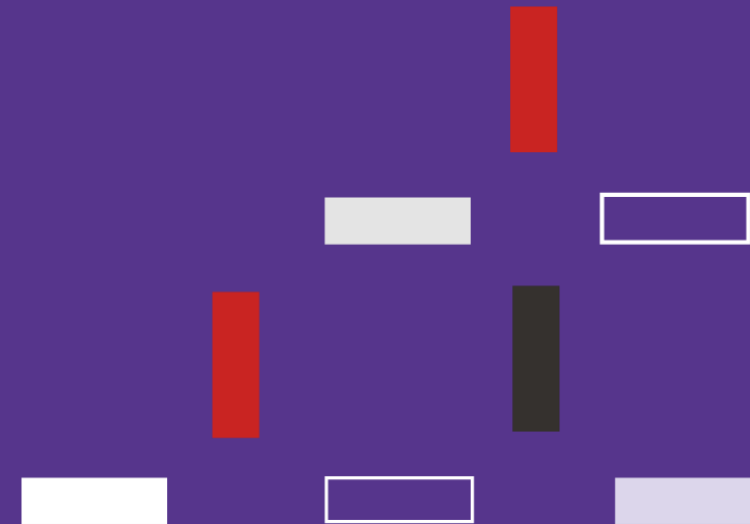


Introduction to EIC Accelerator Challenge on Mobility

European
Innovation
Council



Paolo Bondavalli
Unit 01 Programme Managers Office
EISMEA



The EIC in a nutshell

The European Innovation Council is Europe's flagship innovation programme to identify, develop and scale up breakthrough technologies and game changing innovations.



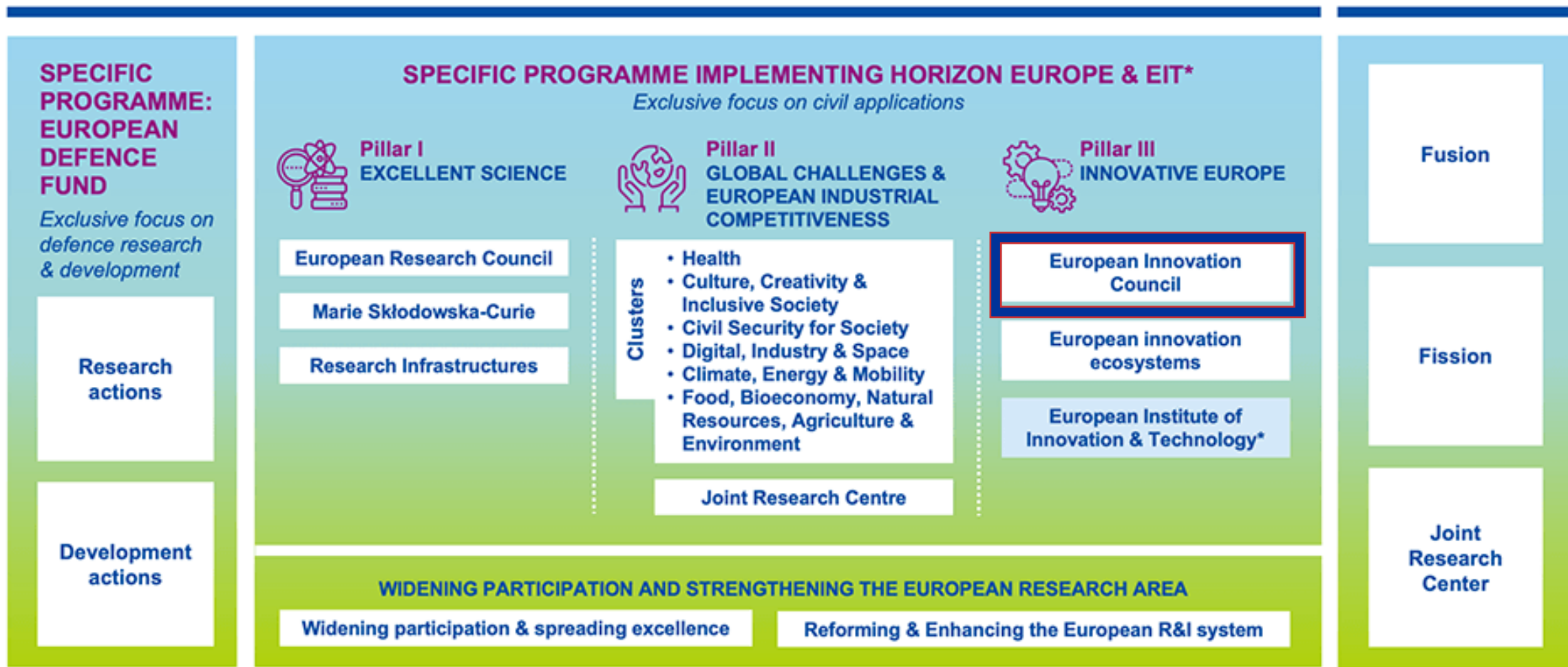
- **Major novelty** introduced in Horizon Europe (following a pilot 2018-20 under Horizon Europe) with budget of over €10 billion as part of HE
- **Objective to identify, develop and scale up breakthrough technologies and disruptive innovations** in Europe and focused on Deeptech
- **Covers full innovation journey** from foundational research on breakthrough technologies, to commercialisation, deployment and scale up (to drive the research to innovation)
- **EIC Board** to advise Commission on strategy and implementation, with full time President (Michiel Sheffer) and 20 members (entrepreneurs, investors, research/ tech transfer, innovation experts)
- **EIC Programme Managers** to develop visions for technology breakthroughs and manage portfolios of projects to achieve breakthroughs (drawing on experience of US DARPA, ARPA-E, etc). To identify and develop challenges with strategic economic/societal impact.
- **EISMEA** (European Innovation Council and SMEs Executive Agency (EISMEA)) delegated implementation of calls and grant management, coordination with equity, BAS (Business Accelerator Services)
- **Dedicated EIC Fund** established to implement investments (EIB as investment advisor)

