InnovProtein EU Alliance Joint Position Paper

The European Commission 'Evaluation of Public Procurement Directives'

An opportunity to unleash the potential of innovative sectors to boost EU competitiveness and address its key challenges

Who are We?

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

Created on the 1st of December 2021, the InnovProtein EU coalition aims to support the overall objectives of the 'EU Farm to Fork Strategy' and the transition towards a 'Sustainable EU Food System'.

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, in line with the Farm to Fork strategy.

- **Our Joint Mission**

Following the joint presentation addressed during the IPIFF Annual Conference on the 1st of December 2021, IPIFF, EABA, and COFALEC have decided to delineate a joint roadmap on common interests and objectives. Innovprotein EU shares the 'common aim' of supporting the overall objectives of the 'EU Farm to Fork Strategy' and the transition towards more sustainable EU food supply chains.

Overall, the insect, algae, and yeast 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, algae, and yeast 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.

- **<u>The partners of the coalition</u>**

- **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 70 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 3,5 thousand 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.

Today, the main markets for insect feed products and oil are the pet food and aquaculture segments. The 2021 authorisations for swine and poultry PAPs and as well the growing number of authorised edible insects as Novel Foods, set expectations for growth both for animal feed and human consumption.

- **EABA, the European Algae Biomass Association**

The general objective of the European Algae Biomass Association (EABA) is to promote mutual interchange and cooperation in the field of algae biomass production and uses in all thinkable applications. It aims at creating, developing, and maintaining solidarity and links between its members and at defending their 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 in order to promote the development of research, technology, and industrial capacities in the field of Algae.

- **COFALEC, the European Confederation of Yeast Producers**

This confederation of European yeast producers is managed by a Supervisory Board which determines the confederation's strategic and policy orientations. It takes decisions and approves committees' proposals. The General Assembly brings together all COFALEC members once a year to approve the association's strategies, objectives, and budget. Four committees (Environment, Technical, Communication, and Oenological Yeasts), each coordinated by a chairperson, are, with the help of the Secretary-General, the working bodies that manage the various challenges and issues facing the sector.

Their work is based on the experience and competence of experts delegated by the member companies. Serving the European yeast industry, they are the link between the companies, the public authorities, the administration, and all other partners within the framework of the strategic orientations determined by the Supervisory Board and the President.

COFALEC also works with all its members to raise awareness among European public authorities, food chain stakeholders, and the general public of the solutions provided by the yeast sector to improve the sustainability of the food chain.

The InnovProtein Position on the 'Evaluation of Public Procurement Directives'

An opportunity to unleash the potential of innovative sectors to boost EU competitiveness and address its key challenges

Proposal 1: Revision of Public Procurement rules to create a level playing field for businesses across Europe, by benefiting innovative sectors, excluded so far, such as insects, algae and yeast

The InnovProtein EU Alliance welcomes the European Commission initiative to launch a public consultation on the evaluation of the Public Procurement Directives.

The Alliance partners acknowledge the great amount of EU public spending executed through Public Procurement, that according to the document launching this consultation corresponds to 2.4 trillion Euros or 14% of the EU GDP.

The InnovProtein EU Alliance emphasises that such public spending directly translates into investments across various business and sectors that provide essential goods and services to the European Union and its Member States. **However, we regret that not all sectors are reaping the benefits of such investments, particularly the ones of insects, algae, and yeast.**

In light of the European Court of Auditors' special report on public procurement in the EU, published in 2023, and the subsequent Council Conclusions (C/2024/3521), which highlight the need for further action to address declining competition in public procurement and to fully leverage the potential of the EU's public procurement market, **we urge the European Commission to revise the current public procurement rules. This revision should aim to expand the range of sectors and businesses that can benefit from public spending initiatives.**

The InnovProtein EU Alliance **requests the European Commission to consider the potential impact of such public spending to be directed to innovative sectors and businesses to support their scale up and thus, boost EU's competitiveness.**

Proposal 2: Public Procurement spending allocated to develop innovative and sustainable sectors such as insects, algae and yeast, which can support the EU to better face its current challenges

In light of the current challenges facing the European Union—particularly those related to climate change and geopolitical instability—there is an urgent need to reduce import dependency and transition towards a more sustainable and self-reliant future. We believe that public spending should be strategically directed to address these issues, which significantly impact EU citizens, consumers, and businesses across various sectors.

