HORIZON EUROPE

Widening Programme
Fostering R&I in Widening Countries

Croatia's Energy Transition: Innovations and Opportunities through EU Projects
25 April 2025



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Widening Participation & Spreading Excellence

European Commission

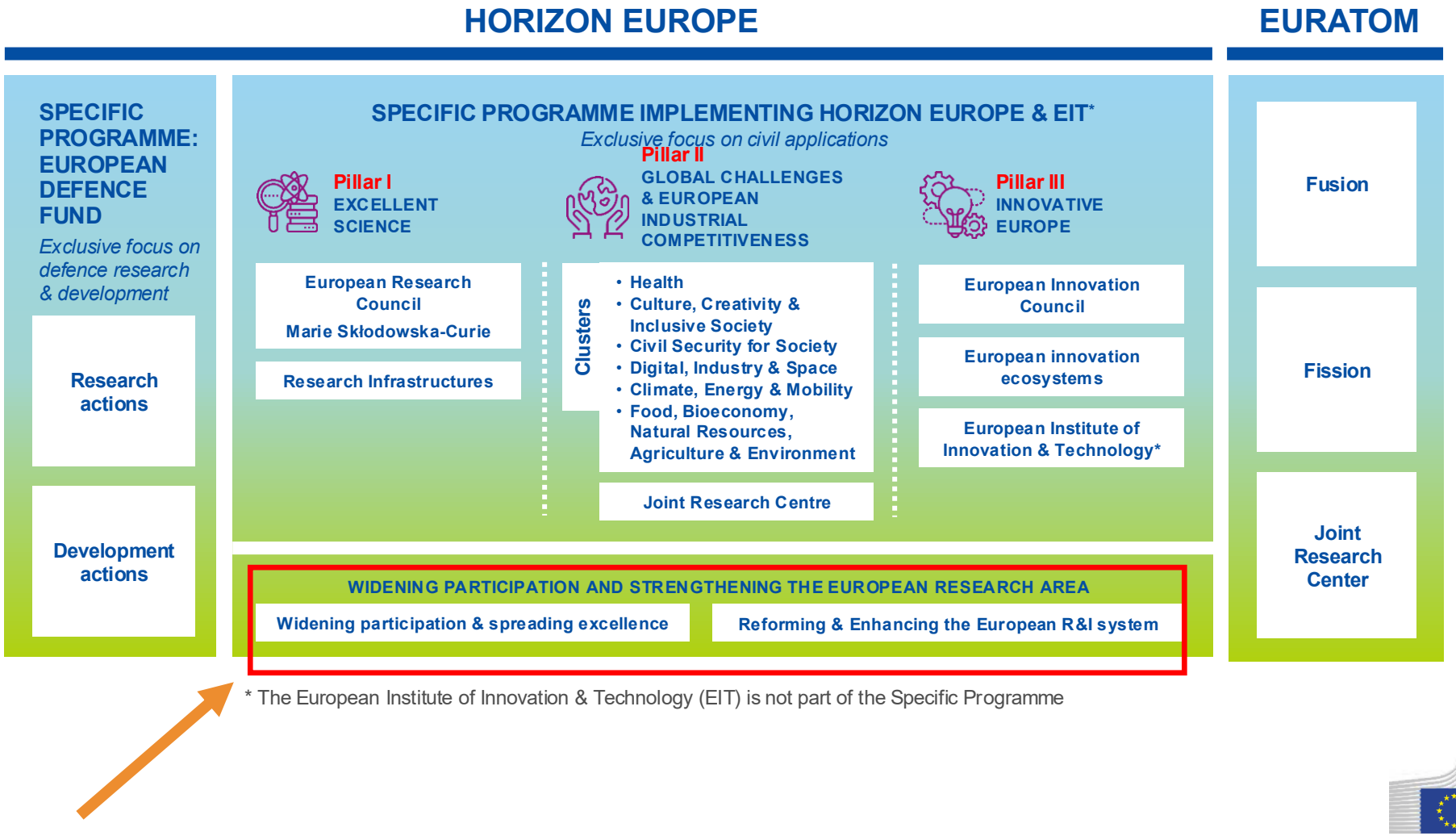
REA'S MISSION



- **Mandated by the European Commission to help build:**
  - ✓ **Greener Europe**
  - ✓ **Prosperous, inclusive societies and economies**
  - ✓ **On the advantages of the digital age.**
- **Supports the EU's R&I policy.**
- **Implements EU programmes**
- **Selects and manages high-quality research and innovation projects.**
- **Provides feedback for policy-making**
- **Delivers logistical and administrative services to the Commission and other EU bodies.**

