



EUROPEAN UNION

# HORIZON EUROPE

#HorizonEU

THE EU RESEARCH & INNOVATION  
PROGRAMME  
2021 - 2027

## HORIZON EUROPE CLUSTER 6

speaker: Patrick De Molder, NCP Flanders & Enterprise Europe Network Flanders

NCP Flanders

**fwo** Fonds Wetenschappelijk Onderzoek  
Vlaanderen  
Opening new horizons

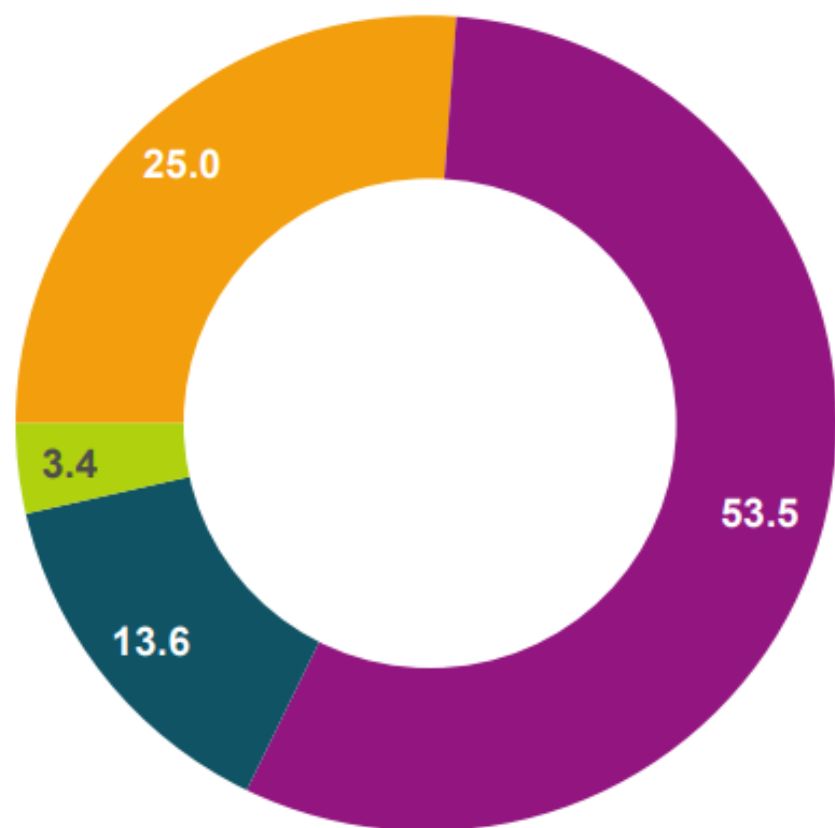
**VLAIO** Vlaanderen  
is ondernemen

# Overview

- Cluster 6 (Pillar II)
- European Partnerships (Pillar II)
- European Institute of Technology and Innovation – EIT (Pillar III)
- European Innovation Council - EIC (Pillar III)

# Horizon Europe Budget: €95.5 billion (2021-2027)

(including €5.4 billion from NGEU – Next Generation Europe – programme of EU for Recovery from COVID-19 crisis)



