

EU Unveils its Technological Sovereignty Package New policy direction for chips, cloud, AI and open source

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Summaries

- The European Technological Sovereignty Package is a policy package aimed at strengthening semiconductors, cloud, AI, data centres, software and data infrastructure as an integrated “European technology stack,” while reducing excessive external dependencies in critical technologies.
- A key feature of the package is that it seeks to enhance technological sovereignty by combining industrial capacity building, demand creation, simplified regulation and permitting, financing, and skills development, while maintaining openness and cooperation with trusted partners.
- For Japanese companies and investors, this is an important policy development when considering opportunities in strategic sectors such as semiconductors, AI, energy, cybersecurity, and advanced materials, including investment, collaboration, and public procurement.

Overview of the Package



Source: EC Audiovisual Service. Photo: Lukasz Kobus © European Union, 2026

On 3 June 2026, the European Commission announced the [European Technological Sovereignty Package](#), a new policy package aimed at strengthening the EU’s capacity to develop, manage and scale up critical technologies, infrastructure, data and digital ecosystems, while remaining open to global partners.

The package responds to concerns that excessive dependence on non-EU providers in areas such as **semiconductors**, **cloud infrastructure**, **AI-related infrastructure**, **digital services** and **intellectual property** could weaken the EU’s competitiveness and economic security, especially amid geopolitical fragmentation and supply chain risks.

Against this background, the Commission calls for a shift from a mainly defensive approach focused on resilience and risk reduction to a more proactive strategy based on **industrial capacity, innovation, diversified supply chains, data control and cooperation with trusted partners**. It also highlights cross-cutting enablers such as **open source, simpler digital regulation, advanced digital skills and investment financing**, which are intended to support a more transparent, secure and innovation-friendly digital and industrial ecosystem in Europe.

The package is mainly composed of four initiatives:

- [Chips Act 2.0 —CA 2.0](#)
- [Cloud and AI Development Act — CADA](#)
- [EU Open Source Strategy](#)
- [Strategic Roadmap for Digitalisation and AI in the Energy Sector](#)

Together with existing EU policy initiatives, these measures are intended to support the development of a **European technology stack**, covering **semiconductors, cloud, AI, software and data infrastructure**.

The EU's Vision of Open Technological Sovereignty

A key point of the package is that the European Commission presents **technological sovereignty** not as isolationism or decoupling, but as an approach based on **openness, partnership and fair competition**. The EU aims to remain integrated into the global economy while better managing the risks of technological interdependence.

In this context, cooperation with trusted partners, including **Japan**, is expected to play an important role in diversifying supply chains, accessing talent and innovation, and reducing vulnerabilities. This approach is closely aligned with the [EU-Japan Digital Partnership](#) and the [EU-Japan Competitiveness Alliance](#), which already identify areas such as semiconductors, AI, quantum technologies, 5G/6G, cybersecurity, digital identity and data governance as priorities for cooperation. **For Japanese companies, this means that Europe's technological sovereignty agenda may create new opportunities** for joint development, demonstration projects, local investment, and participation in public procurement in strategic sectors, particularly through EU-based operations, partnerships, or solutions that meet EU requirements on sovereignty, cybersecurity, and EU added value.

An Ecosystem Approach to Strengthening Europe's Technology Stack

A key feature of the package is that it seeks to strengthen **semiconductors, cloud, AI, data centres, software and energy** not as separate policy areas, but as interconnected parts of a **European technology stack**. For this reason, the package places emphasis not only on strengthening supply-side industrial capacity, but also on combining it with **demand creation, support for strategic projects, simplified regulation and procedures, access to finance, and skills development**.

