China Forces Its Way Into Europe's Green Markets

From One Harmful Dependency to Another

JOJJE OLSSON

ephi

Table of contents

Foreword

An Unsustainable Sustainability Solution

If you're middle-aged today, you probably remember a time when China was mostly known for supplying cheap junk to Europe. If something was labeled "Made in China," you expected it to break after just a few days of use, or perhaps not even work to begin with. As a manufacturing country, China was cheap, but technically underdeveloped.

Then came the debate about working conditions in the countless Chinese factories. Swedish retail chains had employees who traveled around to make sure that minimum wages were paid, that people weren't locked inside, and that there were at least some regulations around working hours. China was simply a country that produced low-quality goods at very low prices. The transformation into a high-tech giant has happened so fast that Europe hasn't kept up.

The U.S. trade tariffs on China have mostly been seen as American nationalist revenge politics, rather than a legitimate concern about a country that rapidly adapts to global demand, and doesn't shy away from state subsidies or violations of human and environmental rights. Today's China is a high-tech nation capable

> **Today's China is a high-tech nation capable of manufacturing and delivering the very things we have politically decided we need, but are no longer able to produce ourselves.**

of manufacturing and delivering the very things we have politically decided we need, but are no longer able to produce ourselves. Through a series of decisions, both at the national and EU levels, we have ended up in a position of deep dependence on China for access to batteries, electric vehicles, solar panels, and a wide range of other products central to the green transition.

This outcome is not just the result of China's superior production capabilities, but also of its sophisticated system of subsidies and a state apparatus that forcefully steers the direction of national manufacturing. This report is an attempt to provide a fact-based snapshot of the current situation.

But one thing is clear – Europe's many decisions to rapidly and forcefully move away from fossil energy dependence have led us into a dependence on China instead. A China that no longer survives on producing cheap plastic trinkets, but on high technology that our modern societies cannot function without. Is that really a sustainable situation?

Marie Söderqvist
CEO at EPHI

Stockholm, june 2025

From One Harmful Dependency to Another

Breaking free from dependence on Russian energy resources is a painful process for the EU, which as recently as last year bought more oil and gas from Russia than it provided in financial aid to Ukraine.[1] Yet despite this experience, the EU is now developing a comparable dependence, this time on China, for its green transition.

Thanks to extensive subsidies, China has rapidly become a global leader in the production of electric vehicles, lithium-ion batteries, solar panels, and wind turbines. The expansion of green energy within China has outpaced most forecasts, fueling an international push marked by dumped goods onto global markets.

"If we want things to stay as they are, everything must change," wrote Giuseppe Tomasi in his novel The Leopard. Yet the EU shows a serious lack of flexibility when it comes to safeguarding its economic and political independence. Its attempts to maintain control over its own markets during times of industrial transformation are half-hearted at best. The EU struggles to respond to China's industrial policy, where companies can afford short-term losses in exchange for global market share thanks to state support. It even seems difficult to have a substantive discussion about the risks posed by dependence on high-tech products from China.

There is no shortage of cautionary examples. For several decades, China has used subsidies to gain an almost monopolistic position in rare earth metals, which are essential for high-tech manufacturing worldwide. This dominance is now leveraged as a tool in trade negotiations with both the United States and the EU.[2]

In times of trade wars and growing geopolitical tensions, it is not difficult to imagine how China could exploit democratic countries' dependence in areas such as transportation, electricity generation, and energy storage.

The United States is taking this issue seriously. President Joe Biden's administration introduced 100 percent tariffs on Chinese electric vehicles and allocated hundreds of billions of dollars in subsidies for domestic green industries. During his second term, Donald Trump imposed tariffs of up to 3.521% on solar panels in Southeast Asian transit countries used for re-export to the U.S.[3]

But the EU remains hesitant and passive. There are currently no tariffs at all on

1 Centre for Research on Energy and Clean Air, https://shorturl.at/JFL4H

2 Reuters, https://shorturl.at/gKkne

3 Nikkei Asia, https://shorturl.at/fxWs0

Chinese solar panels, which now dominate the continent. The EU is the largest export market for Chinese electric vehicles, and last year, more than half of all Chinese investments in Europe went to factories intended for the production of electric vehicles and lithium-ion batteries.[4]

In Europe, there is an ingrained aversion to tariffs, a built-in openness to foreign investment, and widespread skepticism toward state-led industrial initiatives, especially those with longer time horizons. At the same time, the green transition enjoys strong support among voters and is therefore expected to continue. It is difficult to make the equation add up without cheap electric vehicles and solar panels from China.

Politicians, business leaders, and civil society are of course fully entitled to uphold the free trade orthodoxy and the open investment climate that helped build the EU's prosperity. But they must also be aware of the risks and develop strategies to avoid or manage yet another harmful dependency on yet another dictatorship.

Overcapacity and "the second China shock"

During the so-called first China shock, millions of workers in Europe and the United States lost their jobs as China became a world leader in the production of everything from consumer electronics to clothing.[5] This development began in the late 1990s and accelerated after China joined the World Trade Organization in 2001. It was driven by foreign investment and brought significant profits to multinational companies such as Apple and Walmart.

The second China shock, which began around 2018, is of a completely different nature. It is driven by production that has expanded through state subsidies, while China's manufacturing sector has moved up the value chain. It is also fueled by overcapacity, a condition in which a country or market has more production capacity than manufacturers can sell at a profit.

Overcapacity typically arises from excessive investment resulting in overproduction, often combined with low consumption and low inflation. This overcapacity, in turn, leads to parts of industrial output remaining unused or unsold. In a well-functioning market economy, this is a normal part of the production cycle, where excess supply drives prices down until only the most competitive players remain profitable and survive.

4 Merics, https://shorturl.at/LTfCv

5 National Bureau of Economic Research, https://shorturl.at/8oyNj

But in a state-controlled economy, this pattern can be disrupted through market intervention. That is exactly what is now happening in China. The country's over-capacity first began to draw attention in the West after large-scale subsidies were granted to state-owned enterprises in sectors such as steel, cement, aluminum, and glass. It became evident in the mid-2010s, and even after some consolidation that reduced the number of companies, China's overcapacity in these industries remains to this day.

This overcapacity caused some concern in the world's market economies. But it only affected a limited number of jobs in industries already considered problematic for environmental reasons. Buying steel from China was rarely associated with economic security. On the contrary, cheaper steel meant higher profits for many European companies, while local steel producers managed to survive by focusing on more specialized products.

Overcapacity Spreads to the Industries of the Future

Especially after COVID-19, China's overcapacity has gradually extended to private companies and a range of future-oriented industries such as semiconductors, electric vehicles, lithium-ion batteries, and other forms of green energy. This has been made possible by a deliberate industrial policy focused on upgrading the country's high-tech manufacturing capabilities and catching up with developed nations in several key areas.

Rapid transitions are made possible by China's economic system, where minimal welfare serves to enrich the state while keeping the population relatively poor. China's leader Xi Jinping has himself warned that investments in welfare systems risk creating lazy citizens who do not contribute to the economy.[6]

Last year, China's household savings rate reached 55 percent, the highest level since 1952.[7] In comparison, the figure is just over 15 percent in the EU and barely 4 percent in the United States. Unstable capital markets and strict regulations on moving money abroad mean that a large portion of savings ends up in the banks, particularly since the onset of China's real estate market that has persisted since 2021.

The state's control over China's banks also enables capital to be efficiently allocated toward projects prioritized by the authorities. "New high-quality productive capacity" has become a central term in the allocation of these resources, after it was first

6 Asia Society, https://shorturl.at/DQSmX

7 South China Morning Post, https://shorturl.at/RMiJq

mentioned by President Xi Jinping in the autumn of 2023. It refers to the promotion of investment in research and development, as well as in production capacity within emerging strategic sectors and future-oriented industries, with the ambition of making China a global leader in these fields.[8]

Green energy has become a major focus. According to a report from the UK-based organisation Carbon Brief, which specializes in climate policy and science, "clean energy" last year made up 10 percent of China's economy for the first time, in the form of production and investments totaling 13.6 trillion yuan (192 billion euro[9]). Clean energy also accounted for 26 percent of China's GDP growth, and for the first time, the monetary value exceeded that of real estate sales, which had previously been the main driver of the country's growth.[10]

"Clean energy" last year made up 10 percent of China's economy for the first time, in the form of production and investments totaling 13.6 trillion yuan (192 billion euro). Clean energy also accounted for 26 percent of China's GDP growth, and for the first time.