An investment in innovative sectors such as insects, algae and yeast translate into measures to mitigate climate change related incidents, while at the same time reducing EU's exposure to geopolitical instability, by ensuring self-reliance in vital products such as food, animal feed or soil

fertilizer. Furthermore, insects, algae and yeast high protein content and rich nutritional profile can contribute to healthier diets by the EU consumer.

Climate Change induced changing weather patterns are happening more frequently and severe droughts and floods, affecting farmers' crop yields and animal food production. Unpredictable weather patterns are causing shifts in agricultural zones, making it challenging to grow traditional crops in certain regions. At the same time, warmer temperatures can lead to increased 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 and feed production chains, revealing our lack of self-reliance. The war scenario which disrupted traditional trade for several critical raw materials revealed the concerning level of EU dependency on imports for food and animal feed production or even soil fertiliser.

We also strongly argue that Public Procurement should address EU citizens' nutritional and health Concerns. There is growing concern about the nutritional quality of diets, with many EU citizens consuming high 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. Such leads the governments to appeal to citizens for more responsible consumption habits to address both and environmental concerns.

Proposal 3: Revision of Public Procurement rules to ensure EU added value and security of supply from strategic sectors, such as insects, algae and yeast, vital products (food, animal feed, soil fertiliser)

Why should Insects, algae and Yeast be considered vital and strategic investment?

- **An investment in our sectors translates into the security of supply of sustainable food, feed, soil fertilizer and biogas.**

- ✓ **Diversification and complementation of EU's protein production**

The diversification of protein sources through insect, yeast, and algae sectors can enhance the resilience of the EU's food system. By reducing dependence on a limited range of protein sources, the EU becomes more adaptable to disruptions and challenges, fostering food system resilience, as emphasised in the 'Farm to Fork Strategy'. By producing protein locally through insect farming, algae cultivation, and yeast, the EU can reduce its reliance on imported protein for animal feed and food production.

Insects, algae, and yeast offer protein production alternatives, complementing and non-competing with conventional sources, with proven beneficial effects even at low inclusion rates, providing an additional solution to reducing the dependency of the EU on animal feed, soil fertiliser, or even food production.

By incorporating these alternative protein sources into the food supply chain, the EU can reduce its reliance on resource-intensive livestock production, contributing to the Farm to Fork Strategy's goal of promoting more sustainable and climate-friendly food systems.

The insect, algae, and yeast sectors can contribute a great deal to the EU to achieve the 'Farm to Fork Strategy' objectives and support the EU's transition towards a more sustainable & resilient food system, by offering nutritious, environmentally friendly alternative protein sources.

- ✓ **Reduced dependency on the imports for animal feed**

Insects (e.g. mealworms, black soldier flies, crickets), algae, and yeast are protein-rich animal feed, rich in omega-3 fatty acids, B, and other vitamins, minerals, and other nutrients that are beneficial for the health and growth of animals. Additionally, insects and yeast support beneficial gut bacteria, while reducing pathogenic bacteria and are highly digestible, which promotes efficient nutrient absorption by the animals. Insects are especially highly digestible for poultry, fish, and livestock. Furthermore, yeast is a single-celled fungus that has been used in animal nutrition for decades, while insects are becoming more and more popular as a sustainable complement to be used in animal feed. On the other hand, algae-based feed can serve as an alternative to fish meal.

In conclusion, insects, algae, and yeast 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.