Horizon Europe Structure



HORIZON EUROPE

EURATOM



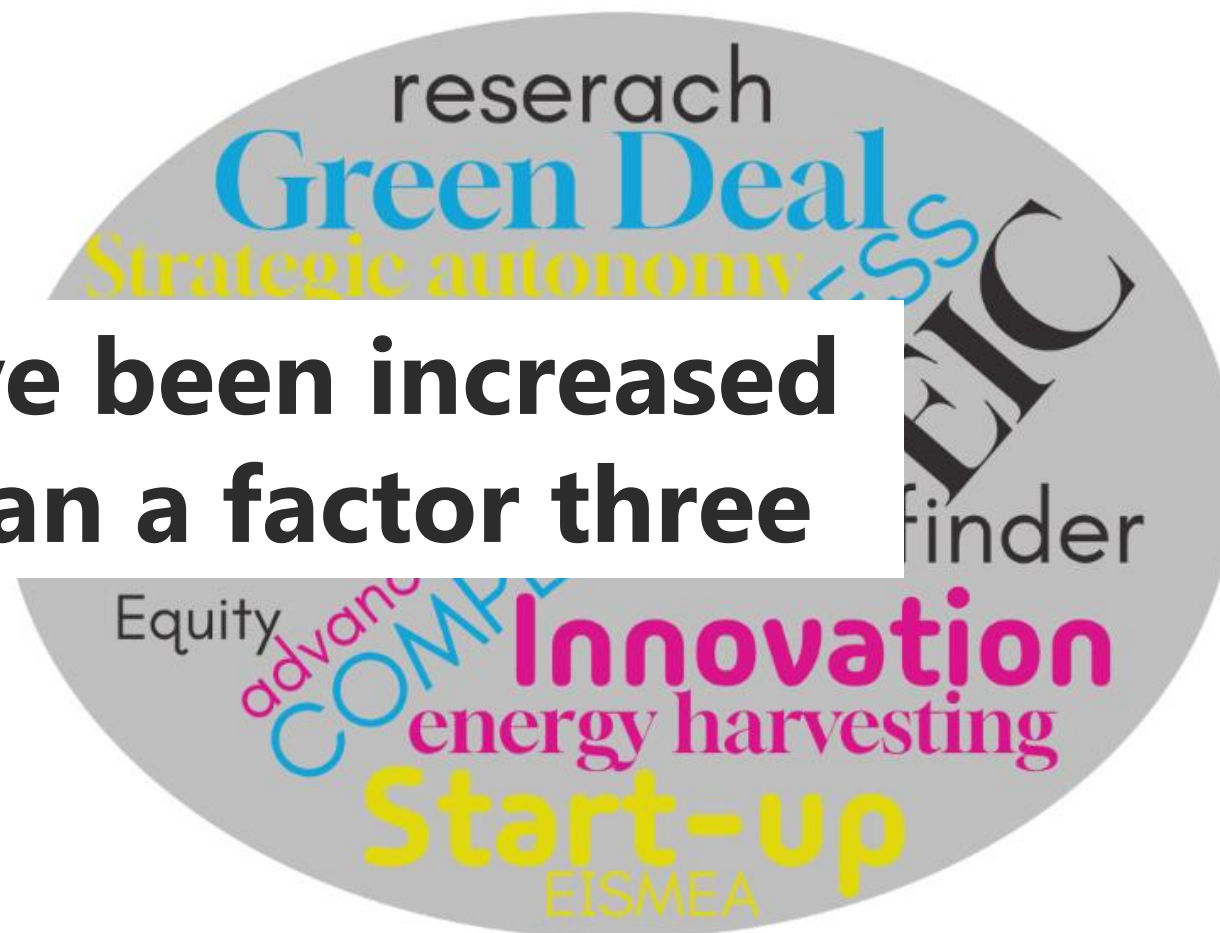
* The European Institute of Innovation & Technology (EIT) is not part of the Specific Programme

ELC is trendy!



**Budget have been increased
by more than a factor three**

**The future of European
competitiveness: Report by
Mario Draghi**





EIC deals with Deep Tech

Definition of Deep Tech

Deep tech is technology that is based on cutting-edge scientific advances and discoveries and is characterized by the need to stay at the technological forefront by constant interaction with new ideas and results from the lab.

#Breakthrough

#Highrisk_Highgain

EIC mainly deals with Deeptech



A deep tech innovator, i.e., is an innovator providing technology solutions based on substantial scientific or engineering challenges. Deep tech is characterized by a **much longer time horizon** from the earliest stages of technological development from prototyping in a research lab (private or public) to demonstration in a real-life environment and then scaling to impact.

