



POSITION PAPER

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From Crisis to Strategic Vision: Shaping the Chips Act 2

Executive Summary

The Chips Act 1 was a timely crisis response that mobilised investments in Europe's semiconductor sector. However, its implementation revealed a number of important shortcomings: overambitious targets, fragmented execution, insufficient industry involvement, slow processes, overly narrow scope. In the face of intense global competition and new technological challenges, a second, more strategic Chips Act is now needed to secure Europe's competitiveness and resilience.

The Chips Act 2.0 should focus on the following three strategic objectives:

1. **Competitiveness** – Enabling EU's semiconductor industry to compete globally in terms of technology and price.
2. **Technological Leadership** – Focusing on those areas in which Europe can lead in global value chains.
3. **Indispensability** – Ensuring EU capabilities are critical for global markets, thus reducing vulnerability to coercion.

To achieve this, the EU and its Member States should:

Secure Strategic Funding

- Accelerate public funding processes and **broaden the scope of "First of a Kind"** projects to the full value chain.
- **Build on strengths** (e.g. materials, equipment, microcontrollers, sensors, power, quantum, and related value chains) to expand technological leadership in strategically important areas.
- Revise rules to better support deep-tech scale-ups, avoid fragmentation and acknowledge that state aid alone is not sufficient to mobilise private investments if the **framework conditions** do not exist.
- Establish a dedicated EU budget and EU Tech Frontrunners scheme for semiconductors within the **European Competitiveness Fund**.

Address the Necessary Preconditions

- Speed up **permitting and support** R&D and CAPEX investments by improving taxation and depreciation conditions.
- Improve infrastructure, speed up solutions for grid congestion and ensure competitive, stable **electricity prices**.
- Promote **access to talent** through targeted education, fast-track visas and mutual recognition of qualifications.

Deepen International Cooperation

- Deepen partnerships with **reliable international partners**, especially in APAC and EFTA countries.
- **Coordinate EU approaches** to export controls and FDI screening. No general local content requirements.

Improve Governance

- Upgrade and institutionalise **industry participation** in the European Semiconductor Board.
- Minimize administrative burdens on companies and do **not impose mandatory** reporting on supply chains.

State of play – Impact of Chips Act 1 and need for a Chips Act 2

The Chips Act 1 was a crisis response with focus on resilience

The first European Chips Act (ECA) was introduced during the COVID-19 crisis. Critical value chains were disrupted, leading to a call for strengthening resilience in Europe, as semiconductors are fundamental inputs for several industries and infrastructures. It was a major initiative by the European Commission and Member States, setting out an industrial policy to build capacity and strengthen security of supply in semiconductors, with several positive results:

- ✓ It played a role in increasing awareness in the political arena of the importance of the semiconductor industry.
- ✓ Within the framework of the ECA five pilot and more than 27 competence centres were initiated.
- ✓ A design platform and six quantum chips pilots are in the making (pillar I).
- ✓ The ECA is enabling support for strategic projects and launching the 'first of a kind' (FOAK) framework, which has led to seven major projects so far (pillar II).
- ✓ Overall, a total of €43 billion in policy-driven investments, and the same amount of private investment up to 2030, is expected. This could mean total expected investment funding of €86 billion.¹

The first Chips Act was a strong start but requires a robust revision that better suits the needs of industry and the European semiconductor ecosystem as a whole, across all segments of the value chain.

Global dynamics have exposed the shortcomings of the Chips Act

Since the COVID-19 crisis and the first implementation of the ECA, global geoeconomic and geopolitical challenges have increased. Other parts of the world have developed ambitious strategies and made serious investments to foster their semiconductor industries. The European semiconductor industry has increased its revenues, but not its market share. Moreover, Europe lags behind in investment momentum compared to the US and Asia (see [KPMG Global Semiconductor Industry Outlook 2025](#)). These investments are needed to keep up in the global race for technological leadership, both in the short and the long term.

