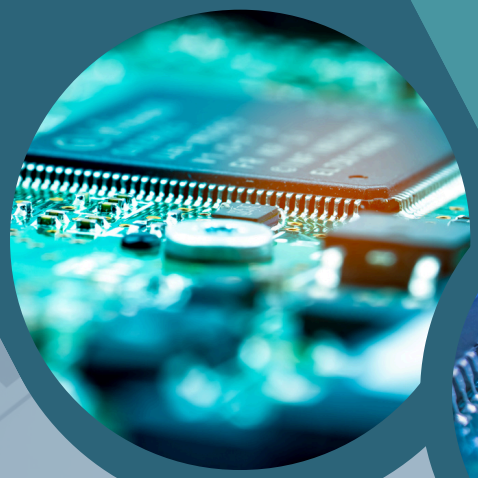
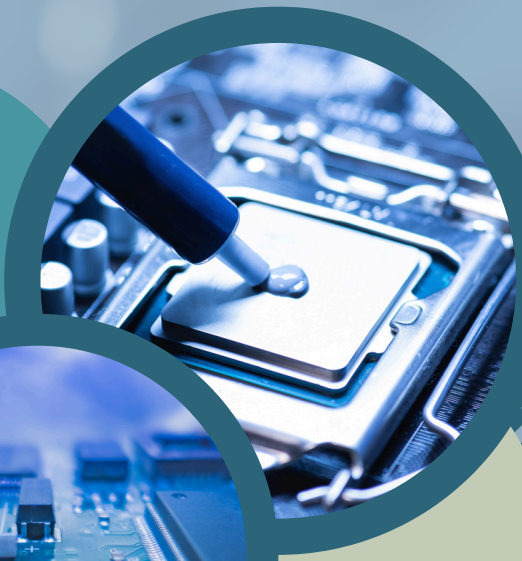
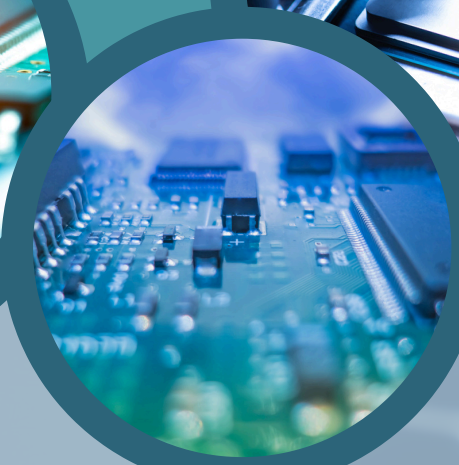






EUROCHAMBRES

Input to the European Commission's public consultation on the Chips Act 2

EUROCHAMBRES

Brussels, 28 November 2025
Input

Input to the European Commission's public consultation on the Chips Act 2

Eurochambres supports the European Commission's ongoing efforts to reduce the EU's dependence on semiconductor production from third countries. With the mandatory review of the European Chips Act scheduled for 2026, there is growing interest in assessing the impact of existing measures. Support for SMEs and startups, the creation of pilot lines, and faster innovation cycles under the first pillar are generally seen as successful, while interventions under the third pillar, affecting entrepreneurial activity during crises, remain subject to critical scrutiny.

Looking ahead, the chamber network sees scope for additional action to strengthen the EU's technological sovereignty, enhance resilience, and attract investment, ensuring that the semiconductor ecosystem can grow.

Europe's economic and technological leadership in the coming years is dependent on ensuring robust semiconductor innovation and a resilient supply chain. The Chips Act 2 initiative must form part of a broader European strategy for achieving open strategic autonomy and economic security. However, limited manufacturing capacity, lower levels of private investment compared with Asia and the U.S., and fragmented industrial efforts across the EU have hindered the scaling of advanced chip production. As a result, Europe risks losing global market share and technological leadership in a sector that is critical for both economic competitiveness and open strategic autonomy.

1. Current challenges

- **Lack of strategic depth**

The current Chips Act, drafted during the pandemic, aimed at reducing supply-chain risks and raising Europe's semiconductor production share to 20%. However, it lacks a long-term geopolitical strategy and an integrated approach across chip ecosystems. The EU should focus on retaining and enhancing critical capabilities, leveraging its role in supplying essential manufacturing equipment, while addressing the evolving geopolitical and technological landscape in a potential Chips Act 2.