- ↳ **Problem and Hardware oriented**
- ↳ **Multidisciplinary**
- ↳ **High risk, high fund needed**
- ↳ **Open innovation approach (ecosystem of innovation)**

investments include private investments, minority stakes, initial public offerings and M&A

EIC main instruments and characteristics



Pathfinder

- **Early stage research** on breakthrough technologies
- Grants up to €3/4 million
- Successor of FET (Open & Proactive)
- **TRL 1-3/4**



Transition

- **Technology maturation** from proof of concept to validation
- **Business & market readiness**
- Grants up to €2.5 million
- **TRL 4-5/6**



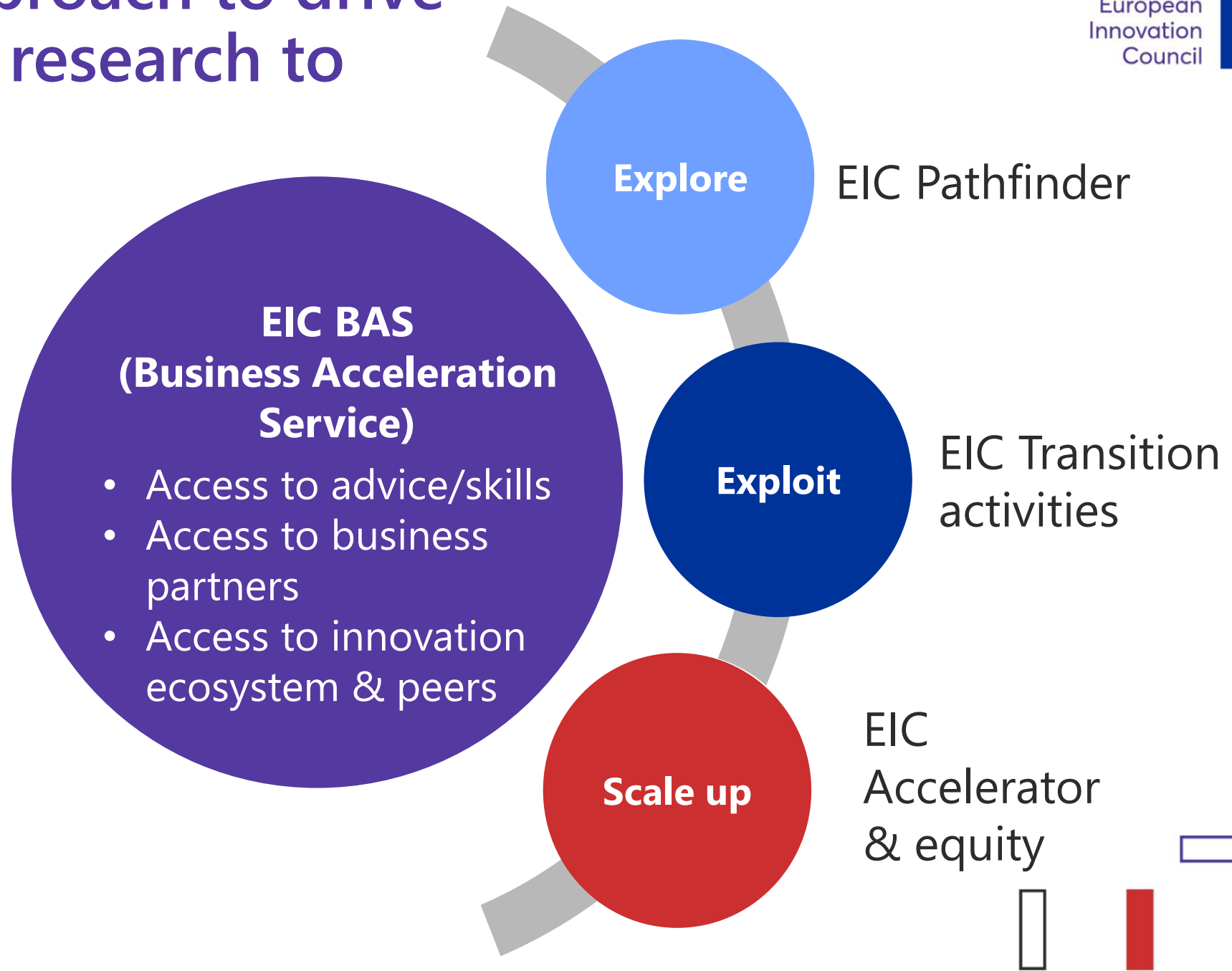
Accelerator

- **Development & scale up** of deep-tech/ disruptive innovations by startups/ SMEs
- Blended finance (grants up to €2.5 million; equity investment up to €10 million)
- Successor of SME instrument
- **TRL 6-9**

- Focus on **breakthrough, market-creating, deep-tech innovations**
- Steered by **EIC Board** of leading innovators (entrepreneurs, investors, researchers, ecosystem)
- **Business Acceleration Services** (coaches/ mentors, corporates, investors, ecosystem)
- **Pro-active management by EIC Programme Managers**
- **Follow up funding for results from Horizon** (ERC, EIT, collaborative) & national programmes



Hands on approach to drive the trip from research to innovation





EIC
PROGRAMME
MANAGERS
Oversee projects

Orsolya Symmons

Health and Biotechnology

Hedi Karray

Artificial Intelligence

Paolo Bondavalli

Advanced materials for energy

Stella Tkatchova

Space systems & technologies

Samira Nik

Quantum tech & electronics

Franc Mouwen

Architecture engineering construction technologies

Federica Zanca

Medical imaging and AI in healthcare

Ivan Stefanic

Food chain technologies, novel & sustainable food

Isabel Obieta

Sustainable Semiconductors

Carina Faber

Renewable energy conversion & alternative resource exploitation



EIC Programme Manager Priorities

Identify candidate challenges and select portfolios of projects

Science and innovation intelligence activity

Outreach and community building

Guiding panel members to select portfolio of projects for Pathfinder, and active observers for Transition and Accelerator

Pro-active management of selected portfolios and projects

Technology

Regulation

Transition to innovation

Communication and dissemination

**EIC
Programme
Management
(per sector)**

Creating together a nucleus of expertise and capabilities; the core of the innovation ecosystems of the future



Why do we have Challenges?

