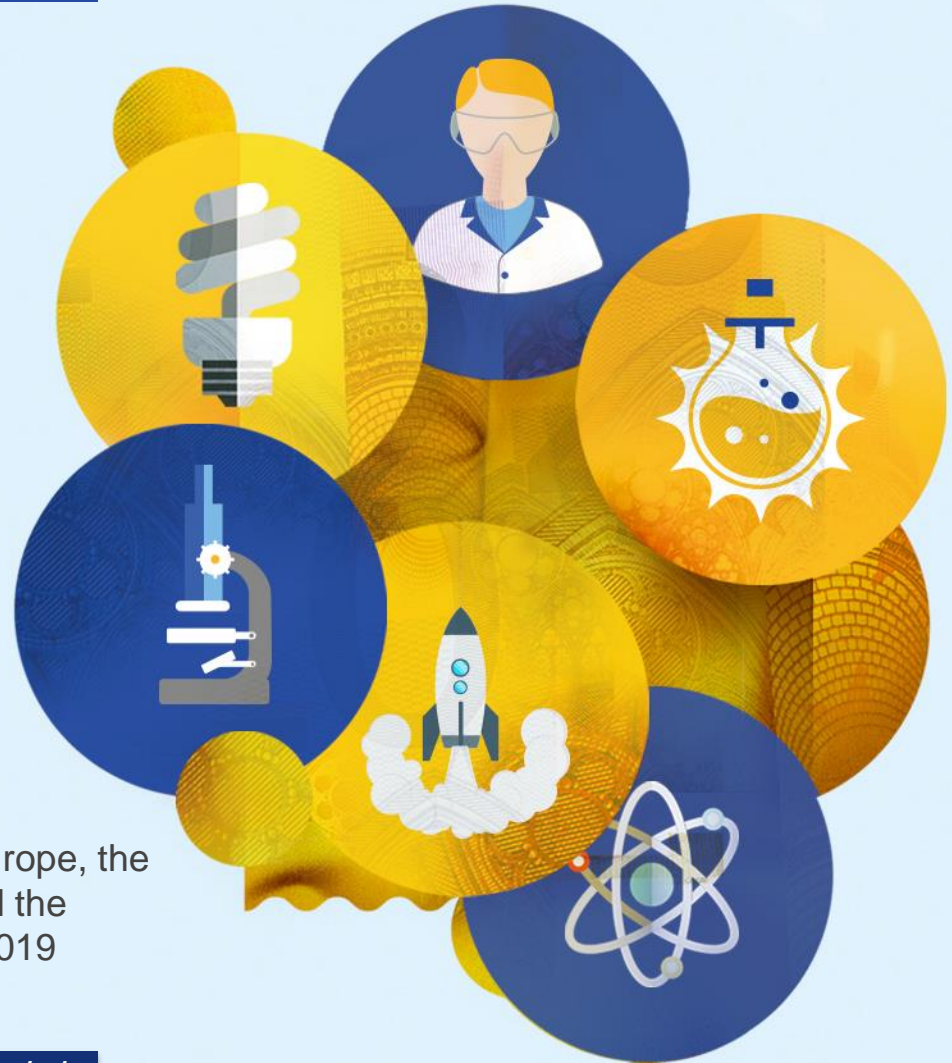


# Horizon Europe

THE NEXT EU RESEARCH & INNOVATION  
INVESTMENT PROGRAMME (2021 – 2027)

#HorizonEU

Based on the Commission Proposal for Horizon Europe, the common understanding between co-legislators and the Partial General Approach, both approved in April 2019





# Horizon Europe

The ambitious EU research and innovation framework programme (2021-2027)



