Industry 5.0: People at the heart of business

4 October 2023
08:30-09:45 CET

Online

#SingleMarket30
Agenda

1. News from the European Cluster Collaboration Platform
   **Nina Hoppmann**, Team Member, European Cluster Collaboration Platform

2. The concept Industry 5.0
   **Sean O'Reagain**, Deputy Head of Unit, DG RTD, European Commission

3. Panel debate
   **Diego Carballo**, European Project Manager, Aerospace Valley
   **Sean O'Reagain**, Deputy Head of Unit, DG RTD, European Commission
   **Sebastian Rynkiewicz**, President, Metal Processing Cluster
   **Tautvydas Pipiras**, Project Manager, Lithuanian Innovation Centre

4. Funding opportunities
   **Nina Hoppmann**, Team Member, European Cluster Collaboration Platform
Housekeeping rules

• 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
Start for Eurocluster-funded projects!

After the first open calls published by the Euroclusters, **SMEs are starting their projects** for a green, digital, and resilient Europe. Euroclusters are cross-sectoral, interdisciplinary and trans-European strategic initiatives of industry clusters and other economic actors such as research organisations, companies, etc. They provide financial support to SMEs for **innovation, adoption of technologies and processes, training, and internationalisation**.
Join Clusters meet Regions!

The objective of the ‘Clusters meet Regions’ events is to 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 collaborations between clusters and regional stakeholders for the industrial development of the regions.

- Lyon, France - 12-13 October 2023; registration open
- Prague, Czech Republic - 23-24 October 2023; registration open
- Düsseldorf, Germany – 8 November 2023; registration open
- Iași, Romania – 21-23 November 2023
- Kraków, Poland – 11-12 December 2023
EEN Townhall talk about Single Digital Gateway on 23 October

Enterprise Europe Network invites you to join the Townhall talk on 23 October, 10:00 – 11:00 CET

The event will focus on:

• on the 1st Implementation Report of the Single Digital Gateway (SDG)
• the potential of SDG for the business support organisations and SMEs
• enabling discussion on possible further improvements.

Register by 19 October:
https://ec.europa.eu/eusurvey/runner/EENTownHallSDGOct2023
Can’t join in person?

Register as a virtual attendee & stream the event on the 'Live Now' page.
The concept Industry 5.0

Sean O’Reagain
Deputy Head of Unit, DG RTD, European Commission
Industry 5.0: People at the Heart of Business

EU Clusters Talk, 4 October 2023

Seán O’Reagain
Deputy Head of Unit, ‘Industry 5.0’
Directorate General for Research and Innovation
European Commission
Digitalisation is ...

- **TRANSFORMING** European industry
- **ACCELERATING** production processes
- **CHANGING** the role of workers

**Primary target**
increase efficiency & productivity

This transformation is Industry 4.0

@EUScienceInnov  #Industry5.0  #ResearchImpactEU

From shareholder to stakeholder value

**INDUSTRY 5.0**
human-centric, sustainable and resilient

76% of executives agree that organizations need to dramatically re-engineer the experiences that bring technology and people together in a more human-centric manner. (Accenture)
Industry 5.0 ...

HUMAN-CENTRIC
... promotes talents, diversity and empowerment

RESILIENT
... is agile and resilient with flexible and adaptable technologies

SUSTAINABLE
... leads action on sustainability and respects planetary boundaries

From shareholder to stakeholder value
INDUSTRY 5.0
human-centric, sustainable and resilient

@EUSciencelInnov #Industry5.0 #ResearchImpactEU
INDUSTRY 5.0 recognises the power of industry to achieve societal goals beyond jobs and growth to become a RESILIENT PROVIDER OF PROSPERITY, by making production RESPECT THE BOUNDARIES OF OUR PLANET and placing the WELLBEING OF THE INDUSTRY WORKER at the centre of the production process.

From shareholder to stakeholder value

INDUSTRY 5.0
human-centric, sustainable and resilient
Industry That Works for People

• From technology-driven to **human-centric approach**
• **Safe** and **qualitative** jobs, **wellbeing** of the worker
• Workers as **investments**, not a mere cost
• Technologies to **enhance** workers’ **capacities** and foster **creativity**
Attracting the Best Talents

- Scarce skillsets in the digital age
- Young people want employers who share their values

By 2025, 75% of the workforce will be millennials. 75% of millennials would take a pay-cut to work for a socially responsible company.