- ➔ **To support areas in which Europe needs more innovative companies in line with European policies**
- ➔ **To create a critical mass**
- ➔ **To provide pro-active support to these companies**
 - **Regulatory**
 - **Technical**
 - **Connect to ecosystems (corporates, investors, early clients, ...)**
 - **Dissemination on trade fairs or other relevant events**
 - **Etc.**



Success rates of WP2023 Challenges

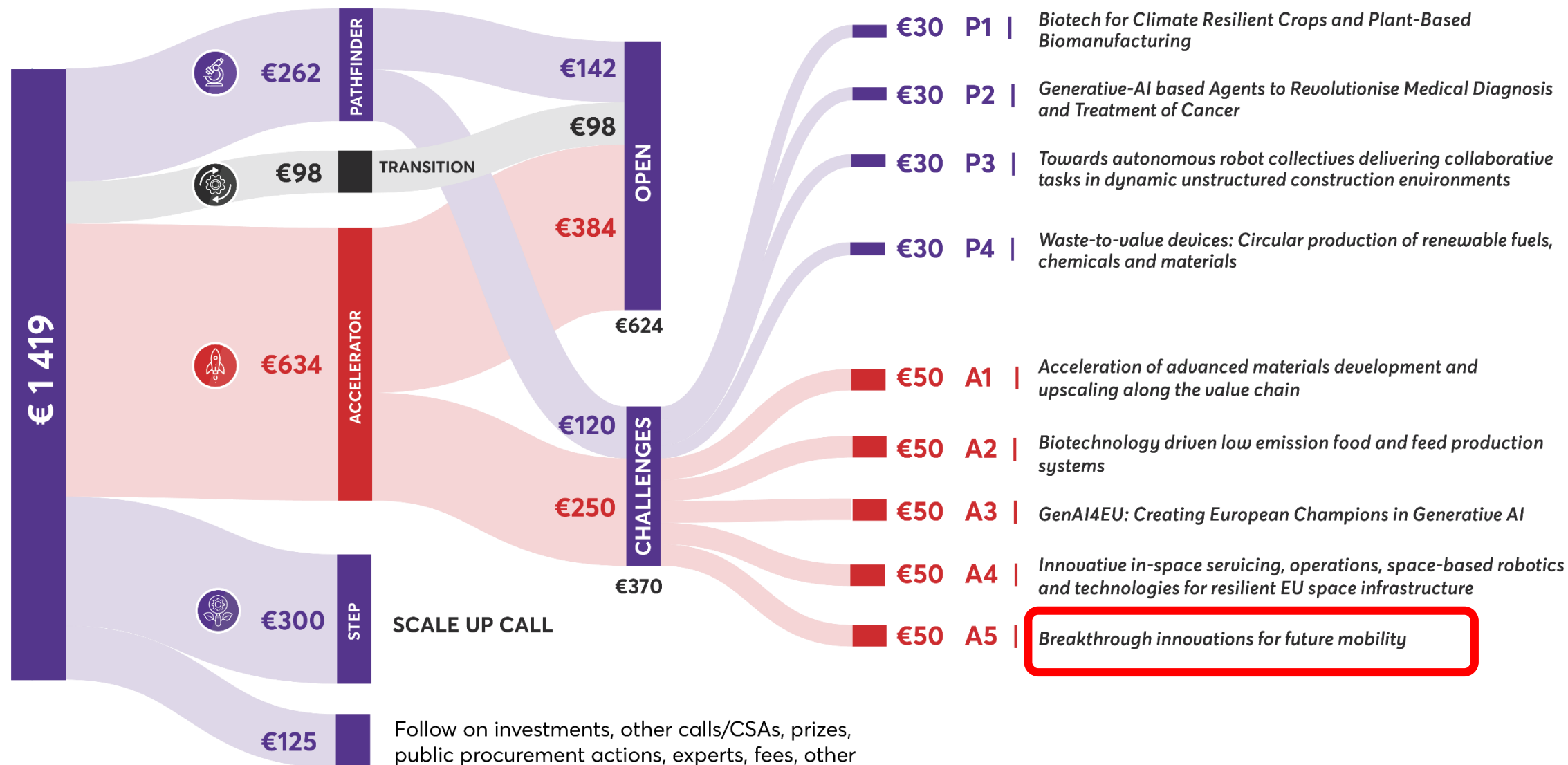
Proposals submitted , Total Requested Grant, Proposals retained, Success Rate, Total Retained Grant, Total Retained Investment, Average...

BY TOPIC, TOPIC CATEGORY

Topic Category	Topic	Proposals submitted	Proposals retained	Total Requested Grant	Total Requested Investment	Total Retained Grant	Total Retained Investment	Average Retained Grant	Average Retained Investment	Success Rate
Challenges	Biomarkers for cancer	51	4	€ 142.4M	€ 206.5M	€ 10.0M	€ 12.5M	€ 0.8M	€ 1.3M	7.8%
Challenges	Decontamination for pandemic management	19	1	€ 33.6M	€ 54.5M	€ 1.9M	€ 2.8M	€ 0.5M	€ 0.7M	5.3%
Challenges	Energy storage	82	7	€ 179.3M	€ 452.6M	€ 17.3M	€ 47.2M	€ 1.0M	€ 2.8M	8.5%
Challenges	New European Bauhaus	56	2	€ 126.6M	€ 231.5M	€ 4.4M	€ 7.4M	€ 0.5M	€ 0.8M	3.6%
Challenges	Quantum or Semiconductor components	77	13	€ 190.2M	€ 434.9M	€ 29.1M	€ 95.1M	€ 1.1M	€ 4.0M	16.9%
Challenges	Resilient agriculture	104	6	€ 229.5M	€ 448.0M	€ 13.0M	€ 11.4M	€ 0.6M	€ 0.5M	5.8%
Challenges	Space technologies and services	43	6	€ 98.0M	€ 216.5M	€ 13.5M	€ 48.5M	€ 1.7M	€ 6.1M	14.0%
Open	Open	2310	131	€ 5,367.8M	€ 9,337.0M	€ 309.5M	€ 459.6M	€ 0.6M	€ 0.8M	5.7%
Total		2742	170	€ 6,367.4M	€ 11,381.4M	€ 398.8M	€ 684.5M	€ 0.6M	€ 1.1M	6.2%

EIC Work Programme 2025

European
Innovation
Council



What are we looking for?



