



EUCLUSTERS  TALKS 

An initiative of the European Union



# Leading the twin transition:

Advanced materials as key enabling technology

**10 April 2024**

08:30-09:45 CET

**Online**

# Agenda

1. News from the European Cluster Collaboration Platform  
**Nina Hoppmann**, *Team Member European Cluster Collaboration Platform*
2. Advanced materials for EU industrial leadership  
**Sofie Nørager**, *Deputy Head of Unit, DG RTD, European Commission*  
**Philipp Runge**, *Legal and Policy Officer, DG GROW, European Commission*
3. Panel debate  
**Annabelle Sion-Henry**, *Head of European Affairs, POLYMERIS*  
**Eva Milella**, *President, IMAST Italian technological district for the engineering of polymeric and composite materials and structures*  
**Magdalena Cholewińska-Falarz**, *Chief Innovation Officer, Silesian Nano Cluster*
4. Funding opportunities  
**Nina Hoppmann**, *Team Member European Cluster Collaboration Platform*

# Housekeeping rules

Andrew Lansley, presenter

- We will use **slido** to launch polls. Please scan the QR code to answer.
- Please use the **Zoom Q&A function to ask questions**, and the **chat function** to comment or share links.
- If you want to speak: Please **raise your hand** and we will give you the floor.
- Please note that the session is being **recorded** and that the recording will be **published** on the European Cluster Collaboration Platform.

# NEWS FROM THE EUROPEAN CLUSTER COLLABORATION PLATFORM

# Register for the European Cluster Conference: 7-8 May 2024

The European Cluster Conference 2024 will take place at the Square, in **Brussels**.

The conference aims to highlight the vital role of clusters in advancing EU industrial priorities. It will address pivotal topics— the **Green Transition**, the **Digital Transition** and **Resilience Building**—providing a deep-dive into key drivers like **skills, funding, and technology**.

Registration now:

<https://europeanclusterconference2024.eu/>



# Matchmaking event within Cluster Conference

As part of the European Cluster Conference 2024, the next ECCP matchmaking event will take place on **8 May 2024**.

This matchmaking event offers participants a dedicated framework to find potential business partners at all stages of the supply chain. They were invited to look for future project partners or specific products or services for their organisation.

The event will take place **physically** during a 4 hours matchmaking session where participants will meet in a **dedicated room of the conference venue**.



# Save the date for Clusters meet Regions in Graz, Austria



Anchored in the theme of **Tradition Reinvented**, the event aims to explore how clusters can spearhead transformative shifts towards a climate-neutral, digital future, aligning with European sustainability goals.

As part of the [Clusters Meet Regions event in Graz, Austria](#), a matchmaking event will take place on **18 June 2024**.

# EU-Taiwan Matchmaking



The **[EU – Taiwan Matchmaking Event](#)** will take place on-site in **Berlin, Germany on 10-12 June 2024** with a delegation of about 80 companies and trade organisations from Taiwan.

Focus areas: ICT/Semiconductors and Digital industries; AI/IoT/Advanced manufacturing; Smart Mobility; Green/Circular Economy/Renewable energy/Sustainability; Smart Healthcare; Smart city/Connectivity/5G

Join the **[info webinar](#)** to get all the details on **18 April, 9:30 – 10:30 CET**.

# EU-South Med Matchmaking



The [EU – South Med Matchmaking Event](#) will take place on-site in **Frankfurt, Germany** on **11-13 June 2024**.

It will bring together cluster organisations and SMEs from the European Union (EU), non-EU countries participating in the Single Market Programme/COSME Strand, and South MED region: **Morocco, Algeria, Egypt, Jordan, Lebanon, Palestine and Tunisia**.

**Focus areas:** Green tech and energy; Digital tech and ICT; Mechanical engineering and manufacturing; Pharma and biotech

# Consultation on the Single Market Programme

The European Commission has published an [open public consultation](#) to gather feedback for an **interim evaluation** of the Single Market Programme 2021-2027.

The Single Market Programme funds **EU projects and actions** to help the single market reach its full potential and ensure Europe's recovery from the COVID-19 pandemic, including **SMEs**. The ongoing interim evaluation will assess the design, implementation, and first results of the SMP for the period 2021-23.

