

# Panel 3: Circularity and Food

Horizon Europe ... and beyond

*... much more than ... just opportunities.*



Danilo Porro – University of Milano Bicocca

## Panel 3: Circularity and Food

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

..... It will **ensure food and nutrition security for all** within planetary boundaries through **knowledge, innovation** and digitalisation in agriculture, fisheries, aquaculture and food systems and steer and accelerate the transition to a low carbon, **efficient circular economy and sustainable bioeconomy** resource, including forestry.





## Panel 3: Circularity and Food

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

(1) Horizon Europe 2021-2027

(2) Horizon Europe and European Competitiveness Fund  
2028-2034

(3) ... taking home messages





**#HorizonEU**

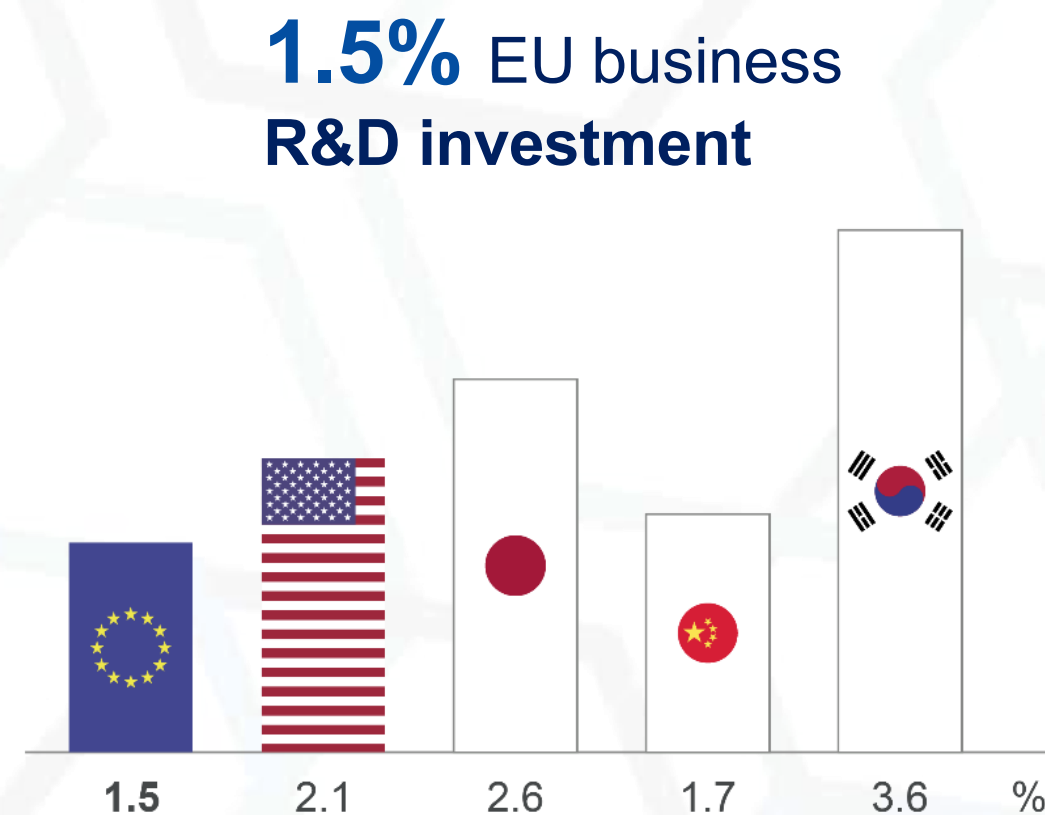
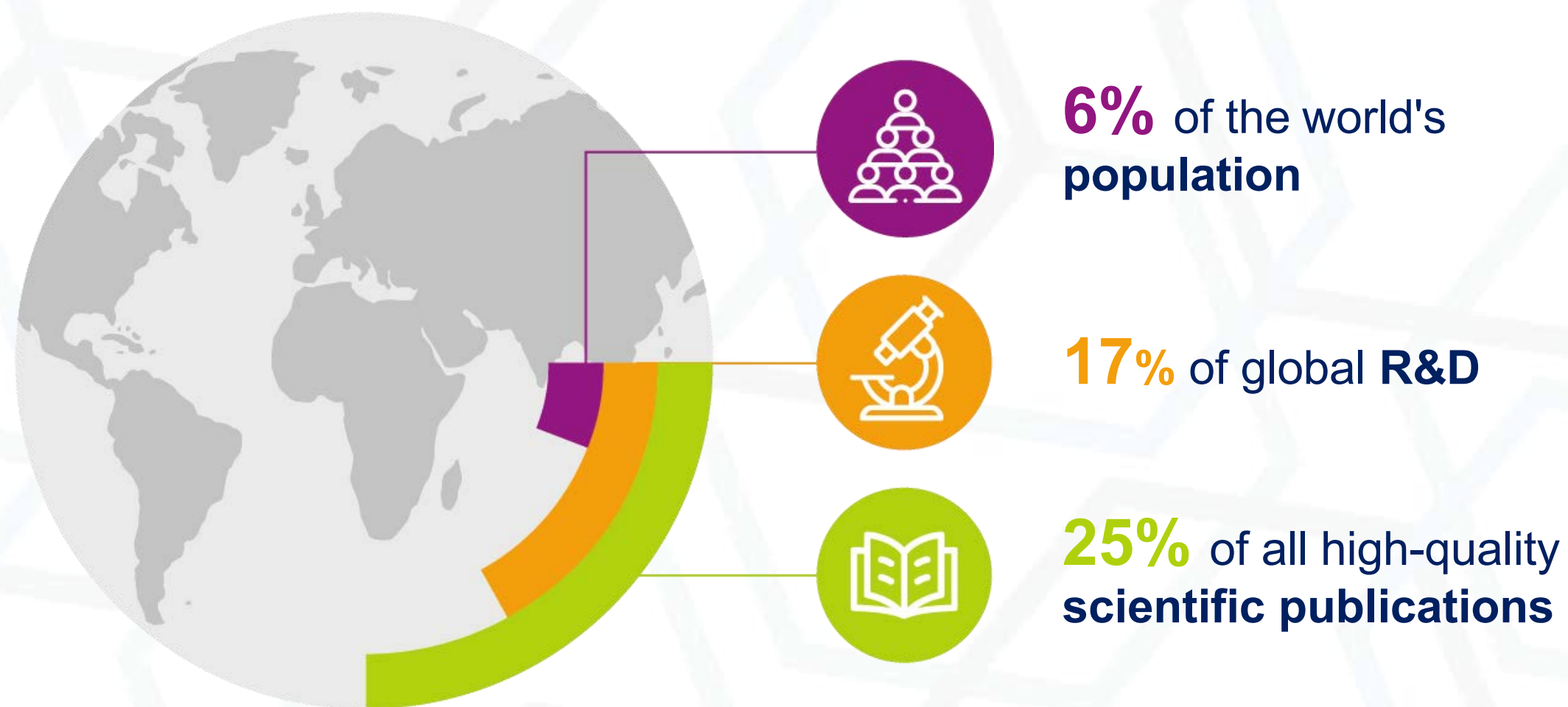
**THE EU  
RESEARCH  
&  
INNOVATION  
PROGRAMME 2021-27**