**to strengthen the EU's scientific and technological bases and the European Research Area (ERA)**



**to boost Europe's innovation capacity, competitiveness and jobs**



**to deliver on citizens' priorities and sustain our socio-economic model and values**

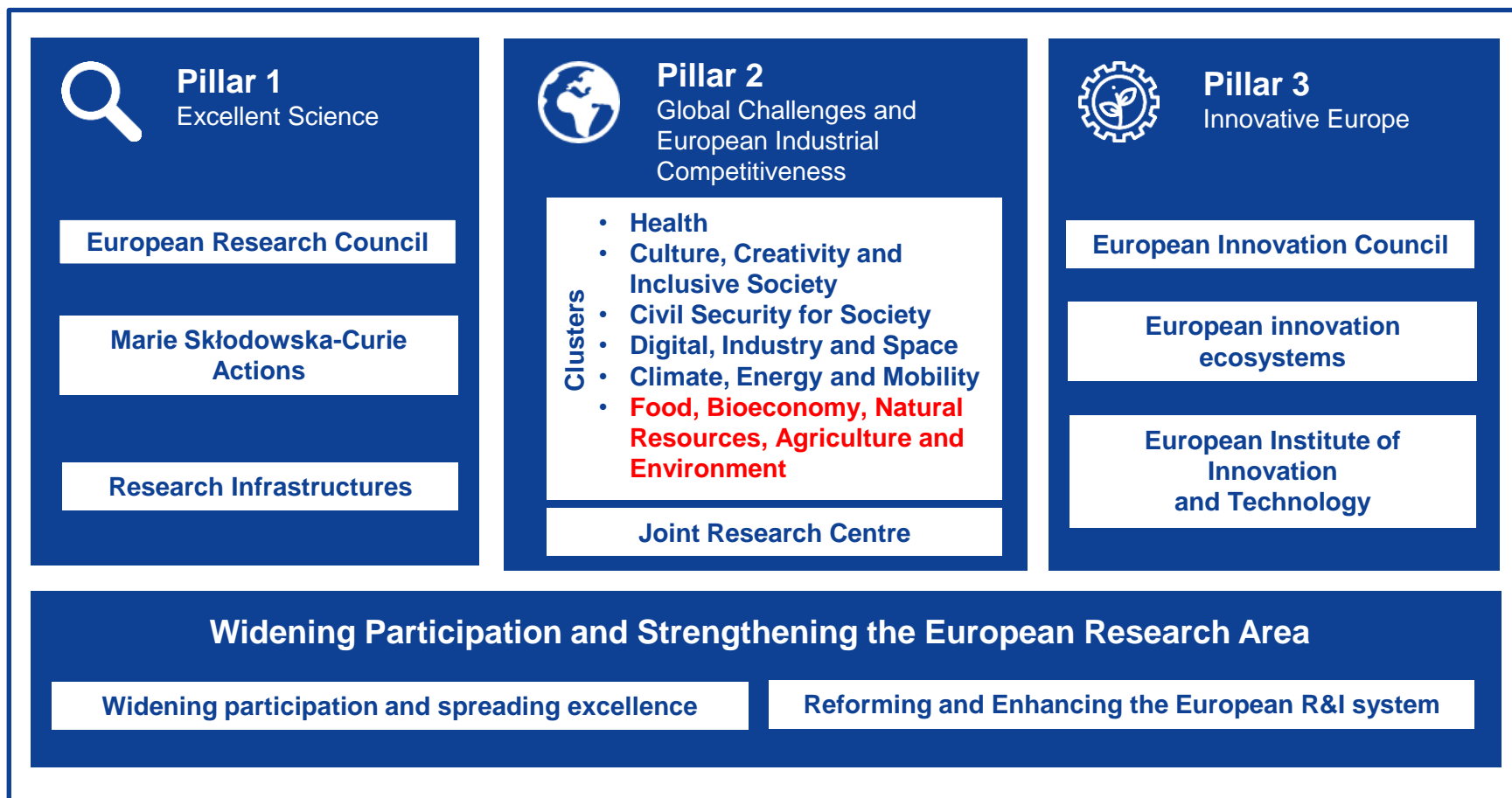
The Commission proposes a budget of € 100 billion for Horizon Europe.