Including nuclear power, power grids, high-speed rail, and other infrastructure that helps reduce emissions within China's energy sector, the clean energy sector grew three times faster than the rest of the economy last year. Investments in clean energy reached 6.8 trillion yuan (816 billion euro), representing 7 percent growth and nearly half of all fixed asset investments in China. The production of output of goods and services within the sector rose by 21% percent.

Since 2022, the value of the clean energy sector has grown by 50 percent. A notable shift in 2024 was that manufacturing grew faster than investment, suggesting a shift from capacity build-up to active production. Growth is driven by "the three new" industries – electric vehicles, batteries, and solar power – which accounted for three-quarters of the sector's total value and more than half of all clean energy investments last year.

8 Brookings Institution, https://shorturl.at/JQKIr

9 All currency conversions in parenthesis are based on the exchange rate as of 12 June 2025.

10 Carbon Brief, https://shorturl.at/K2kwo

Different Forms of State Support in China

China now accounts for around 30 percent of global production but only about 13 percent of global consumption. Still, investment in fixed assets within the manufacturing sector grew by 9.2 percent last year. This was almost twice the rate of GDP growth, indicating that industrial subsidies continue to take precedence over boosting household purchasing power.[11]

Despite the rising levels of state support, more than 20 percent of China's industrial companies are now operating at a loss.[12] Last year, the volume of China's exports rose by 14 percent, while the value increased by only 7 percent. Both of these figures are signs of overcapacity and price dumping.

According to Chinese authorities, however, there is no problem with overcapacity in the country. They claim this is an invention of anti-China actors and that China's growing exports mainly reflect its competitive advantages. At the end of 2024, Xi Jinping reaffirmed his support for the country's economic model and stated that Western liberal market economies cannot compete with modernization in the Chinese style.[13]

In this, Xi Jinping does have a point, as Chinese companies enjoy several advantages compared to their Western counterparts. The most direct form of support comes through outright subsidies. Although such subsidies exist in other countries as well, China spends more than any other major economy both in absolute terms and relative to GDP.

According to the American research group Rhodium Group, China's direct subsidies to domestic companies increased by 80 percent from 2015 – the year the Made in China 2025 industrial plan was launched – to 2023. This increase was even greater among companies in sectors that Beijing considers strategic. These include electric vehicles, batteries, solar panels, and a range of other areas within green energy.

The increase in tax incentives has been even more rapid. These include everything from reduced corporate tax rates to tax deductions for research and development. The number of companies benefiting from such deductions more than quadrupled between 2015 and 2023. Tax benefits for companies in so-called innovative industries grew by an average of 28.8 percent annually from 2018 to 2022, reaching a value of 1.3 trillion yuan (156 billion euro).[14]

---

11 China Briefing, https://shorturl.at/p0RRS

12 Merics, https://shorturl.at/j4YCv

13 Qiushi, https://shorturl.at/JxFQS

14 Rhodium Group, https://shorturl.at/ptKed

Rhodium Group and others note that local authorities play an important role in distributing subsidies and tax incentives. Limited transparency and oversight at the local level makes it difficult to map the full extent of this support.

Thanks to China's state-controlled banking sector, the country's companies also have access to favorable loans. These may be extended below market rates or with terms that reduce the consequences of non-repayment. Such loans can be found around the world and became more common during the COVID-19 pandemic. But once again, the dominance of the state in the banking sector makes this practice more widespread and effective in China.

Simply by owning the country's five largest commercial banks, the state controls more than half of all banking assets in China.15 Central and local government ownership of the remaining banks is also widespread. Political incentives encourage banks to extend or refinance debt with new loans. This reduces the pressure on companies to become profitable quickly, shielding them from market forces that might otherwise force change. Reduced fiscal constraints allow for greater risk-taking, such as increasing production and lowering prices.

Similarly, state control over the energy sector allows many companies to benefit from subsidized energy tariffs. In addition, the state owns all land in China. In urban areas, land is owned through local governments, which often support companies in prioritized industries by offering subsidized or in some cases free land.

Local governments also provide infrastructure and industrial parks, which companies can use or operate in at discounted rates. Industrial parks in particular are strategic investments aligned with the central government's political priorities. They are often designated for specific sectors such as green energy and provide low-cost facilities for manufacturing, research, or employee housing.

Once again, political control and scale set these industrial parks apart from similar initiatives in other countries. Along with transportation, industrial parks represent the largest expenditure for local governments outside their formal budgets. Rhodium Group estimates that China's local authorities spent over one trillion yuan (120 billion euro) on industrial parks last year, describing this as a form of subsidy even though it does not involve direct financial transfers.[16]

15 The International Institute for Management Development, https://shorturl.at/CpHLu

16 Rhodium Group, https://shorturl.at/ptKed

The Domestic Market as Leverage

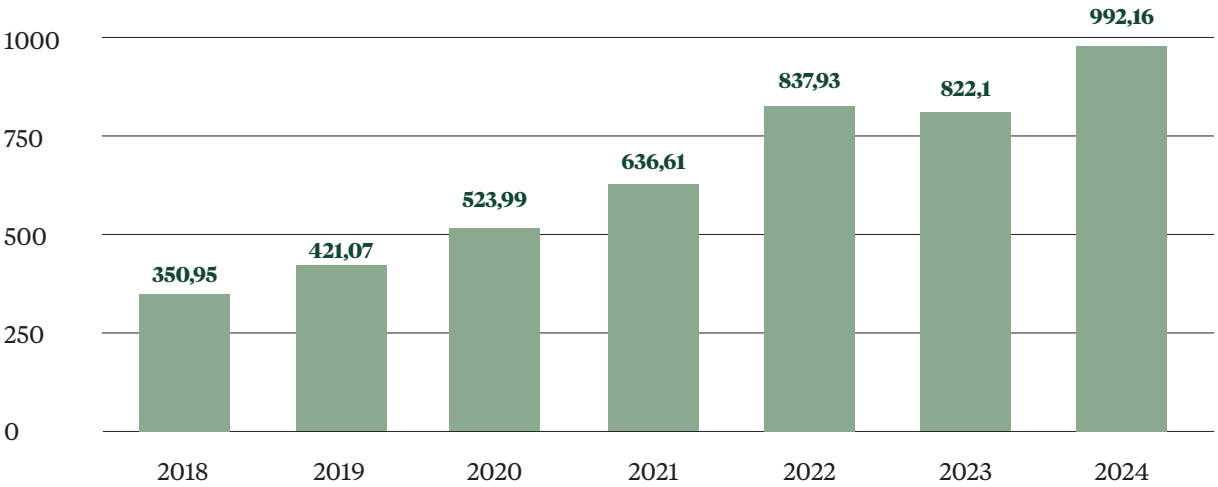
Another form of preferential treatment for Chinese companies lies in regulation and market access. Authorities have successfully leveraged access to China's vast domestic market as leverage to persuade foreign companies to establish production facilities and research and development centers in the country. This, in turn, has led to technology transfer, enabling Chinese companies to build up their own supply chains across a range of high-tech industries.

Of the 529 companies that took part in the China Business Confidence Survey 2024, conducted by the EU Chamber of Commerce in China, 58 percent stated that they had missed out on business opportunities due to restricted market access and other regulatory barriers. This is an increase from 42 percent in 2022.

Similarly, 78 percent of member companies surveyed by the American Chamber of Commerce in China said that state support for Chinese firms had increased over the past decade. They pointed to access to cheap credit, direct subsidies, and favorable terms in public procurement as the main forms of support.[17]

It is true that all major economies support their domestic industries in various ways. However, China's support stands out in two main respects: the political nature of how the support is distributed and its sheer scale.

China's global trade surplus. Billion USD.
Source: China's General Administration of Customs.



17 Rhodium Group, https://shorturl.at/l3Pe0

In May 2025, Rhodium Group noted that China's industrial policy provides subsidies to companies in high-tech sectors equivalent to 4.5 percent of their revenues, compared to an average of 0.69 percent across OECD countries. This figure includes only "conventional industrial policy tools," and does not account for the broader impact of the state-controlled financial system.[18]

The increase in production capacity has led China's trade surplus in goods to rise from 421 billion dollars (365 billion euro) in 2019, the last year before the pandemic, to a record 992 billion dollars (857 billions euro) in 2024.

During the first China shock, parts of the world became dependent on China for goods such as shoes, toys, and basic electronic components. The second China shock risks fostering a similar dependence in the area of green energy, a key strategic industry for Europe's future.

To understand the risks, it is important not to treat green energy as a single, uniform sector. A closer look at "the three new" industries – electric vehicles, solar power, and batteries – reveals very different conditions and challenges.