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Widening under Horizon Europe: Structure



Widening Programme

Widening countries

Member States

- Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, *Luxembourg (H2020),* Malta, Poland, Portugal, Romania, Slovakia, Slovenia and *Greece (HE)*

Widening Associated Countries:

- Albania, Armenia, Bosnia and Herzegovina, Faroe Islands, North Macedonia, Georgia, Kosovo, Moldova, *Morocco (pending),* Montenegro, Serbia, Tunisia, Turkey and Ukraine



Outermost Regions:

- France (Guadeloupe, French Guyana, Martinique, Mayotte, Saint-Martin, La Réunion), Spain (Canary Islands), Portugal (Azores Islands, Madeira)

Objectives

- Encourage **institutional reforms and transformation processes** of the R&I system at national and regional level
- Mobilise **national investments in R&I** capacity;
- Raise the bar for **excellence of R&I** in partnership with outstanding European and international institutions ('win-win situation');
- Increase number of **participations and success** rates (i.e. in Pillars 2 and 3 of HE);
- Foster **brain circulation and gain**, including inter-sectoral mobility
- Create and scale **new innovation ecosystems**

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Widening Package: Actions in HE

Action	Twinning	Teaming	Excellence Hubs	European Excellence Initiative	Pathway to Synergies
Objectif	Building institutional networking	Creating and modernising centres of excellence	Strengthening innovation ecosystems	Empowering universities	Bridging different funding systems
Budget (million euro)	0.8 - 1.5	8 - 15 Complementary funding to be provided	2 - 5	1 - 3	0.5-1.2
Implementation (up to # years)	3	6	4	4	5
Partners	2 research institutions, 2 countries	Advanced partner(s)	2 R&I ecosystems from Widening, different sectors	3 entities, 3 countries, at least 1 Widening	Beneficiaries EU funds a) 2 entities, 2 Widening; b) consortiums 1 domain
R&I budget	30%	10%	-	20%	-

Widening Package: Actions in HE

Action	ERA Chairs	ERA Talents	*ERA Fellowships**	*Hop-on**
Objectif	Bringing excellence to institutions	Supporting intra-sector brain circulation	Bringing excellence to institutions	Joining on-going research and innovation actions
Budget (million euro)	1.5 - 2.5	1 - 3	0.2	0.1-0.6
Implementation (up to years)	5	4	2	-
Partners (minimum requirement)	Mono benificiary (Coordinator)	3 participants, 2 widening, different sectors	MSCA Postdoctoral Fellowships (Rules)	Widening joins selected collaborative R&I actions
R&I budget	10%	10%	-	-

* Not implemented directly by the Widening unit

Widening Package: Actions in HE

European Cooperation is Science and Technology (COST)

Enabling researchers and innovators to set-up their own interdisciplinary research networks bottom-up in a wide range of scientific topics

Dissemination and Exploitation Support Facility (D&E)

Assisting beneficiaries of widening actions to exploit results of their H2020 and HE and improve the effectiveness of their dissemination and exploitation

➡ January 2025

*National Contact Points (NCPs)**

Supporting and strengthening NCP through international networking, improving quality of proposals from legal entities from low R&I performing

