The sector is predominantly composed of SMEs, serving both the food and feed markets (start-ups and 'older' businesses, previously active in other segments e.g. in biocontrol, and pet food). The EU production represents today several dozen thousand tonnes of insect protein, whereas investments account for more than 1.5 billion EUR – this figure is expected to exceed 3 billion EUR by 2030. It already represents more than 3,500 jobs created until today (incl. above 1,000 direct jobs) – likely to exceed thirty thousand by 2030. The sector has passed a critical threshold and has set its mark to be commercially interesting. Today, the main markets for insect proteins and oil are pet food and aquaculture – pigs and poultry are expected to grow in the next few years. Production is scaling up to meet the needs of food, feed, and plant markets while building up capital and know-how.



EABA, THE EUROPEAN ALGAE BIOMASS ASSOCIATION

The European Algae Biomass Association (EABA) is the European association representing both research and industry in the field of algal technologies. EABA represents organisations and



individuals interested in both macro and microalgae, bringing members and representing numerous countries, promoting mutual interaction and cooperation in the field of algae biomass production, transformation and use for the whole range of algae applications.

EABA aims at creating, developing, promoting and maintaining solidarity, contact, interaction and collaboration among its members and at defending their scientific and commercial interests at the European and international levels. Its main target is to act as a catalyst for fostering synergies among scientists, industrialists, and decision-makers to promote the development of research, technology, and industrial capacities in the field of Algae.

The European Algae Biomass sector represents an "economical value" of more than 1.7 B€/year (macroalgae 700 M€; microalgae 750 M€; equipment and engineering 180 M€; research & development 60 M€) and provides jobs for more than 14,000 persons. More than 80% of the market is the result of activity by large multinational companies. However, hundreds of SMEs and private producers recently started to develop a highly dynamic business landscape expected to grow rapidly.

Overall, the insect and algae sectors contribute significantly to the diversification and sustainability reinforcement of protein production in the EU, aligning with the European Commission's objectives.

These alternative protein sources present compelling solutions to address environmental challenges, promote food security, and support the transition to a more sustainable and resilient food system in the European Union.

By embracing these sectors, the EU can lead the way in fostering a protein production model that is both nutritious and environmentally responsible, contributing to a healthier and more sustainable future for all.

For the insect and algae protein sectors to be recognised and integrated into the Farm to Fork Strategy, they need to engage in policy and advocacy actions to highlight their potential contributions to a sustainable and resilient food system.

SPECIFIC CALLS FOR JOINT ACTION

V.I. ADDRESSING THE EU REGULATORY AND LEGISLATIVE FRAMEWORK

The EU InnovProtein Alliance promotes activities aiming at unlocking EU regulatory and policy opportunities and/or the 'filling' of legal loopholes as a means to support the development of respective sectors. These efforts, which should encompass joint EU advocacy and/or regulatory/policy monitoring activities would mainly cover the following topics (non-exhaustive list):

- **Strategic Initiatives developed at the EU Level**, notably concerning the topics revolving around 'food security' and/or 'feed autonomy' (e.g. development of the EU Protein plan).
 - **Relevant Initiatives developed by International Organisations** (e.g. by FAO).
 - **Joint efforts to ease access to private or public funding**, and incentivise investment in 'green' activities, thereby securing appropriate financial instruments to further explore the nutritional and/or environmental potential (including their complementarities) of the concerned innovative protein sources.



Notably through the following activities:

- **Coordinate advocacy activities and information campaigns** towards recognising the role of algae and insects under 'Horizon Europe' programmes (e.g. Via the publication of internal newsletters/policy briefs related to such EU-funded opportunities, through a coordinated response to EU-funded research programmes and/or dissemination activities around the deliverables of such research projects).
- **Coordinate advocacy activities to highlight the alignment of InnovProtein EU with the objectives/targets of the UN SDGs** and the importance of recognising the participating sectors under other relevant EU funding instruments (e.g. funding for SMEs, start-ups/business accelerators).
- **Advocate for regulatory improvements**, including:
 - Including environmental impacts in risk assessments informing authorisation processes for alternative proteins.
 - Improving implementation of the EU framework for alternative proteins through sector-specific guidance.
 - Addressing regulatory restrictions on the use of former foodstuffs containing meat and/or fish for feeding insects to support circular economy principles.