Your feedback will help to understand what went well to make improvements for the future. Please **respond** to this online survey until **31 May 2024**.

# EEN Training Session on Sustainable Finance

The Enterprise Europe Network invites you to **participate virtually in a training session on sustainable finance**. The training session will take place on **11 April 2024, 9:40 – 13:00 CET**.

Learn about:

- EU Sustainable Finance Framework
- SME Sustainable Reporting Standards
- InvestEU: SME Window & Sustainability guarantee
- Financial advisory services – Innovation Fund
- Financing SMEs for Sustainability – Lessons from OECD
- SME Climate Hub tool for SMEs

Link to follow the virtual event:

<https://ecconf.webex.com/ecconf/j.php?MTID=ma1fbfae0fb0e5c5bba9771c3eeb92088>

# Advanced materials for EU industrial leadership

**Sofie Nørager**

Deputy Head of Unit, DG RTD, European Commission

**Philipp Runge**

Legal and Policy Officer, DG GROW, European Commission

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Source: Shutterstock.com



**#AdvancedMaterials**

# **ADVANCED MATERIALS FOR INDUSTRIAL LEADERSHIP**

Cluster Talk on Advanced Materials as  
key enabling technologies

10 April 2024



**European  
Commission** |

# Advanced Materials – what is covered?

- **Intentionally designed** and engineered materials<sup>1</sup> to have:
  - **new or enhanced properties**, and/or
  - **targeted or enhanced structural features**to achieve specific or improved **functional performance**.
- Advanced materials include both:
  - **new emerging** materials from innovative manufacturing processes (high tech materials) and
  - materials that are **manufactured from traditional** materials (low tech materials).

# Examples of Advanced Materials



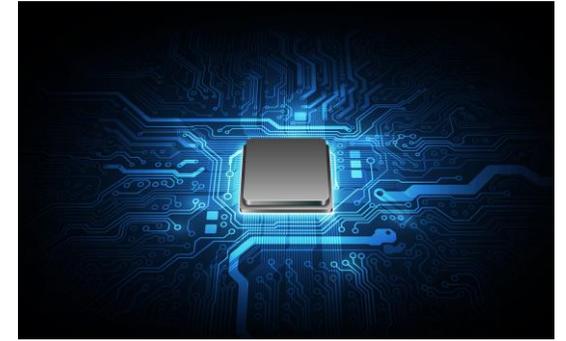
Metallic nanoparticles to enhance energy conversion in solar panels



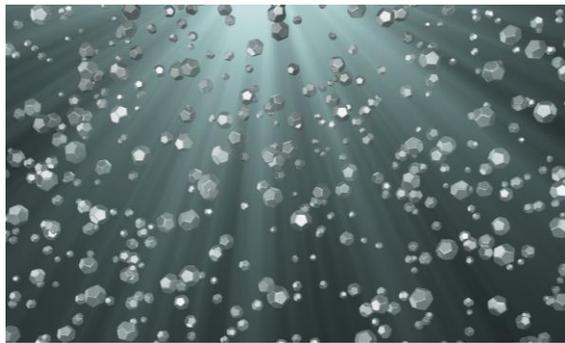
Thermochromic microcapsules absorbing and reflecting light



Sodium-ion based batteries storing energy using more abundant materials



New materials 'beyond silicon' for the next generation of chip technologies



Elastomers and nanocrystals that enable flexible electronics for smart devices



Bio-based materials with increased insulation and circularity capacity



Recyclable carbon reinforced plastics for wind-mill blades, airplane wings or sports equipment.