**Mariya Gabriel**, European Commissioner for Innovation, Research, Culture, Education and Youth

*“The programme aims at giving Europe a new push to a **global positioning**. Horizon Europe is to be **the biggest and most ambitious EU Research Innovation programme ever**. It builds on the success of Horizon 2020 and improves it further by fostering a stronger support to breakthrough innovation through the **European Innovation Council**, by creating greater impact through R&I **Missions** and by streamlining **Partnerships** landscape.”*

... about **global positioning**: EU knowledge and skills are our main resources.



EU data is for 2019.

Data for USA, Japan, China and South Korea are for 2018.

Numbers represent R&D as % of GDP

... including associated Countries, ...  
Horizon Europe is now truly global.





# Horizon Europe legislation defines three types of **impact** tracked through Key Impact Pathways

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

**Scientific Impact**



4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

**Societal Impact**



7. Generating innovation-based growth
8. Creating more and better jobs
9. Leveraging investments in R&I

...Europe can do better at transforming this into **leadership in innovation and entrepreneurship**



**HORIZON EUROPE: 2021-2024 → 2025-2027 → → → 2028-2034**

**A little bit ...**

**.. about the details of the HE genesis**

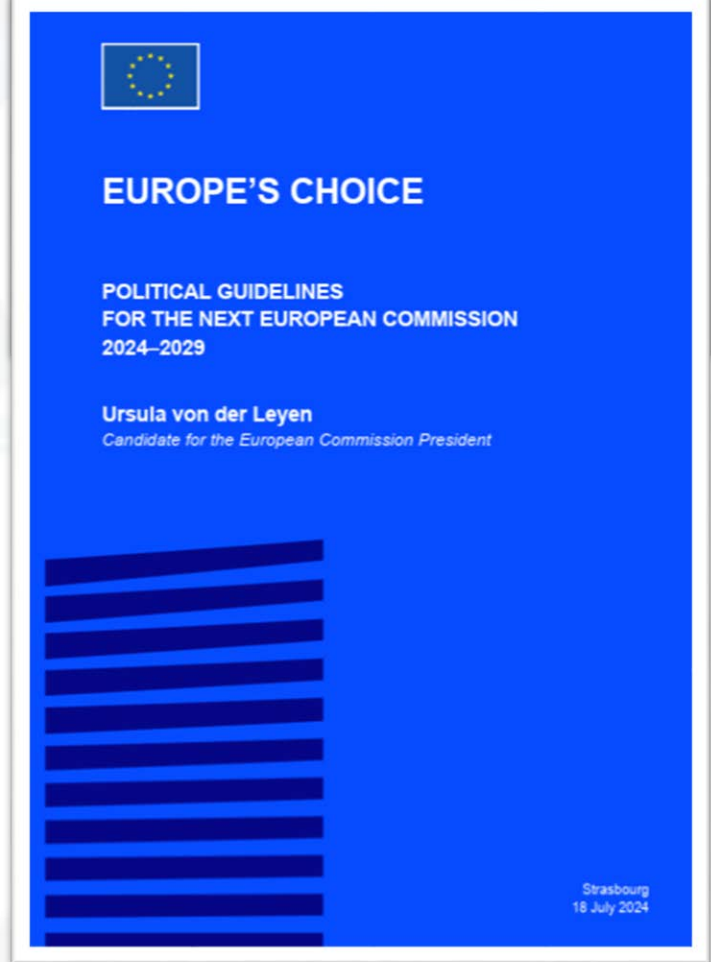
**.... and beyond**



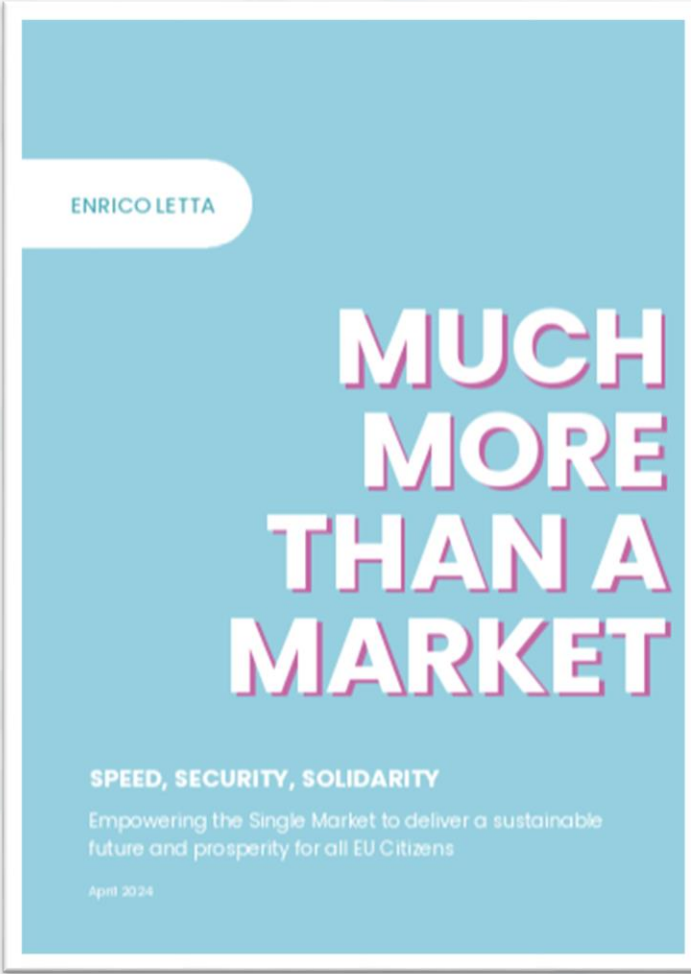
(1) - (2)