Electric Vehicles: Rapid Expansion with Global Ambitions

Electric vehicles are by far the largest sector within green energy in China. According to the International Energy Agency, 12.4 million electric and plug-in hybrid vehicles were produced in China last year, an increase of more than one-quarter from the previous year and accounting for over 70 percent of global production.[19] Manufacturing surged during the 2020s. Hundreds of companies were established in a short period, fueled by subsidies to the sector that, according to consultancy Alix-Partners, totaled 57 billion dollars (49 billion euro) between 2016 and 2022.

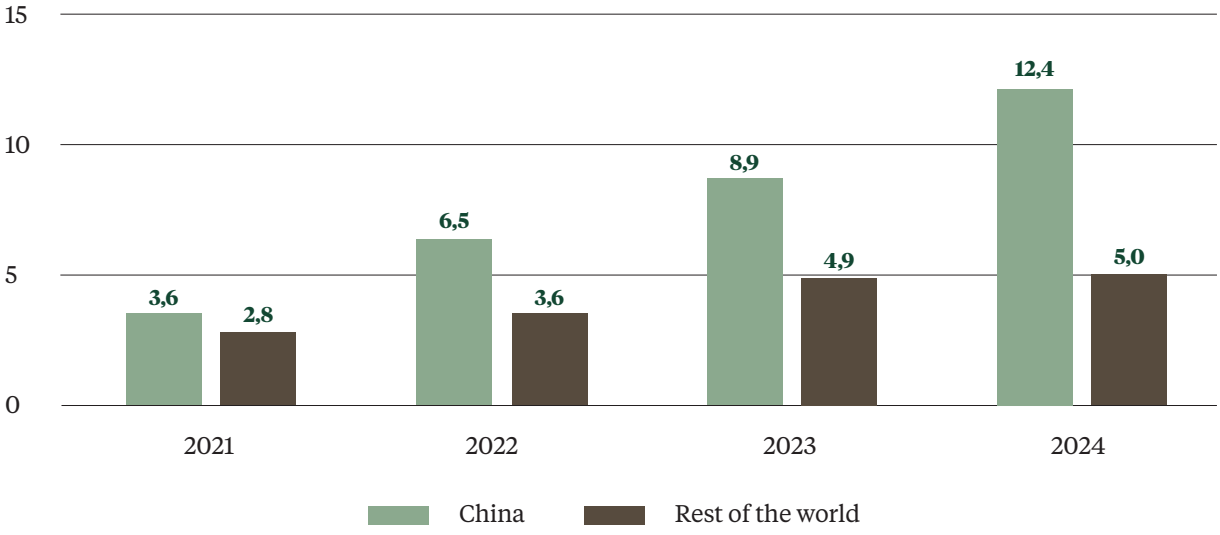
In 2022, however, the central government's direct subsidies for manufacturers largely disappeared, while performance demands to attract customers have gradually increased. Nevertheless, the consolidation called for by central authorities has stalled. This is partly due to regional interests, as local governments continue to support key employers.

In addition, the sector benefits not only from state support in the ways described

18 Rhodium Group, https://shorturl.at/l3Pe0

19 In this report, "electric vehicles" is used as a collective term for fully battery-powered electric cars and the less common plug-in hybrids in Europe.

China's production of electrical vehicles, amount in millions. Source: IEA.



above. Sales are also encourage through waived or reduced VAT on electric vehicles. According to China's State Council, this measure was worth 315 billion yuan by 2024. Between 2024 and 2027, the waived VAT is expected to amount to an additional 520 billion yuan (62.4 billion euro).[20]

Last year, sales received an additional boost by a new type of support offering individuals 20,000 yuan (2,400 euro) to replace their conventional car with an electric vehicle or plug-in hybrid. This subsidy, which continues into 2025, contributed to 48 percent of all cars sold in China last year falling into these categories. The appeal of electric vehicles is also strengthened by investments in charging infrastructure, with the number of charging points increasing by 4.2 million to a total of 12.8 million last year.[21]

The favorable conditions have triggered a price war. Last year, the average price of electric vehicles in China fell by 8 percent to 240,000 yuan (29,000 euro). Yet investments continue. In 2024, 1.393 trillion yuan (167.3 billion euro) was invested in electric vehicle manufacturing, an 11 percent increase year-on-year. The value of production rose by 36 percent to 3.067 trillion yuan (368 billion euro).[22]

Many sector-specific subsidies and regulations have placed foreign competitors at a disadvantage. For example, electric vehicles sold between 2015 and 2019 had to use

20 Reuters, https://shorturl.at/uWWpD

21 China Youth Daily, https://shorturl.at/TqiTL

22 Carbon Brief, https://shorturl.at/K2kwo

batteries from a so-called “white list” of domestic battery manufacturers in order to qualify for state subsidies.23 Until 2022, all foreign carmakers were required to form joint ventures with local competitors in order to produce in China and gain access to the country’s desirable market.

The only exception was Tesla, which was allowed to establish a wholly owned factory in Shanghai as early as 2018. This gave Chinese engineers access to new technology and gave domestic suppliers a key client, enabling them to develop their own supply chains. It is primarily these optimized domestic supply chains that make it cheap and efficient to produce electric vehicles in China today.

Exports Met with Tariffs

State control helped China become a net exporter of cars in 2021, and two years later it surpassed Japan as the world’s largest car exporter. This was mainly due to vehicles with internal combustion engines, but the price war in electric vehicles is now increasing the incentives to export those as well. Exporting is often seen – especially at the local level – as preferable to consolidation, posing less risk of job losses or curtailed growth.

Last year, electric and plug-in hybrid vehicles accounted for about one-quarter of China’s total car exports. According to the industry organization China Association of Automobile Manufacturers (CAAM), this involved 1.28 million vehicles – an increase of 6.7 percent year-on-year – of which 987,000 were fully battery-powered and the rest plug-in hybrids.24

According to China’s customs authority, the export figure was as high as 2.24 million. The difference is due to the fact that CAAM only counts passenger cars, while customs also includes other types of vehicles, including partially assembled ones intended for re-export.

According to customs data, China exported 22 percent of the electric vehicles it produced last year. The value of these exports reached 44 billion dollars (38 billion euro), a tenfold increase since 2020. The EU was the most important market, accounting for just over one-third of export revenues from fully battery-powered electric vehicles, which is by far the most significant category. The fact that the number of exported battery electric vehicles increased while their total value declined is a clear indicator of both price competition and overcapacity.[25]

23 CGTN, https://shorturl.at/pavoS

24 Sina Finance, https://shorturl.at/kBuZS

25 Atlantic Council, https://shorturl.at/fKK8u

The market share of Chinese electric vehicles in the EU can be calculated in different ways. In 2019, less than 1 percent of electric vehicles sold in a clear indicator of both price competition and overcapacitythe union were Chinese, but that figure rose to 11 percent last year. According to the European Commission, the share is expected to grow to 15 percent by 2025.[26] However, already today around one-quarter of electric vehicles imported into the EU come from China, when including companies such as Tesla and BMW that manufacture in China and export to Europe.

Subsidies and price dumping have raised concerns that have been met with tariffs. In May 2024, the Biden administration increased the import tax on electric vehicles, originally introduced under Donald Trump, from 25 to 100 percent. The new tariffs applied to all electric vehicles imported from China to the United States.

The following month, the European Commission announced the results of a year-long investigation into the extent of state support received by Chinese electric vehicle manufacturers.

To counter this competitive advantage, an increase in import tariffs on electric vehicles from China was proposed, in addition to the existing 10 percent. For Tesla, the increase amounted to 7.8 percent. For BYD, the world's largest electric vehicle manufacturer, and Geely, the owner of Volvo Cars, the increase was 18.8 percent. State-owned SAIC and several other manufacturers that were reported to have not cooperated with the investigation received a surcharge of 35.3 percent, bringing the total import tariff to the EU to just over 45 percent.

The tariffs were approved in October of the same year by a qualified majority, with 10 countries representing 46 percent of the EU's population voting in favor. Five countries, including Germany and Hungary, voted against. Sweden was among the 12 nations that abstained. Former Minister for Trade Johan Forssell had openly opposed the tariffs due to the risks they posed to Volvo Cars. After the abstention, current Trade Minister Benjamin Dousa revealed that Sweden had negotiated with the European Commission for a special arrangement regarding Volvo Cars.[27]

Chinese Factories in Europe

Due to the tariffs, many Chinese manufacturers are planning investments in the EU as a long-term strategy for accessing the Union's market. BYD is set to begin production at its first European factory in Hungary at the end of the year. Around four

26 Reuters, https://shorturl.at/paZCS

27 Affärsvärlden, https://shorturl.at/4qCPK

billion euros have been invested in the facility, which is expected to have a capacity of between 150,000 and 200,000 vehicles annually.