These developments have exposed several shortcomings of the Chips Act:

- Overall, the objectives were overambitious (obtaining a market share of 20%). There was no clear ownership in the execution, no clear distribution of responsibilities and insufficient coordination (between the Commission, Member States and industry). This made the implementation of the ECA difficult for both Member States and industry.
- The semiconductor industry was insufficiently consulted and industry involvement in the European Semiconductor Board is far from optimal: for example, the governance structure must be strengthened through meaningful industry involvement in the consultation process.
- In addition, the demands of key industry verticals (such as aerospace, automotive/transportation, defence, industrial, IoT, medical/healthcare, power/energy, smart home, telecoms) have not been sufficiently considered. There has been too much emphasis on the production capacity of 'cutting-edge' chips below 5 nanometers, although these account for only a fraction of European demand.
- Processes throughout all three pillars of the Act have been too complex and not fast enough to compete with regions in other areas of the world where the semiconductor industry is a priority (e.g. design platform, state aid via FOAK, supply chain mapping or crisis mechanism). EU chips policy should be proactive, with a long-term

¹ See [Special report 12/2025 of the European Court of Auditors](#), paragraph 05.

strategy for industry, as well as able to respond to changes in the market with urgency, ensuring that implementation is rapid enough to match international developments and investments.

- Public funding has been too fragmented and too slow.
- The FOAK scope was designed with too narrow a focus. Critical parts of the value chain – like strategic suppliers, chip design, materials, equipment, PCBs, packaging capacities or systems integration – were missing. More could be done to improve supplier involvement (including innovative SME's and scale-ups).
- It also became clear that state aid alone is not the answer to stimulate private investment as long as serious locational disadvantages in Europe² remain in place, such as high electricity costs, grid congestion, shortage of technical talent and know how, as well as a cumbersome regulatory framework, the lack of a fully integrated single market, and lengthy permitting procedures. All of which make doing business and investing in these areas costly and uncompetitive for the entire semiconductor ecosystem.
- Resilience and technological leadership were often confused with self-sufficiency. Due to the high degree of international specialisation of the semiconductor industry, this approach does not contribute to making Europe a technological leader in the next decade.
- Efforts to build trusted partnerships with third countries – to address supply chain vulnerabilities and pursue joint R&D objectives – have fallen short amid heightened geopolitical and trade tensions, while the need for a renewed global outlook has increased to ensure competitiveness.

The need for a European Chips Act 2.0 as a long-term strategic framework

These shortcomings of ECA 1.0, as well as new geopolitical and technological developments (trade conflicts, the growing scarcity of critical raw materials and the AI boom) warrant a European Chips Act 2.0 that meets the requirements of a successful strategy and lays the foundation for a thriving European semiconductor industry.

Europe's technological industries, including the semiconductor industry, are ready for the next step towards a competitive and resilient Europe and are prepared to invest. The drive and willingness from the sector has been clearly set out in the [Semicon Declaration](#) – signed by all Member States – and was strongly supported by a large group of industry players through an [industry endorsement](#), which Orgalim also co-signed. This momentum should be capitalised on to drive a robust Chips Act 2.0 and effect real change for the European ecosystem.

Proposals for the European Chips Act 2.0

Strategic objectives, interdependencies and areas of political action

Strategic objectives: Resilience and self-determination are important political goals. However, **we will only be able to achieve them through competitiveness and technological leadership.** Production capacities in Europe will only serve to ensure a resilient supply for European user industries if they manufacture products that can compete globally in terms of technology and price. Second- and third-rate products from Europe would only tempt end market industries from Europe and the rest of the world to source supplies from abroad. Moreover, only technological leadership and indispensability will enable Europe's economic security in a global political environment characterised by increased geoeconomic competition. Europe must therefore leverage its unique capabilities to preserve and achieve technology leadership in critical parts of tomorrow's market and become indispensable (for example, the next wave of AI innovation: industrial AI, edge AI,

² Notwithstanding the large relative differences between Member States when it comes to preconditions.

powering AI). Indispensability can be achieved through technological leadership in a segment of a value network, thereby developing reverse dependencies that reduce the risk of economic coercion.

The strategic objectives of the European Chips Act 2.0 should therefore be:

1. **Competitiveness;**
2. **Technological leadership; and**
3. **Indispensability**

Interdependencies: To achieve these strategic objectives, several factors affecting the competitiveness of the European semiconductor industry must also be considered, such as foreign (non-market) policies, access to raw materials, energy costs and environmental standards and developments in end markets.

