LUHNIP Monthly Brief on EU Industrial Policy
October 2023

Dimitri Zurstrassen and Donato Di Carlo
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Every month, LUHNIP’s Monthly Brief on EU Industrial Policy provides a bullet-point recap of the month’s main events, followed by three reasoned deep dives into significant developments in EU industrial policy. Our analysis is complemented by a monthly guest contribution from renown experts or practitioners in the field.

_Dimitri Zurstrassen_ and _Donato Di Carlo_

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Last Month in Brief

- 3 October: The European Commission publishes its list of critical technologies for EU economic security
- 4 October: The European Commission opens an anti-subsidy investigation into battery electric vehicles from China
- 5 October: The European Parliament approves the appointments of new Commissioners Maroš Šefčovič and Wopke Hoekstra for the European Green Deal and climate action
- 6 October: Informal European Council in Granada (Spain)
- 13 October: The European Commission opens an investigation into the activities of X (ex-Twitter) as part of the Digital Services Act (DSA)
- 16 October: The Environment and Climate Council agrees on the proposal for a Regulation setting CO2 emission standard for new heavy-duty vehicles
- 17 October: The Energy Council adopts a proposal to amend the EU’s electricity market design (EMD)
- 20 October: EU-US Summit in Washington DC
- 23 October: The Trade Council adopts the instrument to protect the EU against economic coercion by third countries
- 25-26 October: European Council meeting in Brussels
LUHNIP’s 3 Deep Dives

1. The European Commission publishes its list of critical technologies for EU economic security

“Technology is currently at the heart of geopolitical competition and the EU wants to be a player, and not a playground.”

“By identifying ten areas of technologies that are critical for our economic security (...) Europe is adapting to the new geopolitical realities, putting an end to the era of naivety and acting as a real geopolitical power.”
Thierry Breton, European Commissioner for Internal Market, 3 October 2023.

In its European Economic Security Strategy published last 20 June, the European Commission announced it would establish a list of strategic technologies critical for the EU’s economic security. This implies selecting by the end of 2023 the technologies that carry the most sensitive risks so that they can be assessed by the Commission and the Member States. Last 3 October, the Commission unveiled the list of the 10 technologies considered to be the most sensitive ones (see table 1 below). At the same time, the Commission recommended national governments to prioritise an assessment of the risks related to technology leakages and EU security posed by advanced semiconductors, artificial and quantum technologies as well as biotechnologies. Once, by the end of 2023, the Commission and the national governments agree on the list of riskiest technologies, the Commission will formulate measures to strengthen the development of the selected technologies in the European Union.

LUHNIP’s take

The Commission’s recommendation from 3 October represents an important step in its strategy to strengthen the European Union’s autonomy in strategic technologies for the development of European industry (automotive, sectors of the 4th industrial revolution, etc.). The technologies selected by the European Commission are those traditionally regarded as strategic in the current global technology race and those where China enjoys a leading position. The Commission’s recommendation is thus part of the EU’s broader strategy to promote the single market and take firmer action vis-à-vis Chinese industrial competition. However, if the consultative method chosen by the Commission to obtain concerted policy guidelines has the merit of incorporating national interests, it risks being too slow to reverse the acceleration of the EU’s technological dependence and deindustrialisation.
Table 1: List of 10 critical technology areas for the EU’s economic security

