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FROM EXPORT TO LOCALIZED PRODUCTION: CHINA'S FOREIGN DIRECT INVESTMENT STRATEGY IN THE EUROPEAN GREEN-TECHNOLOGY MARKET UNDER TARIFF PRESSURE

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Abstract: This article examines the strategic transformation of Chinese green-technology and electric-vehicle companies in the European Union market - namely their shift from direct exports to localized production through foreign direct investment. The study analyses the EU's definitive anti-subsidy countervailing duties of October 2024, which raised the total import duty on Chinese-made battery electric vehicles to as much as 45.3%, the resulting surge of Chinese greenfield FDI into Europe, and the new "price undertaking" introduced in 2026. Using the OLI paradigm, the Uppsala model and tariff-jumping FDI theory, the paper argues that Chinese firms are not merely circumventing tariffs but embedding a localized industrial ecosystem within Europe. The findings carry practical implications for Uzbekistan's green-energy strategy and its cooperation with Chinese technology suppliers.

Keywords: international competitiveness, foreign direct investment, electric vehicles, green economy, EU-China trade, countervailing duties, tariff-jumping FDI, localization, price undertaking.

Аннотация: В статье рассматривается стратегическая трансформация китайских компаний зелёной энергетики и электромобилей на рынке Европейского союза- переход от прямого экспорта к локализованному производству посредством прямых иностранных инвестиций. Анализируются окончательные компенсационные пошлины ЕС, введённые в октябре 2024 года и повысившие совокупную ставку импортной пошлины на китайские электромобили до 45,3%, последовавший за этим рост гринфилд-инвестиций Китая в Европе, а также новый механизм "ценовых обязательств", введённый в 2026 году. На основе парадигмы OLI, упсальской модели и теории "перепрыгивания тарифов" автор делает вывод, что китайские компании не просто обходят пошлины, а формируют локализованную промышленную экосистему внутри Европы. Результаты имеют практическое значение для стратегии развития зелёной энергетики Узбекистана и её сотрудничества с китайскими технологическими поставщиками.

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Ключевые слова: международная конкурентоспособность, прямые иностранные инвестиции, электромобили, зелёная экономика, торговля ЕС-Китай, компенсационные пошлины, теория “перепрыгивания тарифов”, локализация, ценовые обязательства.

Annotatsiya: Ushbu maqolada Xitoyning yashil energetika va elektromobil kompaniyalarining Yevropa ittifoqi bozoridagi strategik transformatsiyasi - to'g'ridan-to'g'ri eksportdan to'g'ridan-to'g'ri xorijiy investitsiyalar orqali mahalliylashtirilgan ishlab chiqarishga o'tishi tahlil qilinadi. Tadqiqotda YeI tomonidan 2024-yil oktabrda joriy etilgan yakuniy anti-subsidiya bojlari, ular natijasida Xitoyda ishlab chiqarilgan elektromobillarga umumiy boj 45,3% gacha ko'tarilgani, buning natijasida Xitoy greenfield-investitsiyalarining Yevropaga keskin oshishi hamda 2026-yilda joriy etilgan yangi “narx majburiyati” mexanizmi o'rganiladi. OLI paradigmasi, Uppsala modeli va “tarif sakrash” FDI nazariyasi asosida muallif Xitoy kompaniyalari shunchaki bojlarni chetlab o'tmasdan, balki Yevropa ichida mahalliylashtirilgan sanoat ekotizimini shakllantirayotganini asoslaydi. Natijalar O'zbekiston yashil energetika strategiyasi va uning Xitoy texnologiya yetkazib beruvchilari bilan hamkorligi uchun amaliy ahamiyatga ega.

Kalit so'zlar: xalqaro raqobatbardoshlik, to'g'ridan-to'g'ri xorijiy investitsiyalar, elektromobillar, yashil iqtisodiyot, YeI-Xitoy savdosi, anti-subsidiya bojlari, tarif sakrash, mahalliylashtirish, narx majburiyati.

