Welcome & Opening Remarks

Mark Lee, Director of Higher Education, Department for the Economy NI

HORIZON EUROPE NORTHERN IRELAND ROADSHOW
24 OCTOBER 2024
LISBURN

Introduction from the UK and NI's Chief Scientific Advisors

Professor Chris Johnson, Chief Scientific Adviser, DSIT
Professor Helen McArthy, NI Chief Scientific and Technology Adviser, NI Exec Office

HORIZON EUROPE NORTHERN IRELAND ROADSHOW
24 OCTOBER 2024
LISBURN

UKRI Innovate UK
Department for the Economy An Roinn Geilleagair www.economy-ni.gov.uk
Invest Northern Ireland
NICP Northern Ireland Contact Point Horizon Europe
Department for Science, Innovation & Technology

HORIZON EUROPE
October 2024

The Executive Office
www.executiveoffice-ni.gov.uk

Who am I

QUEEN'S UNIVERSITY
DRUG DELIVERY
RNA THERAPY
GENE THERAPY
ULSTER UNIVERSITY
PHARMACY
DUBLIN CITY UNIVERSITY
GREEN TECHNOLOGY
ECOLOGICAL SCIENCES
INVENTOR
TECHNOLOGY
PATENTS
INNOVATE
PEPTIDES
PHARMA INDUSTRY
MULTIDISCIPLINARY
NORTHERN IRELAND
PRESENTATIONS
BMJ ONCOLOGY
ASSOCIATE EDITOR
INTRACELLULAR
CEO

Country Based CSAs

Professor Dame Angela McLean DBE FRS is the Government Chief Scientific Adviser (GCSA) 2023-

Professor Julie Fitzpatrick was appointed Chief Scientific Adviser for Scotland (CSAS) 2021-

Professor Jas Pal Badyal FRS is the Chief Scientific Adviser for Wales (CSAW) 2022 -

CSTA

Civil Contingencies

Independent Advice Across Government

Increase R&D

Champion Technology & Innovation

Embed Science in Policy Making

Regional Strategy for Science & Technology

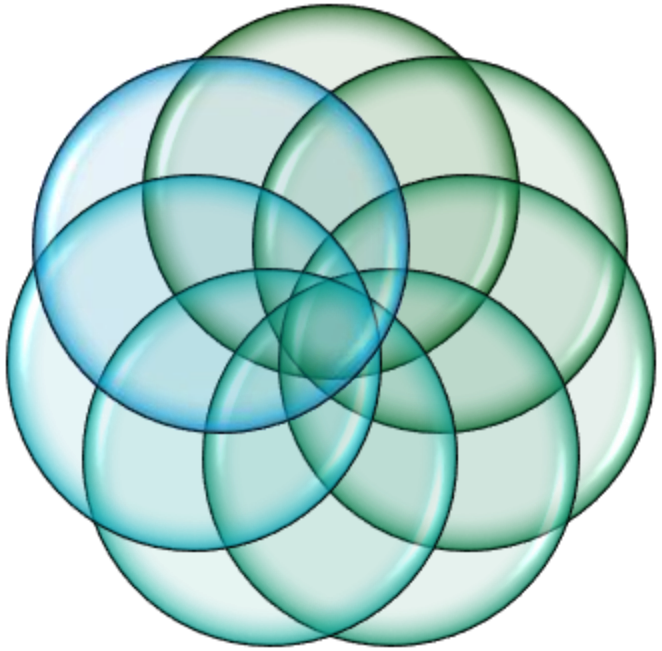
Represent NI Nationally & Globally

NI-Centric Objectives

Science & Technology Strategy

NISTAN

Research to Support PfG



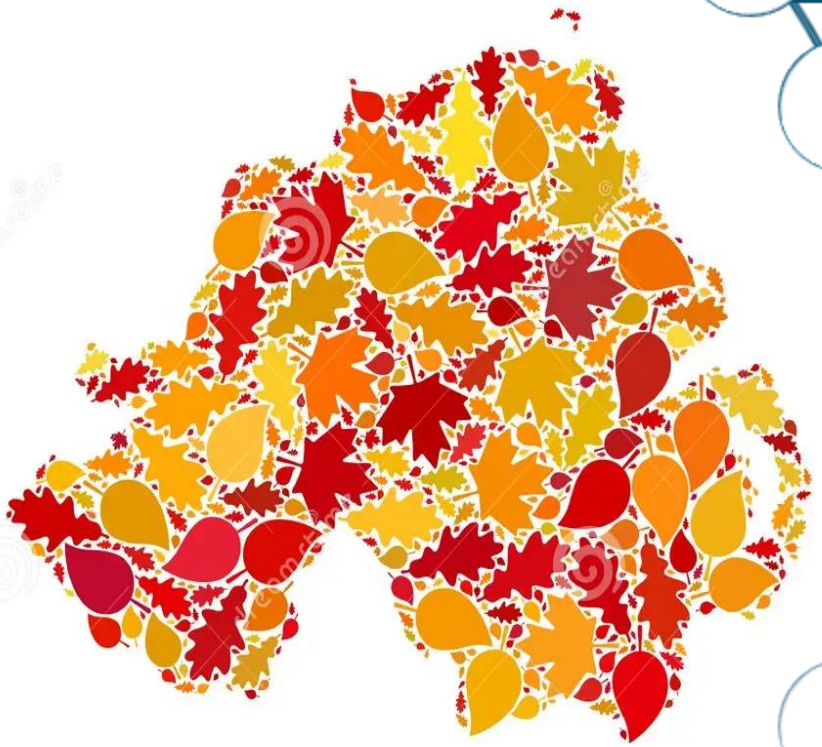
Deep Tech Commercialisation & Scale

NI_Science

Women in STEAM

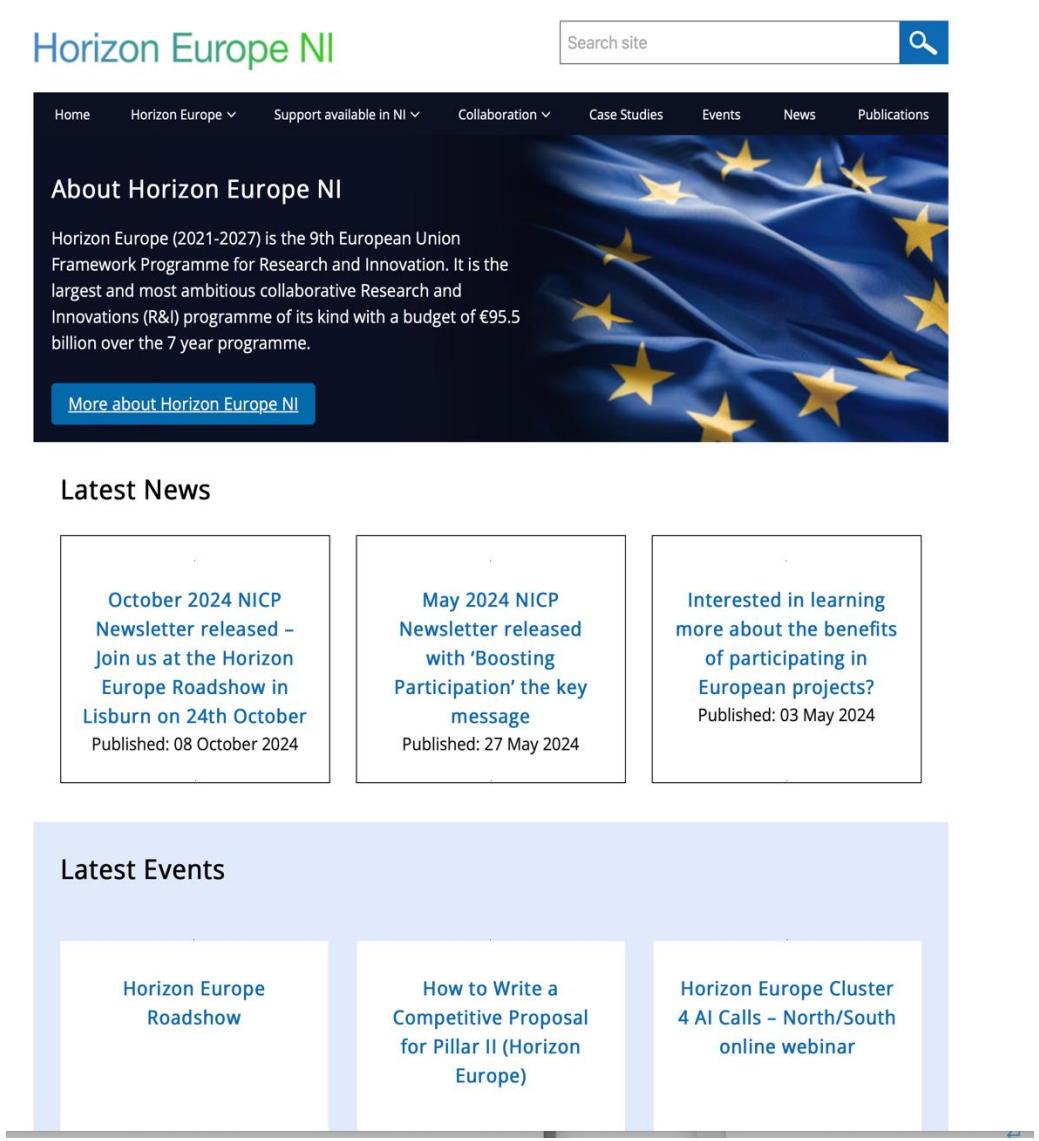
Increase R&D

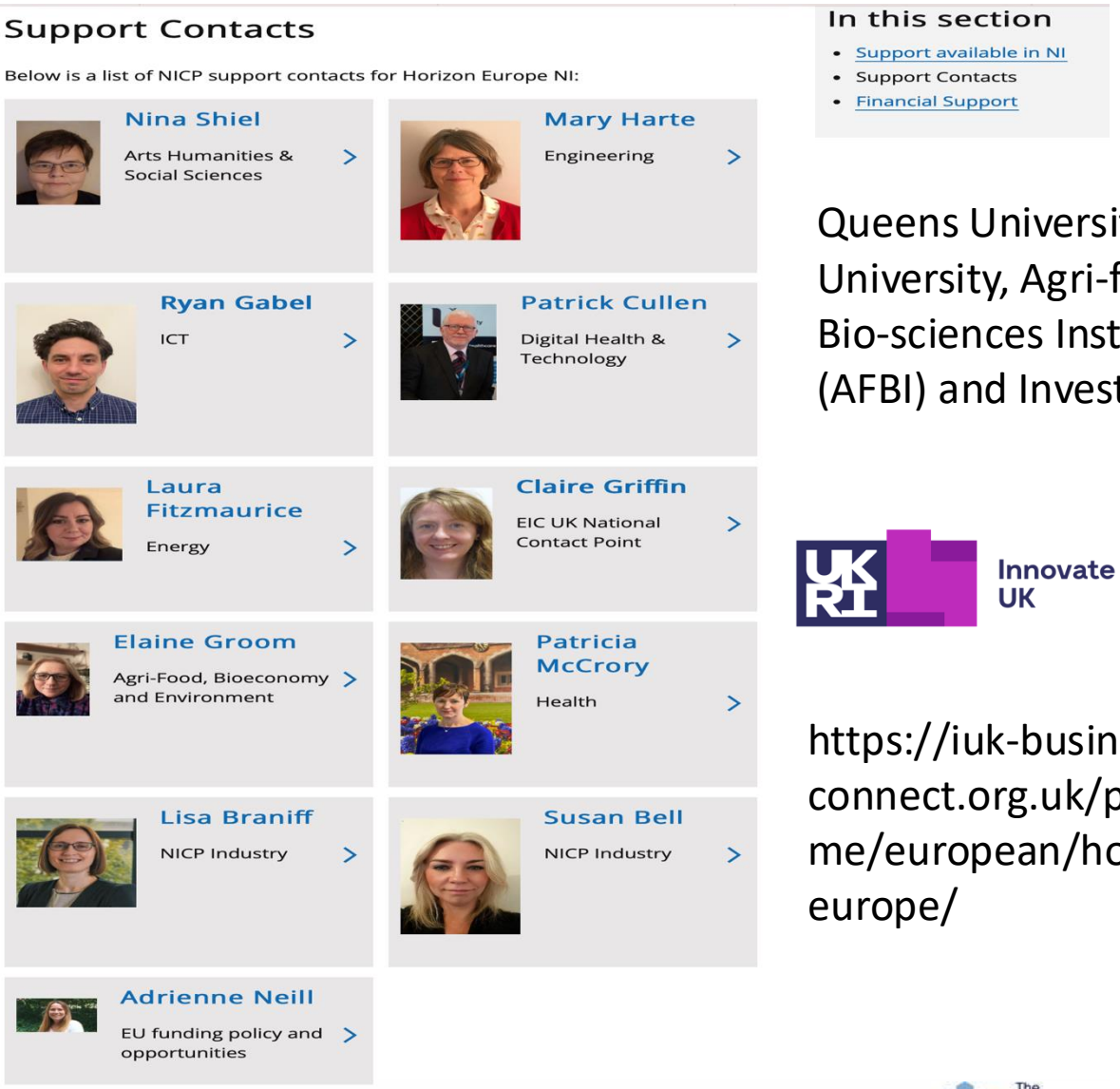
HORIZON EUROPE – NI PERFORMANCE



- H2020 Review NI by RSM UK
- €1 - €5 for Citizens 2040
- EU-UK Association Dec 23
- Access 21' but catch up needed H2020 €53m
- €30.9m from Horizon Europe, 70 successful projects
- 40% with Irish Partners, 28 successful projects
- HEI 70%; Industry/SMEs 18%; Public Bodies 6%; R Orgs 5%

