

PERFORMANCE OF EUROPEAN PARTNERSHIPS



BIENNIAL
MONITORING
REPORT 2022
ON PARTNERSHIPS
IN HORIZON EUROPE

4. Profiles of European Partnerships



4. PROFILES OF EUROPEAN PARTNERSHIPS

HIGHLIGHTS OF THIS CHAPTER

The landscape of Horizon Europe partnerships and how it has evolved from H2020 is described in Chapter 1.

BMR data collection – a Common Indicators Survey and partnership fiches – is a new process, the mainly successful completion of which relied on an intensive and interactive dialogue with the European Partnerships and hands-on support from the Expert Group and the Commission.

While the alignment between Partnership Specific Impact Pathways and Key Performance Indicators, and Horizon Europe objectives and other major European objectives is already considered as good, longer-term efforts to establish a more coherent and consistent set of indicators related to key European objectives could ensure an even more solid basis for monitoring and verifying performance and impacts within the partnership landscape and across wider ranges of policies and policy initiatives.

While still somewhat variable in quality, the partnership fiches provide a good overview of and insight into the Horizon Europe partnerships, especially into identified and potential synergies across the partnership portfolio and related European and national initiatives.

4.1 READING GUIDE FOR THE PARTNERSHIP FICHES

4.1.1 INTRODUCTION

To facilitate the monitoring of individual performances of European Partnerships, a harmonised format, accessible to a broader readership of policymakers and citizens, was developed, within which partnership-specific content could be presented. This chapter, like the previous one for the individual countries, comprises individual partnership fiches including the following information by means of a 'snapshot':

- **Section 1**: Basic information on the partnership (name, type, partner composition, budget), a short mission and vision statement, the main UN SDGs the partnership contributes to, and the strategy map (also called 'Partnership Specific Impact Pathways' or PSIPs). This explains in a schematic narrative how each partnership is built up from its implemented actions, resources and processes during its lifetime, towards its expected outcomes and impacts both within and beyond its lifetime.
- **Section 2**: A table providing the most relevant partnership-specific KPIs, in accordance with the strategy map presented in section 1.
- **Section 3**: Thematic-inspired qualitative content in the form of past or ongoing success stories or intended/expected results. Up to three examples per partnership are described. The broader theme for this BMR is 'synergies', supported by subthemes relating to the twin transition (green, digital) and resilience.
- Section 4: Overview of the partnership members per type¹⁰⁴ and geographical coverage. In the case of partnerships where
 the private members are represented by one or more associations (co-programmed European Partnerships and some JUs),
 the membership structure of the association is provided.

¹⁰⁴⁾ Six categories are used in this report: 1) University (university and other higher education organisations); 2) Research (public research organisation, including international research organisation as well as private research organisation controlled by a public authority); 3) SME (small and medium-sized enterprise), 4) Industry (industrial /profit private organisation); 5) Public (public authorities, ministries, research funders); 6) Other (includes, e.g. associations, technology clusters, non-profit organisations, consultancies or project management agencies).



The main objective of the individual partnership fiches within the BMR is to allow the readership to broadly discover the individual partnerships and understand their essential specific objectives in relation to broader societal objectives, as set out by the major EU and global policies (such as, but not limited to, the European Green Deal and UN SDGs). Each partnership fiche includes the interactive links necessary to find more detailed content.

4.1.2 METHODOLOGY AND PROCESS

The concept of the partnership fiche was first developed and tested together with a number of 'pilot' partnerships ¹⁰⁵. Following this pilot phase, intense interactive dialogues with all partnerships were subsequently set up to develop, in an iterative fashion, content within the agreed harmonised format, at the level of the strategy map (PSIPs) and the KPI table. Typically, several virtual meetings as well as written interactions between the partnership representatives and the assigned Expert Group members took place on virtual platforms, before the finalisation and approval of the content.

4.1.3 IMPORTANT NOTES FOR CONTENT INTERPRETATION

The 2022 BMR cycle took place within a context of partnerships' ongoing negotiations with both the European Commission and partnership internal stakeholders. Thus, some fiches are not yet (fully) developed as the respective partnerships have yet to finalise defining their strategy map, objectives and KPIs.

Furthermore, the timing of the launch of the BMR cycle implied that earlier outputs in terms of defining strategic objectives (e.g. the intervention logic) and KPIs, often using more elaborate and different concepts, needed to be transformed towards broadly accessible (i.e. for non-experts) and more concise content and formats. As a result, essential KPIs often had to be selected from existing larger monitoring systems, leading to discussions within the partnerships or, alternatively, in new partnerships, initially KPIs still had to be defined and/or fine-tuned. These different stages of maturity in terms of the availability of monitoring systems and the associated content, coupled with ongoing negotiation processes, implies that more often than not, KPI tables are not yet complete in terms of content (e.g. targets for 2023, 2025, 2027 still need to be defined, or baselines must be defined and calculated). In other words, it is expected that the current content presented on the individual partnership fiches will be subject to minor, but certain changes (modifications, deletions and additions) towards the next BMR. The definition of KPIs, measurement methods and target setting for partnership-specific indicators requires substantial interactions with stakeholders, often requiring a lead-time of six to nine months to develop a first monitoring system. Therefore, it is expected that the next BMR will contain more stabilised content at the level of both strategy maps and KPI tables.

Finally, it is important to stress that while partnership fiches are fully consistent with legally binding documents (such as, but not restricted to: MoUs, SRIA, SBAs, Annual Activity Reports, etc.) describing joint commitments, rights and obligations between the European Commission and the partnerships (and potentially other legal entities), the content on the partnership fiches itself is not to be considered legally binding, nor exhaustive – e.g. in terms of stated objectives or KPIs (due to some partnerships' vast area(s) of intervention). Therefore, interested readers are invited to visit either the European Commission and/or individual partnership websites to discover formal documents and/or additional and more detailed information on monitoring and evaluation.



4.2 INDIVIDUAL EUROPEAN PARTNERSHIP FICHES

The information presented below gives a snapshot of both the planned and currently active landscape across Horizon Europe partnerships.

Pillar II - Global Challenges and European Industrial Competitiveness

CLUSTER 1 - HEALTH

Planned to comprise nine European Partnerships, six of which will be co-funded, two institutionalised, and one co-programmed.

Launched European Partnerships covered in this report are:

- 1. Innovative Health Initiative (institutionalised based on Article 187 TFEU)
- 2. Global Health EDCTP3 (institutionalised based on Article 187 TFEU)
- 3. Risk Assessment of Chemicals (co-funded)

Other European Partnerships agreed in the first Strategic Plan 2021-2024:

- 4. Transformation of Health Care Systems (co-funded)
- 5. Personalised Medicine (co-funded)
- 6. Rare Diseases (co-funded)
- 7. One Health AMR (co-funded)
- 8. Fostering a European Research Area for Health Research (ERA4Health) (co-funded)
- 9. Pandemic Preparedness (co-programmed)

Budget (EUR million)				
EU contribution	2710			
Commitments from private partners	1439.88			
Commitment from public partners	711.37			

- Living and working in a health-promoting environment
- Tackling diseases and reducing disease burden
- Ensuring access to innovative, sustainable, and high-quality health care
- Unlocking the full potential of new tools, technologies, and digital solutions for a healthy society
- Maintaining an innovative, sustainable, and globally competitive health-related industry.



CLUSTER 4 - DIGITAL, INDUSTRY, AND SPACE

Planned to comprise 10 European Partnerships, 4 of which will be institutionalised and 6 co-programmed. No co-funded partnerships are planned.

Launched European Partnerships covered in this report:

- 1. Key Digital Technologies (institutionalised, based on Article 187 TFEU)
- 2. Smart Networks and Services (institutionalised, based on Article 187 TFEU)
- 3. EuroHPC (institutionalised, based on Article 187 TFEU)
- 4. Metrology (institutionalised, based on Article 185 TFEU)
- 5. Al, Data and Robotics (co-programmed)
- 6. Photonics (co-programmed)
- 7. Made in Europe (co-programmed)
- 8. Clean Steel Low Carbon Steelmaking (co-programmed)
- 9. Processes4Planet (co-programmed)

Other European Partnerships agreed in the first Strategic Plan 2021-2024:

10. Globally Competitive Space Systems (co-programmed)

Budget (EUR million)				
EU contribution	8340			
Commitments from private partners	9151.16			
Commitment from public partners	5245.79			

- Global leadership in clean and climate-neutral industrial value chains, the circular economy and climate-neutral digital systems and infrastructures (networks, data centres)
- Industrial leadership and increased autonomy in key strategic value chains with security of supply in raw materials
- Globally attractive, secure, and dynamic data-agile economy
- Open strategic autonomy in digital technologies and in future emerging enabling technologies
- Open strategic autonomy in developing, deploying, and using global space-based infrastructures, services, applications and data
- A human-centred and ethical development of digital and industrial technologies.



CLUSTER 5 - CLIMATE, ENERGY, AND MOBILITY

Planned to comprise 11 European Partnerships, 2 of which will be co-funded, 4 institutionalised, and 5 co-programmed.

Launched European Partnerships covered in this report:

- 1. Clean Hydrogen (institutionalised based on Article 187 TFEU)
- 2. Clean Aviation (institutionalised based on Article 187 TFEU)
- 3. Single European Sky ATM Research 3 (institutionalised based on Article 187 TFEU)
- 4. Europe's Rail (institutionalised based on Article 187 TFEU)
- 5. Zero-Emission Road Transport (2ZERO) (co-programmed)
- 6. Connected, Cooperative and Automated Mobility (CCAM) (co-programmed)
- 7. Batteries: Towards a competitive European industrial battery value chain (BATT4EU) (co-programmed)
- 8. Zero-emission Water Transport (co-programmed)
- 9. People-centric Sustainable Built Environment (Built4People) (co-programmed)
- 10. Clean Energy Transition (co-funded)
- 11. Driving Urban Transitions (co-funded)

Budget (EUR million)				
EU contribution	7190			
Commitments from private partners	10 740			
Commitment from public partners	886.28			

- Clean and sustainable transition of the energy and transport sectors towards climate neutrality facilitated by innovative cross-sectoral solutions
- More efficient, clean, secure, and competitive energy supply through new solutions for smart grids and energy systems based on more performant renewable energy solutions
- Efficient and sustainable use of energy, accessible for all is ensured through a clean energy system and a just transition
- Towards climate-neutral and environmentally friendly mobility through clean solutions across all transport modes while increasing global competitiveness of the EU transport sector
- Safe, seamless, smart, inclusive, resilient, climate neutral and sustainable mobility services for people and goods thanks
 to user-centric technologies and services, including digital technologies and advanced satellite navigation services.



CLUSTER 6 - FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE, AND ENVIRONMENT

Planned to comprise eight European Partnerships, seven of which will be co-funded, and one institutionalised. No co-programmed partnerships are planned.

Launched European Partnerships covered in this report:

- 1. Circular Bio-Based Europe (institutionalised based on Article 187 TFEU)
- 2. Rescuing Biodiversity to Safeguard Life on Earth (Biodiversa+) (co-funded)
- 3. Climate Neutral, Sustainable and Productive Blue Economy (co-funded)
- 4. Water4All: Water security for the planet (co-funded)

Other European Partnerships agreed in the first Strategic Plan 2021-2024:

- 5. Animal Health and Welfare (co-funded)
- 6. Sustainable Food Systems (co-funded)
- 7. Agriculture of Data (co-funded)
- 8. Accelerating Farming Systems Transition: Agroecology living labs and research infrastructures (co-funded)

Budget (EUR million)				
EU contribution	2 0 4 6			
Commitments from private partners	1000			
Commitment from public partners	960			

- Climate neutrality and adaptation to climate change
- Preservation and restoration of biodiversity and ecosystems
- Sustainable and circular management of natural resources; tackling pollution; bioeconomy
- Food and nutrition security for all from sustainable food systems from farm to fork
- Innovative governance models enabling sustainability, environmental observation.



OTHER PILLARS

Planned to comprise 10 European Partnerships, 1 of which will be co-funded, 8 institutionalised (EIT regulation), and 1 co-programmed.

Launched European Partnerships covered in this report:

- 1. European Open Science Cloud (co-programmed)
- 2. Innovative SMEs (co-funded)
- 3. EIT Health (institutionalised based on EIT Regulation)
- 4. EIT Digital (institutionalised based on EIT Regulation)
- 5. EIT Manufacturing (institutionalised based on EIT Regulation)
- 6. EIT InnoEnergy (institutionalised based on EIT Regulation)
- 7. EIT Climate-KIC (institutionalised based on EIT Regulation)
- 9. EIT Food (institutionalised based on EIT Regulation)

8. EIT Mobility (institutionalised based on EIT Regulation)

10. EIT Raw Materials (institutionalised based on EIT Regulation)

Budget (EUR million)					
EU contribution	3594				
Commitments from private partners	No data available (KICs)				
Commitment from public partners	1233.3				

CLUSTER 1 HEALTH







MISSION AND VISION STATEMENT

The Global Health EDCTP3 Joint Undertaking supports global collaborative research, capacity strengthening, and international initiatives to accelerate the development, evaluation, and implementation of interventions to prevent, identify, and treat infectious diseases and emerging/re-emerging infections in sub-Saharan Africa with the overarching goal to reduce overall mortality and morbidity.

The partnership's general objectives are to:

- reduce the socio-economic burden of infectious diseases in sub-Saharan Africa promoting the development and uptake of new or improved health technologies;
- increase health security in sub-Saharan Africa and globally by strengthening the research and innovation-based capacities for preparedness and response to control infectious diseases.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 1: Health

Type of Partnership: Institutionalised (Art 187 TFEU) - joint undertaking

Coordinating entity: EDCTP3 members are represented by the EDCTP Association

Total estimated budget: EUR 1.6 bn

EU commitments: up to EUR 800 m

Partners' commitments: EUR 839 m*

Predecessor under Horizon 2020: EDCTP 1 and EDCTP2

* Out of which the members of the JU (EDCTP Association) is expected to contribute at least EUR 439 m and contributing partners EUR 400 m

FIND OUT MORE

https://www.edctp.org/

https://ec.europa.eu/info/research-and-innovation/research-area/health-research-and-innovation/edctp_en

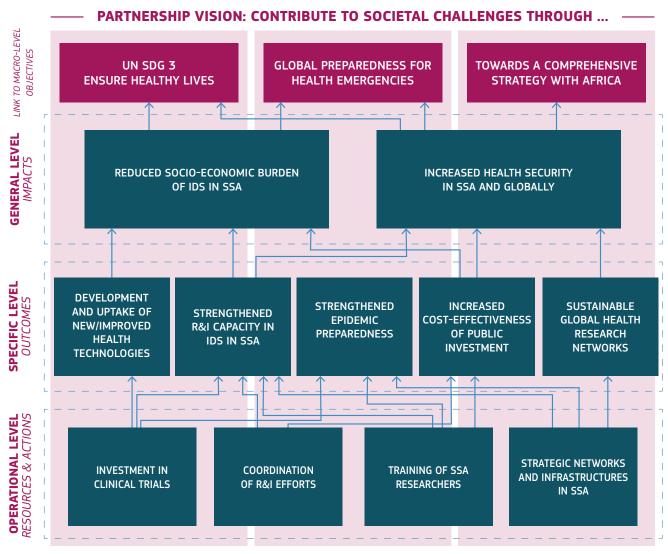


@EDCTP

☑ EC-GLOBAL-HEALTH-EDCTP3@ec.europa.eu



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



ID: infectious diseases SSA: sub-Saharan Africa



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (II	NPUT), PROCESSES A	ND ACTIV	ITIES		
Investment in clinical	Funding (euro)	EDCTP2	TBD	TBD	TBD	Sustained
trials	# of projects (RIA)					& increased
Investment in R&I coordination	Funding (euro)	EDCTP2	TBD	TBD	TBD	Sustained & increased
Capacity building in Sub-Saharan Africa (SSA)	Funding (euro) fellowships; funding other capacity building activities ¹	EDCTP2	TBD	TBD	TBD	Strengthened
Strategic partnerships development	# of partnerships	EDCTP2	TBD	TBD	TBD	Strengthened
		OUTCOMES				
Development of health technologies	# licensed	EDCTP2	TBD	TBD	TBD	Increased
	# advanced					G
R&I capacity in infectious diseases in SSA	# publications external funding (euro)	EDCTP2	TBD	TBD	TBD	Strengthened
R&I epidemic	Funding (euro) invested;	EDCTP2	TBD	TBD	TBD	Strengthened
preparedness in SSA	# projects	2502		.55		Jackigalenea
Cost-effectiveness of public investment	# co-funded activities;	EDCTP2	TBD	TBD	TBD	Increased
or public investment	# of additional activities between Member States					
Sustainable global health research networks	# of participating countries and institutions;	EDCTP2	TBD	TBD	TBD	Increased
	Funding (euro) in third party contributions					
		IMPACTS				
Burden of infectious diseases (IDs) in SSA ²	Mortality caused by IDs in SSA	WHO Mortality Data Mortality Country profile (who.int)	N/A	N/A	N/A	Reduced
	Disability-adjusted life years (DALYs) caused by IDs in SSA	WHO data on the burden of disease Global health estimates: Leading causes of DALYS (who.int)				
Health security	Average capacity of SSA countries to develop & maintain International Health Regulations (IHR)	As of October 2021, the WHO AFRO region had a 49 % average capacity e-SPAR Public (who.int)	N/A	N/A	N/A	Increased

¹ EDCTP funds other capacity building activities aside from fellowships, such as activities in the area of strengthening ethics and regulatory capacity in SSA.

General note to the reader: These KPIs have been simplified for the sake of clarity. Further details on the Global Health EDCTP3-specific KPIs can be found in the Strategic Research and Innovation Agenda, available here: https://ec.europa.eu/info/sites/default/files/research_and_innovation/research_by_area/documents/ec_rtd_edctp3-sria-2022.pdf

² Although the units of measurement selected for this impact do allow measuring whether the burden of IDs have increased/decreased, this burden is multi-factorial and thus the work and investment by EDCTP alone cannot decrease this burden.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Due to its versatility and cross-sectoral integration, the Global Health EDCTP3 should be managed through close collaboration with other programmes and initiatives to create synergies and limit duplications. It is essential to design administrative mechanisms to appropriately address these synergies and complementarities. Synergies will be sought with the following European Partnerships:

- Innovative Health Initiative (IHI)
- One Health AMR
- Animal Health and Welfare
- · Transformation of Health Care Systems
- · Fostering an ERA for Health Research
- Key Digital Technologies
- High Performance Computing
- Smart Networks and Services.

SYNERGIES: STORY 1

Partnership with the World Health Organization (WHO): WHO is a key partner for EDCTP and collaboration is happening at strategic and technical levels, with EDCTP staff actively participating in several WHO policy and technical advisory group meetings. EDCTP representatives participate in a variety of committees and working groups established by WHO, including the WHO R&D Blueprint Global Coordination Mechanism, several workstreams coordinated by the WHO Global Malaria Programme to address the double challenge of malaria & COVID-19, and the WHO-AFRO Expert Committee on Traditional Medicine for COVID-19.

SYNERGIES: STORY 2

EDCTP became an active member of the ESSENCE on Health Research platform in 2020, an initiative that allows donors and funders to identify synergies, establish coherence and increase the value of resources for health research. EDCTP contributed to 1) the ESSENCE Working Group of Review of Investments (WGRI), which is developing a coordination mechanism for reviewing investments in clinical research capacity building in response to the World Bank and Coalition for Epidemic Preparedness and Innovation (CEPI) report *Money and Microbes: Strengthening Research Capacity to Prevent Epidemics*; as well as 2) the publishing and dissemination of a good practice document to guide funders on the best ways to invest in implementation science.

SYNERGIES: STORY 3

In September 2020, EDCTP became a member-observer of the Global Research Collaboration for Infectious Disease Preparedness GloPID-R network, an alliance bringing together research funding organisations on a global scale to facilitate effective and rapid research to address a significant outbreak of a new or re-emerging infectious disease with epidemic and pandemic potential.

OVERVIEW OF MEMBERS

Not available









MISSION AND VISION STATEMENT

The Innovative Health Initiative (IHI) is a new joint undertaking under Horizon Europe. It will fund cross-sectoral collaboration in pre-competitive health research and innovation, involving patients, academia, healthcare professionals, healthcare delivery organisations, regulators, and pharmaceutical, medical technology and digital health companies.

The IHI intends to contribute to*:

- help create an EU-wide health research and innovation ecosystem that facilitates translation of scientific knowledge into innovations;
- foster the development of safe, effective, people-centric and cost-effective innovations that respond to strategic unmet public health needs;
- drive cross-sectoral health innovation for a globally competitive European health industry.

IHI will cover the entire continuum of care, from prevention, diagnostics, to treatment and disease management.

* IHI general objectives, SBA, article 1.4.1 of the Framework of the proposal/initiative, p. 224

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 1: Health

Type of Partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Name of coordinating entity: The IHI industry partners are COCIR, EFPIA including Vaccines

Europe, EuropaBio and MedTech Europe

Total estimated budget: EUR 2.4 bn

EU commitments: up to EUR 1.2 bn

Partners' commitments: EUR 1.2 bn*

Predecessor under Horizon 2020: Innovative Medicine Initiative (IMI1 and IMI2)

* Out of which the members of the JU are expected to contribute at least EUR 1 bn and contributing partners EUR 200 m.

FIND OUT MORE

http://www.ihi.europa.eu/

in https://www.linkedin.com/company/innovative-health-initiative/

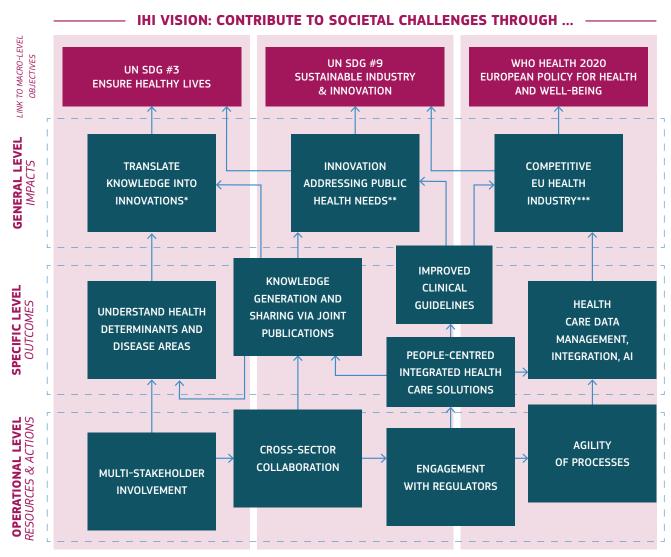
https://twitter.com/IHIEurope

https://www.youtube.com/c/TheInnovativeHealthInitiative

☑ infodesk@ihi.europa.eu



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



^{*}IHI General Objective 1: Contribute toward the creation of an EU-wide health research and innovation ecosystem that facilitates translation of scientific knowledge into innovations

^{**}IHI General Objective 2: Foster the development of safe, effective, people-centric and cost-effective innovations that respond to strategic unmet public health needs

^{***}IHI General Objective 3: Drive cross-sectoral health innovation for a globally competitive European health industry



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ НАМЕ	UNIT OF MEASUREMENT	BASELINE ¹	TARGET ² 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCE	ES (INPUT), PROCE	SSES AND ACT	TIVITIES		
Health care stakeholder involvement	% projects involving > 2 types of stakeholders	50 %	55 %	60%	65 %	70%
Cross-sectoriality	% projects with private members from min. 2 technology sectors	25 %	TBD	TBD	TBD	TBD*
Regulator engagement	# projects interacting with regulators ³	13	0	5	10	20
		оитсом	ES			
Multi-stakeholders' collaboration	% publications	65 %	65 %	66%	67 %	70%
Public-private collaboration	% publications	65 %	65 %	66 %	67 %	70%
Project outputs for use in clinical practice and health R&D&I	# new tools, biomarkers, taxonomies	100	10	50	120	150
Integrated health care solutions	# examples of people- centred, integrated project outputs	N/A	0	3	7	10
Value assessment of integrated solutions	# methodologies submitted to health care authorities and organisations	N/A	0	2	3	5
New or improved clinical guidelines	# contributing projects	13	0	5	10	20
Health data management	# common standards, protocols and frameworks	N/A	0	3	7	10
Data integration demonstration	# pilots	N/A	0	5	10	20
AI feasibility in healthcare	# pilots	N/A	0	1	2	3
		IMPACT	S			
Knowledge to innovation translation	# sustainable networks, collaborations, infrastructures, biobanks, collaborative platforms	10	0	4	7	15
Strategies to address unmet public health needs (WHO list)	% projects developing new or improved methodologies across disciplines	N/A	90%	90 %	90 %	90%
Globally competitive EU health care industry	# examples of cross-sector health innovation activities (e.g. spin-offs)	N/A	0	5	10	20

PARTNERSHIP FICHE: Innovative Health Initiative



There are difficulties in setting up baselines as some of the activities are relatively new or without a good reference (e.g. cross-sectoral collaborations). For the totally new activities, baselines are simply set to zero. As the first call will only be launched later in 2022, we expect that the targets for most indicators in 2023 will be zero.

The causal link between the activities of the partnership and the expected impact (e.g. competitiveness of industry) is difficult to establish; such impacts are very much multifactorial and an initiative like this one can only make a partial contribution, which is reflected in the monitoring framework. In addition, the development timelines for healthcare innovation are relatively long, especially due to regulatory requirements. That means most impacts will likely only become apparent after the end of the partnership. The proposed indicators are still under discussion and will be updated once the final agreement is reached.

*TBD – the decision will be taken by the Governing Board in March 2022

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

TRIALS@HOME - DIGITAL HEALTH PROJECT

In 2020, the IMI2 Trials@Home consortium collaborated with ECSEL JU (predecessor to KDT JU) to help define an ECSEL call for technology developers who could develop/fine-tune their devices to meet the exact needs of the Trials@Home remote clinical trials. The collaboration included a public information campaign and a brokerage event.

The IMI2 **conect4children (c4c)** project and the European Joint Programme on Rare Diseases (EJP RD) have established a Joint Steering Committee in order to coordinate activities, promote synergies and avoid redundant work. With respect to the United States, c4c is working with iACT (the Institute for Advanced Clinical Trials for Children) on specific activities (a confidential disclosure agreement with iACT has been executed relating to collaboration in global interoperability and education). iACT is an independent non-profit organisation in the United States formed by the Critical Path Institute (C-Path).

IHI plans to explore **future synergies** with the planned European Partnership on Transforming Health and Care Systems (THCS) which will be of particular importance as it may provide input for identifying scientific priorities, notably regarding unmet public health needs. Solutions proposed in the context of IHI could enable organisational innovations developed in the THCS partnership.

OVERVIEW OF MEMBERS

Not available

¹ Baselines are derived (where possible) from the Innovative Medicines Initiative (IMI2) as predecessor to IHI

²Reporting methodology: cumulatively reporting from the beginning of IHI until 31/12/2030

³ In this document, the term 'regulators' refers to the different bodies involved in the processes regulating medical products (e.g., scientific assessment, production of scientific guidelines, scientific advice to manufacturers, granting/refusal/suspension of marketing authorisations, post-market surveillance, withdrawing/recalling of devices put on the market, authorisation and oversight of clinical trials). It includes the European Commission, National Competent Authorities (NCA), the Medical Device Coordination Group (MDCG), and the European Medicines Agency (EMA). Notified Bodies, while designated to perform a regulatory function (verification of medical device/in-vitro diagnostics conformity), cannot be considered as regulators in the strict sense of this definition. However, the potential input and expertise of Notified Bodies may still be relevant for the design and implementation of the activities of the proposed initiative.



Partnership for the Assessment of Risks from Chemicals





MISSION AND VISION STATEMENT

Partnership for the Assessment of Risks from Chemicals (PARC) will establish an R&I hub of excellence to support EU and national chemical risk assessment and management with new data, knowledge, methods, networks and skills to address current and emerging chemical safety challenges.

PARC will facilitate the transition to next generation RA to better protect human health and environment. PARC will address end-users' needs to anticipate and respond to the challenges and priorities of the new European policies.

By promoting a high-level network of expertise on chemical assessment at national and EU level, PARC will enable the EU's Chemicals Strategy for Sustainability Towards a Toxic-Free Environment (CSS).

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 1: Health

Type of partnership: Co-funded

Name of coordinating entity: French Agency for Food, Environmental and Occupational

Health & Safety (ANSES)

Total estimated budget: EUR 400 m

EU commitments: EUR 200 m

Partners' commitments: EUR 200 m

Predecessor under Horizon 2020: HBM4EU initiative 'co-ordinating and advancing

humanbiomonitoring (HBM) in Europe'

FIND OUT MORE

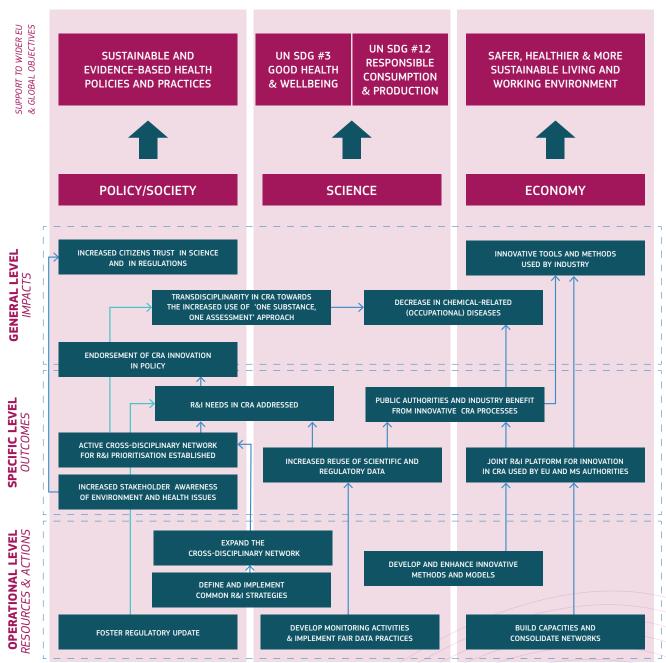
https://www.anses.fr/

parc@anses.fr
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PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

ADDRESS CURRENT, EMERGING AND NOVEL CHEMICAL SAFETY CHALLENGES AND ENABLING THE TRANSITION TO THE NEXT-GENERATION RISK ASSESSMENT





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCE	S (INPUT), PROCE	SSES AND	ACTIVITIES	;	
Cross-disciplinary network	Number of partners involved in the PARC	HBM4EU	1	1	↑	All CRA disciplines are involved
Common R&I strategies	Number of projects/ activities approved for implementation	0	↑	↑	↑	TBD
FAIR data practices	Proportion of datasets developed that are FAIR/partially FAIR	0	↑	↑	↑	100 %
Capacities and resources	Number of entities in the risk assessment network catalogue	TBD	↑	↑	↑	Sufficient coverage at EU level
		оитсом	ES			
Active cross-disciplinary network for R&I prioritisation	% of countries that are actively involved in the network	28 countries	→ or ↑	→ or ↑	→ or ↑	100 % of countries that stay actively involved
Stakeholder awareness	number of activities that target stakeholders	0	↑	↑	↑	100 % of stakeholders that are aware and stay actively involved in CRA
Reuse of scientific and regulatory data	number of data set generated by PARC and reused	0	1	↑	↑	TBD
Use of innovative CRA processes by public authorities	Number of public authorities which uses PARC output	0	↑	1	1	100 % of public authorities involved in PARC indicate benefit from PARC activities
		ІМРАСТ	S			
Endorsement of CRA innovation in policy	Number of citations of PARC outputs/results in policy documents	0	↑	1	1	100 % of PARC policy recommendations considered by policymakers
Citizen trust in science and regulations	Number of activities that target citizens	0	↑	↑	↑	TBD
Support toward 'one substance one assess-ment' approach	Number of activities that contribute to 'one substance, one assessment' approach	0	↑	↑	↑	TBD

The contribution of PARC to the defined outcomes and wider impacts, and the activities implemented to maximise these, will be followed closely throughout the partnership to measure its performance and ultimately to provide a robust justification for the long-term sustainability of PARC's activities. PARC's impact pathway is defined in its monitoring frame to provide a qualitative and quantitative-based indication of the scale and significance of PARC's contribution to the expected outcomes and impacts. The initial set of indicators, including baselines and clear targets, will be further developed and revised regularly, with PARC's different boards and stakeholders, to ensure their relevance for evaluating the progress of the partnership's key, useful and impactful results and focus of the relevant target groups to maximise this impact and exploitation. The table above highlights some of the indicators at the impact, outcome and operational level.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

PARC will continue the development of monitoring capacity acquired in HBM4EU¹ by extending the HBM platform created and enhancing the collaboration between the teams working in the field of HBM and those in charge of environmental monitoring. PARC will also pursue the development of HBM in the EU in close collaboration with the European Human Exposome Network (EHEN)² cluster of Horizon 2020 research and innovation action on the exposome. For the environment, PARC will collaborate with the NORMAN network³ which has recognised experience in emerging contaminants. PARC will build knowledge acquired in other large scale projects funded under previous research framework programmes, such as:

- EU-ToxRisk⁴, an integrated European flagship programme driving mechanism-based toxicity testing & risk assessment;
- The European Cluster to Improve Identification of Endocrine Disruptors (EURION)⁵ of eight Horizon 2020 projects, designed to develop new testing and screening tools for endocrine disruptors.

SYNERGIES: STORY 2

PARC will strengthen interactions between the research community, risk assessors at EU and national regulatory level and other chemical risk assessment stakeholders (industry, NGO, citizens, etc.). The National Hubs (NHs) network will act as fora for discussion between chemical risk assessment stakeholders and provide crucial opportunities to cooperate and create synergies with all actors involved in chemical risk assessment.

The NHs will allow the harnessing of all available expertise on the ground and guarantee a close feedback loop between PARC and national programmes. These NHs are of utmost relevance to disseminate PARC interests and outputs, and to raise citizens' awareness.

SYNERGIES: STORY 3

The partnership has been designed to deliver outputs corresponding to the needs of end-users. To do so, it will ensure close collaboration between EU and national chemical risk assessment and management authorities. Concretely, a Science to Policy dialogue (S2PD) and interface will be implemented to build a joint R&I risk assessment hub of excellence to address chemical safety challenges. This S2PD will allow to identify the priorities in terms of risk assessment and risk management and to facilitate the uptake of PARC results contributing to create a sustainable engagement of the chemical risk assessment community on joint R&I priorities.

¹ https://www.hhm4eu.eu/

² https://www.humanexposome.eu/

https://www.norman-network.net/

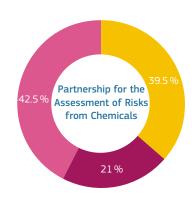
⁴ http://www.eu-toxrisk.eu/

⁵ https://eurion-cluster.eu/



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



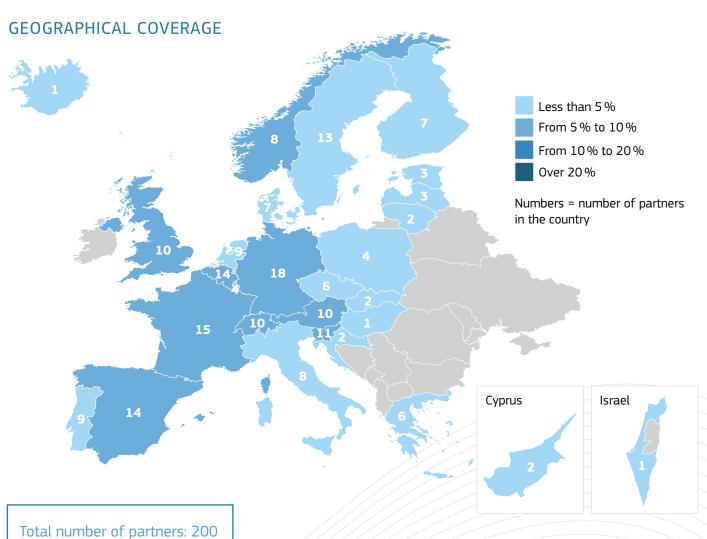
UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities



CLUSTER 4 DIGITAL, INDUSTRY, AND SPACE





MISSION AND VISION STATEMENT

Key Digital Technologies (KDT) Joint Undertaking encompasses electronic components, their design, manufacture and integration in systems and the software that defines how they work. The overarching objective of this partnership is to support the digital transformation of all economic and societal sectors and the European Green Deal, as well as support research and innovation towards the next generation of microprocessors. Together with the Declaration on a European Initiative on processors and semiconductor technologies signed by 20 Member States, an upcoming alliance on microelectronics, and a possible new Important Project of Common European Interest under discussion by Member States to foster breakthrough innovation, this new partnership will help boost competitiveness and Europe's technological sovereignty.