V.II. ADVOCACY FOR THE ACKNOWLEDGMENT OF OUR SECTORS IN OTHER STRATEGIC POLICIES

- **Engage with relevant EU institutions and policymakers** to ensure that the specific needs and challenges of the insect and algae protein sectors are considered in policy documents related to the Farm to Fork Strategy, Protein Strategy, and Sustainable Food Framework as well as concerning other relevant policies that can set a new milestone for the development of our sectors, namely the Agro-Food Promotion Policy or the Common Agricultural Policy.
- **Seek opportunities** to provide input during the development and revision of relevant regulations, guidelines, and standards.
- **Educate/inform members active at the national level** about the possibilities to include the sectors represented within InnovProtein EU under national multiannual Agri-Food strategies.
- **Advocate for policy-based incentives** to scale up alternative protein sources, including the establishment of sustainability standards in animal and aquaculture feed through obligatory minimum incorporation rates of sustainable protein sources such as insects and algae.
- **Support the inclusion of measurable targets** for the gradual incorporation of sustainable protein sources – 5% in 2027, 10% in 2030, 30% in 2050.

V.III. RESEARCH AND INNOVATION

ACCELERATE INTERDISCIPLINARY INNOVATION

We believe that growing sectors such as ours will continue to benefit from projects that will consider their valuable contribution to improving sustainability in food and feed production. While several initiatives targeted knowledge gaps of relevance for our fields, we are convinced that one key element that could play a role in maximising our collective contribution to relevant agri-food challenges would be a focus on tangible, real-life barriers of importance for upstream and downstream stakeholders collaborating with our sectors. In the long run, such interdisciplinary consortia could offer realistic insights that would be mutually beneficial to our



sectors, as well as other relevant agri-food stakeholders (e.g. farmers, food and feed producers, etc.).

SUPPORT DIVERSITY AND COMPETITION IN FUTURE CALLS

It is our understanding that the European Commission will continue to finance only one project per funding call/topic under Cluster 6. Yet, we believe that future calls could better promote collaboration through a synergistic approach if more than one project receives funding under the same call (for example, we see excellent collaboration in the context of the projects funded under topic LC-SFS17-2019: Alternative proteins for food and feed). We were wondering if the European Commission will adopt a different approach in this regard (e.g. in the context of the Horizon Europe 2023-2024 work programme).

ENCOURAGING PROJECTS THAT AIM AT STRENGTHENING THE RESILIENCE OF EUROPE'S FOOD SYSTEMS THROUGH FUTURE-PROOF FUNDING CALLS

Considering the recent and ongoing crises (e.g. COVID-19 pandemic, the Russian invasion of Ukraine, subsequent humanitarian crises, etc.), it becomes clear that focusing our energy on solutions that aim at making Europe's food systems more resilient is an immediate priority.

We value the efforts of the European Commission on this matter (e.g. as reflected in numerous calls from the Work Programme 2021-2022) – yet, we consider our sectors can do more in this regard if applicants are incentivised to frame their project in a future-oriented manner.

In our view, such an approach would make the deliverables of the projects ever more relevant in the future, stimulating innovation across the agri-food chains.

