

6 October 2026

The Director - Investigations
Anti-Dumping Commission
GPO Box 2013
Canberra ACT 2601

**Titanium dioxide exported from the People's Republic of China
Investigation No. 699**

**Government influence on the cost and supply of sulphuric acid and energy in
China**

Dear Director,

This submission is made on behalf of Tronox Limited ("Tronox") to investigation 699 concerning titanium dioxide exported from the People's Republic of China ("China"). It presents further qualitative and quantitative information on whether policies, regulations, subsidies, pricing mechanisms or other forms of intervention or influence by the Government of China ("GOC") affect the cost or supply of sulphuric acid and energy in China.

Energy and sulphuric acid are the second and third largest inputs to the production of the goods, at approximately 14% and 13% of the cost of production respectively. Tronox's submission of 3 August 2026 ("EPR 19") set out why the exporters' recorded costs of both inputs do not reasonably reflect competitive market costs. This submission supplements EPR 19 with information on the mechanisms through which the GOC manipulates in various ways the price and availability of energy, electricity, natural gas and steam, and sets forth various policies and procedures that influence the price and availability of sulphuric acid. This submission also corrects the electricity benchmark proposed in EPR 19.

1. Regulation 43(2)

Regulation 43(2) of the *Customs (International Obligations) Regulation 2015* ("the Regulation") provides that where an exporter keeps records relating to the like goods, and the records "(i) are in accordance with generally accepted accounting principles in the country of export; and (ii) reasonably reflect competitive market costs associated with the production or manufacture of like goods; the Minister must work out the amount by using the information set out in the records".

The second condition is directed at the market in which the cost arose. An exporter's records may show accurately what it paid for electricity or sulphuric acid, and still fail the condition if those prices are influenced by government policies or programs that prevents the functioning of a competitive market. The information contained in this submission demonstrates that this situation exists in China as it relates to costs of producing TiO₂. This submission also supports Tronox's claim, set out in EPR 19, that "the situation in the market of the country of export is such that sales in that market are not suitable for use in determining a price" within subparagraph 269TAC(2)(a)(ii) of the *Customs Act 1901* ("the Act").

The Commission has examined GOC influence over Chinese electricity pricing before. In its 2019 review of the measures on aluminium extrusions it recorded that "[t]he entire transmission grid is owned and maintained by two SOEs: State Grid Corporation of China and China Southern Power Grid", and stated that "it is the Commission's view that the GOC continues to provide support to Chinese aluminium producers through discounted electricity".¹ That finding concerned aluminium smelting. The instruments in section 2 show that the pricing framework within which it was made is general to Chinese manufacturing industry, and that it remained in place in the investigation period.

The Commission's most recent findings go further. In its investigation of hot rolled coil steel, concluded on 2 April 2026, it found that "[t]he commission considers that the Chinese electricity market was distorted during the inquiry/investigation period"² and that "it is clear that the GOC still maintains control over the pricing of electricity in China".³ It identified the means: "Electricity is regulated under the Pricing Law of the People's Republic of China, and the GOC maintains control over pricing through mechanisms such as coal-electricity price linkage, resulting in electricity prices that differ from those that would prevail in the absence of that price regulation and control".⁴ The finding that "the Chinese electricity market was distorted" appears again in the Commission's reports of February 2026 on steel reinforcing bar, and in its final reports on flat rolled steel and freight railway wheels.⁵

The Commission connected that finding to the relevant exporters. It noted that "the purchased electricity identified in the selected exporters' steel production costs came from Chinese SOE sources within the State Grid Corporation of China or other Baosteel subsidiaries, and some coal purchased came from Chinese SOE suppliers", and declined to adjust its benchmark toward Chinese electricity costs because doing so "would likely result in reintroducing the effects of GOC market intervention that the benchmark aims to remove".⁶ Sections 2.9 and 2.10 set out the corresponding facts for the sampled exporters in this investigation.

The Commission has also replaced a Chinese exporter's electricity cost as a separate line of the cost to make. In its investigation of silicon metal, it stated that "[t]he Commission maintains its view that the cost of electricity in the records of the exporter does not reasonably reflect competitive market costs", and that "[t]his uplifted electricity cost was substituted for the actual cost of electricity verified by the Commission".⁷

2. Energy

This section sets out the framework through which the GOC sets and steers the price of electricity (2.1 to 2.5). It then turns to the markets for coal, natural gas and heat that supply the sampled exporters' own boilers (2.6 to 2.8), and to the energy arrangements of the

¹ ADC Report No. 482: Certain aluminium extrusions exported from China, Appendix section A5.4, p 96.

² ADC Report No. 658: Hot rolled coil steel exported from China, Appendix A, section A.6.6.5, p 149.

³ ADC Report No. 658, Appendix A, section A.6.6.5, p 150.

⁴ ADC Report No. 658, section C.7.1, p 168.

⁵ ADC Report No. 669: Steel reinforcing bar exported from China, p 117; ADC Report No. 676: Steel reinforcing bar exported from China by Baowu Group Echeng Iron and Steel Co., Ltd, p 72; ADC Report No. 688: Certain flat rolled steel products exported from the People's Republic of China and the Republic of Korea, section A.6.5.4, p 176; ADC Report No. 690: Freight railway wheels exported to Australia from the People's Republic of China, section A6.5.4, p 151.

⁶ ADC Report No. 658, section C.7.2.3.4.3, p 183.

⁷ ADC Report No. 237: Silicon metal exported from China, sections 6.7.4 and 6.7.5, p 35.

sampled exporters (2.9 and 2.10). The findings of other authorities follow at 2.11 and the quantitative evidence at 2.12.

2.1 The Central Pricing Catalogue

The NDRC's Central Pricing Catalogue, promulgated by NDRC Order No. 31 and in force from 1 May 2020, lists the prices set by the central government.⁸ Its first item is electricity transmission and distribution, reflecting "transmission and distribution prices for provincial and higher-level grids", priced by "the competent pricing department of the State Council".⁹ Its second is oil and gas pipeline transport with "inter-provincial pipeline transportation prices", priced by the same department.¹⁰

The notes to the Catalogue determine what an entry covers. Note 2 states that "the pricing content listed in this Catalogue includes specific prices, charging standards, benchmark prices and their range of fluctuation, and the related pricing mechanisms, methods and rules".¹¹

Note 3 addresses generation. It provides that "the coal-fired generation tariff mechanism, and on-grid tariffs such as nuclear power that are not yet formed through market transactions, are for the time being set by the competent pricing department of the State Council".¹²

Note 4 addresses gas "city-gate prices for other domestic onshore pipeline gas, and for imported pipeline gas from projects commissioned before the end of 2014, are for the time being managed under the existing pricing mechanism".¹³

The price an industrial user pays for grid electricity therefore includes a transmission and distribution charge set by the State Council's pricing department, and the mechanism for coal-fired generation, China's principal source of power, sits with the same department. For gas, the Catalogue sets inter-provincial pipeline tariffs and leaves city-gate prices for most domestic and legacy imported pipeline gas under the existing government mechanism.