# Policy Context



- Advanced materials offer a wealth of **solutions**
  - **Key enablers & innovation drivers** for the **Green Deal** & the **Digital Transition**
  - **Many application areas across sectors**, e.g. in new clean energy technologies for the **Net-Zero Industry Act**
  - **Potential to substitute** certain Critical Raw Materials (CRMs) for the **CRM Act**
- **Increasing demand** expected for advanced materials e.g. for renewable energy, batteries, zero-emission buildings, semiconductors...
  - Improved **efficiency** and **performance**
  - Customer demand for **circular, safe and sustainable** products



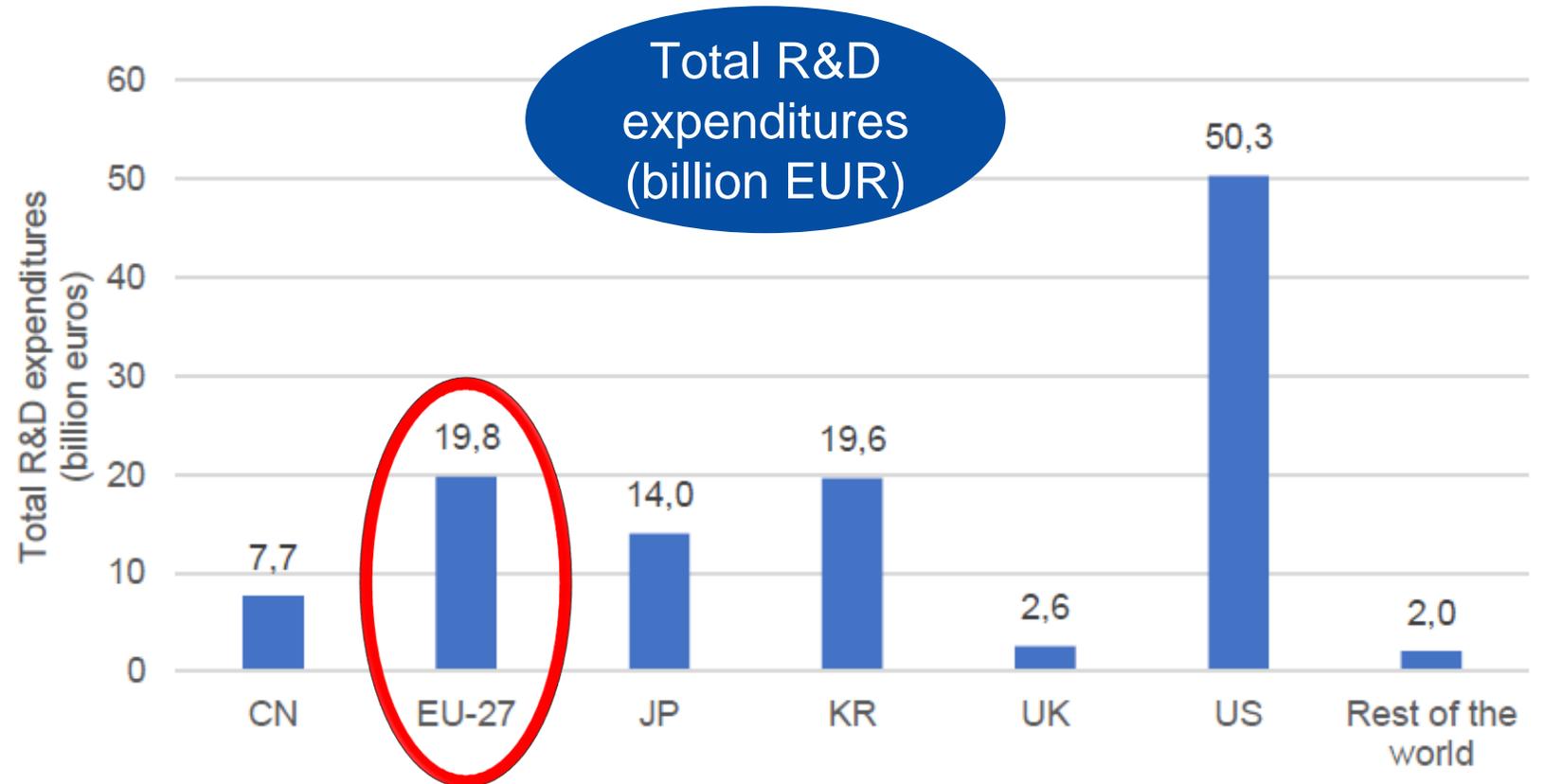
# Advanced Materials – EU Global Positioning

## Patent share

The **EU accounts for 15% of patents in advanced materials** vs 28% in US and 24% in Japan.