OUTREACH INITIATIVES

- **EUROPEAN COMMISSION:** Engaging directly with the European Commission is crucial as it is responsible for proposing and implementing EU policies and legislation. The sectors should communicate their contributions, challenges, and specific needs to relevant departments, such as the Directorate-General for Agriculture and Rural Development, the Directorate-General for Health and Food Safety, and the Directorate-General for Research and Innovation.
 - **Request meetings with the European Commission services, namely:**
 - Directorate-General on Health and Food Safety;
 - Directorate-General on Agriculture and Rural Development;
 - Directorate-General on Research and Innovation.
 - Start-up and Scale up Head of Unit
 - Bioeconomy Head of Unit
 - DG Grow Bioeconomy Unit
- **EUROPEAN PARLIAMENT:** The European Parliament plays a significant role in shaping EU policies and legislation. The insect and algae protein sectors should interact with Members of the European Parliament (MEPs) and relevant parliamentary committees, such as the Committee on Agriculture and Rural Development and the Committee on Environment, Public Health and Food Safety, Regional Development or Industry, Energy and Research to advocate for their interests and showcase their potential contributions.
 - **EABA's objective to participate in the IPIFF event at the European Parliament.**
Ahead or after this event, concurrently host a dedicated side-event within the



Parliament—modeled after InnovProtein’s previous initiative. This joint event will serve to articulate our sector’s strategic contributions and pressing operational needs, while directly calling upon MEPs to champion decisive policy actions that will shape the future growth of our industry.

- **COMMITTEE OF THE REGIONS & EUROPEAN ECONOMIC AND SOCIAL COMMITTEE:** Promote the insects and algae protein sectors as dynamic sectors able to stimulate the economic and social development of the EU rural areas and regions. The growth of the insect and algae sectors can create new economic opportunities and jobs within the EU's regions and therefore reinforce its social, economic, and territorial cohesion.
 - Meeting with the Committee’s representatives in order to propose an Own Initiative Procedure to highlight the economic, social and regional development contributions of our sectors and indicate the policy avenues which could serve to unlock their development.
- **EUROPEAN FOOD SAFETY AUTHORITY (EFSA):** Engaging with EFSA is essential to ensure the safety assessment and regulatory approval of products and processes in the insect and algae sectors. Collaboration with EFSA can facilitate the establishment of clear guidelines and safety standards for these alternative protein sources.
- **NATIONAL GOVERNMENTS AND MINISTRIES:** Interacting with national governments and relevant ministries is important to align with national policies and to gain support for initiatives related to the insect and algae sectors. National-level engagement can also help in accessing funding and resources for research and development projects. Outreach efforts devoted to national governments should be prioritised under the frame of the Council of the EU rotative presidencies.
 - Promote a coalition of EU MS that supports a overreaching strategy to support both sectors under the CAP and EMFAF.
- **RESEARCH AND INNOVATION ORGANISATIONS:** Collaborating with research institutes is vital to leverage scientific knowledge, conduct studies, and improve technological advancements in the insect and algae sectors. Establishing partnerships with research institutions can also facilitate the validation and acceptance of these alternative protein sources. IPIFF already hosts a Research Platform within its organic structure, enabling a direct partnership with academia and research partners.
 - Joint efforts to be dedicated to advocating for more funding opportunities allocated under the EU funding programmes dedicated to research and innovation, in our sectors. This is to be done, namely by promoting advocacy activities towards the design of the new programme of the European Commission dedicated to research and innovation.
 - Meeting with the European Commission Directorate-General on Research and Innovation (Shape the design of the new funding programme on research)
 - Meeting with the European Commission Directorate-General on Agriculture and Rural Development- Research and Innovation Unit (funding opportunities relevant for our sectors);
 - Meeting with the European Commission Directorate-General on Health and Food Safety-Research and Innovation Unit (funding opportunities relevant for our sectors);
 - Meeting with the European Council for Innovation (gathering information on possible upcoming calls).
- **NON-GOVERNMENTAL ORGANIZATIONS (NGOs) AND ADVOCACY GROUPS:** Working with NGOs and advocacy groups focused on sustainable food systems, climate change, and environmental conservation can help gain support for the contribution of the insect and algae sectors in achieving EU policy objectives. These organizations can serve as important allies in promoting sustainable practices and raising awareness among consumers.



- **CONSUMERS AND CONSUMER ASSOCIATIONS:** Engaging with consumers and consumer associations is crucial to building acceptance and demand for insect and algae-based protein products. Creating consumer awareness and addressing potential misconceptions are essential to drive the adoption of these alternative protein sources in the EU market. By actively engaging with these key policy interlocutors, the insect and algae sectors can effectively communicate their value and potential contributions to the European Union policy objectives. Collaboration with relevant stakeholders can lead to the establishment of supportive policies, funding opportunities, and a conducive regulatory environment, facilitating the growth and integration of these sectors into the EU's food system.