# European Parliament and Council reached a common understanding on Horizon Europe on 19 March 2019

- Budget, synergies and third country association still pending, depending on the overall MFF negotiations
- Commission has started preparations for the implementation of Horizon Europe



# Horizon Europe: Preliminary structure



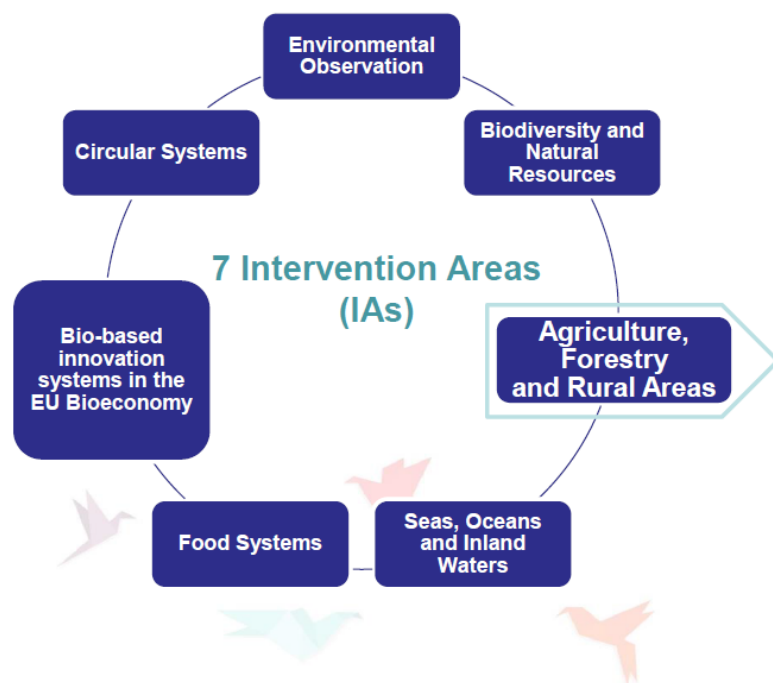
# Clusters in 'Global Challenges and Industrial Competitiveness'

Clusters	Areas of intervention	
<b>Health</b>	<ul style="list-style-type: none"> <li>• Health throughout the life course</li> <li>• Non-communicable and rare diseases</li> <li>• Tools, technologies and digital solutions for health and care, including personalised medicine</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental and social health determinants</li> <li>• Infectious diseases, including poverty-related and neglected disease</li> <li>• Health care systems</li> </ul>
<b>Culture, creativity and inclusive society</b>	<ul style="list-style-type: none"> <li>• Democracy and Governance</li> <li>• Social and economic transformations</li> </ul>	<ul style="list-style-type: none"> <li>• Culture, cultural heritage and creativity</li> </ul>
<b>Civil security for society</b>	<ul style="list-style-type: none"> <li>• Disaster-resilient societies</li> <li>• Protection and Security</li> </ul>	<ul style="list-style-type: none"> <li>• Cybersecurity</li> </ul>
<b>Digital, Industry and space</b>	<ul style="list-style-type: none"> <li>• Manufacturing technologies</li> <li>• Advanced materials</li> <li>• Next generation internet</li> <li>• Circular industries</li> <li>• Space, including Earth Observation</li> <li>• Emerging enabling technologies</li> </ul>	<ul style="list-style-type: none"> <li>• Key digital technologies, including quantum technologies</li> <li>• Artificial Intelligence and robotics</li> <li>• Advanced computing and Big Data</li> <li>• Low-carbon and clean industry</li> <li>• Emerging enabling technologies</li> </ul>
<b>Climate, Energy and Mobility</b>	<ul style="list-style-type: none"> <li>• Climate science and solutions</li> <li>• Energy systems and grids</li> <li>• Communities and cities</li> <li>• Industrial competitiveness in transport</li> <li>• Smart mobility</li> </ul>	<ul style="list-style-type: none"> <li>• Energy supply</li> <li>• Buildings and industrial facilities in energy transition</li> <li>• Clean, safe and accessible transport and mobility</li> <li>• Energy storage</li> </ul>
<b>Food, bioeconomy, natural resources, agriculture and environment</b>	<ul style="list-style-type: none"> <li>• Environmental observation</li> <li>• Agriculture, forestry and rural areas</li> <li>• Circular systems</li> <li>• Food systems</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity and natural resources</li> <li>• Seas, oceans and inland waters</li> <li>• Bio-based innovation systems in the EU Bioeconomy</li> </ul>

# Cluster 6 .- Areas of intervention

## Cluster 6 Food, Bioeconomy, Natural Resources, Agriculture and Environment

### What is in it?



- Sustainable management and efficient use of natural resources
- Climate mitigation and adaptation
- Plant health
- Animal health and welfare
- Use and delivery of ecosystem services
- Sustainable forest management
- EU plant protein production
- Sustainable land use, rural development and territorial linkages
- Digital innovations
- AKIS; advice, building skills, participatory approaches and information sharing
- International partnerships for sustainable agriculture for food and nutrition security

