



9:06 minute read

#Europe

/

#Growth

/

#Industrial Policy

For professional and institutional investors only – not to be further circulated. In Switzerland for qualified investors only. In Australia for wholesale clients

What is the future of European supply chains?

Secular trends including the rise of AI, the green transition, and geopolitical fragmentation are exacerbating vulnerabilities in the EU's industrial supply chains. But the bloc's strategy is changing, and involves de-risking at key nodes in critical supply chains and developing leverage in areas of strength.

Key Takeaways

- The Covid pandemic and Russia-Ukraine war exposed Europe's supply chain vulnerabilities, driving significant inflation and a 1.9% GDP loss between 2020 and 2022. Ongoing secular trends like the energy transition and AI risk exacerbating these challenges.
- Europe's reliance on foreign suppliers for semiconductors is a major weakness. The Chips Act aims to double the EU's global chip market share, but progress is slow.
- The EU has been shifting from Eastern pipeline gas to more LNG imports from the US, Norway, and North Africa. This diversifies supply but brings new logistical and cost challenges, especially for landlocked countries, and may run up against climate goals.
- The green transition is increasing the EU's reliance on critical raw materials, particularly rare earths, where China dominates extraction and processing. But untapped resources in Portugal and Scandinavia could help. And the Critical Raw Materials Act targets more domestic recycling as another source of supply.
- Defence and civilian infrastructure investment are increasingly linked. The Readiness 2030 plan and NATO targets are driving investments in dual-use projects, such as transport and grid enhancements.
- Europe's pursuit of economic resilience is increasingly doubling as a growth strategy. By investing in strategic infrastructure and industrial capacity, the EU could trade off some short-term fiscal stability to build long-term economic strength.

Supply chain transformation is central to the EU's efforts to restore competitiveness

In recent years, supply chain disruption triggered by the Covid pandemic and then the Russia-Ukraine war has brought Europe's supply chain vulnerabilities into sharp relief.

Research by the European Central Bank (ECB) finds that supply chain disruption accounted for roughly two thirds of the increase in inflation from January 2020 to September 2022, while also taking 1.9% off GDP.

And ongoing secular trends in strategic industries could exacerbate the EU's vulnerability.

For instance, the energy transition will keep increasing demand for equipment requiring rare earth minerals, of which Europe has little domestic supply. The rise of AI poses a similar challenge given the EU's reliance on other countries for cutting-edge computing equipment. And geopolitical fragmentation could lead to more flare-ups in trade relations with key partners.

So, it is no surprise to see supply chain strategy at the heart of plans to restore economic competitiveness. For example, Mario Draghi's report *The Future of European Competitiveness* mentions "supply chains" no fewer than 153 times.

The Nexperia dispute as a case study

All of these drivers are played out in miniature in the controversy between the Netherlands and China over Nexperia, a Chinese-controlled, Netherlands-based chip manufacturer.



Concerned that the CEO's intention to shift machinery and intellectual property out of the Netherlands into China would undermine Europe's critical value chain, the Dutch government intervened to block the transfer.

However, China responded with export controls on Nexperia's Chinese affiliates, leaving its European operations without key inputs. As Nexperia's chips form a key link in automotive production supply chains, the disruption had severe ramifications.

These developments are an unwelcome reminder of European dependence on China, Taiwan and the US at critical nodes of its electronics supply chain. And Europe's failure to identify an effective means of retaliation to Chinese export controls betrays its lack of dominance over any one point in the global value chain, leaving it without geoeconomic leverage.

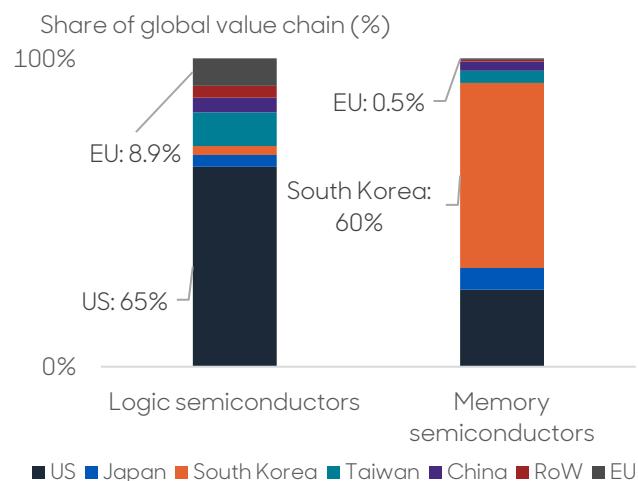
All in on chips?