DEVELOPMENT OF JOINT COMMUNICATION ACTIVITIES

- **Promoting communication activities through 'traditional channels'** (e.g. Infographics to be published on the websites of the respective organisations, use of social media);
- **Joint Events** (e.g. online workshop; Annual Conference at the International Protein Day) to be held during 2025/26;
- **Widening the alliance to other Stakeholders**, collaborating with the InnovProtein EU members or entities interested in strengthening ties with this Alliance (e.g. by organising roundtable discussions in events/thematic webinars).

ENSURE COMPLIANCE AND SAFETY

- Proactively engage with relevant authorities to establish clear safety regulations and standards for the production and consumption of insects and algae as food.
- Invest in research and development to enhance safety measures and ensure compliance with food safety regulations.

PROMOTE CONSUMER ACCEPTANCE

- Promote awareness campaigns and information materials to inform consumers about the nutritional value and sustainability of products made from insects and algae.
- Collaborate with food companies and retailers to introduce innovative and appealing products that incorporate these alternative food sources.

PROMOTE RESEARCH AND INNOVATION

- Advocate for more opportunities to advance research, namely within the frame of the European Commission's research and innovation funding programmes.
- Develop and implement pilot projects and demonstrations that showcase the practical applications and benefits of using insects and algae in the food system.



HISTORIC CONSUMPTION

The historical consumer equation of insects and algae protein has evolved due to various factors, including cultural norms, availability of alternative protein sources, and changing perceptions towards sustainable food choices. Here's an overview of the historical consumer equation for each of these alternative protein sources:

- **Historically, insects have been consumed as food in many cultures around the world, particularly in regions of Asia, Africa, and Latin America.** In these areas, insects have been an integral part of traditional diets for centuries, providing a significant source of protein, vitamins, and minerals. People in these regions have developed culinary traditions and recipes that incorporate insects into various dishes. However, in Western cultures, the consumption of insects as food was not widespread historically. It was often perceived as taboo or unappetising, and the availability of more conventional protein sources like meat and fish further limited the popularity of insects as a food choice.
- **Algae has been used in certain Asian cultures as a food source, especially in Japan, Korea, and China.** Seaweeds and microalgae were harvested and used in traditional dishes, providing essential nutrients like protein, iodine, and vitamins. In Western cultures, the consumption of algae as food was limited historically due to limited availability and lack of awareness about their nutritional benefits. Algae were primarily known for their role in the marine ecosystem and industrial applications.

In recent decades, there has been a growing interest in alternative protein sources driven by concerns over environmental sustainability, food security, and health. This shift in consumer behaviour has led to the reevaluation of insects and algae as viable protein sources.

- **Insects have gained attention for their high protein content and many beneficial nutritional benefits, low environmental footprint, and potential to contribute to sustainable food systems.** Many startups and companies are now producing insect-based protein products like cricket flour, insect snacks, and insect-based protein powders.
- **Algae, particularly microalgae, have garnered interest for their nutritional value, containing essential fatty acids, amino acids, and vitamins.** They are increasingly used in various products, including plant-based meat alternatives, dairy substitutes, and nutritional supplements.

Overall, the historical consumer equation of insects and algae protein has seen a significant transformation from traditional use in certain cultures to a growing interest in their potential as sustainable and nutritious alternative protein sources in modern times. As consumer awareness, education, and product development continue to advance, these alternative protein sources are likely to become more widely accepted and integrated into mainstream diets globally.