Source: Kerstin Rosenow – DG AGRI, SC2 Infoday 4th July 2019

# Lessons Learned

## from Horizon 2020 Interim Evaluation

# Key Novelties

## in Horizon Europe



Support breakthrough innovation



European Innovation Council



Create more impact through mission-orientation and citizens' involvement



R&I Missions



Strengthen international cooperation



Extended association possibilities



Reinforce openness



Open science policy



Rationalise the funding landscape



New approach to Partnerships



Encourage participation



Spreading Excellence



# Horizon Europe – Mission areas

Adaptation to climate change, including societal transformation



Healthy oceans, seas, coastal and inland waters



**Mission areas**



Cancer

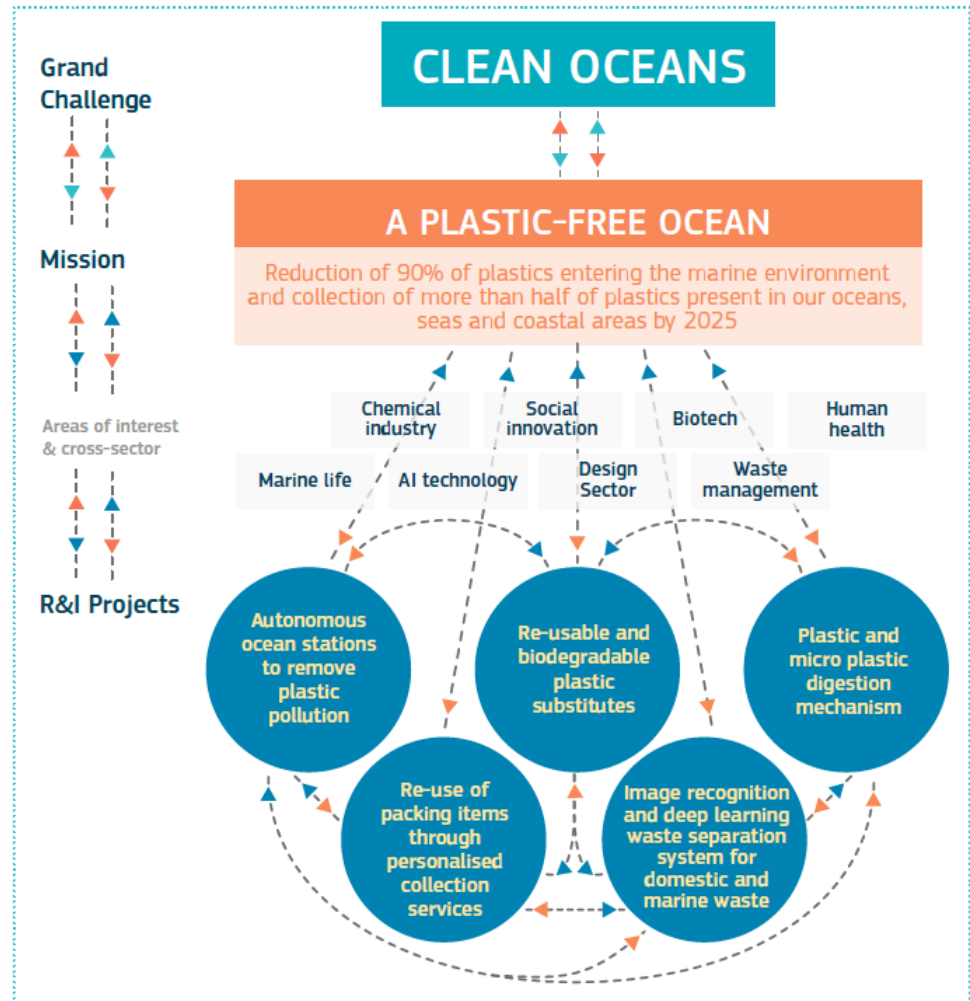
Climate-neutral and smart cities



Soil health and food



# Horizon Europe – Mission areas



A problem-solving approach to fuel innovation-led growth by Mariana MAZZUCATO  
[https://ec.europa.eu/info/sites/info/files/mazzucato\\_report\\_2018.pdf](https://ec.europa.eu/info/sites/info/files/mazzucato_report_2018.pdf)

