

Civil Dialogue Group  
Arable crops, cereals, oilseeds,  
protein crops  
25 November 2019

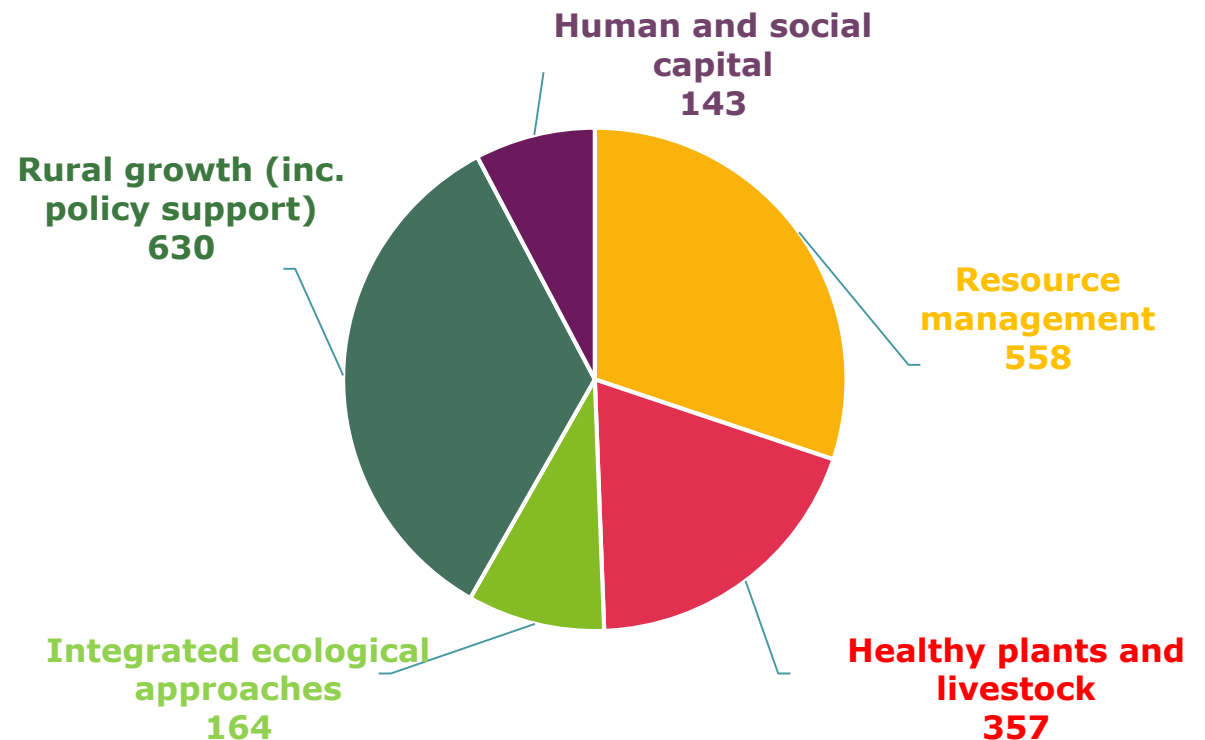
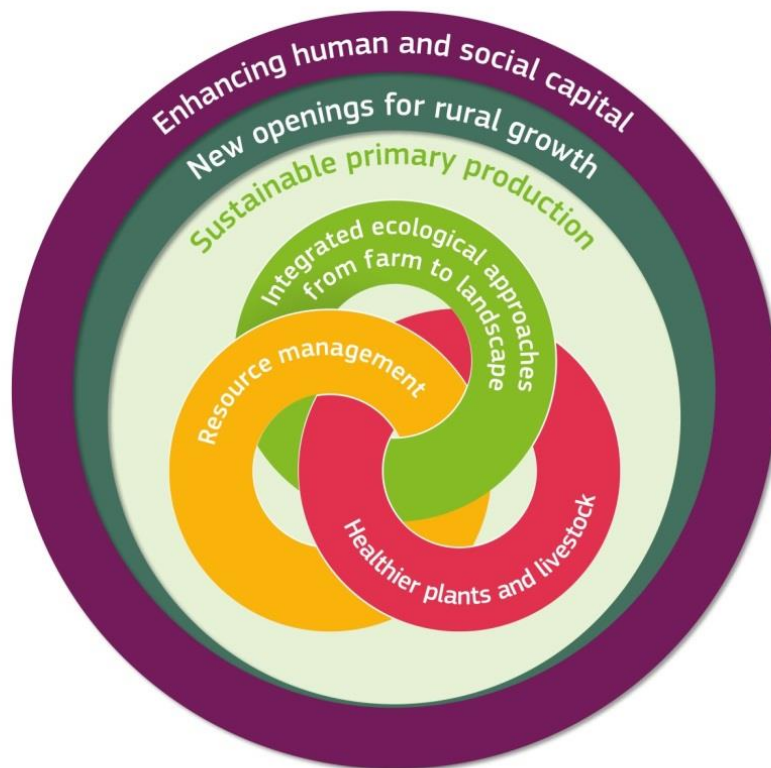
# Protein crops research under Horizon Europe