- ✓ **Contributing to EU citizens' diets to become healthier and nutritionally richer**

Insects, algae, or yeast are nutritious protein sources. Rich in essential amino acids, healthy fats, vitamins, and minerals. Integrating yeast, algae, or insect-based protein products into diets supports a more balanced diet by the EU citizens. On the one hand, insects diversify the protein supply, reducing the EU's heavy reliance on conventional animal-based proteins. Insect-based products, such as cricket flour, insect protein bars, and snacks, present unique and attractive alternatives for consumers. On the other hand, 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. Lastly, yeast is a versatile and cost-effective protein source with a range of applications, widely used in plant-based diets to enhance flavor and nutrition.

These sustainable proteins can be used to create nutritious food products that align with health goals, reducing the prevalence of diet-related health issues. Insects and algae are highly versatile, allowing them to easily be incorporated into many food products, while yeast protein isolates can be used in various food formulations, further diversifying the EU's protein landscape.

Insect-based, algae, or yeast protein Novel Food products are subject to EU food safety regulations, providing consumers with safe and nutritious options. Insects can be produced under controlled conditions, ensuring food safety and quality, while algae can be cultivated in closed systems, reducing the risk of contamination and ensuring food safety. Additionally, yeast production processes are already well-established and have a long history of safe use in the food industry.

- ✓ **Ensuring that soil fertilizer becomes more affordable and available to the EU farmer, while reducing its dependency on imports**

Insect frass is used to describe insect larvae faeces or dejecta. Frass has concentrations in nitrogen, phosphorus, and potassium (NPK) like those found in animal manure. This makes it a great fertilising product. The land application of insect frass is consistent with circular economy principles, by reintroducing valuable nutrients into the food chain, while it offers sustainable solutions to European farmers (e.g. arable crops, viticulture) and/or gardeners. The use of frass in organic agriculture is allows organic producers to benefit from a more diverse palette of locally available bio-based fertilising products.

The European insect sector is at a turning point in its development as production is ramping up, e.g. IPIFF forecasts that European insect producing companies should **produce over 120.000 tons of insect feed products by the end of 2025**. Increased insect ingredients production will go hand in hand with growing quantities of insect frass – insect excrements/dejecta - generated, i.e. we forecast that over **400.000 tons of insect frass** should be produced by European insect producers **in 2025**[1].

Anticipating significant output growth, the **European insect sector** is currently investing **in building the necessary capacities** and **tailored production standards** in view of its **commercialisation** as **fertilising product** on the EU market, in line with the EU regulatory standards adopted in 2021 – i.e. standards embedded in Annex XI, chapter I, section 2 to Regulation (EU) No 142/2011[2].

In this context, the expected future **registration** of **processed frass** - frass subject to a heat treatment process of at least 70° for at least one hour as above-mentioned - **under the EU fertilisers' legislation** (i.e. through its inclusion under CMC 10 of Regulation (EU) 2019/1009) would be **instrumental to ensuring the viability and competitiveness** of **European insect producing companies**, especially at a critical time of the ramping up of our industry. Moreover, such reform would contribute to supporting the European Commission's endeavours to increase the availability of EU bio-based fertilisers and accelerate the transition to a fully decarbonised economy[3][4].

- ✓ **An investment in insects, algae and yeast translates into the unleashing of the market potential of their many applications**

Along with the use of frass as fertilizing product, European insect producers are exploring avenues to efficiently upcycle the produced frass through their use in biogas and/or composting plants.

IPIFF welcomes the Proposal of a list of Net-Zero technology final products and their main specific components to include in its Annex, under Sustainable biogas and biomethane technologies the possibilities offered by the authorised use of Sustainable biogas plants and methane-Anaerobic digesters /Fermentation tanks and Biomethane and upgrading units. Such a reference enables the production of biogas by EU insect producers. Nonetheless, we enjoy this opportunity to call the attention of the European Commission to the potential contribution of the EU insect sector towards these objectives, which can be achieved through an amendment to Regulation (EU) No 142/2011, with the view of clarifying the possibility to use processed frass, as 'starting material for composting or biogas transformation'.