Strategic Plan 2021-2024



Europe's Choice 2024-2029



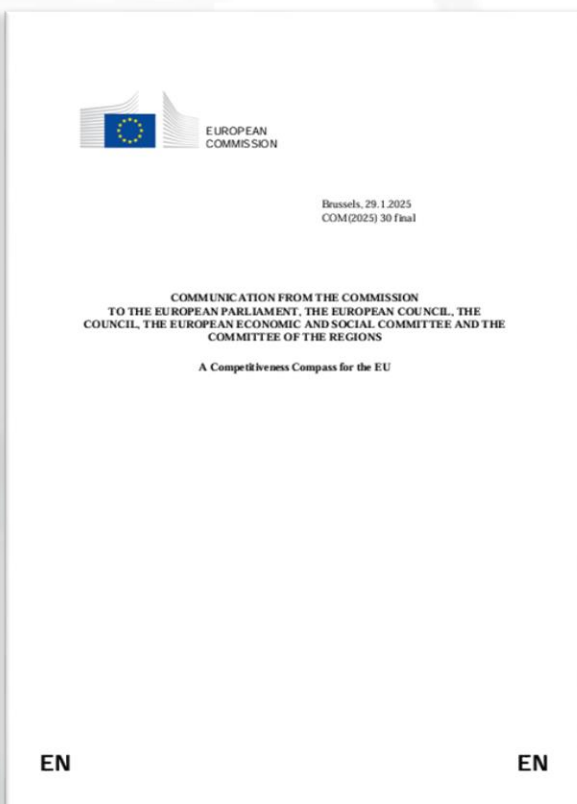
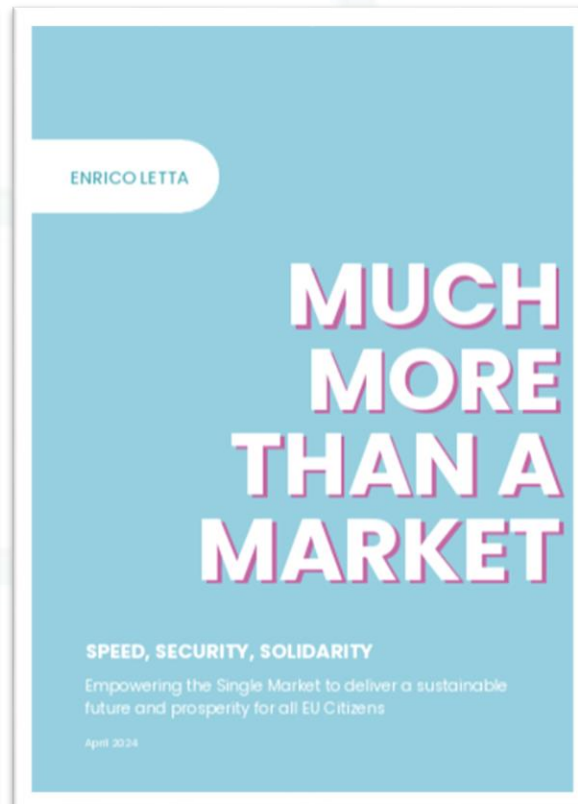
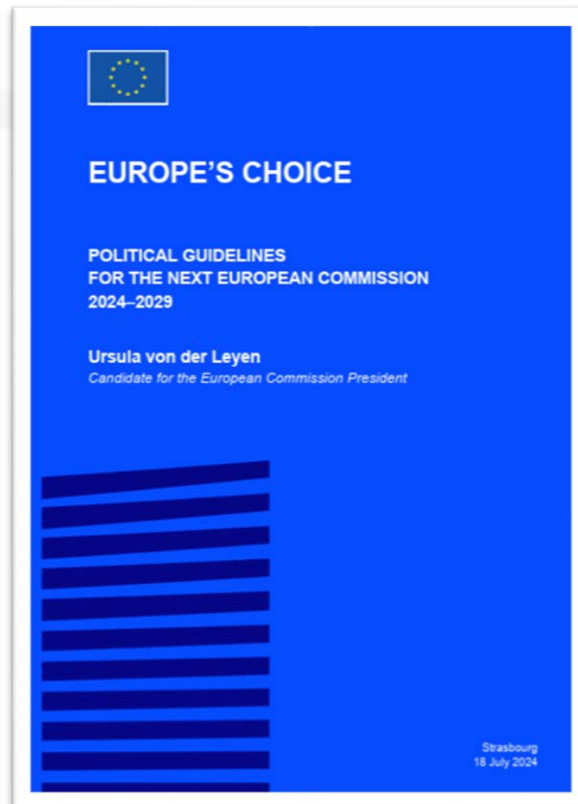
Rapporto Letta



