Brussels, 3rd of October 2025

IPIFF Position Paper

Call for Evidence for a European Innovation Act

I. ABOUT IPIFF AND THE EU INSECT SECTOR

1. Who are we?

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 54 members – most of which are European insect-producing companies - IPIFF promotes the use insects and insect-derived products as a top-tier source of nutrients for human consumption, animal feed and plant nutrition.

The insect industry has emerged as one of the fastest-scaling sectors among industrial start-ups and innovations in Europe, offering a promising pathway to meet Europe's ambitious goals of reindustrialisation and transitioning to a climate-responsible economy. EU support measures should be stepped up to address the specific needs of the sector during its critical phase of scaling up.

2. The EU insect sector embodies the challenges the Innovation Act seeks to address

The European insect production sector welcomes the European Commission's initiative to develop a European Innovation Act. **As a nascent, high-potential bio-industry, we embody the very challenges this Act seeks to address:**

- capital-intensive
- research-driven sector
- operating in a complex regulatory landscape
- striving to scale within the EU to compete globally

Our sector directly contributes to the EU's key political priorities: the **Green Deal** and **Vision for Agriculture & Food** by upcycling organic waste into valuable nutrients, the **Circular Economy Action Plan** by closing nutrient loops, and **Strategic Autonomy** by producing sustainable, EU made proteins for animal an aquaculture feed and food, while at the same time generation organic soil fertilizer and thus, reducing EU's vulnerability to geopolitical instability, trade uncertainty or climate change-related events.

However, to fully deliver on this potential, we require a truly innovation-friendly ecosystem. This paper outlines concrete financial and regulatory measures within the scope of the Innovation Act to unlock our sector's contribution to a more competitive, sustainable, and resilient Europe.

3. Concrete Contributions of the EU Insect sector to the Innovation Act's Objectives

The insect sector is a living test case for the Innovation Act's goals. We provide innovative solutions to societal challenges, and our growth is hampered by the very barriers the Act aims to remove:

- **Regulatory Fragmentation & Innovation-Friendly Frameworks:** While the EU has established a novel food regulatory pathway and has recently pushed forward a simplification omnibus for food and feed authorisation, national interpretations for by-product use, environmental permits, and animal health rules vary, creating a patchwork of 27 different operational environments that stifle cross-border investment and scaling.
- **Access to Finance & Commercial Exploitation:** Insect companies are capital-intensive, requiring significant upfront investment for biorefineries. Our intellectual property (IP) in breeding, automation, and processing is a core asset, yet it is often difficult to leverage for financing. The gap between successful R&D and commercial-scale production remains wide.
- **Testing Innovative Solutions & Access to Infrastructures:** Scaling up production processes requires access to large-scale piloting and testing facilities ("living labs") to validate new technologies and substrates under real-world conditions, which are often inaccessible or administratively cumbersome for SMEs.
- **Innovation Procurement:** Public and private procurement of sustainable insect-based proteins for aquafeed, poultry, swine, pet food, protein-rich food or organic soil fertilizer can provide the crucial "first orders" that de-risk scaling. Current procurement rules often fail to value the green and circular criteria our products offer.
- **Attracting and Retaining Talent:** As a new industry, we compete for highly specialized talent in biotechnology, engineering, and data science. Flexible, EU-wide employee ownership schemes are vital to attract top talent away from established sectors.

II. How the Innovation Act and Fund Fail to support the scale-up of the Innovative EU insect producing Sector

The European Innovation Act and Innovation Fund are designed to bolster EU competitiveness. However, their current conceptual framework contains critical blind spots that prevent them from effectively supporting capital-intensive, systemic bio-innovations like the insect sector. **The failure is not one of intent, but of design and criteria. Here's a breakdown of the specific failures:**

- **The Innovation Fund's "Narrow-Perspective":** The Fund operates with a set of criteria that are misaligned with the value proposition and risk profile of nascent bio-industries.
- **Failure to Value Systemic & Circular Benefits:** The Fund's primary evaluation metric is often **CO2 avoidance per euro spent**. This is a reductive lens for a sector like insects, whose value is multi-faceted. While it reduces emissions, its primary contributions are to **circularity** (waste upcycling), **biodiversity** (reducing pressure on land and oceans), and **strategic autonomy** (domestic protein production). The Fund's narrow criteria fail to capture this full-system benefit, meaning a project that solves multiple problems scores lower than a project that only solves one (CO2) with a higher tonnage.
- **Misses to Finance the Gap:** The Fund is geared towards large-scale, de-risked demonstrations. It effectively supports the *last step* of scaling. Thus, it overlooks the gap between successful pilot-scale R&D and the first commercial-scale plant. This stage is too risky for traditional debt and too capital-intensive for most venture capital. **The Innovation Fund does not currently have a fit-for-purpose instrument to bridge this specific valley for bio-industries.**