Echoing the demands IPIFF made to the European Commission Directorate-General on Health and Food Safety (DG SANTE), the European Commission tabled a regulatory proposal amending Regulation (EU) No 142/2011, with the view of clarifying the possibility to use processed frass, as 'starting material for composting or biogas transformation', while setting a legal basis in order to allow imports

of such materials. The draft text received a favourable opinion by the EU Member States at the PAFF Committee meeting organised on 23 January 2025, prior being submitted to the European Parliament and Council of the EU, in accordance with the Regulatory procedure with scrutiny6.

Proposal 4: Set binding sustainable standards for public purchases to create lead markets in clean and strategic products such as those from insects, algae and yeast.

InnovProtein EU Alliance believes that Public Procurement can have the fundamental role to boost EU's competitiveness on the one hand, and on the other to accelerate the transition to a more sustainable agrifood system. This can be achieved by channelling public spending towards innovative and sustainable protein sources such as insects, algae and yeast.

Moreover, Public Procurement can have the potential to create lead markets in clean and strategic products such as insects, algae and yeast. We believe such can be best achieved by setting binding sustainability standards for protein ingredients purchased via Public Procurement *(i.e. through a minimum percentage of alternative and sustainable protein sources, such as insects, algae and yeast, for certain products, to support the growth of the sustainable protein production industry).*

An investment via Public Procurement in the Insect, yeast, and algae-based proteins translates into the provision of solutions for EU's agrifood system, while at the same time boosting the sustainability and resilience of all related sectors.

Our sectors have a lower carbon footprint compared to conventional livestock production. Integrating these alternative protein sources can help the EU achieve its targets for reducing greenhouse gas emissions and combatting climate change.

- ✓ **Ensuring biodiversity conservation**

Farming insects and cultivating algae for protein production can alleviate pressure on natural ecosystems and reduce habitat destruction associated with conventional agriculture. By minimising the demand for land and water, the insect, yeast, and algae sectors support the Farm to Fork Strategy's objectives of protecting biodiversity and ecosystems.

- ✓ **Reducing greenhouse gas emissions**

Insects and yeast emit lower greenhouse gas emissions, and additionally, algae sequesters carbon dioxide during growth, contributing to carbon capture and climate change mitigation.

- ✓ **Requiring minimal land, water and feed**

Insect farming requires minimal land, water, and feed compared to traditional livestock. Alongside, yeast production, also requires minimal land and water.

Additionally, algae cultivation holds significant sustainability benefits, by growing in various environments, including in seawater and wastewater, reducing competition for arable land. Together, they represent a very ecological set of protein sources. Therefore, embracing insect farming, yeast production, and algae cultivation enhances the EU's commitment to sustainable food production and resource efficiency.

- ✓ **Promoting circular agricultural practices**

A true circular agricultural economy can be achieved thanks to insects, algae, or yeast. On the one hand, with the use of organic waste streams and by-products to feed insects and produce algae, and on the other hand through the use of sustainable feedstocks in yeast fermentation processes. These protein sources with their circular practices close nutrient loops and valorises food waste. We can easily affirm that insect farming, yeast production, and algae cultivation are inherently aligned with the Farm to Fork Strategy's vision of creating a circular and more sustainable food system.

<u>Proposal 5:</u> Public spending to preferably address innovative products such as those from insects, algae and yeast, which by their turn, can boost EU's competitiveness

Public procurement directives and efficient public procurement procedures are crucial for ensuring EU global competitiveness. The direct investment in innovative sectors, still not mature enough, but which EU can be a World leader, can bring added return on the investment.

Public Procurement can have the potential to develop innovative sectors and products such as those from insects, algae and yeast. To this end, once again, we believe such can be best achieved by setting binding sustainability standards for protein ingredients purchased via Public Procurement *<u>(i.e. through a minimum percentage of alternative and sustainable protein sources, such as insects, algae and yeast, for certain products, to support the growth of the sustainable protein production industry).</u>*

When considering that only the EU insect sector has invested over 1,5 billion Euros and has over 150 production facilities across Europe, predominantly composed of SME's and currently employing over 3,500 people and expected to employ over 30,000 by 2030, we can firmly argue that an investment in the insects, algae and yeast sectors bring much return on the investment.