Rapporto Draghi



Competitiveness compass



Materials Act

Chips Act

Innovation Act

AI Act

Quantum Strategy

Biotech Act

Ocean Act

Net-Zero Industry Act

Clean Industrial Deal

Critical Raw Materials Act

ERA Act

Life Science Strategy

*(just examples, list not exhaustive)*



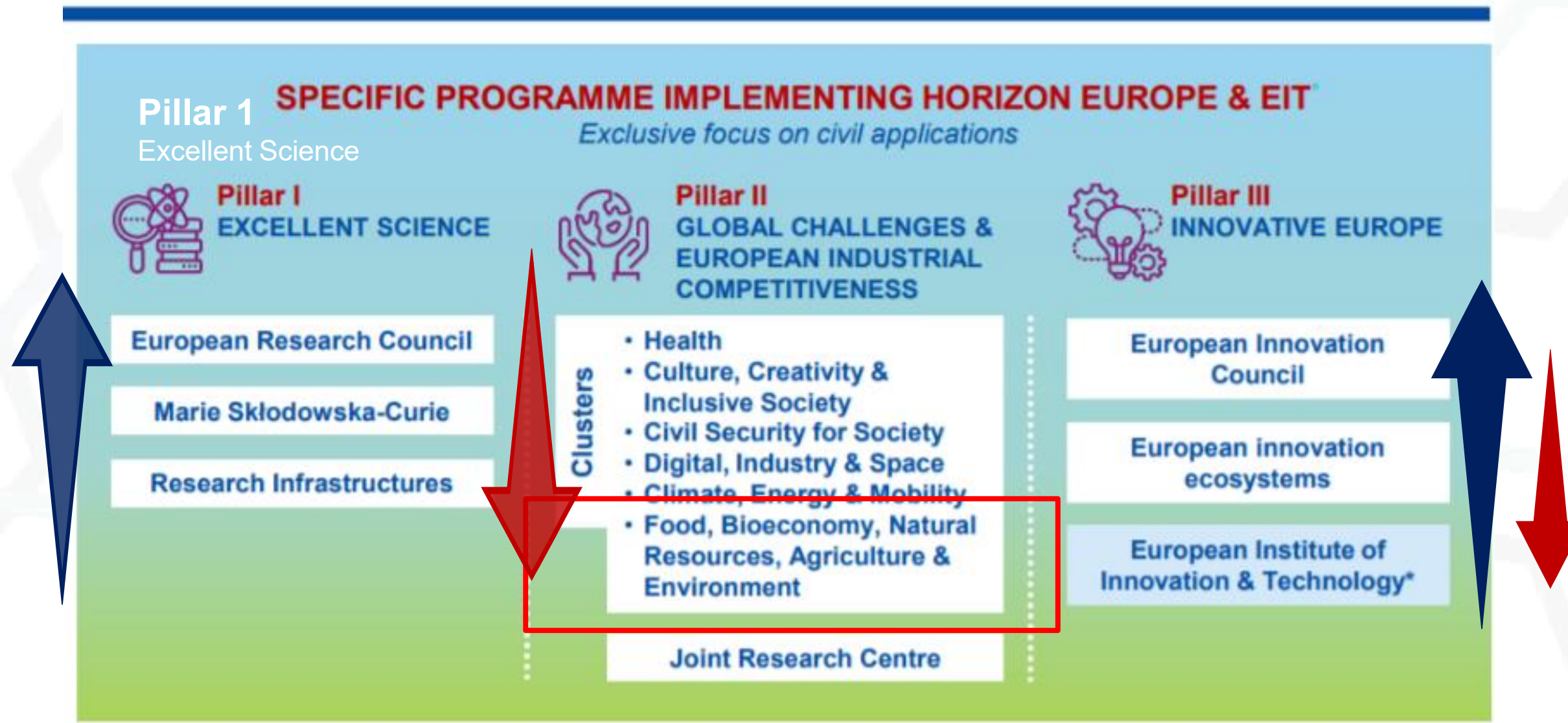
## HORIZON EUROPE

# ... few details

# ...about science and budget



## HORIZON EUROPE



**HORIZON EUROPE**

**SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT**

*Exclusive focus on civil applications*



**Pillar I**



**Pillar II**



**Pillar III**

***Horizon Europe : 95,5 Bln EUR***  
***(2021-2027)***

Joint Research Centre

***The new Horizon Europe*** 

*CURRENT (2021- 2027): 95.5 € billion*

***The new Horizon Europe : 175 Bln EUR***  
**(2028-2034)**

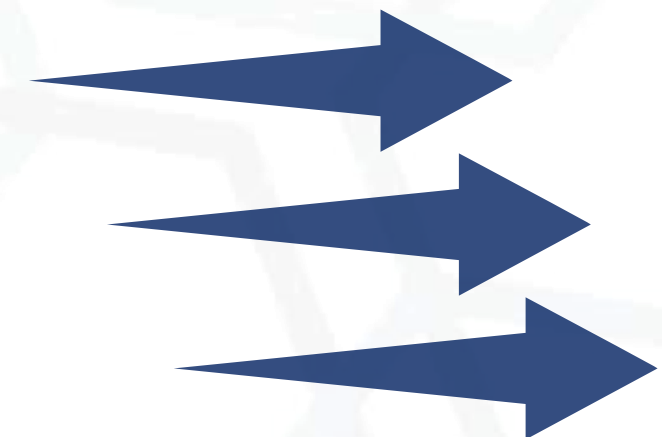
**twice bigger, simpler, faster and  
more impactful**



# 175 Bln EUR, 2028-2034

Pillar I	Pillar II	Pillar III	Pillar IV
EXCELLENT SCIENCE	COMPETITIVENESS AND SOCIETY	INNOVATION	EUROPEAN RESEARCH AREA
<b>€44.079 BILLION</b>	<b>€75.876 BILLION</b>	<b>€38.785 BILLION</b>	<b>€16.262 BILLION</b>
EUROPEAN RESEARCH COUNCIL	COMPETITIVENESS <sup>1</sup> :	EUROPEAN INNOVATION COUNCIL	ERA POLICIES