The new KDT partnership aims to:

- Provide innovative electronic components and systems, software and smart integration to digital value chains, providing secure and trusted technologies tailored to the needs of user industries and citizens. This will help reinforce Europe's potential to innovate.
- Develop and apply these technologies to address major global challenges in mobility, health, energy, security, manufacturing and digital communications. This will contribute to and strengthen Europe's scientific and technological bases
- Better align R&I and industrial policies for a joint approach in mastering these drivers of innovation.
- Further reading:
- Strategic Research and Innovation Agenda: https://www.kdt-ju.europa.eu/sites/default/files/2021-12/2021_ECS-SRIA-final_1501.pdf
- Annual Activity Report 2020 (ECSEL): https://www.kdt-ju.europa.eu/sites/default/files/2021-06/ECSEL%20GB%20 2021.157%20-%20Annex%20AAR%202020.pdf

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 4: Digital, industry and space

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Coordination entity: Private members are represented by the AENEAS and INSIDE

Associations. The Participating States and the Commission are

represented by the Public Authorities Board

Total estimated budget: EUR 6.1 bn
EU commitments: EUR 1.8 bn

Partners' commitments: EUR 2.5 bn (private sector) + EUR 1.8 bn (participating countries)

Predecessor under Horizon 2020: The Electronic Components and Systems for European

Leadership (ECSEL) JU

PARTNERSHIP FICHE: **Key Digital Technologies**



		JT		

www.kdt-ju.europa.eu

in https://www.linkedin.com/company/kdt-ju/

https://twitter.com/KDT_JU

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

	2023	TARGET 2025	TARGET 2027	AMBITION >2027				
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
OUTCOME	c							
OUTCOME	.							
IMPACTS								
	оитсоме	OUTCOMES	OUTCOMES	OUTCOMES				

The KDT JU fiche is not complete due to the recent Chips Act proposal of the European Commission and the expected impact on the KDT JU. For more information, please refer to: https://ec.europa.eu/commission/presscorner/detail/en/ip 22 729.

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Not available

OVERVIEW OF MEMBERS

Not available













MISSION AND VISION STATEMENT

The Smart Networks and Services (SNS) partnership targets a reinforced European leadership in the development and deployment of next generation network technologies, connected devices and services. It will provide solutions beyond the technological improvements of connectivity platforms, bringing unique new service capabilities with wider economic implications. Thus, it will also focus on the full digitisation of European society including vertical industries (e.g., automotive, health, Industry 4.0, maritime, broadcasting and media, public safety, transport, utilities, etc.) and public administrations. The aim is to progress towards the technological and business realisation of the 6G vision and ensure a clear European voice on 6G around the world. The vision is the massive digitalisation of societal and business processes through intelligent connectivity across the human, physical and digital worlds.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 4: Digital, industry and space

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Coordinating entity: 6G Smart Networks and Services Industry Association (6G-IA)

Total estimated budget: EUR 1.8 bn **EU commitments:** EUR 900 m

Partners' commitments: Up to EUR 900 m

Predecessor under Horizon 2020: a new partnership that builds on the results of the 5G cPPP

FIND OUT MORE

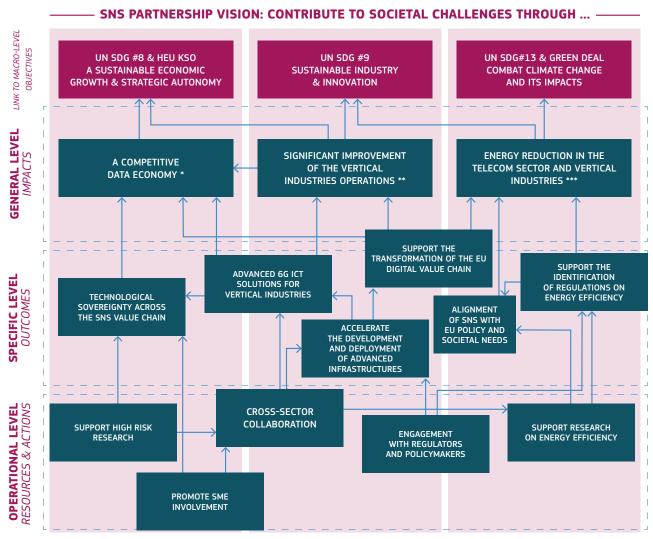
https://6g-ia.eu/

 \square

Private partner's contact address: Office@6g-IA.eu
European Commission contact address: CNECT-E1-SNS@ec.europa.eu

$\bullet \bullet \bullet \bullet \bullet$

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



^{*}SNS Objective 1 (SBA): advance European technological and scientific excellence to support European leadership to shape and master 6G systems by 2030

^{**}SNS Objective 2 (SBA): prepare the European smart networks and services supply industries for the longer-term opportunities emerging from the development of vertical markets for 5G and later 6G infrastructures and services in Europe

^{***}SNS objective 3 (SBA): accelerate the development of energy-efficient network technologies with the aim of significantly reducing the energy and resource consumption of the whole digital infrastructure by 2030 and decreasing the energy consumption of key verticals industries supported by smart networks and services technologies



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES	(INPUT), PROCESSES	AND ACTI	VITIES		
SME innovation and participation	% participation	N/A	20%	20%	20 %	20%
Rapid diffusion	# of end-user workshops & webinars [cumulative]	0	25	60	90	125
High risk research funding	% of total	0	50%	40 %	30 %	N/A
Standardisation contributions	# of standards development organisations (cumulative)	0	50	350	750	1000
Share on family patents	% of patent families	0	15%	15%	15 %	15%
	Patent grant rate		60 %	60%	60 %	60 %
Scientific excellence	# of publications [cumulative]	0	100	400	700	1000
Collaboration and synergies with other partnerships	# collaborations [cumulative]	0	2	5	6	6
		OUTCOMES				
Development of energy efficient networks	White papers [cumulative]	GeSI report on energy consumption by 2030	1	2	3	>3
Technological solutions consensus building	White papers [cumulative]	0	1	2	3	N/A
Advanced 6G solutions for verticals	White papers [cumulative]	0	3	6	10	N/A
		IMPACTS				
A competitive data economy	% market share for the communication network	40 %	N/A	N/A	N/A	N/A
Programme-level consensus on 6G KPIs	White papers [cumulative]	NetworldEurope SRIA	1	2	3	N/A
Uptake of digital solutions within verticals	# of large-scale trials [cumulative]	0	3	6	10	>10
Energy efficiency of cellular telecommunication networks	% increase	Legacy cellular systems (4G)	N/A	N/A	N/A	N/A

- KPIs for resources processes and activities 2, 4, 6, 7; outcomes 1, 2, 3; and impact 2, 3 consider cumulative numbers during the lifetime of the SNS partnership.
- Funding for high-risk research is expected to decrease as after 2025 the standardisation process for 6G networks is expected to be fully active.
- Market share by EU headquartered companies is currently set at a baseline of 40% for the communications market. The targets for the
 following years are expected to be set by 2023 as until then no 6G results will be available by the projects and their adoptions at a market
 level will take longer.
- Setting up the 6G KPIs is an ongoing process. As a baseline, the KPIs from Networld Europe SRIA as well as ongoing efforts from 5G PPP ICT-52 projects will be considered (not currently available).
- For impact KPI 1 the relevant target values for market share in sectors such as cloud computing and, IoT will be delivered by end of 2023.
- For impact KPI 4 the target values will be defined in 2023.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

In 2021 the 6G-IA has collaborated with the AENEAS industrial association, (Key Digital Technologies - KDT partnership) and under the context of the COREnect (European Core Technologies for future connectivity systems and components) project. The target was to identify potential opportunities for maximising the opportunities for the European micro electronic industry to successfully contribute to the mid-term 6G standardisation discussion. In addition, the SNS community has contributed with input in the Electronics Components and Systems (ECS) Strategic Research and Innovation Agenda (SRIA) and presented potential topics in the Visions of ECS beyond a 2023 workshop. Moreover, 6G-IA is currently working on identifying how these topics can be mapped in envisioned 6G architecture, as developed by the 5G PPP Hexa-X project.

SYNERGIES: STORY 2

In 2020 6G-IA and the CCAM partnership collaborated to clarify the activities of the two partnerships and the scope of their activities. In 2021 the communication link between the two partnerships was re-established to coordinate on activities of common interest (e.g., SDA for CEF2). SNS will additionally explore future synergies with Photonics, HPC and AI, Data and Robotics partnerships. The SNS proposal indicated that biennial workshops will be organised with the related partnerships to exchange information about key findings, opportunities, etc. Moreover, collaboration with these partnerships is expected to take place for the preparation of future SRIAs and WPs.

SYNERGIES: STORY 3

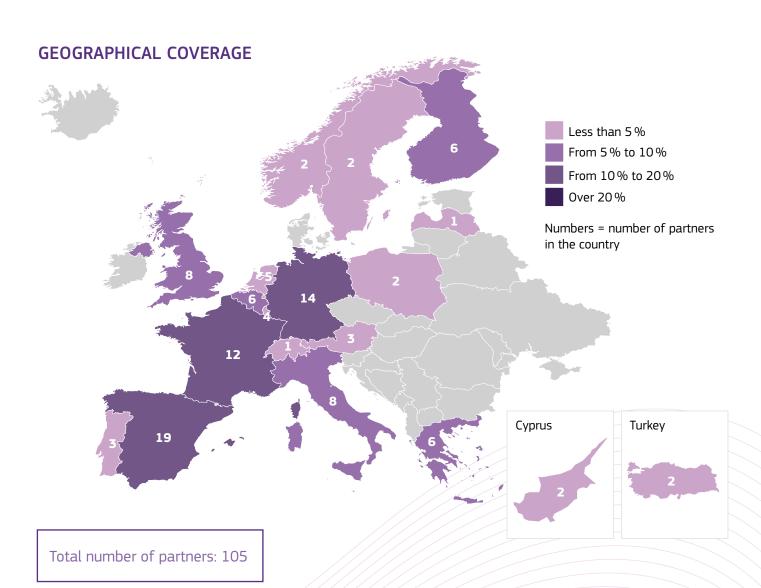
SNS plans to explore future synergies with key vertical sectors by leveraging existing partnership agreements with industry fora in such domains as automotive, transportation, media, manufacturing, public safety, cybersecurity and satellites. Partnership agreements are intended to be extended to further sectors such as health and utilities. Partnership agreements allow a better understanding among ICT stakeholders and vertical industries. The goal is to identify functional requirements from the vertical industries and candidate ICT solutions that can address them through appropriate 6G validation trials.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



















MISSION AND VISION STATEMENT

The Metrology partnership will bring together the measurement science community and stakeholders to deliver on global challenges, including health and climate, support the European Green Deal, and underpin innovation in industry through collaborative research.

The Metrology partnership aims to support accelerating the transition towards a green, climate neutral and digital Europe, as well as strengthen the resilience, competitiveness, and economic growth of European industry.

The Metrology partnership's goals include the development of an excellent and coordinated metrology system at the European level, helping to bridge the investment gap between Europe and its global competitors. This involves the establishment of European metrology networks in highly competitive areas and engagement with stakeholders to ensure state-of-the-art metrology capabilities are widely taken up by innovators. Increasing and coordinating the role of metrology in the design and implementation of regulation and standardisation aims at fostering evidence-based decision making and underpinning public policies.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 4: Digital, industry and space

Type of partnership: Institutionalised (Art 185 TFEU)

Coordinating entity: EURAMET e.V.

Total estimated budget: EUR 687 m

EUR 300 m

Partners' commitments: EUR 387 m

Predecessor under Horizon 2020: The partnership builds on the progress achieved under the

European Metrology Research Programmes.

FIND OUT MORE

www.euramet.org www.euramet.org/partnership www.metpart.eu

in https://www.linkedin.com/company/euramet

https://twitter.com/euramet

☑ Info@effra.eu

+49 531 592 1960

- +49 531 592 1969

EURAMET e.V., Bundesallee 100, 38116 Braunschweig, Germany

PARTNERSHIP FICHE: **Metrology**



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

UNIT OF IEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
	OUTCOME	S						
	001601415	.						
IMPACTS								
		RESOURCES (INPUT), PROCES OUTCOME	RESOURCES (INPUT), PROCESSES AND AC	RESOURCES (INPUT), PROCESSES AND ACTIVITIES OUTCOMES	RESOURCES (INPUT), PROCESSES AND ACTIVITIES OUTCOMES			

A working group has been set up in February 2022 that is developing a robust monitoring framework for the Metrology partnership, in line with its strategic research and innovation agenda. It is expected to be published on the partnership's website in June 2022.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Metrology is a cross-cutting discipline, and EURAMET and the Metrology partnership therefore foster strong collaboration between other partnerships, programmes and initiatives to serve stakeholders and their needs.

Below are a few examples of such collaborations

METROLOGY FOR DIGITAL TRANSFORMATION

In a joint open consultation event in November 2021, stakeholders in the digital field shared their visions on the digital transformation and related measurement science needs with Europe's metrology community.

EURAMET'S European partners involved included: the European Factories of the Future Research Association (EFFRA) and the Made in Europe partnership, the Artificial Intelligence, Data and Robotics Association (represented by Adra), the European Open Science Cloud (EOSC) and the International Data Spaces Association (IDSA).

Discussions ranged on topics from the role of data quality for industry and science and sensor networks in industry, to how to support quality and confidence in AI.

The feedback from partners and stakeholders and the <u>outcomes of the panel discussion</u>, helped guide the development of the 2022 call for needs related to Metrology support for digital transformation within the European Partnership on Metrology.

Read more >>

METROLOGY FOR CLEAN HYDROGEN

Representatives of EURAMET and the Metrology partnership have been <u>appointed as members of the Clean Hydrogen</u> <u>partnership's Stakeholder Group</u> at the beginning of 2022. The 13 members of the stakeholder group' were selected from more than 60 applications. The group will serve as an advisory body for the Clean Hydrogen Joint Undertaking, which will provide input on the strategic and technological priorities to be addressed by Clean Hydrogen.

Concrete synergies include discussions on possible research topics between EURAMET's <u>European Metrology Network</u> <u>for Energy Gases</u> and Hydrogen Europe and Hydrogen Europe Research.

METROLOGY FOR QUANTUM TECHNOLOGIES

To ensure close cooperation and foster synergies there are several links between the Metrology Partnership and the EU's Quantum Technologies Flagship initiative.

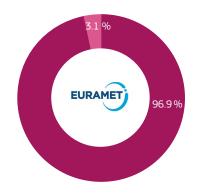
A representative of EURAMET's <u>European Metrology Network for Quantum Technologies</u> is member of the flagship's strategic research agenda working group and representatives of the flagship are members of the EURAMET network's stakeholder council.

A framework partnership agreement details the collaboration of both communities and their members' involvement in calls and projects.



OVERVIEW OF MEMBERS

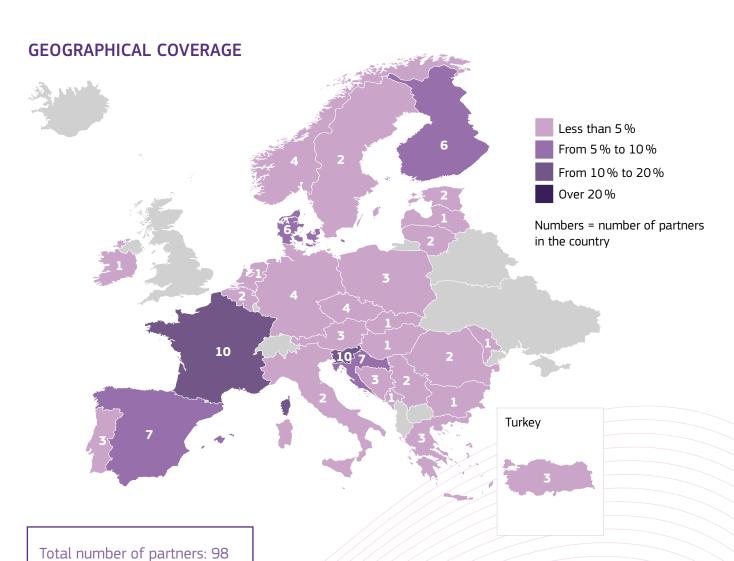
MEMBERS PER TYPE



UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private research organisation controlled by a public authority)













MISSION AND VISION STATEMENT

The European High Performance Computing Joint Undertaking (EuroHPC JU) aims to:

- develop, deploy, extend and maintain in the EU a world-leading federated, secure and hyper-connected supercomputing, quantum computing, service and data infrastructure ecosystem;
- support the development and uptake of demand-oriented and user-driven innovative and competitive supercomputing systems based on a supply chain that will ensure components, technologies and knowledge limiting the risk of disruptions and the development of a wide range of applications optimised for these systems;
- widen the use of that supercomputing infrastructure to a large number of public and private users, and support the twin transition and the development of key skills for European science and industry.
- EuroHPC JU contributes to safeguarding the interests of the EU when procuring supercomputers and supporting the development and uptake of high-performance computing technologies, systems and applications.

It will enable a co-design approach for the acquisition of world-class supercomputers, while safeguarding the security of the supply chain of procured technologies and systems.

It will contribute to the EU's strategic autonomy, support the development of technologies and applications reinforcing Europe's high-performance computing supply chain and promote their integration in supercomputing systems that address a large number of scientific, societal, environmental and industrial needs.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 4: Digital, industry and space

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Total estimated budget: About EUR 7.06 bn **EU commitments:** About EUR 3.08 bn

Partners' commitments: About EUR 900 m (private sector members) + EUR 3.08 bn

(participating states)

Predecessor under Horizon 2020: EuroHPC-JU is a successor to the Joint Undertaking set up

in 2018

FIND OUT MORE

<u>EuroHPC Joint Undertaking Multi Annual Strategic Plan</u> (MASP 2021 - 2027)

PARTNERSHIP FICHE: European High Performance Computing

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
OUTCOMES									
IMPACTS									
OUTCOMES IMPACTS									

Up until EuroHPC JU obtained the capacity to implement its own budget, it remained under the responsibility of the European Commission. EuroHPC JU's KPIs are still under preparation, as the JU only became autonomous in September 2020 and is currently implementing the new founding regulation (EC/2021/1173), which involves setting up its new governance structure and advisory bodies, incorporating the new programmes (HORIZON, DIGITAL and CEF2) into its work programme, and launching its new calls.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES WITH OTHER EU FUNDING STREAMS (RRF, CEF, DEP, ERDF)

EuroHPC JU is pooling EU funding with national contributions for the procurement of supercomputers and for the R&I activities to develop high-performance computing technologies and software. The EU contribution comes from Horizon Europe and Digital Europe Programme (DEP) and we expect that some participating states will also use RRF and ERDF funds. In addition, programmes like CEF2 will support the federation of supercomputers.

SYNERGIES BETWEEN PARTNERSHIPS, BOTH WITHIN AND ACROSS PILLARS/CLUSTERS

The existing cooperation with Key Digital Technologies Joint Undertaking will be strengthened with the Commission proposal for the European Chips Act* and the possible new responsibilities for both JUs in this respect. In particular both JUs will investigate possible opportunities and synergies in high-performance computing microprocessor innovation and development which could be used in future supercomputing infrastructures.

* https://ec.europa.eu/commission/presscorner/detail/en/ip_22_729

OVERVIEW OF MEMBERS

Not available













MISSION AND VISION STATEMENT

The AI, Data and Robotics (ADR) partnership brings together industry, academia and the European Commission to pursue innovative solutions on a large scale, pooling efforts, resources and investments to generate long-term positive impact, boost European competitiveness and technological sovereignty, as well as create jobs and growth.

The general objectives of the co-programmed European Partnership are:

- secure European's sovereignty over AI, data and robotics technologies and know how (position and control perspective dimension);
- establish European leadership in AI, data and robotics technologies with high environmental, social and economic impact (with focus on technology and innovation dimensions);
- reinforce Europe's strong and global competitive position in AI, data and robotics (market dimension).

The partnership will boost Europe's competitiveness, societal well-being and environmental leadership, as leading the world in researching, developing and deploying value-driven trustworthy AI, data and robotics based on European fundamental rights, principles and values.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 4: Digital, industry and space

Type of partnership: Co-programmed

Coordinating entity: The private members of the partnership are represented by the

AI, Data and Robotics Association asbl (Adra)

Total estimated budget: EUR 2.6 bn

EU commitments: EUR 1.3 bn

Partners' commitments: Up to EUR 1.3 bn

Predecessor under Horizon 2020: The partnership builds on the successes of two contractual

PPPs on Big Data Value and Robotics, expanding to the whole

Al community

FIND OUT MORE

https://adr-association.eu/

in https://www.linkedin.com/company/adr-association/

https://twitter.com/Adra_eu_

☑ info@adr-association.eu

PARTNERSHIP FICHE: Artificial Intelligence, Data and Robotics



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

UNIT OF IEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027		
RESOURCES (INPUT), PROCESSES AND ACTIVITIES							
	OUTCOME	S					
	OO TEOME						
IMPACTS							
		RESOURCES (INPUT), PROCES OUTCOME	RESOURCES (INPUT), PROCESSES AND AC	RESOURCES (INPUT), PROCESSES AND ACTIVITIES OUTCOMES	RESOURCES (INPUT), PROCESSES AND ACTIVITIES OUTCOMES		

Adra was founded in May 2021 by five renowned associations that joined forces to lay the foundation of an effective European AI, data and robotics ecosystem. Since December 2021 Adra has been in the process of recruiting new members, to allow the general assembly to elect its first board of directors and become fully operational. To ensure a wider balance and representation beyond the five founding associations, definition of the formal KPIs has been deferred to the elected board and will be featured in the next report.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES WITH OTHER HORIZON EUROPE PARTNERSHIPS

Advanced AI, data and robotics are essential technologies that are increasingly deployed as core components for many applications and solutions across a variety of vertical market sectors. In this respect, they have the potential to generate many socio-economic opportunities, and are key to help solving some of the critical challenges the world faces. Adra is engaging with other partnerships and missions through its 18 directors, who are all associated to at least one partnership or mission. Through its members the ADR partnership is eager to engage with other Horizon Europe partnerships that oftentimes represent the user-side of the technology components developed in the ADR partnership.

SYNERGIES WITH OTHER EU FUNDING INSTRUMENTS

Adra is anchored in European R&I in AI, data and robotics technology. Yet, especially in AI, data and robotics this is a highly dynamic eco-system that includes technology providers, technology users, fundamental research, applied research, large industry, SMEs, start-ups, scale-ups, deep-tech, regions, Member States etc. In particular we intend to develop synergies with the Digital Europe Programme (DEP), and the European Recovery and Resilience Facility.

SYNERGIES BETWEEN DIFFERENT TYPES OF STAKEHOLDERS

AI, data and robotics affects nearly all industry sectors, and has a profound impact on modern society and individual citizens. The enormous and highly dynamic European AI, data and robotics ecosystem is also being inherently complex due to its holistic nature. Many stakeholders, including industry, research, and policymakers at the European and national levels, operate from diverse historic backgrounds. However, to be effective and efficient at the European and global levels, an all-inclusive collaboration is required in technology education, in matching technology with needs, for fair and feasible regulation, and for international technology standardisation. The scale and the inherent complexity make it difficult to impose a one-size-fits-all approach. For the partnership to overcome the heterogeneity, there is a strong need for support and coordination to create a unified community around ADR topics beyond that achieved by each single domain.

OVERVIEW OF MEMBERS

Data not available















MISSION AND VISION STATEMENT

The Made in Europe (MiE) partnership is a platform that brings together leading actors from European manufacturing ecosystems to boost them towards global leadership in technology, towards circular industries and flexibility.

Europe has a competitive, green, digital, human-centric manufacturing sector. With reinforced global position in terms of competitiveness, productivity, and technology leadership, Europe ensures excellent solutions, consumer satisfaction, high quality, environmental and social sustainability, and is the leading solution provider in production technology, digitalisation, resource efficiency, and the circular economy. The European workforce develops new skills to address these needs.

As a platform for national and regional manufacturing technology initiatives, creating economies of scale, common understanding, and alignment of objectives, the partnership brings together leading actors from European industrial ecosystems - academia, industry, NGOs, and the public sector. The partnership aims to:

- ensure european leadership and manufacturing excellence
- achieve circular and climate-neutral manufacturing
- master the digital transformation of manufacturing industry
- create attractive, added-value manufacturing jobs.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 4: Digital, industry and space

Type of partnership: Co-programmed

Coordinating entity: European Factories of the Future Research Association (EFFRA)

Total estimated budget: EUR 1.8 bn

EU commitments: Up to EUR 900 m

Partners' commitments: Up to EUR 900 m

Predecessor under Horizon 2020: Factories of the Future PPP (Factories of the Future | EFFRA)

FIND OUT MORE

https://www.effra.eu/

in https://www.linkedin.com/company/effra/

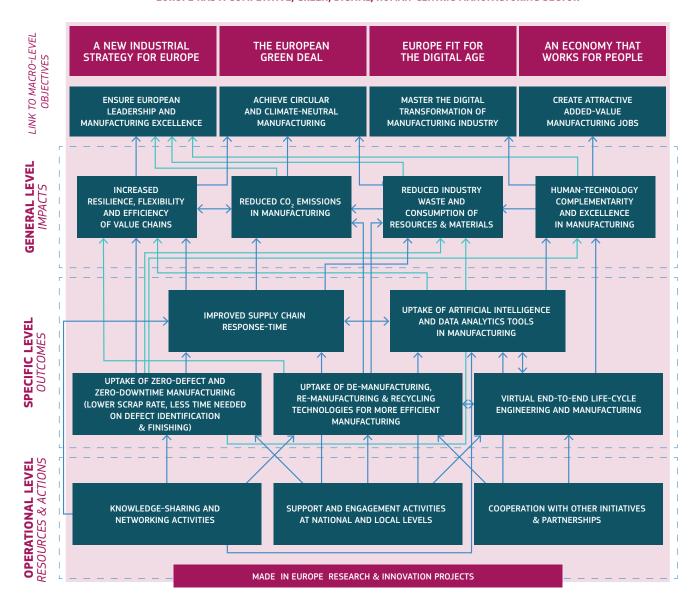
https://twitter.com/EFFRA_Live

☑ Info@effra.eu



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

MADE IN EUROPE PARTNERSHIP'S VISION: EUROPE HAS A COMPETITIVE, GREEN, DIGITAL, HUMAN-CENTRIC MANUFACTURING SECTOR





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ НАМЕ	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
Knowledge-sharing and networking activities	# of activities	0	8	15	25				
Support and engagement activities at national and local levels	# of activities	0	3	10	18				
Cooperation with other initiatives & partnerships	# of activities	0	4	8	16				
		оитсоме	S						
Scrap rate through zero defect and zero downtime manufacturing	# of demonstrators with 20% reduction	0	N/A	15	35	50			
Time needed for defect identification & finishing	% reduction	N/A	N/A	5 %	10%				
Uptake of de- manufacturing, re- manufacturing and recycling technologies for more efficient manufacturing	# of demonstrators		3	15	35	50			
Supply chain response- time	# of demonstrators showing reduction of response-time	0		15	35	50			
Artificial intelligence (AI) and data analytics tools' uptake	# of demonstrators	0	5	15	60	80			
Virtual end-to-end life- cycle engineering and manufacturing	# of demonstrators	0		10	30	40			
		IMPACTS	5						
Human and technology complementarity	# of demonstrators	N/A		10	20	30			
Manufacturing CO ₂ emissions	# of companies showing targeted (60-70%) reduction	1990 levels		at least 70	at least 150	at least 200			
Industrial waste	# of companies showing targeted (10-20%) reduction	2020		at least 50	at least 150	at least 250			



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

COOPERATION WITH EIT MANUFACTURING

The European Factories of the Future Research Association (EFFRA) and EIT Manufacturing (supported by European Institute of Innovation and Technology) have been in touch for the past 12 months and elaborated a cooperation framework aiming at higher TRL levels and the exploitation of results. The cooperation is intended to make the support available to industry stakeholders more effective, extending it across entire project cycles and beyond, and the impact from the joint R&I initiatives more significant and lasting.

One of the first results of this cooperation is already visible in the form of the joint Innovate Together call: the collaboration focuses on innovation activities aiming to support tested and demonstrated exploitable results coming out from Factories of the Future projects to accelerate their market deployment.

COOPERATION WITH NATIONAL AND REGIONAL FUNDING AGENCIES

EFFRA is working together with regional funding agencies and other actors to identify synergies and complementarities between MiE and national/regional initiatives and to organise dissemination and awareness-raising activities. The overall aim is to anchor Made in Europe activities at the regional level.

Moreover, EFFRA cooperates with the Vanguard Initiative.

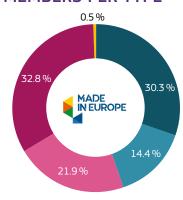
COOPERATION WITH OTHER PARTNERSHIPS

Cooperation with the Photonics and the AI, Data and Robotics partnerships, the Metrology partnership and as well as the KDT partnership is taking place; there are also interactions with other partnerships such as Clean Aviation and 2Zero and others. Although manufacturing is not at the centre of these partnerships, they relate to manufacturing, which is why an analysis of the overlaps between the SRIAs is taking place, including coordination of calls and even the presentation of joint calls.

So far three coordinated calls have been published.

OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

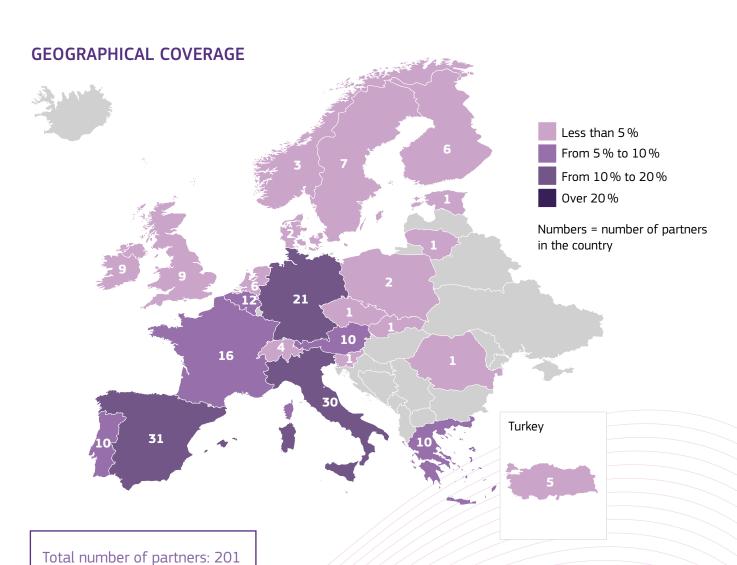
UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

SMEs



















MISSION AND VISION STATEMENT

Photonics is a technology that is an essential building block for the digital transformation and for a green and healthy future in Europe. The new Photonic partnership aims to speed up photonic innovations for a digital, green and healthy future in Europe, securing Europe's technological sovereignty, raising the competitiveness of Europe's economy and ensuring long-term job and prosperity creation. A holistic approach and strong links to applications are key elements.

The main objectives of the Photonics21 partnership are threefold: (1) Foster a focused, continuous and synergetic development of key photonics technologies, components and systems in Europe; (2) Push for the rapid diffusion into the various sectors that critically depend on innovative photonics solutions; and (3) Provide a framework for the shaping of ecosystems to address changes of value creation.

For more information, please refer to:

- MoU Final_MoU_Photonics_C_2021.pdf (photonics21.org)
- SRIA (Photonics Strategic Research and Innovation Agenda by Barbara Flipsnack),
- Proposal (European Partnership for Photonics | European Commission (europa.eu).

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 4: Digital, industry and space

Type of partnership: Co-programmed

Coordinating entity: Photonics21 Association* represents more than 3000

members and 1700 affiliations. Board of Stakeholders

consists of members coming from 18 countries, 50% of them

representing private companies.

Total estimated budget: EUR 680 m

EU commitments: EUR 340 m

Partners' commitments: Up to EUR 340 m

Predecessor under Horizon 2020: Photonics cPPP

* c/o Anne De Moor BV, Rijvisschestraat 124, 9050 Ghent (Zwijnaarde), Belgium.



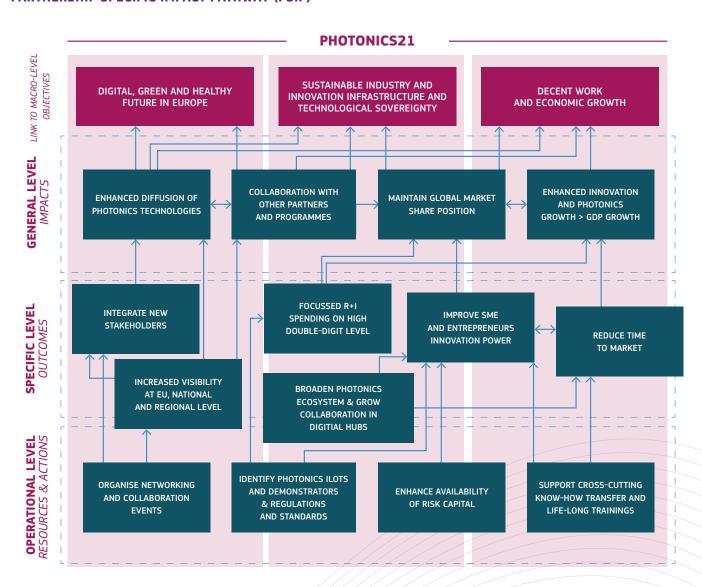
FIND OUT MORE

www.photonics21.org

https://www.photonics21.org/download/ppp-services/photonics-downloads/Photonics_leaflet.pdf

Photonics21 Secretariat c/o VDI Technologiezentrum GmbH VDI-Platz 1, 40468 Duesseldorf, Germany

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027		
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
SME Innovation support	Development of digital and photon hubs	TBD	TBD	TBD	TBD	TBD		
Rapid diffusion	# of end-user workshops	2/year	>2	>2	>2	>2		
Industry participation	% industry in Horizon Europe calls	50 %	N/A	N/A	N/A	>50 %		
		оитсомі	ES					
Stakeholder integration upstream/downstream	# new workshop attendees	New	TBD	TBD	TBD	>30 %		
Collaboration and synergies other programmes	# collaborations	New	TBD	TBD	TBD	min. 2 per WP		
Cross-cutting digital innovation hubs	# common events and actions	New	TBD	TBD	TBD	Increase		
Access to risk capital	Satisfaction rate	EIB study	Improve					
	IMPACTS							
Photonics gross added- value growth (GDP)	GDP multiple	2x in 2019	> Global GDP (CAGR 2020-2026)					
Employment growth	CAGR % growth	2% (vs 1% Industry)	Кеер					
EU global market share	% market share EU	#2	N/A	N/A	N/A	#2		

More detailed information on the partnership's activities, performance and impacts is found in the market and activity reports available here Photonics Downloads | Photonics21



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Considering the challenges, the global economy and societies are currently facing, Horizon Europe and the Photonics partnership are situated in a complex and challenging environment. The way we live and work together is facing fundamental changes: digitisation and the increased convergence of different technologies that goes with it; a new and just questioned global innovation dynamic; the request for more national and technical sovereignty; a tightening resource scarcity and uncertain supply chains - all challenges that call for changing business models. For photonics as a key technology and its broad community in science and industry, this means working even more closely with other key technologies and value-chain partners to find the best solutions to the challenges of the Green Deal, technological sovereignty, digitisation, and competitiveness, which are also the focus of the European Commission.

FOSTERING SYNERGIES WITH OTHER PARTNERSHIPS

The European Partnership on Photonics will place a particular focus on identifying both the cooperation needs and opportunities for synergies with other disciplines, major European platforms and EU public private partnerships. As photonics is a key enabling technology, there is considerable scope for multilateral collaboration to address the socio-economic challenges of application-oriented partnerships.

To reach this goal, Photonics21 has already engaged in discussions with several other partnerships under Horizon Europe, setting up workshops in autumn 2021 for identifying thematic opportunities for future joint cooperation agreements and calls.





SUPPORTING PHOTONICS SMES: SYNERGIES WITH PHOTON HUB AND FINANCING INNOVATION

The Photonics partnership will foster synergies with Photon Hub, a pan-European initiative bringing together more than 500 photonics experts from 15 Member States with the aim of supporting companies regarding photonics orienteering, training and reskilling, deep technology innovation support, business and investment coaching, as well as guidance to regional support.

Furthermore, the Photonics partnership will encourage photonics start-ups to participate in the newly established activities of the European Innovation Council and will advise them of financing opportunities and actively promote their participation in investment events. Access to venture capital for photonics start-ups and entrepreneurs will be created by holding an annual European Photonics Venture Forum. The Photonics partnership will also help to generate potential leads for the EIB to invest in photonics, furthering access to capital for SMEs in the later growth phase.