HORIZON EUROPE – NI Boosting Success





Queens University, Ulster University, Agri-food & Bio-sciences Institute (AFBI) and Invest NI

UKRI Innovate UK | Business Connect

https://iuk-business-connect.org.uk/programme/european/horizon-europe/

https://www.horizoneuropeni.com

The Executive Office
www.executiveoffice-ni.gov.uk

CALL TO ACTION – ENGAGE

CSTA Office Contacts

cstaoffice@executiveoffice-ni.gov.uk

Helen McCarthy Helen.McCarthy@executiveoffice-ni.gov.uk

Iain Kennedy Iain.Kennedy@executiveoffice-ni.gov.uk

Sarah Jones Sarah.Jones@executiveoffice-ni.gov.uk

Kim McAllister Kim.McAllister@executiveoffice-ni.gov.uk

Setting the scene for the day (2)

Patrick Cullen (NICP Health) to introduce Jo Frost (NCP Health)

HORIZON EUROPE NORTHERN IRELAND ROADSHOW
24 OCTOBER 2024
LISBURN

UKRI Innovate UK
Department for the Economy An Roinn Geilleagair www.economy-ni.gov.uk
Invest Northern Ireland
NICP Northern Ireland Contact Point Horizon Europe
Department for Science, Innovation & Technology

UK Research and Innovation

Introduction to Horizon Europe + Support Available to Northern Ireland

24 October 2024

(Slides will be available afterwards)

Sign up to our newsletter:

Jo Frost (ncp-health@iuk.ukri.org) - UK Health National Contact Point

Patrick Cullen (p.cullen1@ulster.ac.uk) - Northern Irish Contact Point for Digital Health

Agenda for this session

- **About you**
- **Horizon Europe Introduction**
  - Who can take part?
  - Why participate
  - Horizon Europe structure
- **Funding opportunities**
- **Support available**

UK Research and Innovation

Two questions about you…

Q1) Which would best describe you?

a) **New to Horizon Europe**, I don't know much about it, but have come to learn today

b) **I know a little about Horizon Europe**, but have not applied for a grant

c) **I am experienced, and have for applied to Horizon Europe** (or the predecessor programmes such as Horizon 2020 or FP7) **or have taken part in project**

UK Research and Innovation

About you…

Q2) Which would best describe you?

a) **From academia**

b) **From an SME (Small and Medium Sized Enterprise)**

c) **From any other type of organisation** (e.g. large company, charity, museum, government department etc)

UK Research and Innovation

UK Research and Innovation

Horizon Europe

Introduction

UK Research and Innovation

What is Horizon Europe?

Horizon Europe is the EU's Research and Innovation funding programme and runs calls from 2021 until 2027

It is the largest international R&I funding programme with a **budget of €95.5 billion***

The UK has Associated to Horizon Europe, which means that UK researchers and innovators can fully participate in Horizon Europe (including leading projects)**

- **Horizon Europe funds all types of organisation** (including academia, SMEs, large companies and others)
- **It funds all R&I sectors**
  - some calls specify the R&I to be done
  - other calls leave that up to the applicants to decide

UK Research and Innovation

** Plus Associated Country contributions. Associated Countries have signed an agreement with the EU which means that organisations from the Associated Country can receive Horizon Europe funding, and can take part in and lead projects.*

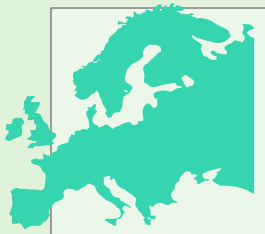
** Only exceptions:

- European Innovation Council Fund (equity part of EIC Accelerator); and
- very exceptional cases if the eligibility for individual funding calls is limited in the Work Programme to EU Member States or certain other countries.

Types of Countries in Horizon Europe

Automatically eligible to receive EU funding

EU Member States
and their overseas territories



Associated Countries
(Overall list + Info on UK Association)

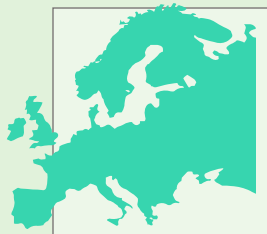
Many 'Third Countries':
116 Low and Middle Income Countries (LMICs)
(most LMICs except BRIC, Mexico, Chile…)

List of Participating Countries in Horizon Europe contains information about countries eligible for funding

Types of Countries in Horizon Europe

Automatically eligible to receive EU funding

EU Member States
and their overseas territories



Associated Countries
(Overall list + Info on UK Association)

Many 'Third Countries':
116 Low and Middle Income Countries (LMICs)
(most LMICs except BRIC, Mexico, Chile…)

Can participate with own funding
(only funded by Horizon Europe in exceptional cases)

Third countries:
Developing economies (Brazil, India, China**, Mexico, Chile,…)
and industrialised countries (Japan, US*,…)

Switzerland: The Swiss government **will fund** Swiss organisations to take part Horizon Europe consortia:

***US organisations**

- ***are eligible for automatic Horizon Europe funding in the main Health Work Programme calls only***
- ***are not eligible for automatic Horizon Europe funding from IHI, the Cancer Mission and other parts of Horizon Europe***

**See Work Programme 2023-25 General Annexes for rules about China, Russia, Hungary, Belarus and parts of Ukraine (p7-8)

List of Participating Countries in Horizon Europe contains information about countries eligible for funding

Why Participate?

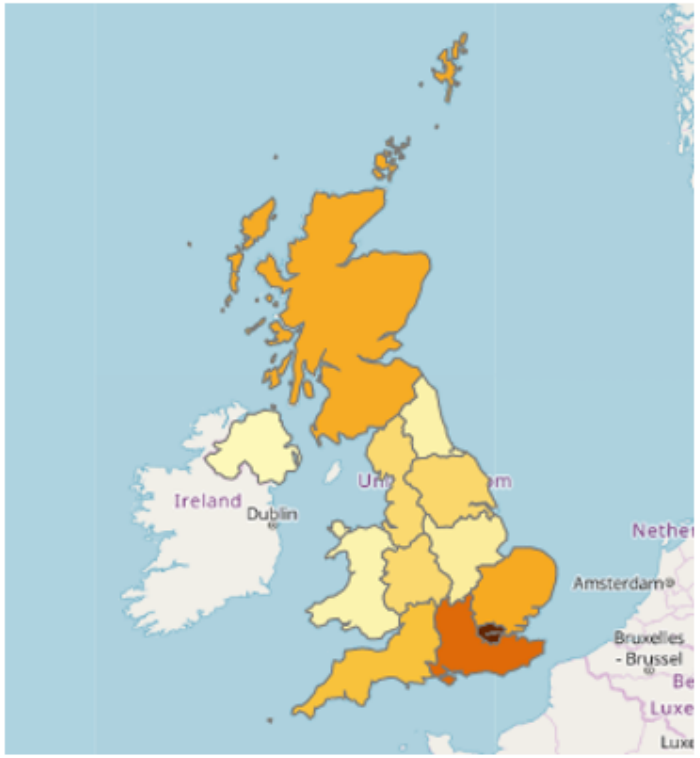
- **Access to funding**
- **Solve global challenges through collaborative research and development generating world leading expertise and innovation, resulting in new UK growth opportunities and jobs.**
- **Benefit from cutting edge European and global research, technologies, infrastructure, talent**
- **Gain access to and collaborate with supply and value chains within Europe and globally**
- **Influence standards, regulations, and policies, paving the way for UK expertise and solutions to be applied globally**

- Very short UKRI video playlist (about 3 mins each)
  with snippets of lots of UK participants briefly explaining the benefits of taking part in Horizon
- Short written case studies about UK organisations involved in Horizon Grants on the UKRI website

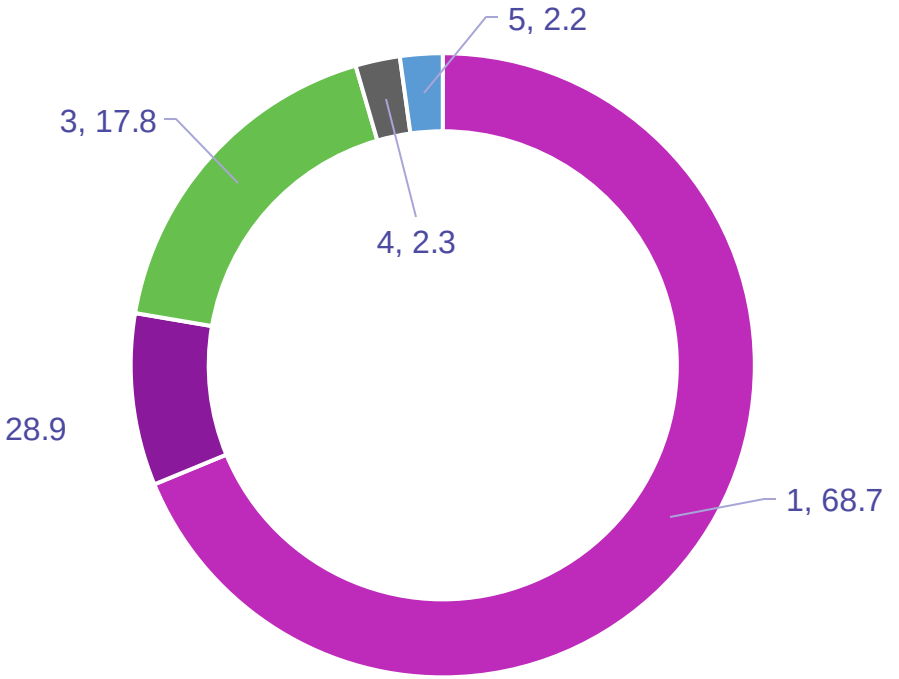
UK Research and Innovation

UK Success in Horizon 2020 & Funding Won

14.75% success rate (EU average 11.91%) → 16,303 participations → 9,802 signed grants (~33% of EU total) → €7.41B EU contribution

