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

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#### **Priorities of the European Commission (2019-2024)**

- ✓ A European Green Deal
- ✓ An economy that works for people
- ✓ A Europe fit for the digital age
- ✓ Protecting our European way of life
- ✓ A stronger Europe in the world
- ✓ A new push for European democracy





European Commission

# Industry 5.0

**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.









#### **Industry that Works for People**

- From technology-driven to human-centric approach
- **Safe** and **qualitative** jobs, **wellbeing** of the worker
- **Empowered** and **engaged** workers
- 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 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.



THREE-QUARTERS OF MILLENNIALS WOULD TAKE A PAY CUT TO WORK FOR A SOCIALLY RESPONSIBLE COMPANY, ACCORDING TO RESEARCH FROM CONE COMMUNICATIONS

The Deloitte Global Millennial Survey 2020 Millennials and Gen Zs hold the key to creating a "better normal" Deloitte research reveals "resilient generations." In the face of unprecedented health and

economic disruption caused by the COVID-19 pandemic, millennials and Gen Zs express resolve and a vision to build a better future.

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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.

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human-centric, sustainable and resilient

#### **Sustainable Industrial Production**

- Resource efficiency = doing "better with less"
- Circular and regenerative economy
- Lead the Twin transition
- 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
- Right skillsets
- Revisiting supply chains
- Societal role of industry





#### **Industry 5.0: Making It Happen**

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

- environment: industrial waste prevention, secondary materials markets, ...
- technology: R&D for human-centric technologies, ...
- 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



## How EU-funded research contributes to Industry 5.0

#### Some examples

BEYOND 4.0

Examining the future impact of new technologies on JOBS, BUSINESS MODELS AND WELFARE



Demonstrating ways FACTORY WORKERS AND AUTOMATION can operate in harmony, increasing productivity, quality, performance, satisfaction and safety

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Showing how cyber-physical systems, product life-cycle management, lifecycle assessment, augmented reality, and artificial intelligence technologies and methods can transform **CIRCULAR MANUFACTURING** 



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#### **Industry 5.0: Latest**

- Industry 5.0 Award: recognising the contribution of EU-funded projects whose results make European industry more resilient, sustainable, and human-centric
  ✓ Deadline for applications : 1 April 2022
- **ESIR expert group report** and dialogue with industry leaders in Spring 2022
  - <u>'Industry 5.0: A Transformative Vision for Europe Governing Systemic</u>
    <u>Transformations towards a Sustainable Industry'</u>
- Venture Capital fund (Momenta) on Industry 5.0



## Find out more



https://ec.europa.eu/info/research-and-innovation/research-area/industrial-research-and-innovation/industry-50\_en