## Patent trend

The **patent trend in EU remains stable**, while it rises in China, US and Japan.



# Ambition

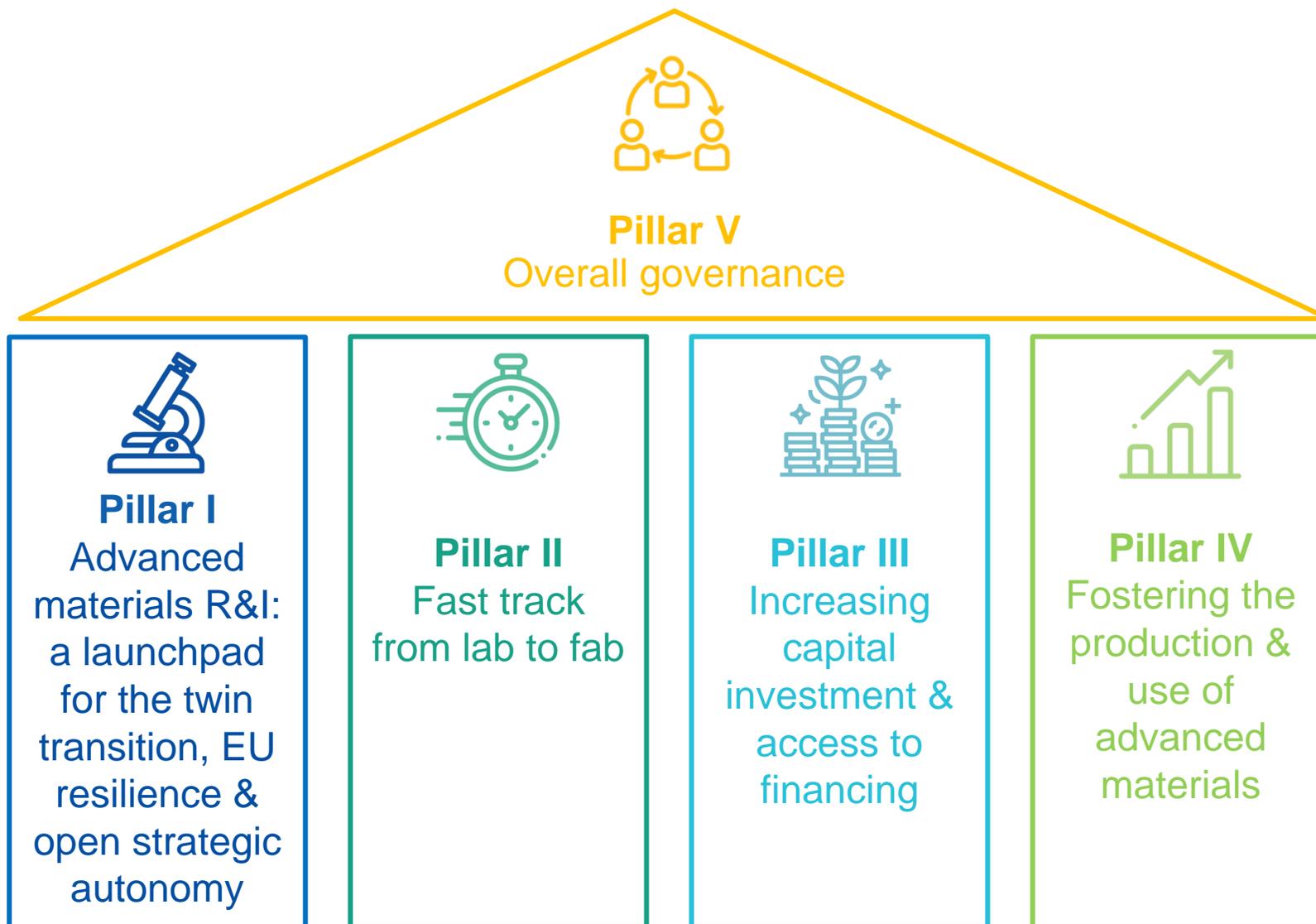


To strengthen the EU's **resilience** and **open strategic autonomy** and to deliver on the **Green Deal**, Europe must :