◆ Large-Scale Investment Needs and Improving the Investment Environment

The package underlines that achieving Europe's **technological sovereignty** will require not only traditional subsidies, but also large-scale financing, including risk capital and equity investment. The Commission estimates additional investment needs of around **€120 billion for semiconductors, €200 billion by 2036 for data centres, and €100 billion for cloud and AI leadership initiatives**, including AI Factories and AI Gigafactories¹. Through the [InvestAI initiative](#),

¹ **AI Factories** are AI development support hubs that make use of Europe's supercomputers. They are designed to support start-ups, industry and researchers in developing AI models and applications. By contrast, **AI Gigafactories** are larger-scale AI computing infrastructures equipped with at least the equivalent compute performance of 75,000 advanced AI compute accelerators. By combining data centre infrastructure with large-scale computing capacity, they are expected to enable the training and development of complex AI models. For further details, please see:

the EU also aims to mobilise around **€200 billion** in AI-related investment. In addition, the EU Open Source Strategy is expected to require around **€2 billion** in public and private funding over the next seven years.

The [European Competitiveness Fund \(ECF\)](#) is presented as a **key future financing tool** under the post-2027 Multiannual Financial Framework (MFF). It is expected to consolidate fragmented EU funding programmes and support strategic sectors such as advanced digital technologies and infrastructure, biotechnology and clean energy technologies². The ECF is intended to provide support across the value chain, from research and innovation to deployment, manufacturing, scale-up and skills, using EU budgetary guarantees, financial instruments and potential equity-related mechanism.

The Commission also stresses that public funding alone will not be sufficient. It therefore points to the [Savings and Investment Union](#) and a possible new mechanism to strengthen Europe's equity investment capacity in advanced technologies and strategic infrastructure, including AI, semiconductors, quantum, robotics, biotechnology and clean energy. To attract such investment, the package also highlights the need to improve the **regulatory and business environment**. In areas such as semiconductors, cloud, data centres and AI infrastructure, the EU aims to accelerate permitting, harmonise investment conditions, improve access to land, energy and financing, and make project pipelines more visible to investors inside and outside the EU.

◆ European semiconductor industry

Chip Act 2.0 (CA 2.0) aims to further strengthen **Europe's semiconductor ecosystem** and the **resilience of its supply chains**. While the [original European Chips Act](#), which entered into force in September 2023, focused mainly on supply-side measures such as expanding semiconductor manufacturing capacity within the EU and ensuring security of supply, CA 2.0 places greater emphasis on **demand-side measures** as well.

More specifically, CA 2.0 seeks to stimulate demand for **high-performance AI chips** and promote the use of **semiconductors designed and manufactured in the EU**, in coordination with AI Factories, AI Gigafactories and the cloud-related measures under Cloud and AI Development Act (CADA). On the demand side, the package refers to measures such as demand forums to introduce semiconductor-related products to industrial users, early-stage cooperation with industry on custom chip design, and public innovation procurement to encourage the uptake of EU-developed semiconductor technologies. On the supply side, CA 2.0 supports strategic projects involving an EU-based open foundry, with node size of 3 nanometres and below, chiplet integration and 3D packaging. It also expands the scope of **first-of-a-kind facilities** to cover key parts of the semiconductor value chain, including materials, equipment, printed circuit boards, advanced packaging, assembly and manufacturing-oriented chip design.

Furthermore, CA 2.0 envisages **semiconductor-specific investment promotion measures**, including faster permitting procedures for semiconductor technology facilities and strategic projects, as well as the use of **Semiconductor Regions of Excellence** across the EU. These regions are intended to increase the visibility of areas with strengths across the semiconductor value chain, including research and development, design, manufacturing, advanced packaging, equipment and materials. They are also expected to promote cooperation among investors, companies, research institutions and regional authorities. Through these measures, the EU aims not only to expand manufacturing capacity, but also to **attract investment into the broader semiconductor ecosystem**, building on

<https://digital-strategy.ec.europa.eu/en/policies/ai-factories>,

https://commission.europa.eu/topics/competitiveness/competitiveness-coordination-tool-projects/ai-gigafactories_en

² The ECF proposal is currently being considered by the European Parliament and the Council as part of the negotiations on the EU's **2028–2034 budgetary framework**. Its establishment remains subject to the adoption of the ECF Regulation, as well as agreement on the next MFF, which requires the unanimous approval of the Member States in the Council and the consent of the European Parliament. The Fund is therefore intended to become operational from 2028, although its final budget and design may change during the legislative negotiations.

regional industrial clusters and technological capabilities.