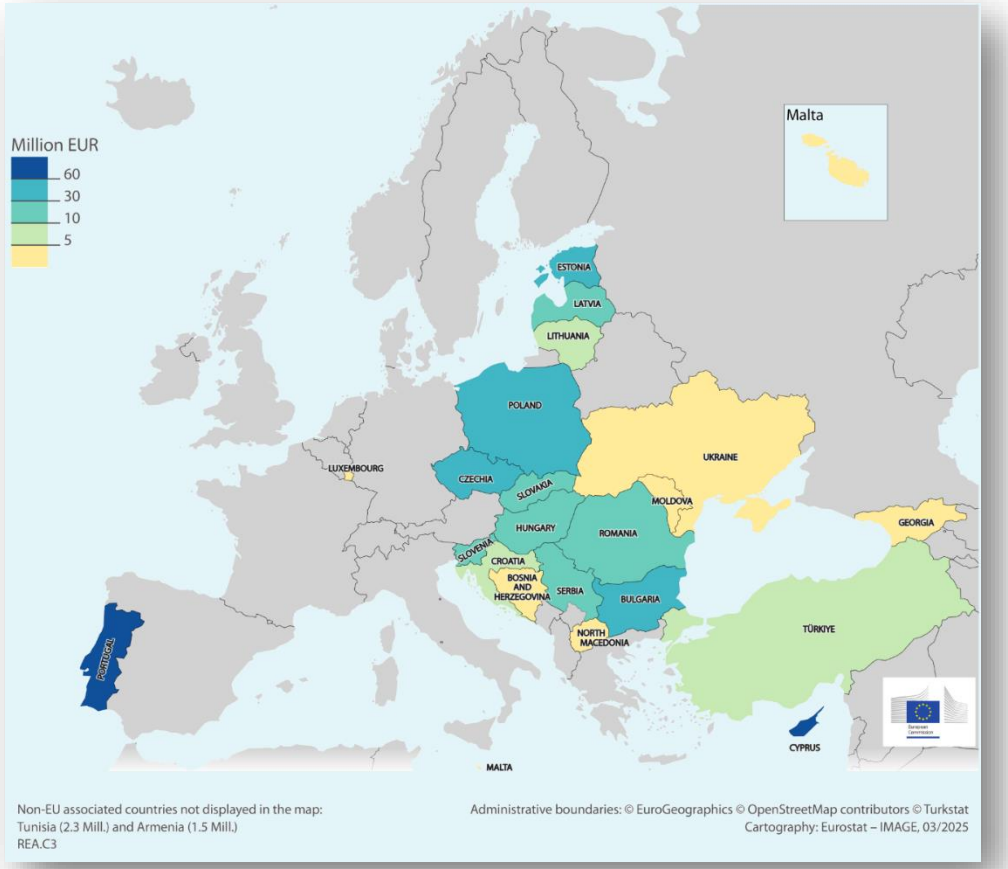
*Policy Support Facility (PSF)**

Assisting Member States and Associated Countries in developing and implementing reforms. It offers, on voluntary basis, high-level expertise and tailor-made advice to national public authorities.

* Not implemented directly by the Widening unit

Widening programme H2020

15 calls computed from:
• *Teaming*
• *Twinning*
• *ERA Chairs*
• *ERA Fellowships*