Chery, China's largest car exporter, opened a factory in Barcelona at the end of last year in partnership with Spain's EV Motors. The plant has an annual capacity of 50,000 vehicles, including both electric and conventional cars from the two companies. However, there are plans to triple that capacity by 2029. Several other Chinese electric vehicle manufacturers have announced plans to build factories in the EU, including SAIC, the country's second-largest car exporter, which is now facing import tariffs of 45.3 percent when selling to the EU.

Chinese investments can create jobs and spur growth in Europe. At the same time, China often brings in its own workers for overseas projects, and Chinese companies are still subject to Chinese laws even when operating abroad. The fact that major investments are taking place in countries like Hungary, which maintains good relations with China, also brings politics into the equation, since the benefits are not evenly distributed across the EU's member states.

On April 2 this year, Donald Trump announced sweeping tariffs on the EU, China, and 55 other countries. This prompted several politicians, companies, and opinion leaders in Europe to advocate for closer ties with China. Within a week, European Commission President Ursula von der Leyen spoke with Chinese Premier Li Qiang about renegotiating the tariffs on Chinese electric vehicles. On April 10, EU Trade Commissioner Maros Sefcovic continued discussions with Chinese Commerce Minister Wang Wentao about replacing the tariffs with a minimum price on Chinese electric vehicles imported into the EU.[28]

Plans to increase electric vehicle exports are confirmed by the fact that Chinese manufacturers such as BYD, SAIC, and Chery placed orders last year for 47 new car carrier ships, more than twice the 33 vessels of this type already operated by Chinese automakers.[29] According to sources cited by Reuters this spring, BYD aims to sell half of its vehicles abroad by 2030, compared to about 10 percent last year.[30] Even though export growth in 2024 was strongest in Russia, Mexico, Thailand, the United Arab Emirates, and Brazil, the EU still represents a larger market than those five countries combined.

28 Reuters, https://shorturl.at/2qtRf

29 Reuters, https://shorturl.at/G2J9G

30 Reuters, https://shorturl.at/UYm5S

In the past year, countries such as Brazil, India, Turkey, Canada, and even Russia have imposed tariffs on Chinese electric vehicles. With China also facing the possibility of being almost entirely shut out of the world's third-largest market for electric vehicles (the United States), access to the world's second-largest market (the EU) becomes all the more crucial.

Notably, the EU's tariffs do not apply to plug-in hybrids. Of the 4.27 million electric vehicles sold by BYD last year, just over 58 percent were plug-in hybrids. In addition, the value of China's plug-in hybrid exports increased by 190 percent last year according to CAAM, while the value of fully battery-powered electric vehicle exports declined by 10 percent.

There are therefore several scenarios in which a divided and hesitant EU risks being flooded with subsidized electric vehicles from China. On top of that, China is by far the world's largest market for electric vehicles, accounting for around half of global sales. The market share of foreign manufacturers in China has nearly halved over the past four years. Yet they continue to invest and increase production there, including for export, which could further widen the EU's trade deficit with China.

Solar Power: Total Dominance in Europe

After electric vehicles, solar power is the second-largest sector within clean energy in China. Last year, solar energy accounted for 2.8 trillion yuan (336 billion euro), or 21 percent of the country's clean energy economic activity. Most of this came from investments in domestic electricity production capacity. Exports of solar panels amounted to just over 600 billion yuan (72 billion euro).[31]

In 2008, China accounted for 40 percent of global solar cell production. Today, that share exceeds 80 percent and is even higher for specific components such as wafers and polysilicon. Especially beginning in the early 2010s, Chinese manufacturers received extensive loans at low interest rates with little regard for productivity. In 2021, the OECD identified solar power as one of four industries where below-market lending was most significant relative to company revenues.[32]

Last year, China added 277 gigawatts of new solar power to its own grid, a 28 percent increase year-on-year and a new record. Over five years, China's investments in solar power for its domestic grid have increased tenfold. The large-scale Chinese investments

31 Carbon Brief, https://shorturl.at/K2kwo

32 Rhodium Group, https://shorturl.at/ptKed

and subsidies led to a 90 percent drop in global solar panel prices over the course of a decade, up to 2024.[33]

A price war in China has driven solar panel prices so low that the country's manufacturers are now selling them below production cost on the global market. Last year, prices were so low that farmers in the Netherlands and Germany used solar panels to build fences.[34] This development caused many manufacturers in China to report losses in 2023, which in turn prompted Chinese regulatory authorities to begin discussing a price floor to stabilize the sector.[35]

Another clear sign of overcapacity is that the value of solar panel production in China dropped by 41 percent last year, despite a 16 percent increase in volume.[36]

Early Calls for Tariffs

The risk that subsidized Chinese manufacturers could drive out European competitors became clear early on. As a result, trade unions and interest groups quickly began pressuring the European Commission to take action. In June 2013, tariffs of 11.8 percent were announced on solar panels from China, which would increase to 47 percent two months later unless a deal was reached.

At the same time, there were fears within the EU that import tariffs could lead to a trade war with an increasingly important China. More than half of the member states – including Germany and the United Kingdom – opposed the tariffs.[37] A compromise was soon reached. Duty-free imports from China were limited to 7 gigawatts per year, and a minimum price was imposed on solar panels.[38]

This did provide temporary relief for European manufacturers. The value of imports dropped sharply from the 2011 record of 21 billion euros. However, the leading industry group EU ProSun argued that the minimum price reflected Chinese overcapacity rather than reflecting actual production costs.

The problem soon became clear, as price dumping made it increasingly attractive for Chinese companies to export to the EU and simply accept the tariffs of up to 64.9 percent on solar panels that exceeded the quotas or fell below the minimum price.

33 Our World in Data, https://shorturl.at/uuOXs

34 Financial Times, https://shorturl.at/sDU1h

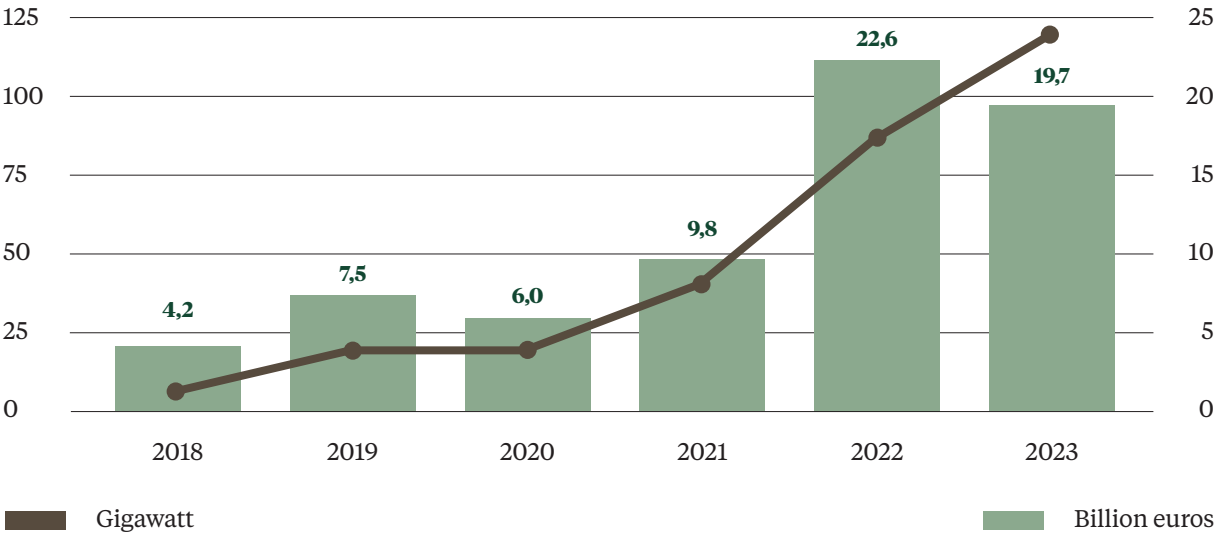
35 EUPD Group, https://shorturl.at/LKKSC

36 Carbon Brief, https://shorturl.at/K2kwo

37 BBC, https://shorturl.at/OEhWI

38 Wall Street Journal, https://shorturl.at/Xg8Jz

China's export of solar panels to the EU. Source: Eurostat & Rystad energy. Gigawatt 2019–2020 are estimates.