- **Financing gaps**

The EU semiconductor sector faces risks from uneven financing across member states and a possible subsidy race that could pit countries against each other. Limited coordination of funding sources, will constrain Europe's ability to scale production, compete internationally, and strengthen technological sovereignty, leaving the semiconductor ecosystem vulnerable to external dependencies and slowing the development of critical capabilities.

- **Strategic dependencies on cutting-edge chips**

The EU currently lacks domestic manufacturing capacity for advanced nodes below 10 nm and remains almost exclusively dependent on non-European suppliers. Domestic demand is too low to justify a large-scale commercial foundry, even though these chips are essential for defence, space, automotive, and high-performance computing applications. At the same time, Europe retains a strong position in mainstream semiconductors such as power electronics, sensors, and photonics but this leadership is increasingly challenged by global competition.

- **Insufficient insight into supply chain structures and ecosystems**

While European companies lead in manufacturing equipment, they are heavily dependent on imported inputs, leaving production vulnerable to disruptions abroad. Around 80% of suppliers to European semiconductor firms are located outside the EU (mainly the US, Taiwan, China/Hong Kong and South Korea), highlighting the depth of these dependencies. Current measures under the Chips Act neglect critical back-end processes, contributing to Europe's declining share of essential components such as PCB and EMS. Since 2000, global PCB output has more than doubled, while Europe's share has collapsed from 13.8% to 2.2%. High tariffs on base materials, combined with no tariffs on finished PCB imports from Asia, increase costs for European manufacturers, encourage offshoring, and weaken the EU's supply chain resilience and technological sovereignty. Targeted actions are needed to enhance resilience and support Europe's technological sovereignty.

2. Semiconductors as an Essential Security Interest

The Chips Act 2.0 should recognise that semiconductors, microelectronics, photonics, and their enabling technologies e.g. materials, production equipment, chip design, testing, and integration, are increasingly important not only for economic competitiveness but also for European security. Ensuring resilience in legacy and specialised chip production is particularly relevant for defence, aerospace, and secure communications, where mature process nodes remain essential.

Future revisions of the Chips Act could therefore consider explicitly classifying semiconductors and critical supply chain inputs as strategic assets. Rather than focusing solely on increasing overall output, the EU could prioritise areas of excellence and strategic indispensability, building on existing strengths in semiconductor equipment, advanced packaging, power electronics, and photonics.

Measures to enhance supply chain resilience could include:

- Diversifying sources of critical raw materials, establishing "allied supply partnerships",
- Mapping and monitoring defence-relevant nodes and materials, and developing mitigation plans for potential supply gaps,
- Developing mitigation plans for supply gaps, guaranteeing pre-procurement agreements, and support for small, specialised "lab-to-fab" could help ensure access to critical components.

While these measures aim to strengthen technological sovereignty and security of supply, the approach should remain flexible, adapting over time to technological developments, evolving geopolitical dynamics, and changing European industrial priorities.

The Commission could also explore how the Chips Act 2.0 could integrate with Europe's defence-industrial policies, linking semiconductor initiatives to defence programmes and funding. Designating critical projects as European Defence Projects of Common European Interest (EDPCIs) with coordinated EU co-financing (under the proposed European Competitiveness Fund (ECF)) and in alignment with the European Defence Industrial Programme (EDIP) could strengthen Europe's semiconductor ecosystem and defence readiness while reducing reliance on fragmented national funding.

3. Proposed policy adaptations

Call for a more holistic, whole value-chain approach

- Focus on European strengths rather than production share alone. Europe's semiconductor industry is a world leader in certain segments, particularly chip manufacturing equipment, specialty chemicals, sensors, and power electronics. These niches give the EU geopolitical leverage. Rather than pursuing the questionable 20 % production target, the **Chips Act 2 should establish clear technological priorities and build on existing competitive advantages**.

- Strengthen the first pillar of the Chips Act, with better coordination across EU initiatives, is essential to set technological priorities, support future value chains, and enhance resilience. Therefore, first-of-a-kind fabs developed by consortia of IDMs, foundries, Tier-1 suppliers, and OEMs might also be actively supported under Pillar 2. Such collaborations can boost the use of chips produced in the EU in key applications and reinforce vertically integrated cooperation across the semiconductor ecosystem. The current first-of-a-kind (FOAK) definition focuses narrowly on production volume, overlooking chip design centres and facilities for critical materials, chemicals, and equipment. **Closer links between the first and the second pillars could better promote the development, production, and supply of key semiconductor technologies in Europe.**

- **Consolidate and expand trade partnerships with technologically advanced and geo-politically aligned partners** e.g. Japan or South Korea to achieve strategic indispensability. The Chips Act 2 could support joint projects in areas like photolithography equipment and semiconductor materials, while creating attractive conditions for foreign investors through long-term planning certainty, streamlined procedures, and transparent, non-discriminatory state aid.