MARIE SKŁODOWSKA-CURIE ACTIONS	1. Clean Transition and Industrial Decarbonisation	INNOVATION ECOSYSTEMS AND THE KNOWLEDGE TRIANGLE	RESEARCH AND TECHNOLOGY INFRASTRUCTURES
SCIENCE FOR EU POLICIES	2. Health, Biotech, Agriculture and Bioeconomy		WIDENING PARTICIPATION AND SPREADING EXCELLENCE
	3. Digital leadership		
	4. Resilience and Security, Defence Industry and Space		
	SOCIETY:		
	1. Global societal challenges		
	2. EU Missions		
	3. New European Bauhaus Facility		

.. not only Horizon Europe



<sup>1</sup> Consistent with activities under the European Competitiveness Fund

Driving prosperity via competitiveness, research and innovation

A new European Competitiveness Fund will invest in strategic technologies, to benefit the entire Single Market, as recommended in the Letta and Draghi Reports.



Horizon Europe and the Competitiveness Fund will offer support for the entire investment journey of a project (from conception phase to scale-up)



# from PNRR, towards the new programme ....

- ▶ Le Fondazioni/Consorzi PNRR rivestono una posizione strategica nel contesto nazionale ed europeo.
- ▶ E' importante rafforzare rapidamente la presenza nei bandi 2026–2027, essenziali per prepararsi a FP10.
- ▶ Supporto tecnico-regolatorio dal MUR e massimo coordinamento con ANVUR e Commissione Europea.
- ▶ Supporto APRE per massimizzare efficacia e qualificazione delle proposte.