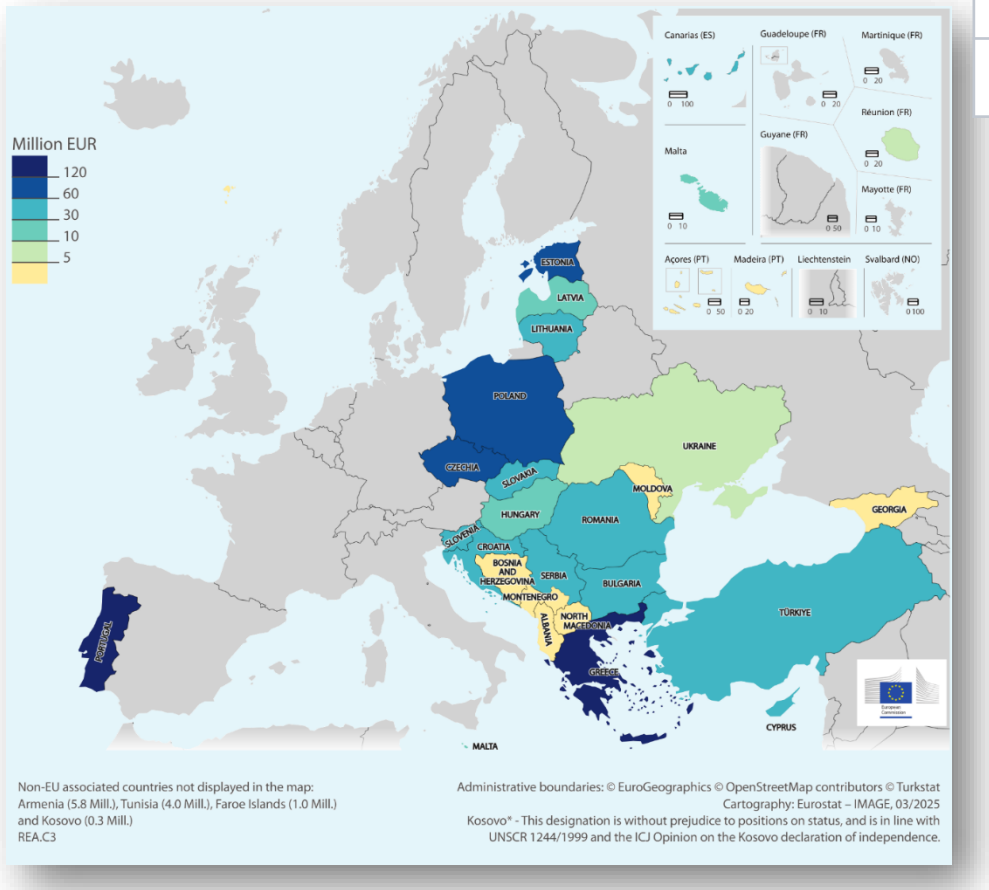


Total budget distributed: 551 Mill €

Widening programme Horizon Europe

23 calls computed from:
• *Teaming*
• *Twinning*
• *Twinning WB*
• *ERA Chairs*
• *ERA Fellowships*
• *ERA Talents*

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• *ERA Talents*
• *Europ. Excellence Init.*
• *Excellence Hubs*
• *Hop-On Facility*
• *R&I policy in WB*
• *Pathways to Synergies*
• *Dissem. & Expl. Facility*



Total budget distributed: 995 Mill €

WIDENING'S CONTRIBUTION TO EU MISSION



159 on-going projects, in **22** Widening Countries, are actively addressing the challenges targeted by the five EU Missions in Horizon Europe.

Soil health and food

43 Projects

Healthy oceans, seas, coastal and inland waters

25 projects

Adaptation to climate change, including societal transformation

64 projects

Climate neutral and smart cities

20 projects

Cancer

32 projects

EU-funded projects contributing to the EU Missions - European Commission

European Commission

Project examples: Green Deal call in Widening programme

The **Twinning Green Deal call** *(HORIZON-WIDERA 2023-ACCESS 02-02)* focused on a defined area of research / innovation directly linked to at least one of the actions listed in the European Green Deal strategy, notably:

- Climate research
- Green technologies
- *Renewable energy*
- Sustainable mobility
- Biodiversity research
- Sustainable use of natural resources (land, water, air)

Project examples: Twining Green Deal



FreeTwinEV: Fostering Research Excellence of in Digital Twinning for Sustainable and Safe Electric Vehicles

The primary aim of the FreeTwinEV project is to enhance Slovak University of Technology (STU) research capacities in Digital Twinning for advanced battery management systems. The vision of the project is to establish STU as the focal point for cutting edge battery research in the CEE region, achieved through a lasting strategic partnership in research involving STU, University of Twente, Linz Centre of Mechatronics and ADDSEN, focusing on internationalization.



http://cordis.europa.eu/project/id/101159989

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Project examples: Teaming



H2START: Green innovations in hydrogen for sustainable energy transition

The proposed project aims to establish a Centre of Excellence (CoE) in Stara Zagora, Bulgaria, to accelerate the development and adoption of innovative technologies for renewable hydrogen production and utilization. The CoE will be a catalyst for replacing coal mining with renewable energy and green hydrogen production, deployment, and export. Recognized as a Hydrogen Valley by the Clean Hydrogen Partnership (ZAHYR HV), the region's successful transformation depends on excellence in research and innovation (R&I) activities, talent attraction, recognition, and international collaboration.

Project examples: On-going projects - ERA Chairs

5GSOLAR: ERA Chair of emerging next-generation photovoltaics

This project aims to establish a pioneering renewable energy demonstration and briefing center in Estonia, as well as a joint EU graduate school dedicated to photovoltaics. This project will contribute to solidifying Europe's position as a leader in climate neutrality, helping to unlock its full potential as a sustainable and environmentally conscious region.