◆ Strengthening Cloud and AI Infrastructure

Cloud and AI Development Act (CADA) aims to support the development of **Europe's cloud and AI industries** and address risks arising from excessive dependence on non-EU providers. It treats cloud, AI and data centres as an integrated technological foundation, and seeks to enhance Europe's **security, autonomy and competitiveness**. The proposal introduces **Union assurance levels** to assess the sovereignty of cloud services, based on factors such as the location of data processing and storage, independence from third countries, transparency of the software supply chain, ownership and control of providers, and personnel requirements. Member States and EU institutions would conduct risk assessments for public-sector cloud use, while cloud providers could be recognised as offering a Union assurance level, through self-assessment for level 1 and audits for higher levels.

Regarding data centres, CADA introduces a framework to simplify and harmonise their deployment across the EU. It aims to **triple data centre capacity over the next five to seven years** and ensure sufficient capacity to meet Europe's demand by 2035, while maintaining high sustainability standards and geographical balance among Member States. The proposal also provides for **data centre strategic projects** and **data centre acceleration zones**, where permit-granting procedures for data centre projects should, in principle, be completed within 12 months. When designating such zones, Member States are expected to consider factors such as grid capacity, clean energy generation, network connectivity, waste heat reuse, environmental impact, decarbonisation and climate resilience. Through these measures, CADA aims not only to expand data centre capacity, but also to strengthen Europe's **cloud and AI ecosystem** in line with energy infrastructure and sustainability objectives.

For Japanese companies, it is important to view CADA not simply as **cloud and AI regulation**, but as an **industrial policy** through which Europe seeks to develop, in an integrated manner, the computing capacity, data infrastructure, cloud infrastructure, cybersecurity, and semiconductors and accelerators needed for the AI era. In particular, CADA is based on the recognition that, while Europe aims to use AI as a key technology to enhance its competitiveness and productivity, it does not yet have sufficient computing capacity or digital infrastructure within the EU. This concern also overlaps with the so-called [Draghi Report](#), the report on strengthening Europe's competitiveness prepared by Mario Draghi, former President of the European Central Bank. The report presents **AI as an opportunity for Europe to boost innovation, productivity and manufacturing competitiveness**, while noting challenges such as Europe's weakening position in advanced technologies, commercialisation and scale-up difficulties, financing constraints and regulatory burdens. In this context, CADA can be seen as part of Europe's effort to address **shortages in computing capacity and cloud/AI infrastructure**, and to create a more favourable environment for AI deployment across industry, the public sector and critical infrastructure.

Implications for Investing and Doing Business in the EU

For Japanese companies and investors, the key point is that the EU sees **AI, semiconductors, cloud and data centres** as central to productivity, competitiveness and economic security. The Technological Sovereignty Package should therefore be understood not simply as regulation or protectionism, but as an effort to strengthen Europe's industrial ecosystem, supply-chain resilience and investment environment.

From this perspective, CA 2.0 is important for understanding how Europe plans to reinforce its **semiconductor ecosystem**. As semiconductor supply chains are highly complex and globally distributed, full self-sufficiency is difficult for the EU³. Cooperation with trusted partners will therefore remain essential. Japanese companies may complement Europe's ecosystem in areas such as semiconductor materials, wafers, manufacturing equipment, advanced manufacturing, packaging, AI chips, photonics, automotive semiconductors and data-centre-related chips.

³ <https://www.eca.europa.eu/en/publications?ref=SR-2025-12>



It will be important to monitor Europe's priority semiconductor regions and clusters, and explore opportunities for demonstration projects, joint development and supply-chain cooperation.

For CADA, Japanese companies and investors should view it as an opportunity for **technology cooperation in infrastructure and services**, as Europe seeks to strengthen the computing capacity, data infrastructure and cloud infrastructure needed for the AI era. Relevant areas include data centres, low-latency computing, cloud and AI services, cybersecurity, data management, energy efficiency, cooling, storage, waste heat reuse and integration with clean energy. These areas may create opportunities for cooperation and investment with European companies, research institutions, local authorities, start-ups, and energy and infrastructure operators.

