

EUCLUSTERS TALKS ★

The Future of European Competitiveness: Role of Clusters

2 October 2024

08:30-09:45 CET

Online

Agenda

1. News from the European Cluster Collaboration Platform
Ángela Negrete Benedí, Team Member European Cluster Collaboration Platform
2. Introduction
Marek Przeor, Team Leader – Cluster Policy, DG GROW, European Commission
3. Contribution of Clusters to the Future of European Competitiveness
Athanasios Konstandopoulos, Chief Scientific Advisor, CHORUS, Professor of Chemical Engineering, Aristotle University Thessaloniki, Greece
4. Panel debate
Dr. Daniel Stadler, Cluster Manager, EIN Quantum Cluster NRW
Luís Martins, President, Cluster Portugal Mineral Resources
Patricia Tames, Deputy Director General, AFM Cluster for Advanced & Digital Manufacturing Technologies
Hickmah Tagauly, Vice President CEBR – Council of European Bioregions
Diego Carballo, European project manager, AeroSpace Valley
5. Funding opportunities
Ángela Negrete Benedí, 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

Apply for the next Cluster Booster Academy

The [Academy](#) will involve up to **50 participants** and will run for **5 days** in a hybrid format including an individual coaching session in between:

3 days of online training sessions:

6 November: from 10 AM to 2 PM CET

11 November: from 10 AM to 2 PM CET

15 November: from 10 AM to 2 PM CET

1 coaching session to be scheduled individually

2 days of in-person training sessions: 3-4 March 2025, hosted at the Warsaw University of Technology

DEADLINE: 17 October 2024



1. Provide **learning opportunities for cluster managers** to further develop their skills
2. Meet the needs of European cluster management teams in their **daily work**
3. Offer cluster management teams the chance to **learn from each other's experiences**
4. Provide the opportunity to co-shape **new European value chains**
5. Support cluster management teams and stakeholders in understanding and **contributing to the European policies and programmes**
6. Help in **developing better policy related to clusters**
7. Improve the **skills of clusters' staff** thanks to a “train the trainers” approach by disseminating their knowledge further

Save the date for the upcoming Clusters meet Regions!



We invite you to join our “Clusters meet Regions” – transnational events that bring together **clusters and policymakers** at the local, regional, and national levels, with the aim of strengthening the industrial ecosystem in a selected host region.

The events facilitate the **implementation of good practices** where clusters play an active role in regional economies and are drivers for economic transition, and to create and promote **collaboration** between clusters and regional stakeholders for the industrial development of the regions.

How has STEP initiative fueled your Cluster Organization? Give us your feedback!

Have you applied for EU funding or looked into available EU funding opportunities lately? The **European Commission wants to hear** about your experiences to help improve access to these funds. We invite you to share your insights through this brief survey: [EU Funding Research](#).

Tell the European Commission' about any challenges you faced, what factors influence your decision to submit a proposal, and how we can better support you. **Your feedback is crucial** in making the funding process smoother and more effective. We appreciate your input!



Introduction from the European Commission

Marek Przeor,
Team Leader, DG GROW, European Commission

Context

- [European Council conclusions 17-18 April 2024](#)
- [Council conclusions on the future of industrial policy \(24 May 2024\)](#)
- [A single market for the benefit of all \(Council conclusions, 24 May 2024\)](#)
- [Strategic agenda 2024-2029](#)
- [European Commission 2024-29](#) (Political guidelines, Commissioners designate)

- [Enrico Letta report - Much more than a market](#)
- [Mario Draghi report: The future of European competitiveness](#)