40% of millennials said they have taken one job offer over another because of the company’s sustainability.

Nearly half of Generation-Z says they would prioritize a job offer that gives them mobility, freedom, and flexibility.

Article
The Deloitte Global Millennial Survey 2020
Millennials and Gen Z hold the key to creating a “better normal”
Deloitte’s research reveals “next generation” in the face of upheaval and pandemic reveals needs of future generations. In the face of unprecedented change and economic disruption caused by the COVID-19 pandemic, millennials and Gen Z express a desire to build a better future.

From shareholder to stakeholder value
INDUSTRY 5.0
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World Economic Forum: creativity #3 most important skill in 2020, after critical thinking and problem-solving. 50% of all employees will need reskilling by 2025, as adoption of technology increases. LinkedIn: creativity is #1 top skill companies need.
Sustainable Industrial Production

- resource efficiency = doing “better with less”
- adopt full product life-cycle perspective
- improve environmental outcome
- help reach Sustainable Development Goals (SDGs)
  “Industry, Innovation and Infrastructure” (#9) and
  “Responsible Consumption and Production” (#12)

Industry is responsible for 15% of the EU’s emissions. Between 1990 and 2019, the EU industry reduced its CO2 emissions by 40% (compared to 25% overall reduction). Between 1990 and 2016, the energy efficiency of industry in the EU improved by 38%, or 1.8% per year.
Resilient Industry

- Response to geopolitical and climate challenges
- Flexible and adaptable technologies
- Appropriate skillsets
- Revisiting supply chains
- Societal role of industry
Why Industry 5.0?

- **Reduced cost** due to resource efficiency
- **Empowered workers** remaining in control
- Competitive industry by **attracting best talent**
- Adapted **training for evolving skills**
- **Competitive edge** in new markets
- Industry 5.0 is a **solution provider** for people and our planet

From shareholder to stakeholder value
**INDUSTRY 5.0**
human-centric, sustainable and resilient

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Industry 5.0: Policy Role

Concrete actions are needed, in a wide range of policies, including:

- **environment**: industrial waste prevention, secondary materials markets, ...
- **education**: develop STEM skills, women’s engagement, entrepreneurial skills, ...
- **employment**: evolving skills needs & employability, labour market transformation, ...
- **social**: social security, inclusiveness, ...
- **regional**: supporting European regions facing major transitions, ...
- **taxation**: tax policies for industry promoting green, human-centric industry...
- **technology**: R&D for human-centric technologies, ...
Industry 5.0 Round-Table with Industry Leaders (April 2022)

- Industry 5.0 future-proofs industry and innovation ecosystems
- Industry 5.0 facilitates cross-sectoral cooperation to enhance resilience of value chains
- Industry 5.0-driven companies lever digitalisation to fulfil purpose
- Appropriate framework conditions essential: directionality, coherence and appropriate policy-level incentives
Industry 5.0: Happening Now

- Momenta VC Industry 5.0 Fund
- European Institute of Technology - Manufacturing Industry 5.0 Flagships
- Dedicated Industry 5.0 Modules in University Courses
- First-Ever Industry 5.0 Award
Industry 5.0: Accelerating Adoption

- **Community of Practice** on Industry 5.0
- Industry 5.0 **Regenerative Business Compass**
- Development of ten Demonstration **Pilot Plants on Human-Centricity**
- Industry 5.0 **Case Studies: Drivers and Factors Supporting/Hindering Implementation**
- **Industry 5.0 Award** – Second Edition
Find out more

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From shareholder to stakeholder value
INDUSTRY 5.0
human-centric, sustainable and resilient
BEFORE WE GET STARTED...
Join at slido.com
#Industry50

1 Start presenting to display the joining instructions on this slide.
In your organisation, are you working on aspects of Industry 5.0?
Panel debate

Diego Carballo, European Project Manager, Aerospace Valley
Sean O’Reagain, Deputy Head of Unit, DG RTD, European Commission
Sebastian Rynkiewicz, President, Metal Processing Cluster
Tautvydas Pipiras, Project Manager, Lithuanian Innovation Centre
How is the concept “Industry 5.0” perceived by industry?
What is your takeaway from this EU Clusters Talk?
FUNDING OPPORTUNITIES
Assessing and strengthening the complementarity between new technologies and human skills

- Projects should contribute to
  - Deepened our **understanding on the potential and impact** of new technologies such as artificial intelligence technologies and robotics to substitute or complement **human skills** and in performing job tasks.
  - **Development and deployment of technologies** that complement and enhance human skills, and development of the corresponding skills in the workforce.