Images from: https://5gsolar.taltech.ee/project/

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COMING SOON

Horizon Europe info days - WIDERA Work Programme 2025

This infoday aims to inform interested applicants about calls in the new WIDERA Work Programme 2025.

20 May 2025 09:00 (GMT+02:00) Events | The research and innovation community platform

Horizon Europe

Energy research and innovation

Horizon Europe Dashboard

Widening participation and spreading excellence

Thank you!

 # HorizonEU

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Project Examples: New projects – European Excellence Initiative



INITIATE: Supporting European R&I Through stakeholder collaboration and institutional reform

INITIATE is a project that aims to empower Widening higher education institutions in Europe to develop research and innovation (R&I) through institutional transformation. INITIATE will use a co-creation process and R&I Labs supported by online tools, such as the Knowledge Hub, to: 1. Create institutional transformation that addresses the needs and resources of each institution and fosters collaboration with local ecosystems. 2. Generate policy recommendations to stimulate R&I development and a culture of excellence in Widening countries. 3. Creating a roadmap for long-term uptake of R&I in Widening countries with identified replication cases in selected countries. 4. Forming an Alliance for green energy transition to ensure the long-term sustainability of INITIATE results.

From February 2022

Until August 2027

10 beneficiaries

Case studies

INITIATE project – Supporting European R&I Through stakeholder collaboration and institutional reform

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Funding opportunities?