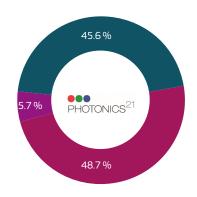
FOSTERING SYNERGIES WITH THE NATIONAL AND REGIONAL ADVISORY BOARD (FORMER MIRROR GROUP)

The efficient coordination of photonics investment and public initiatives at the European, national and regional level is a major challenge for Europe and has so far been insufficiently successful. At the Member State level, the partnership had already established the Photonics21 Mirror Group, which is made up of representatives of national ministries coordinating national priorities and investments in photonics. As a result of this activity, five joint transnational photonics calls on different photonics subjects have been implemented under the ERANET co-funded partnership and the EUREKA programme scheme. The partnership will now take this activity to the next level to trigger new joint cross-Member State calls in photonics, and to enable a close alignment with Horizon Europe's Photonics partnership investments and an efficient preparation and coordination of new joint calls.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



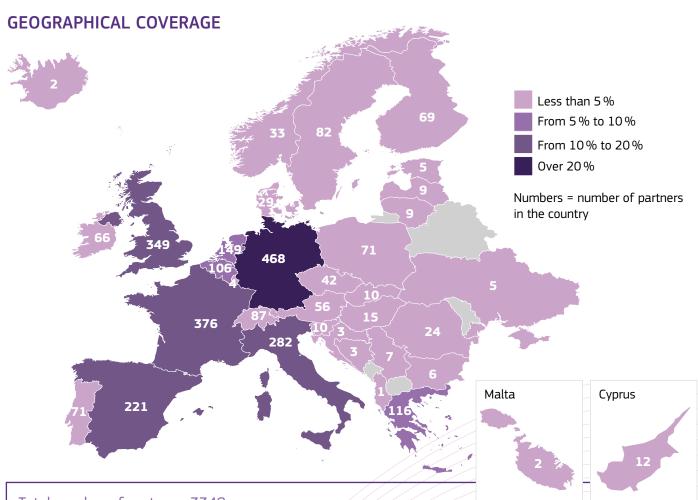
INDUSTRY Other Industrial and/or profit Private organisation

RESEARCH Public research organisation

(including international research organisation as well as private $% \left(1\right) =\left(1\right) \left(1\right) \left$

research organisation controlled by a public authority)

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 3349

79.9% of the partners are represented in the map.

Other partners that do not fit to the map are from Afghanistan, Algeria, Argentinia, "Armenia "Australia, "Azerbaijan, Bangladesh, Botswana, Brazil, Canada, Chile, China, Colombia, Cote d' Ivoire, Dalan, Egypt, Fiji, French Guiana, Ghana, Guinea-Bissau, Hong Kong, India, Iran, Israel, Japan, Jordania, Korea (Republic), Korea, (Democratic People's Republic of), Mexico, Moldova, Morocco, New Zealand, Nigeria, Oman, Pakistan, Peru, Phillipinen, Reunion, Saudi Arabia, Serbia, Singapoore, Sri Lanka, Syrian Arab Republic, Tunesia, Turkey, USA, Uzbekistan, Vietnam and Zambia.















MISSION AND VISION STATEMENT

The Clean Steel Partnership (CSP) is aligned with the EU's goal and policies to achieve climate neutrality by 2050 – the European Green Deal, the Clean Planet for All strategy and the Paris Agreement. It will thus contribute to fighting climate change and moving towards climate neutrality by 2050.

CSP will develop lean CO₂ technologies, and test these at large scales until 2030. These technologies are required to reduce CO₂ from EU steel production by 80-95% compared to 1990 levels, ultimately leading to climate neutrality.

CSP will ensure a coordinated, sustainable approach across stakeholders, technologies, production routes and countries.

CSP nurtures the long-term vision of supporting the European leadership in the transformation of the steel industry into a climate neutral sector while preserving the competitiveness and viability of the EU steel industry making sure that EU production will be able to meet the growing demand for steel products.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 4: Digital, industry and space

Type of partnership: Co-programmed

Coordinating entity: European Steel Technology Platform (ESTEP)

Total estimated budget: EUR 1.7 bn

EUR 700 m

Partners' commitments: Up to EUR 1 bn

Predecessor under Horizon 2020: The Clean Steel Partnership is a new partnership

FIND OUT MORE

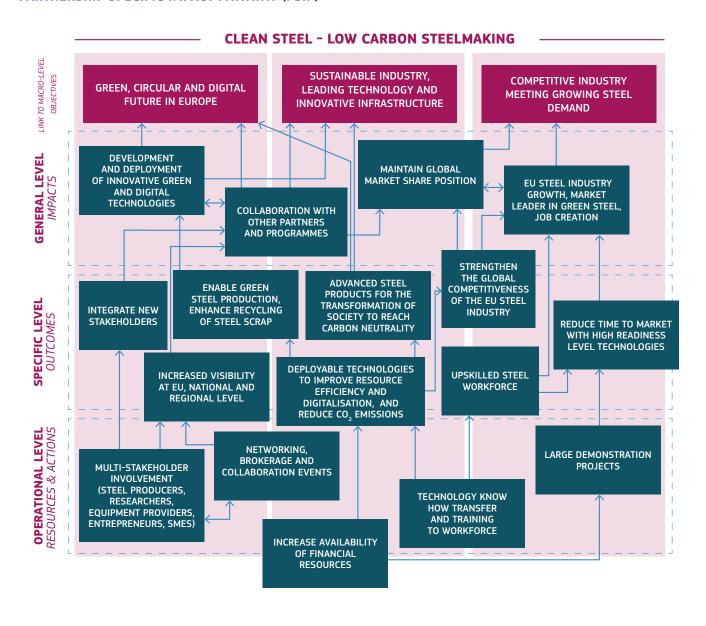
https://www.estep.eu/

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<u>secretariat@steelresearch-estep.eu</u> sq@estep.eu



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOUR	CES (INPUT), PROCES	SSES AND AC	TIVITIES		
Steel industry involvement – financial	% of project budget to steel producers (average)	new	>50 %	>50 %	>50 %	N/A
Steel industry involvement – inclusiveness	% of CO ₂ represented by CSP project partners ¹	new	>50%	>60%	>85 %	>95 %
R&D collaboration science-EU steel companies	# external research stays funded by the Partnership	new	N/A	>5 in 4 technology fields	N/A	>10 in 3 technology fields
Joint calls with other partnerships	# joint calls	new	N/A	Min 2	N/A	Min 5
		оитсоме	S			
Energy use per tonne	%	TBD	N/A	-5 % at TRL7	N/A	-10% at TRL8
CO ₂ capture for CCU/ CCS	% capture rate	TBD	N/A	90% at TRL 6	N/A	95 % at TRL 8
Scrap recycling	% low quality scrap input share	TBD	N/A	+25% at TRL 6	N/A	+50 % at TRL8
Breakthrough in technology building blocks	% projects TRL7	TBD	N/A	Min. 50 %	N/A	Min. 85 % (Min. 75 % TRL8)
Upskilled labour force	# dedicated programmes	0	N/A	Min. 1	N/A	Min. 3
		IMPACTS	5			
EU market share clean steel products	% of clean steel out of total EU steel demand	N/A	N/A	Acceptance of definition of clean steel and its products	TBD	Start of roll-out of clean steel and its products
Global market share EU technology providers	% growth	2020	N/A	+5 %	N/A	+10%
Gross Added Value clean steel production	% growth	2020	N/A	+1%	N/A	+2% in 2030
CO ₂ emission reduction	t CO ₂ e / t CO ₂ e_1990	1990	N/A	N/A	N/A	-55 % in 2030

¹ This % indicates the share of CO₂ from CSP project partners in the overall CO₂ emissions of the steel industry in the EU



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

Additionality of the the Clean Steel Partnership's is envisaged to be realised through a high degree of openness and transparency, and seek to attract all relevant stakeholders to participate in the wider framework. This is done via various measures, such as yearly workshops, a dedicated online presence, and thematic and networking events. Thereby, the partnership will ensure the broad and representative participation of players in the EU steel value chain and those connected to it.

In 2021, ESTEP organised two brokerage events for CSP's members in view of the 2021 calls for funding applications for Horizon Europe and the Research Fund for Coal and Steel frameworks. Focus group workshops on low carbon and energy efficiency, and the circular economy took place.

SYNERGIES: STORY 2

Enablers and support actions on behalf of the CSP will include the creation of synergies with EU and national programmes that enable the upskilling of the steel workforce, activities aiming at fostering R&D&I collaboration between EU companies participating in the clean steel value chain, as well as broader initiatives supporting the creation of a new market for clean steel products.

A way forward will be the launch of several multi-partner projects (targeting at least three beneficiaries and engaging at least three EU Member States) to achieve the objectives of the CSP.

Due to the collaboration among steel producers, reasonable synergies are expected compared to the company-by-company approach, thus reducing the investment need.

SYNERGIES: STORY 3

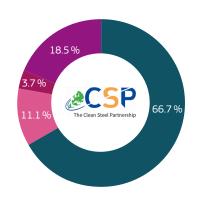
For the partnership to foster additionality, it will collaborate with other partnerships and programmes, for example:

- Processes4Planet: CSP and Processes4Planet have been working closely to align R&D objectives and plans (joint declaration);
- Clean Hydrogen: setting the objectives to accelerate the market entry of nearly-zero GHG-emission hydrogen-based technologies across energy, transport, and industrial end-users (joint declaration);
- Artificial Intelligence, Data and Robotics;
- Made in Europe.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

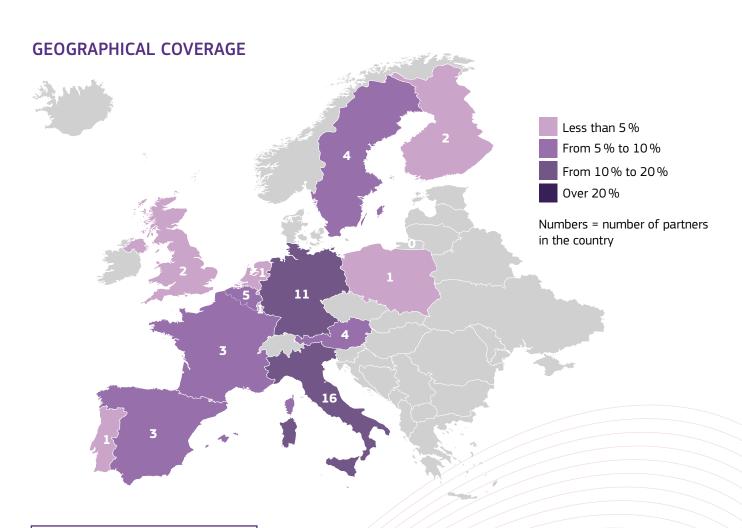
UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 54















MISSION AND VISION STATEMENT

Processes4Planet is a cross-sectorial R&I partnership that aims at transforming the European process industries to achieve the overall climate neutrality at the EU level by 2050 by developing and deploying climate neutral solutions and bringing technological and non-technological innovations to readiness for subsequent deployment.

The partnership aims to:

- close the energy and feedstock loops through sustainable circular business models, innovations, cross-sectoral collaboration and engagement with local ecosystems.
- achieve a global leadership in climate neutral and circular solutions, accelerating innovation and unlocking public and private investment.

P4Planet represents companies, associations, SMEs, research and technology organisations, NGOs, regions, etc. from ten process industry sectors.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 4: Digital, industry and space

Type of partnership: Co-programmed

Coordinating entity: Private members are represented by A.SPIRE. The

Commission's contacts are DG RTD E3 and DG GROW.

Total estimated budget: EUR 2.6 bn

EU commitments: Up to EUR 1.3 bn

Partners' commitments: Up to EUR 1.3 bn

Predecessor under Horizon 2020: SPIRE cPPP

FIND OUT MORE

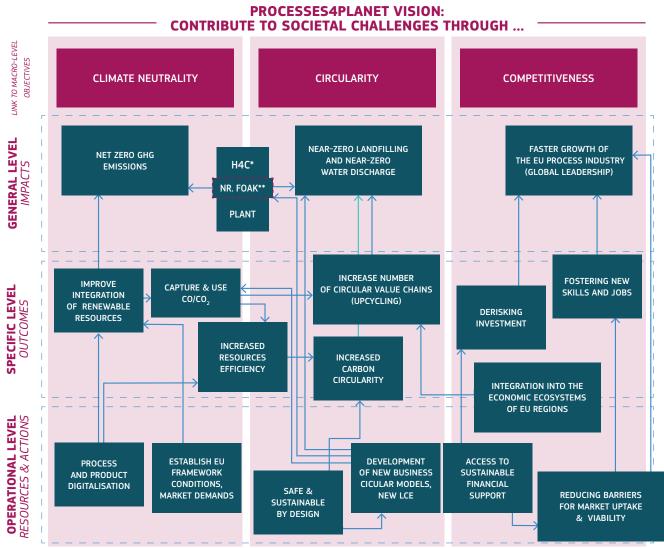
https://www.aspire2050.eu/p4planet/about-p4planet

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info@aspire2050.eu

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PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



*H4C: Hubs for Circularity *FOAK: First-of-a-kind



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME*	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOUR	CES (INPUT), PROCE	SSES AND A	CTIVITIES		
Private investment ⁸	Leverage factor	2	N/A	5	6	10
Significant innovations ⁹	#	5	N/A	12	14	60
CAPEX & OPEX reduction ¹⁰	Millions €	0 (P4Planet)	As per project	As per project	As per project	As per project
New skills and job profiles ¹²	#	0 (P4Planet)	N/A	>2	>3	20
		ОИТСОМЕ	S**			
CO ₂ eq emission	%					
(1) integration of renewables /efficiency ¹		1990 levels	N/A	-60	-70	-100
(2) CO ₂ Capture and Use ²		1990 levels	N/A	-60	-70	-100
Waste volume ³	%	1990 levels	N/A	-40	-50	-75
Secondary materials use intensity ⁴	%	1990	N/A	+40	+50	+80
Water reused/recycled ⁵	%	< 5 %	N/A	+40	+50	+90
H4C establishment ⁶	#	0	N/A	7	15	> 45
		IMPACTS	***			
CO ₂ eq emission (1) integration of renewables /efficiency ¹ (2) CO ₂ Capture and Use ²	% of CO ₂ emission reduction At 50 % IL**** At 90 % IL At 100 % IL	TBD	TBD	TBD	TBD	-50 -90 -100
Waste volume ³	% of waste reduction At 50 % IL At 90 % IL At 100 % IL	TBD	TBD	TBD	TBD	-50 -90 -100
Secondary materials use intensity ⁴	% of secondary materials used At 50 % IL At 90 % IL At 100 % IL	TBD	TBD	TBD	TBD	+50 +90 +100
Water reused/recycled⁵	% of water re-used At 50 % IL At 90 % IL At 100 % IL	TBD	TBD	TBD	TBD	+50 +90 +100
First-of-a-kind plants (TRL 9) ⁷	# of FOAKs at TRL9	0	2	4	15	> 90
Process industry growth ⁸⁻¹⁰	GDP %	Faster than EU-27 GDP	growth			

^{*} Footnote numbers refer to KPI numbers in MoU between P4Planet and EC

^{**} Outcomes based on demonstrators at TRL 7 $\,$

^{***} Measured on a relevant number of FOAKs (First Of A Kind) at TRL9 (50 % implementation, 90 % implementation, 100 % implementation)

^{****} Implementation Level



Processes4Planet KPIs are defined in SRIA 2050 and the partnership's guidance document. In both documents, it is specified that the baseline of the KPIs will take as a reference the levels of 1990. No amounts were included. A methodology on how to effectively assess the progress towards these KPIs will be developed in 2022. The specific baseline amounts will be included during this process.

Portfolio analysis will be developed regularly based on the results of the periodic monitoring and of the surveys launched by A.SPIRE. This will consider what challenges are to be encountered to achieve the objectives, which innovation programmes need to be phased out and which new ones to be phased in.

The reporting will be based on the data gathered through two biennial surveys. One survey will target industry and collect data on industry contributions. The second survey will target Processes4Planet's projects and their related in-kind contributions and investments.

The two last Progress Monitoring Reports (PMRs) of SPIRE cPPP can be found <u>here</u>. Each PMR includes success stories. These can also be found in the last SPIRE projects brochure <u>here</u>. A 2020 trends report can be found <u>here</u>.

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

SPIRE cPPP and BBI JU have collaborated during Horizon 2020 to ensure a good alignment of their work programmes and to identify opportunities to maximise the cross-fertilisation of results of the projects. This has included:

- 2012-2020: joint working group with regular meetings (two to three times per year) to share experiences, reporting methodologies, analysis of projects etc.;
- 2012: signature of the document SPIRE PPP & BIO PPP: Joint Narrative and Docking Points (annexed);
- 2018: signature of the document BBI JU and SPIRE team up for synergy of actions, which can be found here.

SYNERGIES: STORY 2

P4Planet and Clean Steel have set up discussions already at the stage of their SRIAs development. The actions have included:

- regular meetings between A.SPIRE, ESTEP and EUROFER to reach alignments;
- signature of the joint declaration in 2019 by A.SPIRE, EUROFER and ESTEP on Circular and Carbon Neutral Industry and Clean Steel-Low Carbon Steelmaking proposed partnerships for Horizon Europe, which can be found https://example.com/here/;
- steel sector is part of A.SPIRE 10 sectors this allows for regular conversations and to identify on the spot when alignments across the work programmes are needed. The further set up for the collaboration along Horizon Europe is under discussion.

SYNERGIES: STORY 3

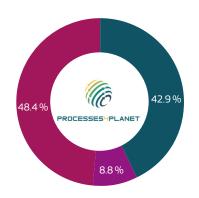
P4Planet and Clean Hydrogen have set up discussions already at the stage of their SRIAs development. The actions have included:

- regular meetings between FCH JU and A.SPIRE, and with their respective units at DG RTD, along with alignments in the SRIAS and in the work programmes;
- participation of A.SPIRE in the Clean Planet Inter-partnership Assembly;
- a joint document on the collaboration of P4Planet and Clean Hydrogen during Horizon Europe is under joint development and discussion.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



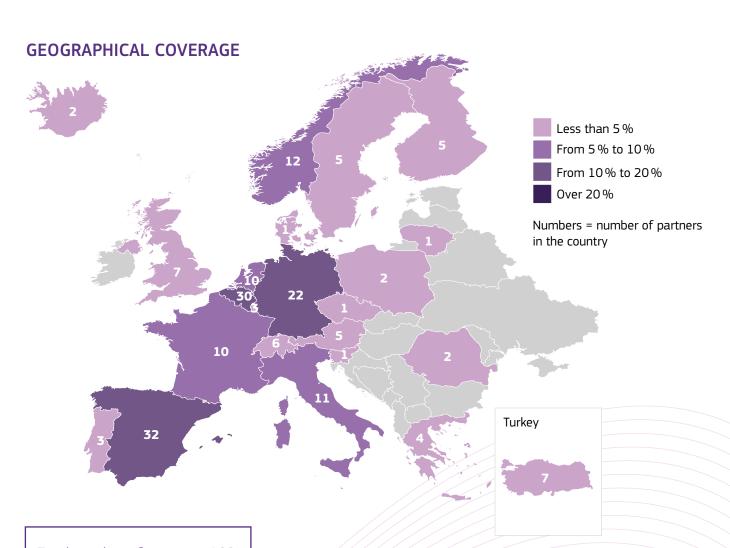
INDUSTRY Other Industrial and/or profit Private organisation

RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 182

CLUSTER 5 CLIMATE, ENERGY, AND MOBILITY













MISSION AND VISION STATEMENT

The Clean Hydrogen Joint Undertaking (JU) aims to support a sustainable hydrogen economy, contributing to the EU's climate goals. Clean Hydrogen JU's mission is to facilitate the transition to a greener EU society through the development of hydrogen technologies.

The Clean Hydrogen JU will contribute to the European climate neutrality goal by producing noticeable, quantifiable results towards the development and scaling up of hydrogen applications. The focus of Clean Hydrogen JU's research and innovation activities will primarily be the production of clean hydrogen, as well as the distribution, storage and enduse applications of low-carbon hydrogen in hard to abate sectors.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Coordinating entity: Governing Board of the Clean Hydrogen Partnership

Total estimated budget: At least EUR 2 bn

EU commitments: Up to EUR 1 bn

Partners' commitments: At least EUR 1 bn

Predecessor under Horizon 2020: Fuel Cell and Hydrogen (FCH) 2 Joint Undertaking

FIND OUT MORE

https://clean-hydrogen.europa.eu

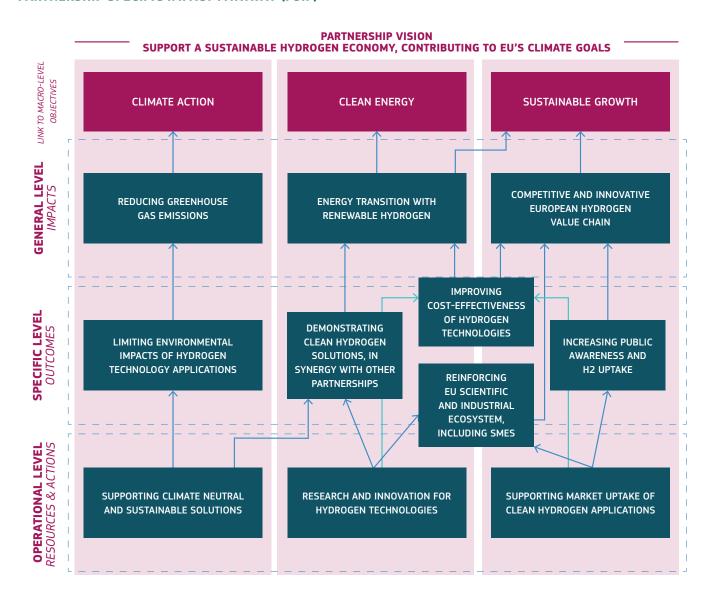
https://ec.europa.eu/newsroom/chju/newsletter-archives/36192

in https://www.linkedin.com/feed/update/urn:li:activity:6877283838180098049

https://twitter.com/CleanHydrogenEU/status/1471516281497014280

info@clean-hydrogen.europa.eu
 info@clean-hydrogen.europa.europa.europa.eu
 info@clean-hydrogen.europa

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S Key Performance Indicators

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURC	ES (INPUT), PR	OCESSES A	ND ACTIVIT	IES	
1. Supporting sustainable solutions	% of budget (2 indicators)	2.5*	20	35	50	
2. Early research projects	% of budget	10*	10	10	10	
3. Demonstration pro- jects	# of projects	43*	20	40	60	
4. Education and training	# of projects	4*	2	4	6	
5. Monitoring technology progress	Qualitative indicator	N/A	N/A	N/A	N/A	
6. Supporting EC in H2 market uptake	Qualitative indicator	N/A	N/A	N/A	N/A	
		оитс	OMES			
7. Environmental impact and sustainability	TBD	TBD	TBD	TBD	TBD	
8. Capital cost of hydro- gen applications	€/kilowatt (2 indicators)	TBD	TBD	TBD	TBD	
9. Research and Innovation Synergies	# of projects	5*	5	10	20	
10. Public perception of hydrogen	Qualitative indicator	N/A	N/A	N/A	N/A	
11. Total persons trained	# of persons	4 163*	1 000	3 000	6 000	
12. Patents and publications	# of patents / publications	12*/289	17/350	20/400	25/450	
13. Promoting cross-sectoral solutions	# of projects	15*	10	15	25	
		IMP	ACTS			
14. Expected avoided emissions	Million tonnes of CO ₂ -eq	TBD	N/A	N/A	N/A	TBD (2030/2050)
15. Deployment of electrolysers	Gigawatt	1	4	6	10	40 (2030)
16. Market uptake of clean hydrogen	Mt of clean hydrogen consumed	0.155	0.7	1	2	10 (2030)
17. Total cost of hydro- gen at end-use	€/kg	8	6.5	5.5	4.5	3 (2030)
18. Size of private hydrogen sector	Qualitative indicator	N/A	N/A	N/A	N/A	

The work on the KPIs is under progress. After their approval from the Clean Hydrogen Partnership's governing board, it is expected that a robust and transparent methodology will be developed with the help of experts in 2022. This especially applies for all elements of the table labelled 'TBD' (to be determined). The methodology will be published on the Clean Hydrogen Partnership's website . For economy of space, some of the KPIs were merged in the table above. More detailed information on the partnership's KPIs, activities, performance and impacts can be found in the partnership's Strategic Research and Innovation Agenda and activity reports, which are available on the partnership's website.

 $^{^{}st}$ Baseline refers to the achievement over the lifetime of the predecessor partnership (FCH 2 JU).



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

HYDROGEN VALLEYS: PROVIDING INSIGHTS IN THE EMERGING HYDROGEN ECONOMY

Since 2014, FCH JU has pursued the concept of hydrogen valleys, a defined geographical area where several hydrogen applications are combined and integrated within an FCH ecosystem. Hydrogen valleys are the most synergetic type of projects, involving different types of stakeholders (public and private partners, large companies and SMEs, private companies, and research institutions). They often combine various sources of funding: private, national, regional and EU funding streams, of which the JU funding is just a small share. Prime examples of these hydrogen valleys are the three recent projects of FCH JU: HEAVENN*, Green Hysland** and BIGHIT***. The Clean Hydrogen JU will continue to support hydrogen valleys as one of its main activities.

*https://heavenn.org/

**https://greenhysland.eu/

***https://www.bighit.eu/

FCH JU & CEF: COOPERATING FOR THE FUTURE

In 2017, FCH JU supported at the time the largest deployment project of fuel-cell buses in Europe, introducing new bus fleets into urban bus operations on a large scale. To further support the deployment and operation of the buses, it is essential to also provide or fund the required refuelling infrastructure for the buses.

This was achieved by the successful cooperation with the Connecting Europe Facility programme (CEF) and its project MERHLIN, through the parallel funding of seven hydrogen refuelling stations – complementarily to the JIVE deployment of 144 buses.

The successful cooperation in the JIVE-MERHLIN projects has paved the way for further possible synergies between the Clean Hydrogen JU and other EU funding streams.

COLLABORATION ON HYDROGEN ACROSS EUROPEAN PARTNERSHIPS

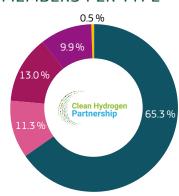
The Clean Hydrogen JU aims to establish structured collaboration with many other European Partnerships, since hydrogen can be deployed as a fuel, energy carrier and for storing energy. The most relevant identified European Partnerships are Towards Zero-emission Road Transport, Zero Emission Waterborne Transport, Europe's rail, clean aviation, processes for the planet and clean steel. Towards this goal, the Clean Hydrogen JU in close cooperation with other end-use partnerships, developed common roadmaps, aiming to better coordinate the planned activities per partnership in the context of R&D in hydrogen technologies. This common planning aims to prevent overlaps, enable synergies and lead to more visible impacts of hydrogen technologies in the context of the Horizon Europe Programme. This effort will be supported by the stakeholders group*, which will promote the cooperation and synergies between partnerships in the domain of hydrogen. The stakeholders group is set up as an official advisory to the Clean Hydrogen JU's governing board, made up of representatives from all sectors along the hydrogen value chain, as well as from other partnerships.

* https://www.clean-hydrogen.europa.eu/about-us/organisation/stakeholders-group_en



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

UNIVERSITY University and other higher education organisations

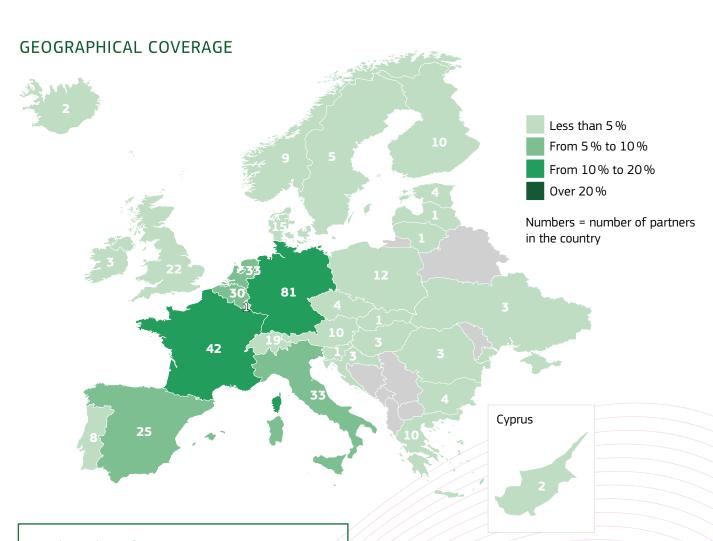
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 415

92.8 % of the partners are represented in the map Other partners that do not fit to the map are from Australia, Canada, Japan, Morocco, Turkey and United States











MISSION AND VISION STATEMENT

The Clean Aviation Joint Undertaking (CAJU) will develop disruptive new aircraft technologies to support the European Green Deal and climate neutrality by 2050. These technologies will deliver net greenhouse gas (GHG) reductions of no less than 30%, compared to 2020 state-of-the-art.

The technological and industrial readiness will allow the deployment of new aircraft with this performance no later than 2035, enabling 75% of the world's civil aviation fleet to be replaced by 2050.

The aircraft developed will enable net CO_2 reductions of up to 90% when combined with the impact of sustainable 'drop-in' fuels, or zero CO_2 emissions in flight when using hydrogen as an energy source.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of Partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Total estimated budget: EUR 4.1 bn

EU commitments: Up to EUR 1.7 bn

Partners' commitments: At least EUR 2.4 bn

Predecessor under Horizon 2020: Clean Sky 2 Joint Undertaking

FIND OUT MORE

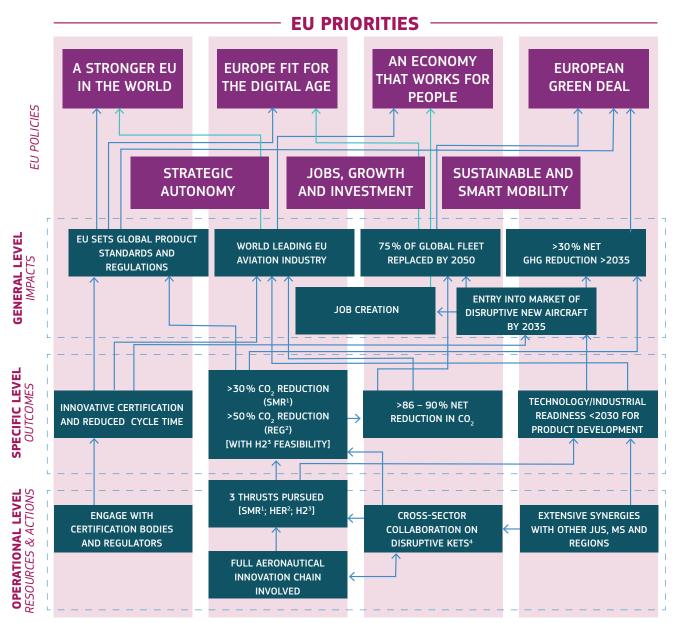
https://clean-aviation.eu/

 \square

info@clean-aviation.eu

RTD-CLEAN-AVIATION@ec.europa.eu

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



¹SMR: ultra-efficient Short-Medium Range aircraft; ²HER: Hybrid-Electric Regional aircraft; ³H2: disruptive technologies to enable Hydrogen-powered aircraft; ⁴KETs: Key Enabling Technologies



PARTNERSHIP'S Key Performance Indicators

КРІ NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	TARGET >2027	
	RESOUR	CES (INPUT), PROCE	SSES AND ACT	TIVITIES			
Newcomers (cross-over from non-aeronautical domains)	# and funding (euro)	N/A	TBD	TBD	TBD	TBD	
Country participation (EU 27 and associated countries)	#	H2020 evaluation for first year level	TBD	TBD	TBD	TBD	
Collaboration and Synergies	# and funding leveraged	H2020 evaluation or first year level	TBD	TBD	TBD	<pre>@ end of programme: >€100 m⁽¹⁾</pre>	
within HorizonEuropewithin other EU			TBD	TBD	TBD	CIGOTII	
Budgetwith national programmes			TBD	TBD	TBD		
regional programmes [RIS3]			>20 regions >€25 m	>25 regions >€50 m	>25 regions >€75 m	>25 regions >€100 m	
Leverage effect from private sector contribution	# (defined as private sector contribution divided by the EU contribution)	H2020 evaluation or first year level	TBD	>0.41	>1.0	>1.41 (@ end of programme)	
		оитсом	ES				
Technology Readiness Levels	Critical technologies reaching TRL6 by 2030	H2020 evaluation or first year level	0	0	TBD	TBD	
Demonstrated CO ₂ emissions reduction potential	%	2020 state-of-the-art technology				(> 2035)	
• from SMR ⁽²⁾ • from HER ⁽³⁾			N/A N/A	N/A N/A	N/A N/A	>30 % >50 %	
		IMPACT	S				
Net GHG emissions reduction	%	compared to 2020 state-of-the-art	N/A	N/A	N/A	>30 % (>2035)	
Market deployment of CA solutions	# solutions (manufacturing ready)	TBD	Minimum 2 new	aircraft (order b	y 2030, deliver	y by 2035)	
Fleet renewal	% (of the global fleet)	TBD	TBD	TBD	TBD	75 % (>2050)	
Time To Market Reduction (TTMR)	%	2020 certification processes	TBD	TBD	TBD	30 % (2030)	
Cost reduction of certification	%	2020 certification processes	TBD	TBD	TBD	30 % (2030)	
EU aeronautics leadership	Global market share in leading technologies	2020 market share	EU aeronautics maintains its 2020 global market share				

¹ with 3 JUs, 2 Cluster R&I WP areas

² SMR: Short-Medium Range aircraft

³ HER: Hybrid Electric Regional aircraft



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

The challenge of transforming air transport towards climate neutrality is huge. Meeting this challenge will require a level of R&I that goes well beyond today's programmes. The sector currently estimates that it will take at least EUR 12 bn in R&I effort in the timeframe of Horizon Europe. Beyond this massive effort, policy instruments and public / public-private financing instruments will also be essential to close the gap from research outcomes towards implementation in the fleet by 2050. The overall funding level required for R&I will require strong synergies from regional and national to EU level, and across a wide array of funding and financing sources in the EU's Multiannual Financial Framework.

REGIONS

Clean Sky 2 has developed synergies with the Regions and European Structural Investment Funds (ESIF) through Memorandum of Understandings (MoUs) with national and regional authorities aligning objectives with regional strategies and Regional Strategy for Research and Innovation for Smart Specialisation (RIS3). Eighteen MoUs have been signed with Member States/Regions, and twelve Clean Sky Synergy Labels have been awarded to complementary activities. More than fifty projects have been supported by ESIF with a budget above EUR 50 million.

The Clean Aviation JU will also develop synergies with national and regional authorities on the basis of the RIS3 and utilising the European Regional Development Fund (ERDF) Operational Programmes in place or under preparation for 2021-2028. At least EUR 100 million plus involving the top 30-40 regions with relevant RIS3 will be targeted.

EU RECOVERY FUND

The CAJU plans to leverage recovery plans and NextGenEU funding as made available to the Member States and where earmarked for innovation. Active discussions are underway with Member States such as France, Spain, Italy, Germany and the Netherlands.

NATIONAL INNOVATION PROGRAMMES

The CAJU plans to develop an innovation architecture spanning the major national R&I programmes in Member States and Associated Countries. Participation by national authorities will be by mutual agreement and based on the significance of the national efforts and budget available and the commitment to align roadmaps and programmes so as to achieve practical synergies in technology development, both in terms of content and timing (as related to the ambition of the Clean Aviation SRIA and SBA Objectives). Together with the NextGenEU funds at least 100% leverage, i.e., a further EUR 1.7 billion will be targeted through this collaboration and joint programming.

FUNDING AND SYNERGIES WITHIN HORIZON EUROPE

Within Pillar II of Horizon Europe, synergies with other proposed Partnerships are most notably (but not exclusively) with the **Clean Hydrogen Partnership** (fuel cells, as well as hydrogen as a potential fuel source) and the **European Battery Alliance**. The exacting standards needed for aerospace applications seem unnecessary for other sectors; yet once they are established the spin-off to other sectors is substantial. We believe the performance levels of fuel cells and batteries that can be unlocked through an aeronautics programme linked to Clean Aviation can allow Europe not to follow or catch up, but to leapfrog Asia. Other synergistic effects are evident with the proposed Partnership for Air Traffic Management i.e., **SESAR 3**. The partnership will need to have effective and efficient means to draw key results from the **collaborative research programme for aeronautics** under the control of the relevant Cluster 5 Clean Planet Directorate and unit.

Outside the cluster, more opportunities exist with **Key Digital Technologies**, other research instruments related to digital technologies, the **Made for Europe** partnership, and the **Space Initiative**, especially when it concerns hydrogen related technologies.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

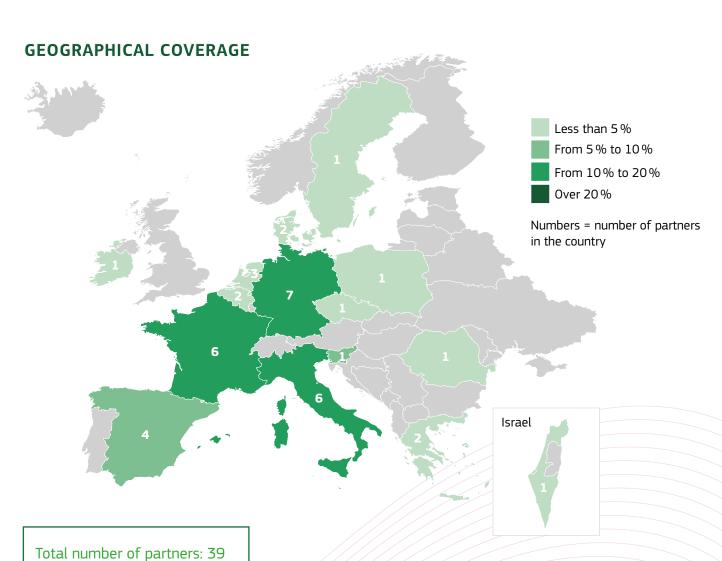
UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

SMEs









MISSION AND VISION STATEMENT

The Single European Sky ATM Research 3 (SESAR 3) Joint Undertaking (aims to accelerate through research and innovation the delivery of an inclusive, resilient and sustainable digital European sky.