Introduction Over the past decade the green-technology sector - solar panels, wind turbines and electric vehicles with their batteries - has become one of the fastest-growing segments of the world economy, and Chinese companies have emerged as its dominant force. “By 2024 China controlled more than 80% of global solar-panel manufacturing and around 60% of wind-turbine output, while a single firm, CATL, held roughly 38% of the global EV-battery market”[1]. For these companies the European Union, with its ambitious “European Green Deal” decarbonization targets, represents the most attractive export destination outside Asia.

However, this expansion has collided with a defensive turn in EU trade policy. Following a thirteen-month anti-subsidy investigation, “in October 2024 the EU imposed definitive countervailing duties on China-made battery electric vehicles, raising the total import burden to as much as 45.3%”[2]. In response, Chinese firms accelerated a strategic pivot - from exporting finished products toward localized production inside Europe through foreign direct investment. The 2026 introduction of a “price undertaking” mechanism added a further layer to this rapidly evolving trade relationship.

The relevance of this topic is twofold. First, the export-to-FDI shift in the EU-China green-technology trade is unfolding in real time and remains under-analysed in the academic literature, particularly the 2026 price-undertaking mechanism. Second, “for Uzbekistan – which aims to source 40% of its electricity from renewables by 2030”[3] and relies heavily on Chinese technology suppliers -

[1]European Commission. (2024). Commission Implementing Regulation (EU) 2024/2754. Official Journal of the European Union, 2024(2754). europa.eu

[2] Rhodium Group, Merics. (2026, May 20). Chinese investment rises to 7-year high - Chinese FDI in Europe: 2025 update. MERICS Reports. merics.org

[3] Ministry of Energy of Uzbekistan**.** (2026, June 19). *Central Asia targets 40% renewable energy share by 2030*. Daryo News. https://daryo.uz/en/2026/06/19/central-asia-targets-40-renewable-energy-share-by-2030

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understanding how Chinese firms localize and compete under regulatory pressure carries direct policy value.

The aim of this article is to analyse the strategic transformation of Chinese green-technology companies in the European market - from exports to localized FDI - under conditions of tariff and regulatory pressure, and to derive practical implications for Uzbekistan. The object of the study is Chinese green-technology and EV companies operating in the EU market; the subject is the economic mechanisms and strategies through which their international competitiveness is formed under trade barriers.

Literature review The analysis rests on several established theories of international business. J. Dunning's eclectic paradigm explains a multinational's decision to invest abroad through three advantage groups - ownership, location and internalization - and is especially suited to explaining why Chinese firms increasingly internalize production within the EU rather than serve it through arm's-length exports.

Two further frameworks complement this picture. The *global value chain governance* approach explains how lead firms - "in this case European automakers - coordinate and govern dispersed suppliers, which helps account for the joint-venture battery plants now embedded within EU automotive supply chains"[4]. "The *dynamic capabilities* perspective"[5] further explains how Chinese firms sense, seize and reconfigure resources to adapt their European strategy as the regulatory environment shifts.

The Uppsala internationalization model describes market entry as a gradual, stage-wise process in which firms deepen commitment as they accumulate market knowledge and network relationships. The recent behaviour of Chinese firms - moving from export to joint ventures to wholly-owned gigafactories - illustrates the model's escalating-commitment logic.

Most directly relevant is tariff-jumping FDI theory, which holds that firms establish production inside a protected market specifically to circumvent trade barriers such as anti-dumping or countervailing duties. Finally, the Springboard perspective argues that emerging-market multinationals use international expansion as a springboard to acquire technology, brand recognition and standards-compliance experience. Together these frameworks allow the export-to-FDI shift to be read not as a tactical reaction but as a multi-objective competitive strategy.

Among national scholars, the works of Sh.D. Ergashxodjayeva on international competition, B.R. Tillayeva on international economic relations, and studies of export potential and diversification provide a domestic methodological anchor for analysing competitiveness in the Uzbek context.