The EU's Chips Act (2023) is supposed to address these issues by mobilising €43 billion in investment. But these measures are failing to achieve the policy's stated goal of increasing the EU's share of global chip value chain from 10% to 20%. That share is, in fact, on course to decline.

Part of the problem is that, while the Chips Act talks of a massive boost to investment, it only mobilises €3.3 billion in central EU funding, with the remainder to be made up by national governments and the private sector. This is well short of €52 billion in federal funding allocated by the US' CHIPS Act, not to mention associated tax relief and the current administration's decision to take a 10% stake in Intel.

Of course, more than a few EU national governments are operating under binding fiscal constraints. For these countries, investing in the semiconductor industry means making potentially painful cuts elsewhere.

Figure 1: Europe barely has a foothold in the manufacture of the most high-end chips



Source: SIA, Aberdeen, January 2026

And the high-end end logic and memory chip manufacturing linked to the AI boom that the Chips Act targets requires significant scale. But, without cross-border coordination, many of Europe's governments simply lack this (see Figure 1).

Indeed, Europe's chip strategy was dealt a blow when Intel withdrew support for planned fabs in Magdeburg and Wroclaw, worth €30 billion and €5 billion respectively.

These disappointments spurred a change of strategy. In September, all 27 member states called for the "unrealistic" and "too broad" 20% target to be dropped in a joint declaration. They instead proposed a strategic vision based on principles of "prosperity, resilience, and indispensability".

This signals a shift towards more targeted investment to enhance existing strengths and address supply chain vulnerabilities.

For example, Europe has an opportunity to enhance its geo-economic leverage by building on Netherlands-based ASML's global leadership in lithography. And it could target investment more effectively by focussing on existing competitive hubs – Dresden as Europe's leading semiconductor manufacturing and R&D cluster, and Eindhoven as the high-tech and semiconductor-equipment hub anchored by ASML.

Meanwhile, the bloc's efforts to reduce its dependence on other countries for high-end logic and memory chips will depend on the extent to which the updated Chip Acts can foster cross-border collaboration, cut red tape, and deliver central financing.

Vulnerabilities in the EU's energy supply chain remain

Another example of a sector where a geopolitical rival has exploited vulnerabilities in Europe's supply chain is, of course, energy.

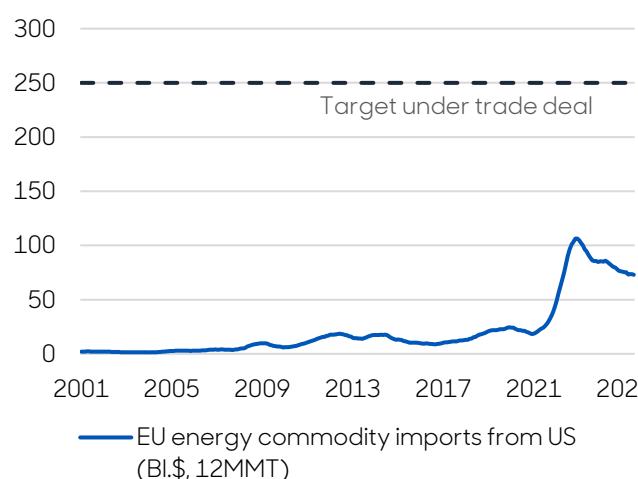
The Russia-Ukraine war pushed the EU's energy logistics strategy away from investment in Eastern pipeline gas infrastructure such as NordStream, to pipelines from Norway and North Africa and especially liquefied natural gas (LNG) imports. And, although the details of the agreement remain unclear, the EU's promise to massively increase purchases from the US as part of the recent trade deal will likely accelerate this trend (see Figure 2).

Processing more liquefied natural gas will require expanding port and regassification capacity, as well as associated logistical transformation around major hubs in Northeastern Europe and the Baltic.

But a massive uplift in LNG consumption would clash with the EU's net-zero commitments. Moreover, distribution to landlocked countries in Central and Eastern Europe poses logistical challenges, and leaves supply chains vulnerable to shocks in the Persian Gulf and US. Imported LNG is also a relatively expensive source of energy.