- **Inability to Leverage Intellectual Property (IP):** For tech-driven sectors, IP (patents on strains, processes, etc.) is their most valuable asset. However, the current financial ecosystem, which the Innovation Fund does not disrupt, does not recognize this IP as sufficient collateral for the massive loans needed to build biorefineries. The Fund does not provide mechanisms to securitize or leverage these intangible assets.
- **One-size fits all approach is ineffective:** While the Act aims to create a better environment for all innovators, its horizontal, one-size-fits-all approach is ineffective for sectors facing unique, deeply entrenched regulatory barriers.
- **Addresses the Symptoms, Not the Disease:** The Act proposes to simplify regulatory frameworks in general, but it does not tackle the **sector-specific regulatory fragmentation** that cripples the insect industry or other innovative bioeconomy-based sectors. For example:
  - The rules for which organic waste streams can be used as insect feed vary dramatically between Member States, creating a patchwork of 27 different operating environments.
  - The authorization process for new insect-based products for animal feed is slow and complex, creating market uncertainty.
- **Lack of Sector-Specific Sandboxes:** The concept of "regulatory sandboxes" is promising, but without a mandate to create them for specific strategic challenges (e.g., a sandbox for validating novel circular bioeconomy processes), they risk being underutilized or irrelevant for sectors that need to test their core business model against legacy regulations.
- **Disconnected from Market Creation:** The Act discusses innovation procurement but does not forcefully link it to strategic EU priorities. It does not mandate or strongly incentivise public bodies to become first buyers of strategic sustainable products, like insect-based feed for public aquaculture, which is crucial to create the initial market demand that de-risks private investment.
- **Lacking policy alignment:** The fundamental failure is that the Innovation Act and Fund operate in a **policy silo**, separate from the EU's other major strategic initiatives.
  - They are not explicitly aligned with the **Bioeconomy Strategy** and thus, miss the unique financing needs of circular bio-industries.
  - They are not integrated with the **Common Agricultural Policy (CAP)** or **Fisheries Policy (CFP)**, which could provide complementary funding and market-pull mechanisms (e.g., rewarding farmers who use sustainable feed).
  - They exist in parallel to, but do not actively contribute to, the strategic goals of **food system resilience** and a **domestic protein plan**.

> *In summary, the current framework fails because it offers generic solutions to specific problems and uses narrow, siloed criteria to evaluate systemic, cross-cutting innovations. It supports companies that fit its mold, rather than proactively shaping the mold to support the strategic sectors Europe needs for its future.*

III. THE CALL FOR POLICY ALLIGNMENT

The insect sector is a nexus where these strategies converge, and it can only scale if they are strategically synchronised.

- **Align with the Clean Industrial Deal & Net-Zero Industrial Act (NZIA):** Recognise insect production as a strategic **net-zero industry**. It decarbonises the agrifood chain by converting low-value carbon streams (waste) into high-value nutrients, directly contributing to the climate neutrality objective. The NZIA's focus on streamlining permits for strategic projects must be applied to circular bioeconomy facilities.

- **Embed within the Bioeconomy Strategy & Startup/Scaleup Initiative:** The sector is a living embodiment of the bioeconomy. Support must be channelled through venture capital instruments tailored for biotech scale-ups and by creating a "**Bio-innovation" track within the Innovation Fund that values circularity metrics alongside CO2 reduction.**
- **Integrate into a Holistic EU Protein Strategy:** This is the critical missing link. The Commission's "Vision for Food and Feed" will remain a theoretical exercise without a dedicated strategy and funding to boost domestic protein production. The insect sector must be a cornerstone of this strategy. This requires:
  - **Leveraging the CAP & CFP:** Use the CAP's rural development funds (EAFRD) to support farmers adopting insect-based feed as a sustainable practice. Use the European Maritime, Fisheries and Aquaculture Fund (EMFAF) to help the aquaculture sector transition to sustainable, circular feed ingredients.
  - **Mobilizing Cohesion & Regional Development Funds:** Direct these funds towards investments in insect production facilities in rural and cohesion regions, turning them into hubs for the circular bioeconomy and creating green jobs.

IV. POLICY AND REGULATORY RECOMENDATIONS: CREATING THE LEVEL PLAYING FIELD

The Innovation Act must create the horizontal framework conditions that allow a sector like ours to thrive.