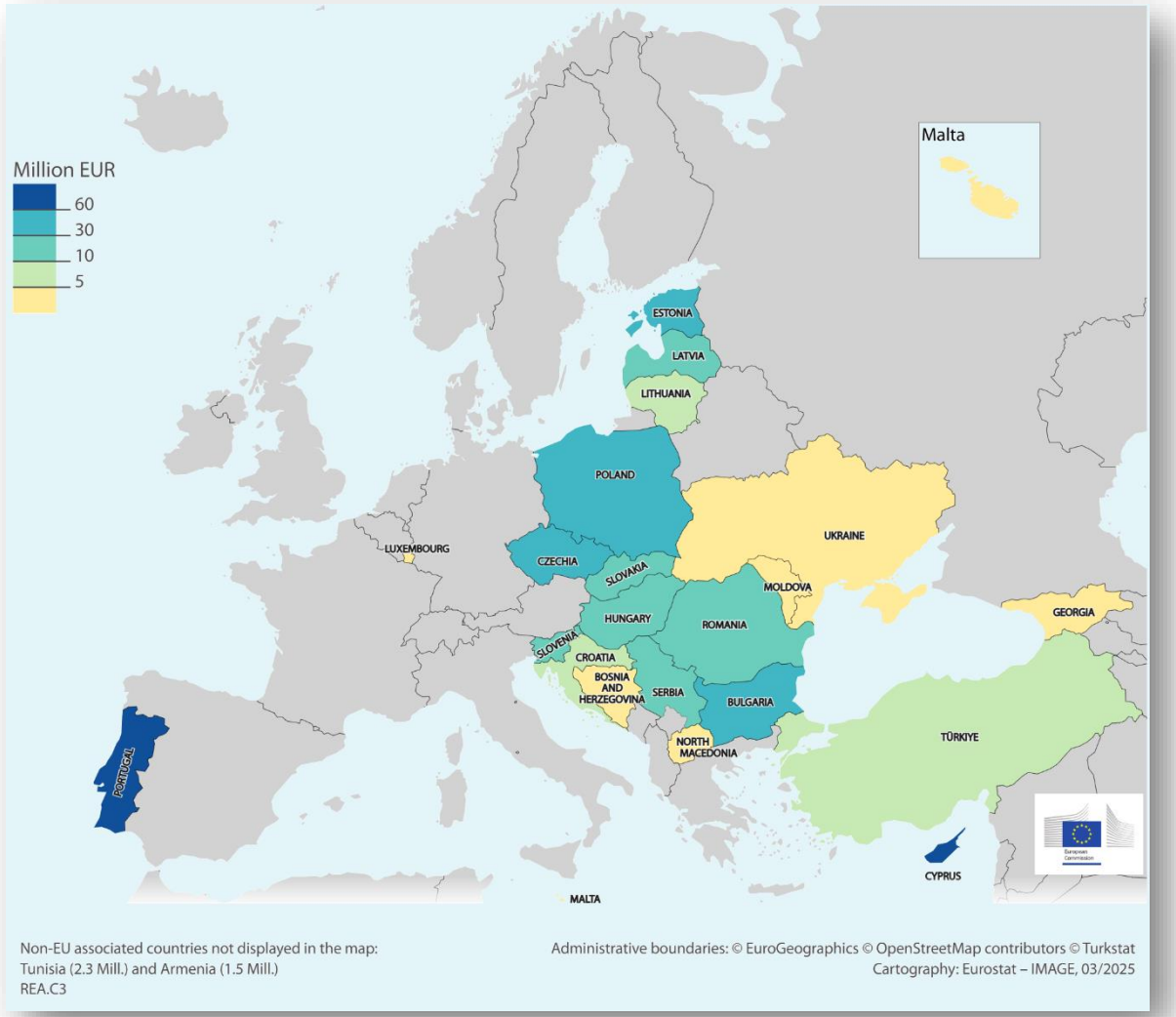
Actions	Opening	Closing
2023		
Teaming for Excellence (HORIZON-WIDERA-2023-ACCESS-01-01-two-stage): 1st stage	10-01-2023	12-04-2023
European Excellence Initiative (EEI) (HORIZON-WIDERA-ACCESS-03-1) -Lump Sum	10-01-2023	12-04-2023
ERA Fellowships (HORIZON-WIDERA-2023-TALENTS-02-01)	12-04-2023	13-09-2023
Twinning (Bottom-up topic) (HORIZON-WIDERA-2023-ACCESS-02-01) -Lump Sum	25-04-2023	28-09-2023
Twinning (Green Deal topic) (HORIZON-WIDERA-2023-ACCESS-02-02) -Lump Sum	25-04-2023	28-09-2023
Synergy action (HORIZON-WIDERA-2023-ACCESS-04-01)	28-03-2023	28-09-2023
Hop on facility (HORIZON-WIDERA-2023-ACCESS-06-01)	10-01-2023	28-09-2023
D&E support facility (HORIZON-WIDERA-2023-ACCESS-05-01)	26-04-2023	28-09-2023
2024		
Teaming for Excellence (HORIZON-WIDERA-2023-ACCESS-01-01-two-stage): 2nd stage	10-01-2023	07-03-2024
Excellence Hubs (HORIZON-WIDERA-2023-ACCESS-07-01)	28-09-2023	07-03-2024
ERA Chairs (HORIZON-WIDERA-2023-TALENTS-01-01) -Lump Sum	28-09-2023	07-03-2024
ERA Fellowships (HORIZON-WIDERA-2024-TALENTS-02-01)	23-04-2024	11-09-2024
ERA Talents (HORIZON-WIDERA-2024-TALENTS-03-01)	25-04-2024	26-09-2024
Hop on facility (HORIZON-WIDERA-2023-ACCESS-06-01)	10-01-2023	26-09-2024
2025		
Teaming for Excellence (HORIZON-WIDERA-2025-ACCESS-01-01-two-stage): 1st stage	03-12-2024	10-04-2025
ERA Fellowships (HORIZON-WIDERA-2025-TALENTS-01-01)	09-04-2025	10-09-2025

WP 2023-2025

Funding and Tenders Portal

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EU Contributions to Widening countries (Widening programme H2020)