# Horizon Europe – Mission areas

## Leaving space for new approaches: R&I Missions

Mission area: Soil Health and Food



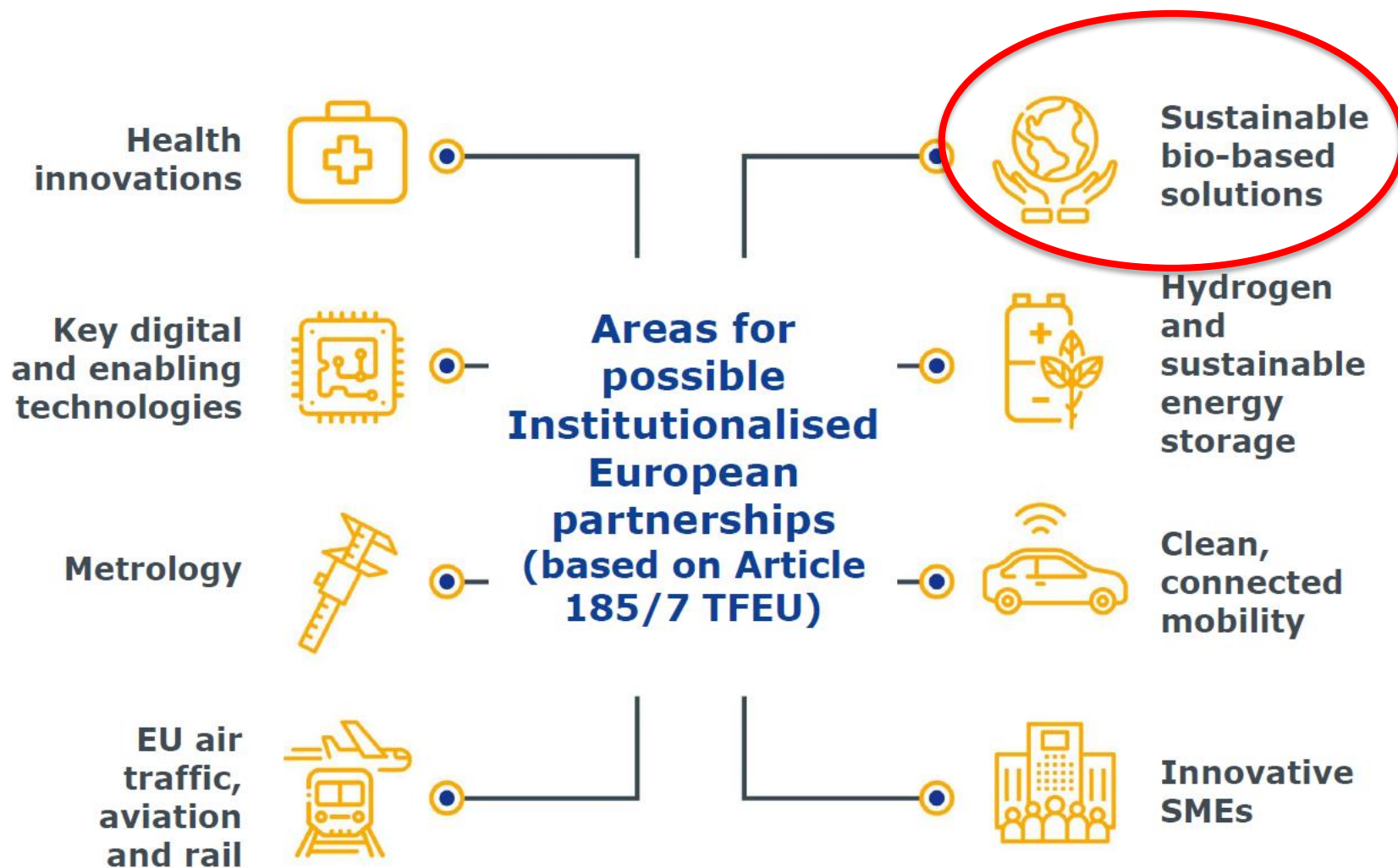
### R&I Missions

**Connecting to citizens:** Missions will relate EU's research and innovation to society and citizens' needs, with strong visibility and impact

A mission will consist of a portfolio of actions intended to achieve a **bold and inspirational as well as measurable goal within a set timeframe**, with impact for science and technology, society and citizens that goes beyond individual actions.