- Sustainable establishes Europe as the most efficient and environmentally friendly sky in which to fly in the world.
- Resilient enables flexible, scalable, safe and secure air traffic management (ATM) that can withstand disruptions in the aviation system.
- Inclusive integrates and connects all types of air vehicles and users, including civil and military, manned and unmanned.
- Accelerate reduces time to market through focused and agile R&I, supporting faster transition to deployment through an extended innovation life cycle.

SESAR 3 JU brings together the EU, Eurocontrol, and more than 50 organisations covering the entire aviation value chain, including airports, airspace users of all categories, air navigation service providers, drone operators and service providers, the manufacturing industry and the scientific community. The partnership also works closely with regulatory and standardisation bodies, notably EASA and EUROCAE, as well as key stakeholders such as professional staff organisations, the space and military communities and global partners.

SESAR 3 JU builds upon the experience of the SESAR JU and continues its coordination role in ATM technology in the EU to further integrate the R&I capacity in Europe.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Total estimated budget: EUR 1.6 bn*

EU commitments: EUR 600 m

Partners' commitments: EUR 1 bn**

Predecessor under Horizon 2020: SESAR Joint Undertaking

- * In addition, to meet its obligations defined in the Single Basic Act, the Digital European Sky programme will also benefit from funding for its digital sky demonstrators from the Connecting Europe Facility (in coordination with CINEA) to the value of at least EUR 200 million.
- ** Out of which the private members will make a total contribution of at least EUR 500 m and Eurocontrol will make a total contribution of up to EUR 500 m.

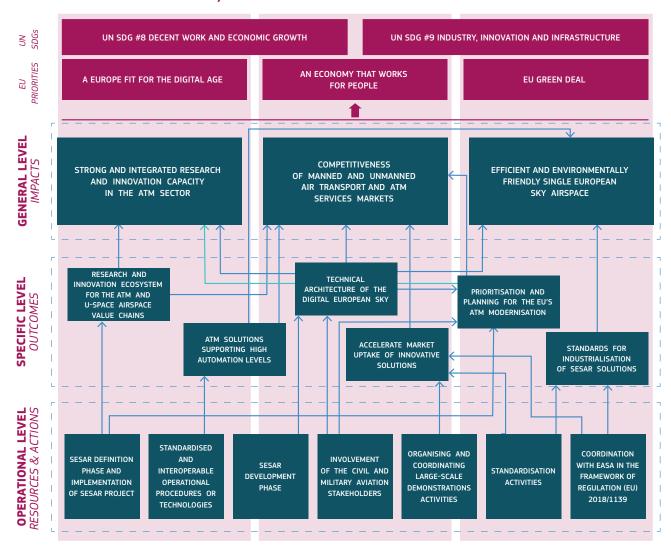
FIND OUT MORE

www.sesarju.eu

+32 2 507 80 00



ACCELERATE THROUGH RESEARCH AND INNOVATION THE DELIVERY OF AN INCLUSIVE, RESILIENT AND SUSTAINABLE DIGITAL EUROPEAN SKY





KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (INPUT), PROCE	SSES AND A	CTIVITIES		
Signed grants (Digital Euro- pean Sky programme)	#	0 (2021)	70	135	167	175
Joint calls ¹	#	1 (2021)	2	2	2	TBD
Complementary funding (HE, national, ERDF, CEF,)	€	€60 m (2021)	€171 m	n/a	TBD ²	TBD
		оитсомі	ES			
Solutions delivered* ready for industrialisation or deployment (Digital European Sky programme)	#	0 (2021)	30	40	75	115
Solutions available for deployment against ambitions of the ATM Master Plan (SESAR 1, SESAR 2020, Digital European Sky programme)	%	37 (2019)	51	68	86	100
Solutions with supporting standards & regulations* (Digital European Sky programme)		0 (2021)	TBD	TBD	TBD	TBD
Share of solutions in deployment in min. 20% of EU MS ³ (Digital European Sky programme)	%	0 (2021)	TBD	TBD	TBD	TBD
		IMPACT:	5			
Accidents (Safety)	% reduction	-36.5 %		TBD		-51 % ⁴
Capacity • airports • TMA** • en route	% increase (peak hourly throughput)	21.4% 27.7% 48.8%		TBD TBD TBD		10% ⁵ 47% ⁶ 49% ⁷
Punctuality (flights departing < 3min of scheduled time)	% increase	4.3 %		TBD		10%8
Fuel savings	Kilograms per flight	147.4		TBD		250-500°
ATCO productivity***	% increase	74.8%		TBD		97.7%10
Technology cost reduction per flight *TRL6	% reduction	30.8%		TBD		43.4%11

^{*}TRL6

^{**} Terminal Maneuvering Area

^{***} Air Traffic Control

¹⁾ Cumulative

²⁾ Pending confirmation through future CEF programme's approval

From 3) to 11): Pending update of the performance ambition of the ATM Master Plan $\,$



MAXIMISING SYNERGIES ACROSS HORIZON EUROPE

SESAR 3 JU will put in place measures to maximise its impact using all possible synergies with other European Partnerships and related national activities. Beyond the involvement in the overall coordination of Horizon Europe, SESAR 3 JU will, in particular, focus on capturing synergies across the following two clusters.

Synergies within the Climate, energy and mobility cluster: in this thread, SESAR 3 JU will reach out to other mobility JUs with the aim of building consolidated roadmaps and action plans for climate neutral mobility solutions. This will also address common sectorial issues such as multimodality transport, automated vehicles and the decarbonisation of the sector. In particular, a specific coordination with the European Partnership for Clean Aviation is believed to be essential for the aviation sector.

Synergies with the Digital, industry and space cluster: considering that the digital transformation of aviation is at the core of the SESAR 3 JU's goals, it strongly echoes the ambition of the digital, industry and space cluster. It is in many ways complementing this cluster by addressing aviation-critical applications. Therefore, it is essential to put in place synergies with all relevant digital initiatives outside of the climate, energy and mobility cluster. For example AI, cybersecurity and high-performance computing are cross-sectorial issues that require deep coordination, especially for the development of use cases and the application of European standards. In addition, the partnership will contribute to the achievement of European space policy. According to the European ATM Master Plan, satellite CNS services are considered essential enablers of the digital European sky. Therefore, the partnership will build on the achievements of SESAR 2020 in the space domain to further engage space actors in the innovation ecosystem.

COHERENCE AND SYNERGIES IN RELATION TO MAJOR NATIONAL (SECTORIAL) POLICIES, PROGRAMMES AND ACTIVITIES

To help repair the economic and social damage caused by the COVID-19 pandemic to the aviation sector, SESAR 3 JU will exploit all possible synergies in relation to major national (sectorial) policies, programmes and activities (such as those that will be part of the EU stimulus package, the Recovery and Resilience Facility, to ensure maximum levels of complementarity and impact). It will aim to leverage local investments and complement R&I needs by looking at the wider European goals and applications.

SESAR 3 JU will explore opportunities for coordination with national and regional initiatives and consult widely through the newly established states' representatives group.

OVERVIEW OF MEMBERS

MEMBERS PER TYPE



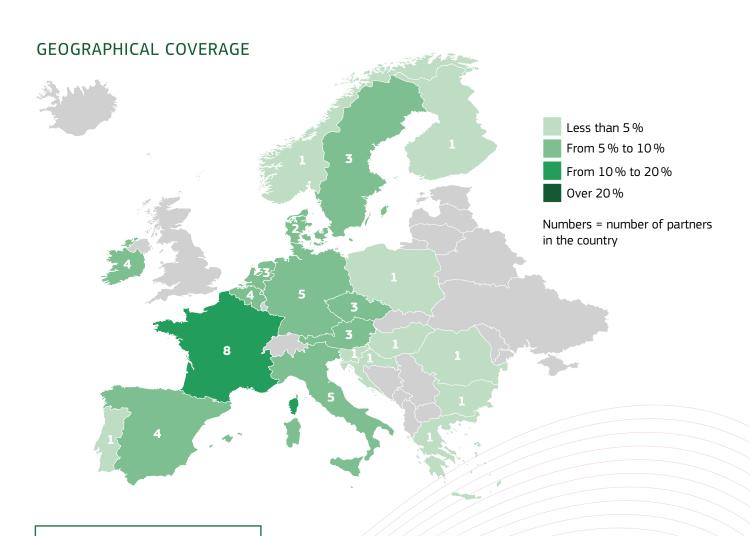
INDUSTRY Other Industrial and/or profit Private organisation

RESEARCH Public research organisation

(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

SMEs



Total number of partners: 54













MISSION AND VISION STATEMENT

The Europe's Rail (EU-Rail) Joint Undertaking will contribute to the achievement of the Single European Railway Area, to a fast transition to a more attractive, user-friendly, competitive, affordable, efficient and sustainable European rail system, and to the development of a strong and globally competitive European rail industry, with an integrated system approach, research, development and demonstrations of innovative technologies and operational solutions (enabled by digitalisation and automation) for future deployment to deliver on EU policies such as the Green Deal objectives, a Europe fit for the digital age, and an economy that works for people and a stronger Europe in the world.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Total estimated budget: EUR 1.2 bn

EU commitments: Up to EUR 600 m

Partners' commitments: EUR 600 m

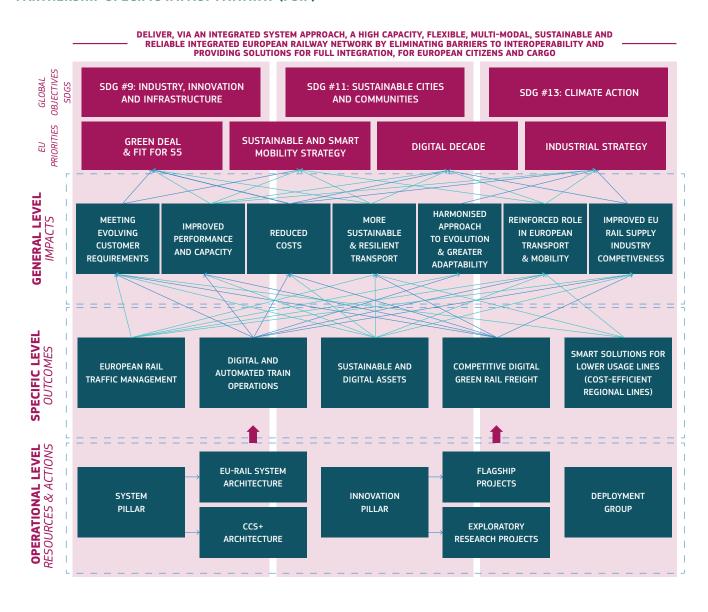
Predecessor under Horizon 2020: Shift2Rail Joint Undertaking

FIND OUT MORE

https://rail-research.europa.eu

https://shift2rail.org/about-europes-rail/europes-rail-ju-members/ https://rail-research.europa.eu/about-europes-rail/contact/







PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
	оитс	OMES						
IMPACTS								
	MEASUREMENT	MEASUREMENT RESOURCES (INPUT), PRO OUTCO	MEASUREMENT BASELINE 2023	MEASUREMENT BASELINE 2023 2025 RESOURCES (INPUT), PROCESSES AND ACTIVITION OUTCOMES	MEASUREMENT BASELINE 2023 2025 2027 RESOURCES (INPUT), PROCESSES AND ACTIVITIES OUTCOMES			

A number of KPIs have been identified for each flagship area (reflecting the five outcomes of the PSIPs table). KPIs are available from the draft master plan and Multi-Annual Work Programme: https://shift2rail.org/about-europes-rail/europes-rail-reference-documents/europes-rail-key-documents/. A selection of these will be used as a reference baseline of the state of the art in 2020 (including results from S2R), and will allow a more focused transformation of the operational work delivered with projects' technical and operational results into more tangible societal impact qualifications. The societal impact measurement methodology will be developed in the first two years of the functioning of the joint undertaking on the basis of the technical and operational KPIs provided here. The calculations of the impact will be provided after each round of demonstrators that is in 2025, 2027 and 2031.



CREATION OF A EUROPEAN ECOSYSTEM

Europe's Rail Joint Undertaking will establish an ecosystem that will facilitate interaction between stakeholders and makes co-operation within and across value chains more efficient. This will ensure that research is translated into market focused innovation through demonstration and deployment. In addition, the launch of large scale projects and demonstrators will also support the fast transfer of the innovation to the market. These projects, such as demonstrations would bring together technology suppliers and users. Finally and overall, the work to be performed by the partnership will also contribute to supporting the establishment of the Single European Railway Area, one of the key targets of the European Commission.

COOPERATION AND SYNERGIES

EU-RAIL will put in place measures to maximise its impact using synergies with other European, national and regional programmes and activities. Beyond the involvement in the overall coordination of Horizon Europe, EU-RAIL will in particular focus on capturing synergies across the following:

Synergies within the Climate, energy and mobility cluster: the JU will reach out to other mobility JUs with the aim to build, where possible, consistent projects and demonstrators for climate neutral mobility solutions. This may also address shared areas of intervention such as multi-modal transport, automation in vehicles and other assets, decarbonisation, the use of alternative fuels, etc. In particular, a specific coordination with the European Partnership for Clean Hydrogen, as well as with the Battery co-programmed partnership appear to be of key relevance.

Synergies with the Digital, industry and space cluster: considering the key expectations coming from the digital transformation of rail, there are major expectations on how this cluster would contribute with rail-critical applications. Artificial intelligence, cyber-security and high-performance computing are cross-sectorial issues that require deep coordination especially for the development of use cases and the application of European standards. In addition, European space policy appears of key relevance, considering the ambition to introduce more and more satellite-based solutions for localisation or data transmission. Here also, synergies with EUSPA will be continued building upon the past experience.

Coherence and synergies in relation to major national (sectorial) policies, programmes and activities: it is estimated that around 15% of the EU stimulus package, the Recovery and Resilience Facility (RRF) will be invested in different areas of national rail systems. There is a need to ensure maximum levels of complementarity and impact, including focusing on future-proof investments. This will require the leveraging of local, regional and national investments to complement the research and innovation activities performed at the EU-RAIL level and vice versa. In this respect, the EU-RAIL state representatives group is expected to play a key role.

COOPERATION WITH THIRD COUNTRIES AND OTHER ORGANISATIONS

In accordance with EU-RAIL's regulation, in carrying out its activities EU-RAIL shall seek a geographically balanced involvement of members and partners in its activities. It shall also establish the necessary international connections in relation to rail research and innovation, in line with the Commission's priorities. In this respect EU-RAIL strategy will be to conduct outreach activities with international partners pursuant to its strategy for cooperation with Third Countries and/or international organisations. In particular the strategy aims to contribute to the competitiveness of the European rail industry at the global level. EU-RAIL will continue the cooperation set up by the S2R JU with a number of key international partners, such as the Federal Railroad Administration (FRA), American Public Transportation Association (APTA), Federal Transit Administration (FTA) in the US, the Canadian Urban Transit Research and Innovation Consortium (CUTRIC), Gulf countries, India and in the near future, Australia.

In line with the policy priority of the Commission in terms of international relations on rail as well as keeping in mind the aforementioned objectives, it is expected that exchanges will take place with Australia, ASEAN, Japan and Mexico. The collaboration with the EU's neighbouring countries, in particular the Western Balkans, will continue and enhances further opportunities to explore for joint activities and large scale demonstrations.

PARTNERSHIP FICHE: EUROPE'S RAIL



OVERVIEW OF MEMBERS

Data not available













MISSION AND VISION STATEMENT

The Towards Zero-emission Road Transport (2Zero) partnership will set an ambitious research programme to accelerate the development of zero tailpipe-emission road transport in Europe with a system approach. It will develop a common vision and deliver a multi-stakeholders roadmap for a climate-neutral and clean road transport system. It will improve air quality, the mobility safety of people and of goods, and hence ensure future European leadership in innovation, production and services. By paving the way to a climate-neutral road transport system, the partnership will make a key contribution to the success of the European Green Deal.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Co-programmed

Coordinating entity: EGVIAfor2Zero AISBL and DG RTD - Future Urban and Mobility

Systems Unit

Total estimated budget: EUR 1.23 bn **EU commitments:** EUR 615 m

Partners' commitments: Up to EUR 900 m

Predecessor under Horizon 2020: The European Green Vehicles (2014-2020) and European

Green Cars (2009-2013) cPPPs.

FIND OUT MORE

www.2Zeroemission.eu

in https://www.linkedin.com/company/2zeroemission/?viewAsMember=true

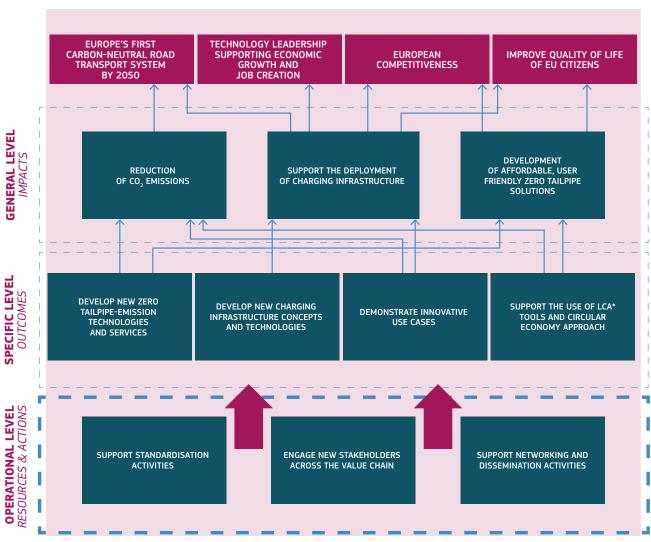
@2Zeroemission

https://www.youtube.com/channel/UCMVUHiygzYPsmIEz2Z4kKXQ

<u>info@2zeroemission.eu</u>



ACCELERATE THE DEVELOPMENT OF ZERO TAILPIPE-EMISSION ROAD TRANSPORT IN EUROPE WITH A SYSTEM APPROACH



Life Cycle Assessment



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
Share of funding going to SMEs	%	TBD				TBD			
IPR generated in funded projects	#	TBD				TBD			
Events organised by the Association	#	TBD				TBD			
		оитс	OMES						
GHG of mobility of people and goods	tonCO ₂ eq /pkm or tkm and toe/pkm and toe/tkm	2020				Reduction of GHG and energy intensity of mobility by 30 % for personal mobility and 25 % for freight by 2030			
Reduction of development time and effort		2020				Estimated 20% decrease of development time and effort including via digitalisation			
Improvement of charging efficiency demonstrated	%	2020				At least 25 % reduction of energy losses during charging (considering both charger and vehicle) by 2030 for all types of chargers			
Number of (public and private) transport operators implementing zero-tailpipe business models and use cases for freight transport and people mobility	#	2020				30 passenger transport and freight transport and logistics use cases demon- strated in projects over the lifetime of the partnership			
Reduction of CO ₂ emissions from road transport for all types of vehicles	% CO ₂ emission at fleet level	1990				Contribution to the overall target of 55% reduction of CO ₂ emission in 2030 (public target)			
Number of (publicly available) electric re- charging and hydrogen refuelling stations avail- able in the EU in 2030	#	2020				Contribution to achieve 3 m public charging points in 2030 (public target)			



SYNERGIES AMONG STAKEHOLDERS

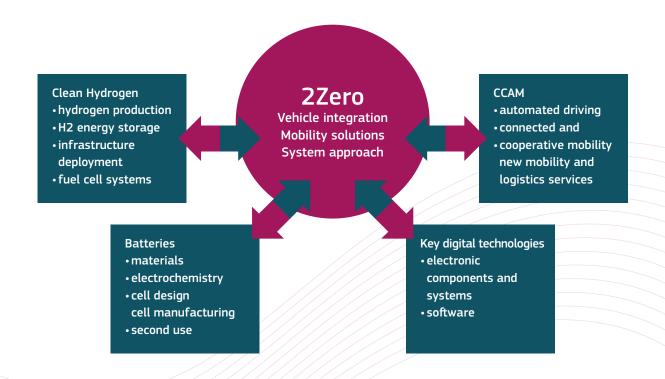
To implement a system approach, the 2Zero partnership extended its membership beyond the traditional automotive value chain and included new stakeholders, such as end users (both for freight transport and people mobility) as well as stakeholders from the energy sector such as major grid players. By involving roughly equal numbers of industry players and members from the research side, the 2Zero partnership is truly a success story of cooperation between different type of stakeholders, within projects, and at the overall partnership level.

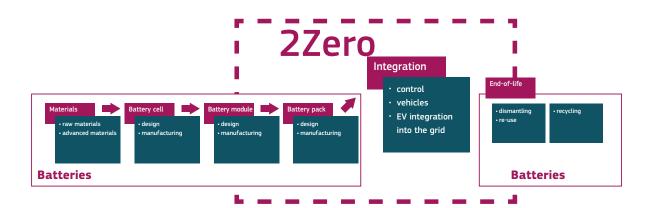
SYNERGIES WITH OTHER PARTNERSHIPS

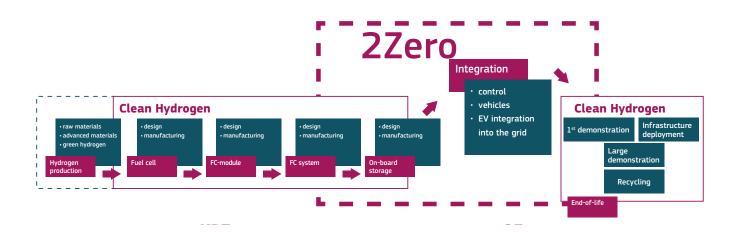
The 2Zero partnership does not aim at working in an isolated silo; the coordination with other partnerships and sectors will be essential for success in the transition towards a carbon neutral road transport system. Specific attention will be paid to ensure constant links, exchanges of information and the integration of results of the enabling technologies partnerships, such as Clean Hydrogen, Batteries for Europe and the Key Digital Technologies. While these partnerships should develop the necessary building blocks, the 2Zero partnership will ensure a smooth and timely integration at the vehicle level. A close cooperation will also be established with the CCAM partnership to accelerate the transition to the 2030 mobility system (see images below).

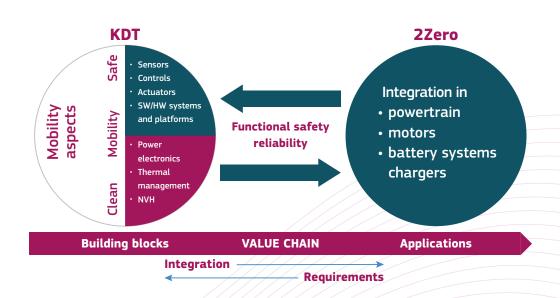
SYNERGIES WITH MEMBER STATES

Acting at the European level is the main task of the partnership; however, a lot of initiatives also occur at the national level. The 2Zero partnership intends to rely on the soon to be launched States Representatives Group (SRG) to ensure a better alignment with the relevant national and regional policies and programmes. The main objectives will be to explore synergies, avoid duplication of funding and activities, and maximise the large-scale deployment of innovations supported by the 2Zero partnership to accelerate the transition to a carbon neutral road transport system.







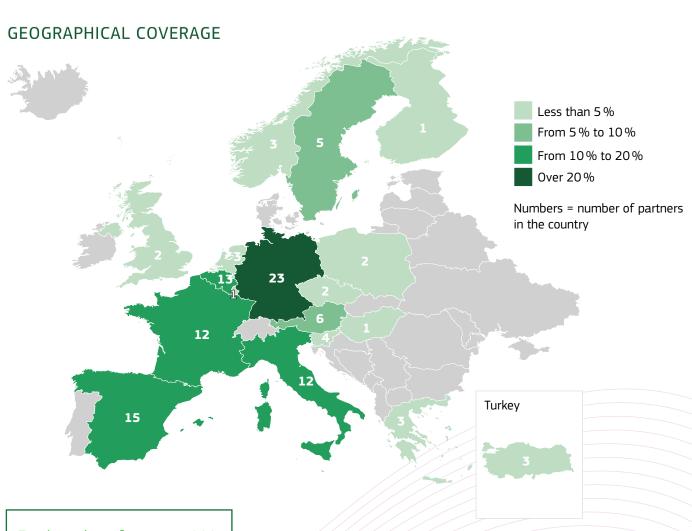




OVERVIEW OF MEMBERS

MEMBERS PER TYPE





Total number of partners: 111













MISSION AND VISION STATEMENT

The Connected, Cooperative and Automated Mobility (CCAM) partnership's vision is to ensure European leadership in safe and sustainable road transport through automation.

The four main goals are: 1) increase safety in road transport; 2) reduce negative impacts from road transport on environment; 3) ensure leadership through targeted knowledge and capacity building; 4) strengthen competitiveness of European industries.

Advancing CCAM is a multi-stakeholders effort, involving public and private stakeholders across industries and value chains, among others: industry players, public authorities and road operators, mobility and logistic services, representative bodies, regulatory bodies, and the research community.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Co-programmed

Coordination entity: CCAM Association

Total estimated budget: Up to EUR 1 bn

EU commitments: Up to EUR 500 m

Partners' commitments: Up to EUR 500 m

FIND OUT MORE

www.ccam.eu

https://www.ccam.eu/wp-content/uploads/2021/11/FINAL_MoU_CCAM.pdf

https://www.ccam.eu/wp-content/uploads/2022/01/CCAM-Partnership-SRIA-FINAL-2021.pdf

in www.linkedin.com/company/ccam-association

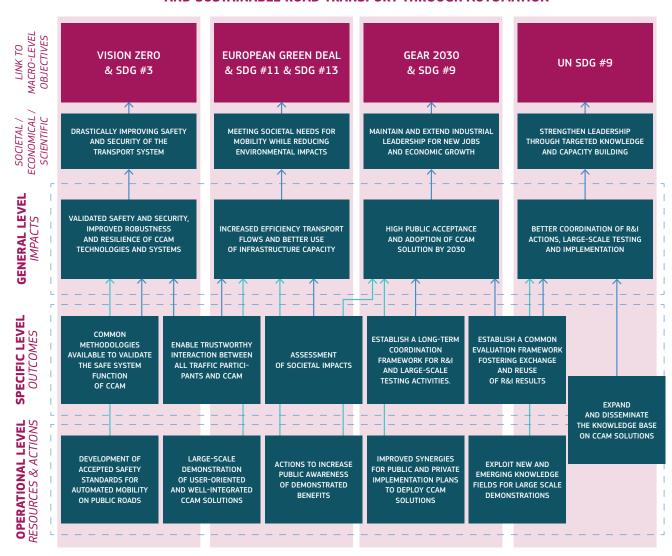
www.twitter.com/CCAM EU

https://www.youtube.com/channel/UCYxhgBhC8ZAPoZIPHbce2hw

<u>Secretariat@ccam.eu</u>



CCAM PARTNERSHIP VISION: TO ENSURE EUROPEAN LEADERSHIP IN SAFE AND SUSTAINABLE ROAD TRANSPORT THROUGH AUTOMATION





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME*	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027	
	RESOURCE	ES (INPUT), PI	ROCESSES A	ND ACTIVIT	IES		
Safety standards acceptance	# demonstrators applying	0	N/A	N/A	N/A	3 or more in 2028	
CCAM large-scale demonstration	# demonstration sites	0	N/A	N/A	N/A	Minimum 30 in 2030	
Public awareness of CCAM benefits	% willingness to use	47 %	N/A	N/A	N/A	75 %	
Knowledge expansion and dissemination	# projects in the know- ledge database	300	Minimum 400	by 2030 and inc	rease of underrepr	esented countries	
		0U1	COMES				
Methodology for safety validation	#	fragmented	fragmented	fragmented	1	1	
Secure & trustworthy interaction of CCAM	# incidents / 1 mio km driven	TBD	N/A	N/A	N/A	10% reduction / year in demonstrators	
Public acceptance	Survey 2025 and 2030	H2020 survey	N/A	Increase	N/A	Increase	
Active member involve- ment	%	18/27	75 % of actors in large-scale demos are CCAM members 75 % of EU MS actively involved in CCAM SRG				
		IM	PACTS				
Fatal and severe accidents under test	#	TBD	0	0	0	0	
Traffic flow efficiency under test	Traffic flow condition**: Travel Time Index, or Congestion Variability Index, or Congested road/ kms, or Peak hour traffic speed	TBD before the test	N/A	N/A	N/A	Improvement	
CCAM partners invest- ment in R&I	% of increase	TBD in 2022	N/A	10%	N/A	25%	
Best practice sharing	# CCAM projects in con- ferences	0	TBD	TBD	TBD	all	

^{*} This is just a selection of the main CCAM Partnership KPIs. Should you wish to access the full list, please refer to the CCAM SRIA at https://www.ccam.eu/wp-content/uploads/2021/12/CCAM-Partnership-SRIA-v1.4_FINAL_VER_-ELECTRONIC-17032022.pdf

^{**} Traffic flow condition: the ideal indicator to measure the impact depends on the demonstrated use case, and it could be a combination of the indicators listed.



MULTI-STAKEHOLDER COOPERATION

The lack of a common long-term vision and strategy targeting systemic solutions, as well as little interaction among the large cross-sectoral value chain has been a barrier for developing CCAM solutions. The CCAM partnership brings together public and private stakeholders – vehicle manufacturers, local and regional authorities, road operators, service providers, telecom industry etc. – into a common ecosystem in order to develop synergetic effects for their investment plans to advance vehicle and infrastructure technologies.

INTERACTION WITH OTHER PARTNERSHIPS

The CCAM partnership is seeking interaction and coordination with other complementary Partnerships (e.g. 2Zero and Driving Urban Transitions) and partnerships addressing enabling technologies for CCAM (Key Digital Technologies, AI, Data and Robotics, Smart Networks and Services, High Performance Computing, Photonics). This coordination will be facilitated for example through alignment groups or institutional meetings, joint expert workshops, and joint conferences.

The CCAM partnership identifies synergies with the objectives of the mission on climate-neutral and smart cities by implementing large-scale demonstrations of automated mobility systems and services within cities. In the current preparatory work for the work programme 2023, a joint topic was developed, building on the solutions from CCAM and 2Zero and which aims to support the climate neutrality ambitions of cities.

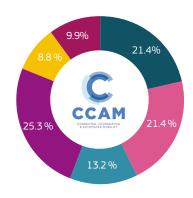
COORDINATING WITH NATIONAL PROGRAMMES

The CCAM partnership board at its first meeting in July 2021 agreed to set up the CCAM States Representatives Group (SRG). According to the memorandum of understanding for the co-programmed European Partnership for Connected, Cooperative and Automated Mobility (CCAM): 'This group should advise and actively support the achievement of objectives of the Co-Programmed European Partnership and ensure complementarity with national policies, priorities and programmes.' The idea is, through the SRG, to bring different EU Member States and Horizon Europe Associated Countries together and streamline national research agendas with the CCAM SRIA. The first meeting of the CCAM SRG took place on 25 November 2021 with representatives from 18 countries.



OVERVIEW OF MEMBERS

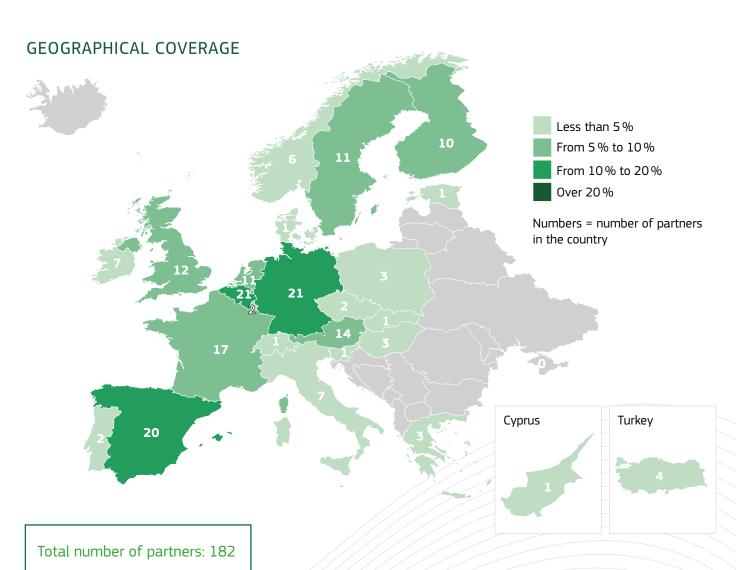
MEMBERS PER TYPE



INDUSTRY
UNIVERSITY
University and other higher education organisation

Public research organisation
(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC
SMEs
OTHERS
Non-profit, associations, state companies etc.

















MISSION AND VISION STATEMENT

The vision of the European Partnership for Batteries (BATT4EU) is to establish by 2030 in Europe the best-in-the-world innovation ecosystem to boost a competitive, sustainable and circular European battery value chain and to drive the transformation towards a carbon-neutral society.

By pooling Europe's resources and knowledge, only a partnership – a long-lasting and coordinated effort involving industry, research and the public sector – can bring predictability to the EU battery value-chain stakeholders.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 5: Climate, energy and mobility

Type of partnership: Co-programmed

Coordinating entity: Batteries European Partnership Association (BEPA)

Total estimated budget: EUR 1.85 bn

EU commitments: EUR 925 m

Partners' commitments: EUR 925 m

Predecessor under Horizon 2020: This is a new partnership

FIND OUT MORE

www.bepassociation.eu

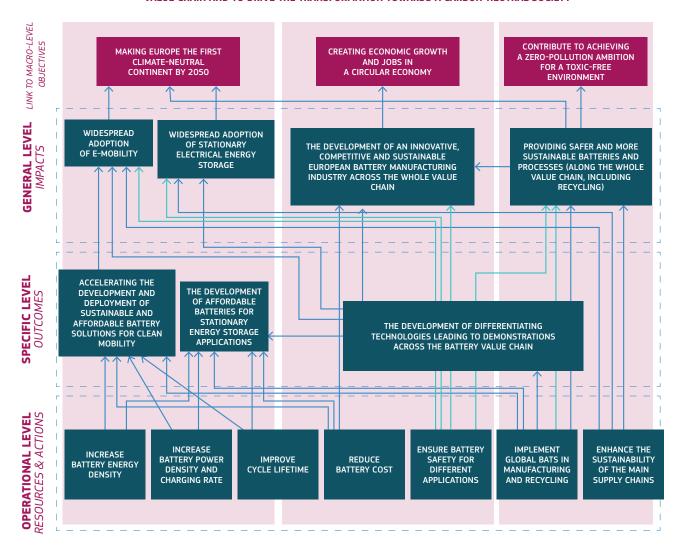
in https://www.linkedin.com/company/bepa-batteries-european-partnership-association

https://mobile.twitter.com/bepa_eu

☑ info@bepassociation.eu



BATT4EU'S VISION IS TO ESTABLISH BY 2030 IN EUROPE THE BEST IN THE WORLD INNOVATION ECOSYSTEM TO BOOST A COMPETITIVE, SUSTAINABLE AND CIRCULAR EUROPEAN BATTERY VALUE CHAIN AND TO DRIVE THE TRANSFORMATION TOWARDS A CARBON-NEUTRAL SOCIETY





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
Joint demonstration projects with other	# of design to cost (dtc) of design to energy	0		2 dtc		5 dtc			
Partnerships	(dte)			2 dte		5 dte			
	of design to power (dtp)			1 dtp		3 dtp			
Availability of updated/ new standard methodologies	#	TBD	N/A	N/A	N/A	TBD			
Demonstration projects for stationary electricity storage	# of projects	0		3		8			
New cell chemistries and archit	# of projects (TRL 4 or higher)	0		TBD		TBD			
Development of innovative process	# raw materials processing	0	N/A	3	N/A	6			
technologies	# recycling			3		6			
		OUTC	OMES						
Battery performance	Gravimetric & volumetric energy densities at cell level	For BEV in 2019: 250 Wh/kg, 500 Wh/L	N/A	N/A	N/A	+60% compared to 2019 baseline			
	Gravimetric & volumetric energy densities at cell level	Depends on application sector. For BEV in 2019: 750 W/kg, 1500 W/L	N/A	N/A	N/A	At least +30% compared to 2019 baseline			
	Cycle life at cell level	Depends on application sector. For BEV in 2019: 1000 cycles at 80% DoD	N/A	N/A	N/A	At least x2 compared to 2019 baseline			
	Cost at cell level (€/ kWh)	Depends on application sector. For BEV in 2019: 125€/ kWh	N/A	N/A	N/A	- 60% compared to 2019 baseline			
Supply Chain Sustainability	CO ₂ equivalent per manufactured kWh	TBD	N/A	N/A	N/A	TBD			
Recycling efficiency	of Li-ion batteries in %	TBD	N/A	N/A	N/A	TBD			



IMPACTS								
Widespread adoption of e-mobility	Numbers of registrations in EU of personal vehicles (PV) and commercial vehicles (CV), both electrically chargeable vehicles (ECV).	Baseline (2019 figures): PV 3,0 % ECV share CV 1,2 % ECV share	N/A	PV 20 % ecv shareCV 2 % ecv share (in total)	N/A	PV: 50% ecv shareCV: 20% ecv share		
Widespread adoption of stationary electrical energy storage	Battery electricity stationary storage capacity Installed in Europe.	4GW/7GWh	N/A	15 GW / 30 GWh	N/A	40 GW / 100 GWh		
EU Battery manufacturing capacity competitive with respect to the rest of the world	New battery cell manufacturing plants.	26 GWh		200 GWh/yr		400GWh (by 2028)		
% of improvement of environmental impact in terms of CO ₂ and toxic material	Reduction of CO ₂ per kWh.	TBD		TBD		TBD		

- 1) Measurement of the TRLs achieved at the end of EU-funded demonstration projects (for BtM and/or FtM applications), qualitative analysis of the work
- 2) Some objectives TBD in function of future regulations
- 3) Depends on application sector.