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<th>Technology area</th>
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<td>1. Advanced semiconductors technologies</td>
<td>- Microelectronics, including processors&lt;br&gt;- Photonics (including high energy laser) technologies&lt;br&gt;- High frequency chips&lt;br&gt;- Semiconductor manufacturing equipment at very advanced node sizes</td>
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<td>2. Artificial intelligence technologies</td>
<td>- High Performance Computing&lt;br&gt;- Cloud and edge computing&lt;br&gt;- Data analytics technologies&lt;br&gt;- Computer vision, language processing, object recognition</td>
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<td>3. Quantum technologies</td>
<td>- Quantum computing&lt;br&gt;- Quantum cryptography&lt;br&gt;- Quantum communications&lt;br&gt;- Quantum sensing and radar&lt;br&gt;- Techniques of genetic modification&lt;br&gt;- New genomic techniques&lt;br&gt;- Gene-drive&lt;br&gt;- Synthetic biology&lt;br&gt;- Secure digital communications and connectivity, such as RAN &amp; Open RAN (Radio Access Network) and 6G&lt;br&gt;- Cyber security technologies including cyber-surveillance, security and intrusion systems, digital forensics&lt;br&gt;- Internet of Things and Virtual Reality&lt;br&gt;- Distributed ledger and digital identity technologies&lt;br&gt;- Guidance, navigation and control technologies, including avionics and marine positioning</td>
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<td>4. Biotechnologies</td>
<td>- Techniques of genetic modification&lt;br&gt;- New genomic techniques&lt;br&gt;- Gene-drive&lt;br&gt;- Synthetic biology</td>
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<td>5. Advanced connectivity, navigation and digital technologies</td>
<td>- Electro-optical, radar, chemical, biological, radiation and distributed sensing&lt;br&gt;- Magnetometers, magnetic gradiometers&lt;br&gt;- Underwater electric field sensors&lt;br&gt;- Gravity metres and gradiometers&lt;br&gt;- Dedicated space-focused technologies, ranging from component to system level&lt;br&gt;- Space surveillance and Earth observation technologies&lt;br&gt;- Space positioning, navigation and timing (PNT)&lt;br&gt;- Secure communications including Low Earth Orbit (LEO) connectivity&lt;br&gt;- Propulsion technologies, including hypersonics and components for military use&lt;br&gt;- Nuclear fusion technologies, reactors and power generation, radiological conversion/enrichment/recycling technologies&lt;br&gt;- Hydrogen and new fuels&lt;br&gt;- Net-zero technologies, including photovoltaics&lt;br&gt;- Smart grids and energy storage, batteries&lt;br&gt;- Technologies for nanomaterials, smart materials, advanced ceramic materials, stealth materials, safe and sustainable by design materials&lt;br&gt;- Additive manufacturing, including in the field&lt;br&gt;- Digital controlled micro-precision manufacturing and small-scale laser machining/welding&lt;br&gt;- Technologies for extraction, processing and recycling of critical raw materials (including hydrometallurgical extraction, bioleaching, nanotechnology-based filtration, electrochemical processing and black mass)</td>
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<td>6. Advanced sensing technologies</td>
<td>- Drones and vehicles (air, land, surface and underwater)&lt;br&gt;- Robots and robot-controlled precision systems&lt;br&gt;- Exoskeletons&lt;br&gt;- AI-enabled systems</td>
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<td>7. Space and propulsion technologies</td>
<td>- Drones and vehicles (air, land, surface and underwater)&lt;br&gt;- Robots and robot-controlled precision systems&lt;br&gt;- Exoskeletons&lt;br&gt;- AI-enabled systems</td>
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<td>8. Energy technologies</td>
<td>- Drones and vehicles (air, land, surface and underwater)&lt;br&gt;- Robots and robot-controlled precision systems&lt;br&gt;- Exoskeletons&lt;br&gt;- AI-enabled systems</td>
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<td>9. Robotics and autonomous systems</td>
<td>- Drones and vehicles (air, land, surface and underwater)&lt;br&gt;- Robots and robot-controlled precision systems&lt;br&gt;- Exoskeletons&lt;br&gt;- AI-enabled systems</td>
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<td>10. Advanced materials, manufacturing, and recycling technologies</td>
<td>- Drones and vehicles (air, land, surface and underwater)&lt;br&gt;- Robots and robot-controlled precision systems&lt;br&gt;- Exoskeletons&lt;br&gt;- AI-enabled systems</td>
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Source: JO C 2023/6689, Commission Recommendation (EU) 2023/2113 of 3 October 2023 on critical technology areas for the EU’s economic security for further risk assessment with Member States.
2. The opening of EU anti-subsidy investigations against Chinese imports of low-carbon industrial products

Last 4 October, the European Commission opened an anti-subsidy investigation into passenger battery electric vehicles from China. The aim of these measures is to respond to anti-competitive practices (e.g. subsidies) by the Chinese government in favour of low-carbon sectors by increasing the price of low-cost imports from China to the EU, as well as major overcapacity in the concerned industries.¹ These protectionist measures are part of an overall strategy to boost the competitiveness of Europe’s non-polluting industries in order to meet the Green Deal targets for reducing greenhouse gas emissions.

LUHNIP’s take

These actions by the European Commission against Chinese imports remain within the traditional trade defence measures allowed by WTO - and do not depart from the long-term European trade policy strategy of combating anti-competitive practices in “non-market economy”² countries. However, they reflect a hardening of Europe’s stance against China's aggressive industrial and trade policy strategies. This follows from the EU’s strategy, since the end of the 2000s, in favour of a firmer stance against China's practices and the increasing desire to strengthen the EU industrial capacity in low-carbon sectors. This trend towards an increase in European trade defence actions against China is likely to be reinforced in the coming months following the announcement of possible new anti-subsidy investigations into Chinese imports of steel and wind turbines and the pressure from various European industry federations to reinforce the fight against uncompetitive behaviour from non-market economies.