Start-ups and SMEs seeking to **scale-up** high impact innovations with the **potential to create new markets**, or disrupt existing one

Innovation building on **scientific discovery**, or technological breakthroughs („**deep tech**“). Minimum of TRL 6 required.



Innovations where **significant funding** is needed over a **long timeframe** and are **too risky** for private investors alone

What can companies apply for?



EIC Blended Finance

Equity
0.5 to €10
million

NEW

Grant
Less than
€ 2.5
million

Also

Grant only

With other
finance

Equity only

No
previous
grant
needed

NEW

EIC Accelerator– Blended Finance



Grant component

- maximum of less than **€ 2.5 million**
- eligible costs are reimbursed up to a maximum of **70%**
- small mid-caps are not eligible for a grant only



Investment component

- € 0.5 million and **maximum € 10 million** NEW
- usually in the form of direct **equity**, or quasi-equity
- **minority ownership** (maximum 25% of the voting shares of the company)
- **“patient capital” principle** (7-10 years perspective on average, max 15 years)

EIC Accelerator – funding options

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Grant only

If you can prove that you have sufficient financial means for deployment and scale-up (TRL 9)

Grant & Investment

If you need support for development (TRL 6 → 8), deployment and scale-up (TRL 9)

Investment Only

If you are looking to fill the funding gap for rapid scale-up of your high-risk innovation and you don't need a grant

EIC Accelerator –Application process



Prepare the full proposal

We will help you to refine your business proposition with **coaching**

2

You have an idea

You have a disruptive, or deep tech **idea** with a potential to **scale up &** you need **financial support**

Tell us your story in a short proposal

1

3

Submit

You submit your full **proposal** which will be **assessed** by Remote evaluators

4

Pitch to jury

Pitch your innovation in front of EIC Jury Members. If selected, you will sign the **contract**

Full Proposal: Evaluation criterion Excellence

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- 1 Novelty and breakthrough character of the innovation**
- 2 Timing**
- 3 Technological feasibility**
- 4 Intellectual Property Strategy**

Full Proposal: Evaluation criterion Impact

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Council



- 1 Customer demand**
- 2 Market development**
- 3 Commercialisation strategy**
- 4 Scale up potential**
- 5 Broader impact**

Full Proposal: Evaluation criterion Risk

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- 1 Team**
- 2 Risk level of the investment**
- 3 Risk mitigation**
- 4 Implementation plan**

How to apply – useful links

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Council



EIC Accelerator

https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator_en

EIC Work Programme 2025

https://eic.ec.europa.eu/eic-2025-work-programme_en

Support for applicants (FAQs, guidelines, contacts)

https://eic.ec.europa.eu/eic-funding-opportunities/eic-accelerator_en#support-for-applicants--beneficiaries

Accelerator Challenge:

Breakthrough innovations for future mobility

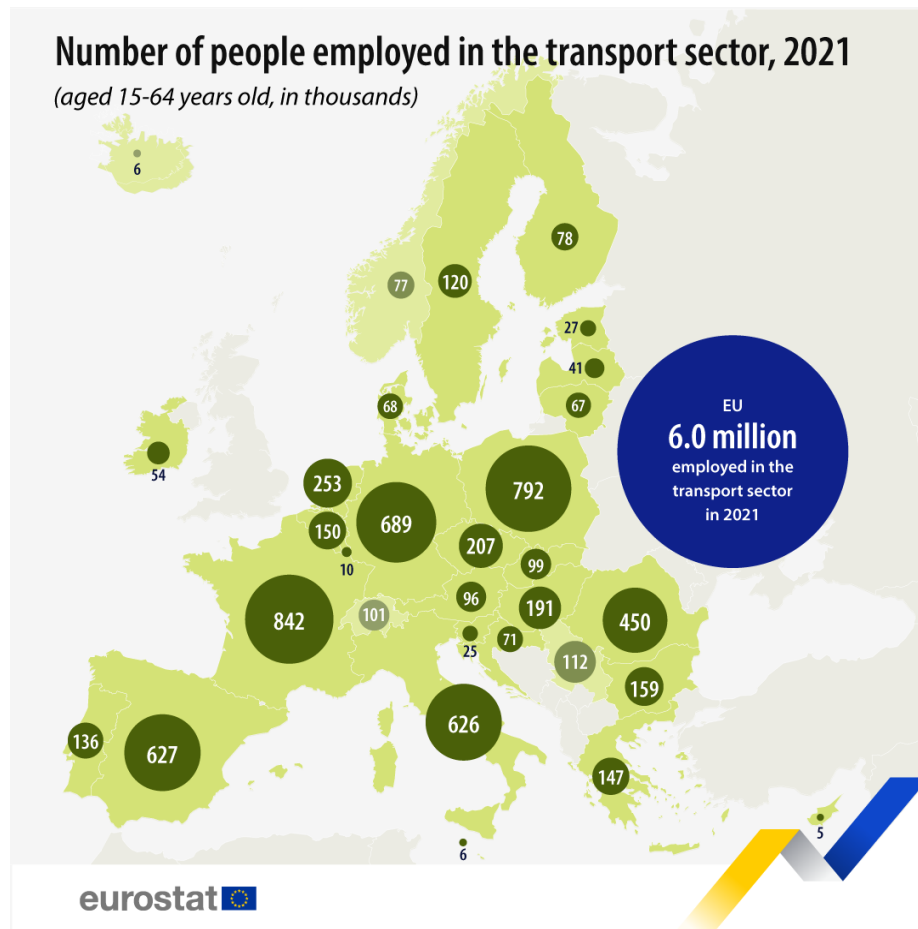
Backing visionary entrepreneurs

Paolo Bondavalli
Programme Manager
Advanced Materials for Energy

European
Innovation
Council



Transport at the core of EU competitiveness

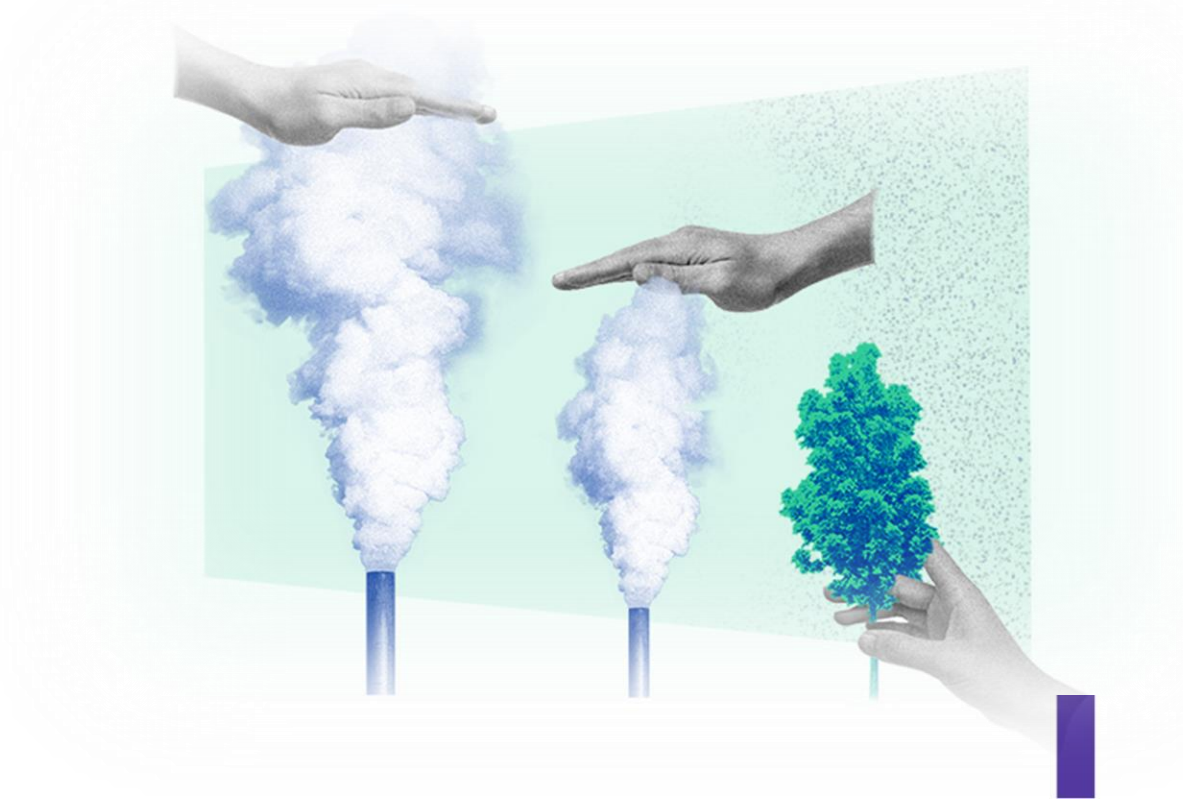


- Transport (automotive) is the area with the **highest private investment in R&I in the EU**
- Fundamental pillar of the world economy – **moving people and goods**
- Many transport technologies have **dual-use**
- Many **critical technologies¹** have direct application in **transport: advanced semiconductors; Artificial intelligence; Advanced connectivity, navigation and advanced sensing; robotics; advanced materials, manufacturing and recycling technologies**

Background:



- ➔ The European Union has charted a path to climate neutrality by 2050 with an ambition to reduce net greenhouse gas emissions by at **least 55% by 2030, compared to 1990 levels.**

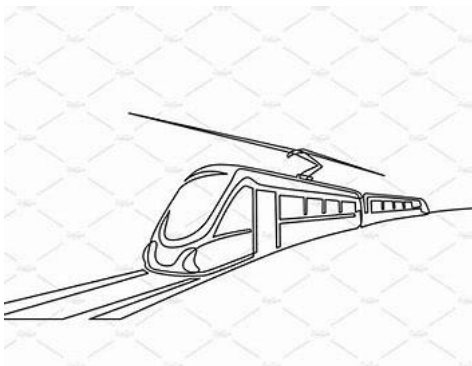




Background II:



- ➔ The transport sector, including road transport, aviation, waterborne and rail, has however been steadily increasing its emissions at an average **yearly rate of 1.7% since 1990**. The resulting emissions are also one of the main contributors to environmental and health problems.
- ➔ **EC has developed 'The Sustainable and Smart Mobility Strategy' which includes an action plan to deliver on a 90% cut in mobility emissions by 2050**, delivered by a smart, competitive, safe, accessible, and affordable transport system.