The Floodgates Open

In 2018, the European Commission completely removed its restrictions. This was partly because they had failed to significantly boost domestic production, which was insufficient to meet the Union's ambitious environmental policy goals. It was also a way to distinguish the EU from Donald Trump's new tariffs, in an effort to join forces with China in opposing what was seen as American protectionism.[39]

The tariffs were to be replaced by mechanisms to support European manufacturers. However, these measures were not enough to compete with China's massive subsidies. Instead, the EU became the most important export market for Chinese manufacturers. Already the following year, in 2019, imports from China had nearly doubled. In 2022, a new record was set with imports worth 22.6 billion euros. Thanks to lower prices, the capacity was far greater than before, reaching 111 gigawatts.

At the time of writing, 2023 is the most recent year with complete financial data. That year, the EU's imports of Chinese solar panels were valued at 19.7 billion euros. Despite a 12 percent drop in value, the volume increased by 5 percent, reflecting the continued decline in prices.[40]

The EU's total installed solar power capacity increased from 263 to 338 gigawatts in 2023. This occurred even though approximately 120 gigawatts of solar panels were

39 South China Morning Post, https://shorturl.at/W6fda

40 Eurostat, https://shorturl.at/Kbyik

imported from China. In other words, imports are outpacing installation, and Europe already now has a stockpile of Chinese solar panels with a capacity of around 100 gigawatts.[41]

China's Dominance Now Difficult to Break

European solar panel production has nearly collapsed in recent years. In 2023, 95 percent of all solar power installed in the Union was imported, with 98 percent of that coming from China.[42] Recently, the EU has absorbed roughly half of China's total solar panel exports by China, which has significantly contributed to consolidating the country's global dominance.

China produces over 80 percent of the world's solar panels, and up to 95 percent of some key components. Its control over the entire supply chain – including the mining and processing of rare earth elements – makes it very difficult to reduce dependence. This is especially true for the EU, which last year added more solar power to its grid than all other energy sources combined and aims to reach 600 gigawatts of capacity by 2030.[43]

In many ways, solar power can be seen as a precursor to the current struggle over tariffs on Chinese electric vehicles. If the EU's existing tariffs on EVs are replaced by a minimum price, it is easy to imagine a similar development of dominance and dependence on China.

As the world's largest economy, the United States now imports almost no electric vehicles or solar panels from China due to tariffs and other industrial policy measures. This means we can expect an even greater surplus of Chinese production to be directed toward the European market.

Lithium-Ion Batteries: China Already a Technological World Leader

China now manufactures about three-quarters of all lithium-ion batteries used in electric vehicles and energy storage systems worldwide.[44] The giant CATL – valued at around 170 billion dollars (147 billion euro) following its stock market listing in Hong Kong this May – alone accounts for nearly 40 percent of global production.

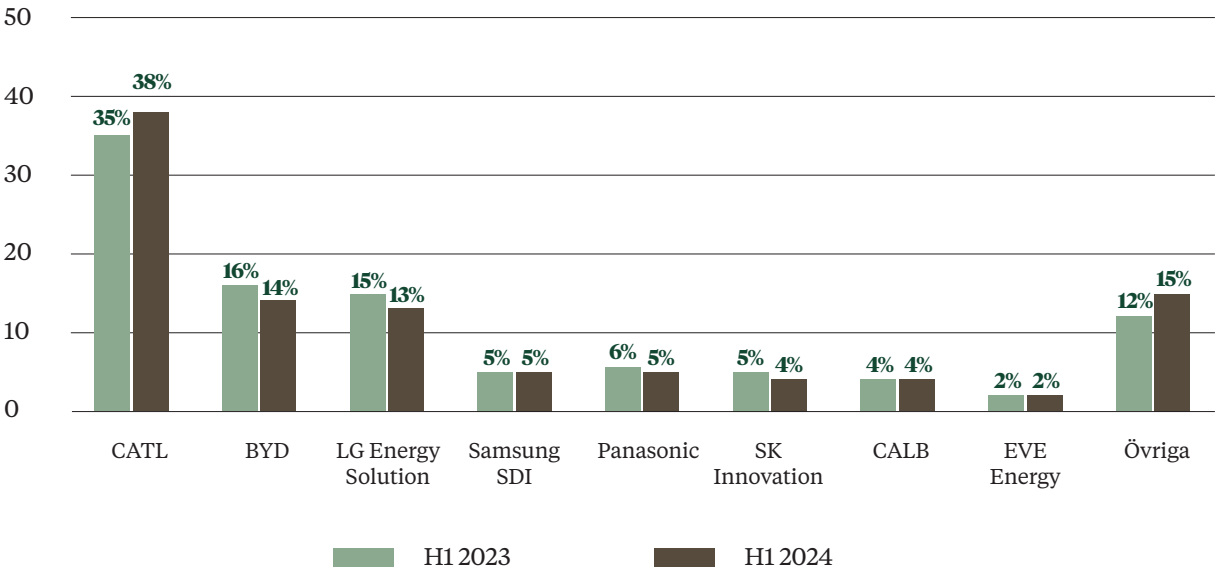
41 Rystad Energy, https://shorturl.at/Igzvr

42 Eurostat, https://shorturl.at/ZjmZi

43 Ember, https://shorturl.at/cfGYO

44 International Energy Agency, https://shorturl.at/jOEWi

Global EV Battery Market Share, H1 2024 & H1 2023.
Source: Counterpoint EV Battery Tracker.



CATL is also the Chinese company that receives the most direct state subsidies of all publicly listed firms in the country. In 2023, these subsidies amounted to 5.72 billion yuan (687 million euro), well above the approximately four billion yuan (480 million euro) received by the second-highest recipient, SAIC Motors. According to preliminary figures, subsidies to CATL increased even further last year.[45]

Unlike with electric vehicles, China began investing early in overseas battery production. As early as 2021–2022, Chinese companies invested more than 15 billion euros in Europe. CATL has been China's biggest investor in Europe across all sectors over the past five years. All six of the largest ongoing Chinese greenfield investments in Europe last year were factories for manufacturing or assembling lithium-ion batteries.[46]

Germany initially attracted most of these investments, thanks to its large automotive industry and status as an industrial powerhouse. For example, CATL's factory in Arnstadt, Germany, became the first Chinese plant to begin production in Europe in 2022. But due to strong political ties with China, Hungary has, in just a few years, gone from being a marginal recipient of Chinese investment to the largest in all of Europe.[47]

45 Nikkei Asia, https://shorturl.at/1p2yi

46 Merics, https://shorturl.at/1Ntkc

47 Merics, https://shorturl.at/1Ntkc

This is entirely due to the battery industry. Since 2022, CATL has been carrying out the largest ongoing Chinese investment in Europe in Hungary, valued at over 7.5 billion euros. EVE Energy and Sunwoda are also set to open factories in the country within the next two years. At the end of 2023, BYD announced one of its largest foreign investments ever in Hungary, where both electric vehicles and batteries will be manufactured.

Reduced Risk Appetite After Northvolt

China's growing presence in Europe's battery sector may seem logical following Northvolt's bankruptcy in 2025. Despite receiving over 200 billion SEK (18 billion euro) in funding and having long-term supply contracts worth around 500 billion SEK (45 billion euro), the Swedish battery company failed in its stated goal of reducing Europe's dependence on Chinese lithium-ion batteries. Yet paradoxically, Northvolt's collapse – combined with new regulations and a relatively weak market for electric vehicles in Europe – appears to have made Chinese actors more hesitant.

In the autumn of 2024, China's seventh-largest battery manufacturer, Svolt, announced its exit from Europe. The company SVOLT Energy Technology (Europe) was shut down in January this year, along with its German subsidiary. Construction of two factories in Germany, in which the company had already invested several billion euros, has been halted.[48]

According to the Chinese financial magazine Caixin, new investments in battery plants in Europe are no longer on the table for several Chinese companies. This is due in part to high costs, long construction timelines, strict environmental regulations, complex local and national permitting processes, and deteriorating political relations.[49]

Obstacles related to regulation and geopolitics became evident in Sweden in December last year. At that time, the Swedish Inspectorate of Strategic Products (ISP) blocked plans for a multi-billion investment in an anode factory in Torsboda by the Chinese battery company PTL.[50] The year before, ISP had been granted expanded powers to review foreign investments from a security perspective, which in itself reflects the EU's growing skepticism toward this type of investment from China.

48 Nikkei Asia, https://shorturl.at/WoCJN

49 Caixin, https://shorturl.at/A5Udq

50 Kinamedia, https://shorturl.at/XQ1Z9

Furthermore, electric vehicle sales in the EU declined last year from 2.4 to 2.2 million vehicles. The share of electric vehicles in the Union's total car sales also dropped by just over two percentage points to 20.6 percent. This can be compared with an increase of over 38 percent in China, where 11.2 million electric vehicles were sold last year and the market share grew to nearly 48 percent.