2.2 The 2021 reform of coal-fired generation tariffs

NDRC Notice (2021) 1439 of 11 October 2021, in force from 15 October 2021, governs the price of coal-fired generation.¹⁴ Under it, coal-fired power is sold "with the on-grid price formed through market trading within the range of 'benchmark price plus or minus a floating range'".¹⁵ The Notice fixes the band itself as "the floating range is in principle not more than 20% up or down, and the market trading price for high energy-consuming enterprises is not subject to the 20% upward limit".¹⁶

The market that the Notice created operates inside limits set by reference to a government benchmark. Unless it is classified as high energy-consuming, a buyer cannot in principle be charged more than 20% above that benchmark, however tight supply becomes.

⁸ National Development and Reform Commission, [Central Pricing Catalogue](#), NDRC Order No. 31, in force 1 May 2020.

⁹ *Central Pricing Catalogue*, item 1, p 1.

¹⁰ *Central Pricing Catalogue*, item 2, p 1.

¹¹ *Central Pricing Catalogue*, note 2, p 3.

¹² *Central Pricing Catalogue*, note 3, p 4.

¹³ *Central Pricing Catalogue*, note 4, p 4.

¹⁴ National Development and Reform Commission, [Notice on Further Deepening the Market-Oriented Reform of On-Grid Tariffs for Coal-Fired Generation](#), 11 October 2021.

¹⁵ NDRC Notice 1439, section 2(1).

¹⁶ NDRC Notice 1439, section 2(ii).

The Notice also directs how low-cost generation is to be used. It provides that "localities shall give priority to using low-price power sources to supply residential and agricultural consumption".¹⁷ Generation is allocated by administrative priority as well as by price.

Under the heading "avoiding unreasonable administrative intervention", the Notice directs that local authorities "shall not organise dedicated electricity trading sessions, and shall not intervene in reasonable fluctuation of market trading prices within the prescribed range".¹⁸ The conduct prohibited is local arrangement of power sales for particular users and local intervention in market prices. REP 482 records examples of local governments reducing the electricity prices paid by particular smelters.¹⁹

2.3 The 2025 Opinion on price governance

The *Opinion of the General Office of the CPC Central Committee and the General Office of the State Council on Improving the Price Governance Mechanism* is dated 5 December 2024 and was published on 2 April 2025, within the investigation period.²⁰

On generation, the Opinion directs that the authorities "advance market-oriented reform of on-grid tariffs for each type of power source, category by category and at a measured pace".²¹ On gas, it directs that they "deepen market-oriented reform of natural gas prices".²² Both are stated as work in progress.

On industrial electricity, it directs that the authorities, "taking into account energy consumption, environmental performance and other factors, improve the tiered electricity price system for key industrial sectors".²³ The tariff an industrial user in a designated sector pays is accordingly graded by the State by reference to criteria it sets.

2.4 Market prices steered within a government band

The market created in 2021 is steered by the State. The *Basic Rules for Electricity Market Operation*, NDRC Order No. 20 of 2024, in force from 1 July 2024, provide that "the NDRC and NEA, together with the relevant departments, conduct market supervision according to their duties and guide market prices to operate within a reasonable range".²⁴ The *Basic Rules for the Electricity Spot Market (Trial)* call spot price limits and price intervention rules "regulatory pricing rules", whose principles are set by the State Council's pricing department and whose detail is set by the provincial pricing departments.²⁵ They also provide that "transmission and distribution prices (including cross-subsidies), comprehensive line-loss rates and the like follow the levels approved by government".²⁶

Each part of the price an industrial user paid in 2025 was fixed by formula. The NDRC's notice on transmission and distribution tariffs for the third regulatory period, which ran to the end of 2025, provides that "the price paid by industrial and commercial users consists of

¹⁷ NDRC Notice 1439, section 2(iv).

¹⁸ NDRC Notice 1439, section 3(iii).

¹⁹ ADC Report No. 482, Appendix section A5.4, pp 96–97.

²⁰ General Office of the CPC Central Committee and General Office of the State Council, [Opinion on Improving the Price Governance Mechanism](#), 5 December 2024, published in the *Gazette of the State Council*, 2025 No. 11.

²¹ 2025 Opinion, section II(I).

²² 2025 Opinion, section II(I).

²³ 2025 Opinion, section III(V).

²⁴ National Development and Reform Commission, [Basic Rules for Electricity Market Operation](#), NDRC Order No. 20 of 2024, in force 1 July 2024, art 34.

²⁵ NDRC and National Energy Administration, *Basic Rules for the Electricity Spot Market (Trial)*, 7 September 2023, art 41.

²⁶ *Basic Rules for the Electricity Spot Market (Trial)*, art 35.

the on-grid price, on-grid line-loss charges, the transmission and distribution price, system operation charges, and government funds and surcharges".²⁷ Its annex fixes the transmission and distribution tariff for each province in which the sampled exporters operate.²⁸

The NDRC's notice establishing a capacity price for coal-fired generation sets that price at 165 yuan per kilowatt per year for Henan, Chongqing and Sichuan for 2024 and 2025,²⁹ and provides that "each locality's coal-power capacity charges are included in system operation costs and are allocated monthly to industrial and commercial users in proportion to their consumption that month".³⁰

The tariff tables State Grid Henan published for 2025 show the result in the province where LB Group and Henan Billions operate. Among the components of the July 2025 industrial price, they itemise a "new gains and losses on electricity price cross-subsidy, per kWh") of 0.019929 yuan and a "coal-fired capacity charge, per kWh" of 0.036289 yuan.³¹

2.5 Local intervention and price relief by location

The national regulator treats local interference in electricity prices as a continuing problem. The National Energy Administration's report on the electricity market in 2024, published in June 2025, lists among its priorities for 2025 to "carry out, as a regular matter, rectification of improper local interference in power market trading".³² Its 2025 notice on special supervision of market order directs inspection for "unlawfully set price limits at the bidding, clearing and settlement stages, and designating counterparties or transaction prices in disguised form".³³ The provinces it covers include Henan, Chongqing and Sichuan, where the sampled exporters have their plants.³⁴

Sichuan shows how such intervention works. From 1 May 2025 the Sichuan Development and Reform Commission directed that "because grid export is constrained in Panzhihua, Liangshan, Ganzi and Aba, large industrial users in those prefectures will for now not apply the peak-price mechanism".³⁵ Replying in June 2025 to a proposal of the city's political consultative conference, the Panzhihua Development and Reform Commission said the exemption "is expected to cut the power costs of the enterprises concerned by 6%". It also said it lowers enterprise costs "through measures such as optimising the time-of-use mechanism and implementing industrial preferential electricity prices".³⁶ Industrial electricity prices in the province are adjusted by administrative decision, place by place.

²⁷ NDRC, [Notice on Provincial Grid Transmission and Distribution Tariffs for the Third Regulatory Period and Related Matters](#), 9 May 2023, para IV.

²⁸ NDRC Notice 526, [Annex](#) (provincial transmission and distribution tariff tables for Henan, Chongqing and Sichuan).

²⁹ NDRC and National Energy Administration, [Notice on Establishing a Capacity Price Mechanism for Coal-Fired Power](#), 8 November 2023, annex (provincial coal-fired capacity price table, 2024 to 2025).

³⁰ NDRC Notice 1501, section II(III).