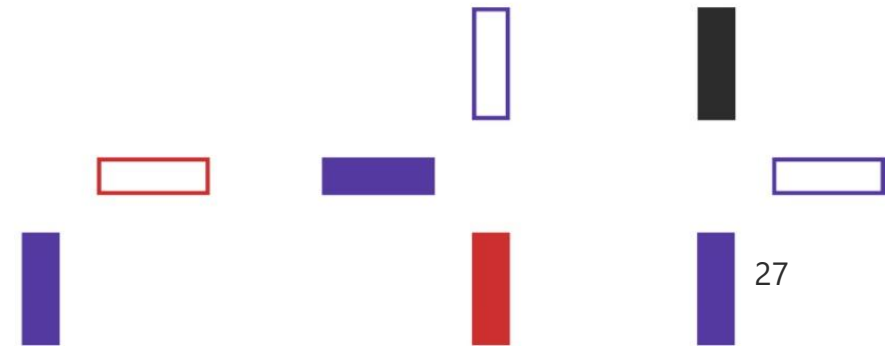




Scope:



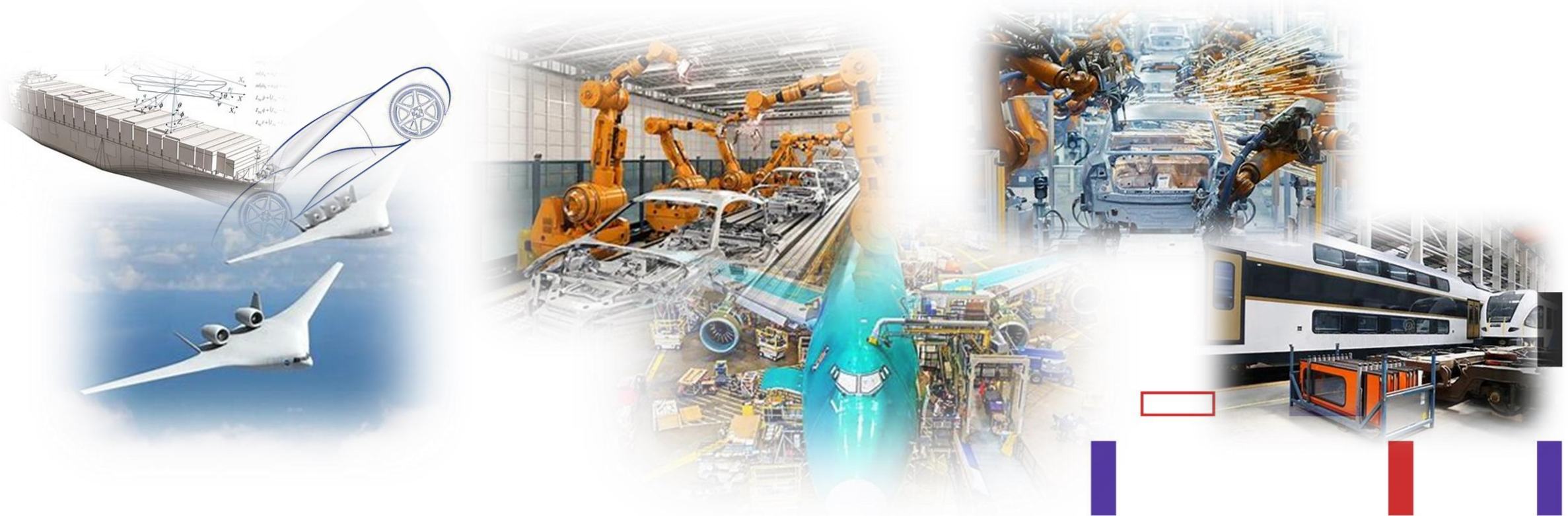
To meet the objectives, this Challenge focuses on supporting companies developing cost-effective and scalable deep tech breakthroughs that will help **deliver reductions in mobility-related emissions in its many facets, from the manufacture of vehicles to their use.**



Specific objectives:



➔ **Breakthroughs in the design, manufacture, assembly and operation** of road vehicles, waterborne vessels, aircraft, or rail contributing significantly to reduce their environmental footprint;





Specific objectives:



- ➔ **Disruptive technologies** contributing to increase operational efficiencies and reductions in greenhouse gas emissions, secondary and other **harmful emissions and noise** for Heavy Duty road vehicles, waterborne vessels, aircraft or rail, multimodal transport and/or their related infrastructure;

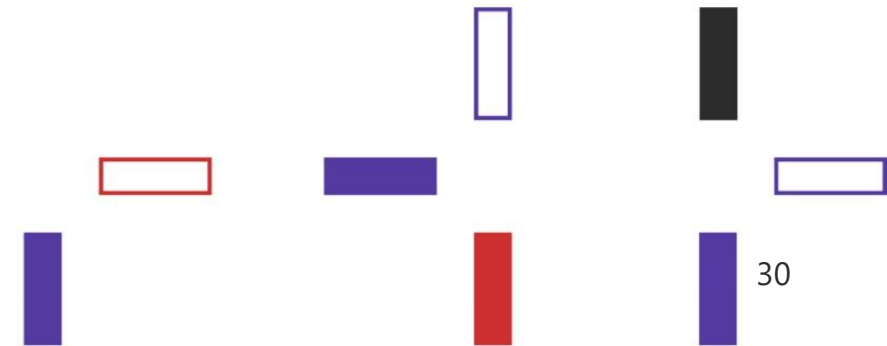




Specific objectives III:



➔ **Sustainable fuels** for hard-to-abate sectors such as aviation and maritime, including retrofitting solutions;