- **accelerate** its advanced materials research & technology development
- **scale up** its innovation and manufacturing capacity and
- **step up** the industrial uptake of advanced materials

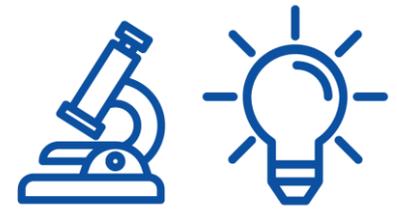


# The Strategy

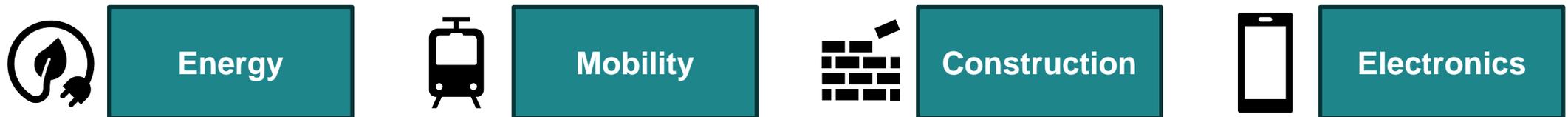


# Pillar 1

## European R&I: Actions



### 1. Common R&I objectives and priorities: co-created with Member States\*



\*see **Annex** to Communication Advanced Materials for Industrial Leadership for **preliminary list of R&I priorities**

### 2. 4 areas as a starting point ⇒ **updates foreseen**

### 3. Identification of **R&I needs** for the substitution of critical raw materials with advanced materials

# Pillar 2

## Lab to Fab: Actions



### 4. Material Commons

- **European Digital Infrastructure**, possibly in the form of a European Digital Infrastructure Consortium
- Building on national initiatives, such as Diadem (France) and MaterialDigital (Germany)

### 5. Access to Technology Infrastructures

- **Single-entry catalogue**, with relevance across industry, particularly for SMEs
- Currently, **28 available test beds**, with a funding of EUR ~319 Million
- **Funding possibilities** for further technology infrastructures

# Pillar 3

## Capital Investment & Finance: Actions



- 6. Horizon Europe partnership «Innovative Materials for EU»**
  - **Public-private, co-programmed, at least EUR 500 Million (2025-2027)**
- 7. European Forum for Important Projects of Common European Interest**
- 8. European Innovation Council**
  - EUR 130+ Million (2024), incl. nanomaterials, solar-to-x, quantum components
- 9. European funding instruments**
  - Innovation Fund
  - STEP
  - Invest-EU

# Pillar 4

## Production & Use: Actions



10. Working with **public procurers** to boost the use of advanced materials
  - via 'Big Buyers working together project'
11. Launch **Advanced Materials Academy**
  - EUR 10 Million Horizon Europe to EIT for call to KICs (2024)
12. Improve **standards** in collaboration with CEN/CENELEC/ETSI & ISO
  - e.g. characterisation and testing
13. **Analyse production, use & patent landscape** of advanced materials
  - EUR 600 000 for the two analyses

# Pillar 5

## Governance: Actions



### 14. Technology Council

- Composed of **ministries** (research, industry), **R&I stakeholders** - including **industry**
- **Countries associated** to Horizon Europe included
- **Commission expert group** to advise on steering
- **Link** with Social Partners, Industrial Alliances, European Industrial Forum, Horizon Partnerships, Advanced Materials Group of Strategic Energy Plan
- **International cooperation**



European  
Commission

# Thank you

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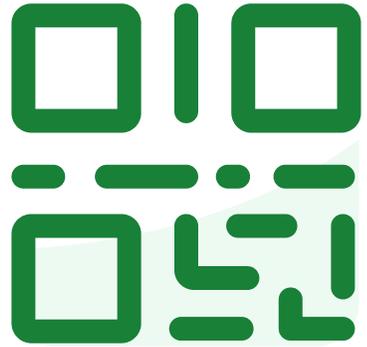
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**#AdvancedMaterials**

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**Do you experience an increased demand for advanced materials in your sector?**

ⓘ Start presenting to display the poll results on this slide.