The study employs a qualitative case-study design combined with descriptive statistical analysis. Primary regulatory sources include the European Commission's implementing regulations and DG Trade communications; quantitative data on FDI flows are drawn from the Rhodium Group–MERICS "Chinese FDI in Europe" reports, and corporate and market data from S&P Global Mobility, the IEA and Reuters. The methods applied are comparative analysis, document analysis of trade-policy

[4] Gereffi, G., Humphrey, J., & Sturgeon, T. (2005). *The governance of global value chains*. Review of International Political Economy, 12(1), 78-104. doi.org

[5] Teece, D. J., Pisano, G., & Shuen, A. (1997). *Dynamic capabilities and strategic management*. Strategic Management Journal, 18(7), Wiley Online Library

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instruments, descriptive statistics, and graphical representation. The CATL Debrecen gigafactory and the Cupra Tavascan price undertaking are used as illustrative cases.

Results and analysis The European Commission launched its anti-subsidy investigation on 4 October 2023, applied provisional duties from July 2024, and adopted definitive countervailing duties on 29-30 October 2024 for a five-year period[6]. The Council vote was notably divided - ten member states in favour, twelve abstaining and five against, including Germany and Hungary[7]. The duties were levied on top of the standard 10% car-import duty, producing the combined rates shown in Table 1 and Figure 1.

Table 1

"EU definitive import duties on China-made BEVs"[8]

Manufacturer	Countervailing duty	+ Standard duty	Total
Tesla (Shanghai)	7.8%	10%	**17.8%**
BYD	17.0%	10%	**27.0%**
Geely	18.8%	10%	**28.8%**
Cooperating (non-sampled)	20.7%	10%	**30.7%**
SAIC / non-cooperating	35.3%	10%	**45.3%**

Crucially, even "at the maximum 45.3% rate the price gap was narrowed rather than eliminated: in 2023 Chinese EVs sold in the EU for an average of about €25,200 - roughly 32% below the average non-EU import and 16% below the EU average price"[9]. BYD, Geely and SAIC challenged the measures before the General Court of the Court of Justice of the EU in January 2025, while simultaneously pursuing a more durable response: producing inside Europe.

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[6]S&P Global Mobility. How EU Tariffs Will Impact the Battery Electric Vehicle Market. 2024. https://www.mobilityglobal.com

[7]Cleary Gottlieb. Definitive Duties Adopted by the EU on Chinese BEVs. Oct. 2024. Council vote: 10 in favour, 12 abstentions, 5 against (incl. Germany, Hungary). https://www.clearygottlieb.com/news

[8] Source: compiled by the author from European Commission Implementing Regulation (EU) 2024/2754 and S&P Global Mobility (2024).

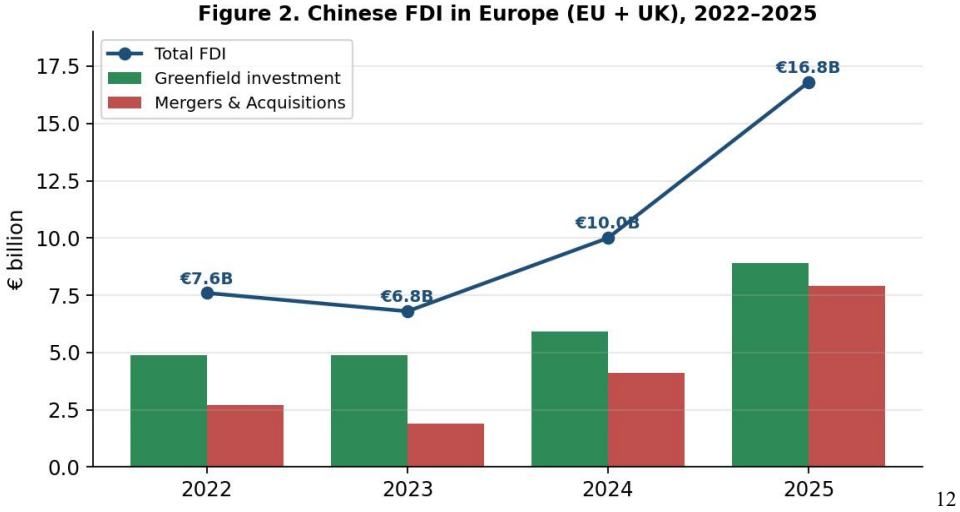
[9]Chinese EV Europe. EU Tariffs on Chinese EVs: Rates, Impact and What to Do. 2026 (avgprice data for 2023)

