

## FOODDRINKEUROPE'S VIEWS ON HORIZON EUROPE

### How Research and Innovation can help tackle societal challenges and increase the competitiveness of the European Food and Drink industry.

#### 1. Introduction.

The food and drink industry is the largest manufacturing sector in the European Union, creating more than 4.6 million of jobs directly, with an annual turnover of over €1 trillion and more than €230 billion of added value. It transforms 72% of the agricultural raw materials produced in Europe, food processing being a key component of the food system. The sector comprises more than 294.000 companies, 99% of which are small and medium enterprises (SMEs). It generates more than €100 billion in wages and salaries across Europe and it invests €38.5 billion in research and development<sup>1</sup>. That said, as stated in the Food2030 strategy, the food sector will encounter considerable challenges in the following years, in particular related to environmental sustainability, public health, and social behaviour and lifestyles<sup>2</sup>. Research and innovation (R&I) is crucial in increasing European competitiveness, in boosting the creation of jobs and in overcoming the societal challenges as outlined in the Sustainable Development Goals (SDGs) of the United Nations (UN). Efficient, flexible and customised food processing is essential in improving the competitiveness of the food sector and meeting the diverse needs of consumers. FoodDrinkEurope welcomes the ninth Framework Programme for R&I -Horizon Europe- and would like to share our views on how this investment could reach its fullest potential.

#### 2. General statements

Horizon Europe builds on the success of previous Framework Programmes for R&I. To strengthen this programme, we call on the European Institutions to:

- Promote the competitiveness of European industries of all sizes, including medium and small enterprises (SMEs).
- Significantly increase public spending in R&I, particularly in areas relevant to the food and drink sector.
- Keep the right balance across the whole R&I chain, from the generation of new knowledge to the exploitation and transfer of the solutions available and its dissemination. FoodDrinkEurope welcomes the three-pillar structure, which reflects well the whole innovation process, combining projects with low and high Technology Readiness Levels (TRL), ranging from novel ideas and breakthrough concepts to incremental solutions with rapid scale-up potential.
- Consider a 'food-themed mission' to continue advancing towards Food Safety and Nutrition Security, mobilising all actors and investors, at different levels and from different disciplines, to make real progress and help consumers attain safe, affordable, healthy and sustainable diets.
- Design new public-private collaborative models to attract and leverage investments and translate research more effectively into innovation and growth, making it easier for the public and private sectors to work together in delivering innovation which is fundamental to accelerate the generation of results and impact.

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<sup>1</sup> FoodDrinkEurope (2019). Let's step up to the plate: Europe's food and drink industry priorities for the EU institutions 2019-2024.

<sup>2</sup> European Union (2016). European research and innovation: For food and nutrition security.

- Engage citizens in R&I processes, to tackle societal challenges. Citizen science and societal engagement will help deliver more relevant and acceptable outcomes and spread awareness on the necessary changes, particularly those that affect lifestyles and behaviour.
- Ensure the role and the participation of industry on the collaborative setting of the agenda, topics, education and information of the citizens.
- Simplify further the administrative requirements of the participants of the programme to facilitate the interaction of big, medium and small enterprises, and even start-ups. Reduce the waiting time for proposals from the submission to the acceptance of the funding.
- Ensure a stable and coherent EU innovation policy. Removing barriers to innovation is also essential to boost the global competitiveness of European industries and to create the right conditions for innovation to flourish.
- Foster a balanced approach between Open Science and Open innovation with the Intellectual Property Policies and Good Industry Practices.

### **3. An efficient programme**

The last of the EU R&I Framework programme, Horizon 2020, gave relevance to a multi-actor, multi-sectorial, multi-disciplinary perspective. The three-pillar structure aimed to follow this strategy and had a strong focus on tackling societal challenges through excellence on scientific knowledge and industrial leadership. The food industry welcomed this approach, and, based on the experience gathered during the programme, we would like to suggest some areas for further improvements:

- Encourage the bottom-up and initial involvement of final users, such as business representatives of the Agri-food sector, in the setting of the strategy, and ensuring the inclusion of industrial partners. This will increase the impact of the acquired knowledge and facilitate the scalability of the R&I developed.
- Facilitate the administrative procedures for applicants and reduce the waiting times for the outcome of evaluations, maintaining the two-stage evaluation procedure.
- Balance TRL levels, while maintaining a very clear impact measurement design and defined Key Performance Indicators (KPIs) through the process, following the outcomes, outputs and long-term impact from the design of the topics.
- In relevant cases, it may be preferable to have several projects approved in parallel under the same call for proposals instead of a larger proposal which includes the overall budget. It is necessary to promote the best plural solutions, not just the single opportunities.
- Increase the efforts on dissemination, transfer, training, replication, exploitation of the already available knowledge with specific focus to other relevant cross-disciplinary knowledge, education and impact on the final business users, stakeholders, consumers and citizens.
- Align further with EU policies in the cases where there is a direct application or where R&I can provide evidence in policy-making.
- Encourage transnational collaborations within Europe and also with third countries, in order to facilitate the integration of global actors in the strategy, from the networking aspects but also at the multinational business-oriented outcome.
- Maximise the synergies with other clusters e.g. of the pillar II (health, culture, civil security, digital industry, and climate, energy and mobility) in a multi-resource, oriented strategy.

