



STRENGTHENING STRATEGIC VALUE CHAINS FOR A FUTURE-READY EU INDUSTRY

This report was prepared by the Strategic Forum for Important Projects of Common European Interest. The Strategic Forum was set up following the Commission's announcement in the 2017 EU Industrial Policy Strategy and consists of 45 experts, representing Member States, industry and innovation and research community.

A CHANGING ROLE OF INDUSTRY

European industries are global leaders in many areas but they need to adapt to new challenges in order to continue to bring value for our citizens, economy and society. Today, a large-scale industrial transformation is needed to ensure that our industries can adopt rapidly to changing technologies, tackle increasing climate, environment and societal pressures; and ensure Europe's competitiveness in a changing global geopolitical context. Our industry should be the driving force of a Green New Deal to make Europe the first climate neutral continent in the world.



JOINING FORCES IN STRATEGIC VALUE CHAINS

To ensure the global success of Europe's industries in the future, we need to build on our strengths and assets and boost our industries' competitive advantages in key strategic value chains. This requires better cooperation between public authorities and industry across Europe, and more cross-border investments from both public and private sources. This approach, where the EU should play a strong coordinating role, will allow Europe to strengthen our industrial competitiveness and ensure our global strategic autonomy in key areas of our economy.

STRATEGIC FORUM'S RECOMMENDATIONS

Following an analysis of Europe's industrial landscape, the Strategic Forum identified six key strategic value chains as priorities for pooling resources and provided recommendations for action. These key strategic value chains complement three other areas - namely high-performance computing, microelectronics and batteries - where large-scale coordinated investments are already ongoing. The EU framework for Important Projects of Common European Interest under the EU state aid rules can be used to support the development and strengthening of strategic value chains.



**CLEAN,
CONNECTED
AND AUTONOMOUS
VEHICLES**



**SMART
HEALTH**



**LOW CO₂
EMISSIONS
INDUSTRY**



**HYDROGEN
TECHNOLOGIES
AND SYSTEMS**



**INDUSTRIAL IN-
TERNET OF THINGS
(INDUSTRIAL IOT)**



CYBERSECURITY

EU STRATEGIC VALUE CHAINS IN FOCUS

The Strategic Forum’s report provides cross-cutting as well as specific recommendations for individual value chains. A number of selected recommendations are presented here. For a complete overview of the recommendations, please refer to the Report.

CROSS-CUTTING RECOMMENDATIONS ACROSS VALUE CHAINS

COORDINATED INVESTMENTS	ENABLING POLICIES	BROAD SUPPORT FOR R&D
<p>The EU should play a key role in coordinating efforts and pooling investments from private and public sources, at EU, national and regional levels. These investments should be targeted at the critical phase of first industrial deployment and commercialisation of new technologies.</p>	<p>The Single Market for goods, services, energy and data must be deepened and integrated. New policy measures are also needed to map and ensure the right skills for the future of our industries. A coherent regulatory framework across EU should also facilitate identifying and supporting new strategic value chains.</p>	<p>Europe should develop a dynamic industrial innovation ecosystem with access to state of the art technology infrastructures. This should build on regional strengths and experience with existing European public-private partnerships.</p>

VALUE-CHAIN SPECIFIC RECOMMENDATIONS

CLEAN, CONNECTED AND AUTONOMOUS VEHICLES

- Great potential to reduce CO₂ and air pollution.
- Could help minimise road accidents, congestion.
- European car industry is a global player, with 4% of EU GDP and 12 million jobs.

RECOMMENDATIONS:

- Invest in new generation high-efficiency electric motors, hydrogen storage and fuel cells.
- Invest in new infrastructures like high-power charging stations, vehicle-to-grid charging and hydrogen refuelling stations.
- Build an accelerator network and dedicated fund for clean and autonomous vehicles.

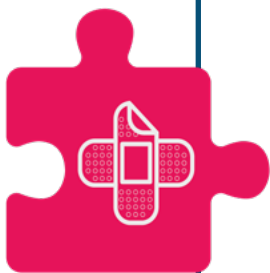


SMART HEALTH

- EU facing ageing population, health staff shortages, rises in preventable diseases.
- Current EU spending at 9.6% of GDP and rising.
- Key in Sustainable Development Goals and European Pillar of Social Rights.

RECOMMENDATIONS:

- Create a European Health Data Space, based on a network of federated and GDPR-compliant health databases with a public-private data governance model.
- Create an EU Investment Platform for Smart Health to support new products and services.
- Stimulate demand and uptake of Smart Health products and services.
- New European Smart Health Innovation Hub to assess and promote Smart Health solutions.



LOW CO₂ EMISSIONS INDUSTRY

- Potential for major contribution to EU's climate neutrality by 2050.
- Two thirds of industrial CO₂ emissions produced by steel, chemicals and cement industries.
- These industries account for €750 billion annual turnover & 2 million jobs.

RECOMMENDATIONS:

- Invest in key technologies to reduce CO₂ in core industries by 95%.
- support R&D for low CO₂ emission industry and scale up demonstration and roll-out projects.
- Develop guidelines and assessments for low CO₂ emissions technologies.
- Establish supportive regulatory framework.



HYDROGEN TECHNOLOGIES AND SYSTEMS

- Potential to replace fossil-based energy with low-emission renewable hydrogen.
- Could enable and optimise large-scale renewable electricity generation.
- Could increase EU energy security and resilience.

RECOMMENDATIONS:

- Develop a roadmap for a future European Hydrogen Economy.
- Build a supportive regulatory framework.
- Support R&D investments and build an innovative industrial system.
- Ensure safety and public acceptance through demonstrations and standardisation.



INDUSTRIAL INTERNET OF THINGS (Industrial IoT)

- Potential for industry productivity, safety and working conditions.
- SMEs still slow to adopt IoT.
- IoT market estimated at €80 billion by 2025.
- €1 trillion value for whole EU economy.

RECOMMENDATIONS:

- Build a common, secure and trusted EU industrial IOT and data ecosystem.
- Speed up establishing the European cloud and develop next generation AI and data exploitation tool
- Build regulatory framework with funding for industrial 5G infrastructure deployment.
- Boost investments in AI and advanced analytic skills.



CYBERSECURITY

- Increasing importance of cybersecurity with new digital advances.
- Cyberattacks could cost €5.3 trillion globally in 2021.
- A global market that exceeds €100 billion.

RECOMMENDATIONS:

- Support coordinated investments and support measures in secure 5G.
- Sharing and exploiting information on threats, vulnerability and incidents.
- Focus on highly critical applications and essential services like electricity, gas, water, transport.
- Establish a European data space with secure end-to-end communications and data protection solutions.