Contribution of Clusters to the Future of European Competitiveness

Athanasios Konstandopoulos

Chief Scientific Advisor, CHORUS

Professor of Chemical Engineering, Aristotle University Thessaloniki, Greece

How Clusters Can Contribute to the Future of European Competitiveness

Athanasios G. Konstandopoulos *PhD, KLH*

Chief Scientific Advisor, CHORUS Cluster

Co-Founder & Senior Partner SYNEST PC

Professor of Chemical Engineering, Aristotle University

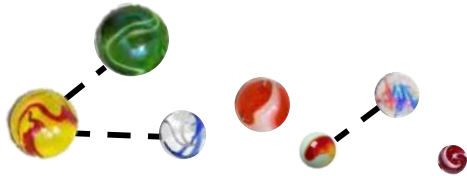
Thessaloniki, Greece

agk@auth.gr , agk@sy-nest.com

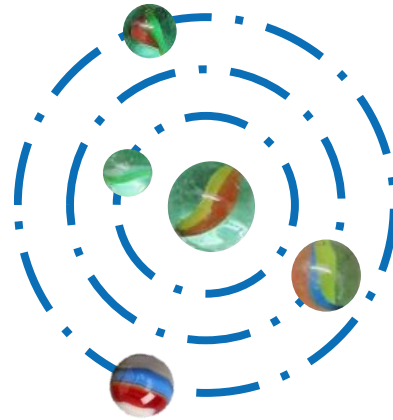
<https://www.linkedin.com/in/athanasios-g-konstandopoulos-b42565a/>

Competitiveness Drives Evolution of Organizations

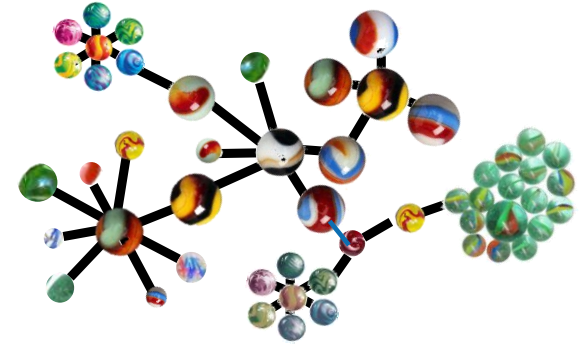
Stage 1:
Islands of Excellence
(driven by individuality)



Stage 2:
Centers of Competence
(driven by specialization)



Stage 3:
Co-Evolving Ecosystems
(driven by synergy)



Private Sector

▪ Companies



Public Sector

▪ Individual
Agencies/Offices

▪ Clusters
▪ Industrial Associations



▪ Municipal Authorities

▪ Meta-organizations
(e.g. Cluster Networks)



▪ Regional Authorities
▪ Government

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Globalization is Reversing...

Global Sourcing of Value Chain Used to Offer Opportunities to All Countries but Trend is Reversing...