Our sectors have passed a critical threshold and has set its mark to be commercially interesting. Production is scaling up to meet the needs of food-feed-plants markets, while building up know-how. With the proper public investment, such as the one provided by Public Procurement, innovative sectors like ours can boost EU's resilience, competitiveness, innovation and circular economy.

The need to develop sustainable innovative sectors creates economic opportunity. By developing new industries to upscale can have high market and societal impact by creating new jobs and promoting the socioeconomic development of EU's less developed and rural regions.

Our sectors' activities generate new economic opportunities by connecting existing agri-food chains and creating new agri-food segments, complementing farmers and fishermen income revenues. Furthermore, with its different application purpose products (incl. human nutrition, animal feed, soil fertiliser and/or technical applications such as biogas), can contributes to the creation of innovative and green jobs in coastal and rural areas, encompassing a wide range of skills and diverse professional qualifications.

Finally, an investment in our sectors translates into the increased competitiveness of EU's agrifood sector, while at the same time improving the EU's resilience, by reducing its dependency on the import of critical products such as animal feed or soil fertiliser.

Proposal 6: Align public spending from Public Procurement with EU's political objectives

Considering the above mentioned reasons explaining why an investment in insects, algae and yeast should benefit from revised rules of EU Public Procurement, we reiterate the need for the EU to demonstrate a clear commitment and investment towards innovative sectors like ours as to ensure the accomplishment of its key policy objectives, to which our sectors, we the needed support that can be provided by Public Procurement, can greatly support the EU to:

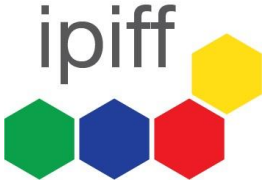
- Promote a Competitive EU Bioeconomy.
- Achieve a 'true' EU Circular Economy.
- Deploy a Clean Industrial era.
- Ensure that our agricultural sector becomes more sustainable and resilient.
- Promote the competitiveness of EU's fisheries and aquaculture sectors.
- Promote the social and economic development of EU rural and coastal regions.

The InnovProtein EU Alliance stresses that Public Procurement can and should be aligned with the EU main policy objectives. By channelling public investment towards innovative sectors like ours, it is a way to ensure that the EU is deploying the available resources to achieve such objectives.

Summary of the Proposals on behalf of the InnovProtein EU Alliance

- ✓ **Proposal 1:** Revision of Public Procurement rules to create a level playing field for businesses across Europe, by benefiting innovative sectors, excluded so far, such as insects, algae and yeast.
- ✓ **Proposal 2:** Public Procurement spending allocated to develop innovative and sustainable sectors such as insects, algae and yeast, which can support the EU to better face its current challenges.
- ✓ **Proposal 3:** Setting binding sustainability standards for protein ingredients purchased via Public Procurement *(i.e. through a minimum percentage of alternative and sustainable protein sources, such as insects, algae and yeast, for certain products, to support the growth of the sustainable protein production industry)*, which can enable the creation of lead markets in clean and strategic products.
- ✓ **Proposal 4:** Public spending should preferably address innovative products such as those from insects, algae and yeast, which by their turn, can boost EU's competitiveness.
- ✓ **Proposal 5:** Revision of Public Procurement rules to ensure EU added value and security of supply from strategic sectors, such as insects, algae and yeast, which can improve sustainability, boost competitiveness, promote socioeconomic development and reduce the reliance on imports from vital products (food, animal feed, soil fertiliser).
- ✓ **Proposal 6:** Align public spending from Public Procurement with EU's political objectives. Investment in sectors such as insects, algae and yeast translate into the achievement of the EU political objectives: Competitive EU Bioeconomy; EU Circular Economy; Clean Industrial Act; a more competitive, sustainable and resilient EU Agriculture, Fisheries and Aquaculture sectors; EU regions socioeconomic development.


InnovProtein
EU Alliance
COFALEC
EABA
EUROPEAN ALGAE
BIOMASS ASSOCIATION
ipiff


ipiff