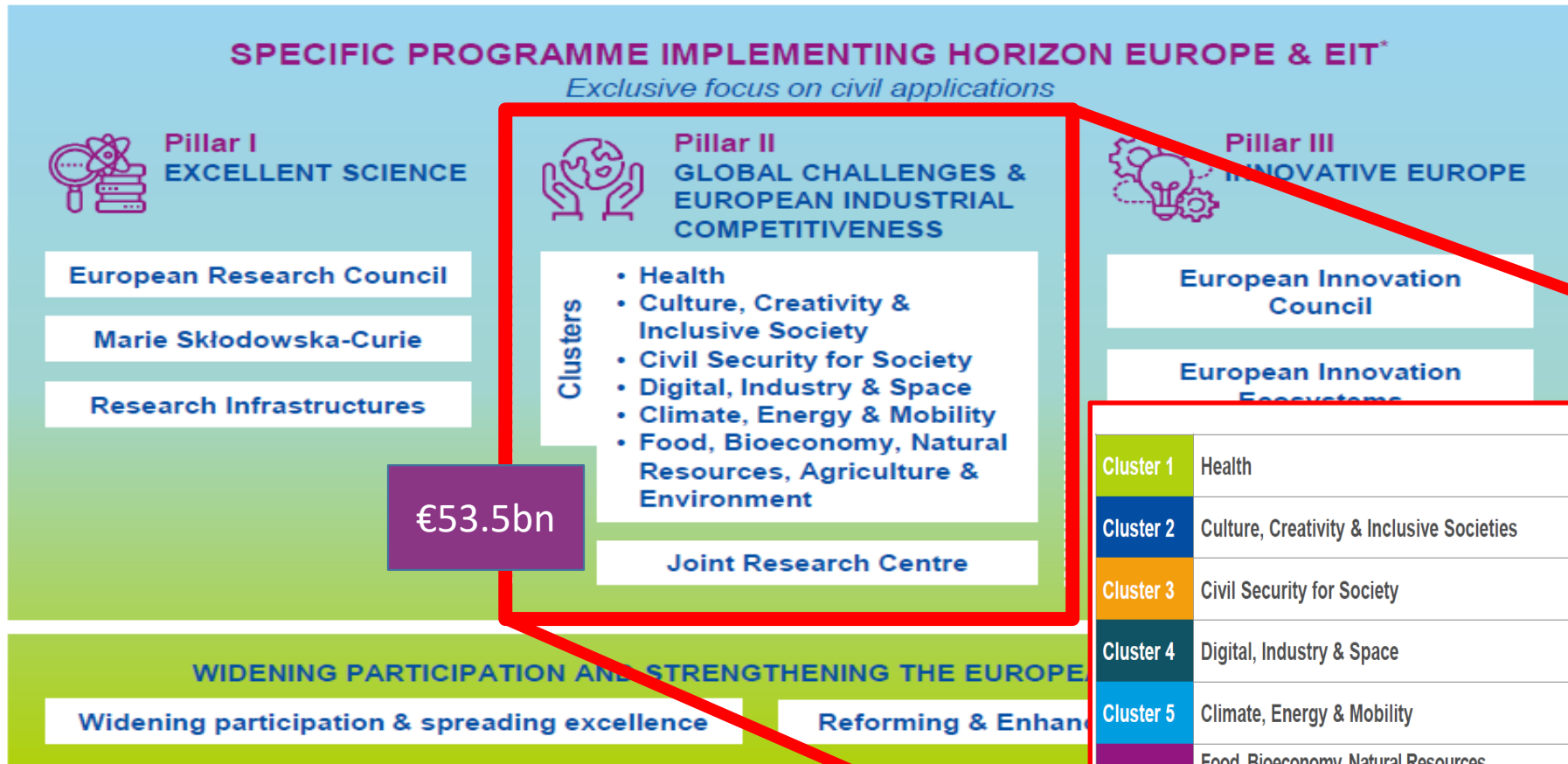
## Political agreement December 2020

*€ billion in current prices*

- Excellent Science
- Global challenges and European ind. comp.
- Innovative Europe
- Widening Part and ERA