³¹ State Grid Henan Electric Power Company, [Agency purchase price information table for July 2025](#), items 12 and 13, as published on the Pingdingshan Municipal Government website.

³² National Energy Administration, [China Electricity Market Development Report 2024](#), June 2025, p 50.

³³ National Energy Administration General Department, [Notice on Special Supervision of Prominent Problems of Electricity Market Order in 2025](#), 7 April 2025, section IV(II).

³⁴ NEA Notice 58, section II.

³⁵ Sichuan Development and Reform Commission, [Notice on Further Adjusting the Time-of-Use Electricity Price Mechanism in Our Province](#), 30 April 2025, section III(I).

³⁶ Panzhihua Municipal Development and Reform Commission, [Reply to Proposal No. 143 of the Fourth Session of the Tenth Municipal CPPCC](#), 19 June 2025, section II.

2.6 Coal

Coal fires the steam boilers at Chongqing Titanium and LB Sichuan. Its price moves within a band the NDRC sets. The NDRC's notice on the coal market price formation mechanism, in force from 1 May 2022, states that "for the near-term stage, a medium- and long-term transaction price for Qinhuangdao port seaborne coal (5,500 kcal) of 570 to 770 yuan per tonne (tax inclusive) is relatively reasonable".³⁷ It commits the NDRC to act in both directions. When prices rise significantly it will "promptly launch price intervention measures in accordance with procedures, to guide coal prices back into the reasonable range", and when they fall excessively it will "take appropriate measures comprehensively to guide coal prices to rebound reasonably".³⁸

The ceiling carries legal consequences. NDRC Announcement No. 4 of 2022 applies to "operators in the coal (domestic thermal coal, the same below) sector" and provides that "where any of the following circumstances exists without justifiable reason, it may generally be regarded as price gouging: (1) the operator's medium- and long-term coal sales price exceeds the upper limit of the reasonable range for medium- and long-term transaction prices set out in relevant national or local documents; (2) the operator's spot coal sales price exceeds by more than 50% the upper limit of that reasonable range".³⁹ It applies whoever the buyer is.

China Shenhua Energy sold 53.2% of its coal in 2025 under annual term contracts at an average of 455 yuan per tonne before VAT, against 569 yuan under monthly term contracts and 556 yuan on spot terms.⁴⁰ The company also reported that "guided by regulatory policy, coal supply was stable and orderly, and raw coal output of industrial enterprises above designated size fell year on year in July to December".⁴¹

A band the State defends in both directions, with sales above it treated as unlawful, is not a competitive market for coal. The steam and power raised from that coal carry the same character.

2.7 Natural gas: price and administrative allocation of supply

The price of pipeline gas is guided by the State. PetroChina, which sold 247.5 billion cubic metres of gas in China in 2025,⁴² states in its annual report for that year that "domestic natural gas prices are subject to government-guided pricing".⁴³ City-gate prices for non-residential gas are set against benchmarks the NDRC fixes for each province, around which "supply and demand parties may, on the basis of the benchmark city-gate price, negotiate the specific city-gate price within a range of up to 20% above it and without limit below it".⁴⁴ The benchmarks are 1,870 yuan per thousand cubic metres in Henan, 1,530 in Sichuan and 1,520 in Chongqing.⁴⁵

³⁷ NDRC, [Notice on Further Improving the Coal Market Price Formation Mechanism](#), 24 February 2022, section II.

³⁸ NDRC Notice 303, section II.

³⁹ NDRC, [Announcement Clarifying Price-Gouging Conduct by Operators in the Coal Sector](#), NDRC Announcement No. 4 of 2022, 30 April 2022.

⁴⁰ China Shenhua Energy Company Limited, [2025 Annual Report](#), p 29.

⁴¹ China Shenhua Energy Company Limited, [2025 Annual Report](#), p 17.

⁴² PetroChina Company Limited, [2025 Annual Report](#), p 22.

⁴³ PetroChina Company Limited, [2025 Annual Report](#), p 73.

⁴⁴ NDRC, [Notice on Reducing Non-Residential Natural Gas City-Gate Prices and Further Advancing Market-Oriented Price Reform](#), 18 November 2015, section II.

⁴⁵ NDRC, [Notice on Adjusting Benchmark City-Gate Prices for Natural Gas](#), 27 March 2019, Annex.

The State also refunds import VAT on gas where "the import price is higher than the reference benchmark value",⁴⁶ and that reference value is "determined by the NDRC and the NEA".⁴⁷ The refund compensates importers for the gap between import cost and a domestic reference the State sets. PetroChina recorded import VAT refunds on gas of RMB 14,328 million in 2025.⁴⁸

The *Natural Gas Utilisation Measures*, NDRC Order No. 21 of 2024, took effect on 1 August 2024.⁴⁹ Article 4 sets the principle of "safeguarding people's livelihood, key sectors and development".⁵⁰ Article 5 provides that "natural gas use is divided into priority, restricted, prohibited and permitted categories. For priority gas-use projects, local people's governments at all levels and the relevant departments are encouraged to give policy support in planning, land use, financing, and fiscal and tax matters".⁵¹

For users outside the priority category, access depends on the category assigned. Article 9 permits gas-fuelled projects in industries that include "petrochemical and chemical" to develop "on condition that the gas source is secured and the project is economically sustainable".⁵² Projects in the prohibited category that are not phased out are "not given assurance of gas supply".⁵³ Supply of gas to industry, and the support attached to it, are allocated by administrative classification. Taken with Notes 2 and 4 of the Central Pricing Catalogue, both the price and the availability of gas to Chinese industry are shaped by the State.

2.8 Steam, heat and captive power

EPR 19 described the major producers as located in state-designated chemical industrial parks that share captive power and steam, with the cost of shared infrastructure borne partly by state-owned park operators.⁵⁴ Chinese tax law adds a further reduction to the cost of that supply. Row 2.22 of the catalogue attached to MOF–STA Announcement 2021 No. 40, discussed at section 3.2, grants a refund of 100% of the VAT payable on "electricity and heat" produced from "waste heat and waste pressure generated in industrial production processes", where the product's raw material comes 100% from those resources.⁵⁵

The refund attaches to sales. It is therefore available where a group company or park operator recovers heat from industrial processes and sells the resulting power or steam to the producer of the goods. The VAT on that supply is refunded in full, and the cost of the power or steam to the group is reduced accordingly.

The price of heat, and the charges captive generation bears, are also set by government. The State Council General Office's notice of December 2020 on charges in the water, power, gas and heating sectors, whose targets run to 2025, directs that "urban central heating prices

⁴⁶ Ministry of Finance, General Administration of Customs and State Taxation Administration, [Notice on Import Tax Policies for the Exploration, Development and Utilisation of Energy Resources during the 14th Five-Year Plan](#), 12 April 2021, para IV.

⁴⁷ Ministry of Finance and others, [Implementing measures for the import tax policy on energy resources](#), 16 April 2021, para VII.

⁴⁸ PetroChina Company Limited, [2025 Annual Report](#), p 171, note 48.

⁴⁹ National Development and Reform Commission, [Natural Gas Utilisation Measures](#), NDRC Order No. 21 of 2024, 3 June 2024, in force 1 August 2024.