Preferring Export or "Safe Money"

Large-scale investment in EU fixed assets has become less attractive, especially in comparison to building new factories in China or in other countries where the growth of electric vehicles is stronger. Still, Chinese battery companies want a presence in Europe, where environmental awareness is more established than in many other markets. The potential is particularly significant given the EU's planned ban on internal combustion engines by 2035.

Lithium-ion batteries are simpler and cheaper to export than electric vehicles – especially to the EU, where the tariff rate is only a few percent. China's battery exports reached 69 billion dollars (59 billion euro) last year, an 8 percent increase year-on-year. Around 30 percent of that export volume now goes to Europe.

Technology licensing or other forms of cooperation with European actors is another alternative. In December last year, CATL announced the establishment of a joint venture with Stellantis, with more than four billion euros to be invested in one of Europe's largest lithium-ion battery factories in Zaragoza, Spain. CATL chairman Zeng Yuqun stated at the time that the company would seek more "innovative" forms of cooperation with European firms.

Given China's technological lead in battery production, Chinese companies can use their technological edge as leverage to minimize investments in fixed assets and instead earn what Chinese media refer to as "safe money" by partnering with local companies.

In a clear reversal of roles, it was reported in November last year that the EU plans to require technology transfer from Chinese battery manufacturers seeking support for their investments in Europe.[51] This mirrors past requirements for European automakers to form joint ventures and share their technology with Chinese competitors in order to gain access to the Chinese market. However, such demands may be complicated by proposed export restrictions from Chinese authorities on this kind of technology.[52]

51 Financial Times, https://shorturl.at/R8xdz

52 Reuters, https://shorturl.at/BryRP

Unclear Regulations

"EU wants you to invest, create jobs, and facilitate technology transfer, but at the same time, they don't want you to expand too quickly or establish local dominance." That is how Sun Xiaohong, Secretary-General for the automotive sector within China's Chamber of Commerce for Machinery and Electronics, summarized at the turn of the year the conflicting conditions faced by the country's battery manufacturers.[53]

In addition to the ban on internal combustion engines by 2035, Chinese companies are also trying to interpret a range of other new EU regulations. Under a battery law introduced in 2023, all batteries sold in the EU from February 2025 must include documentation of their carbon footprint. Those exceeding a certain threshold will be banned starting in 2028. In summer 2024, the EU also adopted the Net-Zero Industry Act, with the goal that 90 percent of the Union's lithium-ion battery demand should be met by production within the EU.

This is likely to encourage joint ventures and other partnerships, rather than relying solely on direct exports to the EU from battery factories in China. Depending on how the regulations are shaped and enforced over time, it may also become advantageous for European companies if the more environmentally harmful parts of the production process remain in China.

It is true that several Chinese factories are scheduled to begin battery production in the EU during 2025. However, no major new Chinese direct investments in the battery sector in Europe have been announced since the end of 2023. The fact that CATL's factory in Arnstadt has yet to turn a profit likely contributes to this hesitancy. Requirements from the Swedish Inspectorate of Strategic Products (ISP) that the CEO and chairman of the board at PTL be Swedish citizens residing in Sweden, and that the principal owner and a majority of board members be Swedish, also complicates new investments in parts of Europe.[54]

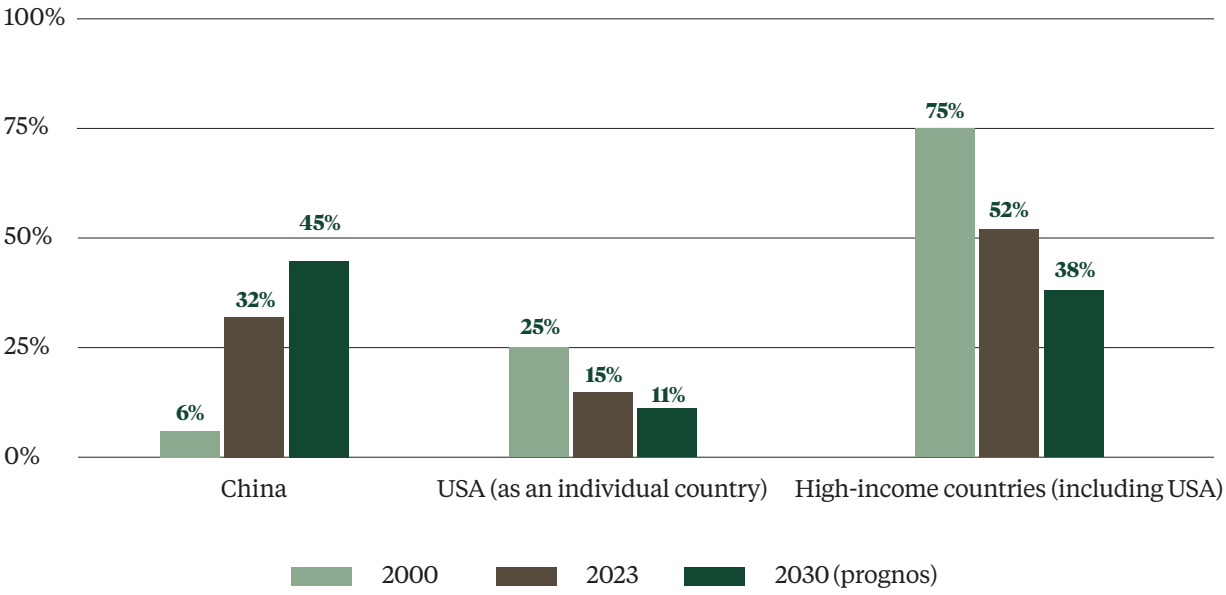
Tariffs are another key factor influencing how Chinese battery companies will approach the EU. In May 2024, Joe Biden announced an increase in tariffs on lithium-ion batteries exported from China to the United States, from 7.5 percent to 25 percent. Tariffs are expected to rise further under Donald Trump, although the exact rate is still unclear at the time of writing. In comparison, EU tariffs on Chinese lithium batteries currently stand at 1.3 percent.[55]

53 Caixin, https://shorturl.at/aVCvn

54 Affärsvärlden, https://shorturl.at/S1Thh

55 Reuters, https://shorturl.at/sntWd

Share of global industrial production. Source: UNIDO.



Green Energy in an Era of Trade Wars

All signs suggest that China intends to continue down its current mercantilist path. During the Third Plenum – a key economic meeting held every five years – in the summer of 2024, the concept of "new high-quality productive capacity" was cemented, with a particular focus on industrial upgrading within the new energy sector. The ambition for state-led growth based on manufacturing was once again embraced.[56]

According to the UNIDO database from the United Nations, China accounted for 6 percent of global industrial production in the year 2000, compared to nearly 30 percent today. By 2030, that share is projected to reach 45 percent. In the world's high-income countries, the trend is moving in the opposite direction; from 75 percent of global manufacturing in 2000 to just 38 percent by 2030.

On the surface, China's low-cost green technology seems ideal for Europe's energy transition. But the risks are significant. The most obvious consequence is the erosion of European industries, resulting in lost production and jobs.

Added to this are the risks of harmful dependency. Purchasing large quantities of plastic toys or furniture from China carries relatively little risk. But increased reliance on Chinese steel, for example, has prompted warnings about the dismantling of

56 Reuters, https://shorturl.at/19CRl

Europe's domestic steel industry, with consequences for the supply chains needed for investments in defense or infrastructure.[57]

Dependence on China for green energy also brings other risks. At the end of April, one of the worst power outages in European history hit Spain and Portugal, leaving over 50 million residents without electricity for up to 18 hours. While this incident has not been linked to China or any other actor with hostile intent, the chaos was triggered by a temporary disruption in the supply of solar power amounting to as little as 2 gigawatts.

The advocacy group SolarPower Europe warns that a mere three gigawatts disruption of solar power could significantly impact Europe's power grid.[58] At the same time, the EU imports solar panels from China each year with a total capacity of several hundred gigawatts.

Hidden Components in Chinese Solar Panels

That same month, during the Iberian Peninsula power outages, officials in the U.S. energy sector discovered "hidden communication units" in solar panels from China. Components not listed in the product documentation were found in the inverters used to regulate power transmission to the grid.[59]

Inverters are often referred to as the brain of solar panels and enable remote access for software updates. The undocumented components lacked standard firewalls to restrict communication with the manufacturer, and officials described them as "a built-in pathway to physically destroy the power grid."