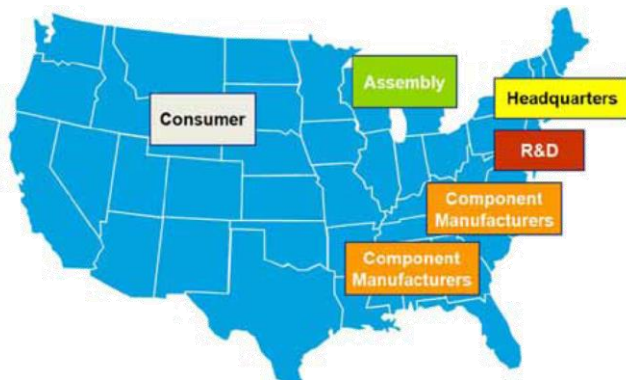


Image source: Deloitte

Globalization



De-globalization

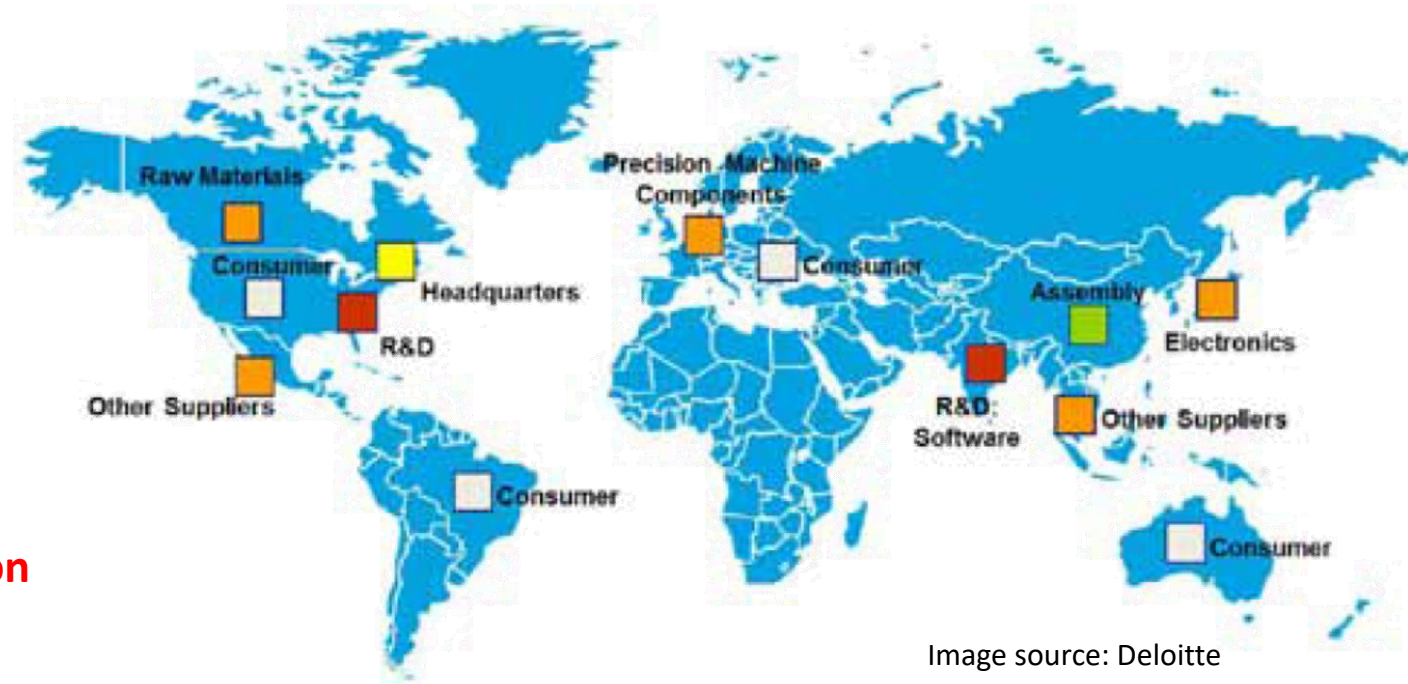


Image source: Deloitte

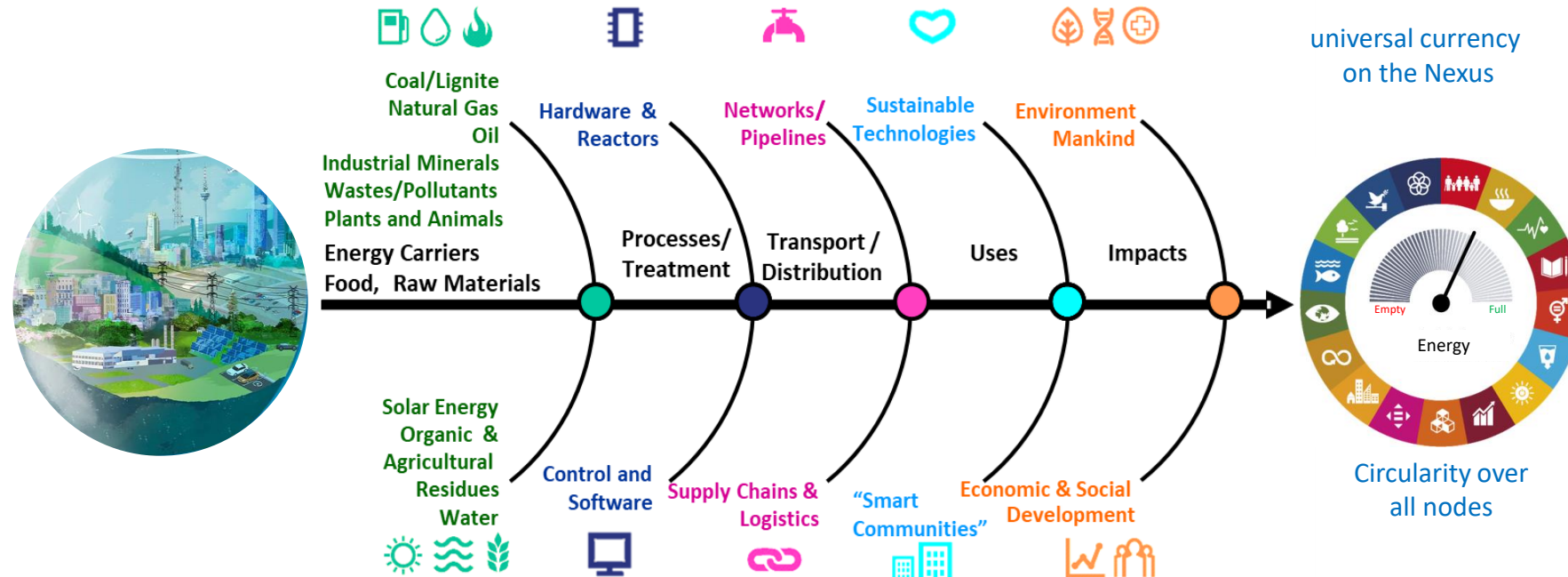
Inspiration from Thermodynamics, Chemical Equilibria and Reversible Reactions