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The surge of Chinese FDI into Europe The tariff barrier coincided with a marked rebound in Chinese FDI in Europe. According to Rhodium group and MERICS, "Chinese FDI in the EU and UK rose 47% to about €10 billion in 2024 and then a further 67% to €16.8 billion in 2025 - the highest level since 2018"[10]. Greenfield investment, the channel most associated with localization, "reached record highs of €5.9 billion and €8.9 billion. The automotive sector attracted €7.6 billion in 2025 - 45% of all Chinese FDI - of which 93% targeted the EV supply chain. Hungary remained the leading destination, attracting €3.9 billion in 2025, followed by Germany and France"[11] (Figure 2).

This shift towards increased localization highlights a strategic realignment among Chinese electric vehicle manufacturers aiming to mitigate the long-term impacts of punitive tariffs. By transitioning from a pure export model to direct foreign investment, these firms are not only bypassing trade barriers but also integrating themselves deeper into the European automotive ecosystem. Consequently, this influx of capital is fostering regional job creation and technological spillover, which may alter the competitive dynamics within the European Union. However, the concentration of these investments in specific countries like Hungary suggests a fragmented geopolitical landscape where individual member states actively compete for foreign capital, potentially complicating unified EU trade policies.

Figure 2. Chinese FDI in Europe (EU + UK), 2022-2025



[12]

A nuance deserves emphasis: while completed greenfield investment hit a record, the value of newly announced projects fell - from €16.9 billion in 2023 to €5.7 billion in 2024 and €5.2 billion in 2025 - signalling that the current wave reflects projects launched earlier, and that momentum may slow. Notably, China's Ministry of Commerce has reportedly advised firms to keep their most advanced technologies at home and limit overseas operations to assembly, revealing a tension between commercial localization and strategic technology control.

[10]Rhodium Group & MERICS. Chinese FDI in Europe: 2025 Update. May 2026.

[11] Rhodium Group, & MERICS. (2026, May 20). Chinese investment rises to 7-year high - Chinese FDI in Europe: 2025 update. MERICS Reports. merics.org

[12] *author's elaboration based on Rhodium Group & MERICS, Chinese FDI in Europe - 2024 and 2025 Updates.*

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Case study: the CATL gigafactory in Debrecen, Hungary The clearest embodiment of the localization strategy is CATL's battery gigafactory in "Debrecen, Hungary, with an investment of €7.3 billion, a planned annual capacity of 100 GWh and a workforce of around 9,000, it is set to become one of Europe's largest battery plants, supplying BMW, Stellantis, Mercedes-Benz and Volkswagen directly within the region"[13]. Cell production was scheduled to begin in early 2026, several months ahead of schedule. In parallel, CATL is building a 50 GWh lithium-iron-phosphate plant in Zaragoza, Spain, as a 50:50 joint venture with Stellantis. CATL frames this as an "In Europe, for Europe" strategy - producing locally to serve European automakers and to meet EU regulatory requirements. (Table 2)

Furthermore, the CATL gigafactory serves as a critical benchmark for future greenfield investments within the continent, illustrating how regulatory pressures can accelerate international industrial partnerships. This local production model effectively cushions Chinese enterprises against volatile supply chains and fluctuating shipping costs while ensuring compliance with stringent European environmental standards. As European automakers increasingly rely on locally sourced battery cells to meet carbon neutrality targets, the strategic positioning of such gigafactories consolidates China's indispensable role in the European energy transition. Ultimately, this integration underscores a complex interdependence where economic regionalization coexists with cross-border technological reliance.