U.S. officials have also found similar components in lithium-ion batteries from China.[60] Inverters are also used in heat pumps and electric vehicle charging stations. In 2023, 78 percent of all inverters imported to the EU came from China. Huawei is the largest exporter, despite the fact that its 5G equipment is already banned in much of the Union and that the company was excluded from SolarPower Europe this year following new EU Commission regulations.[61]

Beyond hacking and manipulated software, electric vehicles can also collect information about both users and their surroundings. This is, of course, also true for

57 Financial Times, https://shorturl.at/muAo8

58 Nikkei Asia, https://shorturl.at/jxwTJ

59 Reuters, https://shorturl.at/aVR8X

60 Reuters, https://shorturl.at/aVR8X

61 Solar Power Europe, https://shorturl.at/SwUVz

American EVs. However, in China there is national security legislation that compels Chinese companies to hand over data or otherwise cooperate with state authorities without questioning their demands.[62]

Another key difference between dependence on American and Chinese products is the United States' status as an ally. China, by contrast, openly expresses its ambition to reshape the liberal world order that has fostered democracy and prosperity in Europe. Instead, China aims to establish a multilateral world order where the law of the strongest prevails over rules-based international institutions, and where the very concept of human rights is redefined from matters of democracy to economic development.[63]

China frequently uses trade sanctions to force political concessions, even against smaller individual European countries such as Norway and Lithuania. In the EU's strategic document European Economic Security Strategy from 2023, there is a specific warning that "countries of particular concern" may exploit dependency for geopolitical purposes. Several EU officials, including Climate Commissioner Wopke Hoekstra, have openly warned about the political implications of relying on China for green energy.[64]

Trump's Tariffs Now Globally Accepted

When Donald Trump imposed tariffs on a wide range of Chinese products in January 2018, including 30 percent on solar panels, many market liberals raised their eyebrows. His stated aim of reducing the U.S. trade deficit with China was also widely questioned.

However, the value of the tariffs became evident when Joe Biden not only maintained but expanded them. This was especially true for products related to green energy and was combined with extensive subsidies to build domestic alternatives.

The same arguments were later echoed by European politicians when the EU imposed tariffs on electric vehicles from China in the summer of 2024. That spring, European Commission President Ursula von der Leyen spoke about the need to protect Europe's own industries as subsidized Chinese electric cars were "flooding" our market.[65] The previous autumn, when the investigation into tariffs on Chinese EVs had just begun,

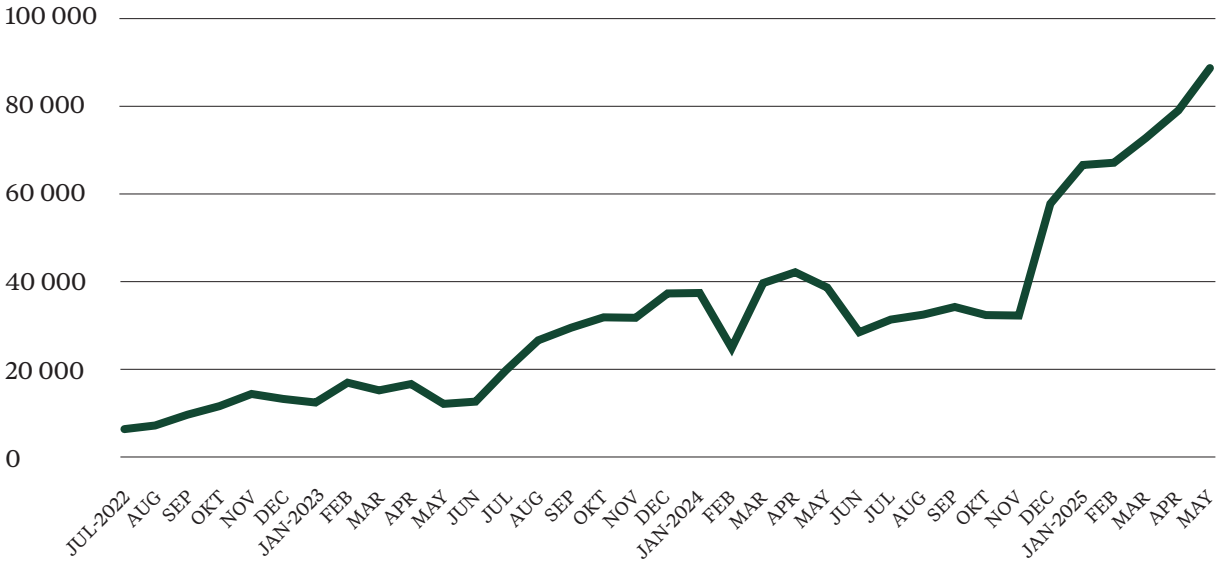
62 Nationellt kunskapscentrum om Kina, https://shorturl.at/Tt96e

63 Atlantic Council, https://shorturl.at/sCvrE

64 Euractiv, https://shorturl.at/BnhGy

65 Reuters, https://shorturl.at/GqvgB

BYD overseas passenger NEV monthly sales. Source: CnEVPost.



Trade Commissioner Valdis Dombrovskis expressed concern in China about the growing trade deficit.[66]

In the spring of 2025, BYD cut the price of 22 of its models by up to 34 percent, as part of an ongoing price war. There are still around 115 Chinese electric vehicle manufacturers competing for the domestic market, where shrinking profit margins make exports increasingly vital.[67] In April, BYD surpassed Tesla for the first time in sales of fully battery-powered cars in Europe. Including plug-in hybrids, BYD's European sales rose by 359 percent year-on-year during the same month.[68]

So far in 2025, BYD has broken its export record every single month. The company aims to export 800,000 vehicles over the course of the year; nearly doubling the 417,000 shipped the year before. At the same time, countries such as Canada, Brazil, India, Thailand, Turkey, and Russia have introduced their own tariffs on electric vehicles from China in recent years.[69]

There is therefore a significant risk that the EU will immediately become the primary dumping ground for Chinese electric vehicles if the current tariffs are replaced with

66 Associated Press, https://shorturl.at/cMuV4

67 The Economist, https://shorturl.at/sz0Ga

68 Jato, https://shorturl.at/puFGW

69 Statista, https://shorturl.at/oKKOx

a minimum price, similar to what happened with Chinese solar panels just over a decade ago. The EU's new trade commissioner, Maroš Šefčovič, warned as recently as June this year that turmoil in the global trade system could result in products being diverted from high-tariff markets to Europe.[70] Still, negotiations are underway to ease tariffs on electric vehicles, driven by the wishes of individual member states and the EU's dependence on rare earth elements from China.[71]

Geopolitical Risks of Chinese Dominance

Donald Trump's second term is marked by a more unrestrained approach to both green energy and tariff policy. He openly dismisses green energy initiatives as a new kind of fraud ("new green scam") and intends to roll back as much as possible of the 783 billion dollars (676 billion euro) that the Biden administration earmarked for energy and climate through the Inflation Reduction Act.

Instead, oil and natural gas are now set to make up a growing share of the United States' energy production. The willingness to fund the green transition with public money has also declined in Europe, as seen in the questioning of climate goals and criticism following the mismanagement of the Swedish battery company Northvolt. U.S. tariffs on allied trading partners, announced on April 2, have further complicated joint efforts to counter China's trade practices.

All of this creates favorable conditions for China to cement its dominance in green energy. While the U.S. this year has withdrawn from multilateral mechanisms such as the Just Energy Transition Partnership under the UN climate framework, China is increasing its funding of green transitions in developing countries. In 2024, new green energy agreements were signed under the framework of China's Belt and Road Initiative, amounting to 11.8 billion dollars (10.2 billion euro), setting a new record.[72]

This marks not only a clear propaganda win for China's narrative as a global climate leader. only a clear propaganda victory for China's narrative as a global climate leader. China's green energy financing is rarely altruistic. Often, it involves high-interest loans that risk making recipient countries economically dependent on China – a dependence that has, on several occasions, led them to move closer to China politically or to grant access to natural resources, including rare earth elements.

In the West, green energy is usually framed as a climate concern. But China's

70 Euronews, https://shorturl.at/hy4vD

71 South China Morning Post, https://shorturl.at/yU2LW

72 Griffith University, https://shorturl.at/L3K8t

dominant position will likely also have implications for national security. The rapid technological advances in recent years suggest that electric motors have greater long-term potential than combustion engines. The prominent use of drones in the war in Ukraine underscores how such technology is becoming strategically relevant to modern warfare.