THE NARRATIVE

Title: Embracing the Transition Decade: Narratives for the Production of Insect and Algae Protein in the European Union

Introduction

The European Union stands at a pivotal moment, facing significant challenges and opportunities in building a sustainable and resilient food system. In the pursuit of an intentional 'Transition Decade,' we propose to champion the production of insect and algae protein as transformative narratives that will shape the future of food in the EU. By harnessing these alternative protein sources, we can address pressing global issues, such as climate change, food security, and biodiversity conservation, while promoting a healthier, more sustainable lifestyle for citizens. Let's embrace the transition and make way for a brighter and greener food future.

- **NARRATIVE 1: SUSTAINABILITY REDEFINED.** Insect and algae protein production represents a paradigm shift in sustainability. By optimising resource efficiency, these sectors offer a unique opportunity to reduce our ecological footprint. Insects require less water, land, and feed compared to traditional livestock, while algae cultivation can sequester carbon dioxide. These solutions present tangible pathways to combat climate change, preserving natural habitats and biodiversity. By endorsing these alternatives, the EU can redefine sustainability and set a global example for responsible food production.
- **NARRATIVE 2: NOURISHING THE FUTURE.** The transition to insect and algae protein production promises a nutritious and diverse food landscape. Insects boast an impressive nutritional profile, rich in protein, essential amino acids, and micronutrients. Algae provide valuable omega-3 fatty acids and essential vitamins. Embracing these alternatives signifies investing in the future health of our communities, fostering resilience against malnutrition and diet-related diseases.
- **NARRATIVE 3: EMPOWERING INNOVATION AND ENTREPRENEURSHIP.** The 'Transition Decade' envisions fostering innovation and supporting entrepreneurship. Insect and algae protein sectors present untapped opportunities for research and development, technological advancements, and novel product offerings. By nurturing these industries, the EU empowers visionary entrepreneurs to drive economic growth, create jobs, and expand sustainable businesses. Our commitment to fostering innovation positions us at the forefront of the global alternative protein market.
- **NARRATIVE 4: ENGAGING CONSUMER CONSCIOUSNESS.** The European Union believes in the power of informed choices. Through compelling narratives, we aim to raise consumer consciousness about the immense potential of insect and algae protein sources. Education and awareness campaigns will demystify these alternatives, building public trust and acceptance. As consumers embrace sustainable food choices, we will witness a collective transformation towards a greener and healthier food culture.



ANNEX IMMEDIATE ACTIONS

Based on the InnovProtein EU Alliance Joint Policy Roadmap (2026-2032), here are concrete steps and actions to take in the very near future. These actions focus on immediate advocacy, securing funding, and building strategic visibility to capitalize on the current EU policy windows mentioned in the roadmap, such as the Protein Plan revision and the post-2027 CAP discussion.

1. Immediate Advocacy on Key EU Policy Files

The roadmap identifies several ongoing policy processes as critical opportunities. Immediate action should focus on engaging with these to ensure the insect and algae sectors are integrated.

- **Target the Revision of the EU Protein Plan:** Proactively engage with Member States (Council) and Members of the European Parliament to advocate for a comprehensive approach that explicitly includes concrete support measures for insect and algae protein production. The aim is to secure formal recognition and eligibility for support under the Common Agricultural Policy (CAP) . This should be a top priority.
- **Engage on the Post-2027 Common Agricultural Policy (CAP):** Actively participate in the early discussions on the future CAP to advocate for the inclusion of insect and algae proteins in agri-environmental schemes. Push for support mechanisms that reward circular, sustainable, and resilient protein production, positioning these sectors as key beneficiaries of the new CAP framework .
- **Engage on the Post-2027 Fisheries and Aquaculture Policy:** Actively advocate for Rather than binding mandates on feed formulation—which fall outside your direct competence of the Commissioner—we propose the inclusion of "minimum percentages of certified EU-produced sustainable feed ingredients" as a criterion for the EU Ecolabel for farmed seafood. This would leverage market demand—via retailers and consumers—to drive adoption, without imposing regulatory burdens on producers.
- **Advocate for Streamlined Authorisation Processes:** Immediately coordinate advocacy efforts to call for improvements to the Novel Food and feed authorisation processes. The goal is to streamline approval timelines and reduce regulatory uncertainty while maintaining high safety and sustainability standards, which is vital for sector growth.
- **Advocate for inclusion of the insect and algae sectors in the measures deployed under the Bioeconomy Strategy:** Targeted support for the bio-based sectors of algae and insects.