Source: Kerstin Rosenow – DG AGRI, SC2 Infoday 4th July 2019

# Horizon Europe - New approach to Partnerships



# Horizon Europe - New approach to Partnerships

## Encouraging synergies: Partnerships - proposed areas

New generation of objective-driven and more ambitious partnerships with MS, industry and others in support of agreed EU policy objectives:



- ❑ 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)

- ❑ Others related to biodiversity, Blue Economy, food systems, circular bio-based sector, water



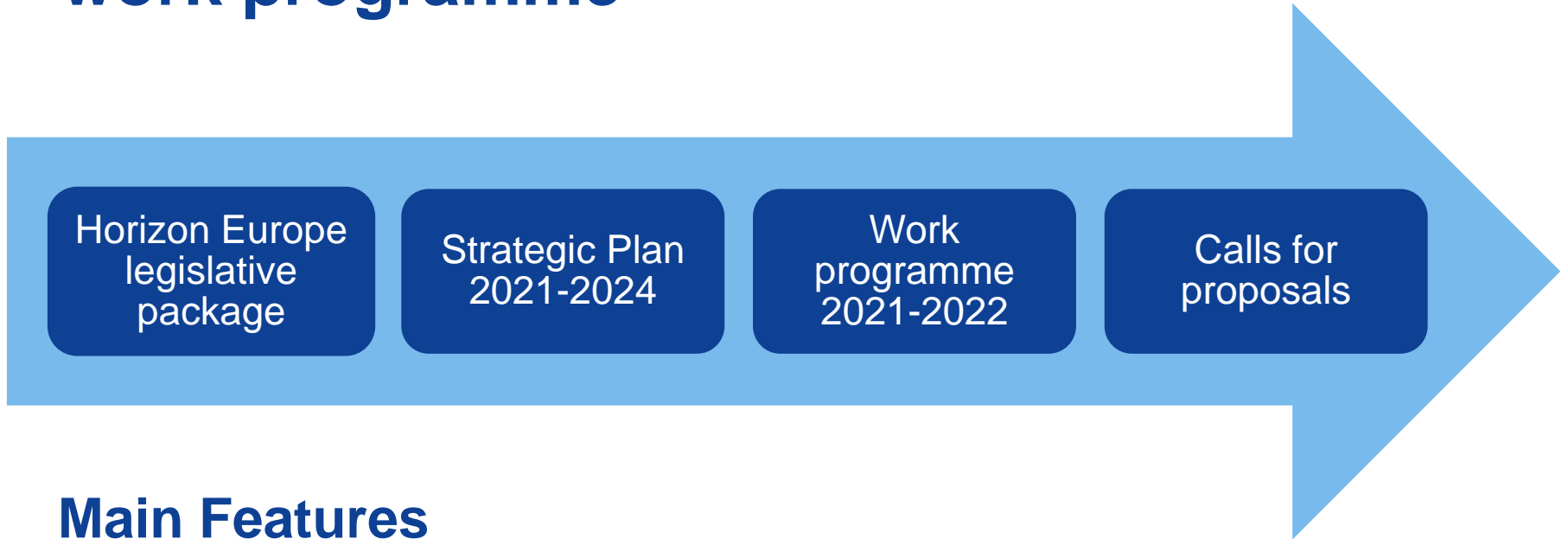
Source: Kerstin Rosenow – DG AGRI, SC2 Infoday 4th July 2019



