

EARTO Analysis on Budget and Structure of Horizon Europe 2.0

25 July 2025

Following the European Commission (EC)'s proposal for establishing <u>Horizon Europe</u> and its dedicated <u>Specific Programme</u> starting in 2028, this memo provides a comparative overview of the proposed changes in budget and structure compared to the current EU Framework Programme for Research & Innovation, Horizon Europe (2021–2027). It is important to note that the figures presented in this analysis remain provisional at this stage and will be subject to further institutional negotiations under the upcoming Multiannual Financial Framework (<u>MFF</u>) for 2028-2034.

Overall, the EC proposes a general budget increase from €79.5 billion to €175 billion, representing a +83% increase compared to the current Horizon Europe. While no major structural overhaul is introduced, a key modification is the integration of Research and Technology Infrastructures (RTIs) under a consolidated Pillar IV: "European Research Area" (ERA). In parallel, the introduction of the <u>European Competitiveness Fund</u> represents a major evolution in programming and governance, yet significant uncertainties remain regarding its role in Pillar II's implementation and its overall governance and integration.

Pillar I - Excellent Science:

- This Pillar maintains a similar share of the overall budget, accounting for +25.2% (compared to +26% under the current Horizon Europe). While the **European Research Council (ERC)** budget is set to double, reaching €31.5 billion, it is worth underlining that Research Infrastructures (RIs) have been moved out of Pillar I (of the current Horizon Europe) and are now part of the RTIs under Pillar IV.
- The Joint Research Centre (JRC) budget has been moved from the current Pillar II to Pillar I, accompanied by a +32% increase.

Pillar II - Competitiveness & Society:

- Pillar II of Horizon Europe 2.0 receives an increase of €22.4 billion, representing a +42% rise in its total budget.
- However, a **key uncertainty** surrounds its relationship with the **European Competitiveness Fund**: while the fund is meant to support programming within this pillar, its operational details and governance remain vague.
- If compared to the "cluster" structure and budget of the current Horizon Europe, **the four thematic**"windows" of the new Pillar II will see the following changes:
 - o Clean Transition and Industrial Decarbonisation: +67% increase, totaling approximately €25 billion (An increase of €10 billion when compared to Horizon Europe cluster 5).
 - o **Health, Biotech, Agriculture and Bioeconomy**: +14% increase, totaling approximately €20 billion (An increase of €2.5 billion when compared to Horizon Europe clusters 1 and 6).
 - Digital Leadership: +10% increase, totaling approximately €17 billion (An increase of +€1.5 billion when compared to Horizon Europe Cluster 4).
 - o **Resilience and Security, Defence Industry and Space**: +303% increase, totaling €6.4 billion (An increase of +€4.8 billion when compared to Horizon Europe cluster 3).

Pillar III - Innovation:

- Pillar III sees the largest relative increase, with a +185% rise in budget, reaching €38.8 billion (+22% of the total budget of Horizon Europe 2.0, compared to +14% under Horizon Europe).
- The **European Innovation Council (EIC)** experiences the most significant growth within this pillar, with a +242% increase, reaching €34.5 billion.

Pillar IV - European Research Area:

- This Pillar does not introduce new instruments per se, but rather consolidates elements previously housed under other pillars.
- Notably, the consolidation of Research Infrastructures (RIs) and Technology Infrastructures (TIs) into Research and Technology Infrastructures (RTIs) under Pillar IV marks a strategic shift in how RTIs are funded and managed, with a +353% increase in budget compared to the previous RIs' allocation, from €2.4 billion to €10.9 billion.
- The "Widening Participation and Spreading Excellence" (WIDERA) from the former WIDERA standalone pillar sees a +58% increase, reaching €5.4 billion.

Comparison of Horizon Europe (HE) and Horizon Europe 2.0 Budget and Structure

Please note that the figures in blue are not included in the official EC regulation and should therefore be considered indicative only.