# Pillar II – Global challenges & industrial competitiveness

Budget 2021 - 2027

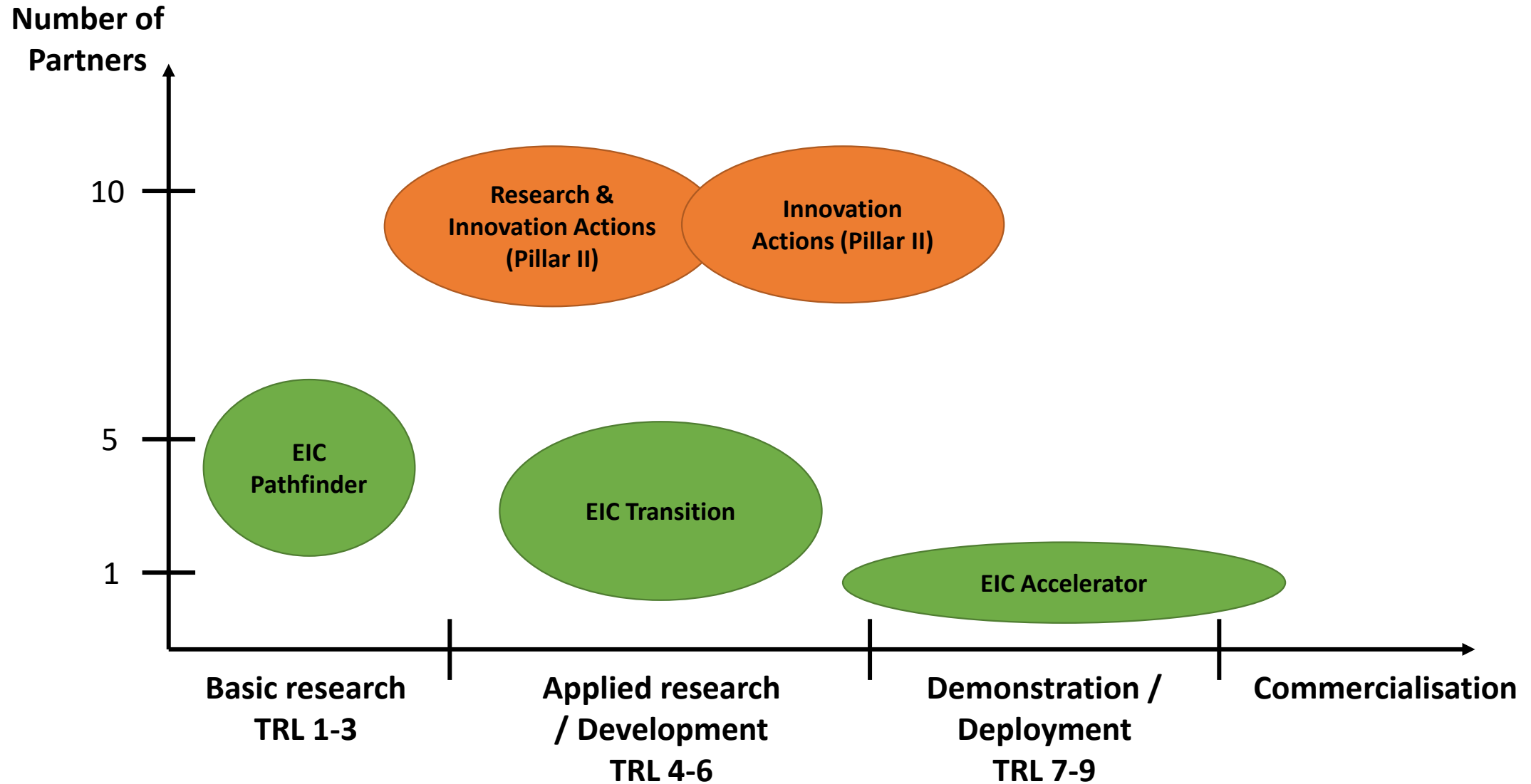


*in current prices*

Cluster 1	Health	<b>€8.246 billion</b> <small>(including €1.35 billion from NGEU)</small>
Cluster 2	Culture, Creativity & Inclusive Societies	<b>€2.280 billion</b>
Cluster 3	Civil Security for Society	<b>€1.596 billion</b>
Cluster 4	Digital, Industry & Space	<b>€15.349 billion</b> <small>(including €1.35 billion from NGEU)</small>
Cluster 5	Climate, Energy & Mobility	<b>€15.123 billion</b> <small>(including €1.35 billion from NGEU)</small>
Cluster 6	Food, Bioeconomy, Natural Resources, Agriculture & Environment	<b>€8.952 billion</b>
	JRC (non-nuclear direct actions)	<b>€1.970 billion</b>