- Advocate for the inclusion of insects and algae sector in the measures deployed under the Start-up and Scale-up Strategy: Support to de-risk private investment and scale-up production capacities.

2. Secure Public Funding and R&D Support

The roadmap emphasizes the importance of research and innovation funding. Actions should focus on influencing upcoming funding programs and calls.

- **Advocate in Horizon Europe Programmes:** Coordinate advocacy activities to highlight the alignment of the insect and algae sectors with the objectives of Horizon Europe. This includes a coordinated response to EU-funded research programmes and ensuring that the sectors' nutritional and environmental potential are prioritized in future calls, particularly under Cluster 6. The Alliance should also push for a more synergistic approach where multiple projects under the same call can collaborate, as seen with LC-SFS17-2019.
- **Influence the EU Startup and Scale-Up Strategy:** Immediately request meetings with the relevant European Commission services (e.g., the Startup and Scale-up Head of Unit) to stress that this strategy is critical for unlocking finance and growth conditions for biotech-driven protein innovators. Advocate for specific support measures for the insect and algae sectors.
- **Seek Funding for Demonstrator and Pilot Projects:** Develop and promote project proposals that demonstrate the practical applications of insect and algae in the food system, as called for in the roadmap. Engage with the European Council for Innovation to gather information on upcoming calls and align proposals with their objectives. The DIVERSIFY4Future and PROTEIN4IMPACT projects serve as excellent models for this type of initiative.

3. Strengthen Strategic Partnerships and Visibility

Building a strong coalition and raising awareness among policymakers is essential for long-term success.

- **Promote a Coalition of EU Member States:** Work with national governments under the frame of the Council of the EU rotating presidencies to promote a coalition of Member States that supports an overarching strategy for both sectors under the CAP and the European Maritime, Fisheries and Aquaculture Fund (EMFAF).
- **Joint Parliamentary Event:** Organize the joint event at the European Parliament with EABA (and potentially COFALEC) to articulate the sector's strategic contributions. This event should directly call upon MEPs to champion policy actions that will shape the future growth of the industry. This is a concrete step to build political momentum.
- **Engage with the Committee of the Regions:** Propose an Own Initiative Procedure to the Committee's representatives. This would highlight the economic, social, and regional development contributions of the insect and algae sectors and indicate the policy avenues which could serve to unlock their development, particularly in rural areas.



4. Operationalize Joint Communication

The roadmap outlines joint communication activities that should be launched immediately to build a positive narrative.

- **Launch Joint Communication Activities:** Implement the "traditional channels" communication plan, including publishing joint infographics and social media campaigns to promote the nutritional and sustainability benefits of the sectors.
- **Plan Joint Events:** In line with the roadmap's call for joint events, organize an online workshop and prepare for the Annual Conference at the International Protein Day to raise the Alliance's profile.
- **Develop Joint Narrative:** Use the narratives from the roadmap (e.g., "Sustainability Redefined," "Nourishing the Future") in all communications to build a coherent and compelling story for consumers and policymakers alike. This will help demystify the alternatives and build public trust .

5. Concrete Actions for a 'Very Near Future' To-Do List

- **Schedule Meetings:** Immediately request meetings with the European Commission's DG AGRI, DG SANTE, DG RTD, the Startup and Scale-up Head of Unit, and the Bioeconomy Head of Unit .
- **Draft Position Papers:** Prepare concise position papers on the revision of the EU Protein Plan and the post-2027 CAP, outlining specific asks for the inclusion of insect and algae proteins.
- **Map MEP Champions:** Identify and engage with key Members of the European Parliament on the AGRI and ENVI committees to build support for the joint parliamentary event and specific policy amendments.
- **Identify Horizon Europe Partners:** Initiate discussions with potential research partners from the InnoProtein and other Horizon projects to prepare coordinated responses for upcoming funding calls .