Ensuring competitive framework conditions

- **Determine the framework conditions needed for competitive chip production in Europe**. Producing cutting-edge microchips is essential for Europe's productivity and growth, so understanding what attracts firms to research and manufacture these technologies in Europe is crucial. The EU regulatory framework should include stronger impact assessments to avoid undermining the semiconductor sector.

- **Combine efforts with other EU instruments** like the Connecting Europe Facility and Cohesion Funds to support infrastructure for new semiconductor facilities

including energy, water, digital networks, among other areas. Existing regional networks or clusters should also be considered and potentially supported to facilitate network, research and the exchange of know-how and best practices.

- **Simplify notification procedures, with clear criteria, and shorter approval timelines of projects**, including Important Projects of Common European Interest (IPCEIs), to enhance European value chains and international partnerships. Coordination between EU and member states should be optimised, minimising market distortions and ensuring transparency so that SMEs are not disadvantaged, while providing investors with predictability and confidence in the process.

- **Develop a skilled workforce and talent pipeline by expanding the pool of qualified professionals and attracting international talent** together with regional chambers of commerce and industry. Building on national initiatives, such as Germany's microelectronics strategy, the Chips Act 2 should prioritise targeted training, education, and retention measures to ensure a resilient and highly skilled workforce for the sector.

- **Shorten state-aid approval** by limiting the timeline to six months after prenotification from a member state, expanding General Block Exemption Regulation (GBER) thresholds for smaller projects and streamlining procedures for larger strategic investments.

Implementing the "lab-to-fab" approach

- **Support smaller, strategically vital manufacturing facilities**. EU demand for advanced chips may be limited in volume but is strategically essential. Instead of prioritising large megafabs, European initiatives should ensure adequate backing for smaller, specialised "lab-to-fab" facilities, while promoting faster technology transfer from research laboratories.

- **Bridge the gap between innovation and the market**. Strong industry participation is essential for pilot lines to deliver value, as their success depends on real industrial use and close cooperation with research organisations. . In particular, an easy and low-threshold access for innovative start-ups and SMEs to projects such as pilot lines and corresponding infrastructures must be ensured. The existing Joint Undertaking model should be maintained and reinforced. Building on the first "lab-to-fab" accelerator calls, Chips JU 2.0 should expand joint industry projects to ensure innovations move from the laboratory into commercial application.