Batt4EU will monitor 19 KPIs in total over the course of Horizon Europe. In this table a selection is shown to show progress towards the general, specific and operational objectives. More information can be found in the <u>SRIA</u>. Although the battery value chain supports many end-uses, the KPIs are generally focused on one type of application (road transport, for example). This is for ease of measurement and follows the argument that progress in one application is indicative of progress across the board.

KPIs for the uptake of battery use are of course contingent on investments on related infrastructure (grid updates, charging infrastructure), which are beyond the scope of the Batt4EU partnership.

Sustainability KPIs are generally still to be defined, as we don't want to anticipate similar KPIs which will be put forward in the update of the Battery Regulation.



JOINT CALL WITH THE 2ZERO PARTNERSHIP

In the lead-up to the 2021-22 Work Programme, BEPA and EGVIAfor2Zero, the private-sector association within the 2ZERO partnership, were both interested in a call to establish an LCA-methodology for their respective scopes. After consultation with the European Commission, experts from BEPA and EGVIAfor2Zero worked together to define a call scope that is beneficial for both partnerships. The joint call now focuses on developing a commonly accepted LCA for zero-emission vehicles and their batteries, but the approach should also apply to other applications of the same types of battery cells (e.g. industrial and stationary). The joint call was taken up in the 2021-22 Work Programme as HORIZON-CL5-2021-D5-01-04.

BATTERY INNOVATION DAYS

BEPA is tasked within the partnership with bringing together stakeholders and disseminating information about the state of play of battery research in Europe. For example, BEPA teamed up with ETIP Batteries Europe and the Battery2030+ initiative to jointly organise a two-and-a-half-day conference called the Battery Innovation Days. The two IPCEI consortia joined this initiative later.

The first Battery Innovation Days took place 23-25 November 2021 and is set to be a yearly fixture.

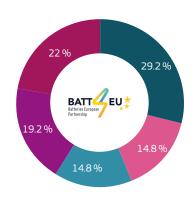
ALIGNING EFFORTS BETWEEN THE BATTERIES INDUSTRY AND ITS VALUE CHAIN

In order to streamline the process of priority-setting for the 2023-24 Work Programme for Batt4EU, BEPA has worked closely with the ETIP Batteries Europe and the Battery 2030+ initiative to use their expertise and efforts in developing technology roadmaps. Leaders of the working groups of these initiatives have presented their technology roadmaps to the members of the BEPA working groups and highlighted several areas of interest. These suggestions were then taken into account by BEPA in drafting the input to the Work Programme in order to align better with the latest technological developments and industry needs.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

UNIVERSITY University and other higher education organisations

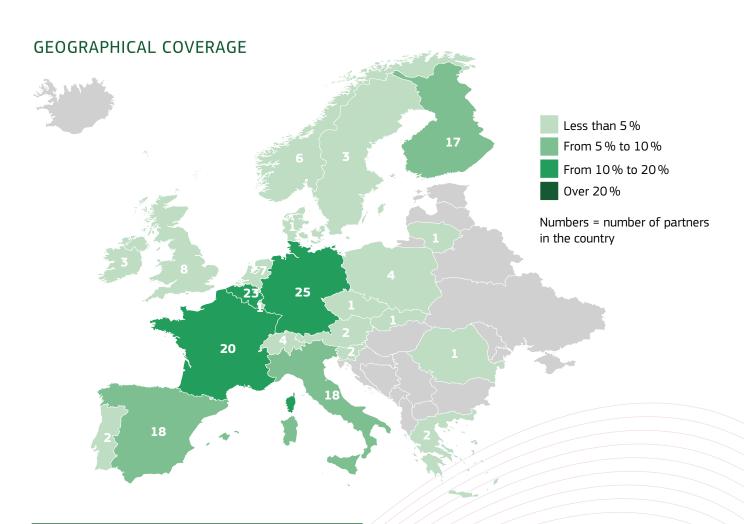
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

SMEs

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 182

93.4 % of the partners are represented in the map Other partners that do not fit to the map are from Canada, China, Turkey and the United States.











MISSION AND VISION STATEMENT

The Zero-emission Waterborne Transport (ZEWT) partnership will provide and demonstrate zero-emission solutions for all main ship types and services before 2030, which will enable zero-emission waterborne transport before 2050.

In addition, the partnership will:

- implement economically viable European new technologies and concepts regarding zero-emission waterborne transport, to strengthen the competitiveness of European industries and provide the capability to re-enter markets;
- facilitate the development and implementation of relevant regulations and policies at the national and international levels, including the development of standards;
- facilitate the uptake of zero-emission waterborne transport technologies.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5: Climate, energy and mobility

Type of partnership: Co-programmed

Coordinating entity: Waterborne Technology Platform

Total estimated budget: EUR 3.8 bn

EU commitments: EUR 530 m

Partners' commitments: EUR 3.3 bn

Predecessor under Horizon 2020: This is a new partnership

FIND OUT MORE

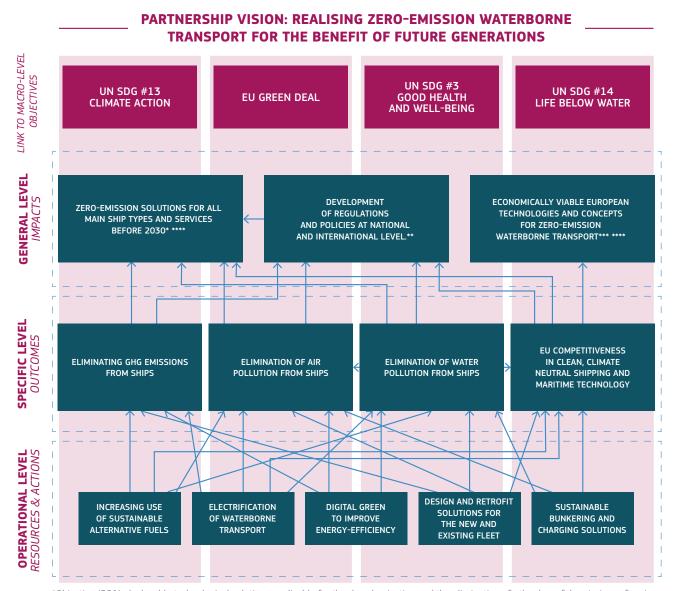
https://waterborne.eu/

in https://www.linkedin.com/company/waterbornetp/

https://twitter.com/WaterborneTP

+32 2 230 2791





^{*}Objective (SO1): deployable technological solutions applicable for the decarbonization and the elimination of other harmful emissions of main ship types and services

^{**}Objective (SO3): development and implementation of regulations and policies at national and international level, including the development of standards:

^{****}Objective (SO2): implementation of economically viable European new technologies and concepts regarding zero-emission waterborne transport, to strengthen the competitiveness of European industries in growing green ship technology markets

^{****} Objective (SO4): uptake of innovative zero-emission waterborne transport technologies and solutions within the European waterborne sector.



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCE	ES (INPUT), PRO	CESSES AN	ND ACTIVITI	ES*	
Solutions using sustainable alternative fuels	# of deployable solutions	NEW	TBC	TBC	TBC	20
Electrified autonomy for commercial shipping	% (150nm-200nm)	NEW	TBC	TBC	TBC	100 % demonstrated by 2030
Fuel consumption for large scale shipping	% reduction target (55%) achieved	2008 emissions	TBC	TBC	TBC	100 % demonstrated by 2030
Bunkering of alternative fuels and electricity	# of projects	NEW	TBC	TBC	TBC	5 projects by 2030
Zero-emission and climate-resilient inland waterway vessels	# of solutions	NEW	TBC	TBC	TBC	15 solutions demonstrated by 2030
Coastal and inland air pollution	# of solutions demonstrating reduction	NEW	TBC	TBC	TBC	25 solutions demonstrated by 2030
Water pollution (incl. underwater noise)	# of projects demonstrating reduction	NEW	TBC	TBC	TBC	5 projects
		оитсо	MES**			
Competitiveness of European industries	# of solutions	NEW	TBC	12	50	70
Regulations, standards and policies	# of contributions to- wards relevant bodies	NEW	TBC	N/A	N/A	20
Uptake of ZEWT*** technologies and solutions	# of solutions	NEW	TBC	N/A	N/A	50

^{*} For the ZEWT partnership, the SRIA indicates that the intermediate targets are reported as of the year Y+3 (2024), Y being the start of the partnership.

In the <u>Strategic Research and Innovation Agenda</u>, targets are described in more detail. The monitoring starts in the third year following the start of the partnership, thereby 2024. A number of targets are only set for the end of the partnership, due to the fact that the development of the solutions targeted takes a number of years. In addition, the co-programmed partnership on Zero-emission Waterborne Transport does not have a predecessor, resulting in the fact that often the baseline is indicated as new.

^{**} Taking into account the long investment cycle for ships, it is too early to define concrete impacts within the time horizon, given the long investment cycle for ships

^{***} ZEWT = Zero Emission Waterborne Transport



SYNERGIES: STORY 1

A first synergy that is building up is the involvement and cooperation of the broader waterborne transport sector, throughout the EU. Recently, the major ship owning companies (e.g. Maersk, CMA CGM) joined the partnership in the broader discussions on RD&I and the transition towards zero-emission waterborne transport. This is a step change concerning the involvement of the broader sector. This reinforced cooperation will ensure that the technologies developed are in accordance with customer needs and will have a quick(er) market roll-out.

SYNERGIES: STORY 2

Another synergy that is building up concerns the cooperation of ZEWT with other partnerships, in particular Clean Hydrogen and BATT4EU. An MoU had recently been signed between private associations (members of both partnerships) with the former, and another MoU is under discussion with the latter. Moreover, frequent exchanges between the ZEWT and Clean Hydrogen representatives regarding the next calls for hydrogen-related projects for waterborne transport are taking place regularly. The overall aim is to establish a strong cooperation between the three partnerships, ensuring strong RD&I support for waterborne transport research and avoiding duplications.

SYNERGIES: STORY 3

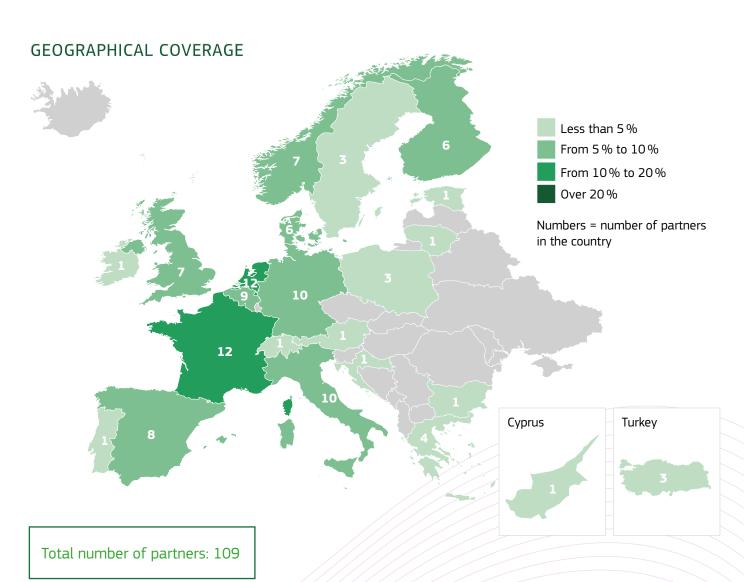
The members are also working on synergies with other EU funding programmes, particularly the Innovation Fund. This is seen as an essential tool to help bring ZEWT's results to market. Several actions have already been taken in this direction by the partnership, such as organising a dedicated workshop on the new Innovation Fund calls (autumn 2022). Moreover, some of the members have already been preselected for funding from the first Innovation Fund call, showcasing the importance of synergies between the initiatives.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE





PEOPLE-CENTRIC SUSTAINABLE BUILT ENVIRONMENT











MISSION AND VISION STATEMENT

The People-centric Sustainable Built Environment (Built4People) partnership brings together the whole value chain to accelerate people-centric innovation in the built environment towards sustainability, The three general objectives are:

- scientific generate holistic innovation towards sustainability;
- economic revitalise the sector through decarbonisation and sustainability transitions;
- societal induce lasting behavioural change towards sustainable living.

The partnership will contribute to achieving the 2030 energy targets, leveraging on the European Renovation Wave strategy, the EU Circular Economy Action Plan and the Affordable Housing Initiative in line with the ambitions of the European Green Deal Action Plan and the new European Bauhaus initiative.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Cluster 5 Climate, energy and mobility

Type of partnership: Co-programmed

Coordinating entity: ECTP and WGBC

Total estimated budget: EUR 780 m **EU commitments:** EUR 380 m **Partners' commitments:** EUR 400 m

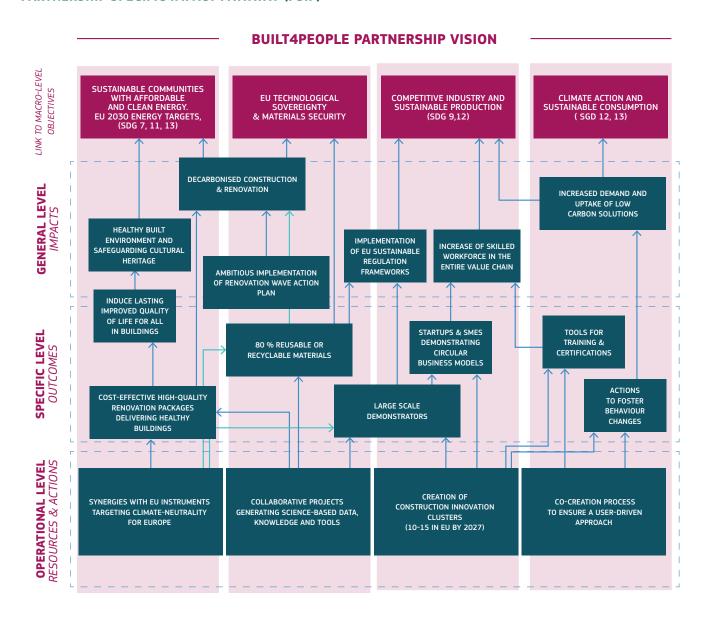
Predecessor under Horizon 2020: Energy-efficient Buildings (EeB) cPPP

FIND OUT MORE

www.ectp.org

 $\underline{https://www.worldgbc.org/our-regional-networks/europe}$

<u>Secretariat@ectp.org</u>





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027				
	RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
Established innovation clusters	#	N/A	3	6	10-15					
Inclusion of building users and occupants	# involved in demonstration	N/A	TBD	TBD	600*					
		оитс	OMES							
Low carbon solutions & renovation packages	#	TBD	TBD	TBD	100**					
Certification & verification tools	# developed	TBD	TBD	TBD	20***					
Training capacity (in hours per year)	#	TBD	TBD	TBD	3000****					
		IMPA	ACTS							
New skills creation	#	N/A	TBD	TBD	30****					
Sustainable & healthy neighbourhoods	% of B4P projects with demonstrated impact	N/A	TBD	TBD	30%****					
Healthy built environ- ment	% of B4P projects with demonstrated health, social and wellbeing	N/A	TBD	TBD	90 %*****					
Safeguarding cultural heritage	% of B4P projects that demonstrate improved outcomes for heritage buildings	N/A	TBD	TBD	15 %******					

^{*} Target assumptions: 60 projects, each involving average 10 users per project

More detailed information on the partnership's activities, performance and impacts is found in activity reports available here

Baselining exercises will be done during 2022 by a dedicated working group. Data from the predecessor partnership, EeB cPPP, will be used as much as is relevant to calculate the baseline and will then be further complemented with other sources as necessary.

^{**} Target assumptions: 60 projects, 1-2 new solutions or packages per project

^{***}Target assumptions: 60 projects, one-third develop training or a new certification tool

^{****}Target assumptions: 60 projects, each delivering average annual training capacity to roll out relevant new content to 50 people per annum

^{*****}Target assumptions: average new jobs / skills per project: 0.5-1, anticipating ≈ 60 projects considering a whole B4P budget of EUR 380 million.

^{*******}Target assumptions: 30% of projects will demonstrate health impacts, including at neighbourhood level

^{********} Target assumptions: given the people-centric nature of the partnership, all projects should be aiming to hit this, hence a high target is appropriate – but recognises that some projects may not achieve their stated goals

^{******}Target assumptions: 10-15% of projects address heritage buildings



CREATING THE BUILT ENVIRONMENT SECTOR ECOSYSTEM

Built4People's predecessor EeB cPPP had a strategic positioning during 2014-2020 and established synergies with several European initiatives. These included SET-Plan and the European Innovation Partnership on Smart Cities and its sustainable built-environment action cluster. In addition it built collaboration with complementary European associations. This resulted in the creation of a European build environment ecosystem with a wide stakeholder base from a scattered industry, providing an EU barometer of R&I priorities for the sector. Built4People will build on these synergies and strengthened it with WGBC's European regional network.

Link to common indicators #2, #11

SYNERGIES CREATED WITH THE SET-PLAN

Built4People intends to collaborate closely with Member States and Associated Countries through the newly created states' representative group (SRG). The aim is to facilitate alignment between the SRIA partnership and the relevant national programmes and policies.

One specific priority will be to support the objectives of the EU policy framework on buildings, building on the work carried out in the SET-Plan and its <u>implementation working group 5</u> (energy-efficient buildings). The SET-Plan IWG5 chair is invited as an observer to the board of the partnership in order to support the alignment of the specific objectives and anticipated outputs of the Built4People partnership with the IWG5 implementation plan and contribute to the SET-Plan's objectives on renovation.

Link to common indicators #10, #13

SYNERGIES WITH OTHER EUROPEAN PARTNERSHIPS

Built4People intends to develop synergies with 4 other Horizon Europe partnerships:

- Clean Energy transition (CET)
- Driving Urban Transitions (DUT)
- Process4Planet (P4P)
- Made in Europe (MiE)

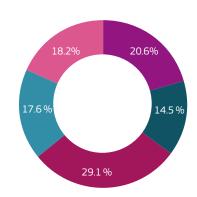
Alignment with P4P and the MiE will be considered in relation to the transformation of the building sector (construction 4.0), industrialisation and mass customisation, the supply chains and the integration of the waste streams of different industrial sectors and the development of circular economy models, new RES energy generation and energy efficiency. Links with the CET and DUT partnerships will be built on interactions with the SET-Plan.

Link to common indicator #8



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

UNIVERSITY University and other higher education organisations

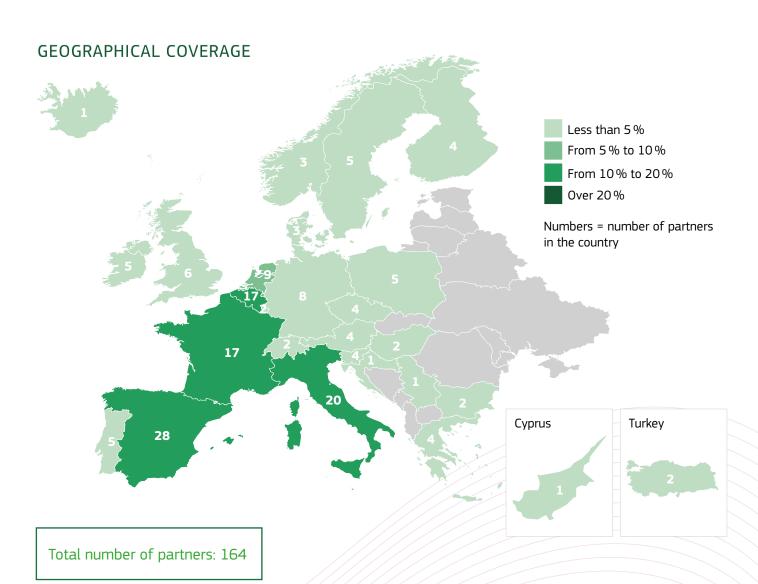
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

SMEs

OTHERS Non-profit, associations, state companies etc.











MISSION AND VISION STATEMENT

The Clean Energy Transition (CET) partnership is a transformative research, development and innovation funding programme that fosters the acceleration of the clean energy transition in all its dimensions. It supports Europe in becoming the first climate-neutral continent and making the EU the front runner in clean energy innovation and implementation. The CET partners, from 32 Member States and Associated Countries, endorsed this common vision that will translate into three main goals: 1) joint programming and funding; 2) renewable energy technology development, demonstration and integration (for fuels, carbon capture and storage, power, heating, and cooling) and system change (e.g. energy infrastructures); 3) innovation ecosystem fostering capacity building, faster market diffusion, upscaling, replication and enabling of the clean energy transition.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Climate, energy and mobility

Type of partnership: Co-funded

Coordinating entity: Federal Ministry for Climate Action, Environment, Energy,

Mobility, Innovation and Technology

Total estimated budget: EUR 791.2 m

EUR 210 m

Partners' commitments: EUR 581.2 m

Predecessors: Solar-ERA.NET, DemoWind, GEOTHERMICA, OCEANERA-NET,

Smart Cities and Communities, the Joint Programming Platform Smart Energy Systems (including the calls Smart Grids Plus, Integrated Regional Energy Systems, Enerdigit, and the JPP SES

& GEOTHERMICA Joint Call 2021), BESTF3, ACT, CSP

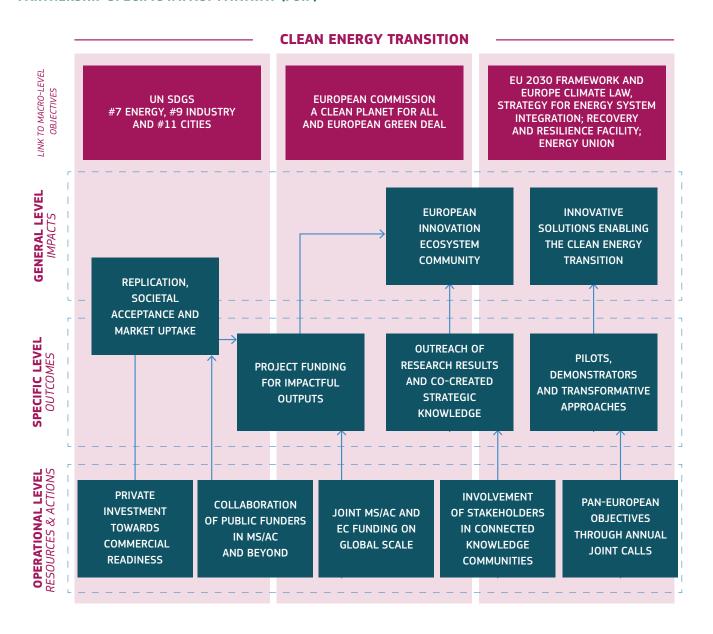
The partnership comprises of 70 national and regional RD&I programme owners and managers from 32 countries (26 EU Member States, 5 Associated Countries and one associated partner). The partnership's research priorities are collected in the <u>Strategic Research and Innovation Agenda (SRIA)</u> published in November 2020.

FIND OUT MORE

Not available



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCE	ES (INPUT), P	ROCESSES AND ACTIV	ITIES		
Joint MS/AC and EC fund- ing on global scale	Annual financial (€/year) contribution to joint call (allocated and con- tracted)	Proposal budget for third party fund for 2 years/joint calls	€100 m /year	Keep level	Keep level	
Involvement of stake- holders in connected knowledge communities	# and type of stakeholders and geographical distribution	TBD	100 new R&I teams in know- ledge community/year 33% of KC members from hands-on practicioners	Keep level	Keep level	
Private investment towards commercial readiness	Private investments mobilised in projects in €/year		Target: 30-100 m €/year			
Collaboration of public funders in MS/AC and beyond	# of CETP partners and countries	Baseline: 70 partners in 32 countries	Keep level	Keep level	Keep level	
Pan-European objectives in annual joint calls	Percentage of joint the- matic priorities addressed through annual call topics	TBD	Annual call cover at least 70% (5 challenges) of the challenges in the SRIA	Keep level	Keep level	
		OU	TCOMES			
Pilots, demonstrators and transformative ap- proaches	# of projects	TBD	# of projects cover at least 2 layers of the 3-layer-re- search model			
Project funding for impactful outputs	# of projects contributing to at least 1 CETP SRIA challenge	TBD	Each project on average contributes to min. 1 CETP SRIA challenge.			
Outreach of research results and co-created strategic knowledge	# of communication inter- actions	TBD	5% increase in communication Interactions/year	5% increase	5% increase	
Replication, societal acceptance and market uptake	# and type of impact partners and geopgraph- ical distribution	TBD	20 Impact Partners in 2024 from 70% of the CETP countries, 2 Impact Partners in each country – 64 Impact Partners in 2027			
		IM	IPACTS			
European innovation ecosystem community	# and type of joint activities with other European Partnerships and R&I Initiatives	TBD	Concrete joint actions each year with 2 other partner- ships and R&I initiatives	Keep level	Keep level	
Innovative solutions enabling the clean energy transition	# of demonstrated solutions	TBD	40 projects per call (assumption €120 m contracted in projects with €3 m average budget per project)	Keep level	Keep level	

Resources: KPI – provide joint MS/AC and EC funding on global scale: based on the initial budget for the first two calls 2022 and 2023 – KPI – enhanced collaboration of public funders in MS/AC and beyond: baseline based on initial commitments of partners – Other KPI targets based on estimations from experiences of former ERA-Nets

Outcomes: KPI – developed and demonstrated solutions: uses model according to the Joint Programming Platform Smart Energy Systems – KPI – project funding for impactful outputs: target based on CETP SRIA challenges – KPI – increased outreach of research results and co-created strategic knowledge: baseline needs to be calculated based on the traffic on former ERA-Net websites – Other KPIs based on estimations from experiences of former ERA-Nets

Impacts: KPI - innovative solutions enabling the clean energy transition: based on experiences of former ERA-Nets



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

COOPERATION WITH OTHER PARTNERSHIPS

CET has identified interfaces with 11 European partnerships in various clusters and already initiated interactions with some of them. The cooperation will be established and pursued on two levels: (1) strategy development, aiming at identifying gaps in specific R&I areas of common interest, as well as avoiding overlaps and exploiting synergies; (2) implementation through identification of joint activities in the context of the annual work programmes, such as coordinated calls between partnerships, knowledge exchange, regular meetings, and joint outreach activities.

The European Partnerships identified as relevant for CET are:

cluster 5 – climate, energy and mobility: Clean Hydrogen, Built4People, European Industrial Battery Value Chain, Driving Urban Transitions to a Sustainable Future;

cluster 4 – digital, industry and space: Smart Networks and Services, Clean Steel - Low Carbon Steelmaking, Process4Planet;

cluster 6 – food, bioeconomy, natural resources, agriculture and environment: Circular Bio-Based Europe; EIT Climate-KIC, EIT InnoEnergy (see figure below).

The CSA on support to the activities of the European Geological Services is also relevant for the same kind of cooperation.

Indicator #8

SYNERGIES WITH NON-EU R&I PARTNERSHIPS AT THE GLOBAL LEVEL – GLOBAL LEADERSHIP

International cooperation in RD&I is essential for tackling global challenges, such as climate change. Collaboration within RD&I projects can anchor European technology and solution providers in global value chains. CET's international activities and outreach will continue existing relationships previously established within ERA-Nets, which engaged with Mission Innovation (MI), a global initiative catalysing a decade of action and investment in research, development and demonstration to make clean energy affordable, attractive and accessible for all. CET partners will establish the Joint Call Facility of MI and actively invite MI partners from outside Europe to participate in CET's joint calls. Two MICalls have already been implemented as a pilot by the Joint Programming Platform Smart Energy Systems with non-EU partners from India, Israel, Morocco, Turkey and the United Kingdom. CET also foresees an effective cooperation with the relevant International Energy Agency (IEA) Technology Collaboration Programmes (TCPs) to boost joint activities and connect their knowledge community with the wider IEA international network and groups of experts from regions outside Europe. Link to common indicators #10, #13



CLUSTER DIGITAL, INDUSTRY AND SPACE

Smart Networks and Services
Clean Steel
Process4Planet
Geologial Service for Europe

EIT

CLUSTER CLIMATE, ENERGY AND MOBILITY

EIT Climate-KIC and EIT InnoEnergy

Clean Energy Transition Partnership Clean Hydrogen
Built4People
Industrial Battery Value Chain
Driving Urban Transition

Circular Bio-Based Europe

CLUSTER FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE AND ENVIRONMENT



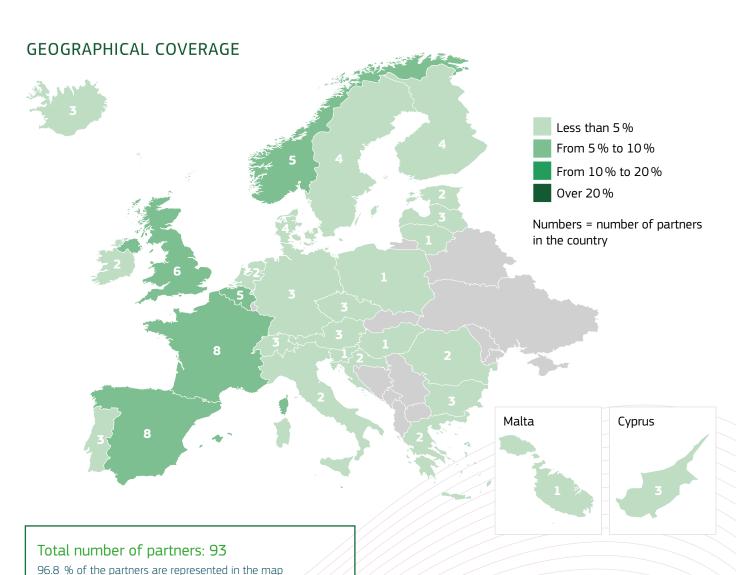
OVERVIEW OF MEMBERS

MEMBERS PER TYPE



Other partners that do not fit to the map are from Israel,

Turkey, and the United States.















MISSION AND VISION STATEMENT

The Driving Urban Transitions towards a Sustainable Future (DUT) partnership steps up the game to tackle urban challenges. We enable local authorities and municipalities, business and citizens to translate global strategies into local actions. We develop the skills and tools to make urban change happen and boost urgently needed urban transformations.

DUT addresses the urban dimension across all SDGs with SDG 11 (sustainable cities and communities) and its subgoals as the main entry point. More information can be found in JPI Urban Europe (2019:12) Strategic Research and Innovation Agenda 2.0*.

* https://jpi-urbaneurope.eu/wp-content/uploads/2019/02/SRIA2.0.pdf

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II - Climate, energy and mobility

Co-funded Type of partnership:

Coordinating entities: Austrian Ministry for Climate Action / Austrian Research

Promotion Agency

Total estimated budget: EUR 435 m

EU commitments: EUR 130 m

Partners' commitments: EUR 305 m

Predecessor under Horizon 2020: Joint Programming Initiative Urban Europe

FIND OUT MORE

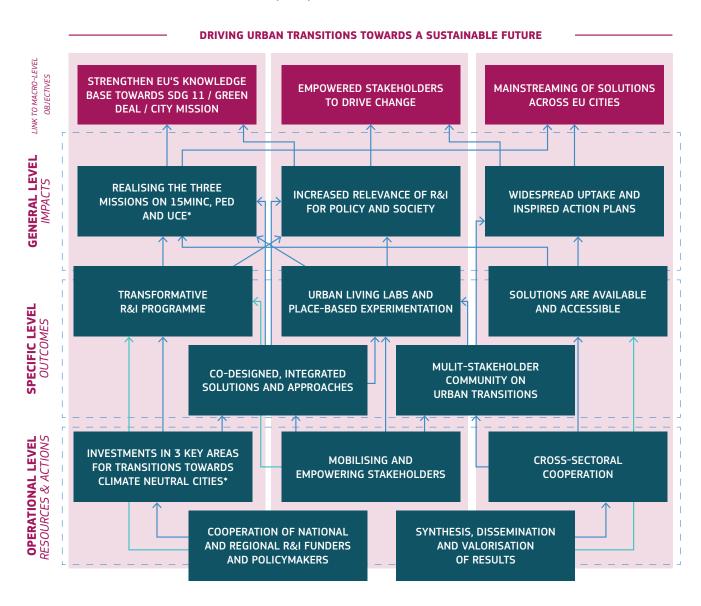
www.jpi-urbaneurope.eu



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PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



^{* 15} Minute Cities, Positive Energy Districts and Urban Circular Economies



PARTNERSHIP'S Key Performance Indicators

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027	
	RESOURC	ES (INPUT), PRO	CESSES AI	ND ACTIVIT	IES		
Country engagement	# countries	60 partners				Keep / mobilise new (inter-	
	# national/regional partners	27 countries				national) countries	
Transdisciplinary projects	# project	110	50	150	300	400	
	# and type of beneficiaries	571				2 800 (min. 50 % non-research organisations).	
Establishment of new urban living labs	# of urban living labs	150+	70	200	350	500 ULLs (min. 10 per participating country)	
Stakeholder mobilisation formats	# and type (incl. AGORA events)	18 community building measures				23 community building measures	
Evidence-based policy- making and mainstream-	# activities and type	18 ULTs (2018- 2021),	10 ULTs	20 ULTs	30 ULTs	35 ULTs	
ing		50 policy recommendations (2015-2020)				200 policy recommendations (2022-2032)	
		4 newsletters/year					
		оитс	OMES				
Average budget for joint calls	Euro per ERA-NET (annual call)	25 Mio EUR allocated 18 Mio EUR contracted	EUR 50 m allocated				
Stakeholder mobilisation	# and geographical spread	approx. 500	700	1 500	2 500	3 000 (incl. stakeholder balance)	
Joint activities with other EPs	# and type	JPI Urban Europe joint activities	Min. 3 joint a	ctivities per yea	r		
Interactions with wider community	# newsletter subscribers # followers	5 000		Increase by 30%		Double by 2032	
		IMP#	ACTS				
DUT transition pathways	# and type of activities and achievements	PED programme portfolio	Continuous a	nd balanced po	rtfolio of activi	ties and achievements in each	
Multi-stakeholder com-	Share of stakeholders	65% research	40% research	า			
munity		21 % local public authorities	30% local public authorities, 20% businesses				
		10% businesses					
		4% civil society actors	10% civil soc	iety actors			
SDGs / Green Deal contribution	% of projects and activities	Example ERA- NET Smart Urban Futures	All funded projects contribute towards the SDGs and the Green Deal; 80% of events are related to Green Deal priorities				

The baseline refers to the achievements of JPI Urban Europe and is based on the established monitoring framework and its indicators. Therefore indicators relating to specific European Commission policies such as the Green Deal are not covered yet and the given baselines must be considered as estimates. More details on the achievements of JPI Urban Europe can be found at the JPI Urban Europe dashboard, https://jpi-urbaneurope.eu/explore/

ULTs refers to Urban Lunch Talks, a webinar series introduced in 2018 to support dissemination and community building.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES WITH EUROPEAN AND INTERNATIONAL POLICY AGENDAS

JPI Urban Europe (JPI UE) is aligning its strategic research and innovation agenda with relevant European and international policy agendas, to join consultation processes around these agendas and to provide evidence from research and innovation activities towards the implementation of the agendas. For instance, JPI UE is a permanent observer to the Urban Agenda of EU (UAEU) and contributed to the development process of the New Leipzig Charter. Exchanges with the UAEU partnerships allowed to consider the defined policy needs in the JPI UE priority setting. The recent ENSUF synthesis report includes a mapping of concrete outputs from projects towards UN's 2030 SDGs, https://jpi-urbaneurope.eu/wp-content/uploads/2021/09/ENSUF-Synthesis-Report-AIT-FINAL-211103.pdf.

SYNERGIES WITH OTHER EUROPEAN INITIATIVES AND PARTNERSHIPS

Focusing on the complexity of urban transformation, JPI Urban Europe (and DUT) offer manifold entry points for cooperation with sectoral oriented initiatives and partnerships. Over the last years co-operation with the nine other joint programming initiatives has taken place to regularly develop common positions and organise joint events, e.g. JPI Urban Europe organised, in cooperation with all JPIs, the conference 10 years Joint Programming in 2018. Joint workshops with FACCE, Water JPI or JPI Climate allowed the identifying of common issues and the alignment of agendas. Dialogues were established with CETP, Biodiversa, EIT Urban Mobility or Food Systems to exchange on strategic issues and priorities.