- In the specific area of food systems, a multi-actor, multi-level, multi-disciplinary approach is preferable, following the Food2030 strategy. Food systems should be central to understand the complexity of the food sector, food processors included, and projects should be driven by demand from the food systems main actors: the transformation of the food system will not work without the modernisation of the food processing. Consumer-oriented, processor-aligned, producer-approved and delivered, taking into account the new technologies for the modernisation of the food industry.

#### 4. Missions

The adoption of a mission-oriented framework is considered under Horizon Europe. This is a unique opportunity to bring stakeholders and investors from the food sector together. A food system-themed mission would help to realise the Food2030 priorities, make real progress in the societal challenges and meet the UN SDGs. This mission should also incorporate all stakeholders in the food system, including food processors and consumers from the beginning, considering:

- A Multi-level, multi-actor, multi-disciplinary approach to missions. Its focus should not be limited to production, but include processing, logistics, packaging and consumers.
- Inclusion of a number of significant private sector experts on the mission boards – 50% (end users).
- Mission targets and goals must be clearly measured over a timeline and in terms of the return of investment with defined KPIs. Considering return as value, whether it will be knowledge, products, services or dissemination.
- Balance the regular actions in the clusters and the missions, in terms of budget, resources, topics, scope, etc.
- Review the implementation of the missions and suggest corrective measures if necessary.

#### 5. Public-private partnerships

Public-private partnerships have proven to be one of the best instruments to attract investment and foster innovation at European level, bringing together industry (including SMEs) with different stakeholders in a pre-competitive R&I context. The existing public-private partnership on bio-economy, the Bio-Based Industry consortium, has not met all the challenges and stakeholders relevant in the food area. Therefore, new models are needed to create opportunities for the overall food sector in order for it to have its own space to overcome the urgent challenges it faces<sup>3</sup>. This could be summarised as follows:

- The PPPs should also be affordable for SMEs to allow for their participation. The current platforms have already started incorporating this approach, but further improvements could be achieved<sup>4</sup>.

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<sup>3</sup> ETP Food for Life (2018). Transforming the EU Agri-Food Sector. Joint declaration by the ETP Food For Life, FoodDrinkEurope, EIT Food, FoodNexus, FoodForce, and the European Federation of Food Science and Technology (EFFOST) and supported by important network such as the National Food Technology Platforms NFTPps,

<sup>4</sup> ETP Food for Life (2017). Making Research and Innovation work for SMEs in the Food and Drink Sector. Joint chapter of the European Technology Platform Food for Life, the European Collaboration

- Alignment of the actions undertaken by PPPs with other initiatives such as the EIT Food and Missions.
- A PPP in the area of food/bioeconomy should include all the stakeholders that are related to the Food Systems approach. The bio-economy strategy is somewhat more of a broader philosophy which goes beyond bio-based industries and includes all possible partners of the food value chain from food production to consumer. The bio-economy strategy should include agri-food and food processing, and have the value chain at its centre.

## 6. Topics

Horizon Europe includes food as a theme in different parts of the programme of cluster VI, which also covers a sub-cluster in 'food systems'. This is welcomed by the food industry. In order to help further defining the topics to be covered under this cluster, we would like to suggest some topics of interest, such as placing food processor and consumer at the centre of the innovation strategy, and including social and cultural aspects, lifestyles and insights on the drivers of innovation, technology, consumption.

Healthy and balanced diets, understanding the impact of nutrition on the prevention of communicable diseases and giving special attention to vulnerable groups and special nutrient requirements.

Food safety including traceability, and bringing new foods into the market, increasing consumer trust in food processing.

Alternative and sustainable food sources, which increase biodiversity but also ensure food security, whilst maintaining high quality, quantities, standards and taste.

A true circular economy in food systems, from production, to retailer and consumers and back.

Modernisation of the agri-food industry through digitalisation, including robotics, internet of things, data gathering, sensors and artificial intelligence, ensuring flexible, customised, resource efficient processing.

Energy-efficient infrastructures and processes responding to the current environmental challenges.

Integrate the concepts of Circular- and Bioeconomy at a small scale ("regional implementation"). Both latter topics could offer perspective for the rural economy.

Sustainable, efficient and affordable packaging, including new developments in recycling and biodegradability, facilitating a no plastic world.

Empowering local networks to disseminate new knowledge and new possibilities for low cost / low scale technologies to food producers, specially SMEs, adding values to territory and communities.



Generating new methods and tools to improve the use and transfer of the already available knowledge.

Please refer to the Strategic Research and Innovation Agenda<sup>5</sup> and the Implementation Action Plan<sup>6</sup> of the ETP Food for Life as sources for additional R&I actions.

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<sup>5</sup> ETP Food for Life (2016). Strategic Research and Innovation Agenda (SRIA).

<sup>6</sup> ETP Food for Life (2018). Implementation Action Plan (IAP).