\* The European Institute of Innovation & Technology (EIT) is not part of the Sp

# Horizon Europe – Choice of instruments



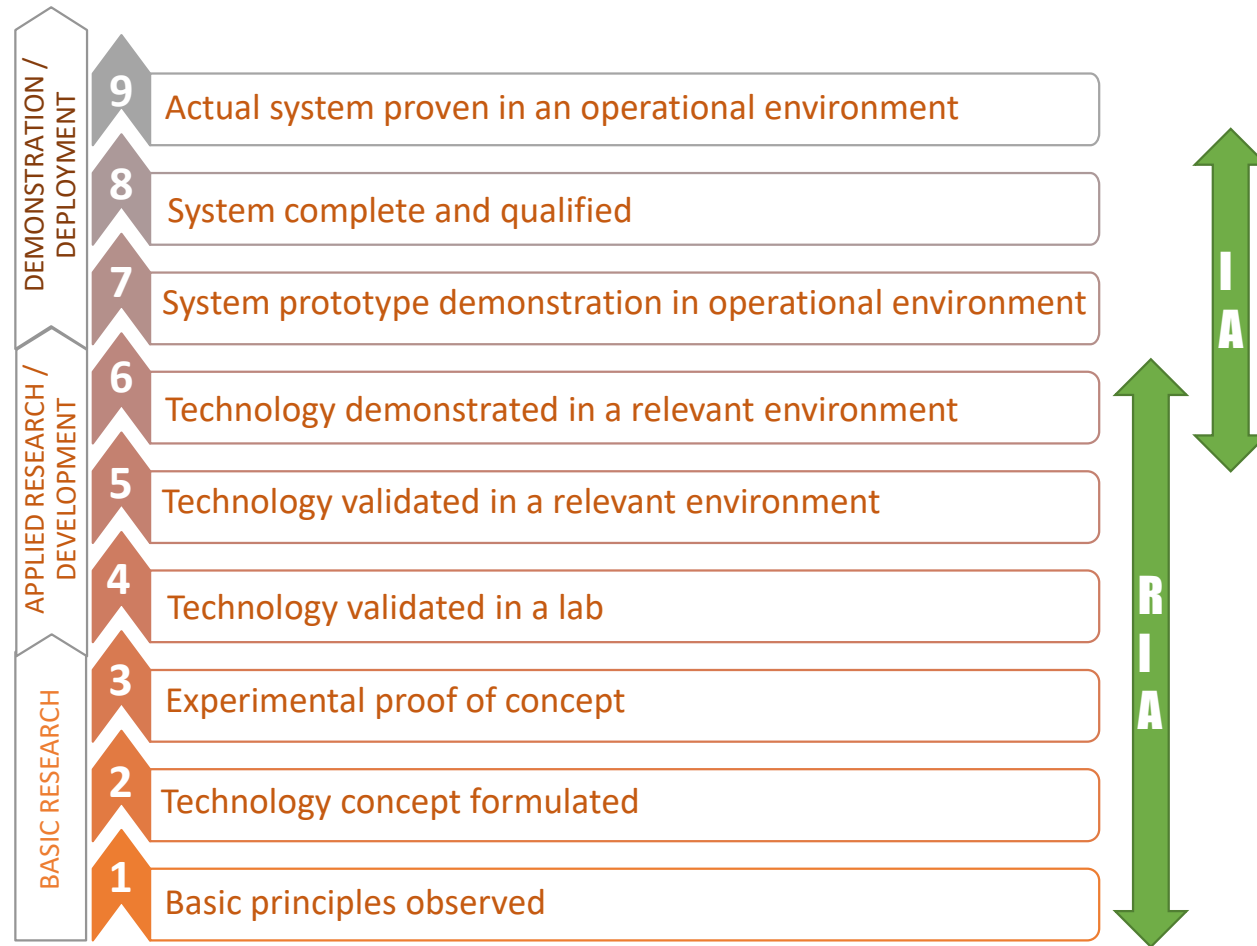
## Pillar II – Global challenges & industrial competitiveness

- **Impact-oriented** – contribution R&I to address EU policy priorities
- **‘Top down’ topics** - what is your solution to the problem?
- **Collaborative projects** (consortium)
  - Research organisations
  - Companies
  - Universities
  - Governmental organisations
  - ...
- **Research & Innovation Activities**

## Pillar II – Main types of actions

Type of action	Number of partners (with at least 1 partner from an EU Member State)	Funding
<b>Research and innovation action (RIA)</b> <ul style="list-style-type: none"> <li>- Basic &amp; applied research</li> <li>- Technology development</li> <li>- Possibly demonstrate in a lab or simulated environment</li> </ul>	$\geq 3$ <i>established in different EU Member State or Associated Countries</i>	<b>Up to 100%</b>
<b>Innovation action (IA)</b> <ul style="list-style-type: none"> <li>- Prototyping, testing, demonstrating, piloting</li> <li>- Large-scale validation &amp; market replication</li> </ul>	$\geq 3$ <i>established in different EU Member State or Associated Countries</i>	<b>Up to 70%</b> (non-profit 100%)
Coordination and support actions	1 (mostly more)	Up to 100%