Figure 2: Promised imports of energy from the US might not be credible, but the direction of travel is clear



Source: Haver, Aberdeen, January 2026

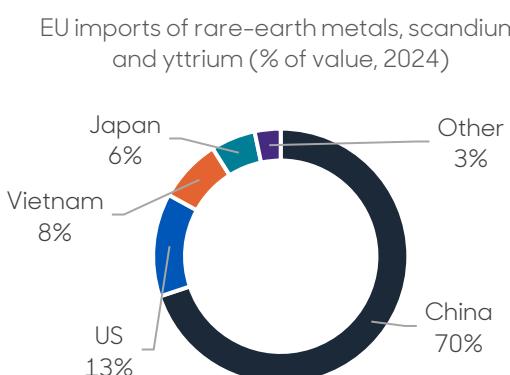
The green transition will require renewing Europe's critical raw materials supply chains

Longer term, renewables are set to play an increasingly large role in the EU's energy mix. In addition, the EU's decarbonisation strategy compels it to phase out internal combustion engine (ICE) production by 2035.

But greater use of green technologies means more reliance on critical minerals – another area where the EU's supply chain is vulnerable.

For instance, China dominates global extraction of graphite (crucial for battery production) and rare earths (used in heat pumps, wind turbine instruments). Its dominance of the critical resource *processing* space is even more pronounced. By contrast, the EU's share of global minerals production is under 7%. Currently, it imports 70% of its rare earths from China, and produces no domestic supply (see Figure 3).

Figure 3: The EU is highly dependent on China for its rare earths supply



Source: Eurostat, Aberdeen, January 2026

The latter has brought its dominance to bear in recent trade disputes using export restrictions.

In contrast to the chips value chain, there is no clear area of strength in the global critical minerals supply chain that the EU could leverage. But it does have access to advanced mining and recycling technologies that could help secure a domestic supply.

In addition, there are significant deposits of lithium in Portugal, and nickel deposits in Scandinavia. These are currently not being mined, though future extraction is planned.

So, if the EU can translate its longstanding leading position in recycling other raw materials such as steel and zinc to critical raw materials, it could gain a valuable domestic supply. The EU's Critical Raw Materials Act (2024) sets a target to meet 25% of domestic consumption of recycled critical minerals domestically.

This strategy is not without its challenges, however. Not least among these is the EU's lack of a network of recycling infrastructure capable of supporting the recycling process end-to-end. Investment in storage facilities for strategic stockpiles is also essential.

Pro-infrastructure legislative measures such as the Critical Raw Materials Act and Germany's €500 billion package should help in this regard. But, given the relatively small scale of these facilities, the private sector could play a leading role in this investment drive.

Security and secure supply chains

One reason for the push for more secure supply chains in semiconductor, energy, and critical minerals is their importance to the EU's defence sector.

Defence spending will ramp up in the coming years in response to new security threats and a push from the US for Europe to carry a greater burden of its own defence.

The EU's Readiness 2030 plan sets out a goal to increase defence spending by €800 billion.

Historically, much of European defence expenditure has been subject to international leakages. On this occasion, the EU has taken steps to ensure leakages are limited and supply chains strengthened by encouraging domestic procurement.

For instance, €150 billion in EU-backed loans will be made available to member states for defence infrastructure projects, but only if governments contract companies based within the single market or Ukraine.

The structure of these loans – which heavily favour joint ventures between EU companies – is explicitly aimed at pushing Europe's fragmented defence industry towards cross-border collaboration.



In this regard, the Readiness 2030 plan consciously echoes Draghi's focus, for example calling for unified weapons specifications to reduce duplication and improve interoperability across member states' systems.

Meanwhile, the agreement of NATO member states to increase defence spending to 5% of their GDP both underlines the case for greater procurement and the need for investment in Europe's logistical network.

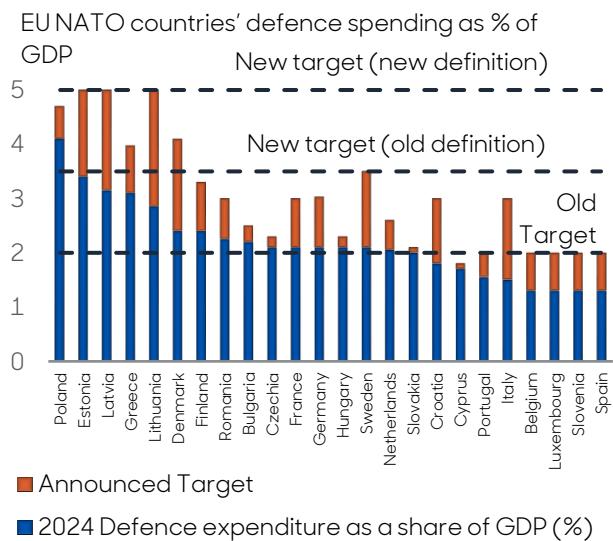
Civilian spillovers

Only 3.5% of this 5% target is earmarked for core defence capabilities, with the remaining 1.5% available for spending on "critical infrastructure, defend[ing] our networks, ensur[ing] our civil preparedness and resilience, unleash[ing] innovation, and strength[en] our defence industrial base", as outlined in the NATO statement (see Figure 4).