Table 2

"Selected Chinese green-technology localization projects in the EU"[14]

Company / project	Location	Investment	Capacity	Status
CATL gigafactory	Debrecen, Hungary	€7.3 bn	100 GWh	Production from early 2026
CATL–Stellantis JV	Zaragoza, Spain	~€4.1 bn (50:50)	50 GWh	Production late 2026
Volkswagen Anhui (Cupra Tavascan)	Anhui, China → EU sales	EV projects in EU	-	Price undertaking, Feb. 2026
BYD plant	Hungary	n/a	n/a	Trial production early 2026

[13]Reuters / TechNode. CATL's €7.3 billion Hungary plant to begin production early 2026. Sept. 2025.

[14] Rhodium Group, & MERICS. (2026, May 20). Chinese investment rises to 7-year high - Chinese FDI in Europe: 2025 update. MERICS Reports. merics.org

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The 2026 "price undertaking" mechanism: the Cupra Tavascan case

On 12 January 2026 the EU and China reached a consensus on "price undertakings" as an alternative to flat tariffs, and the Commission published guidance for exporters. The mechanism allows a producer to be exempted from countervailing duties if it commits to a minimum import price, a volume quota, and investment in the EU. "On 10 February 2026 the Commission accepted the first such undertaking - from Volkswagen and its EU affiliate SEAT for the China-built Cupra Tavascan SUV - exempting it from the 20.7% duty"[15]. Decisively, Volkswagen demonstrated that the Tavascan's production relies on European equity without Chinese state subsidies, and committed to defined BEV-investment milestones in the EU, with the next model generation to be produced in Europe altogether.

This case reveals the mechanism's dual logic: it protects European producers from price undercutting while channelling Chinese-linked capital into EU-based production. The first beneficiary was a European brand built in China - underscoring how blurred the "national origin" of a vehicle has become in a deeply intertwined supply chain.

Discussion

Interpreted through the theoretical framework, the evidence supports a clear thesis. Tariff-jumping FDI theory explains the immediate trigger - firms locate inside the EU to neutralize duties of up to 45.3%. The OLI paradigm explains the deeper rationale: localization converts a Chinese ownership advantage, low-cost, advanced manufacturing, into a location advantage "Made in EU" status, proximity to demand, regulatory compliance, while internalizing control over technology and quality. The Uppsala model captures the escalating commitment from export to gigafactory, and the Springboard perspective explains the simultaneous pursuit of brand-building, standards experience and risk diversification.

Beyond tariff avoidance, a structural shift is under way. By building gigafactories, forming joint ventures with European automakers, and embedding suppliers, Chinese firms are not merely entering the European market - they are constructing a localized industrial ecosystem inside Europe. This brings genuine benefits jobs, capacity, technology transfer but also deepens Europe's dependence on Chinese capital and know-how in a strategic sector, which explains the EU's insistence on investment commitments and minimum prices as conditions for relief.

Conclusion

This study has shown that Chinese green-technology companies responded to the EU's 2024 anti-subsidy duties with a strategic pivot from export toward localized FDI, reinforced by the 2026 price-undertaking mechanism. The shift is best understood as a multi-objective competitive strategy rather than a defensive tactic, combining tariff circumvention, ownership-to-location advantage conversion, escalating market commitment and springboard learning.

For Uzbekistan, which targets 40% renewable electricity by 2030 and is rapidly building solar and wind capacity, several lessons follow. Chinese firms currently participate in Uzbekistan's renewables mainly as EPC contractors and equipment suppliers - for example, "Energy China

[15]European Commission, DG Trade. Commission accepts price undertaking from Chinese electric car producer. 10 Feb. 2026.