Areas of political action: Innovative companies should emerge, grow, expand and invest in Europe; that is what makes Europe a crucial player in the global semiconductor industry. To this end, the EU, together with its Member States, must establish the right framework conditions, stimulate private investment and innovation, inter alia with public funding (from basic research to industrial deployment by setting priorities in the budget planning), and ensure fair trade in international cooperation. To accomplish these tasks, good and participatory governance is required with meaningful industry involvement. A Chips Act 2.0 will have achieved its goals when entire value chains in Europe are globally more competitive as well as more resilient to geopolitical shocks and are better suited to fulfil the demands of industry verticals.

Secure strategic funding

Simpler application and faster approvals: Long permitting approval times for publicly funded projects under the EU Chips Act pillar II (FOAK) and IPCEIs remain a competitive disadvantage compared to other regions. It can take up to two years from the first submission of documents to the grant notification. In the semiconductor industry, which is characterised by ever-shorter innovation cycles, these bureaucratic hurdles risk delaying innovation and manufacturing projects by years, meaning the loss of competitive edge.³ Therefore, information on public funding programs must be more transparent and simpler to access – especially for SMEs and mid-caps. The requirements for planning depth and technical details must be reduced to an appropriate level. The processes must be flexible to take changing conditions into account. Furthermore, shorter and structured timelines from application to grant notification must be implemented (maximum seven to nine months real time to grant). The Net-Zero Industry Act⁴ is a good example of clarity in this context, where Articles 9 and 16 provide explicit timelines for permit-granting procedures.

Stimulating investments in SME and mid-size companies for strong ecosystems: R&D is the key driver of competitiveness across Europe's broader semiconductor ecosystem. However, R&D intensity among mid-sized semiconductor companies is under continuous pressure, posing a serious risk to Europe's long-term innovation capacity and technological leadership.⁵ To strengthen Europe's technological leadership, the EU must enable the growth and scaling of start-ups, scale-ups, and SMEs across the full innovation ecosystem.

- This requires mobilising National Promotional Institutes (NPIs) together with the EIB/EIF to provide financing for long-term investments in semiconductor companies (such as investments in productivity and innovation).

³ EU Commission already plans to have simpler and more inclusive IPCEI; see Competitiveness Compass for the EU (29.01.2025), https://commission.europa.eu/document/download/10017eb1-4722-4333-add2-e0ed18105a34_en, rev. 2025-10-15.

⁴ See Regulation (EU) 2024/1735 (1306.2024): https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L_202401735, rev. 2025-10-15.

⁵ PWC (2025).

- The European Innovation Council (EIC) plays an important role in scaling innovative semiconductor companies. Midcap, SME and scale-up participation should be stimulated in calls under the European Chips Act.
- Moreover, the definition of an “Undertaking in Difficulty” in the EU state aid rules currently hinders capital-intensive deep-tech scale-ups in receiving public funding.⁶ The definition should be revised for deep-tech scale-ups and the exemption period should be extended, allowing innovative companies in capital-intensive sectors such as semiconductors to access public and blended finance during their growth phase.
- Company-led innovation through EU Tech Frontrunners should be boosted. Europe should establish a dedicated scheme for the semiconductor sector under the EU Tech Frontrunners model found in the European Competitiveness Fund (ECF). This instrument would channel EU R&D funding directly to leading companies that drive ambitious, high-impact innovation agendas together with their ecosystems of SMEs, startups, research institutions and suppliers. By empowering leading businesses to coordinate large-scale, mission-driven R&D and deployment projects, this approach would accelerate breakthroughs in areas such as chip design, advanced materials and sustainable manufacturing, while ensuring that value creation and industrial capacity remain anchored in Europe.

Dedicated budget for European scale: The European Court of Auditors concluded that the current amount of funding might not be enough to reach the targets set by the Chips Act⁷. A dedicated Semicon Budget in the proposed European Competitiveness Fund (ECF) is needed to ensure bold funding for semiconductors, serving the entire continuum from fundamental research to industrialisation. Close links should be made with all thematic windows under the ECF, including resilience, defence industry and security, positioning semiconductors as driving dual-use technologies as well as safeguarding investments in productivity and robust semiconductor value chains in Europe. Funding should be allocated competitively based on excellence and potential for global leadership, ensuring that only the most promising projects receive support and avoiding permanent subsidisation.