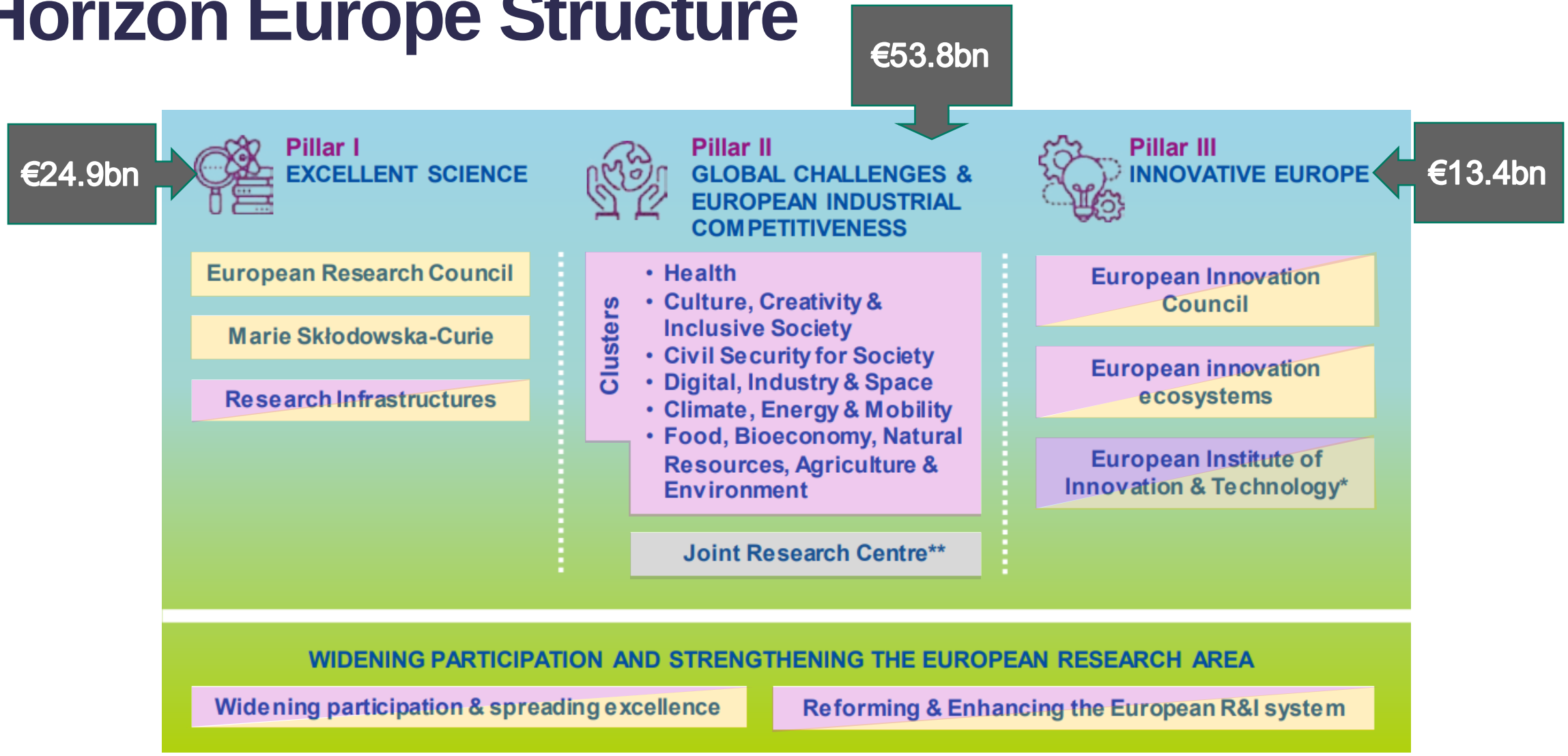


2,845 SME participations → €933M EU contribution



UK Research and Innovation

Horizon Europe Structure



UK Research and Innovation

(Budgets shown are for 2021-2027.
Budgets will be higher than above once the UK and other Associated Country contributions are included)

Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

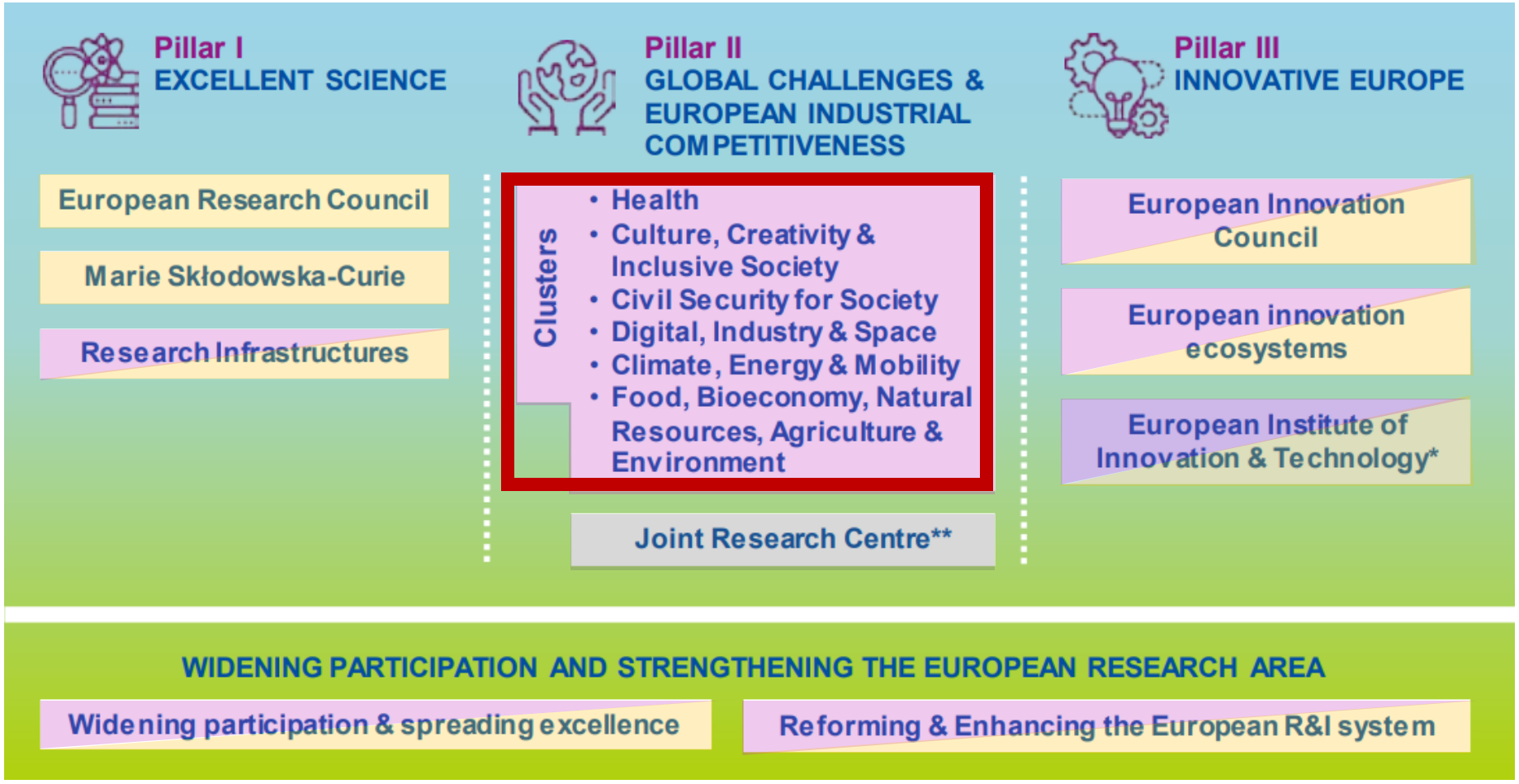
UK Research and Innovation

Horizon Europe

Pillar II

- Clusters
- Partnerships
- Missions
- New European Bauhaus (NEB)

Horizon Europe Structure



UK Research and Innovation

Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

Horizon Europe – Pillar II - Clusters

- **Challenge driven – must solve the problem posed by the European Commission (so not bottom-up idea driven)**
- **'Work Programmes' list specific call topics**, each with recommended
  - Scope
  - Expected outcomes
  - Budget
- Most (but not all) funding calls in the current Work Programmes have closed
- **The 2025 call topics are currently expected to be published ~March/April 2025**
- **Mainly funds consortium projects** with at least 3 different legal entities from 3 different Member States and/or Associated Countries.
  At least one organisation must be from an EU Member State.
- **Consortium partners often very varied** –you should have the right people for the tasks and from any type of legal entity
- Project size for each varies from less than €1m to a few million

Breakout sessions later today on most of the six Clusters

UK Research and Innovation

Horizon Europe – Pillar II - Partnerships

- **Horizon Europe Partnerships** are initiatives where the **European Commission and private and/or public partners jointly develop and then run a research and innovation programme called a 'partnership'**

- **There are about 48 of "Partnerships" in Pillar II of Horizon Europe** (**Diagram showing partnerships**, also listed for reference on the next 2 slides)

- **Most partnerships run calls for proposals**
  - **Each call for proposals run by a partnership can have different rules**
  - **For each call, please check the call documents to see which countries and types of organisation are eligible for funding**
  - **Some partnerships do NOT use standard Horizon Europe eligibility rules!**

Further info:

- **Links to info on each partnership**
- Most partnerships also have a website
- National Contact Points (NCPs) and Northern Ireland Contact Points (NCIPs) can help

Horizon Europe – Pillar II - Partnerships

Cluster 1: Health

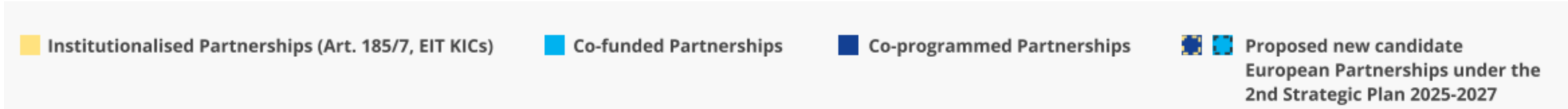
- Innovative Health Initiative
- EDCTP3 Global Health Partnership
- Assessment of Risks from Chemicals (PARC)
- Transforming of Health Care Systems
- ERA4Health
- ERDERA - Rare Diseases
- One-Health Antimicrobial Resistance (AMR)
- Personalised Medicine
- Pandemic Preparedness
- Brain Health

Cluster 2: Culture, Creativity, Inclusive Societies

- Resilient Cultural Heritage
- Social Transformations and Resilience

Cluster 3: Civil Security for Society

Has no partnerships



Cluster 4: Digital, Industry and Space

- Chips JU
- Smart Networks and Services (SNS JU)
- High Performance Computing (EuroHPC JU)
- European Metrology (Art. 185)
- Raw Materials for the Green and Digital Transition
- AI-Data-Robotics
- Photonics
- Made in Europe
- Clean Steel - Low Carbon Steelmaking
- Processes4Planet
- Globally Competetive Space Systems
- Innovative Materials for EU (I AM for EU)
- Virtual Worlds
- Textiles of the Future

Cluster 5: Climate, Energy and Mobility

- Clean Hydrogen
- Clean Aviation
- Single European Sky ATM Research 3
- Europe's Rail
- Clean Energy Transition (CETP)
- Driving Urban Transition (DUT)
- Connected, Cooperative and Automated Mobility
- Batteries (BATT4EU)
- Zero-Emission Waterborne Transport
- Zero-Emission Road Transport (2ZERO)
- Built4People
- Solar Photovoltaics

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

- R&I in the Mediterranean Area (PRIMA) (Art. 185)
- Circular Bio-based Europe (CBE JU)
- Biodiversa+
- Sustainable Blue Economy (SBEP)
- Water4All
- Animal Health and Wellfare
- Accelating Farming Systems Transformation
- Agriculture of Data
- Safe and Sustainable Food Systems
- Forests and Forestry for a Sustainable Future

Horizon Europe – Pillar II - Missions

What are Horizon Europe 'Missions'?

- There are five **Missions**, which are part of Horizon Europe (shown in the diagram bvelow)
- Each Mission aims to achieve a bold, inspirational and measurable goal within a set timeframe, with impact for society and policy making as well as relevance for a wide range of Europe citizens
- **There are a range of Horizon Europe call topics under each of the five Missions**
- The **2024 Horizon Europe Mission funding calls** have closed
- **The 2025 Call Topics are expected to be published ~March/April 2025** (in the 2025 "Missions and Cross-cutting Activities" Work Programme)
- Sign up to our newsletter to stay up to date

Adaptation to Climate Change | Cancer | Climate-neutral and Smart Cities | Restore our Ocean and Waters | Soil Deal for Europe

UK Research and Innovation

Horizon Europe – Pillar II - New European Bauhaus

The New European Bauhaus (NEB) is an EU policy and funding initiative launched by the European Commission in 2021 that fosters sustainable solutions for transforming the built environment and lifestyles under the green transition.

