

Advanced Technologies for Industry (ATI) project

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A Summary
EDDIE Consortium

Advanced Technologies for Industry (ATI) project is an EU-driven initiative that plays a principal role in advancing the EU's industrial policy approach, aiming to monitor the up-to-date data and trends on advanced technologies. The project delivers critical information to policymakers, industry stakeholders, and academia, including statistical data, trends insights, analyses and reports, targeting to support them in implementing policies and initiatives.

The EU industrial policy is a comprehensive framework aimed at enhancing the competitiveness, innovation, and sustainability of European industries. It focuses on promoting digital transformation, encouraging the development of small and medium-sized enterprises, and ensuring that European industry is a driver of sustainable growth and employment.

In this frame, Advanced Technologies for Industry (ATI) project, set up as a merge of Key Enabling Technologies (KETs) observatory and Digital Transformation Monitor Initiatives. In the transformation procedure towards low-carbon and knowledge-based economy, it is crucial for industries to incorporate and utilize advanced technologies. In this direction, ATI project has identified and focused on the following 16 advanced technologies:

- **Advanced Manufacturing Technology**
- **Advanced Materials**
- **Artificial Intelligence**
- **Augmented and Virtual Reality**
- **Big Data**
- **Blockchain**
- **Cloud Computing**
- **Connectivity**
- **Industrial Biotechnology**
- **Internet of Things**
- **Micro- and Nanoelectronics**
- **Mobility, Nanotechnology**
- **Photonics**
- **Robotics**
- **Security**

The information is presented at the project's website, providing policymakers, industrial stakeholders and academia with critical resources, including statistical data on advanced technology adoption, analytical reports on technological trends, policy measures insights, and comparative analyses with key economies. Additionally, it offers access to technology centers and innovation hubs across EU countries, fostering a collaborative and data-driven approach to innovation and competitiveness.

The project utilizes 8 tools to address its objectives.

Data dashboard

Data dashboard is a tool that enables the user to identify the technology production and uptake level per country, facilitating policy and technological transformation. The countries' performance is presented based on eight key policy dimensions, namely technology generation, technology uptake,

skills, investment, entrepreneurship, innovation, collaboration, infrastructure. The data can be presented per country or per sector, providing also the opportunity to the user to select various underlying indicators per dimension, for detailed view of countries data.

Technology Centre Mapping

The projects maps and presents ATI Technology Centres. ATI Technology Centres play a vital role in supporting SMEs by facilitating the transition from lab to market-ready product development in the field of Advanced Technologies for Industry. These centres specialize in applied research and innovation, focusing on Technology Readiness Levels (TRL) 3 to 8, effectively reducing time-to-market for innovative concepts and products.

Technology Watch

Advanced Technology Watch identifies rapidly evolving, disruptive technologies. It caters to policymakers, large and SME enterprises, and business intermediaries, offering insights on technology maturity, market potential, and technical adaptations for successful market integration.

Product Watch

Product Watch focuses novel products driven by advanced technologies to enhance their economic and societal impact. It provides a comprehensive analysis of these products value chains, links to IPCEI, and EU competitive positioning. This resource supports cluster organizations and S3 partnerships in identifying collaborative innovation opportunities among European regions.

Sectoral Watch

Sectoral Watch evaluates advanced technologies generation and uptake, entrepreneurial activities, and skill demands in specific sectors. It involves analyzing data from various sources that monitor the use of advanced technologies in European industries and competitive economies. This analysis offers policymakers, industries, and intermediaries sector-specific insights, helping them better comprehend advanced technology data.

Policy Briefs

Policy Briefs analyze national and regional policies targeting specific challenges and technological domains, exploring tools designed to boost advanced technology adoption. These reports provide comparative insights, highlighting lessons learnt, best practices, and design challenges for innovative policy initiatives.

EU Reports

EU Reports and General Findings utilize both traditional and novel data sources and metrics to analyze and present the trends in generation and uptake of advanced technologies, along with the linked entrepreneurial pursuits, venture capital investments, skills demand & offer, and the digital prospects within Europe.

International Reports

The International Reports focus on the most recent developments regarding advanced technologies from USA, China, Canada, Japan, South Korea, Russia, and UK, considering patents, trade and investment data, and also presenting enlightening policy reviews.