Harmonised funding: For a strengthened European approach, a larger share of funding should be done on a European level, including EFTA states such as Switzerland, Norway, Lichtenstein and Iceland, and more coordination is desirable between Member States – but without delaying the *time to grant* (see above). This could, for example, be achieved in the IPCEI Advanced Semiconductor Technologies (AST) by using the proposed IPCEI top-up in the European Competitiveness Fund, if processes are not slowed down by Commission involvement. Moreover, this requires a strong pillar 1 and co-financing of the Commission under pillar II.

Focus on innovation leading to industrial deployment: ‘first of a kind’ facilities (FOAKs) have proved to be effective under the current Chips Act. The scope of FOAK projects should be broadened: strategic suppliers, equipment manufacturers, materials, quantum chip fabrication, printed circuit boards (PCBs), packaging capacities or systems integration and strategic joint ventures with applying industries, research facilities and start-ups/scale-ups should be included in the scope of FOAK.

Close cooperation with industry verticals⁸ is crucial to align demand and supply and strengthen European value chains. The Chips Act 2.0 should provide the right conditions for and should seek strategic cooperation with end markets on a European level, while maintaining a global outlook and considering global market developments, as the semiconductor industry is an inherent part of international value chains. To stimulate value chain innovation and industrialisation, industry partnerships integrating semiconductor industry and industry verticals should be introduced. Europe should catalyse and support industry-led alliances, ecosystems and consortia that connect chip providers with end-

⁶ This is acknowledged in the [EU Start and Scale-Up Strategy](#) (pp. 8-9).

⁷ European Court of Auditors (2025). [Special report 12/2025: The EU's strategy for microchips](#), p. 11

⁸ At the time of writing, a study is being conducted by the German Business Association ZVEI, the Dutch FME and other Partners on the business case of semiconductor production and development in Europe in relation to end market needs, following up on the Industry Endorsement of the Semicon Coalition.

users, ensuring early adoption of innovative chips designed and made in Europe. Such initiatives would help secure anchor customers, strengthen downstream competitiveness in sectors like automotive, defence, energy and telecoms, and reinforce Europe's global market position. The cooperation should start at R&D-level. Therefore, industry should be more involved in the pilot lines, which are still heavily dominated by RTOs.

Build on strengths and expand technological leadership. Europe's strengths lie in materials, R&D, equipment (including EUV lithography, metrology, and smart manufacturing), system design, microcontrollers, sensors, power semiconductors, secure electronics, edge AI, photonics and quantum technologies. The Chips Act 2.0 should help to expand these strengths and transfer them to other areas of strategic importance.

Power semiconductors, secure electronics, edge solutions, photonics and quantum technologies give Europe the opportunity to play a part in the growth market of AI without trying to catch up in areas of technology (e.g. GPUs), where other economic regions are much further ahead. Instead, Europe can focus on differentiation in innovation and develop complementary areas of technology in which it is well positioned.

In other areas, Europe should maintain or build up a minimum level of capacity for reasons of resilience – e.g. backend manufacturing processes (like advanced packaging, printed circuit boards, and electronic manufacturing services).

By concentrating on these domains, Europe can reinforce its technological leadership, enhance industrial competitiveness, and increase resilience in semiconductor supply chains. Building on strengths includes taking into account whole supply chains supporting these strengths. The strength of all companies in the value chain determines their success (technological leadership, competitiveness and resilience), but the chain is only strong as its weakest link.