# from PNRR, towards the new programme ....

## **BANDI 2026/27 GIA' PUBBLICATI:**

*[https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes\\_en](https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programmes-and-open-calls/horizon-europe/horizon-europe-work-programmes_en)*



## Taking home message:

- ▶ Designare/aggiornare, da parte delle Fondazioni che non l'hanno ancora fatto, un loro rappresentante istituzionale.
- ▶ Mappare gli asset PNRR (piloti, dimostratori, infrastrutture) utilizzabili per presentarsi ai consorzi in formazione per le chiamate di Horizon EU 2026 e 2027.
- ▶ Avviare interlocuzioni Fondazioni–Atenei–EPR ed APRE su topic prioritari 2026 ancora aperti e su quelli 2027 (scouting partner, bozza concept note).
- ▶ Elaborare una “roadmap call 2027” per ciascuna Fondazione/Consorzio, con priorità, ruoli target (coordinamento/partner), timeline e risorse.
- ▶ Presidio delle Partnership e Mission rilevanti, verifica delle sinergie con altri programmi, monitoraggio degli aggiornamenti FP10.



## Panel 3: circularity and food

# Horizon Europe ... and beyond

*Thanks for your attention*



Danilo Porro – University of Milano Bicocca

HORIZON EUROPE



# Partnerships and Missions

*“The programme aims at giving Europe a new push to a **global positioning**. Horizon Europe is to be **the biggest and most ambitious EU Research Innovation programme ever**. It builds on the success of Horizon 2020 and improves it further by fostering a stronger support to breakthrough innovation through the **European Innovation Council**, by creating greater impact through **R&I missions** and by streamlining **partnerships** landscape.”*





## 5 EU Missions areas



Adaptation to climate change, including societal transformation



Cancer



Healthy oceans, seas, coastal & inland waters



Climate-neutral & smart cities



Soil health & food

## Overview of 49 candidate European Partnerships

### HORIZON EUROPE PILLAR II - Global challenges & European industrial competitiveness

CLUSTER 1: Health	CLUSTER 4: Digital, Industry & Space	CLUSTER 5: Climate, Energy & Mobility	CLUSTER 6: Food, Bioeconomy, Agriculture, ...
Innovative Health Initiative	Key Digital Technologies	Clean Hydrogen	Circular Bio-based Europe
Global Health Partnership	Smart Networks & Services	Clean Aviation	Rescuing Biodiversity to Safeguard Life on Earth
Transformation of health systems	High Performance Computing	Single European Sky ATM Research 3	Climate Neutral, Sustainable & Productive Blue Economy
Chemicals risk assessment	European Metrology (Art. 185)	Europe's Rail	Water4All
ERA for Health	AI-Data-Robotics	Connected and Automated Mobility (CCAM)	Animal Health & Welfare*
Rare diseases*	Photonics	Batteries	Accelerating Farming Systems Transitions*
One-Health Anti Microbial Resistance*	Made in Europe	Zero-emission waterborne transport	Agriculture of Data*
Personalised Medicine*	Clean steel – low-carbon steelmaking	Zero-emission road transport	Safe & Sustainable Food System*
Pandemic Preparedness* <i>Co-funded or co-programmed</i>	Processes4Planet	Built4People	
	Global competitive space systems**	Clean Energy Transition	
		Driving Urban Transitions	

### PILLAR III - Innovative Europe

EIT (KNOWLEDGE & INNOVATION COMMUNITIES)	SUPPORT TO INNOVATION ECOSYSTEMS
InnoEnergy	Innovative SMEs
Climate	
Digital	
Food	
Health	
Raw Materials	
Manufacturing	
Urban Mobility	
Cultural and Creative Industries	

- Institutionalised Partnerships (Art 185/7)
- Institutionalised Partnerships / EIT KICs
- Co-Programmed
- Co-Funded

### CROSS-PILLARS II & III

European Open Science Cloud
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\* Calls with opening dates in 2023-24  
 \*\* Calls with opening dates not before 2022