Writer Noah Smith recently posed the rhetorical question of whether we want China to manufacture all the world's jet engines, robots, and plutonium. He then compared that scenario to allowing the country to dominate the future production of electric motors and lithium-ion batteries.[73]

It would be unrealistic to expect the market to fund this new technology at the same scale as the Chinese state. Private investors are not expected to take responsibility for defense or national security. Nevertheless, Europe's declining risk appetite and the current U.S. administration's ideological resistance to new technologies are now paving the way for Chinese dominance in several critical industries of the future.

No Easy Solutions

The EU's large-scale import of subsidized Chinese products directly reinforces China's dominance in green energy. As the Chinese domestic market becomes increasingly saturated, exports are gaining importance for the continued expansion of Chinese companies. Last year, the EU was the largest export market for Chinese solar panels, electric vehicles, and lithium-ion batteries.

By comparison, barely a single Chinese electric vehicle was sold in the United States last year, and the country imported solar panels from China with a capacity of less than 0.1 gigawatts. If the EU aims to follow suit, it faces a difficult road ahead. The impact of countering Chinese subsidies through international mechanisms is limited. Many forms of Chinese state support fall outside WTO rules, as they are systemic, broad-based, and not targeted at individual companies or sectors.

The situation is further complicated by the fact that China officially positions itself as the chief defender of the multilateral trade system, while Donald Trump's administration this year halted its funding of the World Trade Organization and introduced unilateral tariffs in violation of its rules. At China's request, the organization also launched an investigation into the Inflation Reduction Act, adopted under Joe Biden, for its subsidies to green energy.[74]

---

73 Noahpinion, https://shorturl.at/JgK6u

74 World Trade Organization, https://shorturl.at/6TGZd

According to Rhodium Group and others, China's main advantage lies in its large domestic market, which, combined with its political system, allows for rapid commercialization of green energy products. Cooperation between the U.S., the EU, and other countries is seen as the only way to match China's scale.[75] But since the political will is currently lacking in the United States, the EU must be prepared to act on its own.

It is crucial not to give in to pressure and dismantle the already relatively low tariffs on electric vehicles from China. On the contrary, there are reasons to further restrict imports. Since 2022, the U.S. has effectively blocked imports of Chinese solar panels through the Uyghur Forced Labor Prevention Act, due to the industry's well-documented links to forced labor involving ethnic minorities in China.[76]

Northvolt's struggles shouldn't be a reason to abandon European manufacturing – or the public funding needed to support it. Electric motors and lithium-ion batteries in particular must be treated as matters of national and economic security, not merely as climate initiatives. Few question public investment in national security. By the same logic, regulations and environmental laws must also be reviewed in order to establish domestic alternatives to China's rare earth elements.

Still, it is inevitable that Chinese products will make up a large part of Europe's green transition for the foreseeable future. This makes it equally important to take measures that mitigate the harmful effects in the short term. For example, China has banned Tesla from operating near military sites and government buildings. This shows that Chinese authorities are aware of the data that can be collected and should prompt a discussion about similar measures in the EU.[77]

Actions can also be taken at the national level. Lithuania, for example, restricts remote access for Chinese inverters in solar, wind, or battery installations with a capacity above 100 kilowatts.[78] In light of China's growing investments in individual countries, the EU should also discuss mechanisms for so-called transnational subsidies. What happens if BYD's factory in Hungary becomes a site where already subsidized components from China are assembled into vehicles that are then sold tariff-free on the internal market?

Think tanks such as Merics have called for a framework to ensure that Chinese

75 Wall Street Journal, https://shorturl.at/7S8Qd

76 Center for Strategic and International Studies, https://shorturl.at/K1BWB

77 Nikkei Asia, https://shorturl.at/gVo5y

78 Reuters, https://shorturl.at/SFuuX

investments in green energy in Europe actually reduce dependency on China. For decades, China has been highly effective in pushing foreign companies to localize both production and R&D. Now that the roles are reversed, the EU has every opportunity to demand localization as a condition for investment, especially for key components where independent supply chains are needed.

A combination of tariffs, domestic subsidies, and political decisions, even at the risk of displeasing an important trade partner like China, is necessary to avoid harmful dependence. It won't be easy, but the alternative carries even greater risks: moving directly from dependence on Russian gas to reliance on Chinese products for our green transition.

References

Affärsvärlden, https://shorturl.at/S1Thh
Affärsvärlden, https://shorturl.at/4qCPK
Asia Society, https://shorturl.at/DQSmX
Associated Press, https://shorturl.at/cMuV4
Atlantic Council, https://shorturl.at/fKK8u
Atlantic Council, https://shorturl.at/sCvrE
BBC, https://shorturl.at/OEhWI
Brookings Institution, https://shorturl.at/JQKIr
Carbon Brief, https://shorturl.at/K2kwo
Caixin, https://shorturl.at/A5Udq
Caixin, https://shorturl.at/aVCvn
Center for Strategic and International Studies, https://shorturl.at/K1BWB
Centre for Research on Energy and Clean Air, https://shorturl.at/JFL4H
CGTN, https://shorturl.at/pavoS
China Briefing, https://shorturl.at/p0RRS
China Youth Daily, https://shorturl.at/TqiTL
Ember, https://shorturl.at/cfGYO
EUPD Group, https://shorturl.at/LKKSC
Euractiv, https://shorturl.at/BnhGy
Euronews, https://shorturl.at/hy4vD
Eurostat, https://shorturl.at/Kbyik
Eurostat, https://shorturl.at/ZjmZi
Financial Times, https://shorturl.at/sDU1h
Financial Times, https://shorturl.at/R8xdz
Financial Times, https://shorturl.at/muAo8
Griffith University, https://shorturl.at/L3K8t
International Energy Agency, https://shorturl.at/jOEWi
Jato, https://shorturl.at/puFGW
Kinamedia, https://shorturl.at/XQ1Z9
Merics, https://shorturl.at/LTfCv
Merics, https://shorturl.at/j4YCv
Merics, https://shorturl.at/1Ntkc
National Bureau of Economic Research, https://shorturl.at/8oyNj

Nationellt kunskapscentrum om Kina, https://shorturl.at/Tt96e
Nikkei Asia, https://shorturl.at/fxWs0
Nikkei Asia, https://shorturl.at/1p2yi
Nikkei Asia, https://shorturl.at/WoCJN
Nikkei Asia, https://shorturl.at/jxwTJ
Nikkei Asia, https://shorturl.at/gVo5y
Noahpinion, https://shorturl.at/JgK6u
Our World in Data, https://shorturl.at/uuOXs
Qiushi, https://shorturl.at/JxFQS
Reuters, https://shorturl.at/BryRP
Reuters, https://shorturl.at/sntWd
Reuters, https://shorturl.at/19CRl
Reuters, https://shorturl.at/aVR8X
Reuters, https://shorturl.at/GqvgB
Reuters, https://shorturl.at/SFuuX
Reuters, https://shorturl.at/gKkne
Reuters, https://shorturl.at/uWWpD
Reuters, https://shorturl.at/paZCS
Reuters, https://shorturl.at/2qtRf
Reuters, https://shorturl.at/G2J9G
Reuters, https://shorturl.at/UYm5S
Rhodium Group, https://shorturl.at/ptKed
Rhodium Group, https://shorturl.at/l3Pe0
Rystad Energy, https://shorturl.at/Igzvr
Sina Finance, https://shorturl.at/kBuZS
Solar Power Europe, https://shorturl.at/SwUVz
South China Morning Post, https://shorturl.at/RMiJq
South China Morning Post, https://shorturl.at/yU2LW
South China Morning Post, https://shorturl.at/W6fda
Statista, https://shorturl.at/oKKOx
The Economist, https://shorturl.at/sz0Ga
The International Institute for Management Development, https://shorturl.at/CpHLu
Wall Street Journal, https://shorturl.at/Xg8Jz
Wall Street Journal, https://shorturl.at/7S8Qd
World Trade Organization, https://shorturl.at/6TGZd

Om rapportförfattaren

Jojje Olsson är journalist med fokus på Kina och Östasien. Han flyttade han till Peking 2007, och tog magisterexamen i journalistik vid University of Hong Kong. Han har rapporterat från Asien för över 100 svenska publikationer, och skrivit sex stycken böcker om Kina. Sedan 2016 bor han på Taiwan, där han rapporterar för främst Expressen och Affärsvärlden. Han driver även Kinamedia, Sveriges största nyhetssida och nyhetsbrev med fokus på Kina.

ephi

The Environment and Public Institute is a privately funded think tank that advocates for the free market and free research. EPHI publishes reports on current topics within the area of public health and the environment.

You can read all our publications on ephi.se.

www.ephi.se