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**Where do you see the challenges for EU industrial leadership in advanced materials?**

ⓘ Start presenting to display the poll results on this slide.

# Panel debate

**Annabelle Sion-Henry**, Head of European Affairs, POLYMERIS

**Eva Milella**, President, IMAST Italian technological district for the engineering of polymeric and composite materials and structures

**Magdalena Cholewińska-Falarz**, Chief Innovation Officer, Silesian Nano Cluster

# FUNDING OPPORTUNITIES

# Explore the new EU Funding & Tenders Portal

- The [Portal](#) is your **one-stop-shop** for EU funding and tender opportunities. The Portal is now available in its new shape and brings a range of **novelties**:
  - A Fresh Look & Feel
  - Advanced Search Capabilities
  - Tailored Recommendations
  - Enhanced Filtering
  - Engaging Content



# EIT Raw Materials Booster Call 2024-2025 for Startups and SMEs

- EIT Raw Materials is the world's largest innovation community in the raw materials sector. It collaborates with start-ups, scale-ups, and SMEs to help them **scale globally**.
- EIT Raw Materials is seeking companies developing solutions (products and services) supporting the three EIT Raw Materials Lighthouse programmes:
  - **Responsible Sourcing Lighthouse:** leads the innovation in mineral exploration, responsible sourcing and processing of raw materials for Europe's green future.
  - **Sustainable Materials Lighthouse:** guides innovation in the making, using, and recycling of sustainable and cost-efficient raw materials for future green mobility and energy.
  - **Circular Societies Lighthouse:** fosters innovation in the radical shift to a circular economy and society enabling economic growth and carbon-neutrality.
- Deadline: 27 May 2024
- HORIZON-EIT-2023-25-KIC-EITRAWMATERIALS - EIT Raw Materials Business Plan 2023-2025  
Topic ID: EIT RM BP23-25
- Published on [EU Funding & Tenders Portal](#)

# Data Space for Manufacturing

- Proposals should aim to achieve the following objectives:
  - **Scale up deployment and use of data space(s)** for manufacturing to enhance operations and support transition to a greener and circular economy.
  - Enable **new business models** such as Manufacturing-As-A-Service and virtual reality for industrial worlds.
  - Contribute to the **twin green and digital transition** of manufacturing industries.
- In order to **foster sustainability, efficiency, and innovation**, a scope has been outlined for the European initiative with targeted actions:
  - Agile supply chain management and risk mitigation through data sharing.
  - Transition to a greener and circular economy with enhanced business opportunities for industrial data services.
- Deadline: 29 May 2024
- DIGITAL-SIMPLE DIGITAL Simple Grants  
TOPIC ID: DIGITAL-2024-CLOUD-DATA-06-MANUFSPACE
- Published on [EU Funding & Tenders Portal](#)

# EU-Ukraine Cluster Partnership Programme

- The action will support **Ukrainian business integration in EU value chains** and the development of **cooperation projects and partnerships** between European and Ukrainian clusters and business network organisations.
- The programme will be implemented by consortia of organisations that are interested in establishing and running a **Cluster Partnership** (referred to as Partnerships).
- The proposal shall address both specific objectives:
  - Developing **value chains interlinkages** between EU and Ukrainian companies (networking).
  - Fostering the **cluster capacity-building and the professionalisation of support** for both EU and Ukrainian SMEs.
- Deadline: 4 June 2024
- SMP-PJG SMP Project Grants;  
TOPIC ID: SMP-COSME-2024-CLUSTERUA-01
- Published on [EU Funding & Tenders Portal](#)

# EU-Ukraine Cluster Partnership Programme: Info Session

- Info session **on policy background, call text, and financial provisions with Q&A**
- **22 April, 9:30 – 12:00 CEST**
- Register here:  
[https://eisma.ec.europa.eu/events/online-info-session-call-eu-ukraine-cluster-partnership-programme-smp-cosme-2024-clusterua-01-2024-04-22\\_en](https://eisma.ec.europa.eu/events/online-info-session-call-eu-ukraine-cluster-partnership-programme-smp-cosme-2024-clusterua-01-2024-04-22_en)