⁵⁰ *Natural Gas Utilisation Measures*, art 4.

⁵¹ *Natural Gas Utilisation Measures*, art 5.

⁵² *Natural Gas Utilisation Measures*, art 9(3).

⁵³ *Natural Gas Utilisation Measures*, art 13.

⁵⁴ EPR 19

⁵⁵ Ministry of Finance and State Taxation Administration, [Catalogue of Resource Comprehensive Utilisation Products and Services Eligible for VAT Preferences \(2022 edition\)](#), attachment to MOF–STA Announcement 2021 No. 40, row 2.22, p 5.

shall be included in local pricing catalogues and be subject to government-set or government-guided prices".⁵⁶ It also directs that "each region shall reasonably set the system standby fee for captive plants by reference to the basic charge level in the local large-industry transmission and distribution tariff and on the basis of the provincial grid transmission and distribution tariff. Waste-heat, waste-pressure and waste-gas captive plants shall continue to have system standby fees reduced or exempted".⁵⁷

Gas-fired combined heat and power is favoured in the allocation of gas. The Natural Gas Utilisation Measures place "(7) natural gas combined heat and power projects" and "(9) natural gas distributed energy projects" in the priority category,⁵⁸ for which article 5 encourages the policy support described at 2.7. LB Group runs a natural gas distributed energy project at its Jiaozuo base (2.10).

2.9 Chongqing Titanium

Chongqing Titanium Industry Co., Ltd ("Chongqing Titanium") is owned by the State. It's exporter questionnaire states that "Chongqing Titanium is a state-owned company" and that "Chongqing Titanium is wholly state-owned enterprises". Its shareholder is Pangang Group Vanadium and Titanium Resources Co., Ltd ("PGVT"). PGVT's annual report records that "the ultimate controlling party of this enterprise is Ansteel Group Co., Ltd",⁵⁹ and describes the nature of its actual controller as "a central State-owned assets management body".⁶⁰

Chongqing Titanium energy costs demonstrates how many of the mechanisms described above affect Chngqing Titanium's costs of production:

- *Steam production from coal.* Its business license covers "industrial water and industrial water steam supply".⁶¹ The environmental information PGVT publishes for the plant records that it is "equipped with two 90-tonne boilers and one 300,000-tonne sulphur-burning acid plant",⁶² that the boilers are "coal-fired boilers",⁶³ and that their emissions are regulated under GB 13223-2011, the emission standard for thermal power plants.⁶⁴ PGVT reports that in 2025 it "completed the 2024 carbon emission verification of Chongqing Titanium and the power plant in the national carbon market and of Chongqing Titanium in the local carbon market, and surrendered allowances on time".⁶⁵
- *Inter-company energy costs within the Ansteel group is based on government price benchmarks.* PGVT's 2026 notice of its routine related-party transactions provides that the prices of its purchases of "raw materials, energy and power" from related parties follow the principle that "(1) where there is a government-set price, it applies; (2) where there is a government-guided price, the parties negotiate within the range

⁵⁶ General Office of the State Council, [Notice Forwarding the Opinion of the NDRC and Other Departments on Clearing Up and Regulating Charges in the Urban Water, Power, Gas and Heating Sectors](#), 23 December 2020, Part III(IV).

⁵⁷ [Notice Forwarding the Opinion of the NDRC and Other Departments on Clearing Up and Regulating Charges in the Urban Water, Power, Gas and Heating Sectors](#), Part IV(II).

⁵⁸ *Natural Gas Utilisation Measures*, art 6.

⁵⁹ Pangang Group Vanadium Titanium & Resources Co., Ltd, [2025 Annual Report](#), p 159.

⁶⁰ PGVT, [2025 Annual Report](#), pp 59–60.

⁶¹ EPR 17, Attachment 2, Exhibit A-2.1 (business licence of Chongqing Titanium).

⁶² PGVT, [Environmental information disclosure for basic information](#), published 3 March 2025.

⁶³ PGVT, [Environmental information disclosure for pollution control facilities](#), item 7, published 3 March 2025.

⁶⁴ PGVT, [Environmental information disclosure for emissions summary](#), published 3 March 2025.

⁶⁵ PGVT, [2025 Environmental, Social and Governance Report](#), p 20.

not exceeding it".⁶⁶ PGVT bought raw materials and electricity worth RMB 5,909.55 million from the Ansteel group in 2025.⁶⁷

In its responses to the questionnaire, Chongqing Titanium fails to disclose the true nature of the benefit it receives from utilizing these GOC mechanisms. It states that it "does not benefit from any concession on the purchase of any utility services" and that it "negotiates with suppliers transaction by transaction. The purchase price is market price". Asked to describe its interaction with the GOC, including "supervision by the State-owned Assets Supervision and Administration Commission (SASAC) or a body under the control of SASAC", it answered only that "[e]very year the company needs to file Corporate Income Tax Statement and Value Added Tax Declarations to Tax Bureau and pay tax".⁶⁸ A wholly State-owned producer that raises steam from coal, within a group that prices energy by reference to government prices, is the case in which the Commission should test the recorded cost of energy against competitive market costs.

2.10 The LB group

Energy is a material cost for the LB group. LB Group's 2025 annual report records "energy and power" as 18.33% of the operating cost of its titanium dioxide in 2025, and 20.52% in 2024.⁶⁹ The Chinese industry association has accepted that "[t]he production of TiO₂ is highly electricity- and gas-intensive".⁷⁰

The group's 2025 sustainability report, whose scope covers "LB Group (Jiaozuo base), Billions New Materials, Lufeng Titanium, LB Sichuan, LB Xiangyang" among other companies, records consumption in 2025 of 455,029,420.36 cubic metres of natural gas, 529,994.40 tonnes of coal, 5,760,743,641.75 kWh of electricity and 3,021,427.00 tonnes of purchased steam.⁷¹ Its solar capacity generated about 18 million kWh a year,⁷² so almost all of its electricity came from the grid.

LB's process steam requirements come from coal and gas-fired boilers. LB Group's 2024 social responsibility report describes a "LB Sichuan Titanium coal-fired boiler retrofit project, in which natural gas burners added to the water walls on both sides of the furnace cut coal consumption by 40%".⁷³ Its 2024 annual report lists, under LB Group itself, a "natural gas distributed energy project, phase one, Jiaozuo Western Industrial Cluster".⁷⁴ Steam and power from these units cost what their coal and gas cost, so the evidence at 2.6 to 2.8 goes directly to the recorded cost of energy at these plants.

The group also receives government grants tied to electricity and energy use. Its accounts record a grant described as "Mianzhu Bureau of Industry, Science and Information Technology award for stabilising industrial production: electricity subsidy for the second quarter of 2022",⁷⁵ and, in the first half of 2025, a "electricity use award paid from local treasury funds") and RMB 1.23 million of "funding for an energy-saving and carbon-

⁶⁶ PGVT, [Announcement of Estimated Routine Related-Party Transactions for 2026](#), 31 March 2026, p 7.

⁶⁷ PGVT, [Announcement of Estimated Routine Related-Party Transactions for 2026](#), pp 3–4.

⁶⁸ EPR 17, question H-1.1, p 44.