SYNERGIES WITH STAKEHOLDER COMMUNITIES

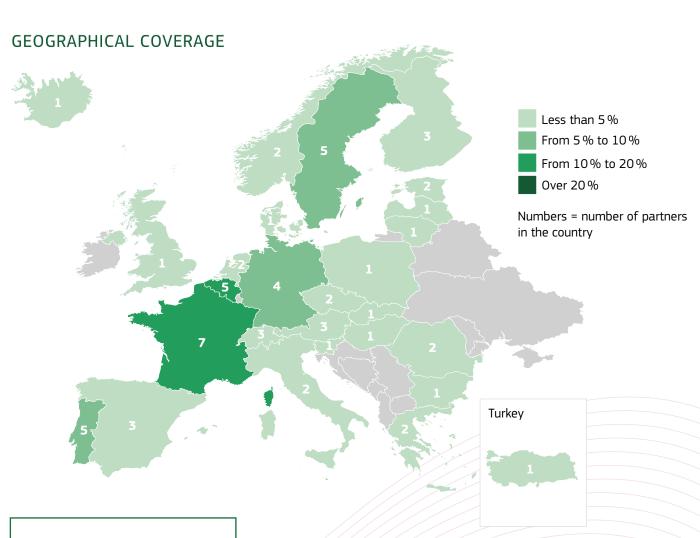
Co-design is one of the key principles of JPI Urban Europe. Various formats have been established to mobilise and engage stakeholders in agenda setting and knowledge production. For instance, a bottom-up multi-stakeholder community was initiated and is further developed: interactive AGORA dialogues were organised mobilising more than 500 stakeholders in 8 events; the webinar series Urban Lunch Talks offers space for reflexions and has attracted 1 400 participants from 45 countries since 2018. To fully exploit the synergies across stakeholder groups, urban living labs are strongly supported as they allow urban stakeholders to engage in local experimentation and the co-creation of solutions in projects. So far more than 150 urban living labs have been funded.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE





Total number of partners: 63

CLUSTER 6 FOOD, BIOECONOMY, NATURAL RESOURCES, AGRICULTURE, AND ENVIRONMENT









MISSION AND VISION STATEMENT

The main role of the Circular Bio-based Europe Joint Undertaking (CBE JU) is to bring together various actors from bio-based industries, ranging from farmers to scientists, to solve the technological, regulatory and market challenges of the sector.

Three main objectives have been set for this partnership*:

- (a) accelerate the innovation process and development of bio-based innovative solutions;
- (b) accelerate market deployment of the existing mature and innovative bio-based solutions:
- (c) ensure a high level of environmental performance of bio-based industrial systems.

The CBE JU will contribute to reach the EU's ambitious climate targets by shifting from non-renewable fossil raw materials and minerals to innovative, sustainable and circular bio-based production processes. It will foster a sustainable economic transition, creating jobs and economic growth in regions across Europe, while delivering significant contributions to the European Green Deal objectives by moving towards climate neutrality, resource efficiency and zero pollution.**

The Circular Bio-based Europe Joint Undertaking builds on the achievements of its predecessor, the Bio-Based Industries (BBI) Joint Undertaking while enlarging its scope and addressing the remaining challenges of Europe's bio-based industries by involving a wider range of stakeholders including the primary sector as well as providers of waste, residues and side streams, regional authorities and investors to prevent market failures and unsustainable bio-based processes.

* CBE JU general objectives, SBA article 46.1

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 6: Food, bioeconomy, natural resources,

agriculture and environment

Type of Partnership: Institutionalised (Art 187 TFEU) – joint undertaking

Coordinating entities: The Bio-based Industries Consortium (BIC) and DG RTD

Total estimated budget: EUR 2 bn

EU commitments: up to EUR 1 bn **Partners' commitments:** at least EUR 1 bn

Predecessor under Horizon 2020: Bio-Based Industries Joint Undertaking

FIND OUT MORE

https://www.bbi.europa.eu/about/circular-bio-based-europe-joint-undertaking-cbe-juhttps://biconsortium.eu/bio-based-industries-consortium

in https://www.linkedin.com/company/cbe-ju/

https://twitter.com/CBE_JU

^{**} BIC – vision: The circular bio-society in 2050

PARTNERSHIP FICHE: CIRCULAR BIO-BASED EUROPE



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Data not available

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
	OUTCOMES								
IMPACTS									

Based on the KPIs and impacts that have been set and used to monitor the performance of the previous partnership*, a robust system** will be set for the new partnership as part of the Strategic Research and Innovation Agenda (SRIA), which is still under preparation.

After the adoption of the SRIA from Circular Bio-based Europe's governing board, the SRIA will be published on our website.

^{*} BBI JU specific KPIs, BBI JU Annual Activity Report 2020 section 1.3.3

^{**} Executive summary: Study on BBI JU project portfolio and KPIs validation



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES WITH OTHER HORIZON EUROPE PARTNERSHIPS

Since 2016, BBI JU and SPIRE have been jointly exploring collaborative ways of maximising their impacts, and established a joint working group with the objective of ensuring complementarities, coherence and mutual understanding at different levels. The collaboration effort enabled full alignment of strategic agendas and work plans, while emphasising further complementarity and striving for synergy between topics.

In the future, the collaboration between CBE and the new Processes4Planet co-programme partnership will continue to support the transition of the European process industries towards climate neutrality and circularity.

SYNERGIES WITH OTHER EU FUNDING INSTRUMENTS

Dedicated partnership agreements* have been established with key funding organisations to explore alternative funding support to the awarded proposals. A memorandum of understanding has been signed with the European Bank for Reconstruction and Development and the European Circular Bio Economy Fund, and an advisory services agreement with the European Investment Bank. These agreements have been used in the framework of the BBI JU Synergy Label and will be further used in CBE to reduce the risk for research and innovation investment for biobased companies and projects.

* <u>Partnership agreements with BBI JU | Circular Bio-based Europe Joint Undertaking (CBE JU) (europa.eu)</u>

SYNERGIES BETWEEN DIFFERENT TYPES OF STAKEHOLDERS

To enhance and consolidate the participation of the primary sector in the bio-based sector and its value chains as a whole, a series of actions have been initiated by the BBI JU and will continue in the new partnership. A dedicated study on the participation of the agricultural sector was conducted first to better understand its participation in the BBI JU initiative. An action plan was then developed and recently revised* to ensure the involvement of primary sector in the CBE initiative and to contribute to rural development, by providing new and diversified incomes to primary producers while creating high skilled jobs.

* CBE JU Action Plan

OVERVIEW OF MEMBERS

Not available















MISSION AND VISION STATEMENT

The European Biodiversity Partnership (Biodiversa+) is part of the European Biodiversity Strategy for 2030. It aims to build a bridge between science, policy and practice, focusing on five main objectives: (1) plan and support research and innovation on biodiversity; (2) establish a transnational network of harmonised biodiversity monitoring schemes; (3) produce knowledge for deploying nature-based solutions and valuation of biodiversity in the private sector; (4) science-based support for policymaking and implementation; (5) strengthen the relevance and impact of pan-European research on biodiversity in a global context. In line with the post-2020 Global Biodiversity Framework, Biodiversa+ will thus implement an ambitious programme to support the general vision that nature in Europe is back on a path of recovery by 2030, and that by 2050 people are living in harmony with nature.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 6: Food, bioeconomy, natural resources,

agriculture and environment

Type of Partnership: Co-funded

Coordinating entities: Belgian Science Policy Office/Belspo – Belgium,

DG RTD and DG ENV

Total estimated budget: EUR 802 m

EU commitments: EUR 165 m

Partners' commitments: EUR 191 m + EUR 445 m in kind*

* incl. EUR 251 million for research as non-eligible; EUR 187 million for biodiversity monitoring and EUR 7 million for other activities as eligible.

FIND OUT MORE

www.biodiversa.org

in https://www.linkedin.com/company/biodiversa3

@BiodivERsA3t



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

EUROPEAN BIODIVERSITY PARTNERSHIP VISION: CONTRIBUTE TO SOCIETAL CHALLENGES THROUGH ... TO MACRO-LEVEL OBJECTIVES* 3 6000 -W TARGETING SDGS 3, 11, 13, 14 & 15 NO NET ECOSYSTEM LOSS BY 2030, DECREASED SPECIES EXTINCTION RISK AND INCREASED SPECIES AND GENETIC DIVERSITY **GENERAL LEVEL** DEPLOYMENT OF NATURE-BASED SOLUTIONS AT SCALE CONTRIBUTING TO PEOPLE'S NEEDS FULL ACKNOWLEDGMENT OF GOOD BIODIVERSITY STATUS WITH EU/ASSOCIATE COUNTRIES LEADERSHIP REINFORCED SCIENCE-BASED ACTIONS / SOLUTIONS INCREASE BIODIVERSITY MAINSTREAMING CONTRIBUTION OF EU R&I TO MONITORING ACROSS TO CONSERVE IN KEY SECTORS & RESTORE **GLOBAL POLICY** SCIENTIFIC BREAKTHROUGHS BETTER POLICYMAKING FOR TACKLING THE BIODIVERSITY CRISIS RESEARCH & POLICY & ACTIONABLE KNOWLEDGE ACTORS BUILDING COHERENT JOINT ACTIVITIES SPECIFIC LEVEL OUTCOMES PROMOTE HARMONISATION OF MONITORING SCHEMES ACROSS EUROPE INCREASE PRIVATE STAKEHOLDER STRENGTHENING THE EU AS GLOBAL ACTOR FOR BIODIVERSITY R&I INVOVEMENT IN R&I INCREASE POOLING **OPERATIONAL LEVEL**RESOURCES & ACTIONS INCREASE CAPACITY & RESOURCES FOR AND ACTORS BIODIVERSITY MONITORING **INCREASE** ENGAGEMENT WITH GLOBAL (NON-EU) ACTORS STRENGTHEN STAKEHOLDERS CREATE A COMMON R&I AGENDA COOPERATION

^{*} post-2020 Global Biodiversity Framework



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ НАМЕ	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027			
RESOURCES (INPUT), PROCESSES AND ACTIVITIES									
Joint call funding	€ (cumulative)	€42 m / joint call	€84 m	€168 m	€252 m	N/A			
Monitoring capacity and resources	# of policy actors engaged	18	20	22	24	TBD			
Global network engagement	# of international networks/initiatives	4	8	10	12	TBD			
		OUTCOM	IES						
Scientific breakthroughs	# of Q1 journal publications	20 per project	0	TBD	TBD	3 600 (by 2035)			
Stakeholder involvement	average # of stakeholders per funded project	10	12	12	14	14			
Shared monitoring priorities	# priorities implemented	6 pre-identified in 2022	N/A	2	6	TBD			
Global policy	# joint activities	2/ year	4	10	15	TBD			
contribution	feeding global policy (cumulative)								
		IMPAC	TS						
Joint R&I activities	# topical flagship programmes (cumulative)	2 in 2022	4	6	8 (max 10)	TBD			
Joint research & implementation workshops Biodiversa+ / LIFE	# (cumulative)	1 per 2 yrs	1	2	3	TBD			
Availability of harmonised monitoring schemes	#	N/A	N/A	2	6	TBD			
Private sector contribution	# joint calls for research proposals (cumulative)	1 per 2 yrs	1	2	4	TBD			
Uptake of nature- based solutions	# of success stories	N/A	2	4	7	TBD			
EU leadership in biodiversity R&I	# of participating ministries and agencies of non- European countries	6 per call	8	10	12	TBD			

- Some activities are new, hence so are the baselines (no good reference yet);
- Baselines for which a value is indicated, are based on the BiodivERsA experience taking into account the upscaling under Biodiversa+ as well as the activities already foreseen in the 1st annual workplan of Biodiversa+;
- Impacts related to Biodiversa+ funded research will only become available after a few years;
- Individual impacts of Biodiversa+ on policy processes are difficult to assess as the latter is an aggregate effect determined by many external circumstances;
- Beyond 2027, for now TBD (unsure & need more time to assess);
- Some KPIs will remain stable (same average per year), some will steadily increase as capacity and collaborations are built up, and some might be a bit heterogenous (targets moving over the years) depending on the flagship programmes we will launch.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

Biodiversa (the predecessor of Biodiversa+) launched 10 calls for research proposals of which 3 with other bodies, most notably Water-JPI, FACCE-JPI and the Belmont Forum for a total budget of EUR 60 million.

SYNERGIES: STORY 2

Through direct dialogue, and via relevant discussion fora, Biodiversa+ will ensure coherence and collaboration with other relevant partnerships (Accelerating Farming Systems Transitions; Water4All; Sustainable and Productive Blue Economy; Driving Urban Transitions, possibly also Circular Bio-based Europe; and Animal Health and Welfare) while designing and rolling out its flagship programmes. This will allow the partnership to tackle issues at the interface between biodiversity loss and other societal challenges. Partnerships can cover similar topics, but approach them from a different, complementary angle. Also, amongst the six joint calls, at least two will be developed in strong connection with other partnerships.

SYNERGIES: STORY 3

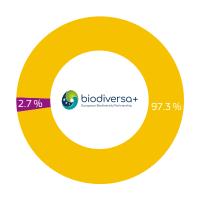
Biodiversa+ will ensure that, for the first time, environmental policy actors (ministries of environment and environmental protection agencies) will be systematically mobilised as key partners in carrying out biodiversity research and innovation, along with ministries of research, funding agencies and foundations. It will also promote better coordinated collaboration than currently observed between national/local biodiversity monitoring schemes and R&I actors, as well as tighter links between R&I and private actors.



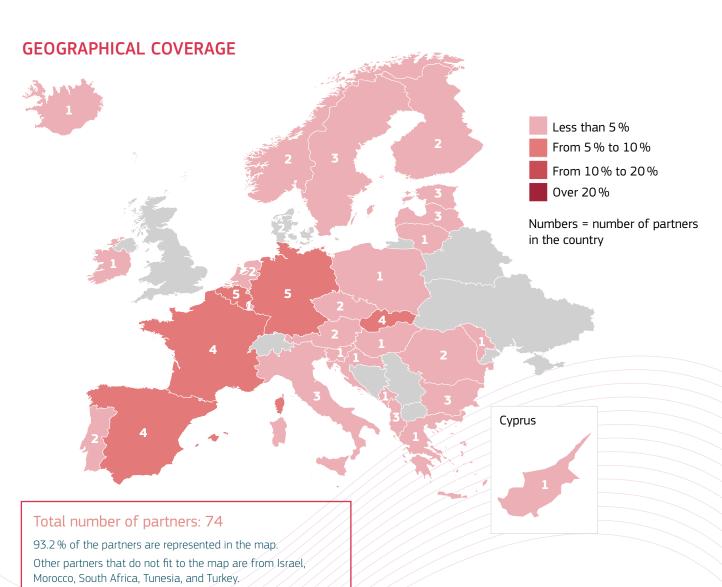
OVERVIEW OF MEMBERS

Biodiversa+ is composed of 74 members from 37 countries (incl. ministries in charge of research and of the environment, funding agencies or foundations, environment protection agencies).

MEMBERS PER TYPE



PUBLIC Research funders, ministeries, regions, citiesOTHERS Non-profit, associations, state companies etc.



A climate neutral, sustainable and productive BLUE ECONOMY











MISSION AND VISION STATEMENT

A climate neutral, sustainable and productive Blue Economy (SBEP) partnership will enable a just and inclusive transition to a climate-neutral, sustainable and productive blue economy for key intervention areas for healthy oceans and the wellbeing of citizens in harmony with nature. By mobilising relevant stakeholders from the quadruple helix to co-create and co-deliver knowledge-based solutions / innovative governance models combining financial and in-kind resources, SBEP targets the Green Deal and Digital Europe objectives as well as contributes to the Global Earth Observing System. Integration of the sea-basins initiatives and strategies will ensure that impact is delivered at local level as well as internationally.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 6: Food, bioeconomy, natural resources,

agriculture and environment

Type of Partnership: Co-funded

Coordinating entities: Italian Ministry of University and Research / The Research

Council of Norway

Total estimated budget: EUR 490.72 m

EUR 150 m **Partners' commitments:**EUR 150 m

EUR 340.72 m

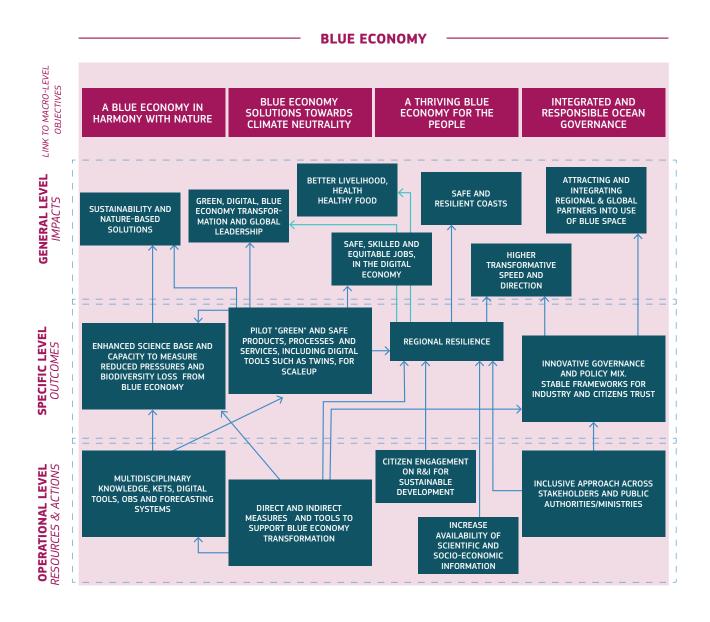
FIND OUT MORE

https://www.jpi-oceans.eu/climate-neutral-sustainable-and-productive-blue-economy

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raflib49@gmail.com ka@forskningsradet.no

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027	
	RESOUR	CES (INPUT), PROCES	SSES AND A	CTIVITIES			
Capital access	# of national funds	TBD	TBD	TBD	TBD	N/A	
Stakeholder co-design	# of 4-helix all 5 regions/All-Atlantic participation	TBD		+ 5 %	24	TBD	
Collaborations w/ other ERA actions	#	0	Effective struplace	uctures in	> 10	N/A	
Sustainable innovation access	# Innovative business models/ taxonomy systems	TBD	TBD	TBD	TBD	N/A	
		оитсоме	S				
Green / digital inventions	# pilots	International, EU, national indexes	TBD	TBD	>15	20 pilots	
Digital ocean synergies	# synergies	European Oceans Obs System	Up to 5 synergies, 80 % FAIR data				
			80 % of Essential Ocean Variables parameters included				
Resilience	# Nature-based solutions	TBD	TBD	TBD	TBD	N/A	
Structured ERA community	# of involved entities # of upscaled outputs (EU-13) # publications	H2020	2030: EU-13 sea-bordering parties fully involved and policy priorities aligned				
Capacity building	# programmes	TBD	TBD				
capacity ballaning	# academic degrees		.55				
	" deaderine degrees	IMPACTS					
Citizens' wellbeing	Sectoral performance	International, EU, national indexes	>2027: 20% increase in valorisation of food and feed from aquatic sources + 15% reduced carbon footprint + early warning systems to protect citizens				
Employment	Number (FTE)	EU indexes	<u> </u>	ıbled to 10 mil			
Investment	% increase	TBD	TBD	TBD	+ 25 %	N/A	
Internal market and export growth	% increase	International, EU, National indexes	TBD	TBD	TBD	+ 5 %	
Policy uptake	% of results	Conventions/ Directives	TBD	50 % of results	80 % of results	N/A	



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SEA-BASINS AND ATLANTIC OCEAN INTEGRATION DEEPENING (INTENDED)

Sea-basins and Atlantic Ocean initiatives have delivered in the last years via SRIAs notable key results for the blue economy, including better cooperation and capacity building. The governance structures of such initiatives differ from basin to basin and in some of the regions, conventions or the European Commission are also playing a major role. Furthermore, the Horizon Europe mission Restore our Ocean and Waters will address regional lighthouses. Via structured coordination among relevant sea basin programmes, strategies and initiatives, including macro regional strategies, the Sustainable Blue Economy Partnership (SBEP) intends to contribute to such integration as added value for co-creation, in order to generate impact at the local level. By supporting the implementation of these strategies, and at the same time contributing to the EU internationalisation and global cooperation strategy, this approach will guarantee alignment and strengthen the ERA beyond Europe.

CONNECTED PARTNERSHIPS AND INITIATIVES (INTENDED)

From the outset of the SBEP's intervention areas, coordination will be made with relevant European co-funded and co-programmed partnerships as well as Joint Programming Initiatives to foster alignment and exchange praxis as well as avoiding duplication.

Key partners include:

- Joint Programming Initiatives: Healthy and Productive Seas and Oceans and Connecting Climate Knowledge for Europe;
- Partnerships: Rescuing biodiversity to safeguard life on earth, Zero Emission Waterborne Transport, Clean Energy Transition, Water Security for the Planet, and Safe and Sustainable Food Systems for People, Planet and Climate:
- Open Science Cloud: Artificial Intelligence, Data and Robotics, EIT Digital, EIT Raw Materials, and the European Partnership on Innovative SMEs.

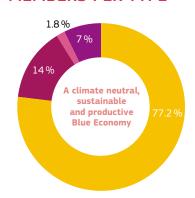
Joint scoping exercises or assessment of projects' results are example of possible coordinated actions.

FOLLOW-UP OF ERANET COFUNDS (INTENDED)

Following up key building blocks of the blue economy, ERA will ensure higher impact. In this regard the achievements of the ERANET MarTERA on maritime technologies, the Blue Bioeconomy Cofund and the OceanERA will be taken up by SBEP.

OVERVIEW OF MEMBERS

MEMBERS PER TYPE



UNIVERSITY University and other higher education organisations

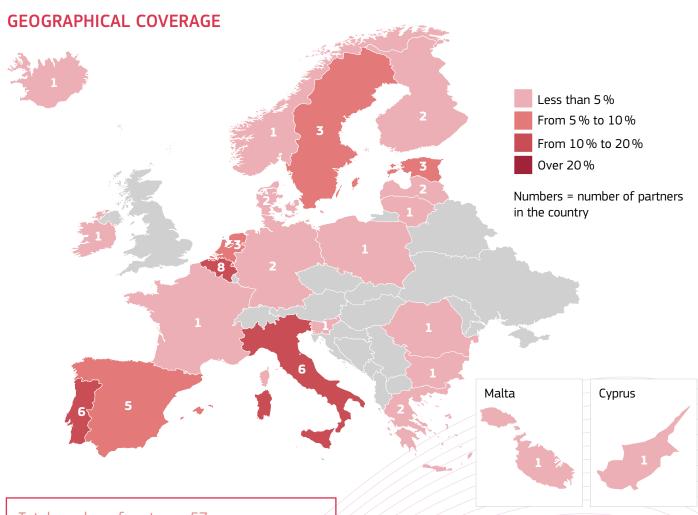
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 57

96.4% of the partners are represented in the map.

Other partners that do not fit to the map are from Faroe Islands and Turkey.













MISSION AND VISION STATEMENT

Water Security for the Planet (Water4All) partnership aims at boosting the systemic transformations and changes across the entire research and water innovation pipeline, fostering matchmaking between problem owners and solution providers to ensure water security for all in the long term.

The Water4All consortium gathers research funders, innovation funders, authorities in charge of the environment, networks representing the water economic sector, and research operators. Water4All runs and promotes a holistic approach to freshwater R&I, connecting actors from research to decision making and field implementation, including a process which includes citizens. We are striving for a more integrated and informed approach to address water challenges, and an increased uptake of innovative solutions.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar II – Cluster 6: Food, bioeconomy, natural resources,

agriculture and environment

Type of Partnership: Co-funded

Coordinating entities: Agence Nationale de la Recherche (ANR)

Total estimated budget: EUR 420 m **EU commitments:** EUR 126 m **Partners' commitments:** EUR 294 m

Predecessor under Horizon 2020: Water4All builds on the Water Joint Programming Initiative

(Water JPI), and also on a number of ERA-NETs (Water Works,

Aquatic Pollutants)

FIND OUT MORE

www.anr.fr

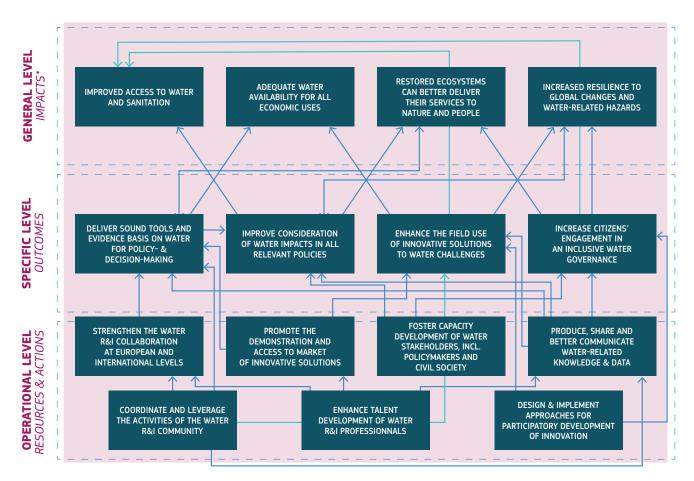
The Water JPI resources can be used for now and will reference the Water4all accounts later on. www.water4all-partnership.eu

- f https://www.facebook.com/Water-JPI-517792798284596/
- in http://linkedin.com/groups/8455262
- https://twitter.com/WaterJPI
- https://www.youtube.com/channel/UCIR880cyeg5v87KzLzeVlkQ
- ☑ Water4all@agencerecherche.fr



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

SDG6: CLEAN WATER AND SANITATION WATER SECURITY FOR ALL ...



^{*} The targeted long-term impacts refer to the components of water security proposed by UN-Water (2013) for the sustainable development agenda: https://www.unwater.org/app/uploads/2017/05/unwater_poster_0ct2013.pdf



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (INPL	JT), PROCESS	ES AND ACT	IVITIES		
Partnership composition	# participants (per type and country)	20	74 organisations 28 countries	TBD	TBD	-
Newcomers	# in supported projects	TBD	TBD	TBD	TBD	_
Joint calls	# (cumulated)	7 calls in 10 years	2	4	6	-
Coordinated activities	# of European Partnerships	4	TBD	TBD	TBD	-
Innovative solutions presented	# in central web portal	N/A	N/A	TBD	TBD	-
Social media outreach	# of followers	TBD	TBD	TBD	TBD	-
Researchers upskilled	#	N/A	TBD	TBD	TBD	-
Individuals benefiting from capacity & knowledge building	#	N/A	TBD	BD	TBD	-
Citizen / end-users contribution to R&I	% of funded projects	N/A	TBD	TBD	TBD	-
		OUTCOMES				
Water data delivery in a transnational platform	# countries participating	N/A	N/A	TBD	TBD	-
Contributions to public policy & strategic documents	Qualitative (success stories)	N/A	N/A	TBD	TBD	TBD
Integration of water challenges in policies & regulations	Qualitative study (sector-based survey)	N/A	TBD	N/A	TBD	TBD
Uptake of research-produced tools by SMEs	# of pre-commercial prototypes	N/A	N/A	N/A	TBD	-
Demonstrated inclusive water governance	# of case studies	N/A	TBD	TBD	TBD	-
		IMPACTS				
Population access to drinking water	% (EU)	94 %	N/A	N/A	N/A	TBD
Population access to sanitation	% (EU)	73 %	N/A	N/A	N/A	TBD
Level of water stress	% (withdrawal vs resources)	8.51%	N/A	N/A	N/A	TBD
Permanent water area	km² (lakes and rivers)	520 881	N/A	N/A	N/A	TBD
Economic loss from water- related hazards	% of GDP	0.25 %	N/A	N/A	N/A	TBD

- Water4All's complete monitoring template will be included in the final Strategic Research and Innovation Agenda, to be published in early 2022
- Formal endorsement of the targets by the Governing Board should happen at the kick-off meeting early 2022. Most targets are therefore marked 'TBD'.
- Many baselines are not available because the related data was not monitored so far, or because the partnership precisely creates new activities to fill a gap.
- The first research projects funded through the calls will start in 2023. The transfer and uptake of results can hardly start before 2025: several indicators only make sense beyond 2025. We mark 'N/A' where we don't think it is possible to have a meaningful value; some 'TBD' may also eventually be turned into 'N/A' for this reason. Indicators for the outcomes and, most of all, impacts, also make sense in the medium-term and will mostly be used for the later years of monitoring.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

JOINT ACTIVITIES

Water JPI has sought since its launch in 2011 synergies with other initiatives in order to enhance societal impact and avoid the duplication of efforts in thematic areas of common interests. This strategic objective has translated in shared efforts to influence EU agenda setting with other JPIs, joint calls for projects and additional activities e.g. common strategic research agendas, Transfer Projects and TAP actions. Collaborations with other initiatives include three joint transnational calls, respectively with the FACCE JPI (2016, 21 projects funded), the EraNet Biodiversa (2020, 22 projects funded), the JPIs AMR and Oceans (2020, 18 projects funded).

COOPERATION WITH NON-EU COUNTRIES

International cooperation has been a priority for Water JPI since its inception. Israel joined the initiative in its early stages and South Africa has been a full member since 2017. Joint calls have been launched in collaboration with Brazil, Canada, Egypt, Morocco, South Africa, Taiwan, Tunisia and Turkey, joining resources towards addressing specific and common water challenges.

Strategic alliances with other initiatives and countries such as Australia, India, the United States and Vietnam could serve Water4All in the development of strategic agendas or the identification of joint actions. Water4All's international activities will build on the main lessons and practices described in the upcoming Water JPI's international cooperation strategy.

ALIGNMENT

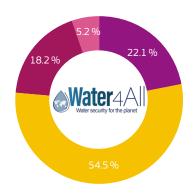
Water JPI arose as a process whereby partner states agreed on a common vision to address major challenges and enable the alignment of national priorities. Members succeeded in the development in 2016 of a common strategic research and innovation agenda that has been recently updated and that outlines key RD&I areas for the sustainable management of water resources. Alignment activities have also allowed the launch of joint processes of research practices and project management as well as the identification of collaboration barriers. The set-up of mirror groups in some member countries has contributed to the better alignment of national strategies with Water JPI's priorities*.

* http://www.waterjpi.eu/mapping-agenda/strategic-research-and-innovation-agenda-sria/waterjpi_sria2025_web.pdf



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



UNIVERSITY University and other higher education organisations

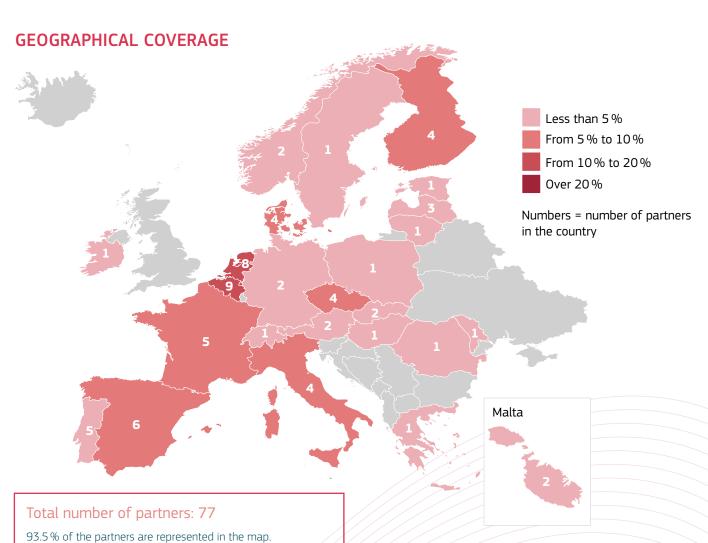
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

OTHERS Non-profit, associations, state companies etc.



Other partners that do not fit to the map are from Israel, South Africa and Turkey.



OTHER PILLARS

PARTNERSHIP FICHE: EUROPEAN OPEN SCIENCE CLOUD









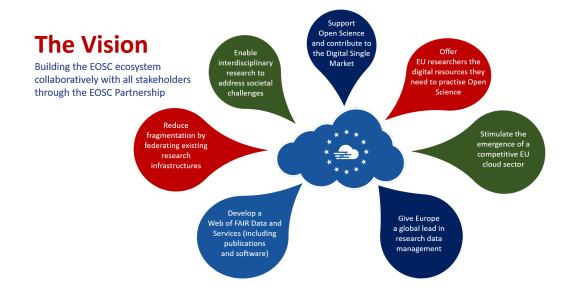






MISSION AND VISION STATEMENT

European Partnership for the European Open Science Cloud (EOSC) was established in 2021 to provide a wide framework for R&I alignment, not only at the EU, but also at national, community and institutional levels. The creation of a 'web of FAIR data' as the backbone of the EOSC serves all disciplines, domains and societal sectors that make use of data and data sharing. The relevant documents, including the Memorandum of Understanding, can be found on the EOSC Association website: https://eosc.eu/documents



KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar I – Research infrastructures

Type of Partnership: Co-programmed

Coordinating entities: EOSC Association and the European Commission

Total estimated budget: EUR 990 m **EU commitments**: EUR 490 m

Partners' commitments: EUR 500 m

Predecessor under Horizon 2020: New partnership



FIND OUT MORE

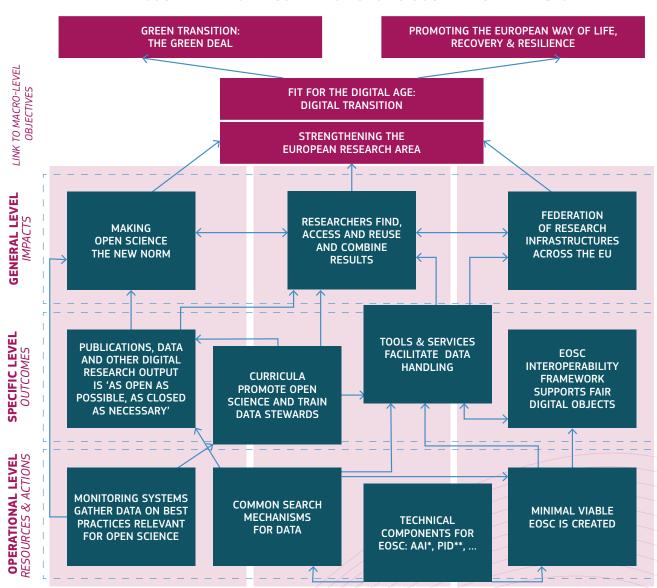
https://eosc.eu/

in https://www.linkedin.com/company/80728224info@eosc.eu

https://twitter.com/eoscassociation

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

EOSC PARTNERSHIP CONTRIBUTIONS TO SOCIETAL CHALLENGES



^{*} AAI: Authentication and Authorization Infrastructure

^{**} PID: Persistent Identifiers



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027		
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
Immediate open access availability of publications from EOSC members	% of publication record	N/A	70% of total publication record by 2023	80% of total publication record by 2025	85% of total publication record by 2027	>95 % of total publication record		
(European) Data stewards curricula recognition within national education systems	# of national education systems	N/A	5	10	15	>90 % of the EOSC-A member systems		
Implementation of policies requiring data sharing and incentivise re-use.	% of EOSC research funding members	N/A	70%	75 %	80%	100%		
		оитс	OMES					
Availability of pan-European infrastructures for preservation, management and sharing of research software	#	TBD	TBD	3	2	1 (the ambition is to integrate all the then existing infrastructure)		
Percentage of the active data spaces that take up data management practices, including the FAIR data principles.	%	0	Qualitative: a number starting	50%	75%	>90 %		
		IMP	ACTS					
Number of geographically spread observer organisations that have joined EOSC from outside EU MS/AC	#	TBD	10	15	20	25		
Number of interconnections with clouds and commons from outside the EU	#	TBD	2	4	6	8		



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Due to the horizontal nature of the EOSC partnership it is relevant for all other partnerships, for all R&I activities in Horizon Europe, for all national developments in the domain of open science and for world-wide development to enhance data interoperability and open science. For the EOSC partnership this leads to many (possible) synergies.

WORLD-WIDE

In Europe EOSC addresses the global challenge that research faces in the context of more and more data-intensive science. This challenge cannot be fully addressed by either the EU alone or by any Member State or Associated Country in isolation. Thus, it is imperative to work synergistically with the developments in the other regions of the world.

At this moment EOSC plays the most prominent role in the international sphere, and cooperates, for example, with Global Open Research Commons (GORC), Global Open Science Cloud (GOSC), Open Science Commons Executives Roundtable (OSCER) and Council for National Open Science Coordination (CoNOSC).

EUROPEAN

Many building blocks for EOSC, e.g., the science and regional clusters, with experience in developing national components, will be used to promote effective synergies at the regional and/or community levels. <u>EOSC Future</u> will help in bridging the e-infrastructures and Research Infrastructures communities, to seamlessly integrate existing data and services.

The European strategy for data recognises EOSC as the nucleus for a science, research and innovation data space, which will progressively be articulated with the nine new sectoral data spaces foreseen in the strategy. These new data spaces will build on the ongoing EOSC experiences gained with the research community. Therefore, there is huge opportunity for EOSC as a frontrunner in data-interoperability to serve the new data spaces with their specific research data. This will create synergies between EU policies, given the role of EOSC in the renewed ERA, the European data strategy and, more widely, the European data economy.