**Online Info Session**  
22 April 2024, 09:30-12:00 CEST

EU-Ukraine Cluster Partnership Programme  
(SMP-COSME-2024-CLUSTERUA)

**#SINGLEMARKET**

# Opportunities for SMEs: Calls from Euroclusters

- AIBC: Open call for SMEs from the **ICT, mobility, logistics, energy and/or manufacturing sectors** to participate in **international mission** to Austin, TX, USA; deadline 16 May
- CirInWater: Knowledge lump sum is willing to boost SMEs' development or growth by facilitating **access to external training or consultancy services**; meant for an individual SME that is offering **water-smart solutions**, especially for the agrifood & energy-intensive industries; deadline 2 October 2024
- CREATHRIV-EU: 2nd Call for financial support to CCI ( **creative and cultural industries**) SMEs - **Cross-fertilisation** Prize; deadline 22 April 2024
- E-BOOST: Supporting innovative **Products & Services** development in **electromobility** sectors; deadline 31 May 2024
- E-BOOST: **Mobility** Lump Sum to Mobility and Industry **Suppliers Meeting** (MISM) mission; deadline 31 May 2024
- ELBE: Call for Internationalisation UK, USA & AUSTRALIA; deadline 20 May 2024
- FRIEND CCI: Call for **providers** offering solutions in **digitalisation, greening, and internationalisation** to collaborate with **Creative and Cultural** SMEs for the realization of funded projects; deadline 1 August 2025
- GEMSTONE: Financial support for **training** related to **Green Manufacturing**; deadline 31 December 2024
- IKAT: **Tourism** 2nd Call for SMEs in Europe - Financial support for services; deadline 15 May 2024
- INGENIOUS: **Internationalisation** grant for SMEs operating in **energy-intensive industries** to develop activities related to Africa, Asia, North America and Latin America; deadline 30 September 2024
- INGENIOUS: **Training** grants to help SMEs improve their digital skills, green transition, resilience preparedness and reskilling and upskilling of the workforce; deadline 14 February 2025

# Opportunities for SMEs: Calls from Euroclusters

- PIMAP4Sustainability: Support for **upskilling and reskilling** projects for photonics, advanced materials, advanced manufacturing, aerospace, metalworking and industrial production SMEs; cut-off 30 April 2024
- PIMAP4Sustainability: Training/Services open call with three strands: the two first ones will allow European SMEs to pursue **trainings/services** related to **Green Transition and Internationalisation** and the third one - the International mission support scheme - will help SMEs in **attending the PIMAP4Sustainability Japan mission** that will take place in June 2024; cut-off 10 May 2024
- POLREC: Open Call for **Internationalisation** of **Polymer/Elastomer recycling** SMEs; deadline 22 May 2024
- RE-CENTRE: Financial support for participation of SMEs (traditional furniture and living sector, IT sector, and green/circular economy sector) in **B2B meetings** with entities from Mexico or Chile; deadline 31 May 2024
- RESIST: 2<sup>nd</sup> **Innovation** Open Call for improved technologies and processes in production in the **Automotive – Mobility – Transport** ecosystem; deadline 12 December 2024
- RESIST: **Networking and marketing** FSTP for SMEs from the **Automotive – Mobility – Transport** ecosystem; deadline 20 December 2024
- RESIST: **Internationalisation** FSTP for activities in target markets; deadline 20 December 2024
- RESIST: **Coaching and mentoring** for assessment and feasibility services; deadline 1 November 2024
- SILEO: 1st Open Call for **Advanced Technology Uptake** Projects for **lighting and furniture SMEs**; deadline 12 April 2024
- SILEO: Open Call for Hack Day Travel Vouchers – Romania; deadline 19 April 2024
- **All calls here:** <https://clustercollaboration.eu/open-calls>

# Register for the next Talks

**17 April**

Autonomy, innovation and security: EU strategies for Aerospace and Defence

**24 April**

Innovation through integration: How to create and engage a meta-cluster

# Continue the discussion



<https://www.linkedin.com/groups/9503062/>

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