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Global Considerations

- Nexus nature of the challenges / Interdependencies
- Need for a holistic/synergetic framework:
 - ✓ **Unified view** of raw materials, increase **local sourcing**
 - ✓ **Distributed** processing, “edge manufacturing”, scale-up by **modularity**
 - ✓ **Resilience** exploiting network & complexity science for latent potentials /criticalities
 - ✓ Exploit **synergies** to foster sustainable use within **symbiotic** (“smart”) communities
 - ✓ Assess **multidimensional impacts** on environment, society and economy

The Resource NEXUS: Building sustainability, resilience and competitiveness



<https://ec.europa.eu/jrc/sites/jrcsh/files/20141021-certh-jrc-conference-konstandopoulos.pdf>

- **Unified view** of raw materials, increase **local sourcing**
- **Distributed** processing, "edge manufacturing", scale-up by **modularity**
- **Networks** & complexity science, latent potentials /criticalities, **resilience**
- Exploit **synergies** to foster sustainable use within **symbiotic** ("smart") communities
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Synergies over Multiple Domains

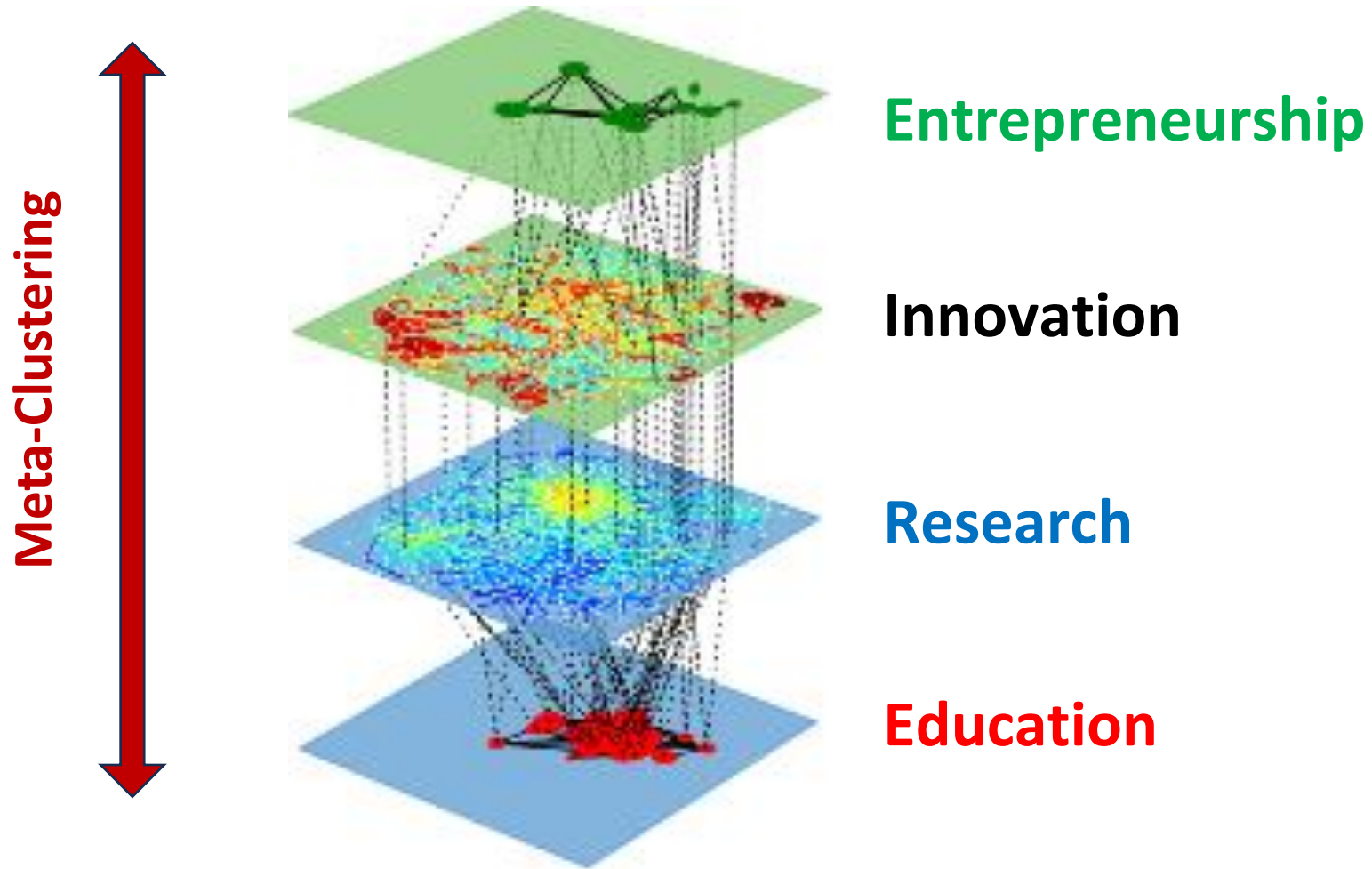
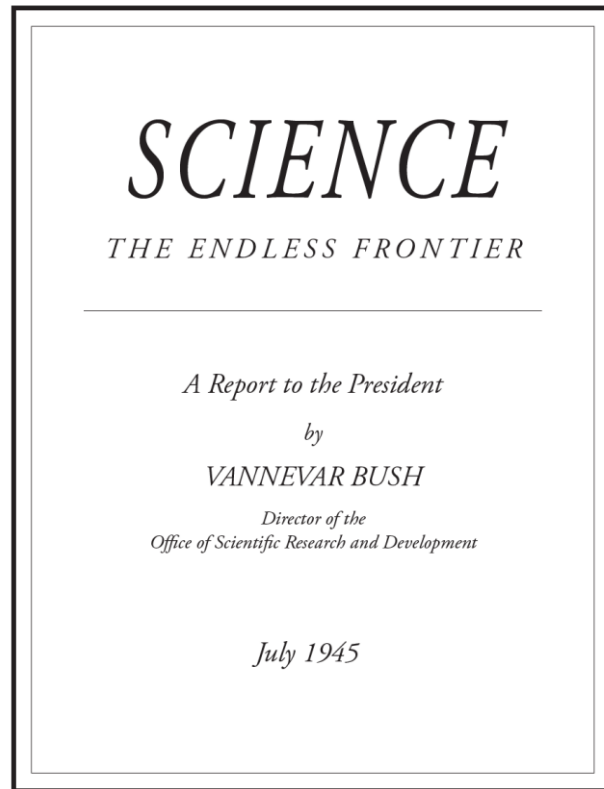