⁶⁹ LB Group Co., Ltd, [Annual Report 2025](#), p 35.

⁷⁰ CNCIA submission of 9 June 2026, EPR 699 item 5, para 5.1, p 5.

⁷¹ LB Group Co., Ltd, [2025 Sustainability Report](#), p 152 and note 18.

⁷² LB Group Co., Ltd, [2025 Sustainability Report](#), p 52.

⁷³ LB Group Co., Ltd, [2024 Corporate Social Responsibility Report](#), p 32.

⁷⁴ LB Group Co., Ltd, [Annual Report 2024](#), p 87.

⁷⁵ LB Group Co., Ltd, [Annual Report 2024](#), p 325.

reduction retrofit of a titanium dioxide production line".⁷⁶ Mianzhu is where LB Sichuan's plant stands.

LB has already argued, without success, that the inputs it supplies to itself are free of distortion. In the European Union's investigation of the same goods, LB claimed that its titanium ore from related mines was not distorted. The European Commission rejected the claim, holding that "an input that in itself was produced in China by combining a range of factors of production and input costs (such as raw materials, energy, land, financing, labour, etc.) is also exposed to significant distortions. No evidence or argument to the contrary has been adduced by the GOC or the exporting producers in the present investigation and hence LB's argument had to be dismissed".⁷⁷ The same reasoning applies to steam and power the group raises from coal and gas bought in China.

The LB respondents' answers do not address these facts. Each answers question H-11.9 in the same words, that it "does not benefit from any concession on the purchase of any utility services", followed by a redacted passage and a confidential exhibit. None answers the question on subsidies publicly. Each answer gives the same refrain: LB "has not been subjected to any direct or indirect price guidance or controls by the Government of China during the period, with respect to raw material inputs", which does not address energy. The public record therefore shows neither who supplies the LB respondents with electricity, steam, coal and gas, nor on what terms.

2.11 Findings of other investigating authorities

The European Commission replaced every Chinese energy cost when it constructed normal value for the same goods. In its provisional regulation it found that the "prices and costs of the product concerned, including the costs of raw materials, energy and labour, are not the result of free market forces because they are affected by substantial government intervention".⁷⁸ Its factors of production included electricity, natural gas, steam and bituminous coal, each valued at a Brazilian benchmark.⁷⁹ For electricity it "used the industrial electricity price statistics published by the Ministry of Mines and Energy of Brazil", and for steam it "used natural gas as heat input and used the price of gas for industrial users in Brazil".⁸⁰ The definitive regulation adopted that calculation.

Those findings rest on the European Commission's report on distortions in the Chinese economy. Its energy chapter concludes that "[g]iven the significant State presence and intervention into energy production, pricing and planning, the overall picture emerging is one where normal market considerations do not prevail on the Chinese market for energy".⁸¹ It also found that "despite the fact that in general the preferential pricing is not allowed as such in China, such practices still remain widespread".⁸²

⁷⁶ LB Group Co., Ltd, [2025 Half-Year Report](#), p 228.

⁷⁷ [Commission Implementing Regulation \(EU\) 2024/1923 of 10 July 2024 imposing a provisional anti-dumping duty on imports of titanium dioxide originating in the People's Republic of China](#), recital (230).

⁷⁸ Regulation (EU) 2024/1923, recital (199).

⁷⁹ Regulation (EU) 2024/1923, recital (224), Table 1.

⁸⁰ Regulation (EU) 2024/1923, recitals (233) and (235).

⁸¹ [European Commission, Commission Staff Working Document on Significant Distortions in the Economy of the People's Republic of China for the Purposes of Trade Defence Investigations](#), SWD(2024) 91 final, 10 April 2024, chapter 10, p 296.

⁸² SWD(2024) 91 final, section 10.2.1.2.2, p 279.

The United Kingdom's Trade Remedies Authority ("TRA") has repeatedly examined Chinese energy pricing in dumping investigations. The first two determinations discussed below are before the Commission as exhibits to Tronox's application.

In its investigation of aluminium extrusions (AD0012) the TRA recorded that "[e]nergy is subject to price-setting or guided by Local Governments".⁸³ It concluded "that there is a PMS in the PRC in relation to the aluminium input and energy costs, and that the distortions caused by the PMS impact the normal value of the Goods Concerned for two overseas exporters".⁸⁴

In its investigation of optical fibre cables (AD0021) the TRA quoted the GOC's own description of its electricity market in the *Opinions on Further Deepening the Reform of the Electric Power System* (ZhongFa [2015] No. 9): "The current electricity price management is still dominated by government pricing, and electricity price adjustment often lags behind cost changes, making it difficult to timely and reasonably reflect electricity costs, market supply and demand, resource scarcity and environmental protection expenditures".⁸⁵

It noted that under NDRC and NEA Circular Fa Gai Yun Xing [2018] No. 1027, where a user and provider cannot agree, "the user price is temporarily determined according to the local catalogue electricity price standard".⁸⁶ It relied on the Central Pricing Catalogue discussed at 2.1,⁸⁷ and on the OECD's statement that "[t]he NDRC is ultimately responsible for price setting and competition regulation in most segments of the energy market".⁸⁸ It concluded "that there is evidence that energy prices in the PRC reflect non-commercial factors, and as such there is a PMS within the OFC industry".⁸⁹

The TRA's more recent determinations go further, and in each the TRA adjusted the exporters' energy costs. In its investigation of tin mill products it found "that self-generated electricity costs incurred by the Shougang Group were artificially low relative to the third country benchmark for industrial electricity", and adjusted them.⁹⁰ In its investigation of biodiesel it found that "the energy market in the PRC reflects non-commercial factors, through the price of inputs (coal) and price setting or price controls for the generation, transmission and distribution of electricity",⁹¹ and increased electricity and coal costs "to reasonably reflect the cost in the market of the PRC if such prices were substantially determined by free market forces".⁹²

In its provisional determination on glass containers, made on 8 September 2026 on an investigation period of calendar 2025, the TRA compared the sampled exporters' electricity and gas costs with Brazilian industrial prices for 2025. It used benchmarks for "natural gas

⁸³ Trade Remedies Authority (UK), *Final Determination, Case AD0012: Investigation into alleged dumping of aluminium extrusions from the People's Republic of China*, para 177, p 38 (Application, Exhibit B-3.51).

⁸⁴ TRA, *Final Determination AD0012*, para 243, p 50 (Application, Exhibit B-3.51).

⁸⁵ TRA, *Final Determination, Investigation No. AD0021: Optical fibre cables imported into the United Kingdom from the People's Republic of China*, para 260, p 61 (Application, Exhibit B-3.37).

⁸⁶ TRA, *Final Determination AD0021*, para 261, p 61 (Application, Exhibit B-3.37).

⁸⁷ TRA, *Final Determination AD0021*, para 268, p 63 (Application, Exhibit B-3.37).

⁸⁸ TRA, *Final Determination AD0021*, para 269, p 63 (Application, Exhibit B-3.37), quoting OECD, *Inventory of Support Measures for Fossil Fuels: Country Notes*.

⁸⁹ TRA, *Final Determination AD0021*, para 270, p 63 (Application, Exhibit B-3.37).