* Building upon the EOSC experience, EC announces creation of nine Common European data spaces | EOSC Secretariat

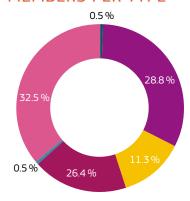
NATIONAL

For EOSC it will be essential to develop the right synergies between national and EU funding streams as well as a higher level of coherence in the funding from different parts of EU research funding and across the three pillars of Horizon Europe. Several European countries are investing significantly in their data infrastructure. The essential ingredients are proper research data management, the education and employment of data stewards, and standards. Ultimately, the pan-European EOSC will also positively influence the planning of institutional and national infrastructures by developing synergies and compatibility schemes with other existing infrastructures, improving the quality of the integrated research landscape, and increasing researchers' ability to provide science-based solutions to complex societal challenges.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisationUNIVERSITY University and other higher education organisations

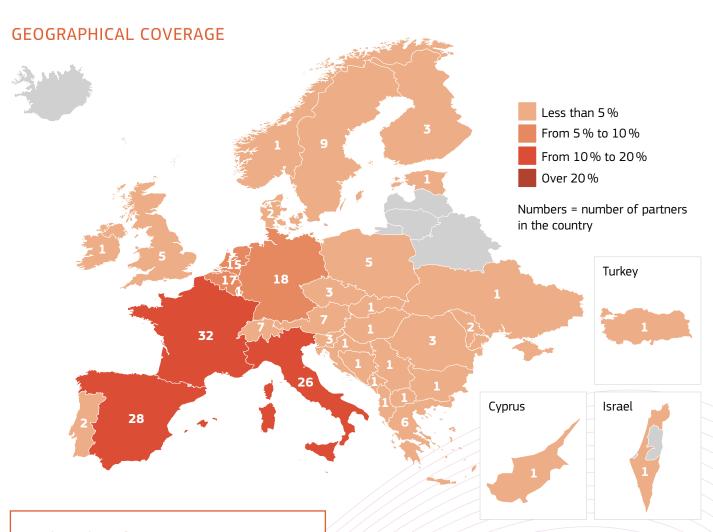
RESEARCH Public research organisation

(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC Research funders, ministeries, regions, cities

SMEs

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 212

99.1 % of the Partners are represented in the map.

Other partners that do not fit to the map are from Armenia and Sudan.











The partnership is implemented by innovation agencies of 37 countries under the umbrella of Eureka. Its vision is to stimulate economic growth and job creation by enhancing the competitiveness of innovative SMEs while contributing to delivering a positive societal and environmental impact in Europe and beyond.

The objectives of the partnership are to enable innovation and the internationalisation of SMEs, and to connect Member States R&D&I national programmes.

The partnership aims to do this by implementing the Eurostars-3 programme and accompanying measures to SMEs, like the Eureka-Innowwide programme and a higher connectivity to other services offered in the European innovation landscape.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Innovation Ecosystems

Type of Partnership: Co-funded

Coordinating entity: Eureka Association

Total estimated budget: EUR 988 m

EUR 250 m (including EUR 25 m for the accompanying

measure Innowwide)

Partners' commitment: EUR 738 m

Predecessor under Horizon 2020: Eurostars-2 (Horizon 2020) implemented under Article 185 of

TFEU

FIND OUT MORE

www.eurekanetwork.org

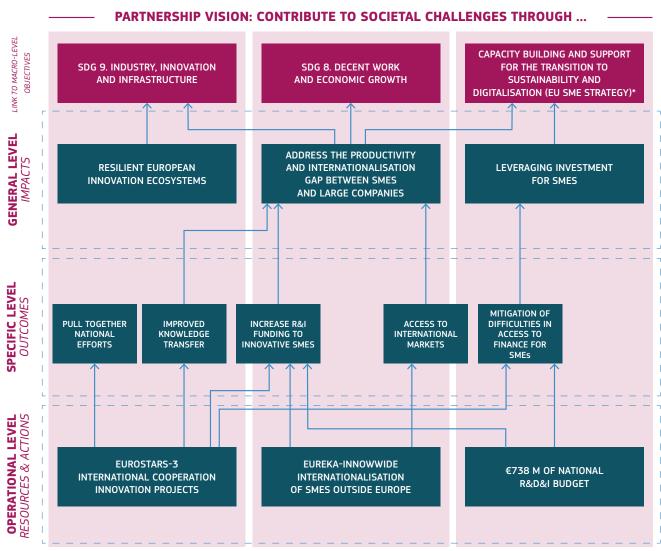
in https://www.linkedin.com/company/eureka-association/about/

https://twitter.com/EUREKA_NETWORK

https://www.youtube.com/c/EUREKA-NETWORK-1985

<u>eureka.secretariat@eurekanetwork.org</u>

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)



^{*} https://ec.europa.eu/growth/smes/sme-strategy_en



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
RESC	DURCES (INPUT), P	ROCESSES A	ND ACTIVI	ΓIES		
Number of Eursotars-3 calls	Number per year	1	2	2	2	N/A
Eureka-Innowwide calls	Number per year	0	1	1	1	N/A
	OUT	COMES				
Sustained cooperation over time	% of project partners	15%	N/A	20%	25 %	33%
Newcomers SMEs to international cooperation	% of E3 funded SMEs	N/A	10%	TBD	20%	N/A
Sales share of new products by innovative SMEs	%	= control group	TBD	TBD	TBD	TBD
Export share of innovative SMEs	%	= control group	TBD	TBD	TBD	TBD
Time to market	Months	24	N/A	N/A	18	TBD
Post-project private investment (after E3)	% of innovative SMEs	= control group	TBD	TBD	TBD	TBD
Post-project public investment (after E3)	% of innovative SMEs	= control group	TBD	TBD	TBD	TBD
Widening participation	% of E3 funded projects	After first E3 call	TBD	TBD	TBD	TBD
Widening budget allocation	% of public E3 fund	After first E3 call	TBD	TBD	TBD	TBD
Use of national budget (cumulative)	€	N/A	€250 m	€500 m	€738 m	€738 m
	IM	PACTS				
Resilient European Innovation Ecosystem	Number of related KPIs fulfilled (1, 2, 8, 9)	None	N/A	N/A	4	4
Address productivity and internationalisation gap between large companies and SMEs	Number of related KPIs fulfilled (3, 4, 5)	None	N/A	N/A	3	3
Leverage investments for SMEs	Number of related KPIs fulfilled (6, 7, 10)	None	N/A	N/A	3	3

The KPIs are still being developed and thus should not be taken as final.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

The European Partnership on Innovative SMEs consists of innovation agencies and ministries from 37 countries. Following Eureka's founding principle of international cooperation, participating countries in Europe and beyond in this partnership will dedicate more than EUR 900 million of trans-national R&D budget to fostering innovation and the internationalisation of SMEs in international cooperation programmes.

By creating this synergy between national R&D budgets, the partnership contributes to the target set by the European Commission and the Council for countries to commit 5% of national public R&D funding to joint programmes and European Partnerships by 2030 (Ref: <u>Council Recommendation on a Pact for Research and Innovation in Europe</u> (13701/21)).

In addition to the abovementioned policy objective, the allocation of national budgets in an international R&D&I programme will help to overcome many of the barriers towards internationalisation identified by numerous policy papers that SMEs face nowadays.

SYNERGIES: STORY 2

This partnership will aim at achieving the reactivation of some of the less active countries in its predecessor Eurostars-3 thanks to a new provision in Article 15(3) of Horizon Europe, by which Member States can use resources co-financed from cohesion policy funds such as ERDF and ESF+ as national contributions to co-funded partnerships. This new feature under Horizon Europe will strengthen the links of the partnership with smart specialisation strategies and will help to achieve a more balanced participation among its members.

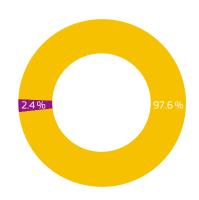
The benefits of this new provision are already visible with the re-introduction of Greece into the programme, and the higher tentative funds allocation of widening countries.

This partnership also aims to become a forum where representatives from participating countries can exchange knowledge and experience on how to channel cohesion policy funds towards this and other European Partnerships.

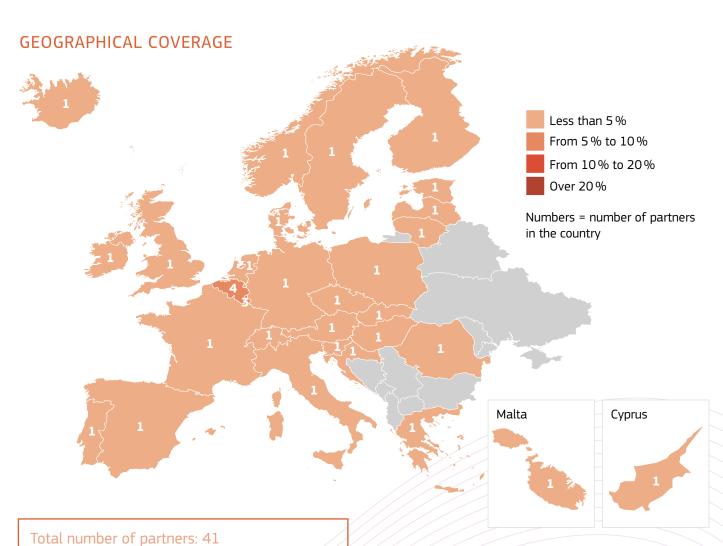


OVERVIEW OF MEMBERS

MEMBERS PER TYPE



PUBLIC Research funders, ministeries, regions, cities **OTHERS** Non-profit, associations, state companies etc.



87.8 % of the partners are represented in the map Other partners that do not fit to the map are from Canada, Israel, the Republic of Korea, Singapore, South Africa and Turkey.









EIT Health is a strong, diverse and balanced European Partnership of best-in-class organisations in education, research, technology, business creation and corporate and social innovation.

EIT Health's vision is 'To enable people in Europe to live longer, healthier lives by building and growing businesses to create products and services that progress healthcare in Europe, while strengthening our economy and the sustainability of our healthcare systems.'

EIT Health's mission is: 'By 2030, we'll be Europe's leading innovation platform, facilitating longer, healthier lives and more sustainable healthcare systems.'

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT Health e.V.

Total estimated budget: EUR 49.5 m (2021); EUR 59.27 m¹ (2022)

Predecessor under Horizon 2020: Started in 2015

1) KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

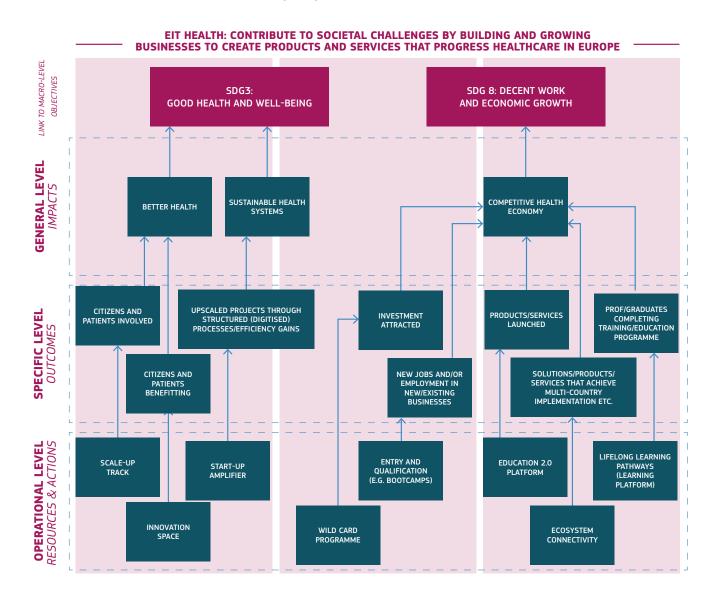
FIND OUT MORE

EIT Health e.V. Mies-van-der-Rohe-Str 1C 80807 Munich, Germany

https://eithealth.eu/

- f https://www.facebook.com/EITHealth/
- https://www.instagram.com/eithealth/
- in https://www.linkedin.com/company/eithealth/
- https://twitter.com/EITHealth
- https://www.youtube.com/channel/UC8W06RVPIATNIxFMVyi6Ujw
- https://vimeo.com/user58674995/videos
- <u>info@eithealth.eu</u>

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

КРІ NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (INPU	T), PROCESS	ES AND ACT	IVITIES		
# Project partners	Activity partners, which are involved only in implementation of KICs activities (including project partners and wild cards; not including linked third parties).	256	276	296	316	N/A
# Partners from EIT RIS countries	(same as KPI)	77	80	83	85	N/A
# Financial sustainability revenues	€	€11.9 m	€16.3 m	€22.6 m	€30.4 m	N/A
# HEIs involved in EIT and KIC activities	(same as KPI)	20	25	30	30	N/A
		OUTCOMES				
# Designed/tested innovations*	(same as KPI name)	18	19	19	16	N/A
# Supported start-ups/scale- ups	(same as KPI name)	103	154	126	109	N/A
# Investment attracted by KIC supported Start-ups/Scale-ups	€	€151 m	€199 m	€191 m	€186 m	N/A
# Participants in (non-degree) education and training	(same as KPI name)	2890	3640	4840	6340	N/A
		IMPACTS**				
# Citizens and patients involved	# Citizens and patients involved (ideation, co- creation); where (and if) possible, per disease areas (such as cancer) and range of application (prevention, diagnosis, treatment)	12800	N/A	25 600	38 400	N/A
# Upscaled projects*** that strengthen healthcare systems	# Upscaled projects*** that strengthen healthcare systems through (cost) efficiency gains and/or by improving the individual experience of care	6	N/A	12	21	N/A
# New jobs or employment created in new businesses	(same as KPI name)	760	N/A	1704	3023	N/A
# Products/services launched	Innovations launched on the market (based on KIC support) (economic)	54	N/A	74	91	N/A

^{*} Decrease due to shift towards projects focusing on efficiency gains.

Remarks:

- KPIs are taken from the EIT Health's Strategic Agenda 2021-2027, chapter 4.2 Results from the Annual KPI targets.
- Baseline is given as 2021 KPI target, defined in the Strategic Agenda 2021-2027 approved in April 2021
- Outcomes and impacts are linked to the KPIs for resources as outlined in Annex 1 KIC Impact of the Strategic Agenda 2021-2027.

^{**} Impact KPIs are measured with the baseline set in the year 2022. The figures in the columns for targets for 2025 and 2027 are the goals set for years 2024 and 2027 as 2024 is the closest available measurement year outlined by EIT Health's Strategic Agenda 2021-2027.

^{***} Upscaled projects are projects where proof exists that they were developed with EIT Health support, and are later used by organisations without further EIT Health support



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

Three key areas of collaboration are currently explored together with the European Innovation Council (EIC):

- 1.strengthening of network capabilities of start-ups through access to stakeholders and expertise;
- 2. mobilising start-up access to finance and deal flow;
- 3. establishing further opportunities and joint events.

The first line of collaboration is focused on the participation of EIC start-ups into EIT Health's programmes. EIT Health would fast-track EIC start-ups into the Bridgehead and Bootcamp programmes, with start-up grants and operational costs covered by EIC. Furthermore, all EIC ventures will have access to EIT Health's ecosystem and benefit from the synergies of the other lines of EIC-EIT Health collaboration. EIC-funded start-ups will benefit from tangible results from the careful programme selection based on their specific stage and needs. The second and third lines of collaboration are meant to strengthen ties and the sharing of expertise between EIC and EIT Health as in-kind services.

SYNERGIES: STORY 2

EIT Health and the European investment Fund (EIF) are partnering to operate the Venture Centre of Excellence (VCOE), a public-private co-investment programme to empower finance for small- and medium-sized enterprises (SMEs) in Europe's health sector.

The VCOE connects life science investors with high investment capacities – such as venture capital funding, corporate or industrial firms, technology transfer offices, insurers and more – with highly qualified pan-European SMEs using an exclusive artificial intelligence platform that brings all members together.

Companies in the programme receive support to fundraise and have key access to services provided by EIT Health in support of their Series A. B and up to pre-IPO fundraising rounds.

Please see: https://eithealth.eu/programmes/venture-centre-of-excellence/

SYNERGIES: STORY 3

There are also various examples of synergies between stakeholders from within the partnership. There is an overview on the EIT Health web side to cover this: <u>Case studies in health | EIT Health</u>

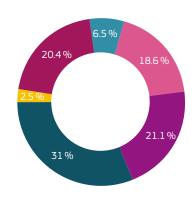
These synergies include:

- supporting the prevention of type 2 diabetes together with Health Integrator
- taking control of movement disorders with more targeted therapy together with DBS Select
- holistic health apps for chronic disease management together with Wefight.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE

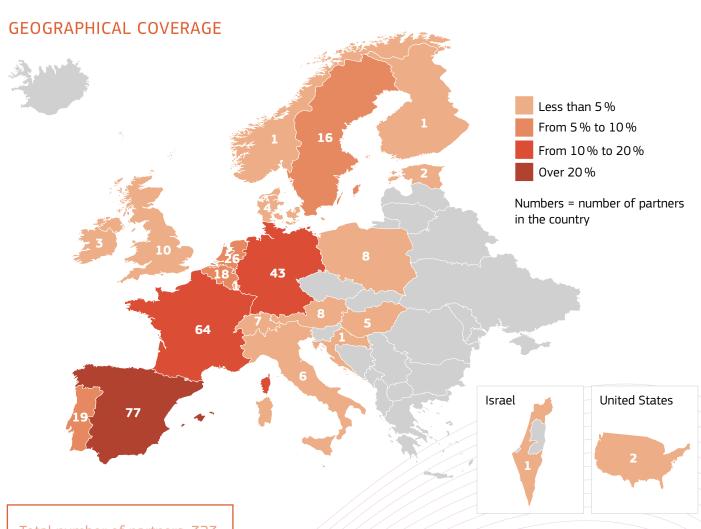


INDUSTRY
Other Industrial and/or profit Private organisation
University and other higher education organisations

Public research organisation
(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC
Research funders, ministeries, regions, cities

SMEs
OTHERS
Non-profit, associations, state companies etc.



Total number of partners: 323

















EIT Digital answers specific innovation needs by, finding the right partners to bring technology to the market, supporting

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Institutionalised - EIT KIC Type of Partnership:

Coordinating entity: EIT Digital IVZW

Total estimated budget: Budget: EUR 29.8 m (2021); EUR 24.74 m^{*} (2022)

Predecessor under Horizon 2020: Started in 2010

* IKIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

in https://www.linkedin.com/company/eit-digital

https://twitter.com/EIT Digital

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

PARTNERSHIP VISION: CONTRIBUTE TO SOCIETAL CHALLENGES THROUGH ... LINK TO MACRO-LEVEL **OBJECTIVES** SDG 9: INDUSTRY, **SDG 17: PARTNERSHIPS SDG 4**: **SDG 8: DECENT WORK** INNOVATION AND INFRASTRUCTURE QUALITY EDUCATION AND ECONOMIC GROWTH FOR THE GOALS **GENERAL LEVEL** EUROPEAN HIGHER EDUCATION SYSTEM BUILDING WORLD-CLASS INCREASED EU MEMBER **BRING EUROPEAN VALUE TO** DELIVERING **EUROPEAN INDUSTRY** STATES DIGITAL THE DIGITAL WORLD ENTREPRENEURIAL DIGITAL PLAYERS IN DIGITAL COMPETITIVENESS SKILLS SPECIFIC LEVEL OUTCOMES BRING DEEP TECH CREATING DIGITAL R&D RESULTS NEW JOBS CLOSING TO THE MARKET IN KNOWLEDGE GAPS **EU POLICY DOCUMENTS NEW MARKET OPPORTUNITIES OPERATIONAL LEVEL**RESOURCES & ACTIONS **CROSS-SECTOR** COLLABORATION KNOWLEDGE TRIANGLE INTEGRATION ENGAGEMENT WITH REGULATORS, MATCHMAKING **NEW COURSES** AND NETWORKING



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (IN	PUT), PROCE	SSES AND AC	TIVITIES		
Financial sustainability revenues	€		€13.23 m	€19.5 m	€24.6 m	€30 m
Active partners	Number of organisations		400	500	650	650
Mobilised funding	€		€64.5 m	€42 m	€42 m	€42 m
		OUTCOM	ES			
Supported start-ups/ scale-ups (EITHE03.1)	Number of supported start- ups/scale-ups by the KIC	100/year	110	120	120	120
Start-ups created of/for innovation (EITHE04.1)	Number of start-ups created by the KIC innovation activities	50/year	50	60	60	60
Investment attracted by KIC supported start- ups/scale-ups	Amount of investment attracted by KIC supported start-ups/scale-ups	€70 m/ year	€70 m	€70 m	€70 m	€70 m
(EITHE06.1)						
		IMPACT	S			
Strengthening the economic impact of EU digital firms through increasing the share of exports of their digital services to non-EU markets	% of services of firms involved with EIT Digital (start-ups, scale-ups, partners) exported to non-EU markets	New	20% (by 2024)		40%	40%
Supporting European regulation and digital standards that addresses key European values such as ethics of AI, data protection, trusted social media platforms	Deployment of an effective thought leadership and policy support capacity demonstrated by uptake and adoption (by governments, EC and other governmental organisations) of EIT Digital initiatives, policy recommendations and publications (e.g., makers and shapers journey, policy reports on the digital industry, cybersecurity and AI)	New	6 EIT Digital thought leadership publications quoted in key EU policy documents		10 EIT Digital thought leadership publications quoted in key EU policy documents	10 EIT Digital thought leadership publications quoted in key EU policy documents
Increased digital talent development in Europe by transforming the European ICT Masters and Doctoral programmes with a stronger focus on societal needs and on entrepreneurship (societal)	Adoption of the EIT Digital Master School model, Industrial Doctoral School model and EIT quality label for European Technical universities		10% of European technical universities		15 % European technical universities	
Increased competitiveness of EU Member States with a special focus on countries with a DESI (Digital Economy and Society) < 50 (societal)	Level of participation of Member States with DESI lower than 50 in EIT digital activities (e.g., through RIS programme)		+100 % participation		+130 % participation	



EIT Digital's strategic objectives are aimed at strengthening EU impact in digital. We aim at fostering a stronger European digital ecosystem to leverage the diversity and complementarities of different players to build world class digital companies. The EU has been driving the development of the Single Market to boost business opportunities and including and empowering citizens, yet the Single Market is still characterised by high fragmentation. We aim at increasing Member States competitiveness by taking dedicated actions in RIS countries, which present lower level of innovation, while continuing to foster innovation across the EU. EU countries are known for strong publicly funded R&D, while private companies have a more conservative approach. We aim at changing this trend to speed up the adoption and commercialisation of R&D results in strategic areas. This is expected to increase societal and economic impact of EU R&D investments and stimulate industry investment. Fundamental to the ambition of a stronger digital Europe is a European education system able to adapt to the digital reality, which can equip people with the right digital skills and to deploy digital technology to support education. All our efforts are committed to overcoming female gender underrepresentation in digital with continuous and focused approaches.

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

MANUFACTURING INDUSTRY DIGITAL INNOVATION HUBS

The Manufacturing Industry Digital Innovation Hubs (MIDIH) project lead by EIT Digital is an inclusive Innovation Action of 21 beneficiaries coming from 12 EU countries, including, Competence Centers, Digital Innovation Hubs, CPS/IOT Technology Providers as well as Lighthouse Manufacturing Industries.

The MIDIH project supports the ICT Innovation for Manufacturing SMEs by developing a "one-stop shop" of services with access to advanced digital solutions and financial opportunities. MIDIH project aims also to establish a mentoring and coaching sustainable programme to help manufacturing SME migrate their 6Ps assets (Products, Processes, Platforms, People, Partners, Performance) towards the new technologies brought by the Internet of the Future, CPS and IOT.

CYBERSECURITY COMPETENCE FOR RESEARCH AND INNOVATION: CONCORDIA

CONCORDIA, an EU-funded multi-disciplinary R&I project, gathers above 50 EU partners, including EIT Digital. The project aims to interconnect all of Europe's cybersecurity capabilities into a network of expertise to help build a secure, trusted, resilient and competitive ecosystem. Moreover, it will develop the EU Cybersecurity Research and Innovation Roadmap.

EIT Digital is focusing on the private-public partnership, bringing together stakeholders from a wide range of domains and exploring the needs of the digital market. Also, EIT Digital is involved in training activities and will bring forward the EIT Digital Academy for organising digital professional schools on cybersecurity.

A EUROPEAN AI ON-DEMAND PLATFORM AND ECOSYSTEM: AI4EU

The European AI on Demand Platform brings together the AI community while promoting European values. Furthermore, the platform facilitates knowledge transfer from research to business application. For this, it mobilised the whole European AI ecosystem and united 80 partners coordinated by Thales Six GTS France SAS, including EIT Digital, top universities, and innovation centres in 21 countries.

The AI4EU Platform established a world reference, built upon and interoperable with existing AI and data components and platforms. The project implemented eight pilots led by industrial partners to demonstrate the platform's capabilities. Each pilot focused on a different area by highlighting the platform's versatility: AI4Citizen, AI4Robotics, AI 4Industry, AI4Healthcare, AI4Media, AI4Agriculture, AI4IoT, and AI4Cybersecurity.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES (CONTINUED)

ENTREMO

The startup Entremo, co-founded by EIT Digital Master School students, is deploying their product, a wristband to remotely monitor the vital signs of patients, in hospitals and nursing homes in Hungary. The watch can measure vital signs of COVID-19 patients.

It all started with a group of friends passionate about using technology to improve people's health and wellbeing, all of them involved in different EIT Digital Master School programmes. They had earlier won the European Commission #EuvsVirus hackathon's healthcare category with a prototype of their 3D-printed remote monitoring device. This led to an invitation to submit a call for proposals to the EIT Digital Innovation Factory DATA against COVID-19 initiative. For this they found four international partners: ELTE-Soft, MOHAnet and E.tv.s Lorand University from Hungary and InnoTractor from the Netherlands. EIT Digital supports collaboration with students – universities – SMEs and public bodies for bringing next level innovation to the market.

SARA

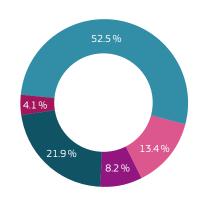
The Social & Autonomous Robotic Health Assistant (SARA) startup from the Netherlands offers a turnkey hardware and software solution for care institutions and hospitals to improve care recipients' quality of life and provide support to alleviate caregiver-staffing shortages. SARA functions as a social entity in nursing homes and hospitals The robotic assistants are designed to be largely autonomous, since nurses can access the SARA system from a computer or a tablet to create a personalised profile and health plan for every client (supporting music therapy and reminding staff or clients when it is time to take medication).

The startup named SARA was created as a result of a collaboration between university students – SMEs and important business players under EIT Digital Innovation Factory umbrella and has strong customer traction in the Netherlands



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisationUNIVERSITY University and other higher education organisations

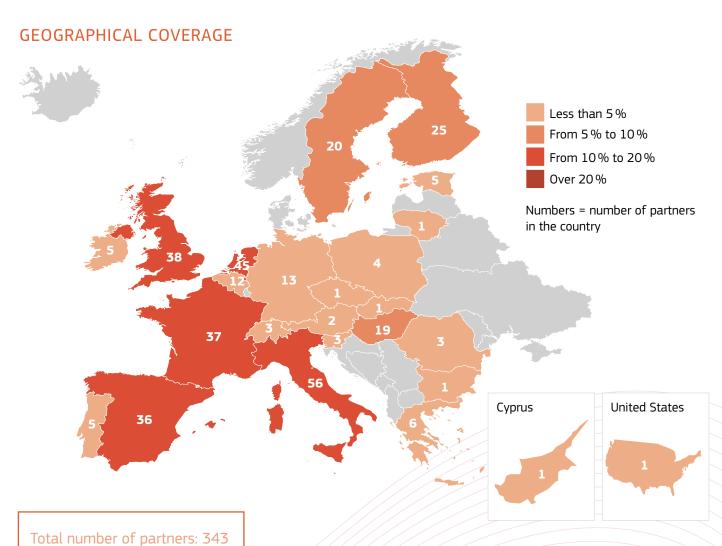
RESEARCH Public research organisation

(including international research organisation as well as private

research organisation controlled by a public authority)

SMEs

OTHERS Non-profit, associations, state companies etc.

















EIT Manufacturing leverages the strengths and abilities of European industry to design and manufacture the goods and services that create our wealth and underpin our ambition to reach Europe's sustainability goals. Recent geopolitical impacts and crises, such as the COVID-19 pandemic, strengthen the need for Europe to sustain a strong and resilient manufacturing industry. In alignment with the EU's recovery plan NextGenerationEU, the KIC is committed to support the manufacturing industry to recover quickly and learn from the crisis. European manufacturing needs the strong innovation, business creation, and education capability created by EIT Manufacturing to fulfil our bold vision: global manufacturing innovation is led by Europe! We will achieve our vision through collaboration. EIT Manufacturing's mission is to: Bring together manufacturing actors across Europe to integrate innovation and education for an entrepreneurial and sustainable Europe.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT Manufacturing Association

Total estimated budget: EUR 33.6 m (2021); EUR 40.06 m* (2022)

Predecessor under Horizon 2020: Started in 2020

* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

www.eitmanufacturing.eu

- f https://www.facebook.com/EITManufacturing/
- in https://www.linkedin.com/company/eit-manufacturing/
- https://www.youtube.com/user/EITeu

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

EIT MANUFACTURING VISION: GLOBAL MANUFACTURING INNOVATION IS LED BY EUROPE LINK TO MACRO-LEVEL OBJECTIVES SO1 - COMPETITIVE SO3 - GLOBALLY COMPETITIVE AND RESILIENT MANUFACTURING SO2 - POWERFUL SO4 - ENVIRONMENTALLY **SO5 - MANUFACTURING FIT** MANUFACTURING SKILLS AND SOCIAL SUSTAINABILITY SUSTAINABLE MANUFACTURING MANUFACTURING INNOVATION FOR THE DIGITAL AGE ECOSYSTEMS (UN SDG #17) (UN SDG #8) (UN SDG #12) (UN SDG #9) (UN SDG #4) **GENERAL LEVEL** HIGHLY COMPETITIVE HIGHEST WORLDWIDE INCREASED PERFORMANCE, COMPATIBILITY WELL-FUNCTIONING NETWORKS MANUFACTURING INDUSTRY SHARE OF PRODUCTION UNLEASHED MANUFACTURING IMPACTS FOR DISRUPTIVE INNOVATION **BEING A CORE ENGINE** FACILITIES WITH A NET INNOVATION POTENTIAL BASED & STANDARDISATION OF SOCIETAL GROWTH ACROSS SUPPLY-CHAINS, ZERO-CARBON FOOTPRINT, ON HIGHLY QUALIFIED PEOPLE OF EUROPEAN MANUFACTURING, FAVOURABLE CONDITIONS AND CAPABLE TO RAPIDLY EUROPEAN MANUFACTURING IN SOCIALLY SUSTAINABLE JOBS **INCREASED AGILITY** RESPOND TO BUSINESS OPPORTUNITIES & CRISES FOR MFG START-UPS IS A KEY ENABLER/DRIVER OF SUPPLY CHAINS OF CIRCULAR ECONOMY SPECIFIC LEVEL OUTCOMES FLOWS OF IDEAS & NEW SKILLED-UP/RE-SKILLED MARKETED INNOVATIONS, VALUABLE PARTNERSHIPS, FACILITATED BUSINESS WIDELY DEPLOYED AND ADOPTED ADVANCED DIGITAL WORKFORCE, EMPOWERED COMPANY-IMPLEMENTED REDUCED GREEN-HOUSE GAS WOMEN IN MANUFACTURING STRATEGIES & TECHS **EMISSIONS AND MATERIAL** TRANSACTIONS TECHNOLOGIES AND DIGITAL FOR AGILITY, FLEXIBILITY, RESILIENCE BUSINESSES, ATTRACTIVE CONSUMPTION BY MANUFACTURING START-UPS AND SMES BUSINESS PLATFORMS WORKPLACES **OPERATIONAL LEVEL**RESOURCES & ACTIONS KTI INTEGRATION, OPEN EDUCATION PARADIGMS, INNOVATION PLATFORM, INNOVATION BUSINESS CREATION **PLATFORM & PROGRAMMES NETWORKING. RIS** PROGRAMMES **PROGRAMMES** PROGRAMMES

^{*} KTI: Knowledge Triangle Integration

^{**} RIS: Regional Innovation Scheme



PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
RESC	DURCES (INPUT), P	ROCESSES A	ND ACTIVI	ΓIES		
Active KIC Partners (organizations actively involved in KIC activities) (cross-SO)	# of partners	50 (2020)	280	310	320	-
Co-location centres (CLCs) (cross-SO)	# of CLCs	5 (2020)	6	7	8	-
Regional innovation scheme (RIS) hubs (cross-SO)	# of RIS hubs	13 (2021)	16	16	16	
Total budget (cross-SO)	€	N/A	€90.68 m	€109.57 m	€112.04 m	-
	OU.	ГСОМЕЅ				
Educational badges issued to document and testify the achievement of a learning outcome (SO1)	# of badges	N/A	2182	4985	9368	-
Start-ups created / led by women (S01)	# of start-ups	N/A	2	4	5	-
Supported start-ups/scale-ups (SO2)	# of supported start- ups/scale-ups	N/A	171	229	277	-
Marketed innovations (products/ services) (SO3)	# of innovations	N/A	22	25	27	-
Activities (including new ventures) that lead to a reduction of material consumption of at least 20% (related to the process/product targeted) three years after the end of the activity (SO4)	# of activities (including new ventures)	N/A	4	5	6	-
KIC partners who have deployed and adopted advanced digital tools or digital business platforms to increase performance (SOS)	# of KIC partners	N/A	10	20	20	-
	IM	PACTS				
Highly qualified employees working in the manufacturing sector (SO1)	% of highly qualified employees over all employees in the manufacturing sector	(24% in 2017)	N/A	N/A	>30 %	-
Manufacturing value added (SO2, SO3)	% over GDP	(14% in 2018)	N/A	N/A	>16 %	-
Circular material use rate in manufacturing sector exceeds 15 % (SO4)	use rate	(11% in 2014)	N/A	N/A	> 15 %	-
Reduction of GHG emissions in non-ETS industry (SO4)	% of reduction	2005	N/A	N/A	> 25 %	-
Participating companies increasing their digital maturity through the KIC (SO5)	# of companies	N/A	N/A	N/A	> 500	-
61						

Short-, mid- and long-term (impact) KPIs are defined to monitor the progress towards achieving the five EIT Manufacturing Strategic Objectives (SOs), according to the impact pathways identified in EIT Manufacturing Strategic Agenda 2021-2027:

- SO1 Competitive manufacturing skills and social sustainability: a highly skilled workforce in attractive jobs;
- SO2 Powerful manufacturing innovation ecosystems: ecosystems for innovation, entrepreneurship, business transformation;
- S03 Globally competitive and resilient manufacturing: disruptive and incremental innovation increase the competitiveness of European manufacturing;
- SO4 Environmentally sustainable manufacturing: radically reducing climate impact and creating closed-looped manufacturing;
- SO5 Manufacturing fit for the digital age: maximise the development, use, and exploitation of digital technologies in manufacturing.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

EIT Manufacturing brings together manufacturing actors in innovation ecosystems – industry, solution providers, SMEs and start-ups, universities and RTOs – aiming to add unique value to European products, processes, services and to ensure that global manufacturing innovation is led by Europe. In order to achieve this, it strongly supports synergies between different types of stakeholders across Europe. In addition, EIT Manufacturing is strongly interested in and pursues collaborations with initiatives at the European and national/regional levels to establish collaborations and synergies of mutual benefit. The cross-sectoral character of manufacturing covering a wide range of industrial sectors and the combined capacities of its community allows fertilisation across several, modern technologies. Therefore, a wide area of synergies is explored such as with other KICs and European Partnerships, with regional and national authorities, with initiatives like the European Digital Innovation Hubs, the New European Bauhaus, the GAIA-X initiative, and with international associations and fora, like the World Manufacturing Forum. Indicative examples of synergies are presented hereafter.

SYNERGY WITH EFFRA AND THE MADE IN EUROPE EUROPEAN PARTNERSHIP

EIT Manufacturing has been working together with the European Factories of the Future Research Association (EFFRA) looking forward to collaboration with strong benefits for the future of European manufacturing. EFFRA is the private counterpart of the European Commission in the Made in Europe European Partnership under Horizon Europe. This collaboration signals an important milestone, further to which stakeholders of two initiatives from two different pillars, Made in Europe (Pillar 2) and EIT Manufacturing (Pillar 3), will work together towards a common goal, strengthening European manufacturing and multiplying the impact of R&I activities. In the coming years collaboration is expected to also extend to education and business creation aspects. The relevant cooperation agreement was signed in Brussels, on 27 October 2021, receiving the support of DG EAC, DG CONNECT and DG RTD.

Within the context of this collaboration, EIT Manufacturing created and launched the Innovate Together initiative in 2021 which is an open call for proposals for innovation activities aiming to support tested and demonstrated exploitable results (supported by Made in Europe) and accelerate their market deployment. This synergy between Made in Europe and EIT Manufacturing can create a huge potential for accelerating the market exploitation of research and innovation activities and maximising their economic and societal impact.