Image source https://mnets.github.io/pymnet/_images/index-example.png

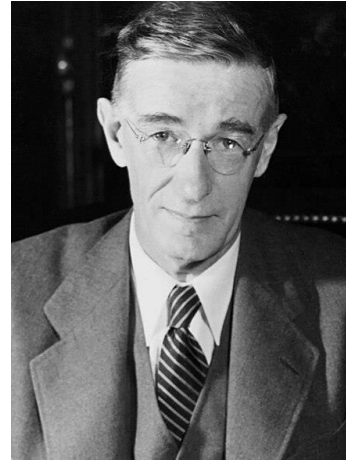
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From Vannevar Bush (1945) to Mario Draghi (2024)



228 pages

Innovation count: 1



*A nation which borrows
its basic knowledge will
be hopelessly
handicapped in the
race for innovation*



397 pages

Innovation count: 547



*To meet the objectives laid out
in this report, a minimum
annual additional investment
of EUR 750 to EUR 800
billion is needed*

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From Vannevar Bush (1945) to Mario Draghi (2024)

Similarities

- Need for **scientific and technological progress** to drive **economic growth and competitiveness**.
- **Government involvement** in supporting research and technology
- Focus on **human capital** through **education and skills** development for future competitiveness
- **International collaboration** to maintain global leadership in science and technology.
- Importance of **public-private cooperation** in advancing technological progress

Differences

- Bush relies on **basic research** to lay the foundation for future technologies, while Draghi focuses on **applied research** and immediate innovation to address current challenges
- Draghi emphasizes an 80% **reliance on private sector investment**, while Bush advocates for **strong government funding** of research without specific reliance on private capital

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Clusters meet the Draghi Report Recommendations