Susana Gaona Sáez  
Programme Officer, Research and Innovation Unit  
DG Agriculture and Rural Development

# Agri-Research Priorities

## Distribution of budget over priorities (EUR million - 2014-2020)



**315 projects – 1,9 M€ under Horizon 2020**

# R&I on protein crops 2014-2020



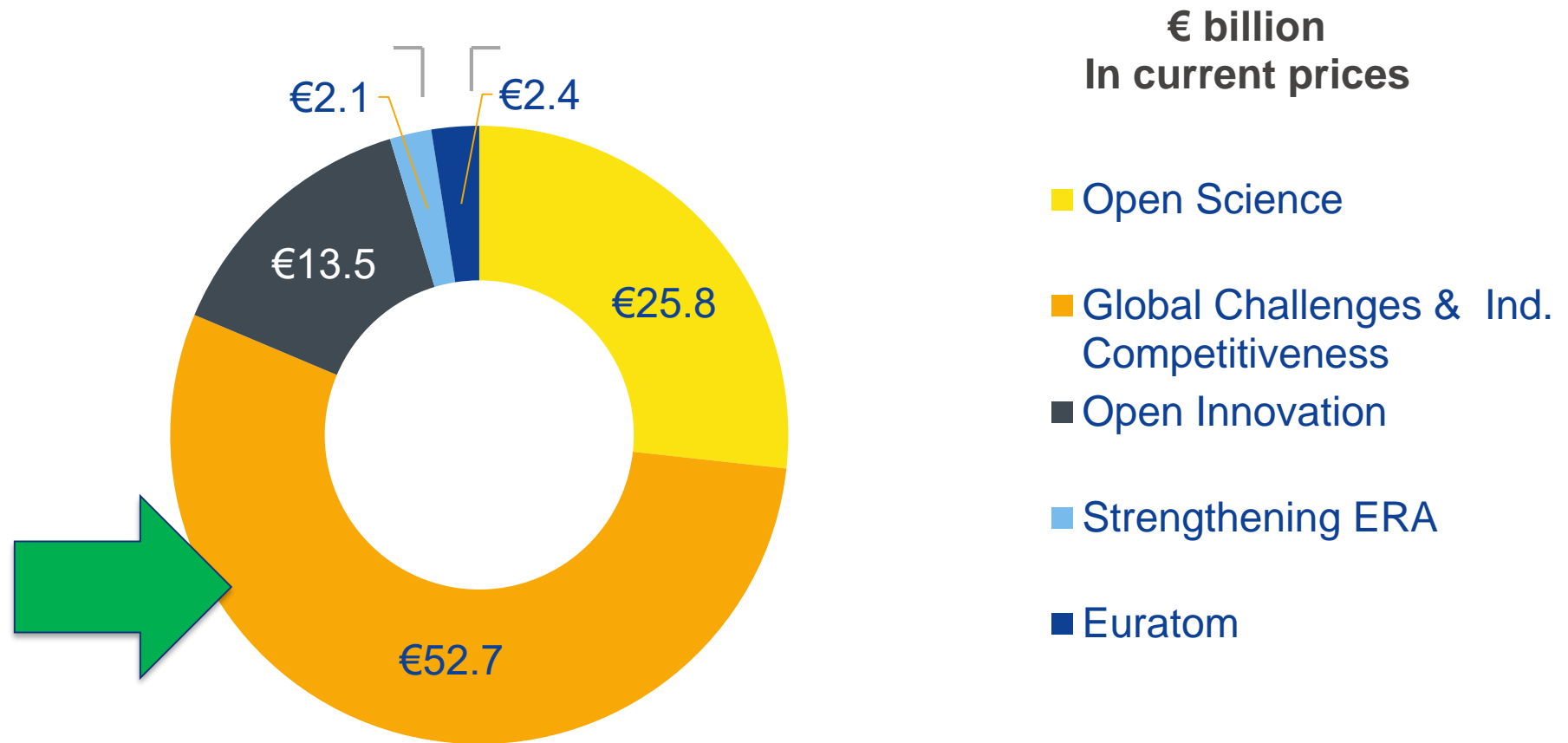




# R&I on protein crops under Horizon Europe (2021-2027)



# Horizon Europe, the biggest EU research and innovation programme ever: proposed budget €100 billion\*



\* This envelope includes EUR 3.5 billion allocated under the InvestEU Fund.