These civil projects need only be tangentially related to military logistics operations to qualify for inclusion as "defence adjacent" under NATO's definition. Mooted public investments therefore include grid enhancements and upgrades to cybersecurity systems.

In addition, the plan calls for spending on infrastructure supporting military mobility such as bridges, widening of railway tunnels, ports, and new airport terminals. The integrity of subsea cable infrastructure is also a growing focus.

Figure 4: NATO rules now incentivise infrastructure investment

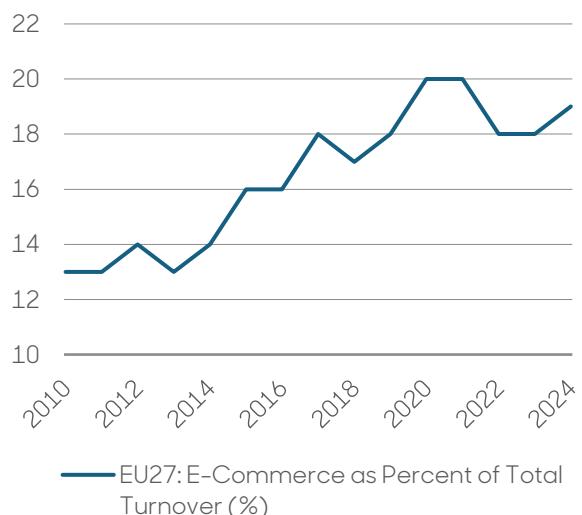


Source: Haver, UBS, NATO, January 2026

Conveniently, there is also a pressing need for investment in civilian transport infrastructure driven by the growth of e-commerce and international tourism (see Figure 5). We find that Europe's largest infrastructure gap is in the transport space.

And as 90% of the transport infrastructure needed for large military operations in the EU is dual use, the usage of fiscal space earmarked for defence expenditure to address a civilian infrastructure gap is an opportunity Europe's governments are unlikely to pass up. For example, plans to use public funds to build a bridge to Sicily are in motion.

Figure 5: The growth in e-commerce underlines the case for investment in logistics



Source: Haver, January 2026

A more security-centric future

This blurring of lines between military and economic strategy reflects a broader shift. Europe's security agenda encompasses economic security including securing critical inputs to reshaping industrial capacity as well as defence.

Supply chain resilience is central to this effort, not just to reduce exposure to shocks, but to gain strategic leverage in a more fragmented global economy.

But this is not simply a pivot to caution. Policies including the Chips Act (and its potential follow-up), civilian infrastructure investment, and the ramping up of defence production are growth-additive measures.

In some cases, they may even trade some degree of fiscal stability off for long-term competitiveness and security. We see Europe's reform agenda – especially in Germany – boosting growth over the medium term.

Author

Felix Feather

Important Information

For professional and Institutional Investors only – not to be further circulated. In Switzerland for qualified investors only.

Risk warning

The value of investments, and the income from them, can go down as well as up and an investor may get back less than the amount invested. Past performance is not a guide to future results.

Copyright in this content from the Global Macro Research team belongs to the Aberdeen Group and our licensors. You may quote this content (excluding any Third Party Data) provided you acknowledge Aberdeen Investments as the source.

Any data contained herein which is attributed to a third party ("Third Party Data") is the property of (a) third party supplier(s) (the "Owner") and is licensed for use by Aberdeen*. Third Party Data may not be copied or distributed. Third Party Data is provided "as is" and is not warranted to be accurate, complete or timely. To the extent permitted by applicable law, none of the Owner, Aberdeen* or any other third party (including any third party involved in providing and/or compiling Third Party Data) shall have any liability for Third Party Data or for any use made of Third Party Data. Neither the Owner nor any other third party sponsors, endorses or promotes the fund or product to which Third Party Data relates.

*Aberdeen means the relevant member of the Aberdeen Group, being Aberdeen Group plc together with its subsidiaries, subsidiary undertakings and associated companies (whether direct or indirect) from time to time.

The information contained herein is intended to be of general interest only and does not constitute legal or tax advice. Aberdeen does not warrant the accuracy, adequacy or completeness of the information and materials contained in this document and expressly disclaims liability for errors or omissions in such information and materials. Aberdeen reserves the right to make changes and corrections to its opinions expressed in this document at any time, without notice.