Horizon Europe Budget (M€) under MFF 2021-2027			Horizon Europe 2.0 <u>Budget</u> (M€) under MFF 2028-2034			HE vs HE 2.0	
Structure	Budget	% Total Budget	Structure	Budget	% Total budget	+/- (M€) HE vs 2.0	% Increase compared to HE
Pillar I: Excellent Science	25 000 €	26%	Pillar I: Excellent Science	44 079 €	25.2%	+ 19 079 €	+ 76%
ERC	16 000 €	17%	ERC ERC	31 500	18%	+ 15 500 €	+ 97%
MSCA	6 600 €	7%	MSCA	10 000	5.7%	+ 4 400 €	+ 67%
RIs	2 400 €	3%	RIs moved to Pillar IV				
			Science for EU Policies No dedicated budget				
			Joint Research Cer (JRC) – moved fro Pillar II		1.5%	+ 630 €	+ 32%
Pillar II: Global Challenges & EU Industrial Competitiveness	53 516 €	56%	Pillar II: Competitiveness & Society		43.4%	+ 22 360 €	+ 42%
CL5: Climate, Energy & Mobility	15 123 €	16%	Clean Transition and Industrial Decarbonisation	25 331 €	14.5%	+ 10 208 €	+ 67%
CL1: Health CL6: Food, Bioeconomy, Natural Resources	8 246 € 8 952 €	9% 9%	Health, Biotech Agriculture and Bioeconomy		11.2%	+ 2 452 €	+ 14%
CL4: Digital, Industry & Space	15 349 €	16%	Digital leadersh	nip 16 854 €	9.6%	+ 1 505 €	+ 10%
CL3: Civil Security for Society	1 596 €	2%	Resilience and Security, Defend Industry and Space	oce 6 435 €	3.7%	+ 4 839 €	+ 303%
Total CL 1,3,4,5,6	49 266 €	51%	Total "Competitivene	ss″ 68 270 €	39%	+ 19 004 €	+ 39%
CL2: Culture, Creativity & Inclusive Societies	2 280 €	2%	S Global Societal O Challenges				
EU Missions	Clusters ar a budget fo	re including or Missions	EU Missions		•		
New European Bauhaus Facility			E New EuropeanT Bauhaus Facilit				
Dauriaus Facility			Y Total "Society"	y 7 606 €	4.3%		
JRC	1 970 €	2%	JRC budget moved to PA		illar I		
Pillar III: Innovative Europe	13 600 €	14%	Pillar III: Innovation	38 785 €	22.2%	+ 25 185 €	+ 185%
EIC	10 073 €	11%	EIC	34 500 €	20%	+ 24 427 €	+ 242%
EIE	527 €	1%	Innovation	4 205 6	20/	1 750 6	1 210/
EIT	3 000 €	3%	Ecosystems and the Knowledge Triangl		2%	+ 758 €	+ 21%
WIDERA	3 400 €	4%	Pillar IV: ERA	16 262 €	9.3%	+ 12 862 €	+ 378%
			ERA Policies		No dedic	ated budget	
RIs under Pillar I with 2 400 M€		RTIs	10 875 €	6.2%	+ 8 475 €	+ 353%	
Widening	2 960 €	3%	Widening Participation and	5 387 €	3.1%	+ 1 987 €	+ 58%
Reforming	440 €	0.5%	Spreading Exceller	nce			
HE Total	95 516 €		HE 2.0 Tota	I 175 002 €		+ 79 486 €	+ 83%

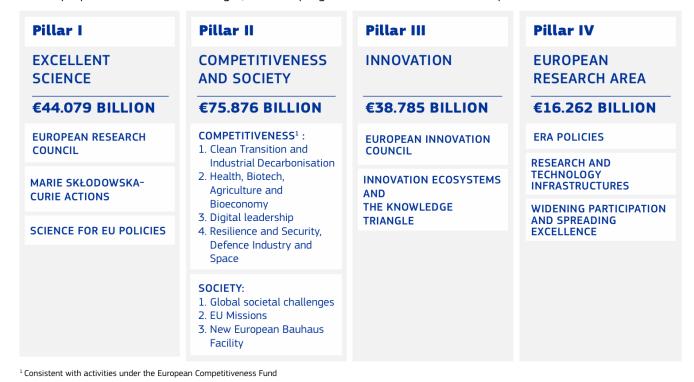
Annex 1 - Architecture Overview

For clarity, this page presents a structural synthesis of Horizon Europe and Horizon Europe 2.0.