1. **Harmonise and Simplify the Regulatory Landscape:**
   - **Implement a "One-Stop-Shop" for Permits:** For industrial-scale insect production facilities, establish a single, digital EU portal for coordinating environmental and safety permits, reducing administrative burden and uncertainty.
   - **Clarify and Harmonise Substrate Rules:** Issue clear EU-wide guidelines on the classification and safe use of various organic side-streams (e.g., former foodstuffs, agro-industrial by-products) as insect feed, ending current fragmentation.
2. **Establish an EU-Wide Regulatory Sandbox for Circular Bioeconomy:**
   - Create a dedicated sandbox where companies can test and validate the use of new, safe but currently unapproved organic waste streams under controlled conditions and with close supervision from the European Food Safety Authority (EFSA) and national authorities. This is a prime example of "mutual learning" between innovators and regulators.
3. **Boost Innovation Procurement:**
   - **Amend Public Procurement Directives:** Mandate or strongly incentivise the inclusion of "green and circular" criteria in public tenders for catering and animal feed (e.g., in public aquaculture research institutes). This would create a vital early market for insect-based products.
   - **Launch an "EU Sustainable Protein Procurement Pact":** A voluntary initiative bringing together large private and public buyers to commit to sourcing a percentage of their protein from innovative, EU-produced sustainable sources like insects.

4. Facilitate Access to Infrastructures and Talent:

- **Create an EU Map of Open-Access Pilot Facilities:** Catalogue and provide streamlined access to large-scale bio-testing facilities that insect SMEs can use for scaling up processes.
- **Promote EU-Wide Stock Option Schemes:** The proposed **28th regime for companies** should include simplified, tax-harmonised rules for employee stock ownership, making it easier for our startups and scaleups to compete for global talent.

V. FINANCIAL RECOMMENDATIONS: UNLOCKING CAPITAL FOR SCALE-UP

The current Innovation Fund is a critical tool, **but its focus on large-scale clean-tech must be adapted to support the specific needs of first-of-a-kind industrial-scale insect biorefineries.** We propose the following concrete financial measures under the Innovation Act and related initiatives:

1. Dedicated 'Bio-Innovation' Window in the Innovation Fund:

Create a specific window for industrial-scale biotechnology projects that contribute to the circular bioeconomy. Evaluation criteria should explicitly reward:

- **Carbon Removals & Avoided Emissions:** Credit for the lifecycle GHG savings from upcycling organic waste and displacing imported deforestation-linked feedstocks like soy.
- **Strategic Autonomy:** Support for projects that reduce the EU's dependency on imported protein sources.
- **De-risking First-of-a-Kind Facilities:** Accept a higher risk profile for pioneering biorefineries, blending grants with preferential loans to cover the high capital expenditure.

2. Unlocking IPR-Based Financing:

The Act should facilitate mechanisms where the sector's IP—related to proprietary insect strains, bioconversion processes, and automation—can be used as collateral. This could involve:

- Developing EU-standardised methodologies for valuing green-tech IP portfolios.
- Promoting and guaranteeing "IP-backed loans" through the European Investment Bank Group.

3. Blending Finance with Innovation Procurement:

Link financial support to offtake agreements. For instance, a project applying for Innovation Fund support could receive a "bonus" or improved terms if it can demonstrate secured purchase commitments from public or private buyers (e.g., aquaculture companies committed to using sustainable insect meal), thereby de-risking the investment.

VI. Conclusion

The European insect sector is poised to be a global leader in the blue and circular bioeconomy, directly contributing to the strategic objectives of the European Innovation Act. However, without targeted financial and regulatory support, we risk seeing European innovation and companies relocate to more supportive jurisdictions.

By implementing the measures outlined above—**adapting the Innovation Fund, unlocking IP finance, establishing regulatory sandboxes, and championing innovation procurement**—the European Commission can ensure that the Innovation Act delivers tangible results. **It will enable the EU insect sector to scale up, create green jobs, enhance our strategic autonomy, and deliver groundbreaking sustainable solutions for Europe and the world.**

We stand ready to collaborate with the Commission to provide further technical input and to be a partner in building a more innovative and competitive Europe.

Based on the above, explain how the current Innovation Act and Innovation Fund is not support the scale-up of innovative industries such as insects and thus, **it is imperative to align it with the Clean Industrial Deal, Net Zero Industrial Act, Bieconomy Strategy, Start-up and Scale-up strategy and contribute to the goals of the Vision for Agriculture and Food**, namely by integrating investment in a holistic protein stratgey, Common Agricultural, Fisheries and Regional Development policies and related funds.

IPIFF, the International Platform of Insects for Food and Feed,
Brussels, the 3rd of October 2025