# Horizon Europe (2021-2027)

Pillar 2:  
EUR 52,7bn out of a total of  
€ 100bn  
(implemented through calls,  
missions and partnerships)

## Cluster 6

**EUR 10 bn proposed for R&I on food,  
bioeconomy, natural resources, agriculture  
and the environment**





## Proteins in the legal basis for Horizon Europe

Intervention Area Agriculture, Forestry and Rural Areas (IA3):

***“Support to EU plant protein production for food, feed and environmental services”***



## Report “Development of plant proteins in the EU”

***R&I is a key driver for improving the competitiveness of EU-grown protein plants:***

- ❖ *close gaps in breeding, eco-friendly crop protection, sustainable soil management, supply chains*
- ❖ *EIP-AGRI to implement innovation at farm level and in supply chains, gather and share best practices*





# Challenges: six cross-cutting long-term impacts



Environmental  
Observation

Biodiversity  
and Natural Resources

Agriculture, Forestry  
and Rural Areas

Seas, Oceans  
and Inland Waters

Food Systems

Bio-based innovation  
systems in the EU  
Bioeconomy

Circular Systems



## Six targeted impacts for Cluster 6

- Reduction of **GHG emissions** and **adaptation to climate change**
- Halt of **biodiversity decline** and restoration of ecosystems
- **Sustainable and circular management and use of natural resources**; healthy **soils** and clean water and air; attractive jobs, enhanced value creation and competitiveness
- Sustainable primary production, food and bio-based systems which are **inclusive, safe and healthy**; food and nutrition security for all
- **Better understanding of behavioural, socio-economic and demographic changes** for balanced development of vibrant **rural**, and peri-urban **areas**
- Environmental observations, evidence base and tools for **governance models** enabling sustainability



# Horizon Europe – Where are we?





## How are proteins and legumes considered in the “Orientations document”?

*“ R&I results will contribute, in particular, to the **development and strengthening of value chains** of high quality eco-innovative products that better respond to new needs and opportunities, in particular the growing consumer demand for healthier and sustainable diets, improve income of producers and minimize impact on climate and environment. Particular attention will be given to fruits and vegetables, **EU-grown plant proteins** and the organic sector.”*





## How are proteins and legumes considered in the “Orientations document”?

*“R&I solutions will be developed to build climate smart and environmentally sustainable food systems adaptive to climate change, which conserve natural resources, and implement resource-efficient circular economy principles, while reducing environmental footprint. A range of approaches to enhance diversity, sustainability and food quality, and facilitate production, processing and consumption (e.g. **plant-based proteins**, algae, seafood and insects based proteins) will be investigated. ”*







## How are proteins and legumes considered in the “Orientations document”?

*‘A range of approaches will be developed to enhance resource use efficiency in agriculture and forestry, in particular water, find alternatives to scarce resources and decrease the dependency on critical raw materials (together with IA5 and Clusters 4 and 5). A better understanding of the nutrient flows and the role of biodiversity as well as a **more effective integration of legume crops in farming systems** will allow to optimise nutrient management and reduce pesticide use on-farms and across landscapes, thereby also decreasing pollution of water, soil and air from primary production and contributing to the zero-pollution ambition of the Green Deal.’*



## How are proteins and legumes considered in the “Orientations document”?

*“An overarching partnership on “Safe and sustainable food systems for people, planet and climate” will provide a platform to co-create the healthy, sustainable and inclusive food systems of tomorrow that accelerate the transition towards a carbon neutral Europe by 2050 and contribute to the new “Farm to Fork vision” and action plan under the European Green Deal. This partnership will focus on (...) supporting the **shift to sustainable and healthy diets and alternative proteins** (...).”*



How are proteins and legumes considered in the  
“Orientations document”?

***Orientations document currently being  
revised following the open consultation to  
umbrella organisations  
(closed 17 November)***



## Horizon Europe Cluster 6 – Partnerships candidates

- ☐ **Towards more sustainable farming: agro-ecology living labs and research infrastructures**
- ☐ European Partnership on Animals and Health
- ☐ Environmental Observations for a sustainable EU agriculture (Agriculture of data)
- ☐ Rescuing biodiversity to safeguard life on Earth
- ☐ A climate neutral, sustainable and productive Blue Economy
- ☐ **Safe and Sustainable Food Systems for People, Planet & Climate**
- ☐ European Partnership for a Circular bio-based Europe: sustainable innovation for new local value from waste and biomass
- ☐ Water4All: Water security for the planet

**Adaptation to climate  
change, including societal  
transformation**



**Cancer**

**Healthy  
oceans,  
seas,  
coastal and  
inland  
waters**



## **5 Mission areas**

**Climate-neutral  
and smart cities**



**Soil  
health  
and food**





## Protein crops in Horizon Europe

- *Agronomic aspects (markets, supply chains, cropping systems, breeding...)*
- *Environmental benefits and ecosystem services*
- *Healthier and more sustainable diets (breeding, alternative protein sources, processing technologies...)*

***Ongoing identification of key R&I areas leading to first work programme of Horizon Europe***

***Your comments and ideas are welcome!***

*Susana.Gaona-Saez@ec.europa.eu*

# Steps towards Horizon Europe Strategic Plan and the Work Programme





## To know more...

### **Strategic approach to EU's Agricultural Research and Innovation:**

<https://ec.europa.eu/programmes/horizon2020/en/news/final-paper-strategic-approach-eu-agricultural-research-and-innovation>

### **Horizon Europe:**

[https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme\\_en](https://ec.europa.eu/info/horizon-europe-next-research-and-innovation-framework-programme_en)

### **Development of plant proteins in the EU**

<https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52018DC0757>



# Thank You!

#InvestEUresearch  
#AgriResearchEU  
#H2020SC2 #HorizonEU