- The NEB is implemented in various ways, including through Horizon Europe funding calls, for example through call topics in the “Missions and Cross-cutting Activities” Work Programme

- The **2024 Call Topics** have closed. Example call topics:
  - *Exploiting the potential of secondary bio-based products*
  - *New governance models for the co-design and co-construction of public spaces in neighbourhoods by communities*

- **The 2025 Call Topics are expected to be published ~March/April 2025**
  (in the 2025 “Missions and Cross-cutting Activities” Work Programme)

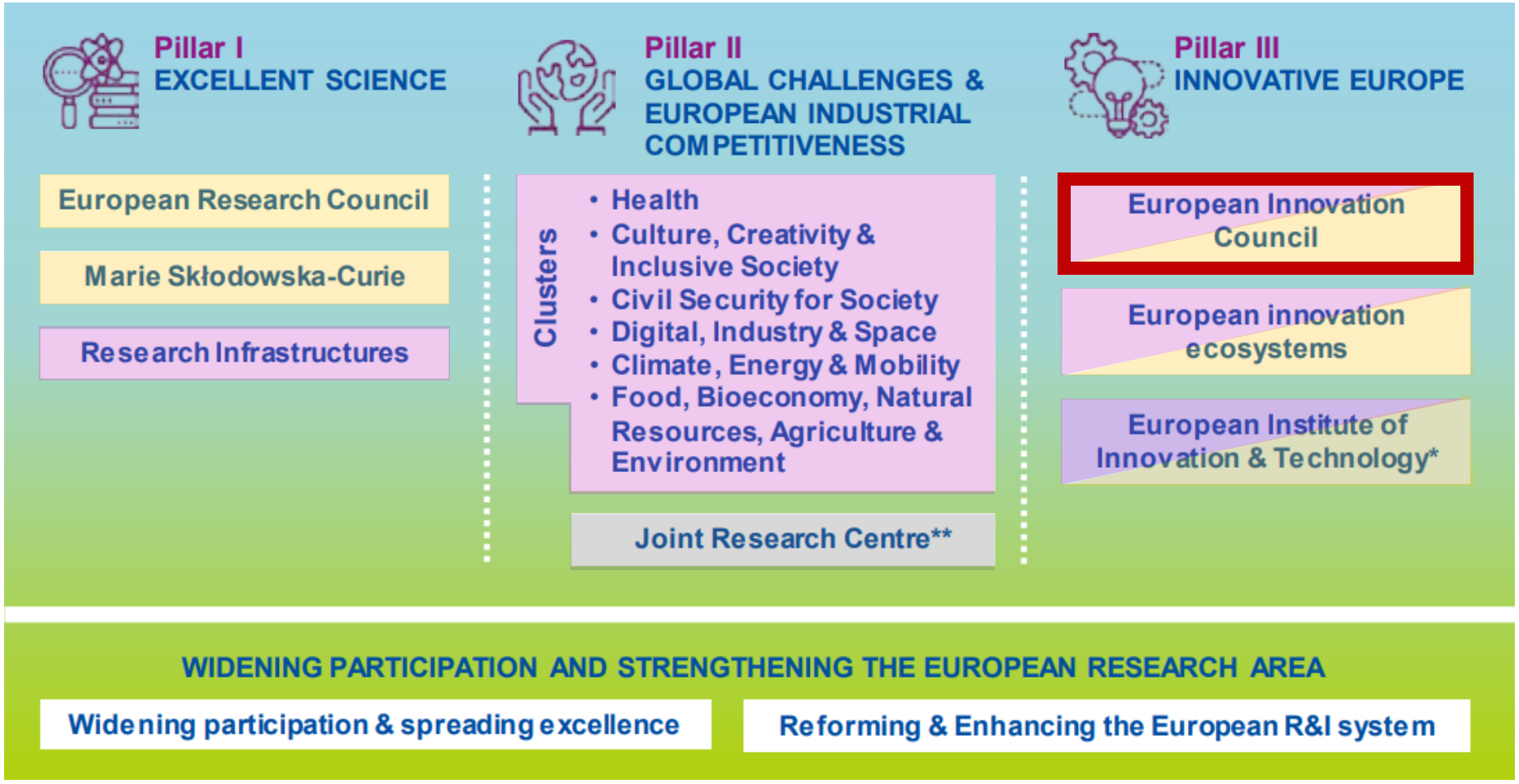
UK Research and Innovation

UK Research and Innovation

Horizon Europe

- Pillar III

Horizon Europe – Pillar III



UK Research and Innovation

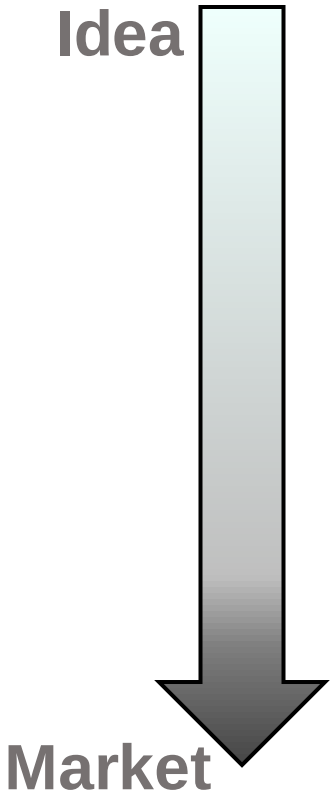
Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

Horizon Europe - Pillar III - European Innovation Council (EIC) (€10bn)

'Integrated, agile support across the full R&D spectrum from early-stage research to scale-up'



EIC Pathfinder TRL 3 (Open) TRL 4 (Challenges)	**Pathfinder OPEN (bottom up, no pre-defined topics)** Advanced research to develop the scientific basis to underpin breakthrough technologies, oriented around 'gatekeepers': • Radical technology vision • Breakthrough target • Novel interdisciplinary ***Deadline Spring 2025***	**Pathfinder CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc ***Deadline Autumn 2025***

UK Research and Innovation

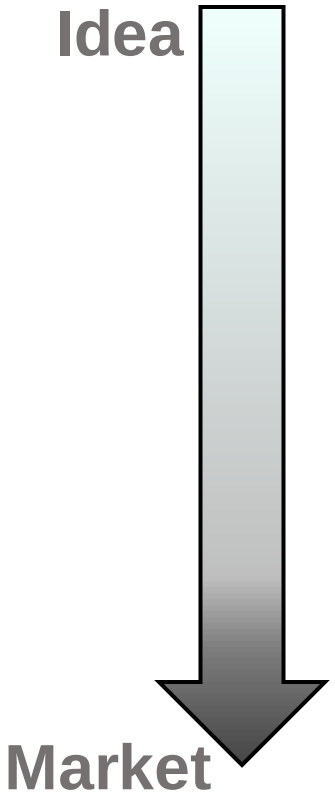
Like more info? Recent UK EIC Infoday / 5 Nov - EIC Infoday on 2025 Work Programme
UK contact: Claire.Griffin@iuk.ukri.org
National Contact Points in other countries / Technology Readiness Level definitions

EIC website / EIC newsletter /
2025 Work Programme expected soon

*UK based organisations can access the majority of the EIC (**except the EIC Fund part of the EIC Accelerator).***

Horizon Europe - Pillar III - European Innovation Council (EIC) (€10bn)

'Integrated, agile support across the full R&D spectrum from early-stage research to scale-up'



EIC Pathfinder TRL 3 (Open) TRL 4 (Challenges)	**Pathfinder OPEN (bottom up, no pre-defined topics)** Advanced research to develop the scientific basis to underpin breakthrough technologies, oriented around 'gatekeepers': • Radical technology vision • Breakthrough target • Novel interdisciplinary ***Deadline Spring 2025***	**Pathfinder CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc ***Deadline Autumn 2025***
EIC Transition TRL 4-5/6	**Transition OPEN (bottom up, no pre-defined topics)** Validate technologies and develop business plans for specific applications, builds on EIC Pathfinder projects, ERC Proof of Concept projects or collaborative projects from Horizon Europe Pillar 2 or Societal Challenges in Horizon 2020. ***Deadline Autumn 2025***	**Transition CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc

UK Research and Innovation

Like more info? Recent UK EIC Infoday / 5 Nov - EIC Infoday on 2025 Work Programme
UK contact: Claire.Griffin@iuk.ukri.org
National Contact Points in other countries / Technology Readiness Level definitions

EIC website / EIC newsletter /
2025 Work Programme expected soon

*UK based organisations can access the majority of the EIC (**except the EIC Fund part of the EIC Accelerator).***

Horizon Europe – Pillar III – European Innovation Council (EIC)

'Integrated, agile support across the full R&D spectrum from early-stage research to scale-up'

Idea

Market

EIC Pathfinder TRL 3 (Open) TRL 4 (Challenges)	**Pathfinder OPEN (bottom up, no pre-defined topics)** Advanced research to develop the scientific basis to underpin breakthrough technologies, oriented around 'gatekeepers': • Radical technology vision • Breakthrough target • Novel interdisciplinary ***Deadline Spring 2025***	**Pathfinder CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc ***Deadline Autumn 2025***
EIC Transition TRL 4-5/6	**Transition OPEN (bottom up, no pre-defined topics)** Validate technologies and develop business plans for specific applications, builds on EIC Pathfinder projects, ERC Proof of Concept projects or collaborative projects from Horizon Europe Pillar 2 or Societal Challenges in Horizon 2020. ***Deadline Autumn 2025***	**Transition CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc
EIC Accelerator TRL 6-9	**Accelerator OPEN (bottom-up, no predefined topics)** Develop and scaleup innovations with the potential to create new markets or disrupt existing ones ***Deadlines Spring and Autumn 2025***	**Accelerator CHALLENGES (top-down in specific technology areas)** 2025 Challenges tbc ***Deadlines Spring and Autumn 2025***

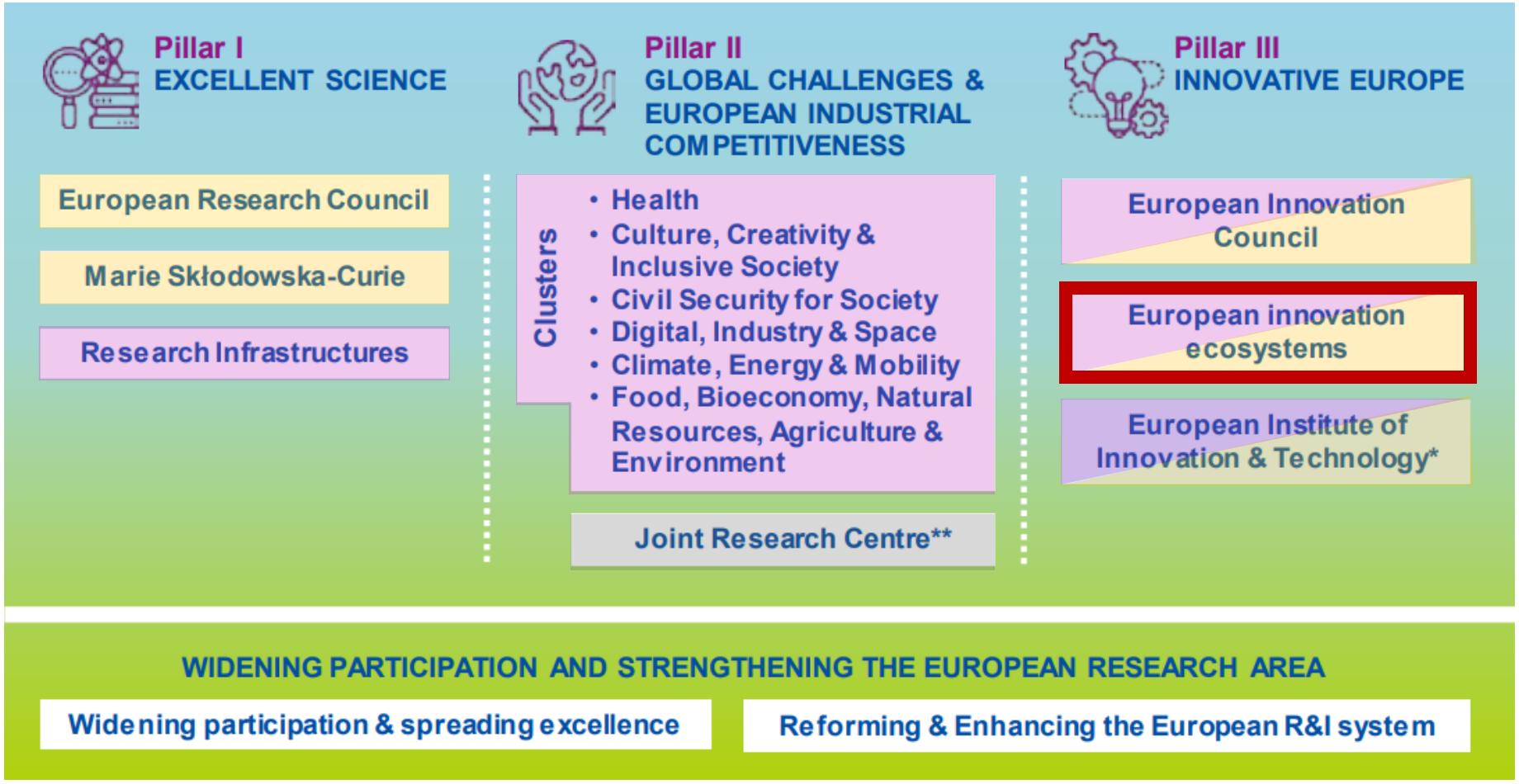
UK Research and Innovation

Like more info? Recent UK EIC Infoday / 5 Nov - EIC Infoday on 2025 Work Programme
UK contact: Claire.Griffin@iuk.ukri.org
National Contact Points in other countries / Technology Readiness Level definitions

EIC website / EIC newsletter / 2025 Work Programme expected soon

*UK based organisations can access the majority of the EIC (**except the EIC Fund part of the EIC Accelerator).***

Horizon Europe – Pillar III



UK Research and Innovation

Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

Horizon Europe - Pillar III - European Innovation Ecosystems (EIE)

Objective:

Connected and efficient innovation ecosystems

- Support the scaling of companies
- Encourage innovation
- Stimulate cooperation among national, regional and local innovation actors

Expected impacts

- **Interconnected, inclusive & efficient innovation systems** across Europe
- Elevated scalability potential of business
- Innovative SMEs growth accessing markets & embedding in global value chains.