ENVIRONMENTAL TECHNOLOGY VERIFICATION (ETV) PROGRAMME

EIT Manufacturing has been working with DG ENV within the context of promoting the circular economy in manufacturing by relevant EIT Manufacturing activities, while also by specially focusing on and promoting the Environmental Technology Verification (ETV) programme. Accordingly, EIT Manufacturing, through its Co-Location Center West, participates in the team that has the role of the ETV secretariat for the coming years.

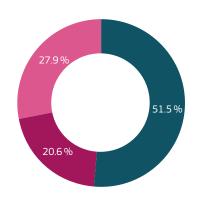
REGIONAL/NATIONAL AUTHORITIES

EIT Manufacturing has signed a large number of agreements (MoUs, MoCs, LoIs) with relevant regional and national stakeholders, especially in EIT RIS eligible countries. These agreements mark the start of our cooperation towards specific collaborations in the future at the regional and national levels. EIT Manufacturing has also acceded to the MoUs signed by EIT with EU Member States and is aiming to strongly contribute in the context of these MoUs. By fostering collaboration with national and regional authorities EIT Manufacturing will be able to connect SMEs and start-ups in RIS countries with instruments and funding that can be used by them for innovation, education and business creation.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE

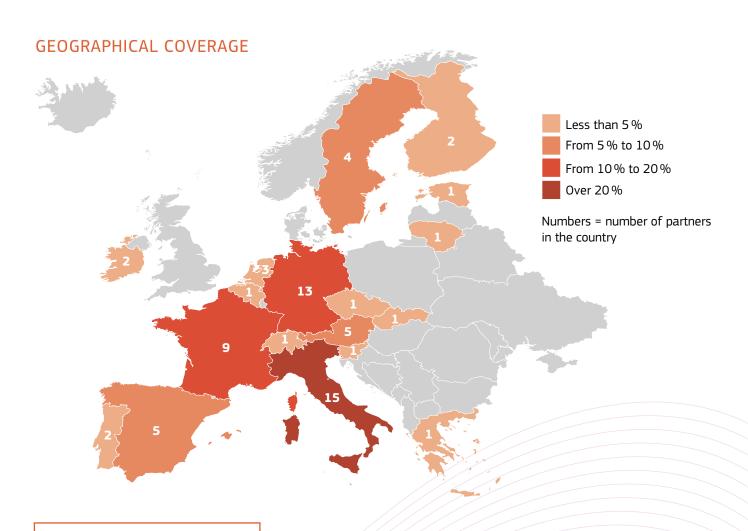


INDUSTRY Other Industrial and/or profit Private organisation

UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private research organisation controlled by a public authority)



Total number of partners: 68













EIT InnoEnergy vision is 'to be the leading engine for innovation and entrepreneurship in sustainable energy'.

EIT InnoEnergy defines its mission as 'to build and manage a sustainable, long-lasting operational framework amongst the three actors of the knowledge triangle in the energy sector: industry, research, and higher education, while ensuring that the integration of the three is more efficient and has a higher impact on innovation (talent, technology, companies; than the three standing alone'.

EIT InnoEnergy, with the other KICs, have demonstrated that innovation is vastly different compared to research (and compared to commercial activities); and requires different parties involved (research institutes, universities, industry, public administration, financial institutions, regulators), different dynamics (not only project based interactions, but ambitions in a given sector), different management (from project or deal bilateral management to management of dynamics based on societal challenge goals) and different values (trust is key in InnoEnergy ecosystem).

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT InnoEnergy SE

Total estimated budget: EUR 43 m (2021); EUR 36.58 m⁻ (2022)

Predecessor under Horizon 2020: Started in 2010

* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

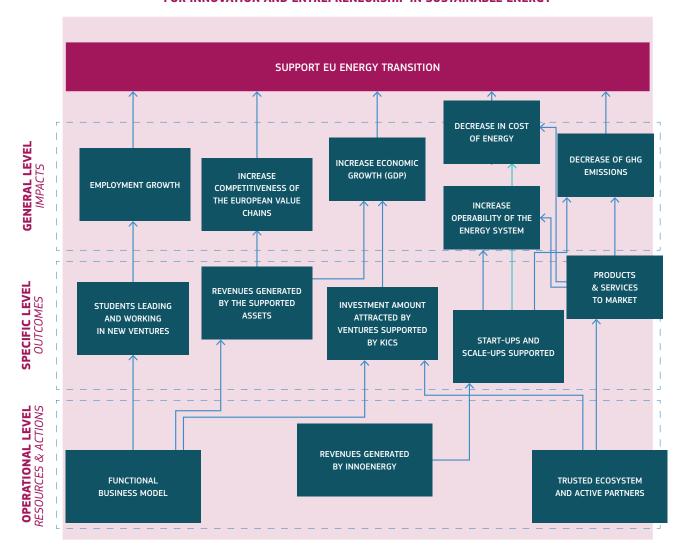
FIND OUT MORE

www.innoenergy.com

☑ info@innoenergy.com

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

PARTNERSHIP VISION: LEADING ENGINE FOR INNOVATION AND ENTREPRENEURSHIP IN SUSTAINABLE ENERGY





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOURCES (INPU	T), PROCESS	ES AND ACT	IVITIES		
Revenue generated by EIT InnoEnergy – audited	€		€61.2 m	€120.2 m	€182.2 m	€220 m
Equity positions from the balance sheet – audited	€		€500 m	€1000 m	€1600 m	€2000 m
Active Partners	Number of organisations		500	800	1000	1000
		OUTCOMES				
Products and services to the market	Number of products		60	60	60	60
Start-ups and scale-ups supported	Number of start -up/ scale ups supported		90	90	90	90
Investment amount attracted by ventures supported by KICs	€		€800 m	€1000 m	€1000 m	€1000 m
Revenues generated by the supported assets	€		€500 m	€1200 m	€1500 m	€2000 m
Students leading and working in new ventures	Number of students		40	40	40	40
		IMPACTS				
New jobs created & maintained (multiplied with 4 for indirect)	Number of jobs		10 000	20 000	25 000	30 000
Increase competitiveness of the European value chains	Number of value chains		2	3	4	5
Decrease of costs of energy	€ saved				€1800 m	€1800 m
Decrease of GHG emissions	Giga tonnes of CO ₂ abated				0.3	0.3
Increase operability of the energy system	TWh of renewable energy deployed				100	100

The baseline for the impact indicators for 2020 is available here: $https://issuu.com/innoenergy/docs/eit_innoenergy_impact_report_2020_digital_low?mode=window\&_hsmi=154129881\&_hsenc=p2ANqtz--LLS1l8raYfxR2UPP7Z1Al3ftuYUXuazIVQ9V2uU9vC2aPACOrMM60mw8BEhi1BPu2X mYiK0fAsVLWuEeCvi844JRHXA$

The impact is assessed every two years and published in an impact report.



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

EUROPEAN BATTERY ALLIANCE (EBA)

EIT InnoEnergy has been entrusted by the European Commission to drive forward and promote EBA250 activities. EIT InnoEnergy's role in the European Battery Alliance is to provide background data and to define key questions, recommendations, and actions. EIT InnoEnergy also supports the establishment of a European battery ecosystem by providing EBA250 workshops, a meeting place for key stakeholders along the entire value chain.

EBA goal is to build a strong pan-European battery industry to capture a new market worth EUR 250 billion a year in 2025.

EBA is an independent meeting place: more than 700 members throughout the value chain have joined EBA250. The members come from the industrial, academic, and financial worlds, from mining to recycling.

EBA is project driven: our actions' DNA are competitiveness, sustainability, significant impact, objective focus, urgency, concrete, project-driven, sharing and investment.

EUROPEAN GREEN HYDROGEN ACCELERATION CENTER

The European Green Hydrogen Acceleration Center (EGHAC) focuses purely on accelerating the uptake of green hydrogen in Europe – generated only with renewable sources such as wind or solar – as a key pillar for decarbonising our heavy industry, energy, and transport sectors.

EGHAC was set up by the EIT InnoEnergy and Breakthrough Energy with the ambition by 2025 to build a EUR 100 billion a year green hydrogen economy. This will create up to 500 000 direct and indirect jobs across the complete value chain. The ambition for yearly demand for useful green hydrogen-based energy will be 1200 TwH.

The EGHAC will initiate and support large scale industrial green hydrogen projects which will have massive ${\rm CO_2}$ reduction impact, kickstart the creation of a green hydrogen economy and create jobs. These projects are always considered from a value chain perspective and explicitly include the 'off-takers' (end customers).

Next to large-scale industrial projects EGHAC supports further developments of green hydrogen-related technology. Start-ups and innovation projects can get support via the regular EIT InnoEnergy processes and support programmes

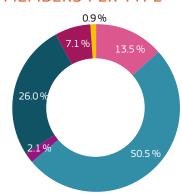
EUROPEAN SOLAR INITIATIVE (ESI)

The ESI aims to re-develop a strong photovoltaic (PV) manufacturing industry in Europe across the entire value chain from raw materials to recycling, which will capture the additional 20 GW of annual solar demand forecasted in Europe for the next decade. This will generate EUR 40 billion of GDP annually and create 400 000 new direct and indirect jobs across the PV value chain.

The ESI combines the thriving ecosystem of PV players created over the years by SolarPower Europe and the successful blueprint of the European Battery Alliance, led by EIT InnoEnergy, with its <u>Business Investment Platform</u> (BIP). Designed to bridge the gap between business cases, investors, off takers, delivery resources, BIP shortens time to investment, de-risks, accelerates and boosts the robustness of the investment cases in all required dimensions (technology, team, supply chain, environmental sustainability and off-takers).

OVERVIEW OF MEMBERS

MEMBERS PER TYPE



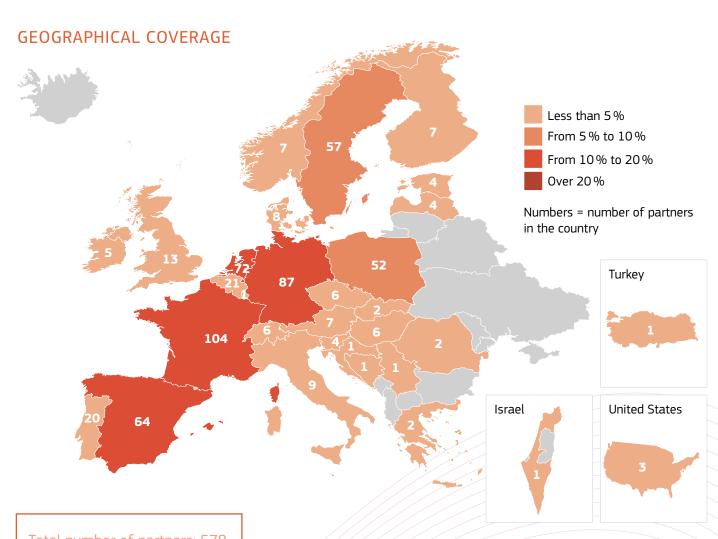
INDUSTRY
Other Industrial and/or profit Private organisation
UNIVERSITY
University and other higher education organisations
Public research organisation
(including international research organisation as well as private

research organisation controlled by a public authority)

SMEs

OTHERS Non-profit, associations, state companies etc.

PUBLIC Research funders, ministeries, regions, cities



Total number of partners: 578















EIT Climate-KIC's mission is to catalyse systemic change through innovation in areas of human activity – cities, land use, sustainable production systems, finance – that have a critical impact on greenhouse gas emissions and to create climate-resilient communities. EIT Climate-KIC aims to direct its efforts at systems innovation, working with ambitious actors to connect supply and demand while leveraging the power of its community to catalyse change. In this way, EIT Climate-KIC will work to unlock systemic change through strategic innovation – designing, executing and connecting entrepreneurial experiments and deep demonstrations selected and assessed as a portfolio of innovation effects on levers of systemic change.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III – European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT Climate-KIC

Total estimated budget: EUR 29.3 m (2021); EUR 21.18 m* (2022)

Predecessor under Horizon 2020: Started in 2010

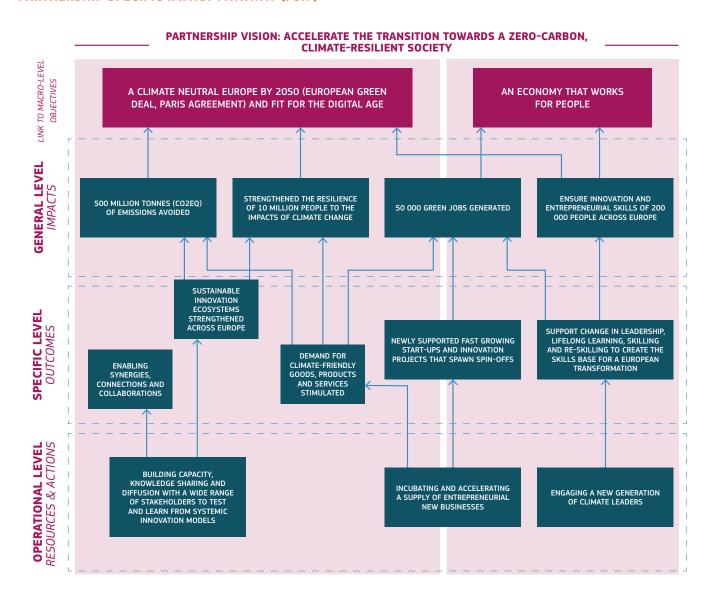
* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

https://www.climate-kic.org/



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
	RESOUR	CES (INPUT), PR	OCESSES AND	ACTIVITIES		
Financially sustainable revenues	€	€6.2 m	€11.6 m	€18.5 m	€27 m	TBD
Active KIC partners (in EIT grant)	Number of partners	180	160	150	150	N/A
HEIs involved in EIT and KICs activities	Number of HEIs	14	18	20	26	TBD
		OUTO	OMES			
Designed/tested Innovations	Number of innovations	N/A	12	12	12	TBD
Supported start-ups/ scale-ups	Number of start-ups	163	150	120	120	TBD
Participants in (non- degree) education and training	Number of participants	2959	1500	1500	1200	TBD
		IMP	ACTS			
Avoided or sequestered greenhouse gas emissions measured as MT CO ₂ equivalent (cf. baseline year).	million tonnes (CO ₂ eq) of emissions avoided	N/A	200**	N/A	500	TBD
Places/challenge owners with an agreement to work in partnership with EIT Climate-KIC to achieve rapid decarbonisation and resilience	Number of places and challenge owners	N/A	30*	N/A	50	N/A
People with enhanced innovation and entrepreneurial skills	Number of people	N/A	50 000***	N/A	200 000	N/A
Combined # new jobs created in start-ups/ scale-ups, and # jobs/ employment in existing businesses, partners sustained through innovations.	Number of jobs	N/A	20 000****	N/A	50 000	N/A
Euros leveraged to support the scale-up/ diffusion of innovations to tackle climate change.	€	N/A	€30 bn*****	€100 bn	TBD	N/A

^{*, **, ***, ****, *****} by 2024

Baseline year is 2021.

Annual Report 2020: https://eit.europa.eu/sites/default/files/gb decisions and eit caar 2020.pdf.pdf

Impact Report 2021: https://www.climate-kic.org/who-we-are/making-an-impact/

EIT Climate-KIC's Strategic Innovation Agenda (2021-2027): https://eit.europa.eu/who-we-are/eit-glance/eit-strategy-2021-2027):



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

SYNERGIES: STORY 1

EIT Climate-KIC has been supporting a cohort of 15 city governments across Europe through the <u>Deep</u> <u>Demonstrations Healthy Clean Cities Programme</u>. <u>Deep Demonstrations</u> are the large-scale projects through which we offer systems innovation as a service to Europe's most ambitious 'challenge owners' – i.e., the mayors, government ministries, industry leaders and funders who have the means and mandate to tackle Europe's biggest climate change challenges. Building on this programme, EIC Climate-KIC is now coordinating the NetZeroCities project aiming to lead European cities' transition to net-zero emissions by 2030. The project is part of Horizon 2020 and will directly support the targets of the European Green Deal and the EU's mission of 100 <u>Climate-Neutral and Smart Cities by 2030</u>.

SYNERGIES: STORY 2

Together with the Joint Research Centre (JRC), EIT Climate-KIC co-developed a practitioner-oriented handbook *Policy co-creation for mission-oriented policies*. *Participatory methodologies to structure multi-stakeholder policymaking processes* (2020). The handbook is based on the lessons learnt from facilitating policy processes as part of the Smart Specialisation Thematic Platform, the EU Policy Lab and the EIT Climate-KIC experience on practice-based knowledge on sustainability transitions and policy processes. The aim was to set the ground for handbook to serve as a tool to support implementation actions such as technical assistance and capacity building related to the new action lines on industrial transitions, sustainable smart specialisation strategies (S4) and the UN's Sustainable Development Goals in the context of the new EU policy framework. This type of exchange of good practices is already taking place in the cross-KIC initiative in the Western Balkans, where Climate-KIC is responsible for the overall coordination and leading of place-based actions and cross-regional collaboration on systems mapping and policy co-design processes.

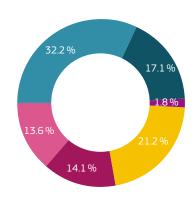
SYNERGIES: STORY 3

EIT Climate-KIC has a range of entrepreneurship activities that aim to identify, support and invest in entrepreneurs through every stage of innovation, helping them move from initial concepts to scalable companies, all of which have been very successful across Europe and are now gaining global traction. EIT Climate-KIC is now operating in more African countries than ever before (15 countries). In our Climate-Launchpad programme more African ideas were submitted and African entrepreneurs were supported more than before – 909 ideas (45% of total ideas across programmes globally) with 593 invited to join our online mini-course and over 150 participating in the full programme. Through conversations with funders, we were able to secure additional funding to build upon our existing entrepreneurship programmes. This led, for instance, to the CDC Group funding the Adaptation and Resilience Challenge in 2021, which involved taking an adaptation lens to our existing programme and offering an adaptation and resilience specific accelerator programme to 15 start-ups. Irish Aid also increased their funding to build gender mainstreaming tools to be integrated into our programmes.



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY
Other Industrial and/or profit Private organisation
University
RESEARCH
Public research organisation
(including international research organisation as well as private research organisation controlled by a public authority)

PUBLIC
Research funders, ministeries, regions, cities

SMEs
OTHERS Non-profit, associations, state companies etc.

GEOGRAPHICAL COVERAGE Less than 5 % From 5 % to 10 % From 10 % to 20 % Over 20 % Numbers = number of partners in the country Malta Cyprus

Total number of partners: 397

98.2 % of the partners are represented in the map Other partners that do not fit to the map are from China, Colombia, Indonesia, Mexico, Thailand and United States.















At EIT Urban Mobility we accelerate the change towards a sustainable model for urban mobility for liveable urban spaces

We strive for a form of mobility that allows people and goods to move affordably, fast, comfortably, safely and cleanly but at the same time enables cities to reclaim public spaces from cars, creating more space for people to work, meet up and play.

We foster integration by bringing together the key players across the whole value chain of mobility and integrating the knowledge triangle. We engage people, connect communities, accelerate market opportunities, and educate students and professionals. To solve the most pressing mobility challenges, we put cities at the centre of all of our activities.

All the activities of EIT Urban Mobility serve three societal impact goals:

- improving quality of life in cities;
- mitigating and adapting to climate change
- creating jobs and strengthening the European urban mobility sector.

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT Urban Mobility management team

Total estimated budget: EUR 31.3 m (2021); EUR 42.44 m* (2022)

Predecessor under Horizon 2020: Started in 2019

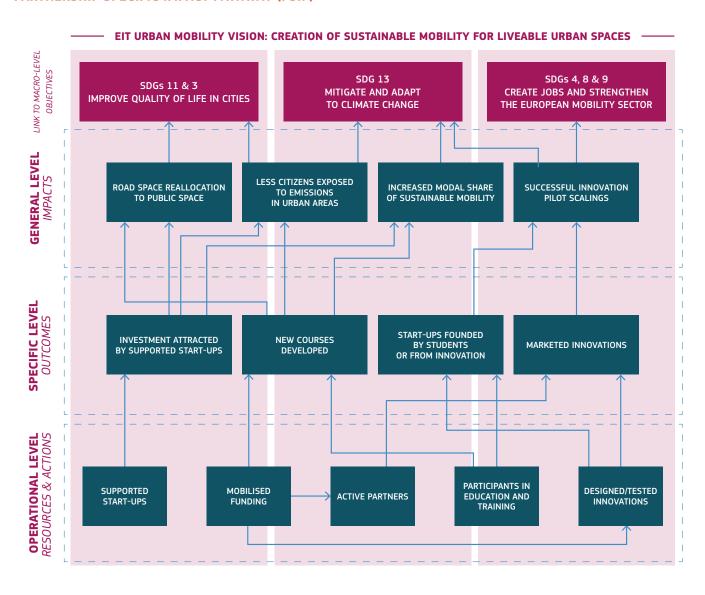
* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

www.eiturbanmobility.eu

- f https://www.facebook.com/EIT-Urban-Mobility-1951333174955858/
- https://www.instagram.com/eiturbanmob/
- in www.linkedin.com/company/eit-urban-mobility/mycompany/
- https://www.youtube.com/channel/UCnsVPKuZBK_UiZoOMOYNxXQ
- ☑ office@eiturbanmobility.eu

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
R	ESOURCES (INPUT	, PROCESSES	AND ACTIV	/ITIES		
EIT UM supported start-ups	#	80	100 per year	100 per year	100 per year	TBD
Active partners	#	180	220	230	250	TBD
Mobilised funding	€	NEW	TBD	TBD	€75 m	TBD
Participants in education and training	#	2500	4000	7500	10000	TBD
Designed/tested innovations	#	17	30 per year	35 per year	35 per year	TBD
		DUTCOMES				
Investment attracted by EIT UM supported start-ups	€	€3 m	€8 m	€10 m	€12 m	TBD
Start-ups founded by students or from innovation	#	N/A	TBD	TBD	TBD	TBD
New courses developed	#	NEW	N/A	N/A	150	TBD
Marketed innovations	#	15	20 per year	27 per year	33 per year	TBD
		IMPACTS				
Road space reallocation to public space	% change in EIT UM City Club cities	NEW	N/A	N/A	Decrease in 80% of the City Club cities compared to levels of 2020	TBD
City Club city inhabitants exposed to emissions in urban areas	% change in EIT UM City Club cities	NEW	N/A	N/A	Decrease in 80% of the City Club cities compared to levels of 2020	TBD
Modal share of sustainable mobility	% change in EIT UM City Club cities	NEW	N/A	N/A	Increase in 100 % of the City Club cities compared to levels of 2020	TBD
Innovation pilots scalings	#	NEW	10 per year	10 per year	10 per year	TBD

EIT Urban Mobility monitors its outputs through three different set of KPIs. These relate to:

- annual EIT core KPIs: same set of KPIs for all KICs in line with EIT KIC model;
- EIT Urban Mobility specific KPIs: KPIs relating to programmes of EIT UM;
- EIT Urban Mobility city impact indicators.

City impact indicators are not measured on an annual basis. They will be monitored by observing the values of each respective indicator for City Club members in 2024 (against 2020 values) and 2027 (against 2024 values) and assess if an increase or decrease in the values can be observed in a growing number of cities.

For several new EIT Urban Mobility specific KPIs and EIT Urban Mobility city impact indicators, baselines were not established yet.

EIT Urban Mobility's Strategic Agenda 2021-2017 provides further insights into the KIC's strategy for 2021-2027, the intervention logic, the full set of KPIs and the pathway towards achieving our societal and urban mobility impact goals: https://www.eiturbanmobility.eu/wp-content/uploads/2021/04/210329_SA_EIT-UM-branded_Final-published.pdf



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

FURNISH (FAST URBAN RESPONSES FOR NEW INCLUSIVE SPACES AND HABITAT)

FURNISH was born to fight the spread of COVID-19 in cities, while reinforcing the use of public space. FURNISH organised an open call to select 4 teams throughout Europe which digitally fabricated and deployed urban elements to temporarily adapt public spaces to meet the new challenges and opportunities presented by COVID-19. FURNISH aims to merge the challenge of gaining more public space through 'tactical urbanism', which can reconfigure a street to expand the area for pedestrians and leisure, with local digital manufacturing. The call was open to Fab Labs, research groups, designers and makers able to produce rapid solutions to the urgent spatial problems and opportunities posed by the coronavirus. The project is planned to design and test new mobile urban elements to be temporarily installed in public spaces to promote social cohesion while bringing safety and a healthy environment for citizens. The seven Mobile Urban Elements (MUE) prototypes were placed in seven different sites in five European cities.

Further details: https://www.eiturbanmobility.eu/furnish-the-project-that-is-reconfiguring-public-spaces-across-europe/

ESTABLISHMENT OF A REGIONAL INNOVATION SCHEME HUB NETWORK

EIT Urban Mobility establishes, launches, maintains and grows a network of organisations (hubs) acting in regions considered moderate or modest innovators in several waves, and selects the regions to start with based on their urbanisation and touristic parameters, city structure and population. Once the hubs are established, they act as facilitators between local ecosystem actors and the EIT Urban Mobility network integrating the knowledge triangle through specialised activities, thereby contributing to the incremental growth of regional innovation capacity.

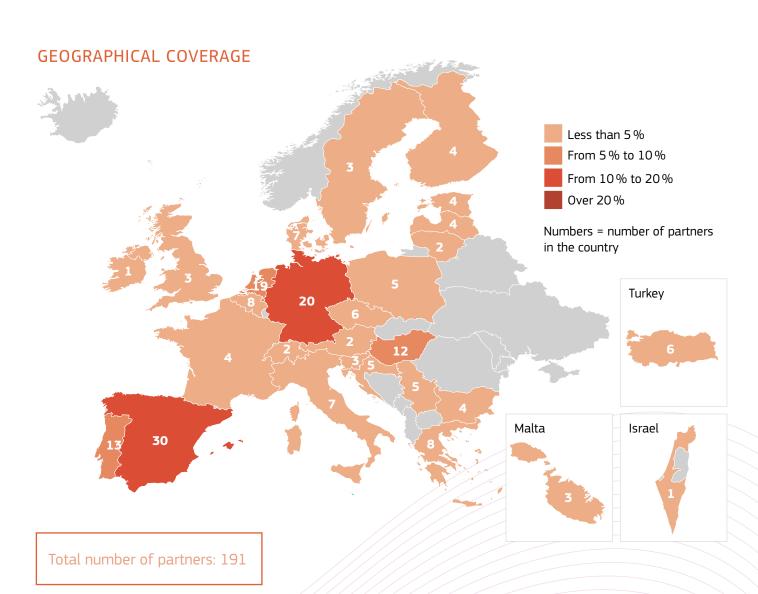
Further details: https://www.eiturbanmobility.eu/ris/ and https://www.eiturbanmobility.eu/ris/ and https://www.eiturbanmobility.eu/ris/ and https://www.eiturbanmobility.eu/ris/ and https://www.eiturbanmobility.eu/we-are-growing-five-new-research-innovation-scheme-hubs-launched/



OVERVIEW OF MEMBERS

MEMBERS PER TYPE

















EIT Food's vision is a world where everybody can access and enjoy sustainable, safe and healthy food – with trust and fairness from farm to fork

EIT Food's mission is to transform how food is produced, distributed, and consumed and to increase its value to European society. We will achieve this by solving the biggest innovation challenges through trusted industry, educatior and research partners working together with informed and engaged citizens.

EIT Food priorities are outlined in its SRIA 2021-2027

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT Food IVZW

Total estimated budget: EUR 55.4 m (2021); EUR 50.52 m* (2022)

Predecessor under Horizon 2020: Started in 2016

* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

www.eitfood.eu

in https://www.linkedin.com/company/eit-food?originalSubdomain=be



PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)

Not available

PARTNERSHIP'S KEY PERFORMANCE INDICATORS

Not available

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027		
RESOURCES (INPUT), PROCESSES AND ACTIVITIES								
	OUT	COMES						
IMPACTS								

SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

Not available

OVERVIEW OF MEMBERS

Not available















EIT RawMaterials is an innovation community within the European Institute of Innovation and Technology (EIT). The mission of EIT RawMaterials is to enable the sustainable competitiveness of the European minerals, metals and materials sectors along the value chain by driving innovation, education and entrepreneurship.

EIT RawMaterials is a key European actor in advancing Europe's transition into a sustainable economy. This will be realised by integrating knowledge from industry, higher education and research by engaging stakeholders from the entire raw materials value chain

EIT RawMaterials builds on the world's largest network of excellent partners in raw materials and advanced materials EIT RawMaterials' activities contribute to maintaining and increasing Europe's competitiveness whilst securing and creating new jobs.

Raw materials are critically important for society in general, and for the transition to a green economy in particular. They are key for achieving the goals set out in COP21 and the United Nations Sustainable Development Goals, for implementing the European 2030 Agenda for Sustainable Development and for the European Resource Efficiency Initiative. Metals, minerals and raw materials and their sustainable supply and consumption are important in the move towards a circular economy.

EIT RawMaterials' projects are either directly linked to the SDGs by measurable output or indirectly by consequences of the measurable outputs. https://eitrawmaterials.eu/sustainable-development-goals/

KEY FACTS AND FIGURES

Horizon Europe Pillar and Cluster: Pillar III - European Institute of Innovation and Technology

Type of Partnership: Institutionalised – EIT KIC

Coordinating entity: EIT RawMaterials e.V and EIT RawMaterials GmbH

Total estimated budget: EUR 58.3 m (2021); EUR 55.21 m (2022)

Predecessor under Horizon 2020: Started in 2015

* KIC budget is approved on a yearly basis based on the assessment of the KIC's Business Plan by the EIT

FIND OUT MORE

https://eitrawmaterials.eu

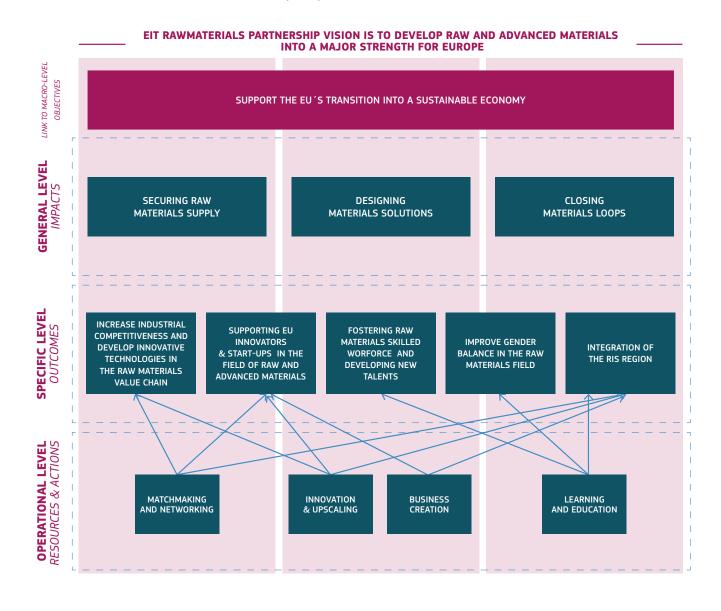
https://www.instagram.com/eitrawmaterials/

in https://www.linkedin.com/company/eit-raw-materials/mycompany/

https://twitter.com/eitrawmaterials

☑ info@eitrawmaterials.eu

PARTNERSHIP SPECIFIC IMPACT PATHWAY (PSIP)





PARTNERSHIP'S KEY PERFORMANCE INDICATORS

KPI NAME	UNIT OF MEASUREMENT	BASELINE	TARGET 2023	TARGET 2025	TARGET 2027	AMBITION >2027
RESC	DURCES (INPUT), P	ROCESSES A	ND ACTIVI	TIES		
Number of EIT RM partners	Number of partners		145	155	165	
EIT RM RIS Hubs	Number of RIS HUBs		8	10	10	
HEIs involved in EIT and KIC activities	# of HEIs		75	75	75	
Partners from EIT RIS countries	Number of EIT RM RIS Countries		110	130	140	
	OUT	ГСОМЕЅ				
Marketed innovations	Number of innovations	Unit	29	30	30	
Supported start-ups/scale-ups	Number of start-ups	Unit	50	50	50	
Investment attracted by KIC supported start-ups/scale-ups	Number of investments	Unit	10	10	10	
Securing raw materials supply	Investment attracted in resources	€			€500 m	
Improve gender balance in the RM sector	Women graduating from RM-related courses	%	40 %	45 %	50%	
	IM	PACTS				
Integrate and leverage the RM potential in the RIS region	Integration of the RIS region – % funding RIS participants in non-RIS projects	%	20%	20 %	20%	
Ensure stable RM workforce	Creating/maintaining/ re-skilling jobs in the RM sector (including conversion from brown technologies)	Unit	1300	5800	12000	
Designing materials solutions	Women graduating from RM courses	%			50%	
Closing materials loops	% CO ₂ emitted savings	%			20%	

EIT RM Impact KPIs target

In keeping with the refinement of its strategic agenda and with changes in the EIT core KPIs, EIT RawMaterials has reviewed its impact KPIs and aligned them with its strategic objectives and overall societal impact.

All the above KPIs are taken from the EIT RawMaterials Strategic Agenda 2021/2027.

https://eitrawmaterials.eu/wp-content/uploads/2021/04/Annex-1-EIT-RawMaterials Strategic-Agenda 2021-2027.pdf



SYNERGIES WITH OTHER EUROPEAN AND NATIONAL INITIATIVES

THE EUROPEAN RAW MATERIALS ALLIANCE (ERMA)

EIT RawMaterials has been given the mandate by the European Commission to manage ERMA and its activities. ERMA was announced by the European Commission on 3 September 2020, as part of an Action Plan on Critical Raw Materials, and the publication of the 2020 List of Critical Raw Materials. ERMA's vision is to secure access to critical and strategic raw materials, advanced materials, and processing know-how for the EU's industrial ecosystems. ERMA involves all relevant stakeholders, including industrial actors along the value chain, Member States and regions, trade unions, civil society, research and technology organisations, investors and NGOs. In the first year since its foundation in November 2020, around 600 such partners have joined ERMA.

https://erma.eu/about-us/

HIGHER EDUCATION INITIATIVE

The EIT's HEI initiative: Innovation Capacity Building for Higher Education is a joint EIT community activity coordinated by EIT RawMaterials. The initiative is a key objective for the European Institute of Innovation and Technology (EIT) as part of its new strategy, the EIT Strategic Innovation Agenda 2021–2027. The initiative aims to support higher education institutions with expertise and coaching, access to the EIT innovation ecosystem, and funding, enabling them to develop innovation action plans complementing the needs of individual higher education institutions

https://eit-hei.eu/about/about-eit-hei-initiative/

EIT CIRCULAR ECONOMY

Developed and led by EIT RawMaterials, the EIT Circular Economy Community consists of six Knowledge and Innovation Communities namely EIT RawMaterials, EIT Climate-KIC, EIT Digital, EIT Food, EIT Manufacturing and EIT Urban Mobility.

The EIT Circular Economy Community aims to:

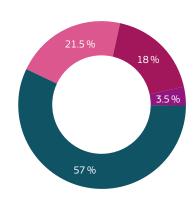
- support KICs in developing a joint circular economy offer;
- strengthen the implementation of a Circular Economy joint strategy;
- support breakthrough initiatives and start-ups through the Environmental Technology Verification (ETV) programme;
- collaborate with the European Commission in the implementation of the European Circular Economy Action Plan;
- collaborate with the European Circular Economy Stakeholder Platform (ECESP);
- facilitate access to markets for innovative KICs solutions.

https://www.eit-circulareconomy.eu/about-us/



OVERVIEW OF MEMBERS

MEMBERS PER TYPE



INDUSTRY Other Industrial and/or profit Private organisation

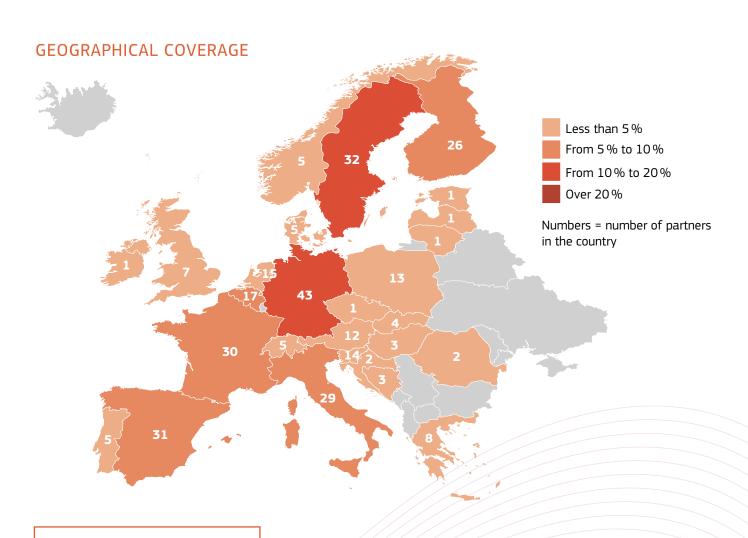
UNIVERSITY University and other higher education organisations

RESEARCH Public research organisation

(including international research organisation as well as private $% \left(1\right) =\left(1\right) \left(1\right) \left$

research organisation controlled by a public authority)

OTHERS Non-profit, associations, state companies etc.



Total number of partners: 316