Horizon Europe (2021-2027) HORIZON EUROPE EURATOM SPECIFIC SPECIFIC PROGRAMME IMPLEMENTING HORIZON EUROPE & EIT PROGRAMME: Exclusive focus on civil applications **EUROPEAN DEFENCE Fusion** GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL **EXCELLENT SCIENCE INNOVATIVE EUROPE FUND** Exclusive focus on COMPETITIVENESS defence research **European Research Council European Innovation** & development Culture, Creativity & Inclusive Society Council Marie Skłodowska-Curie Civil Security for Society **European Innovation** Digital, Industry & Space Climate, Energy & Mobility Fission Research Research Infrastructures **Ecosystems** actions Food, Bioeconomy, Natural Resources, Agriculture & **European Institute of** Innovation & Technology Environment Joint Research Centre **Joint** Development Research actions WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA Center Widening participation & spreading excellence Reforming & Enhancing the European R&I system * The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme European

Horizon Europe 2.0 (2028-2034)

With a proposed €175 billion budget, the new programme will be based on four pillars.



Annex 2 - Horizon Europe 2.0: Full Budget table overview

Please note that the figures in blue are not included in the official EC regulation and should therefore be considered indicative only.

Horizon Europe 2.0: EC Proposed Regulation (16.07.2025)							
Structure Pillar I: Excellent Science		Budget (M€)	+/- Compared to HE 2021-2027(M€)	% Increase compared to HE			
		44 079 €	+ 19 079 €	+ 76%			
ERC		31 500 €	+ 15 500 €	+ 97%			
MSCA		10 000 €	+ 4 400 €	+ 67%			
Science for EU Policies		No dedi					
Joint Research Centre (JRC)		2 600 €	+ 630 €	+ 32%			
Pillar II: Competitiveness & Society		75 876 €	+ 22 360 €	+ 42%			
С	Clean Transition and Industrial Decarbonisation	25 331 €	+ 10 208 €	+ 67%			
O M P E T	Health, Biotech, Agriculture and Bioeconomy	19 650 €	+ 2 452 €	+ 14%			
	Digital leadership	16 854 €	+ 1 505 €	+ 10%			
	Resilience and Security, Defence Industry and Space	6 435 €	+ 4 839 €	+ 303%			
	Total Pillar II "Competitiveness"	68 270 €	+ 19 004 €	+ 39%			
S	Global societal challenges						
0	EU Missions						
С	New European Bauhaus Facility						
	Total Pillar II "Society"	7 606 €					
	Pillar III: Innovation	38 785 €	+ 25 185 €	+ 185%			
EIC		34 500 €	+ 24 427 €	+ 242%			
Innovation Ecosystems and the Knowledge Triangle		4 285 €	+ 758 €	+ 21%			
Pillar IV: European Research Area		16 262 €	+ 12 862 €	+ 378%			
ERA Policies		No dedicated budget					
Research	n and Technology Infrastructures	10 875 €	+ 8 475 €	+ 353%			
Widening Excellen	g Participation and Spreading ce	5 387 €	+ 1 987 €	+ 58%			
Total		175 002 €	+ 79 486 €	+ 83%			

EARTO - European Association of Research and Technology Organizations

Founded in 1999, EARTO promotes RTOs and represents their interest in Europe. EARTO network counts over 350 RTOs in more than 31 countries. EARTO members represent 150,000 highly-skilled researchers and engineers managing a wide range of innovation infrastructures.

RTOs - Research and Technology Organizations
From the lab to your everyday life. RTOs innovate to improve your health and well-being, your safety and security, your mobility and connectivity.
RTOs' technologies cover all scientific fields. Their work ranges from basic research to new products and services' development. RTOs are non-profit organizations whose core mission is to produce, combine and bridge various types of knowledge, skills and infrastructures to deliver a range of research and development activities in collaboration with public and industrial partners of all sizes. These activities aim to result in technological and social innovations and system solutions that contribute to and mutually reinforce their economic, societal and policy impacts.

EARTO Contact: www.earto.eu