Total budget distributed: 551 Mill €

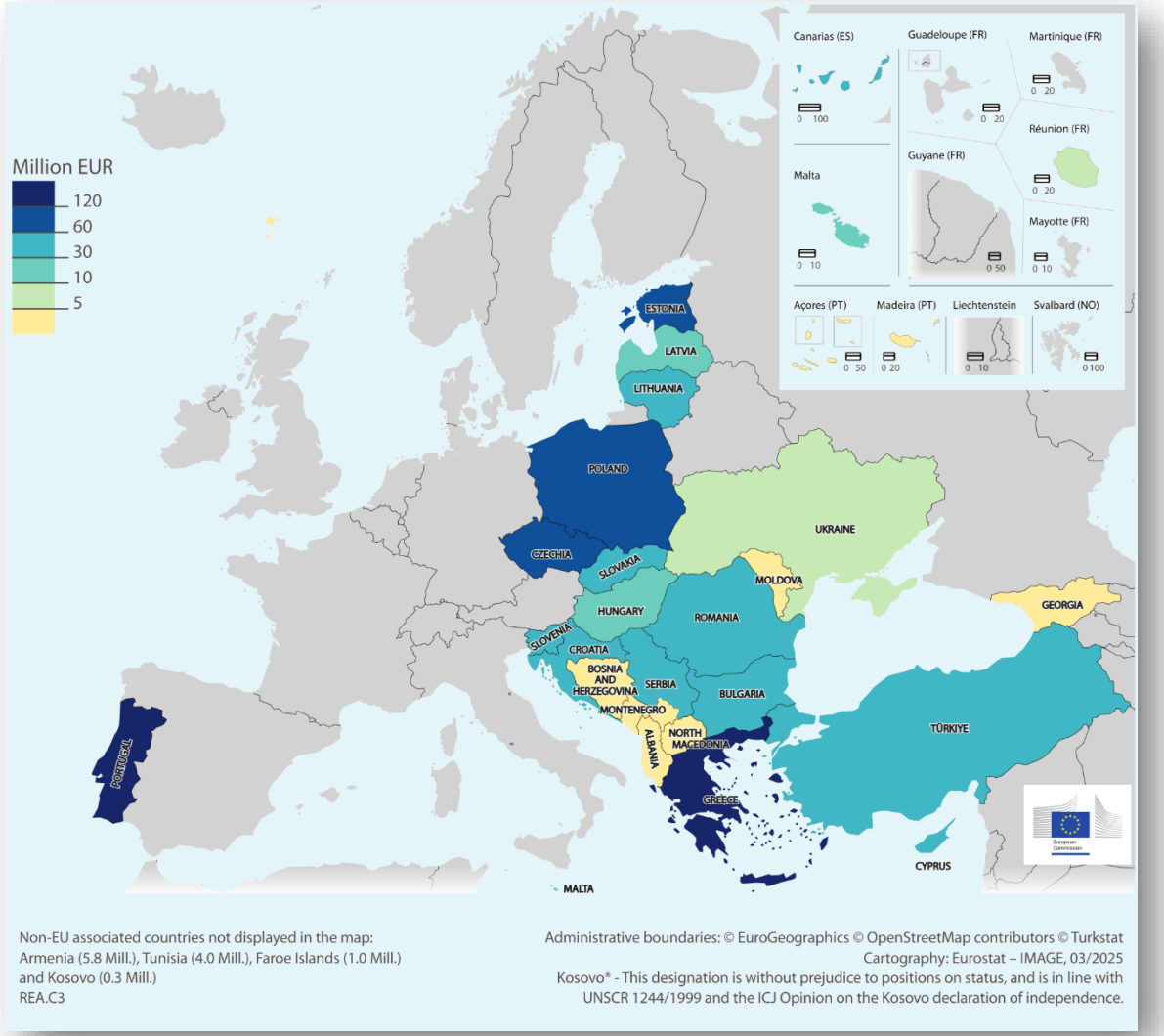
Ranking of Widening Countries in H2020	EU Contribution (Mill.€)
PT	*102.319544*
CY	*88.186610*
PL	*58.955772*
EE	*52.806844*
CZ	*50.575973*
BG	*30.044338*
LV	*27.888571*
SI	*25.930211*
HU	*24.756051*
RS	*21.326242*
SK	*17.950713*
RO	*10.177905*
HR	*9.796890*
TR	*9.591593*
LT	*5.334265*
LU	*4.814006*
MT	*4.093675*
TN	*2.273924*
MD	*1.520250*
AM	*1.506331*
UA	*0.839823*
BA	*0.390550*
MK	*0.238750*
GE	*0.137391*

15 calls computed from:

- *Twinning*
- *Teaming*
- *ERA Chairs*
- *ERA Fellowships*

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EU Contributions to Widening countries (Widening programme HE)