European  
Commission

Agriculture and  
Rural Development

# Strategic plan gives direction to the work programme



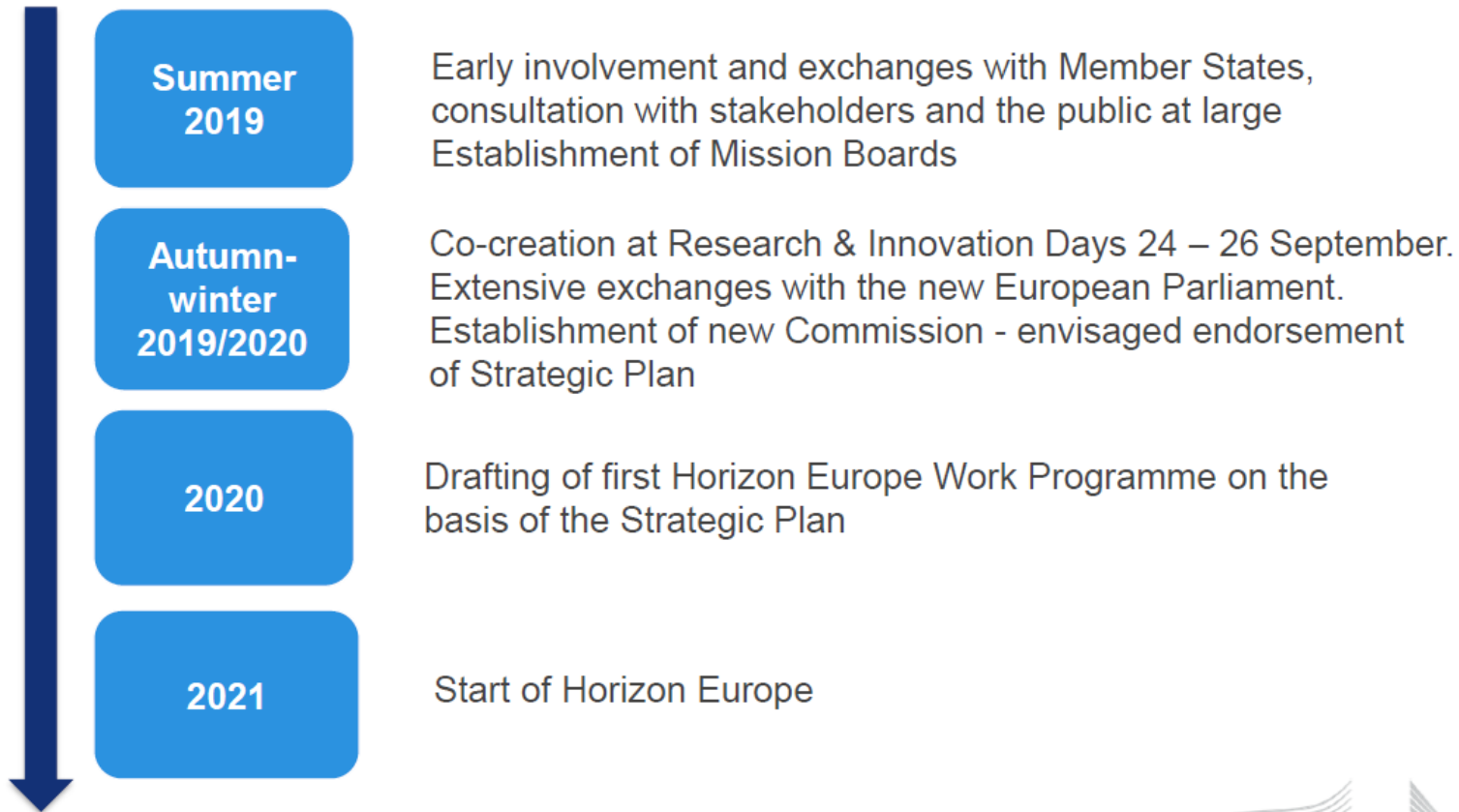
## Main Features

Early involvement and extensive exchanges with Member States

Extensive exchanges with the European Parliament

Consultations with stakeholders and public at large

# Steps towards the first Horizon Europe work programme



# Thank you!

**#InvestEUresearch**  
**#HorizonEU**

[https://ec.europa.eu/info/designing-next-research-and-innovation-framework-programme/what-shapes-next-framework-programme\\_en?pk\\_campaign=rtd\\_news](https://ec.europa.eu/info/designing-next-research-and-innovation-framework-programme/what-shapes-next-framework-programme_en?pk_campaign=rtd_news)

**#H2020SC2**

[www.ec.europa.eu/research/bioeconomy](http://www.ec.europa.eu/research/bioeconomy)

[www.ec.europa.eu/agriculture/research-innovation\\_en](http://www.ec.europa.eu/agriculture/research-innovation_en)

Participant Portal

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>