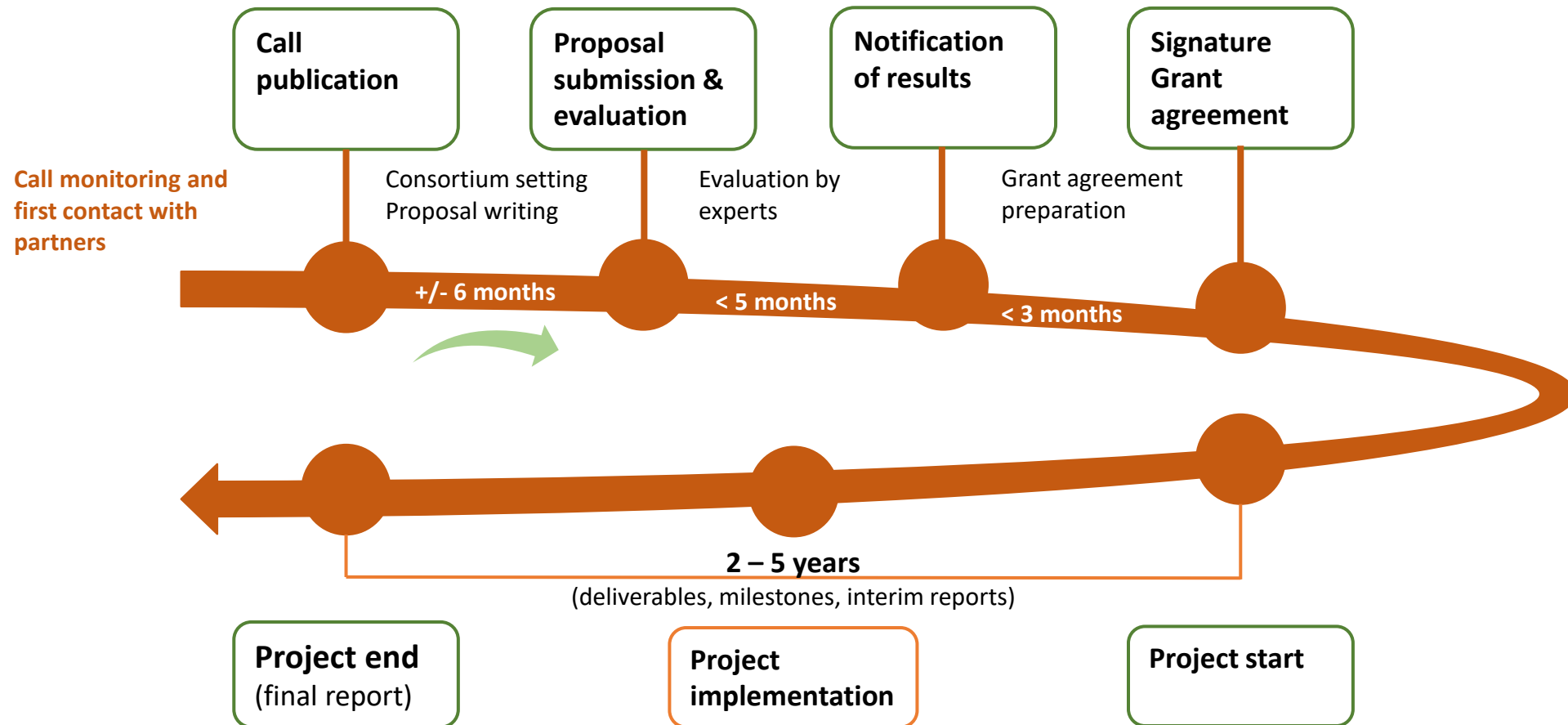
# Pillar II – Technology Readiness Levels & Choice of instruments





# Planning your proposal

Before you start - consider the whole Horizon Europe project life cycle



# Pillar II – Cluster 6 : Destinations

## DESTINATION 1

**Biodiversity and ecosystem services**

## DESTINATION 2

**Fair, healthy and environment-friendly food systems from primary production to consumption**

## DESTINATION 3

**Circular economy and bioeconomy sectors**

## DESTINATION 4

**Clean environment and zero pollution**

## DESTINATION 5

**Land, ocean and water for climate action**

## DESTINATION 6

**Resilient, inclusive, healthy and green rural, coastal and urban communities**

## Pillar II – Cluster 6 – calls in Draft

- 1. HORIZON-CL6-2024-FARM2FORK-01-7: Impact of the development of novel foods based on alternative sources of proteins** : “Assess the potential of insect protein, micro and macro algae-based products, microbial proteins and/or food/aquaculture by-products in terms of market development taking into account the farm to fork strategy objectives based on up-to-date/new knowledge about them.”
- 2. HORIZON-CL6-2023-CircBio-01-8: Eco-friendly consumer products – low-toxicity/zero pollution construction bio-based materials** : “Identifying and scaling bio-based materials for construction, including agro-forestry residues, fibers, recycled organics, and industrial by-products through enhanced biomass circularity. These materials may undergo further enhancement via fermentation, biomanufacturing, or biotechnology. Additionally, exploring the incorporation of living organisms like plants, algae, and fungi into construction materials for enhanced quality and environmental benefits. Potential applications span composites, insulation, adhesives, and more, depending on the chosen construction value chain.
- 3. HORIZON-CL6-2023-CircBio-01-11: Novel culturing of aquatic organisms for blue biotechnology applications** “Scope: The biotechnological exploitation of both pelagic and benthic marine and other aquatic (such as the ones living in fresh waters, transitional waters and ice ecosystems) organisms often requires their cultivation and the optimisation of production yield for the compounds of interest. Aquatic biota, and in particular marine ones (bacteria, algae, fungi or invertebrates such as sponges, corals and molluscs), cannot be easily cultured. It is believed that just a fraction of 1% of marine bacteria can be cultured using existing methods, and viruses and bacterial and viral phages, present even greater challenges. The culturing of aquatic organisms offers a sustainable alternative to wild harvesting.”