Some of the technological fields mentioned above should be examined in more detail:

- **Chip design and tools for chip design** are of paramount importance: Chip design is a high-value activity, generating significant intellectual property and economic returns. Innovative chip design directly fuels these next-generation technologies and systems, since it is for the foundation of downstream-industry enablement. Therefore, chip design should be a part of FOAK and the design centres and the design platform should be accelerated as quickly as possible.
- In **Quantum chip technologies** Europe is still strong. To maintain Europe's competitiveness in quantum chip technologies, the Commission should ensure the support of the pilot lines which are already well beyond initial funding. To reach systems with 100 error-corrected qubits by 2030, Europe needs scalable public-private infrastructure and dedicated funding for startups and SMEs developing quantum chips. This should be considered within the existing funding tools. The Quantum Chips Industrialisation Roadmap, due in 2026, should focus on targeted scale-up support and prepare for quantum-specialised fabs. Coordination with Chips Act 2.0 is essential to align funding instruments and secure long-term growth for European quantum developers.
- The semiconductor industry in Europe has unique strengths in **edge AI solutions**. Europe's user industries like automotive, industrial and home IoT require innovative solutions that enable the technological transformation towards intelligent systems. Such systems involve edge AI delivering low power and high safety and security. Europe is also leading in hardware components increasing energy efficiency of data centres and AI systems including power semiconductors, power management ICs and ASICs based on silicon, silicon carbide and gallium nitride technology. '**Powering AI**' will be another major opportunity for Europe to enable cloud-based GPUs developments. These European strengths must be reflected in pillar II of the ECA 2.0 and in the upcoming IPCEI AST.
- Europe has an opportunity to become a global leader in **sustainable semiconductor manufacturing**. The EU should direct funding towards green technologies, including energy-efficient chip production, water conservation,

recyclable and sustainable materials, circularity and safer substances. A key priority should be innovative material substitution and advanced recycling to cut dependence on rare earths from third countries. Support should also cover semiconductors and components that enable the green transition, such as integrated photonics, heterogeneous integration and chips for renewable energy applications.

- **Productivity and industrial AI** are very important for Europe as a business location with high labour costs and an aging population. Companies should be leveraging (industrial) AI for better productivity and quality, and clean production. The EU should promote investments for the deployment of industrial GenAI at Europe's fabs to improve productivity.

Adress the necessary preconditions

Targeted support for critical parts of the value chain and for future technologies is essential. However, it is even more important to **attract private investment** and innovation in the semiconductor industry in Europe **by creating favourable conditions**. Innovation and Investment should be facilitated in the entire value chain, up until end markets and industry verticals. The success of the Chips Act 2.0 also depends on the necessary preconditions for facilitating a stable and competitive investment climate for semiconductor companies in Europe.

Efficient regulatory processes for permits: The permitting of large-scale projects in Europe takes too long and involves considerable risks for investors. A friendly EU-adapted permitting regime is needed in general and is a prerequisite to secure semiconductor projects in the EU. Firstly, Europe should secure high social, environmental and governance standards that go hand in hand with competitiveness. Environmental assessments should be simplified. Secondly, developers of large-scale projects should have a single-point-of-contact with a can-do-mindset, which prioritises and coordinates the permitting procedure at local, national and European level.

Improvement of taxation and depreciation conditions: Taxation remains a core sovereign competence of each Member State. However, the EU can coordinate and promote best practices regarding taxation and depreciation schemes for R&D and innovation, and in some cases capital expenditures (CAPEX), throughout the value chain. These incentives are proven instruments to unlock large-scale private investment, as demonstrated by the decisive role of tax credits in the success of the US CHIPS & Science Act, Taiwanese and South Korean programmes (see [ZVEI study "From chips to chances, 2024"](#)). European countries should in a harmonised way deploy similar tools when considered useful to remain competitive and attractive for semiconductor manufacturing and R&D – as well as other industries.

Supporting infrastructure and competitive electricity prices: The semiconductor industry relies on a stable infrastructure. In particular, a highly stable power grid, low and predictable electricity prices, a reliable water supply and a good logistics infrastructure (airports, rail connections) are important. Unfortunately, compared to China and the US the EU not only has very high electricity prices, but also a high level of price volatility and unpredictability (see [Draghi-Report, P. 6ff](#)). The EU must provide internationally competitive electricity prices, an outstanding infrastructure and a level playing field within Europe. Progress is needed on the internal market for energy.

