

Industry 5.0



What this approach is focused on, how it will be achieved and how it is already being implemented.

What is Industry 5.0?

European industry is a key driver in the economic and societal transitions that we are currently undergoing.

In order to remain the engine of prosperity, industry must lead the digital and green transitions.

Industry 5.0 provides a vision of industry that aims beyond efficiency and productivity as the sole goals, and reinforces the role and the contribution of industry to society.

It places the wellbeing of the worker at the centre of the production process and uses new technologies to provide prosperity beyond jobs and growth while respecting the production limits of the planet.

It complements the existing "Industry 4.0" approach by specifically putting research and innovation at the service of the transition to a **sustainable, human-centric** and **resilient European industry**.

Why Industry 5.0?

Industries can play an active role in providing solutions to challenges for society including the preservation of resources, climate change and social stability.

Industry 5.0 brings benefits for industry, for workers and for society.

It empowers workers, as well as addresses the evolving skills and training needs of employees. It increases the competitiveness of industry and helps attract the best talents.

It is good for our planet as it favours circular production models and support technologies that make the use of natural resources more efficient.

Revising existing value chains and energy consumption practices can also make industries more resilient against external shocks, such as Covid-19 crisis.

How to make it happen?

The Industry 5.0 approach contributes to 3 of the [Commission's priorities](#): "An economy that works for people", "European Green Deal" and "Europe fit for the digital age".

Elements pertinent to Industry 5.0 are already part of major Commission policy initiatives

- adopting a human-centric approach for digital technologies including artificial intelligence ([Proposal for AI regulation](#))
- up-skilling and re-skilling European workers, particularly digital skills ([Skills Agenda](#) and [Digital Education Action plan](#))
- modern, resource-efficient and sustainable industries and transition to a circular economy ([Green Deal](#))
- a globally competitive and world-leading industry, speeding up investment in research and innovation ([Industrial Strategy](#))

These are just some examples that demonstrate the strong links between the industrial transition and other societal developments.

Experts from research and technology organisations as well as funding agencies discussed the concept of Industry 5.0 during 2 virtual workshops on 2 and 9 July 2020.

[ESIR](#) a high-level expert group advising the Commission on how to develop a forward-looking and transformative research and innovation policy, are currently developing a new policy brief on Industry 5.0. It will provide concrete policy recommendations and actions for attaining Industry 5.0 goals and will provide an important basis for advancing European and national-level policy initiatives and making sure the development is in line with the Commission's political priorities.

Industry 5.0 Award

The Industry 5.0 Award recognises EU-funded projects that make an outstanding contribution to building a more human-centric, sustainable and resilient European industry. This could be by means of developing innovative technologies, industrial or supply chain processes, new business models, or by advancing the understanding of human-centricity, sustainability and resilience in industry.

Finalists will be invited to the Award ceremony in early June 2022. This will be a unique opportunity to showcase the qualities of the projects. The winning project will receive communication support from the European Commission, which includes the preparation of promotional videos, social media publicity and an article in the Horizon Magazine.

Application deadline: 1 April 2022

[More information](#)

Publications

Study January 2022 Research and Innovation

[Industry 5.0, a transformative vision for Europe](#)

Governing systemic transformations towards a sustainable industry, an ESIR policy brief

Report January 2021 Research and Innovation

Towards a sustainable, human-centric and resilient European industry

Report September 2020 Research and Innovation

[Enabling Technologies for Industry 5.0](#)

Results of a workshop with Europe's technology leaders

Documents

Industry 5.0 (Infographic)

November 2020

English

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