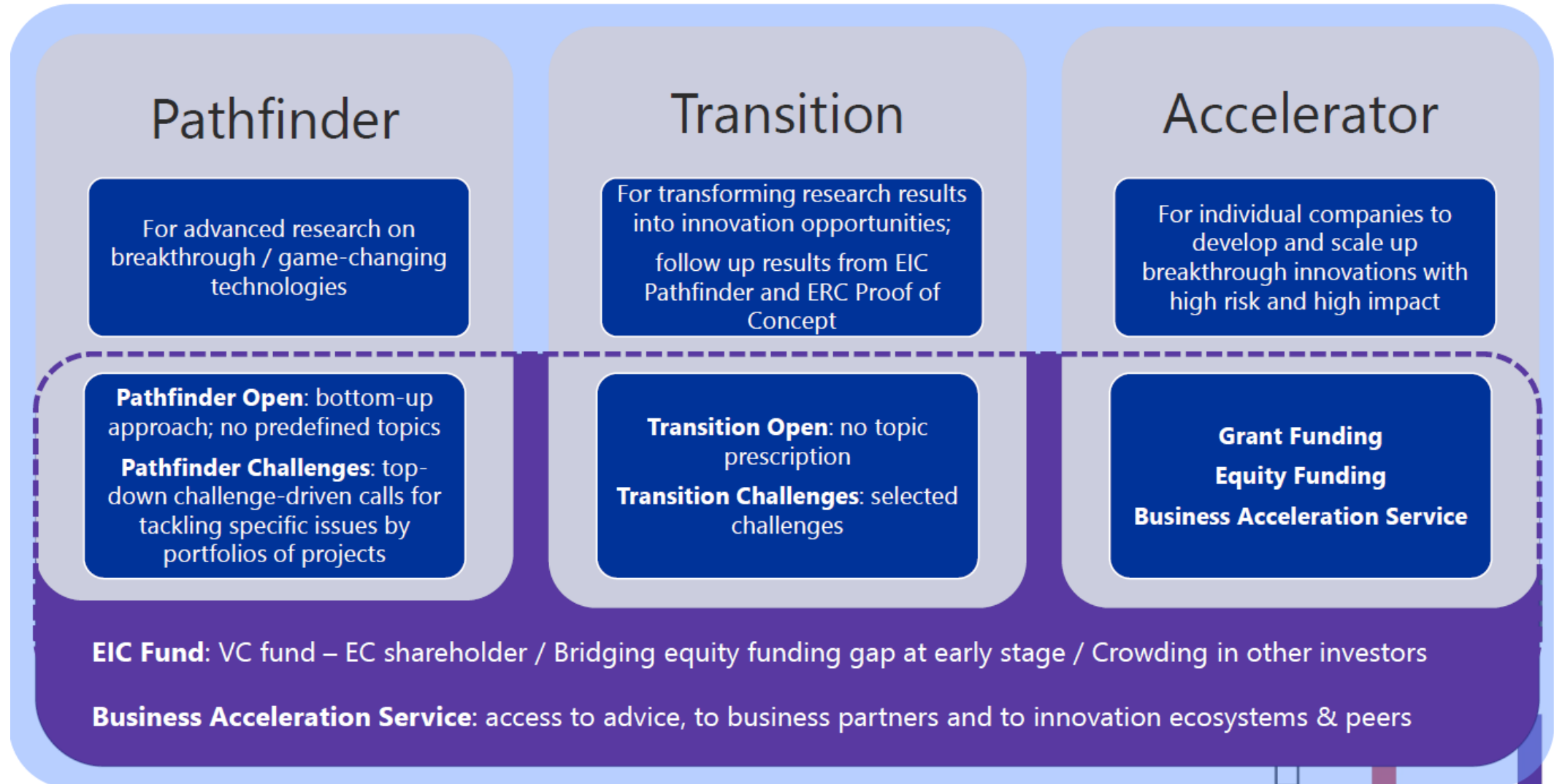
## Pillar II – European Partnerships in the field of

- **Water4All Partnership:** Ensure long-term water security through systemic research and innovation transformations. First call: "A thriving sustainable blue economy for a brighter future." More info: <https://www.water4all-partnership.eu/>
- **Sustainable Blue Economy Partnership (SBEP):** A network of 60 partners from 25 countries. Planned investment of €450 million over seven years. More info: <https://bluepartnership.eu/>
- **Sustainable Food Systems Partnership:** Focuses on creating a sustainable food system for people, planet, and climate. Promotes strategic research and innovation for safer and sustainable food systems. More info: [scar-europe.org](http://scar-europe.org)
- **Circular Bio-based Europe Joint Undertaking (CBE JU):** Aims to unite bio-based industry stakeholders to overcome sector challenges. Supports the transition to a circular bio-based economy. More info: <https://www.cbe.europa.eu/>