Access to talent: Access to talent is a decisive factor for the growth and competitiveness of the European semiconductor industry. The Commission should – in line with its competences on the matter and in partnership with educational institutions and Chips Competence Centres – take a leading role in strengthening the talent pool and skills base needed for the sector's future. Whilst working on a European Chips Act 2.0, existing initiatives and frameworks should be utilised, such as the STEM Education Strategic Plan, Digital Europe Programme, ESF+, Union of Skills, EU Talent Pool and Horizon Europe. To strengthen the talent pool and skills base for the semiconductor industry, the Commission should:

- **Integrate semiconductor skills into EU education strategies:** Explicitly include semiconductor talent development in the implementation of the STEM Education Strategic Plan and related EU initiatives. This requires targeted, EU-coordinated actions that structurally involve industry and Member States' focal points to develop technical skills which match the sector's evolving needs, ensuring a robust pipeline of highly qualified engineers and technicians.
- **Bridge the skills gap and promote lifelong learning:** Support the creation and scaling of education and training programmes tailored to the semiconductor industry, including vocational learning, upskilling and reskilling initiatives. Promote lifelong learning in engineering and technology fields through EU funding and policy instruments.
- **Foster knowledge-sharing and best practices:** Facilitate knowledge-sharing and best practices across Member States by supporting EU-level platforms, networks, and competence centres for semiconductors. Encourage collaboration between industry and education providers, including apprenticeships and hybrid learning models.
- **Adapt STEM education to technological change:** Ensure that the STEM education system at EU level swiftly adapts to technological advancements and sectoral demands. Support the development and mutual recognition of micro-credentials and qualifications for semiconductor professions.
- **Accelerate talent attraction from third countries:** Propose harmonised, fast-track visa and recognition procedures for highly skilled semiconductor professionals, building on the EU Talent Pool and Skills Portability Initiative. Streamline processes to enable European companies to recruit global experts efficiently, supporting innovation and maintaining Europe's competitive edge.

Deepen international cooperation

The growing importance for numerous user industries, coupled with the experience of supply bottlenecks during the pandemic and increasing geopolitical tensions, has brought microelectronics to the forefront of economic and security policy considerations for many political actors. To achieve their economic and security policy goals, governments are increasingly resorting to interventionist instruments that in some cases run counter to the basic principles of fair and open competition in global trade. Markets (both in the US and China) are becoming harder to enter due to geopolitical tensions, but the semiconductor industry is driven by specialisation and thereby involves complex value chains. To strengthen Europe's resilience and growth in microelectronics, **international partnerships with reliable partners** must be deepened.

Keep markets open but insist on fair treatment: It is important to keep markets open with as many international partners as possible. Access to sales markets and reliable supplies of goods and services from partner countries are the best way to promote the competitiveness of industry in Europe. Cooperation on raw materials, skilled workers and complementary skills is essential. At the same time, however, Europe must not shy away from taking its own measures to protect itself in the event of unjustified market interventions by third parties – prudently, appropriately and with the involvement of industry and international partners.

Coordinate EU technology security-related trade policy and investment tools – export controls for dual-use goods, FDI screening and local sourcing: A common approach and coordinated implementation between EU Member States is needed when it comes to export controls for high-tech products. Such a coordinated practice strengthens planning and legal certainty for companies and makes a significant contribution to Europe's economic resilience in geopolitically sensitive technology areas.

Also, when screening foreign direct investment (FDI), Europe needs a coordinated, balanced approach that promotes strategic capital inflows and greenfield investments that strengthen the industrial and technological base by building

capacity and know-how within Europe. FDI screening must be based on clearly defined areas of critical technologies, which are to be defined within the framework of the European Economic Security Strategy. At present, the technologies listed under “Advanced Semiconductors” do not follow a consistent approach and can affect virtually any part of a very broad product portfolio. Uniform guidelines – including for greenfield investments – should primarily serve the goal of creating a level playing field across Europe and promoting investment.

In evaluating a potential future Outbound Investment Screening Mechanism (OIS) the EU should exercise extreme caution to avoid increasing the regulatory burden for Europe’s technology industries and to safeguard value-adding international collaboration and spin-in effects through investments to maintain and achieve technological leadership (more information in [Orgalim’s position on the European Economic Security Strategy](#)).