UK Research and Innovation

UK contact: Claire.Griffin@iuk.ukri.org

Eurostars

- **Eurostars is the largest international funding programme for SMEs wishing to collaborate on R&D projects that create innovative products, processes or services for commercialisation.**
- **It funds transnational, market-oriented, collaborative R&I projects.**
- **Projects must be initiated and driven by Research and Development performing SMEs.**

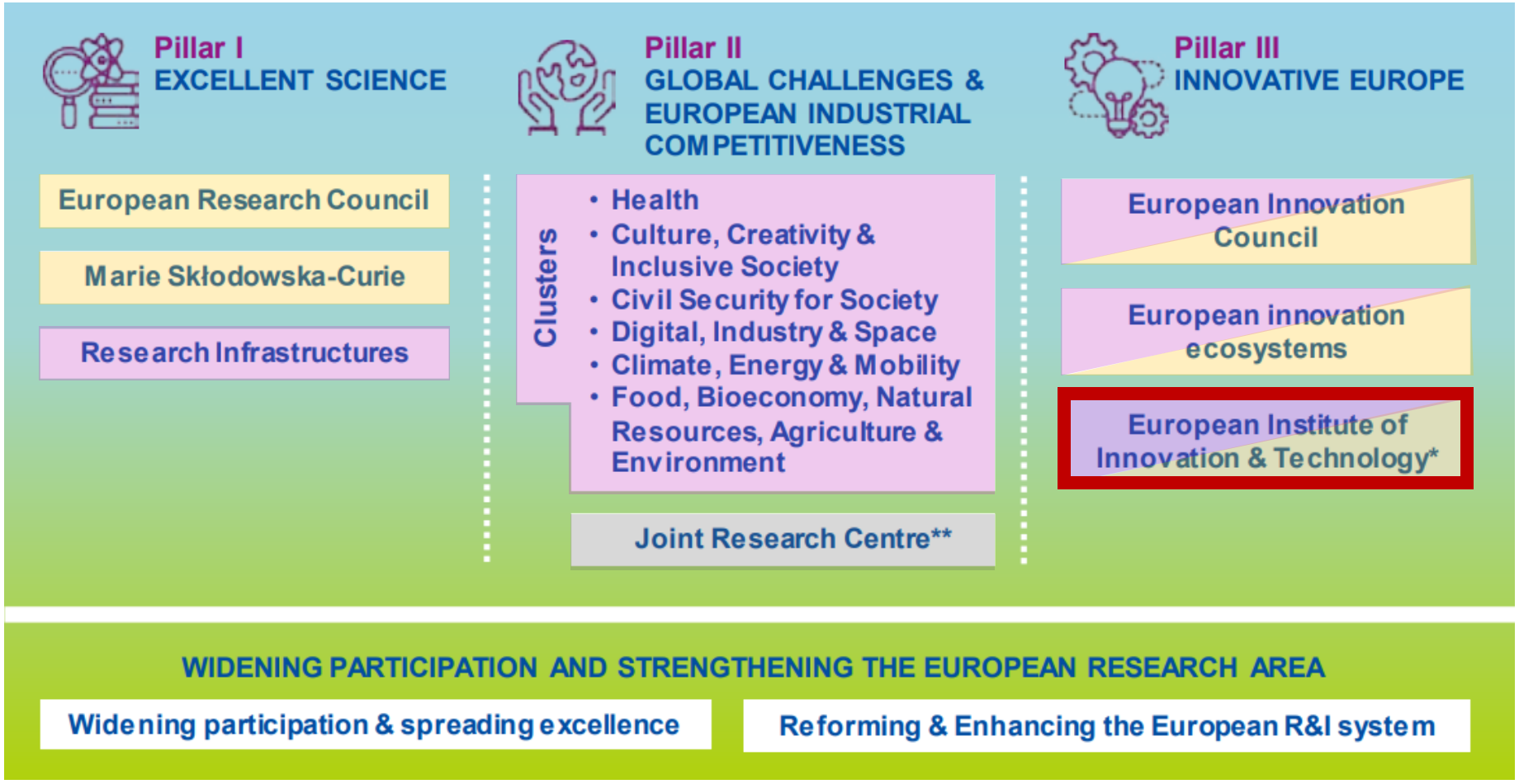
Eurostars countries: Austria, Belgium, Bulgaria, Canada, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Turkey and the UK.

- **There are 2 funding calls per year.**
- **UK SMEs can work on any innovation area with any of the 37 Eurostars countries in bi- or multi-lateral projects**
- **In the UK only SMEs are funded**
- **In some other countries other types of organisation are also funded (e.g. Ireland)**

UK Research and Innovation

Like more info? UK contact **Ben Morris** / Eurostars contacts in each country
Eureka and Eurostars websites / Subscribe to the Eureka/Eurostars newsletter

Horizon Europe – Pillar III



UK Research and Innovation

Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

European Institute of Innovation and Technology (EIT)

The European Institute of Innovation and Technology (EIT) is Europe's largest innovation network.

It has funding opportunities in 9 areas:

- Climate Change
- Cultural & Creative Sectors & Industries
- Digitisation
- Future of Food
- Health Innovation
- Sustainable Energy
- Added-Value Manufacturing
- Raw Materials
- Urban Mobility
- Water, marine, and maritime sectors and ecosystems (anticipated in 2026)

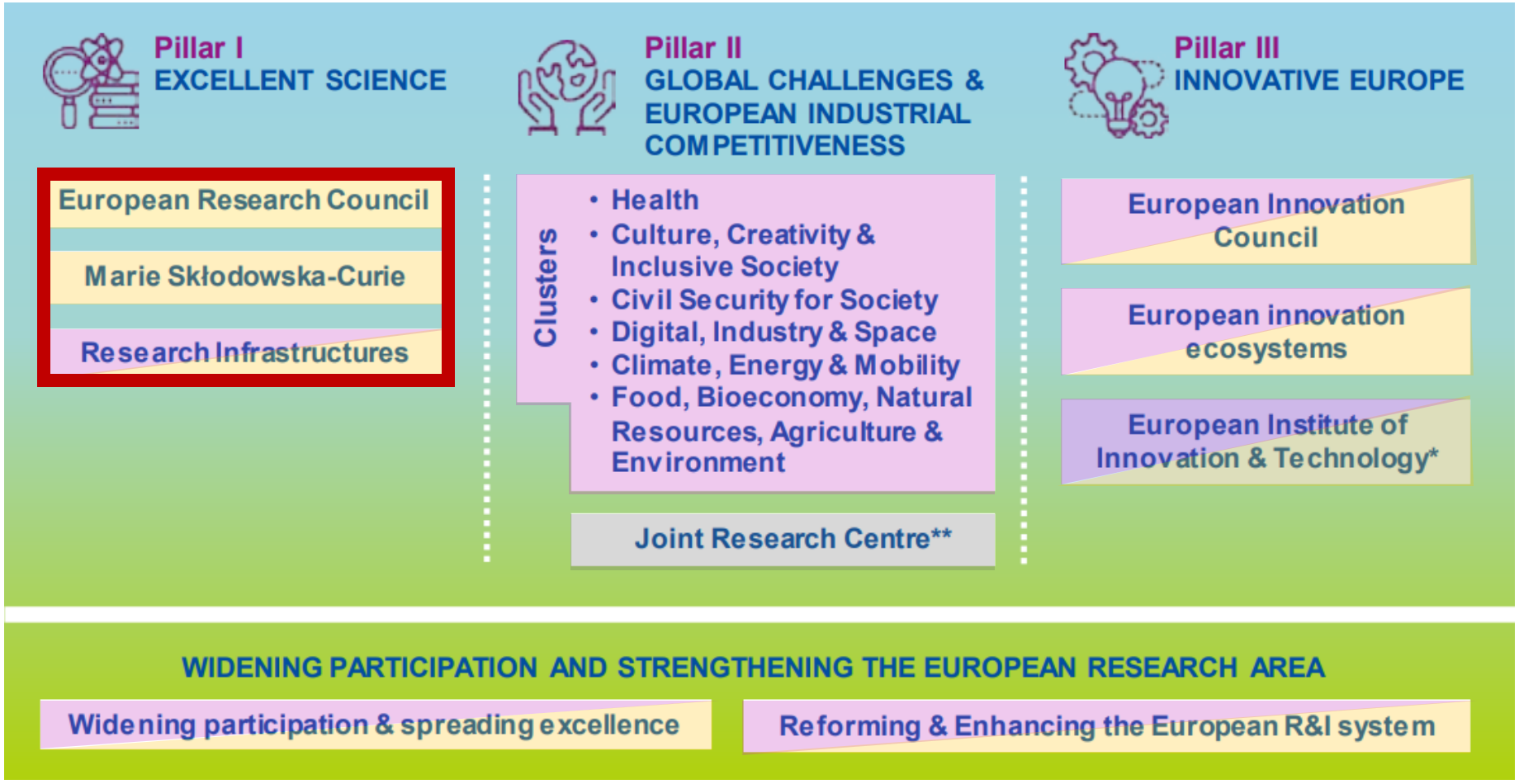
UK Research and Innovation

Horizon Europe

- Pillar I

UK Research and Innovation

Horizon Europe Structure



UK Research and Innovation

Key:

Open to all research and innovation fields

Challenge driven – must solve the problem posed – not bottom-up idea driven

Horizon Europe - Pillar I - European Research Council (ERC)
€16 Billion 2021-2027

- Long term funding of ground-breaking curiosity lead, investigator-driven 'frontier research'
- Funds a Principal Investigator (PI) and their team.
- **Across ALL research fields - completely bottom-up**
- Projects are selected for funding purely based on the excellence (of PI and project)
- Main types of funding:
  - Starting Grants
  - Consolidator Grants
  - Advanced Grants
  - Synergy Grants

Like more info? UK National Contact Point: erc-uk@ukro.ac.uk / website / events.
ERC Website including page on grant schemes / newsletter (sign up at the bottom of the ERC Website)

Horizon Europe - Pillar I - Marie Skłodowska-Curie Actions (MSCA)
€6.6 Billion 2021-2027

Open to all areas of research and innovation

MSCA Doctoral Networks

- Provides full **funding for an international consortium to train a group of PhD students.** Provides recruited researchers with **training through research**
- **Mobility is key** – intersectoral, interdisciplinary and international!

MSCA Staff Exchange Scheme

- **Funds short-term exchanges of personnel between academic, industrial and commercial organisations** throughout the world

MSCA Post Doctoral Fellowships

- Provides full **funding for an individual postdoctoral researcher**
- **Mobility is key** – intersectoral, interdisciplinary and international!

NEW: Extra 6 months funding for fellow to spend time in non-academic setting

MSCA COFUND Doctoral and Fellowship Programme

Like more info? UK National Contact Point:
mariecurie-uk@ukro.ac.uk / website / training events

Horizon Europe – Pillar I – Research Infrastructures
€2.4 billion 2021-2027

Is not:
X **building** Research Infrastructures (RIs)
X **funding capital costs** (with some exceptions)

It **is** aiming to:
✓ Support **Trans-National & Virtual Access** to RI
✓ Facilitate EU Member State agreement on **roadmaps** for future pan-European Rs and **RI upgrades via ESFRI** (European Strategy Forum on Research Infrastructures)
✓ Foster **international cooperation** of facilities, links with the private sector, and compliance with **EOSC** (European Open Science Cloud)

You can either apply to a call in the **Horizon Europe RI Work Programme**
Or check out **Research Infrastructures** with Horizon funding to allow transnational/virtual researchers or users.

UK Research and Innovation

UK contact point: Megan Underwood RINCPUK@stfc.ac.uk
/ contact points in other countries

UK Research and Innovation

Horizon Europe

Other

- COST (European Co-operation in Science and Technology)

Horizon Europe - Widening participation and strengthening the European Research Area (ERA)

Includes **COST** (European Co-operation in Science and Technology):

- **COST Open Call** (annual deadlines, **usually October**)
  - **Open to all areas of research and innovation** (bottom-up)
  - **Funding to set up interdisciplinary research and innovation networks in Europe and beyond**
    - Funding for organising meetings, training schools, short term scientific missions or other networking
    - Networks run for 4 years and help to build capacity.
  - Funds global networking of nationally-funded research.
  - In Horizon 2020, COST had a high success rate of 37%
- You can also join the many existing COST actions
  - e.g. European Network for Optimisation of Veterinary Antimicrobial Treatment – website / newsletter

UK Research and Innovation

More info? COST website / eligible countries

UK contact point: cost.ukcnc@dsit.gov.uk / contact points in other countries

UK Research and Innovation

Horizon Europe

Support Available – UK and Europe

What is a National Contact Point (NCP)?

The network of **National Contact Points in the UK** and **other countries** provide free guidance, practical information and assistance on all aspects of participation in Horizon Europe.

- Here today: Jo (Health), Conall (Energy), Claire (European Innovation Council, EIC).