## Pillar III – Innovative Europe

- **Stimulate & support creation & diffusion of breakthrough innovations**
- **European Innovation Council (EIC)**
  - From supporting breakthrough technologies to bringing innovations to the market
  - Scaling up
  - Combination of various forms of financing, including capital investment (equity)
- **European Institute for Innovation & Technology (EIT)**
  - Brings together leading business, education & research organisations to stimulate innovation
  - EIT supports the development of dynamic, long-term European partnerships among leading companies, research labs & higher education
    - => **EIT Knowledge and Innovation Communities (KICs)**
  - Each KIC is dedicated to finding solutions to a specific global challenge e.g. health

# European Innovation Council – Main support schemes



More information & contact: [PROGRAMME - EIC | NCP Flanders](#)

# European Innovation Council – Summary of main 2024 calls

Table 1. Summary of main calls in 2024<sup>5</sup>

Call	Who can apply	What for	EIC Open		EIC Challenges		
			Deadlines	Indicative Budget (EUR million)	EIC Challenge	Deadlines/ Cut-offs	Indicative Budget (EUR million)
<b>EIC Pathfinder</b>	Open call: only consortia can apply. Challenges call: smaller consortia (at least two eligible entities) or and single applicants as well as larger consortia.	Open Call: Grants up to EUR 3 million Challenge Call: Grants up to EUR 4 million. Higher amounts if duly justified. Projects to achieve the proof of principle and validate the scientific basis of breakthrough technologies (starting from early TRLs aiming at achieving TRL3 or 4)	7 March 2024	136	"Solar-to-X" devices Towards cement and concrete as a carbon sink Nature inspired alternatives for food packaging and films. Nanoelectronics for energy-efficient smart edge devices Protecting EU space infrastructure	16 October 2024	120
<b>EIC Transition</b>	Single applicants (SMEs, spin-offs, start-ups, research organisations, universities) or small consortia (minimum 2, maximum 5 eligible entities).	Grants of up to EUR 2.5 million to validate and demonstrate technology in application-relevant environment (starting at TRL 3/ 4 aiming at achieving TRL 5/ 6) and develop business and market readiness.	18 <sup>th</sup> September 2024	94			
<b>EIC Accelerator</b>	Single start-ups and SMEs (including spin-offs), individuals (intending to launch a start-up/ SME) and in exceptional cases small mid-caps (fewer than 499 employees).	Grant component below EUR 2.5M for innovation activities (starting at TRL 5 or 6 aiming at achieving higher TRLs) Investment component of EUR 0.5 up to 15 million for scaling up and other activities. Grant only and investment only component under certain conditions.	Short applications: any time (continuous) Full applications: 13 March 2024 3 October 2024	375	Human Centric Generative AI Virtual worlds and augmented interaction, including support to Industry 5.0 Enabling the smart edge & quantum technology components Food from precision fermentation and algae Monoclonal antibody-based therapeutics for emerging viruses Renewable energy sources and their whole value chain	Short applications: any time (continuous) Full applications: 13 March 2024 3 October 2024	300

<sup>5</sup> This table provides a simplified overview. All applicants need to read the relevant sections for the full information on eligibility and conditions for funding. Specific consortia eligibility conditions are described in Annex 2 of this current document. As affiliated entities do not sign the grant agreement, they do not count towards the minimum eligibility criteria for consortium composition (if any). The Director-General responsible for the call may decide to open the calls up to one month prior to or after the envisaged date(s) of opening. The Director-General responsible may delay the deadline(s) by up to two months.

# European Institute for Innovation & Technology (EIT) – EIT Food

A leading initiative of food innovators supported by the EU.

- **Goals:**

- Enhance innovation in the food sector for a healthy and sustainable future.
- Strengthen food systems in Europe.
- Drive consumer confidence and improved global health.

- **How to Participate:**

- Open to startups, innovators, and entrepreneurs.
- Apply directly to EIT Food programmes.
- Terms range from free participation to success fee-based, with potential grants or options/equity.

- **Programmes Open for Application:**

- For a list of current opportunities, visit "Our Programmes" on the EIT Food website.

- **More info:** <https://www.eitfood.eu/open-calls>



# NCP Flanders: [www.ncpflanders.be](http://www.ncpflanders.be)

NCP  
Flanders

Our Services Horizon Europe Digital Europe Defence Other Funding About Contact

News Event Calendar Infosheets Video Corner Documents Partner Searches

SIGN IN

SIGN UP

Guidance & Assistance for Stakeholders in Flanders

Horizon Europe Horizon 2020

Digital Europe & Defence

## Our services



### How to get started

By informing and spreading awareness, we ensure that the different funding programmes become known and readily accessible to all potential applicants.



