

# PROTEINES FRANCE: INNOVATION ROADMAP

# Food, Pet Food, Feed and Biobased Applications

#### OUR AMBITION: SPEED UP THE PROTEIN SECTOR DEVELOPMENT

- Catalyse the development of the protein sector in France
- Create value on the French territory and contribute to tackle the French protein dependence
- Mobilise all actors according to shared development axes

### **OUR ACTIONS**

- Ease the development and public support of innovation projects (competitive and non-competitive) on the full value chain: from renewable resources production to the development of new solutions
- Facilitate investments in industrial sites that contribute to job creations and market growth
- Encourage the creation and development of start-up likely to develop breakthrough innovations
- Support communication and information related to market introduction of innovative products, in a stable regulatory framework

# **OUR MEMBERS** (February 2018)

































An association coordinated by



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### SCIENTIFIC AMBITIONS

Protéines France's scientific ambition is to better valorise proteins in numerous of applications ranging from ingredients dedicated to the nutrition and the health of humans, pets and livestock to biobased products (chemicals, materials...).

#### PROTEIN SOURCES CONSIDERED BY PROTÉINES FRANCE

Worldwide demand for protein is progressively expanding. From Proteines France's prospective, sustainable protein supply for the future can only rely on two options:

- An optimal valorisation of existing sources of proteins such as meat, fish, crops or dairy products
- The exploitation of new sources of proteins including:
  - o European crops (cereal, oleaginous and pulses), together with residues and coproducts from primary biomass processing
  - Residues from animal processing, fisheries, aquaculture and algae industries
  - New sources of protein such as insects, algae, fungi, yeast and bacteria



### MAIN INNOVATION CHALLENGES

Challenges addressed by Protéines France cover the full value chain of plant-based and new sources of proteins (insects, algae, yeast...)



- Launching breeding programs to develop the best cultivars / species / strains presenting high yields and high contents in proteins.
- Implementing agronomical / biotechnological / zootechnical practices allowing an optimal expression of the genetic potential of the cultivars / species / strains.
- Insuring a sustainable and competitive agricultural production by a comprehensive agronomical / biotechnological / zootechnical approach.
- Developing new processes to fractionate biomass resources and to extract, concentrate, purify, functionalise proteins.
- Assessing, characterising and improving the impacts of first transformation processes on techno-functional properties of proteins and forecast their behaviour in products matrix (food, pet food, feed, biobased products).
- Assessing, characterising and improving the organoleptic quality of new proteins for food, pet food and feed applications.
- Insuring the nutritional value and digestibility of proteins and exploring their allergenic potential.
- Formulating new products in consistency with consumers / users expectations and insuring their industrialisation.

# **INNOVATIVE PROJETS SUPPORTED**

Protéines France will take full advantage of the successes of earlier and ongoing R&D as well as small-scale industrial operations and will both support non-competitive and competitive projects.

#### Non-competitive projects objectives Competitive projects objectives Serve the interest of the whole value chain by Develop and industrialise new processes, addressing the development of new tools, products or services methodologies, approaches, practices Support the development of technologies having Promote French international competitiveness reached a TRL 4 and are supposed to come onto and innovation capacity in the field of proteins the market at a short or medium term sciences, technologies and applications Serve the interest of one or a limited number of Assist teams of public and private researchers, to jumpstart high-impact potential research activities of strategic relevance for the French Proteins for future ambitions