Some of the information in this document may contain projections or other forward-looking statements regarding future events or future financial performance of countries, markets or companies. These statements are only predictions and actual events or results may differ materially. The reader must make his/her own assessment of the relevance, accuracy and adequacy of the information contained in this document, and make such independent investigations as he/she may consider necessary or appropriate for the purpose of such assessment.

Any opinion or estimate contained in this document is made on a general basis and is not to be relied on by the reader as advice. Neither Aberdeen nor any of its agents have given any consideration to nor have they made any investigation of the investment objectives, financial situation or particular need of the reader, any specific person or group of persons.

Accordingly, no warranty whatsoever is given and no liability whatsoever is accepted for any loss arising whether directly or indirectly as a result of the reader, any person or group of persons acting on any information, opinion or estimate contained in this document.

This communication constitutes marketing, and is available in the following countries/regions and issued by the respective Aberdeen Group members detailed below. The Aberdeen Group comprises Aberdeen Group plc and its subsidiaries: (entities as at 22 September 2025)

United Kingdom (UK)

abrdn Investment Management Limited registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL. Authorised and regulated in the UK by the Financial Conduct Authority.

Europe¹, Middle East and Africa

¹In EU/EEA for Professional Investors, in Switzerland for Qualified Investors - not authorised for distribution to retail investors in these regions

Belgium, Cyprus, Denmark, Finland, France, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, and Sweden: Produced by abrdn Investment Management Limited which is registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL and authorised and regulated by the Financial Conduct Authority in the UK. Unless otherwise indicated, this content refers only to the market views, analysis and investment capabilities of the foregoing entity as at the date of publication. Issued by abrdn Investments Ireland Limited. Registered in Republic of Ireland (Company No.621721) at 2-4 Merrion Row, Dublin D02 WP23. Regulated by the Central Bank of Ireland. **Austria, Germany:** abrdn Investment Management Limited registered in Scotland (SC123321) at 1 George Street, Edinburgh EH2 2LL. Authorised and regulated by the Financial Conduct Authority in the UK. **Switzerland:** abrdn Investments Switzerland AG. Registered in Switzerland (CHE-114.943.983) at Schweizergasse 14, 8001 Zürich. **Abu Dhabi Global Market ("ADGM"):** abrdn Investments Middle East Limited, Cloud Suite 403, 11th floor, Al Sarab Tower, Abu Dhabi Global Market Square, Al Maryah Island, P.O. Box 5327224, Abu Dhabi, United Arab Emirates. Regulated by the ADGM Financial Services Regulatory Authority. For Professional Clients and Market Counterparties only. **South Africa:** abrdn Investments Limited ("abrdnIL"). Registered in Scotland (SC108419) at 1 George Street, Edinburgh EH2 2LL. abrdnIL is not a registered Financial Service Provider and is exempt from the Financial Advisory And Intermediary Services Act, 2002. abrdnIL operates in South Africa under an exemption granted by the Financial Sector Conduct Authority (FSCA FAIS Notice 3 of 2022) and can render financial services to the classes of clients specified therein. Aberdeen Investments Global is a business name of the foregoing entities.

Asia-Pacific

Australia and New Zealand: abrdn Oceania Pty Ltd (ABN 35 666 571 268) is a Corporate Authorised Representative (CAR No. 001304153) of AFSL Holders MSC Advisory Pty Ltd, ACN 607 459 441, AFSL No. 480649 and Melbourne Securities Corporation Limited, ACN 160 326 545, AFSL No. 428289. In New Zealand, this material is provided for information purposes only. It is intended only for wholesale investors as defined in the Financial Markets Conduct Act (New Zealand). **Hong Kong:** abrdn Hong Kong Limited. This material has not been reviewed by the Securities and Futures Commission. **Japan:** abrdn Japan Limited Financial Instruments Firm: Kanto Local Finance Bureau (Kinsho) No.320 Membership: Japan Investment Advisers Association, The Investment Trusts Association, Type II Financial Instruments Firms Association. **Malaysia:** abrdn Malaysia Sdn Bhd, Company Number: 200501013266 (690313 -D). This material has not been reviewed by the Securities Commission of Malaysia. **Thailand:** Aberdeen Asset Management (Thailand) Limited. **Singapore:** abrdn Asia Limited, Registration Number 199105448E. Aberdeen Investments Global is a business name of the foregoing entities.

Copyright © Aberdeen Group plc 2026. All rights reserved.

AA-140126-202828-63