- Deadline: 7 February 2024
- HORIZON-RIA HORIZON Research and Innovation Actions
  Topic ID: HORIZON-CL2-2024-TRANSFORMATIONS-01-11
- Published on [Funding & Tenders Portal](http://www.example.com)
Beyond the horizon: A human-friendly deployment of artificial intelligence and related technologies

- Projects should contribute to
  - Understanding and awareness raising about **successful existing deployment** of AI and the impact they have on European economy and society, providing a reality check of capabilities/benefits, but also limitations of current AI solutions, and how the latter are currently addressed.
  - On the basis of lessons from successful deployment, analysis of the **implementation of the ethics principles** for trustworthy AI.
  - Structurally enhanced capacities to foresee, evaluate and manage the future and longer term **opportunities and challenges** associated with artificial intelligence and related technologies.
  - Well founded and prioritised **recommendations** for European policy on R&I and in other key areas

- Deadline: 7 February 2024
- HORIZON-RIA HORIZON Research and Innovation Actions Topic ID: HORIZON-CL2-2024-TRANSFORMATIONS-01-06
- Published on Funding & Tenders Portal
Collaborative intelligence – combining the best of machine and human (AI Data and Robotics Partnership)

- Projects should contribute to
  - Demonstrate the value of human-machine collaboration and interaction by improved effectiveness, intuitiveness, efficiency, completeness, limits of knowledge indication and other objective or quantifiable subjective measures.
  - Demonstrate how collaborative decision-making improves over human decision-making and that the collaborative decisions cover all stages of reasoning (that they are based on an improved coverage of data and knowledge sources, on an improved analytic ability to reason from input to output, and on a well-communicated decision).

- Deadline: 19 March 2024
- HORIZON-RIA HORIZON Research and Innovation Actions
  Topic ID: HORIZON-CL4-2024-HUMAN-01-07
- Published on [Funding & Tenders Portal](https://funding-and-tenders-portal.com)
Opportunities for SMEs: Calls from Euroclusters

- **DESIRE**: Innovation and internationalisation of e-Health solutions; deadline 13 November 2023
- **E-Boost**: Five calls to identify product innovations to reduce dependency on critical inputs and technologies in the E-BOOST value chains, to introduce new-to-firm products or services, and to engage actors from regions with different levels of economic development; targets are SMEs from the mobility ecosystem
- **EPICENTRE**: Support via mentoring, coaching and training for SMEs from Digital and Fintech to Health and Agri-food sectors; deadline 5 December 2023.
- **EuroBooSTeX**: Grant for textile SMEs to innovate through technologies and adapt business processes to enable the green and digital transition; deadline 8 November 2023
- **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 manufacturing, technology and solution providers SMEs, and in particular industrial equipment and tool providers, for implementation of a new green technology, service, product or business production process in a real operational environment; deadline 31 October 2023
- **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
- **METASTARS**: Call for innovation services for green technology development, digitalisation, upskilling and reskilling, internationalisation, and information security systems for SMEs from the aeronautics, space, defence and ICT sectors; deadline 31 December 2023
- **POLREC**: Innovation open call aims to support SMEs by funding their polymer recycling projects; deadline 31 October 2023
- **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
- **SUSTAIN**: Financial support to SMEs for developing new products, services or methods addressing the smart building construction challenges; deadline 1 November 2023
- **All calls here**: [https://clustercollaboration.eu/open-calls](https://clustercollaboration.eu/open-calls)
Come to our C2Lab!

SMEs, clusters, research organisations, social and public entities are invited to join an interactive workshop to meet, network, exchange ideas, and initiative new project proposals. Guided by experts on project creation and management, you have the possibility to forge new alliances and project consortia for the topic of your interest. You can either join with a concrete project idea or offer your skills and knowledge in new areas.

25-26 October 2023: Ljubljana, Slovenia

14-15 November 2023: Vilnius, Lithuania
Register for the next Talks

11 October  Takeaways from EU Industry Days
18 October  Cybersecurity
25 October  Industrial Alliances
Register on the European Cluster Collaboration Platform!
https://clustercollaboration.eu/

The European online hub for industry clusters
Strengthening the European economy through collaboration

Find partners per country, region, sector or industrial ecosystem
THANK YOU