Horizontal Recommendations	Cluster Contributions
Accelerating innovation	Facilitate collaborative R&D across industries to foster cross-border/cross-ecosystem innovation and commercialization. Shared R&D facilities reduce cost for SMEs. [<i>Silicon Saxony (Germany)</i>]
Energy Transition and Decarbonization	Clusters promote joint investments in clean energy technologies. They foster public-private partnerships for energy efficiency improvements. [<i>Basque Energy Cluster (Spain)</i>]
Security and Reducing Dependencies	Clusters build local supply chains for critical materials , reducing external reliance. They enhance resilience through cooperation between regional suppliers. [<i>Nordic Mining Cluster (Norway)</i>]
Strengthening the Single Market	Encourage partnerships between large companies and SMEs to foster innovation while maintaining competitive dynamics, helping businesses to navigate regulatory barriers and harmonize standards across borders , while they promote cross-border trade through collaborative projects . [<i>European Automotive Cluster Network (EU-wide)</i>]
Financing Investments	Clusters pool resources to attract both public and private funding and develop investment ecosystems that bring together financial institutions and businesses to mobilize large-scale investments for innovation and infrastructure. [<i>European Battery Alliance (EU-wide)</i>]
Governance and Coordination	Clusters align local, regional, and national policies with broader EU competitiveness goals and establish cluster-led governance models that streamline decision-making and foster efficient collaboration across industries. [<i>Medicon Valley Alliance (Denmark and Sweden)</i>]

Clusters meet the Draghi Report Sectoral Policies

Sectoral Policy	Cluster Contribution
Energy	Clusters drive the development of local renewable energy projects and foster cross-industry collaboration for energy efficiency solutions. [<i>CleanTech Cluster (Austria)</i>]
Critical Raw Materials	Clusters help establish regional value chains for critical raw materials, supporting recycling, sustainable mining, and innovation. [<i>Lithium Iberia Cluster (Spain and Portugal)</i>]
Digitalisation and Advanced Technologies	Clusters support digital technology development and adoption across sectors, including AI, IoT, and cloud computing, improving efficiency and competitiveness. [<i>Digital Innovation Hub (Germany)</i>]
Semiconductors	Clusters foster collaboration between semiconductor suppliers, manufacturers and research institutions, driving innovation and expanding Europe's semiconductor industry. <i>Digital Innovation Hub (Germany)</i>

Clusters meet the Draghi Report Sectoral Policies

Sectoral Policy	Cluster Contribution
Energy-intensive industries	Clusters help energy-intensive industries such as steel, chemicals, and cement reduce their carbon footprint by developing new technologies, sharing best practices in energy-efficient technologies and improving energy efficiency. [<i>Cluster Energie Region (Austria)</i>]
Clean Technologies	Clean tech clusters support the scaling and commercialization of clean technology solutions like renewable energy, water management, and waste reduction technologies, helping Europe achieve sustainability goals. [<i>GreenTech Cluster (Austria)</i>]
Automotive	Automotive clusters lead the transition to zero/negative carbon mobility, promoting innovation in sustainable transport technologies. [<i>Automotive Cluster of Slovenia (Slovenia)</i>]
Defence	Defence clusters enhance R&D, manufacturing, and cooperation in critical defence technologies, boosting Europe's security and autonomy. [<i>Defense Cluster (France)</i>]

Clusters meet the Draghi Report Sectoral Policies

Sectoral Policy	Cluster Contribution
Space	Space clusters facilitate collaboration in satellite technology and space exploration and the commercialization of space technologies, contributing to Europe's leadership in space innovation. [<i>SpaceTech Cluster (France)</i>]
Pharma	Clusters help pharmaceutical and biotech companies innovate by facilitating collaboration between research institutions, drug manufacturers, and government entities. [<i>BioValley Cluster (France, Germany, Switzerland)</i>]

Thank you!

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#Cluster4Comp**

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Which are the key clusters' capabilities to contribute to European competitiveness?

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What specific measures or strategies should European clusters adopt to improve European competitiveness?

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What is in your opinion the most important factors for European competitiveness to thrive in the future?

① Start presenting to display the poll results on this slide.