At the same time, cloud and AI services for the public sector and critical infrastructure may increasingly be assessed based on **sovereignty risks, cybersecurity, data governance, supply-chain transparency and compliance with EU standards**. For data centre investment, sustainability, power infrastructure, energy efficiency and climate impact will also be important. Japanese companies should therefore monitor priority regions, public procurement opportunities and AI infrastructure demand, while considering how they can contribute through materials, equipment, design support, joint development, local manufacturing, infrastructure operation or service provision.

Furthermore, to turn these policy priorities into concrete business opportunities, it is important to look at the financing mechanisms that support project development and production capacity. Frameworks such as **IPCEIs — Important Projects of Common European Interest** — support large-scale, cross-border projects involving several Member States, often in areas with high technological and financial risk. Joint funding by Member States, state aid and regional investment support can also provide important clues as to where and how EU policy priorities will be translated into actual projects⁴. **For Japanese companies and investors, the Technological Sovereignty Package can therefore serve as a compass for identifying the EU's strategic priority areas.** At the same time, it will be important to monitor how funding support and project pipelines develop in practice.

Going forward, legislative proposals such as CA 2.0 and CADA are expected to be examined by the European Parliament and the Council of the European Union before their adoption and entry into force. The Commission is also expected to launch calls related to AI Gigafactories and to advance consultations on building large-scale European equity investment capacity to support Europe's technological sovereignty ambitions. For Japanese companies and investors, it will therefore be important to monitor the legislative process, funding opportunities, calls for proposals and the formation of strategic projects.

⁴ The Technological Sovereignty Package refers not only to the IPCEI on cloud infrastructure and services, but also to the design of IPCEIs related to AI and computing infrastructure. These are positioned as frameworks to support the strengthening of Europe's AI and cloud infrastructure. For further details, please see: https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en; https://competition-policy.ec.europa.eu/state-aid/ipcei_en; https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis/cloud_en; <https://www.bundeswirtschaftsministerium.de/Redaktion/EN/Artikel/Industry/ipcei-cis.html>; <https://www.bundeswirtschaftsministerium.de/Redaktion/EN/Dossier/ipcei-cic.html>



Related Links:

- [Strengthening Europe's Tech Sovereignty | Shaping Europe's digital future](#)
- [Chips Act 2.0 | Shaping Europe's digital future](#)
- [Cloud and AI Development Act | Shaping Europe's digital future](#)
- [Commission sets course for Europe's AI leadership with an ambitious AI Continent Action Plan](#)
- [The EU Open Source Strategy | Shaping Europe's digital future](#)
- [Strategic Roadmap on digitalisation and AI in the energy sector - Energy](#)
- [Questions and answers on the Technological Sovereignty Package](#)
- [EU launches InvestAI initiative to mobilise €200 billion](#)
- [European Competitiveness Fund - Internal Market, Industry, Entrepreneurship and SMEs](#)
- [Savings and investments union - Finance - European Commission](#)
- [The AI Continent Action Plan | Shaping Europe's digital future](#)
- [AI Gigafactories - European Commission](#)
- [AI Factories | Shaping Europe's digital future](#)
- [EU launches InvestAI initiative to mobilise €200 billion](#)
- [European Chips Act | Shaping Europe's digital future](#)
- [The Draghi report on EU competitiveness](#)
- [Special report 12/2025: The EU's strategy for microchips | European Court of Auditors](#)
- [IPCEI - Competition Policy - European Commission](#)
- [100878541.pdf](#) (EU-Japan Competitive Alliance)
- [第4回 日 EU デジタルパートナーシップ閣僚級会合の結果 | デジタル庁](#)
- [第4回日 EU デジタルパートナーシップ閣僚級会合を開催しました \(METI/経済産業省\)](#)
- [EU MAG 駐日 EU 代表部公式ウェブマガジン](#) (デジタル社会の未来をリードする日・EU パートナーシップ)

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