NCP services vary in each country/sector, but typically include:

Informing and awareness raising
on Horizon Europe and other EU programmes

Assisting, advising and training
to improve the quality of Horizon Europe proposals

Signposting and cooperation
highlighting support avail. & supporting consortium development

UK Research and Innovation

Sign up to our UK NCP newsletter

Horizon Europe: Other support to help UK applicants

Innovate UK: Travel Support to attend European Events

- Helps UK SMEs expand their networks and build consortia. Up to £700 to cover T&S to attend specific events

Innovate UK: Pump Priming Funding

- For individual UK SMEs to explore and access Horizon Europe collaborative research & innovation opportunities
- Currently offers up to £6,000 (including VAT). Support from UK NCPs + an Innovate UK Business Growth Specialist.

British Academy Horizon Europe Pump Priming (funded by UK Government)

- Up to £10,000. Currently closed, but may reopen.

Other UK Help and Support including the **UKRO - UK Research Office**

- UK NCPs for the **European Research Council** and **Marie Skłodowska-Curie Actions**
- Those based at **subscribing organisations** can also get support across Horizon Europe and can **register for updates**

EU Intellectual Property (IP) Helpdesk very useful free to use helpdesk including helpline, training events and templates, guides and forms (including how to write an exploitation and dissemination plan)

UK Research and Innovation

UK Research and Innovation

Horizon Europe

Support Available – Northern Ireland

UK Research and Innovation

NICP Support Network

N.I. Resources and Contacts

https://horizoneuropeni.com/

@HORIZONEUROPENI

InterTradeIreland @ITI_HorizonEur

- **Travel Voucher Scheme**: Cross border/island of Ireland travel vouchers, worth £500 per early-stage partnership or £350 per partner for the EU travel voucher which covers T&S costs for the early-stage partnership to travel to information or brokerage days in Europe.
- ITI will be facilitating a series of **North-South workshops in 2025 focussed on HEU calls** going live next year and that people can express their interest in attending these by visiting the ITI stand

UK Research and Innovation

Thank you

UK Research and Innovation

niche
Nutrition Innovation Centre for Food & Health

Food, Nutrition and Health Research at Ulster University

At the

Nutrition Innovation Centre for Food & Health (NICHE)

School of Biomedical Sciences

Director (2016-present): *Prof Helene McNulty RD PhD MRIA*

Ulster University

'Global Excellence in Nutrition Research & Education'

About NICHE

Who are we?

- The **largest centre for nutrition research on the island of Ireland and one of the largest within Europe:**
  - 46 staff (academic, research, technical and support staff)
  - 30 PhD research students / 400 BSc and MSc students in Food, Nutrition & Dietetics

- **A top-ranked university centre for nutrition research** in the UK since the mid-1990s (as evidenced by our performance in all UK-wide research assessment exercises to date; up to REF2021)

- Our centre has attracted **grant income of over £50 million for nutrition research** in the past 25 years
  - Current income generated by NICHE amounts to £11.5 million

- Sept 2024: For the second year running, we received the significant accolade of being been named as **No.1 in the UK for Nutrition and Food Science 2025 (of 53 institutions)** (The Guardian University Guide 2025 – the rankings | University guide | The Guardian

About NICHE

Our Mission

- To investigate the role of food and nutrition in the promotion of better health and well-being throughout the lifecycle, from pregnancy through to older age

Our Objectives

- provide greater understanding of **nutrition-related health issues**
- achieve **impacts** through facilitating food, nutrition and health policy aimed at disease prevention
- engage in **transdisciplinary research** between NICHE and other centres, both internal and external to the University, across disciplines and and across sectors
- drive related **innovation activities** in food and health sectors

NICHE Advisory Board

- Our nutrition research activities are dynamically reviewed by an international Advisory Board which meets twice yearly

About NICHE

Capability, Capacity and Expertise in Nutrition and Health research

- **State-of-the-Art facilities** (e.g. Human Intervention Studies Unit; Vascular Health Unit; DXA bone scanners, Metabolic assessment, Laboratories for biomarkers)
- **Critical mass** in terms staff and students (at BSc, MSc, PhD levels) in nutrition and health
- **Research funding** from NI, the Republic, UK, European and international sources
- Extensive **international presence** and collaborations
- **Interdisciplinary research projects**
- Virtual Centre for **Nutrition & Ageing research**
  (e.g. Co-owners of the TUDA study)

Exemplar Project: AWARE (2022-2026)

Aquaponics from WAstewater Reclamation

- **Funding:** € 5.1m (HORIZON-CL6-2022-FARM2FORK-01)
- **Ulster funding/PI:** €395,000/ Prof Helene McNulty (NICHE)
  Co-investigators: Drs Ruth Price (NICHE) and Kirsty Pourshahidi (NICHE) and Stephen Gallagher (Psychology)

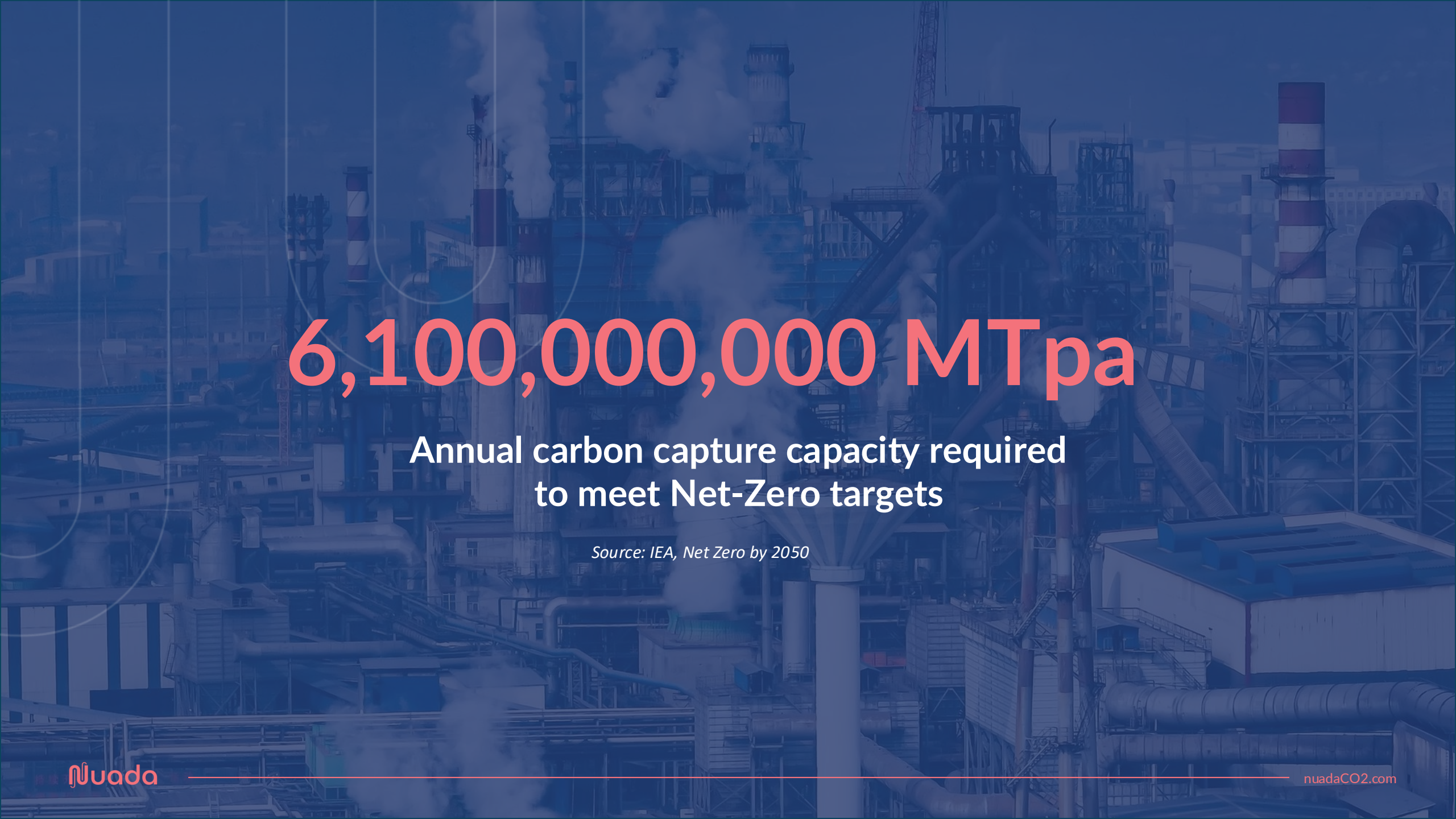
- **Consortium:**
  - ➢20 partners
  - ➢SMEs and academic
  - ➢across 8 countries
  - **Italy**, Spain, Greece, Portugal, Germany, Belgium, Chile and NI-UK

Nuada

Redefining Carbon Capture

24/10/24

nuadaCO2.com



6,100,000,000 MTpa

Annual carbon capture capacity required to meet Net-Zero targets

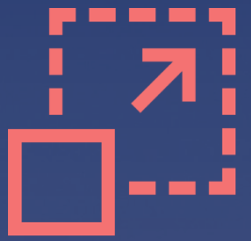
Source: IEA, Net Zero by 2050

The next generation of carbon capture

An ultra-energy efficient capture system that combines the unique properties of Metal-Organic Frameworks (MOFs) with mature VPSA technology

Ultra-Energy Efficient

Mature Process



Modular & Scalable

“Heatless” Capture

Flexible Applications

No Toxic Solvents

Nuada today

We build energy-efficient machines that vacuum CO_2 out of industrial emissions

Industrial Pilot plants

2

Team Size

40

Primary equity raised

≈€9m

Patents

6

TRL

6+

Non-dilutive funding

>€6m

MOF filter production

> 1 tpy

Company facilities

1,700m^2

Our H2020 Projects

2015
€8 m, 12 partners

2016
€4.2 m, 9 partners

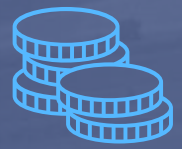
2018
€10 m, 15 partners

2019
€11 m, 13 partners

2024
3 new proposals submitted

Why should you apply?

Benefits



- Cash
- Pre-payment
- Time, equipment, materials and travel

- Cutting-edge research

- Direct collaboration with specialists
- Complementary skills

Challenges

- Establish multidisciplinary consortium
- Complex project proposal
- Highly competitive process

- Project management
- Challenging technical deliverables
- Reporting

Nuada

Capturing **the future**

THANK YOU

Almac Group - Horizon Europe

Dr Simon Grattan
Director – Research Services & Government Affairs
Oct 24

ALMAC

Galen:
global pharmaceutical sales & marketing organisation

GALEN

Almac Clinical Technologies:
clinical trial technology and expert technology

Almac Discovery:
biotech organisation

Almac Clinical Services:
manufacture, distribution & management of clinical trials

ALMAC
Partnering to Advance Human Health

Almac Diagnostic Services:
biomarker discovery & development

Almac Pharma Services:
drug product development; commercial manufacture & pack

Almac Sciences:
API development & analytical services

50+
Years' experience

7,500
Employees globally

54%
Contributed to over half of approved NMEs in the last 5 years

25
Partner with top 25 BioPharma companies

18
Locations worldwide

Engagement with EU funding, some examples:

- Translational Research Network in Prostate Cancer (TransPot) – MSCA ETN
- Active Pharmaceutical Production in Flow (APPFlow) – MSCA EID
- Targeted Anti-Cancer Therapies (TACT) – MSCA ETN

Value in participation:

- Connections and widening network
- Access to partner facilities and skills
- Potential access to talent
- Resulting PR and potential commercial links
- % Support rate and cash into the business

Success in Horizon Europe

Dr Martha Cahill - National Contact Point, Enterprise Ireland

HORIZON EUROPE NORTHERN IRELAND ROADSHOW
24 OCTOBER 2024
LISBURN

UKRI Innovate UK
Department for the Economy An Roinn Geilleagair www.economy-ni.gov.uk
Invest Northern Ireland
NICP Northern Ireland Contact Point Horizon Europe
Department for Science, Innovation & Technology

Horizon Europe – Ireland's performance to date

Dr. Martha Cahill

National Representative for health

Acting on behalf of

Micol Martinelli – Acting National Director
Kevin Burke – National Director Horizon Europe

Contents

- National Support Network team
- Horizon Europe results overview
- Case studies, newsletters & Events

The National Support Network for Horizon Europe

The Team consists of:

- National Director/Coordinator
- A dedicated national office in Enterprise Ireland
- A distributed network of national delegates and national contact points covering all parts of the programme
- Specialists in health, industry, digital, space, security, climate, energy, mobility, agriculture, marine, social science and humanities, etc.