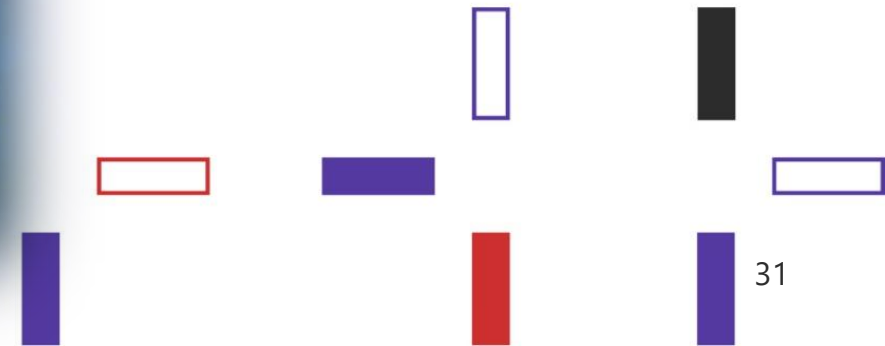




Specific objectives IV:



➔ **Breakthroughs in the development and integration of digital tools ranging from sensors to the application of AI** enhancing autonomous transport solutions and more sustainable energy use on land, water or in the air, improve the connectivity and efficiency of vehicles and the transport system including capacity management, and smart and bi-directional charging functionalities.





Expected outcomes and impacts:

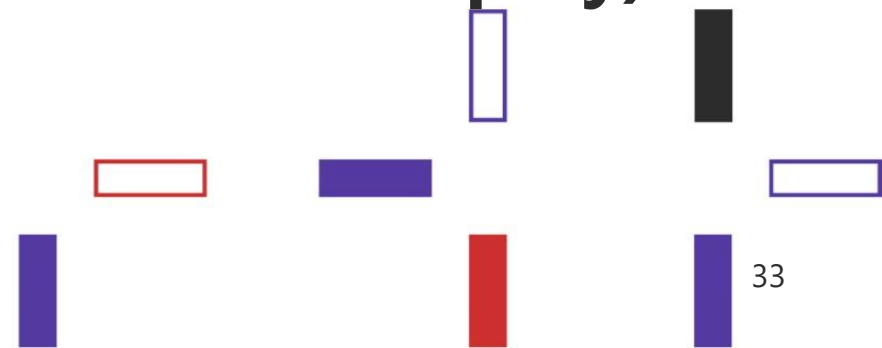


- ➔ To increase the **competitiveness and economic autonomy or security** of European companies across the mobility value chain;
- ➔ To support **the scaling up of technologies that materially reduce mobility-related emissions**, including a quantification on how they reduce emissions or increase efficiency of transport, or provide more affordable or inclusive mobility
- ➔ **To deliver improvements** in accessibility, safety, security, connectivity, flexibility and efficiency of the transport system including new mobility services and models;
- ➔ To develop new **skills and create jobs in the EU.**

The good proposal



- **The deeptech content is demonstrated (breakthrough and high gain/high risk approach)**
- **It has as main objective reduction of CO2 emission (not a collateral impact)**
- **The business model and plan are pertinent and sound**
- **The market is there and the roadmap for its penetration is credible**
- **The justification for EIC fundings (grant and equity) is convincingly detailed**



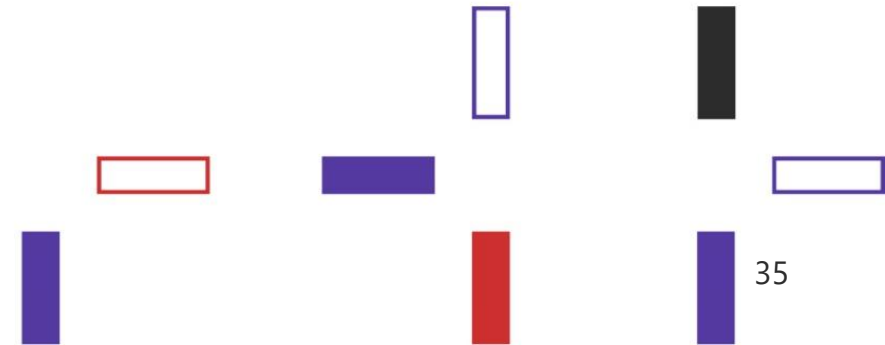


Call	Who can apply	What for	EIC Open		EIC Challenges		
			Deadlines	Indicative Budget (EUR million)	EIC Challenge	Deadlines/ Cut-offs	Indicative Budget (EUR million)
EIC Pathfinder	Open call: only consortia can apply. Challenges call: smaller consortia (at least two eligible entities) or single applicants 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)	21 May 2025	142	Biotech for Climate Resilient Crops and Plant-Based Biomanufacturing Generative-AI based Agents to Revolutionize Medical Diagnosis and Treatment of Cancer Towards autonomous robot collectives delivering collaborative tasks in dynamic unstructured construction environments Waste-to-value devices - circular production of renewable fuels, chemicals and materials	29 October 2025	120
EIC Transition	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.	17 September 2025	98			
EIC Accelerator	Single start-ups and SMEs (including spin-offs), individuals (intending to launch a start-up/ SME) and in some cases small mid-caps (fewer than 499 employees).	Grant component below EUR 2.5M for innovation activities (TRL 6 to 8) Investment component of EUR 0.5 up to 10 million for scaling up and other activities. Grant only and investment only component under certain conditions.	Short applications: any time (continuous) Full applications: 12 March 2025, 1 October 2025	384	Acceleration of advanced materials development and upscaling along the value chain Biotechnology driven low emission food production systems GenAI4EU: Creating European Champions in Generative AI Innovative in-space servicing, operations, space-based robotics and technologies for resilient EU space infrastructure Breakthrough innovations for future mobility	12 March 2025, 1 October 2025	250
EIC Accelerator – STEP scale-up call	Single startups and SMEs, small mid-caps, investors on behalf of eligible companies	Investment component of EUR 10 up to 30 million for scaling up strategic technologies for Europe.	Any time (continuous)	300			



Indicative budget

- EUR 50 Million





Thank you!

<https://eic.ec.europa.eu>

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