Amid growing geopolitical tensions, non-price-related criteria are being considered in public procurement, which is positive when it comes to criteria regarding innovation and sustainability. However, **Europe must avoid general ‘local content requirements’ (LCR)**. Specific local content requirements should only be considered as a last resort and after a thorough impact assessment and consultation with international partners in a limited number of strictly defined sensitive areas such as critical infrastructure, cybersecurity, or defence and security equipment. Policymakers must keep in mind that not all components can be produced in Europe. In many areas, the intellectual property, expertise, and production capacities are lacking. Also, LCR pose a significant administrative burden for entire value chains. See more information in [Orgalim’s position on the reform of EU Public Procurement rules](#).

Deepen partnership with APAC countries: Special focus should be placed on APAC countries such as Japan, India, Indonesia, Malaysia, Singapore, South Korea, Thailand, and Vietnam. These nations offer complementary strengths in technology and industry, especially in microelectronics. Their growing markets, competitive ecosystems, and integration into regional value chains make them ideal partners. Collaboration should include promoting co-investments and technology partnerships with global leaders by enabling partners to form joint ventures with EU firms and access EU-funded R&D infrastructures, in line with the principle of open strategic autonomy. While FTAs remain central to EU trade policy, delays in negotiations hinder progress. Therefore, alternative formats like the OECD or G7+ should be used to foster technology partnerships. Collaborating with microelectronics clusters in these countries could further strengthen the sector in both the EU and partner states. India deserves particular attention due to its ambitions and achievements in global value chains, especially in microelectronics. Europe can benefit from India’s chip design expertise, back-end capabilities, large engineering talent pool, vibrant tech start-up scene, and increasing activity in critical raw materials. A Memorandum of Understanding between the EU and India on semiconductor cooperation has been in place since 2024. A comprehensive FTA should be finalised by the end of 2025 to expand cooperation in microelectronics. Finally, the EU should use the EU-Japan Strategic Partnership Agreement (SPA)⁹ – which entered into force on 1 January 2025 – to deepen the cooperation on leading-edge chips. Japan’s advances in this area offer an opportunity to reduce existing dependencies through strategic collaboration.

Deepen collaboration with EFTA states: The EFTA states have proven to be reliable partners in various European activities and projects, for example the FP6, FP7 and Horizon framework. Their political independence has made them very competitive, especially in innovation and industrialisation of technologies. Harnessing this potential would leverage investment into the European semiconductor ecosystem and help position Europe to achieve the main targets of competitiveness, technological leadership and indispensability.

⁹ See: <https://eur-lex.europa.eu/EN/legal-content/summary/eu-japan-strategic-partnership-agreement.html>, rev. 2025-01-28.

A Governance focused on stronger cooperation between the EU, Member States, and industry

When it comes to ECA 2.0, decision-making authority is distributed across multiple interconnected levels – local, regional, national, and supranational. Policymaking and implementation must be coordinated among diverse actors. That is why a clear definition of the respective roles and responsibilities is essential for the success of the revised Chips Act.

Setting up tools for clear strategy and a successful implementation: The special report by the European Court of Auditors is critical of the fact that there is only one very ambitious and hardly attainable objective in the ECA: the 2030 Digital Decade objective of delivering 20% by value of the world's cutting-edge and sustainable microchip production (see Special Report, § 27f). In fact, many elements of a strategy are missing from the ECA. The ECA 2.0 should evolve from a one-time reactive response to a long-term industrial policy tool and formulate strategic objectives that consider not only the strategies of Member States but also those of other economic areas. The strategic high-level objectives should be translated into SMART objectives. These Specific, Measurable, Achievable, Relevant and Time-bound goals should be assigned to a specific stakeholder (taking into account the essential role of Member States' action) and regularly reviewed by the European Semiconductor Board to ensure they are being achieved. SMART objectives might, for instance, be formulated as follows:

- Triple the combined EU, national and private investments in semiconductor R&D, design, and production by 2035, with a minimum 2:1 and aspirational 3:1 leverage ratio of private to public investment.
- Approve at least one new fast-track IPCEI on advanced semiconductors by 2028.
- Generate long-term anchor demand agreements for at least 20 new FOAK facilities across Europe by 2035.
- Train and upskill 200,000 semiconductor professionals by 2035.
- Attract 10,000 foreign experts and researchers into the EU semiconductor sector by 2030 through streamlined visa pathways, with a stretch target of 30,000–40,000 by 2035.