3. The results of the last EU-US Summit in Washington, D.C.

Last 20 October, representatives of the European Union institutions met with their counterparts from the US administration in Washington, D.C. to discuss transatlantic cooperation. Key issues for discussion included the negotiation of an EU-US agreement on critical minerals and a Global Arrangement on Sustainable Steel and Aluminium (GSA). The first agreement should strengthen the supply chains of critical minerals and contain the negative repercussions of the American Inflation Reduction Act (2022). In particular, the objective is to allow certain European electric vehicles imported into the United States to benefit from consumer tax credits reserved for cars assembled in the USA.

¹ Overcapacity is industrial capacity not utilised by production. It is often the result of interventionist industrial policies and affects traditionally capital-intensive sectors such as the steel industry.

² A non-market economy is defined as an economy “where the government has a complete or substantially complete monopoly of its trade and where all domestic prices are fixed by the State.”
The GSA was intended to resolve the ongoing trade dispute between the EU and the USA in the aluminium and steel sectors following the imposition of protectionist measures by the Trump administration, but also to regulate excess capacities and CO2 emissions by certain non-market producing countries like China. While progress was made on the two dossiers, the parties failed to reach final agreements, seemingly because of the EU's opposition to exempt the US from the application of the carbon border adjustment mechanism (CBAM) and due to the US' proposal to automatically impose tariffs on non-market economy countries. The EU fears that exempting the US would jeopardise the proper functioning of the CBAM – one of the flagship mechanisms of the European Green Deal – and would run counter to WTO rules. Following the impasse, the two parties agreed to reach an agreement by the end of 2023 to avoid the re-imposition of US tariffs on steel and aluminium (temporarily suspended since 2021 and replaced with import quotas). However, this deadline seems indicative, since the US ambassador to the EU has announced that it could be extended if negotiations between the two parties take longer than expected.

Source: Euractiv

LUHNIP’s take

The results of the October EU-US summit indicate how difficult it remains for the United States and the European Union to agree on a common strategy for trade and industrial policies. The Biden administration is pursuing a unilateral industrial policy strategy to defend US companies and is stepping up the fight against China's influence by all means. The European Union, for its part, wants to mitigate the effects of the US Inflation Reduction Act on its economy while trying to comply with WTO rules and achieve the twin objectives of the
Green Deal and EU strategic autonomy. This autumn’s negotiations will show whether the two partners are capable of finding a solution that reconciles their political objectives while preserving a cooperative transatlantic relationship in the pursuit of addressing current global challenges (global aluminium and steel overcapacities, the fight against climate change, the rise of China as a major superpower, etc.).

*** Guest Contribution of the Month ***

Prof. Valentina Meliciani
Dean of the Luiss Institute for European Analysis and Policy (LEAP), Full Professor of Applied Economics at the University Luiss Guido Carli of Rome

There is no doubt that the recent geopolitical developments, the pandemic, and the war have led the European Union to rethink its traditional approach to industrial policies – for a long time only based on market-oriented competition policies and the need to protect the single market by constraining state aid. The European market-based export-oriented model began to be questioned in a world where China and the United States are increasingly using trade and industrial policy measures to ensure technological leadership in critical value chains. The “new industrial strategy” for Europe explicitly refers to the need to ensure strategic autonomy in the context of the green and digital transitions. In this framework, new tools have been conceived and new terms such as open strategic autonomy (OSA) have become popular and have been extended from common foreign and security policies to the EU industrial strategy. However, the different tools still lack a unified vision to avoid the duplication of efforts, the waste of national resources and insufficient critical mass for the huge investments required to effectively face the twin transition. Moreover, they lack the support of a central fiscal capacity which places Europe in a different and weaker position with respect to the US and China. The effectiveness of the new EU industrial strategy is strictly linked to its consistency with the general evolution of European economic governance and the balance between national and central coordination and funding. National industrial policies in the framework of loosening state aid rules risk being ineffective and putting countries with different fiscal capacities in an asymmetric position, as well as counteracting the effects of the EU Cohesion Policy. The geopolitical tensions between the US and China and the discriminatory trade policies implemented by these areas require a centralized European response also to defend a rules-based international trade system and make it more inclusive.

The issues at stake require a strong effort of high-quality policy-oriented research in order to animate a well-informed European debate. As Dean of the Luiss Institute for European Analysis and Policy (LEAP), I congratulate and welcome the foundation of LUHNIP, our new hub focused on academic and policy research on the new European industrial policy.