Ranking of Widening Countries in HE	EU Contribution (Mill.€)
PT	*160.2*
EL	*127.8*
CZ	*93.2*
PL	*82.3*
EE	*60.1*
CY	*50.8*
SI	*47.3*
RS	*39.2*
SK	*37.8*
HR	*37.7*
BG	*34.1*
TR	*33.9*
ES70	*32.9*
LT	*30.1*
RO	*30.0*
LV	*29.2*
MT	*13.3*
HU	*10.1*
UA	*9.2*
AM	*5.8*
FRY4	*5.7*
TN	*4.0*
MK	*3.9*
BA	*3.4*
GE	*3.4*
PT30	*2.7*
AL	*2.5*
ME	*1.9*
FO	*1.0*
PT20	*0.6*
XK	*0.3*
MD	*0.1*

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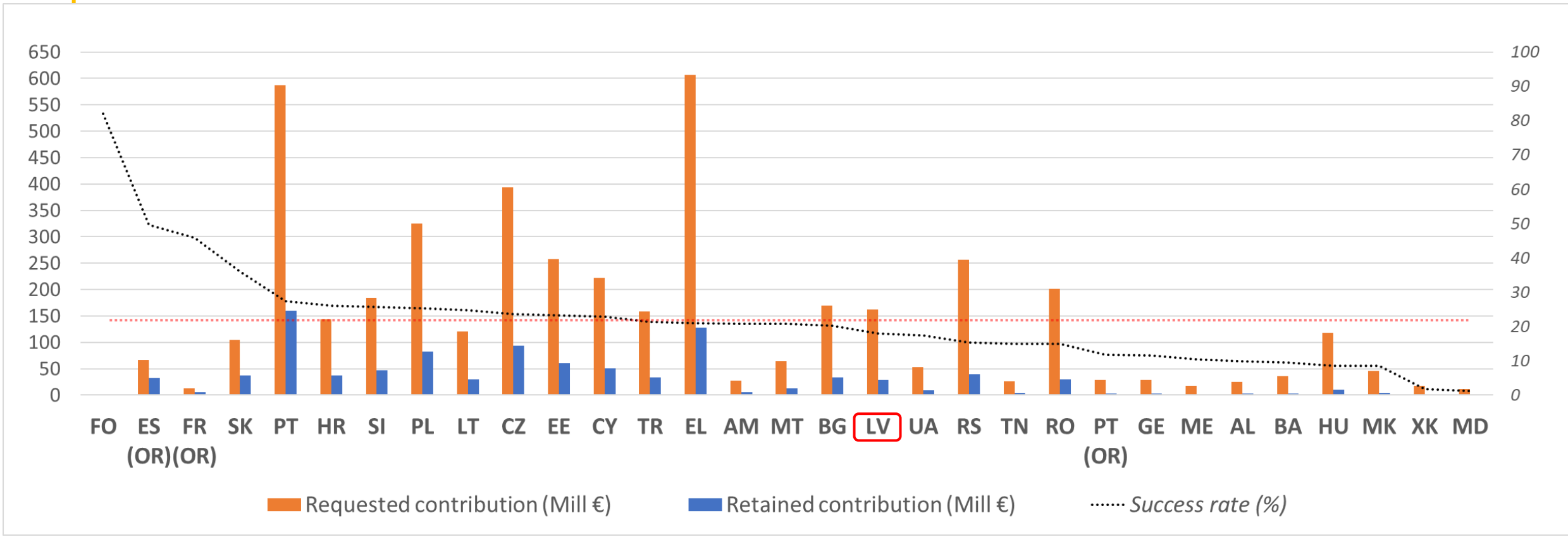
Total budget distributed: 995 Mill €

Outermost Regions: ES70 – Islas Canarias; FRY4 - La Réunion; PT20 – Açores; PT30 – Madeira

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EU Contributions´ Success Rate of Widening countries

WIDENING programme in Horizon Europe (23 Calls of Proposals)



Average success rate (22%)

(OR) = Outermost Region as of Art. 349 TFEU

Total budget of submitted proposals: 4,479 Mill €

Total budget retained: 995 Mill €

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Note: Only eligible projects and countries requesting an EU contribution are considered