A feasible design for mapping & monitoring: Policy decisions should be based on a comprehensive understanding of supply chains, market mechanisms, stakeholders, (future) demands and technology trends. However, extensive, mandatory reporting by companies is not a viable option. Reporting would be a new bureaucratic burden for companies, making Europe even less attractive as a business location. Unresolved issues regarding competition rules would need to be clarified. In addition, data alone will not help. The Commission would need to have sufficient expertise to interpret the “dumb” data. Finally, policymakers might be tempted to intervene politically in supply chains without being able to fully assess the consequences. The organisation of value chains must remain the prerogative of industry. Therefore, the Commission should build (limited) competency and capacity within its staff to guarantee a ‘market literacy’ to be able to design research studies and interpret results. The actual development of the methodology, data collection and in-depth analysis should be carried out by a service provider with a long-term contract. The assignment to a service provider ensures rapid operational readiness, professional excellence, compliance with competition law (clean-room-mechanism), low risks and high flexibility. The design of research inquires, and evaluation of data should be carried out in close cooperation with key stakeholders like microelectronic research organisations, companies and Member States (via the European Semiconductor Board – see next section). Such constellations are already common practice in many countries. New measures related to economic security must avoid creating additional administrative reporting. Coordination of national chips plans should focus on alignment and efficiency, ensuring monitoring and crisis-response mechanisms function effectively, rather than multiplying compliance costs for companies.

Stronger cooperation between the Commission, Member States and industry: The special report by the European Court of Auditors criticises a mismatch between objectives and responsibilities and the lack of a consolidated and transparent overview of all semiconductor investments across the EU. The Commission announced funding for which it is only partly

responsible. That is why clear ownership of tasks is needed and stakeholders can only take on tasks that fall within their own area of responsibility. We propose the following division of labour:

- **European Union:** The EU sets the framework. It ensures flexible and far-reaching aid schemes (FOAK-clause, fast track IPCEI, etc.), an integrated single market and minimal bureaucracy. It also helps Member States coordinate their activities with the aim of achieving added value for Europe and creating complementarity between projects in the individual Member States. This also includes allowing for different speeds and ambitions. The Semiconductor Coalition should be able to move faster and invest more. If the next MFF allocates an EU budget line for microelectronics production capacity, the EU can also provide support with direct funding.
- **Member States:** Member States provide budgetary resources for targeted support, optimise national framework conditions (approval procedures etc.) and provide suitable infrastructure so that their regional clusters can continue to grow. Member States also have an important role in facilitating industrial involvement across the EU.
- **Companies and Research and Technology Organisations (RTOs):** Companies and RTOs create competitive products and services and develop the technologies of tomorrow. With their knowledge of markets and technologies, they support politicians and elected officials (via their business associations) in their decision-making processes.

Upgrading the ESB with institutionalised industry participation: The ECA established the European Semiconductor Board (ESB), which has not entirely met its goals “to facilitate a smooth, effective and harmonised implementation of this Regulation, cooperation and the exchange of information [...]” ([compare §7 of ECA](#)). Furthermore, the Industrial Alliance for Processors and Semiconductor Technologies has so far not fulfilled the proposed advisory function ([compare §8 of ECA](#)). Industry representatives should be part of a renewed European Semiconductor Board with strong bottom-up industry participation, which also includes end market industries. The ESB should ensure real coordination across Member States and pooling of funding to achieve critical mass for projects of strategic relevance. The ESB should track activities within the framework of the ECA using status reports and should jointly decide on improvements if interim targets are not achieved. The board should be used for **real-time dialogue and consultation** with key stakeholders on priorities, strategic choices and investments.

Ensure regulatory coherence: The drafting and implementation of the ECA 2.0 should align closely with other EU legislation – such as the Quantum Act and Advanced Materials Act – to guarantee smooth interplay and strong complementarity across policy domains.

Orgalim represents Europe’s technology industries, comprised of 770,000 innovative companies spanning the mechanical engineering, electrical engineering, electronics, ICT and metal technology branches. Together they represent the EU’s largest manufacturing sector, generating annual turnover of €2,755 billion, manufacturing one-third of all European exports and providing 11.6 million direct jobs. Orgalim is registered under the European Union Transparency Register – ID number: 20210641335-88.



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