⁹⁰ Trade Remedies Authority (UK), [Final Affirmative Determination, Investigation No. AD0062: Dumping investigation into Tin Mill Products imported into the United Kingdom from the People's Republic of China](#), 12 March 2026, para 282, p 48.

⁹¹ TRA, [Final Determination, Investigation No. AD0058: Dumping investigation into biodiesel imported into the United Kingdom originating from the People's Republic of China](#), 24 November 2025, para 327, p 65.

⁹² TRA, *Final Determination AD0058*, paras 403 and 406, p 78.

(\$0.105/kWh converted to 0.745 RMB / kWh) and electricity (\$0.123/kWh converted to 0.881 RMB/kWh)", and recorded that "[t]he corresponding PRC average prices are in the range of 0.28-0.36 RMB/kWh (natural gas) and 0.54-0.7 RMB/kWh (electricity)".⁹³ It found "that energy costs incurred by the sampled exporter groups were artificially low relative to the third country benchmark and PRC average price".⁹⁴ It also recorded that its earlier investigations "all found that government intervention distorted energy costs and that prices reflected non-commercial factors".⁹⁵

The United States and Canada have made findings to similar effect. The United States Department of Commerce found in its 2026 countervailing duty investigation of L-lysine from China "that prices from actual transactions involving buyers and sellers in China are significantly distorted" in the market for steam coal.⁹⁶ In its preliminary determination on tris(hydroxymethyl)aminomethane, on an investigation period of 2025, it found that the markets for inputs including sulphuric acid and natural gas "are distorted by the GOC's presence".⁹⁷ The Canada Border Services Agency found in January 2026 that "China's central and local governments have intervened to furnish the iron pipe sector with below-market-price inputs encompassing energy, raw materials, and finance".⁹⁸

2.12 Quantitative evidence

EPR 19 records that the TZMI *Pigment Cost Study 2025* puts the Chinese producers' electricity cost at approximately US\$ [REDACTED] to US\$ [REDACTED] per kWh, and their heating fuel at approximately US\$ [REDACTED] per GJ, against approximately US\$ [REDACTED] per kWh and US\$ [REDACTED] per GJ for the Brazilian reference plant and a non-Chinese heating-fuel average of approximately US\$ [REDACTED] per GJ. EPR 19 proposes as the competitive-market benchmark the Brazilian industrial tariffs derived from the determinations of the national electricity regulator, ANEEL, which ranged from approximately R\$0.64 to R\$0.98 per kWh at January 2025, together with the industrial gas prices published by the Brazilian Ministry of Mines and Energy. That is the approach the European Commission took in its own investigation of the same goods from China.⁹⁹

Tronox proposes the actual electricity cost of the Brazilian reference plant, as recorded by TZMI, which is the cost of an industrial plant of the kind regulation 43(2)(b)(ii) is concerned with. If the Commission prefers a published regulated series as well, the appropriate one is the Brazilian regulator's tariffs for medium and high voltage consumers, or free-market prices, for 2025.

Tables 1 and 2 below apply the TZMI prices to the energy used per tonne of pigment on each production route, as recorded in the European Commission's reference document on best

⁹³ TRA, [Provisional Affirmative Determination and Recommendation of Guarantee, Investigation No. AD0087: Dumping investigation into certain glass containers imported into the United Kingdom from the People's Republic of China](#), 8 September 2026, para 219, p 38.

⁹⁴ TRA, *Provisional Affirmative Determination AD0087*, para 220, p 38.

⁹⁵ TRA, *Provisional Affirmative Determination AD0087*, para 129, p 22.

⁹⁶ United States Department of Commerce, *Decision Memorandum for the Preliminary Affirmative Determination of the Countervailing Duty Investigation of L-lysine from the People's Republic of China*, case C-570-216, 2 January 2026, p 24.

⁹⁷ United States Department of Commerce, *Decision Memorandum for the Preliminary Affirmative Determination of the Countervailing Duty Investigation of Tris(hydroxymethyl)aminomethane from the People's Republic of China*, case C-570-231, 18 September 2026, p 35.

⁹⁸ Canada Border Services Agency, [Statement of Reasons: Final determinations, Certain cast iron soil pipe from China](#), 22 January 2026, para 88.

⁹⁹ EPR 19, section 3.9(c), referring to Commission Implementing Regulation (EU) 2025/4 and Commission Implementing Regulation (EU) 2024/1923.

available techniques for the industry.¹⁰⁰ On that basis the Chinese producers paid between about one half and two thirds of the reference plant's electricity price, and about one half of its price for heating fuel. Replacing the Chinese energy prices with the competitive-market prices adds between approximately US\$ [REDACTED] and US\$ [REDACTED] to the cost to make each tonne of pigment, depending on the production route and the comparator, before selling, general and administrative expenses and profit.

The European and United Kingdom benchmarks point the same way. Brazil's industrial electricity price was CNY 0.8868 per kWh in the European Commission's investigation period of October 2022 to September 2023,¹⁰¹ and 0.881 RMB per kWh in 2025 on the TRA's figures, against Chinese average prices of 0.54 to 0.70 RMB per kWh.¹⁰² On those figures Chinese industrial electricity was between about [REDACTED]% and [REDACTED]% below the Brazilian benchmark in 2025. That range is consistent with the plant-level comparison in Table 2.

The TRA's Brazilian electricity benchmark is lower than the cost of the TZMI Brazilian reference plant. Tronox keeps the reference plant as its proposed benchmark, because it is the cost of an industrial plant of the kind regulation 43(2)(b)(ii) is concerned with. Table 2 also sets out the result on the TRA's benchmark as a cross-check. On that lower benchmark the Chinese energy cost is still below the competitive-market cost.

Table 1: Energy benchmark prices

Benchmark	Electricity (US\$ per kWh)	Heating fuel (US\$ per GJ)
TZMI, Brazilian reference plant	[REDACTED]	[REDACTED]
TRA, Brazilian industrial prices, 2025	0.123	29.17
European Commission, Brazil, October 2022 to September 2023	0.123 (CNY 0.8868)	not used
TZMI, non-China average	not recorded	[REDACTED]
<i>TZMI, Chinese producers</i>	[REDACTED] to [REDACTED]	[REDACTED]

The TZMI figures are plant-level costs from the TZMI Pigment Cost Study 2025, set out in the confidential version of EPR 19, section 3.9(c). The TRA figures are from its provisional determination on glass containers, para 219, with the gas price converted from US\$0.105 per kWh at 277.78 kWh per GJ. The European Commission's figure is from Regulation (EU) 2024/1923, recital (224), Table 1. It is converted at the 2025 average rate of 7.1875 yuan to the US dollar, although it covers an earlier period.

¹⁰⁰ European Commission, Joint Research Centre, [Reference Document on Best Available Techniques for the Manufacture of Large Volume Inorganic Chemicals: Solids and Others Industry](#), August 2007, Table 3.16, p 117, and Table 3.39, p 153.

¹⁰¹ [Regulation \(EU\) 2024/1923](#), recital (224), Table 1, and recital (20).

¹⁰² TRA, *Provisional Affirmative Determination AD0087*, para 219, p 38.