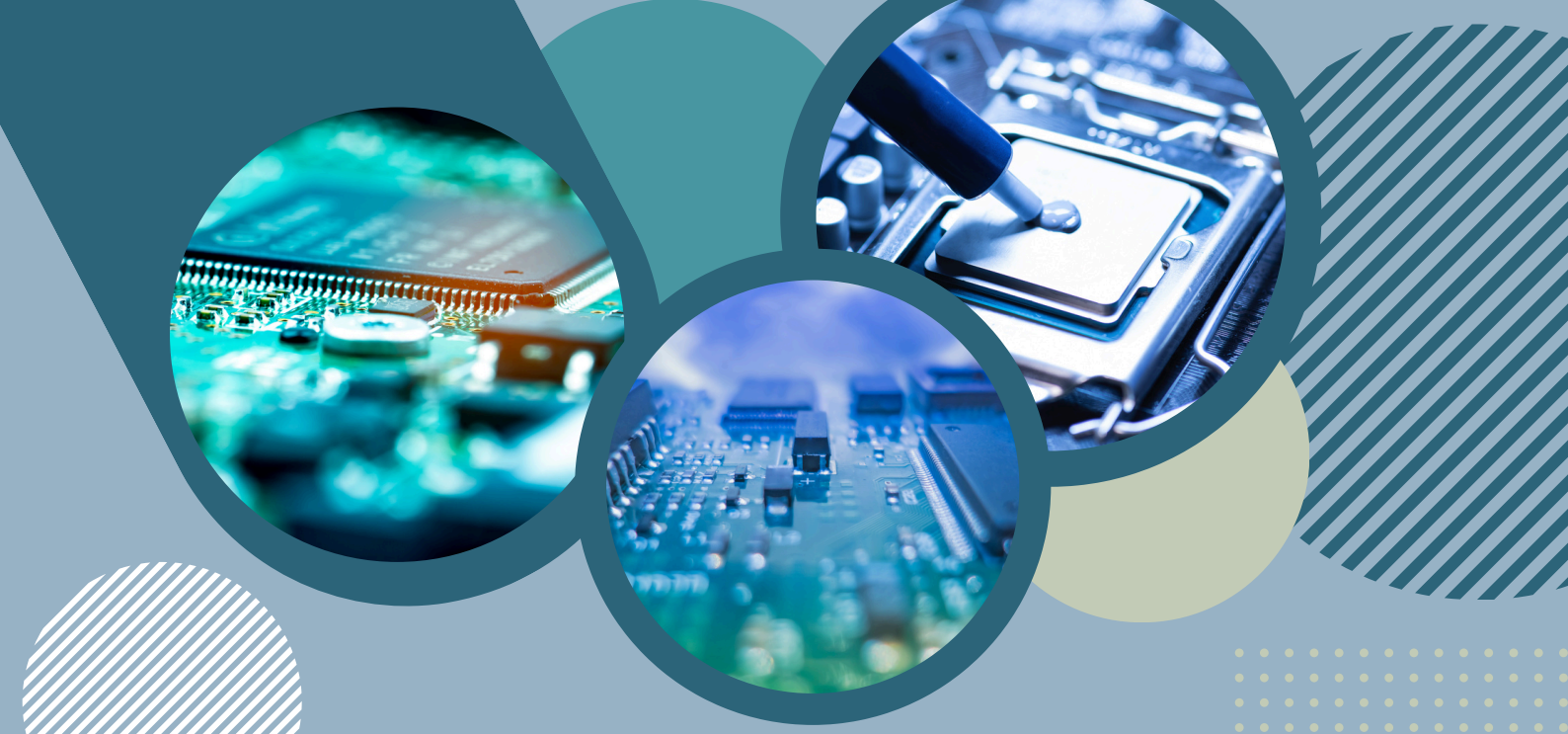
- **Identify semiconductor areas essential for Europe's safety and security**. The EU should determine where reliable supply is critical and where domestic production is necessary. Since trusted suppliers may be costlier, clear strategic criteria are needed to guide "make-or-buy" decisions and assess where substitution is possible during supply disruptions and to address critical vulnerabilities. However, such interventions should be targeted and require comprehensive assessments.

Bringing industry and policymakers together

- **Enable industry consultation by creating a structured advisory group of semiconductor companies, research institutions, and business associations**, ensuring that their expertise on technology, market trends, and supply chain vulnerabilities is systematically considered in the European Semiconductor Board's strategic decision-making.

- **Build trust between industry and regulators by establishing a secure, standardised and encrypted platform** for collecting and storing sensitive data with robust cybersecurity rules, strengthen rules to safeguard information shared with third countries, and giving companies the ability to review and challenges decisions that could compromise their competitive position. Any shift toward mandatory reporting should be limited, carefully targeted, and developed in consultation with industry to avoid duplication and undue administrative burden.

- **Limit monitoring to the minimum and streamline information gathering** by adopting a unified EU template for semiconductor supply-chain requests, coordinated through companies' headquarters, and clearly stating purpose and usage. This will avoid redundancies, reduce administrative burdens, improve data quality, and enhance industry compliance across member states.



Eurochambres – the association of European chambers of commerce and industry – represents more than 20 million businesses through its members and a network of 1700 regional and local chambers across Europe. Eurochambres is the leading voice for the broad business community at EU level, building on chambers' strong connections with the grass roots economy and their hands-on support to entrepreneurs. Chambers' member businesses – over 93% of which are SMEs – employ over 120 million people.

Previous inputs can be found here.

Contact:
Eurochambres Senior Policy Advisor for Single Market
Mr Frederico Martins, Tel. +32 2 282 08 54, martins@eurochambres.eu

Eurochambres Press and Communication Manager
Mrs Karen Albuquerque, Tel. +32 2 282 08 72, albuquerque@eurochambres.eu

Eurochambres Press Contact
Mr Alexander Maurer, Tel. +32 2 282 08 62, maurer@eurochambres.eu

@Eurochambres
@eurochambres.bsky.social
www.eurochambres.eu