Panel debate

Dr. Daniel Stadler, Cluster Manager, EIN Quantum Cluster NRW

Luís Martins, President, Cluster Portugal Mineral Resources

Patricia Tames, Deputy Director General, AFM Cluster for Advanced & Digital Manufacturing Technologies

Hickmah Tagaully, Vice President, CEBR –Council of European Bioregions

Diego Carballo, European Project Manager, AeroSpace Valley, France

FUNDING OPPORTUNITIES

Zero-pollution cities

- Projects are expected to contribute to the following outcome:
 - **Improved methods** for assessing pollution exposure (air, water, soil, noise) and their health impacts at the local/regional level;
 - **Better assessment of pollution exposure** for vulnerable groups, including those affected by socio-economic factors, to inform more targeted health impact assessments;
 - Enhanced understanding of behavioral economics, psychology, and organizational behavior, to design **more effective measures** for reducing pollution in urban areas;
 - **Comparative analysis** of successful pollution reduction strategies at the local level, identifying key factors for success and potential replication in other areas
- Topic ID: HORIZON-RIA HORIZON Research and Innovation Actions
- Deadline: 11 February 2025
- Published on [EU Funding & Tenders Portal](#)

Demand-led innovation through public procurement

- Projects are expected to contribute to the following outcome:
 - **Strengthened EU civil security capabilities** for addressing evolving security challenges through the adoption of innovative, capability-driven solutions.
 - **Enhanced collaboration between demand and supply sectors** by increasing cooperation among market actors which will foster the swift industrialization, commercialization, and deployment of successful security research outcomes.
 - **Cross-cutting knowledge creation** by generating research-based knowledge in areas that cut across multiple security domains.
 - **Synergy-building and clustering initiatives**
- Topic ID: HORIZON-PCP HORIZON Pre-commercial Procurement
- Deadline: 20 November 2024
- Published on [EU Funding & Tenders Portal](#)

Living Labs in urban areas for healthy soils

- Projects are expected to contribute to the following outcome:
 - **Increased capacities for participatory, interdisciplinary, and transdisciplinary R&I** across EU Member States and Horizon Europe Associated Countries, fostering cooperation among research, practice, and policy to co-create and test solutions for soil health.
 - **Enhanced soil health in rural and urban areas** where living labs are deployed, supported by an established monitoring framework.
 - **Improved accessibility of practice-oriented knowledge, tools, and techniques** for urban communities, local councils/regions, and land managers, facilitating uptake of solutions for soil health and related ecosystem services
 - **Increased awareness among policymakers** in the EU and of local needs related to soil health, informing the design of more effective policies.
- Topic ID: HORIZON-RIA HORIZON Research and Innovation Actions
- Deadline: 08 October 2024
- Published on [EU Funding & Tenders Portal](#)

Non-thematic development actions by SMEs

- Projects must contribute to the following outcome:
 - **Innovative and cost-effective defence solutions** that enhance readiness, deployability, reliability, safety, and sustainability of defence forces.
 - **Increased involvement of SMEs** in the European defence ecosystem, boosting innovation capacity across Europe.
 - **Application of groundbreaking technologies** and novel concepts, including those adapted from civil applications to defence.
 - **Potential for future market creation** by facilitating access of SMEs to defence markets and supply chains.
 - **Strengthened European defence supply chains** and technological ecosystems, contributing to a competitive and resilient European defence industrial base.
- Topic ID: EDF-LS EDF Lump Sum Grants
- Deadline: 05 November 2024
- Published on [EU Funding & Tenders Portal](#)

Opportunities for SMEs: Calls from Euroclusters

- FRIEND CCI: Call for **providers** in the following areas: digitalization, green transition, service for internationalization; deadline 01 August 2025
- GEMSTONE: Financial support for **training** related to **Green Manufacturing**; deadline 31 December 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
- RESIST: **Coaching and mentoring** for assessment and feasibility services; deadline 1 November 2024
- RESIST: **Training** FSTP for SMEs in the **Automotive – Mobility – Transport** ecosystem; deadline 30 November 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.

Opportunities for SMEs: Calls from Euroclusters

- xBUILD-EU 2^{nc} call for proposals for **Innovate, Global and Digital Green** grants to make SMEs more resilient against value chain disruptions, deadline 2 October 2024.
- SILEO 3rd call for Expression of Interest for the SILEO Pool of Technology Uptake **Facilitators**, deadline 11 October 2024.
- SILEO 2nd Open Call for Advanced Technology Uptake Projects from SMEs operating in the lighting and furniture industry, deadline 25 October 2024.
- **All calls here:** <https://clustercollaboration.eu/open-calls>

Continue the discussion



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

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THANK YOU