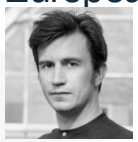
Who:

- 28 national delegates and national contact points across 10 government departments and agencies

The National Support Network for Horizon Europe

Pillar 1 Excellent Science

- European Research Council



- Marie Skłodowska-Curie Actions

- Research Infrastructures

National Director (acting)

New European Bauhaus

Pillar 2 Challenges & Competitiveness

- Health

- Culture, Creativity & Inclusive Society

- Civil Security for Society

- Digital, Industry & Space

- Climate, Energy & Mobility

- Food, Bioeconomy, Natural Resources, Agriculture & Environment

Pillar 3 Innovative Europe

- European Innovation Council

- European Innovation Ecosystems

- European Institute of Innovation & Technology

Horizontal

- Widening Participation & Strengthening the European Research Area

- Legal & Financial Rules

Ireland National Support Network activity

What the Ireland team do:

- Act as the conduit to/from the European Commission
- Identify strategic opportunities for Irish involvement in Horizon Europe
- Represent Irish position at EU Programme Committees
- Target potential applicants, raise awareness
- EU policy consultation with government departments
- Maximise the potential for North-South collaboration
- Proposal preparation assistance & expert guidance

Team directory published:

Find your European Advisor

Latest key figures from Horizon Dashboard

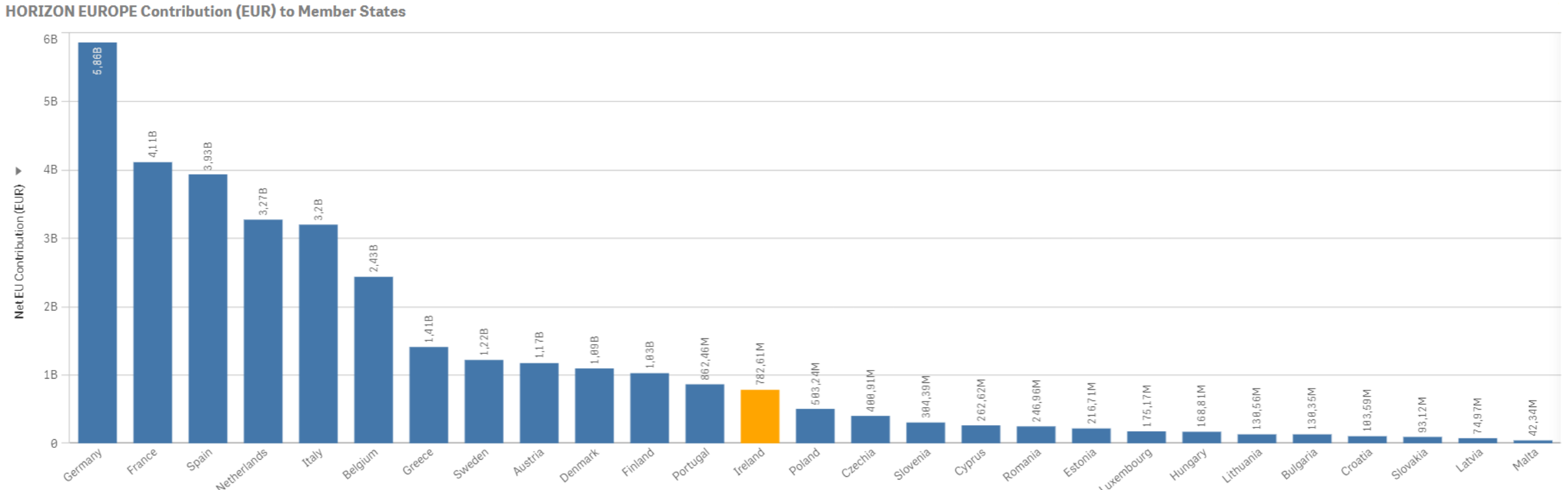
Ireland's performance in Horizon Europe:

- Net EU contribution: **€782.6m** which is **2.16%** of Horizon Europe total
- Ireland has **signed 1217 grants** which is **8.6%** of the total number of grants signed under Horizon Europe
- **463 Irish organisations** are involved in Horizon Europe projects with a total of **1,715** participations (N project, N times).
- Ireland has submitted **6,114** eligible proposals – **one in five** of those have been selected for funding.

EU Member States – Budget share & participation

Ireland ranks at 13 for both budget share and participation in Horizon Europe

Top 5 (in order):
Germany, France, Spain, Netherlands and Italy

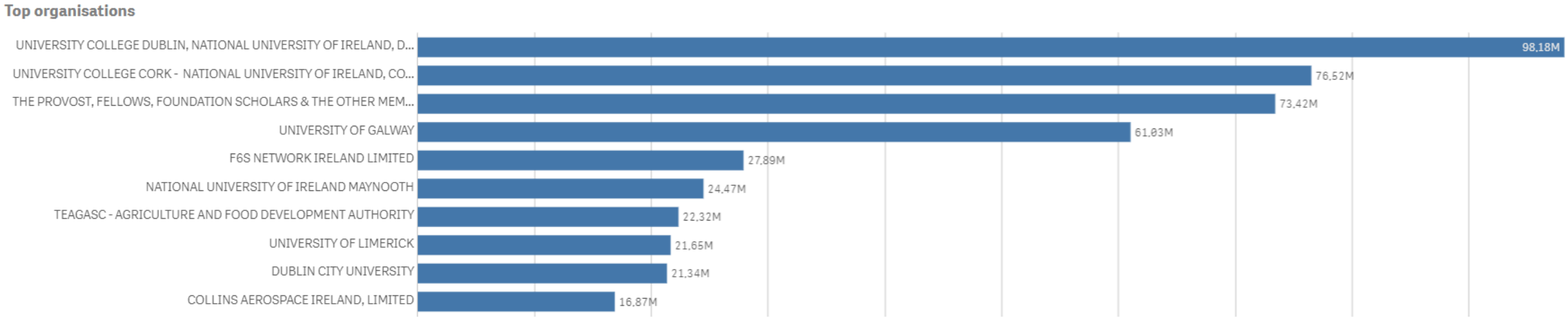


Programme Area breakdown

Programme Area	Official figure (millions) - Horizon Dashboard Thematic priority	Percentage of Ireland's total drawdown
ERC	122.5	15.65%
Cluster 4 Digital, Industry, Space	119.4	15.25%
Cluster 6, Food, Bioeconomy, Natural Resources	104.6	13.36%
Cluster 5 Climate, Energy, Mobility	101.8	13.01%
EIC Programme	98.9	12.64%
MSCA	88.64	11.32%
Cluster 1 Health	69.41	8.87%
Research Infrastructures	18.44	2.36%
Cluster 2 Culture	18.22	2.33%
Cluster 3 Security	19.48	2.49%
Widening Participation & Strengthening ERA	12.24	1.56%
EIE	6.88	0.88%
EIT	2.2	0.28%
Ireland's Total Drawdown	**782.71**	100.00%

Top organisations

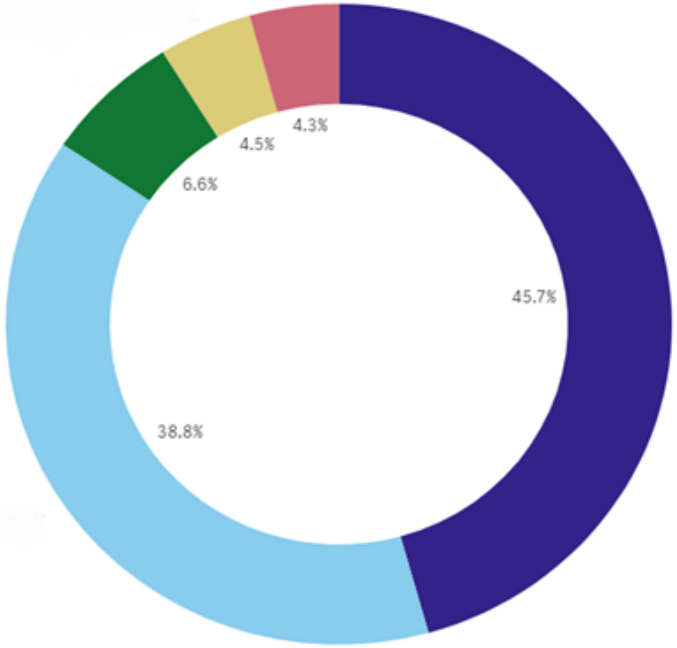
1. UCD - €98.18m
2. UCC - €76.52m
3. TCD - €73.42m
4. University of Galway - €61.03m
5. F6S Network - €27.89m
6. Maynooth - €24.47m
7. Teagasc - €22.32m
8. University of Limerick - €21.65m
9. DCU - €21.34m
10. Collins Aerospace - €16.87m



Organisation type

Overview by organisation type based on Net EU contribution:

- 46% Higher or Secondary Education Establishments
- 38% Private for Profit entities
- 7% Other
- 5% Research Organisations
- 4% Public bodies

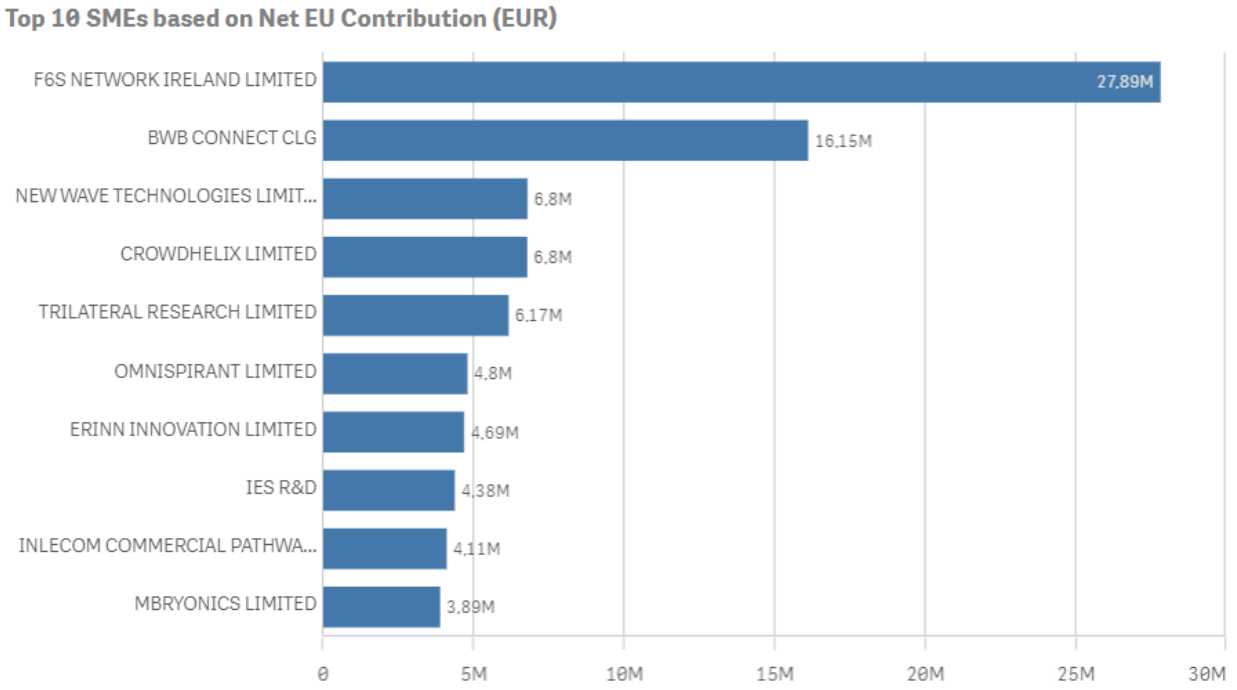


Ireland's SME Performance

Key SME figures

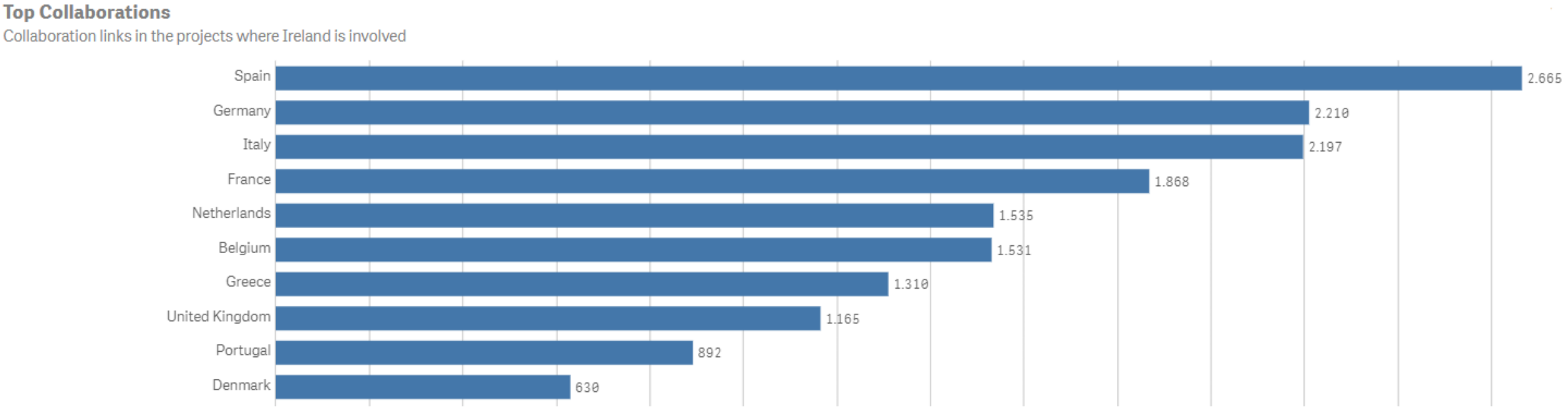
- **211 individual SMEs** make up **503 participations** – that's **29.3%** of Ireland's participation in Horizon Europe
- SME Net EU contribution is **€229.3m** which is **29.2%** of Ireland's total Net EU Contribution