### Project development

We ensure that you have all the necessary information and knowledge to participate in the Horizon Europe programme



### What has been realised

Sometimes an example says more than a thousand explanations. Especially to reveal the diversity of the Horizon Europe programme

## myOVERVIEW - sign up for personalised information

We offer **news and event updates**, covering all domains and topics of Horizon 2020 & Horizon Europe.

Stay informed about what matters to you. By signing up, you can opt in for **e-mail notifications** and get access to a **personalised dashboard** that groups all news updates and event announcements in your domain(s).

SIGN UP

Only for stakeholders located in Flanders

NCP Flanders

**fwo** Fonds Wetenschappelijk Onderzoek  
Vlaanderen  
Opening new horizons

**VLAIO**  Vlaanderen  
is ondernemen

# EU Funding overview - website: [www.eufundingoverview.be](http://www.eufundingoverview.be)

- Innovation 22
- Research 22
- Growth 20
- Networking 13
- Dissemination 12
- Start 11

## AREAS

- Oceans and seas 26
- Innovation 71
- International Cooperation 71
- SMEs 58
- Partnerships with Industry & MS 56
- Environment & Climate Action 46
- Society 45
- Manufacturing 40
- Energy 38
- Funding Researchers 38
- ICT Research & Innovation 37
- Research Infrastructures 36
- Social Sciences and Humanities 36
- Health 34
- Agriculture and forestry 32
- Security 32
- Transport 31
- Food & Healthy Diet 28
- Biotechnology 25
- Culture & Creativity 25

Show less

## European Maritime, Fisheries and Aquaculture Fund (EMFAF) - (European Structural and... FUNDING

Fund for the EU's maritime and fisheries policies for 2014-2020

-  SMEs, Large Enterprises, Government, Cities, Communities & NGOs, Knowledge Centers
-  Grant, Loans & Investments
-  Research, Innovation, Growth, Infrastructure
-  Environment & Climate Action, Food & Healthy Diet, Funding Researchers, Innovation, International Cooperation, Oceans a...

[CLICK FOR DETAILS >](#)

## European Innovation Council and Small and Medium-sized Enterprises Executive Agency... AGENCY

Funds projects in the field of innovation, energy efficiency, environment and maritime affairs with a particular focus on SMEs

-  SMEs
-  Grant, Procurement, Networking
-  Research, Innovation, Growth, Infrastructure
-  Energy, Environment & Climate Action, International Cooperation, Oceans and seas, Partnerships with Industry &...

[CLICK FOR DETAILS >](#)

## European Innovation Council and SMEs Executive Agency (EISMEA) AGENCY


The Agency implements the European Innovation Council and manages other EU programmes focusing on SME support, innovation and the single market

-  SMEs, Large Enterprises, Government, Cities, Communities & NGOs, Knowledge Centers
-  Grant, Lump Sum, Loans & Investments, Equity financing, Guarantees, Procurement, Networking, No direct...
-  Research, Innovation, Growth, Start, Infrastructure, Networking, Di
-  Agriculture and forestry, Bio-based Industries, Biotechnology, Energy, Environment & Climate...

[CLICK FOR DETAILS >](#)

## European Innovation Council (EIC) funding opportunities - (under Horizon) FUNDING

The EIC aims to identify and support breakthrough technologies and game changing innovations to create new markets and scale up internationally

-  SMEs, Knowledge Centers
-  Grant, Equity financing, Networking
-  Research, Innovation, Growth, Infrastructure
-  Agriculture and forestry, Bio-based Industries, Biotechnology, Energy, Environment & Climate...

[CLICK FOR DETAILS >](#)

# 1. Enterprise Europe Network – E.E.N.

- ▶ **Support in finding suitable international partners (business & technology partners, Horizon Europe, R&D,.... ) :**
  - ▶ Partnering Opportunity Database (POD): <https://een.ec.europa.eu/partnering-opportunities>
  - ▶ International matchmaking events:
    - <https://www.enterpriseeuropenvlaanderen.be/agenda-internationale-bedrijvencontactdagen>
    - [https://een.ec.europa.eu/events?f%5B0%5D=field\\_eventstartdate%3Anext\\_year](https://een.ec.europa.eu/events?f%5B0%5D=field_eventstartdate%3Anext_year)
  - ▶ Maritime Industries & Services Sector Group – monthly newsletter
  - ▶ Contactperson: Patrick De Molder, [patrick.demolder@vlaio.be](mailto:patrick.demolder@vlaio.be) , +32 497 59 33 90