Table 2: Additional cost to make, US\$ per tonne of pigment

Benchmark	Electricity, chloride route	Electricity, sulphate route	Heating fuel, chloride route	Heating fuel, sulphate route
TZMI, Brazilian reference plant	\$█ to \$█	\$█ to \$█	\$█ to \$█	\$█ to \$█
TRA, Brazilian industrial prices, 2025	\$42 to \$79	\$27 to \$50	\$165 to \$337	\$276 to \$596
TZMI, non-China average	not available	not available	\$█ to \$█	\$█ to \$█

Each figure is the gap between the benchmark price and the Chinese producers' price, multiplied by the energy used per tonne of pigment on each route. The electricity ranges reflect the Chinese cost of US\$█ to US\$█ per kWh. The heating-fuel ranges run from fuel burned directly to fuel including the energy content of the steam the process uses, counted as if boilers were perfectly efficient. Energy use per tonne is the average for European sites reported in the European Commission's reference document on best available techniques, Tables 3.16 and 3.39. The European Commission's electricity price is close to the TRA's and is not shown separately. All figures are before selling, general and administrative expenses and profit.

On the TZMI benchmark, the combined effect of electricity and heating fuel ranges from US\$█ per tonne on the sulphate route and US\$█ on the chloride route, using the top of the Chinese electricity range, the non-China fuel average and fuel burned directly, to US\$█ on the chloride route and US\$█ on the sulphate route, using the bottom of the Chinese electricity range, the Brazilian plant's fuel price and the steam the process uses. With the TRA's electricity benchmark in place of the TZMI plant, the lowest combined case is about US\$█ per tonne on the chloride route and US\$█ on the sulphate route. On every combination the Chinese energy cost is below the competitive-market cost.

3. Sulphuric acid

Sulphuric acid reaches the cost of the goods through the price the producers pay for acid, and through the value they obtain for ferrous sulphate, the by-product of the acid consumed in the sulphate process. The Commission should examine both.

3.1 The Chinese sulphuric acid market

China's sulphuric acid market is large, closed and dominated by State-owned producers. The China Sulphuric Acid Industry Association ("CSIA") records capacity of 140.6 million tonnes in 2024, of which 43.7% was sulphur-burning capacity and 37.5% smelter capacity, and output of 120.1 million tonnes.¹⁰³ Output in 2025 was 110.82 million tonnes, of which 4.12

¹⁰³ China Sulphuric Acid Industry Association, [Review of the Chinese sulphuric acid industry in 2024](#).

million tonnes was exported.¹⁰⁴ In no year from 2020 to 2025 did exports exceed 4.1% of apparent domestic demand.¹⁰⁵

More than a third of that capacity produces acid as a by-product of copper, zinc and nickel smelting. Four of the ten largest acid producers are smelting groups owned by central or provincial governments: Jiangxi Copper, Tongling Nonferrous, Jinchuan and Yunnan Copper.¹⁰⁶ Jiangxi Copper's actual controller is the Jiangxi provincial State-owned Assets Supervision and Administration Commission.¹⁰⁷ Tongling Nonferrous alone produced 6.22 million tonnes of acid in 2025.¹⁰⁸

The volume of smelter acid production is dependent upon capacity and utilization of copper, zinc and nickel smelting. China has excess copper smelting capacity. Hence, refining prices charged by copper smelters was actually negative in 2025. Though China's national trade association for the nonferrous metals sector objected to the excess production and its impact on prices,¹⁰⁹ Chinese smelters nonetheless increased refined copper output by 6.85% in January to April 2026, with acid revenue supporting their margins.¹¹⁰ Merchant sulphuric acid volumes are thus completely untethered from the supply/demand equation.

3.2 VAT refunds on acid produced from phosphogypsum and from flue gas

MOF–STA Announcement 2021 No. 40, *Announcement on Improving the VAT Policy for Comprehensive Utilisation of Resources*, is dated 30 December 2021 and took effect on 1 March 2022.¹¹¹ Article 3 provides that "general VAT taxpayers that sell self-produced resource-utilisation products or provide resource-utilisation services (sales of utilisation products and services) may benefit from the policy of immediate refund of VAT upon collection".¹¹² The products, conditions and refund rates are set by the catalogue attached to the Announcement.

Two rows of that catalogue cover sulphuric acid. Row 2.3 lists, among the products made from "phosphogypsum", "sulphuric acid made from phosphogypsum", on condition that "more than 40% of the product's raw material comes from phosphogypsum". The refund rate is 70%.¹¹³

Row 2.19 lists "sulphuric acid" among the products made from "flue gas generated in the production processes of coal-fired power plants and all types of industrial enterprises, and high-sulphur natural gas", on conditions that include "more than 95% of the product's raw material comes from the listed resources" and "sulphuric acid concentration above 15%". The refund rate is 50%.¹¹⁴

A producer of acid from either source pays VAT on its sales and then has 70% or 50% of that VAT returned by the State. The refund lowers the net cost to the producer of supplying acid

¹⁰⁴ SMM, [SMM analysis: the mystery behind the flat China sulfuric acid FOB price \(2026\)](#).

¹⁰⁵ Tronox calculation from CSIA and SMM output and export data for 2020 to 2025.

¹⁰⁶ International Copper Association, [Reported by China Nonferrous Metals News](#), 2020 ranking of Chinese sulphuric acid producers.

¹⁰⁷ Jiangxi Copper Company Limited, [Interim Report 2025](#).

¹⁰⁸ SMM, [Report on Tongling Nonferrous sulphuric acid output for 2025](#).

¹⁰⁹ Mysteel, [China's sulfuric acid export ban unlikely to suppress short-term copper smelting profit \(2026\)](#).

¹¹⁰ Mining.com, [China's top copper smelters to cut output to combat negative processing fees](#).

¹¹¹ Ministry of Finance and State Taxation Administration, [Announcement on Improving the VAT Policy for Comprehensive Utilisation of Resources](#), MOF–STA Announcement 2021 No. 40, 30 December 2021, in force 1 March 2022.

¹¹² MOF–STA Announcement 2021 No. 40, art 3.

¹¹³ [Catalogue to MOF–STA Announcement 2021 No. 40](#), row 2.3, p 2.

¹¹⁴ [Catalogue to MOF–STA Announcement 2021 No. 40](#), row 2.19, p 5.

from those sources. It is the GOC instrument behind the measure described at section 1.8 of EPR 19. Tronox relies on it here as evidence relevant to 'competitive market cost' under paragraph 43(2)(b)(ii) of the Regulation. The recipient books the refund as other income.¹¹⁵

3.3 Income tax concessions on acid and ferrous sulphate

The same waste streams also attract concessions in income tax. The *Catalogue of Resource Comprehensive Utilisation Enterprise Income Tax Preferences (2021 edition)* lists, at row 2.6, "sulphur, sulphuric acid" and "ferrous sulphate" among the products made from waste gases that include "chemical industry waste gas, and petroleum refining and petrochemical waste gas", where "100% of the product's raw material comes from the listed resources".¹¹⁶ Row 2.3 lists "iron salts" among the products made from "waste liquids and residues from the chemical, textile and paper industries".¹¹⁷ Revenue from listed products is brought into taxable income at 90% of its amount.¹¹⁸

Row 2.3 reaches the ferrous sulphate recovered from the waste acid of sulphate-route titanium dioxide production, which is discussed at 3.10.