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developed a 1- GW solar complex in the Bukhara and Kashkadarya regions, commissioned in 2023-2024"[16], while Goldwind, Envision and JA Solar supply turbines and modules to projects led by Gulf developers such as Masdar and ACWA power. The European experience suggests that Uzbekistan should move beyond importing finished equipment toward attracting localized manufacturing and assembly, negotiating technology-transfer and local-content commitments - much as the EU now ties tariff relief to EU-based investment, a balanced policy that welcomes Chinese capital while safeguarding national technological capacity and supplier diversity would strengthen the long-term competitiveness of Uzbekistan's green-energy sector.

References

1. Belderbos, R. & Sleuwaegen, L. (1998). Tariff jumping DFI and export substitution: Japanese electronics firms in Europe. International Journal of Industrial Organization, 16(5), 601–638.
2. Blonigen, B. A. (2002). Tariff-jumping antidumping duties. Journal of International Economics, 57(1), 31-49.
3. Bruegel (2025). A smart European strategy for electric vehicle investment from China. Brussels: Bruegel Policy Brief.
4. Chinese EV Europe (2026). EU Tariffs on Chinese EVs: Rates, Impact and What to Do.
5. Cleary Gottlieb (2024). Definitive Duties Adopted by the EU on Chinese BEVs. Client alert, October 2024.
6. Dunning, J. H. (2001). The eclectic (OLI) paradigm of international production: past, present and future. International Journal of the Economics of Business, 8(2), 173–190.
7. European Commission (2024). Commission Implementing Regulation (EU) 2024/2754 imposing definitive countervailing duties on imports of new battery electric vehicles originating in China. Official Journal of the EU, 29 October 2024.
8. European Commission, DG Trade (2026). Commission accepts price undertaking from Chinese electric car producer. Brussels, 10 February 2026. Available at: https://policy.trade.ec.europa.eu/news/commission-accepts-price-undertaking-chinese-electric-car-producer-2026-02-10_en
9. Gereffi, G., Humphrey, J. & Sturgeon, T. (2005). The governance of global value chains. Review of International Political Economy, 12(1), 78–104.
10. International Energy Agency (IEA) (2025). China's Official Energy Finance in Emerging and Developing Economies - Case 1: Uzbekistan 1-GW Solar PV Project. Paris: IEA.
11. Johanson, J. & Vahlne, J.-E. (1977). The internationalization process of the firm. Journal of International Business Studies, 8(1), 23–32.
12. Johanson, J. & Vahlne, J.-E. (2009). The Uppsala internationalization process model revisited. Journal of International Business Studies, 40(9), 1411–1431.
13. Luo, Y. & Tung, R. L. (2007). International expansion of emerging market enterprises: a springboard perspective. Journal of International Business Studies, 38(4), 481–498.
14. Reuters / TechNode (2025). CATL's €7.3 billion Hungary plant to begin production early 2026. September 2025.

[16]IEA. China's Official Energy Finance in Emerging and Developing Economies - Case 1: Uzbekistan 1-GW Solar PV Project. 2025. iea.org

HSR (LONDON),
HOUGHTON STREET REVIEW JOURNAL
ISSN: 2058-5519|Impact factor-15.9
http://houghtonstreetreview.com/index.php/hsr

15. Rhodium Group & MERICS (2025). Chinese Investment Rebounds Despite Growing Frictions: Chinese FDI in Europe - 2024 Update. Berlin/New York.
16. Rhodium Group & MERICS (2026). Chinese Investment Rises to Seven-Year High: Chinese FDI in Europe - 2025 Update. Berlin/New York.
17. S&P Global Mobility (2024). How EU Tariffs Will Impact the Battery Electric Vehicle Market.
18. Teece, D. J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal, 18(7), 509-533.
19. Ergashxodjayeva, Sh. D. Xalqaro raqobat. O'quv qo'llanma. Toshkent.
20. Tillayeva, B. R. (2023). Xalqaro iqtisodiyot va xalqaro iqtisodiy munosabatlar. Darslik. Toshkent: Universitet, 230 b.