1. F6S - €27.8m
2. BWB - €16.15m
3. New Wave - €6.8m
4. Crowdhelix - €6.8m
5. Trilateral - €6.17m
6. Omnispirant - €4.8m
7. Erinn Innovation - €4.69m
8. IES R&D - €4.38m
9. Inlecom - €4.11m
10. MBRYONICS Limited- €3.8m



Collaboration links

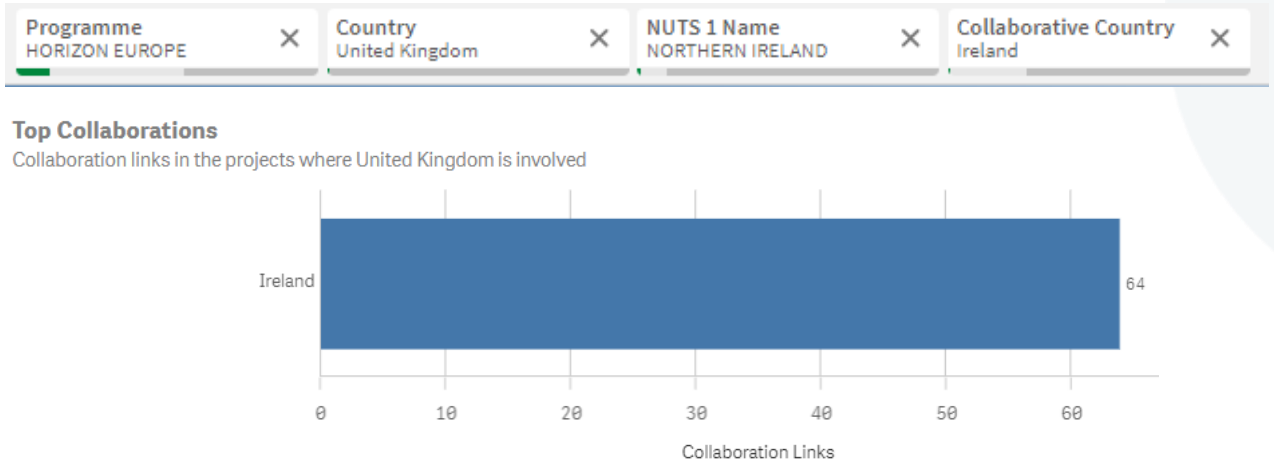
1. Spain 2665
2. Germany 2210
3. Italy 2197
4. France 1868
5. Netherlands 1535
6. Belgium 1531
7. Greece 1310
8. United Kingdom 1165
9. Portugal 892
10. Denmark 630



Ireland-Northern Ireland collaboration links

Collaboration Links:

Ireland and Northern Ireland have **64** collaboration links across **26** projects.



The **top three thematic areas** where Ireland and Northern Ireland collaborate:

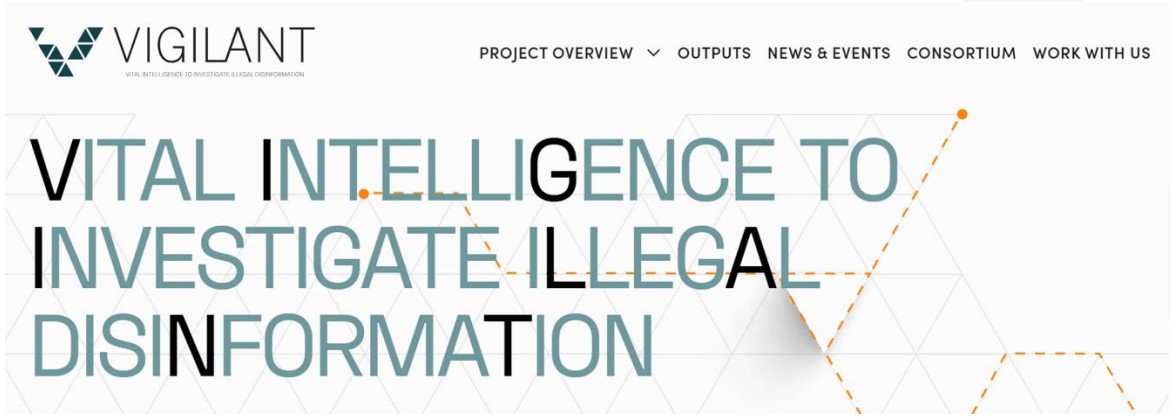
1. Food, Bioeconomy, Natural Resources, Agriculture and Environment - 11 projects
2. MSCA – 8 projects
3. Health – 3 projects

Projects coordinated by Ireland with NI partner

Acronym	Title	Net EU Contribution	Thematic Priority	Ireland coordinator	Northern Ireland partner
VIGILANT	Vital IntelliGence to Investigate ILlegAl DisiNformaTion	€ 3,376,605	Civil Security for Society	Trinity College Dublin	Police Service of Northern Ireland
BIOFIN	PROTECTING AND RESTORING BIODIVERSITY USING MAINSTREAM FINANCE (BIOFIN)	€ 4,382,053	Food, Bioeconomy Natural Resources, Agriculture and Environment	University of Limerick	The Queen's University of Belfast
STEP UP	Sustainable Livestock Systems Transition and Evidence Platform for Upgrading Policies	€ 4,311,559	Food, Bioeconomy Natural Resources, Agriculture and Environment	Teagasc	The Queen's University of Belfast
Recon4IMD	Reconstruction and Computational Modelling for Inherited Metabolic Diseases	€ 7,871,903	Health	University of Galway	Belfast Health and Social Care Trust
In-Touch	In-Touch: Implementation of a person-centered palliative care iNtervention To imprOve comfort, QUality of Life and social engagement of people with advanced dementia in Care Homes	€ 5,723,637	Health	UCC	The Queen's University of Belfast
MM_BH3_CutTag	Parallel epigenomic and apoptotic profiling to identify targetable sensitivities in Multiple Myeloma	€ 215,534	MSCA	RCSI	Almac Discovery Ltd
DIGI PLUS	Leadership for Sustainable Digital Transformation in Europe	€ 1,910,400	MSCA	Maynooth University	Banbridge District Enterprises Ltd
C-NEWTRAL	C-NEWTRAL: smart CompreheNsive training to mainstrEam neW approaches for climaTe-neutRal cities through citizen engAgement and decision-making support for innovative governance and integrated pLanning	€ 2,715,797	MSCA	UCD	The Queen's University of Belfast
BullNet	A cutting-edge integrated approach to sperm biology and associated reproductive biotechnologies to assist the dairy and beef industries meet growing societal, environmental and economic demands	€ 2,718,979	MSCA	University of Limerick	The Queen's University of Belfast
EVEREST	Extracellular Vesicle Research Exchanges for Advanced Biomarkers and Therapeutics	€ 1,311,000	MSCA	UCD	The Queen's University of Belfast

Project Example - VIGILANT

VIGILANT – New platform to help police fight online hate crime



Policing social media is not easy. Police officials do not have access to special tools or technologies to help them combat disinformation or hateful content online. In this context, the EU-funded VIGILANT project will develop a platform that can track and analyse disinformation to help police crackdown on internet hate crime. Specifically, the new platform features advanced disinformation identification and analysis tools and technologies. It uses state-of-the-art artificial intelligence methods that will be tailored to police needs. It can be used on all major social media platforms and websites and for all types of content (image, text and video) and multiple languages.

Funded under "**Civil Security for Society**", the project started in November 2022 and continues until October 2025 – it is coordinated by **Trinity College Dublin** with the **Police Service of Northern Ireland** among the partners.

Project Example – In-Touch

In-Touch – transforming dementia care in Europe

Caring for individuals with advanced dementia in care homes poses significant challenges, impacting their quality of life and causing distress among family members and caregivers. In this context, the EU-funded In-Touch project aims to develop an innovative intervention that combines 'in the moment' care for immediate needs and planning for future care needs. A cross-country trial across 56 nursing homes in seven countries aims to enhance comfort, social engagement, and overall well-being. If successful, this initiative could transform dementia care in Europe, providing better quality of life for patients, support for caregivers, and a cost-effective, evidence-based model for future implementation. This holistic approach promises a brighter future for those affected by advanced dementia.

Funded under "**Health**", the project started in January 2024 and continues until December 2028 – it is coordinated by **UCC** with the **Queen's University of Belfast** among the partners.

Project Example – DIGI PLUS

DIGI PLUS - Shaping the next generation of researchers in sustainable digitalisation

DIGI+ DIGITAL TRANSFORMATION

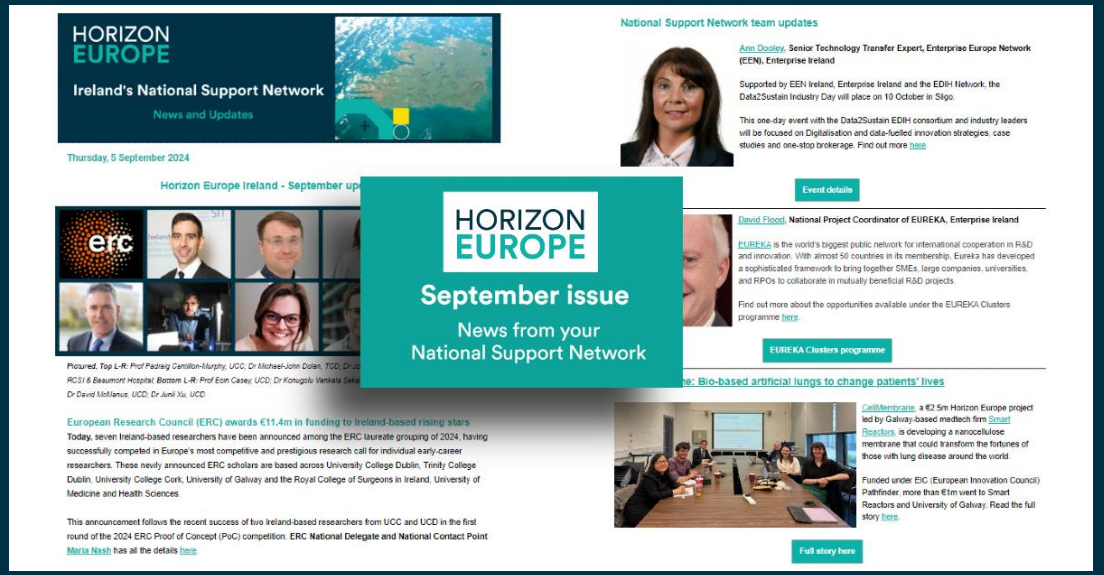
Sustainable digital transformation is a key element of many European initiatives. It promotes digital solutions that will contribute to economic growth and green objectives. With the support of the Marie Skłodowska-Curie Actions programme, the DIGI PLUS project will award 20 postdoctoral researchers with fellowships to advance digital capabilities, policies and standards in four multidisciplinary fields: innovative business models and data ecosystems; digital culture and skills; data governance; and innovative digital technologies and adoption. Candidates will acquire a combination of research-oriented and transferable skills, thus significantly improving their career advancement prospects. The project will cultivate a new generation of European researchers ready to address future digital challenges.

Funded under "**MSCA**", the project started in January 2024 and continues until December 2028 – it is coordinated by **Maynooth University** with **Banbridge District Enterprises** among the partners.

HORIZON EUROPE

Keep up to date by visiting our website & signing up to our newsletters

www.horizoneurope.ie



Sign up to our Newsletter

NAME

EMAIL *

ORGANISATION *

Choose your areas of interest? ☐ Horizon Europe (General)

Horizon Impact Conference 2024

Thursday 5 December

Enterprise Ireland

THANK YOU

Enterprise Ireland