3.4 State direction of the acid and sulphur chain

The State also directs and guides the structure of China's industrial base for sulphuric acid production. The NDRC's *Guidance Catalogue for Industrial Structure Adjustment (2024 edition)*, in force from 1 February 2024, restricts small sulphur-burning and pyrite acid plants, restricts sulphate-route titanium dioxide capacity except where it is integrated with co-production, and encourages the recovery of acid from waste.¹¹⁹ The effect is to direct acid production toward integrated complexes and smelter recovery, the two routes that carry the tax concessions at 3.2 and 3.3.

It allocates the principal feedstock of sulphur-burning acid. In February 2025 the NDRC directed that "PetroChina and Sinopec shall increase assured supply of the natural gas needed for fertiliser production, and give domestic phosphate fertiliser producers priority for the sulphur they produce".¹²⁰ The two largest domestic sources of sulphur are State-owned, and the State decides who has first call on their output.

3.5 The price freeze of December 2025

On 18 December 2025, within the investigation period, the CSIA and the phosphate fertiliser industry association agreed at a joint meeting that smelter acid prices would be frozen at their levels of 11 December 2025, that exports would be made only at or above domestic prices, and that sulphur would move to an independent pricing system.¹²¹ The frozen levels were RMB 850 to 1,000 per tonne in Central China, RMB 820 to 880 in the Southwest and RMB 940 to 1,010 in East China.¹²²

¹¹⁵ China Association of Circular Economy, [Guidance on the VAT policy for comprehensive utilisation of resources](#).

¹¹⁶ Ministry of Finance, State Taxation Administration, NDRC and Ministry of Ecology and Environment, [Catalogue of Resource Comprehensive Utilisation Enterprise Income Tax Preferences \(2021 edition\)](#), Attachment 2, row 2.6.

¹¹⁷ *Catalogue of Resource Comprehensive Utilisation Enterprise Income Tax Preferences (2021 edition)*, row 2.3.

¹¹⁸ [Enterprise Income Tax Law of the People's Republic of China](#), art 33, and its *Implementing Regulations*, art 99.

¹¹⁹ NDRC, [Guidance Catalogue for Industrial Structure Adjustment \(2024 edition\)](#), NDRC Order 2023 No. 7, as summarised by CIRS.

¹²⁰ NDRC, [Notice on Ensuring the Supply and Stable Prices of Fertiliser for Spring Ploughing and the Whole of 2025](#).

¹²¹ Sina Finance, [Report of 19 December 2025 on the joint association meeting of 18 December 2025](#).

¹²² RCCaijing, [Citing Zhuochuang Information](#), December 2025.

Prices held by agreement among producers' associations, with export prices tied to them, are not formed by competition. The freeze applied for the last two weeks of the investigation period. Though the price freeze covered only a small portion of the investigation period, it is nonetheless significant because of what says about the lack of transparency and market forces for the sulphuric acid industry in China.

3.6 Restrictions on exports of sulphuric acid

Throughout 2025 every export of sulphuric acid required a licence. Sulphuric acid is a controlled precursor chemical, and its export has required a licence from the Ministry of Commerce since 2006.¹²³

It has been reported that the NDRC imposed an export quota for sulphuric acid of approximately 700,000 tonnes for January to April 2026.¹²⁴ It has further been reported that the Ministry of Commerce and the General Administration of Customs announced on 10 April 2026 a suspension of exports of ordinary industrial sulphuric acid and smelter by-product sulphuric acid from 1 May to 31 December 2026, with electronic-grade acid exportable only by special approval.¹²⁵

A restriction on export of an input holds supply of that input in the domestic market. It is the same mechanism Tronox identified in EPR 19 for titanium feedstock, where the withdrawal of the VAT export refund on ilmenite reserves it for domestic processors.¹²⁶ The reported measures show the State acting directly on the quantity of sulphuric acid that may leave China.

The controls affected export prices as well as volumes. From November 2025 to March 2026 the Chinese smelter-acid FOB index held flat at US\$125 per tonne for five months while regional prices rose, and export licences were confined to a few firms.¹²⁷ On 30 January 2026 the NDRC directed State-owned enterprises and the CSIA to give domestic phosphate producers priority and to organise the matching of acid supply to them.¹²⁸

3.7 Captive supply within integrated groups

EPR 19 set out how the major producers make and transfer sulphuric acid, and the related ferrous-sulphate stream, within the same captive complexes rather than buying it at arm's length.¹²⁹ Where acid is supplied from a related producer, or from a park operator, the recorded cost is the transfer price set within the group. The refunds described in sections 3.2 and 2.8 are available to the supplier in that arrangement, and their effect on the price charged to the producer of the goods can be established only by examining the supplier's position.

3.8 Prices paid for acid by the sampled exporters in 2025

LB Group Co., Ltd, a selected exporter, discloses in its annual report for 2025 that it bought sulphuric acid at an average of RMB 266.55 per tonne in the first half of the year and RMB 377.09 per tonne in the second, excluding VAT.¹³⁰ Bought-in acid was 2.52% of its purchases,

¹²³ Ministry of Commerce, [Rules on the administration of exports of precursor chemicals](#).

¹²⁴ Sinolytics, [China's sulfuric acid export controls: the next supply chain pressure point \(2026\)](#)

¹²⁵ Sina Finance, [Suspension of sulphuric acid exports from 1 May 2026](#).

¹²⁶ EPR 19.

¹²⁷ SMM, [SMM analysis: the mystery behind the flat China sulfuric acid FOB price](#).

¹²⁸ NDRC, [Notice on Ensuring the Supply and Price Stability of Fertilizers](#), 30 January 2026.

¹²⁹ EPR 19.

¹³⁰ LB Group Co., Ltd, [Annual Report 2025](#).

against 4.92% for sulphur, and LB makes most of its own acid by burning sulphur.¹³¹ Its business licence permits it to produce 600,000 tonnes of acid a year and to sell it only within its own plant site.¹³²

Including VAT at 13%, LB's prices were about RMB 301 per tonne in the first half and RMB 426 per tonne in the second. Both were below the market for 98% acid in Henan, where LB's Jiaozuo plant is located, and below the national average.

Date in 2025	Henan range (RMB/t)	Henan midpoint (RMB/t)	National average (RMB/t)
21 January	not reported	not reported	366
22 April	410 to 580	495	not reported
20 to 24 June	500 to 600	550	593
13 November	not reported	not reported	773

The Henan ranges are the CSIA's weekly quotations,¹³³ and the national averages are Baichuan's.¹³⁴

LB also paid well below the cost of making acid from sulphur. A tonne of 98% acid requires about 0.33 tonnes of sulphur. At the sulphur prices LB itself paid in 2025, the sulphur alone in a tonne of acid cost about RMB 620 in the first half and RMB 800 in the second.¹³⁵ LB therefore bought acid at about half the cost of the sulphur needed to make it. Acid at that price is below the feedstock cost of a sulphur-burning producer. It is consistent with by-product acid from smelters that receive the refunds described at 3.2.

A producer that buys all of its acid shows the same pattern. Anhui Annada Titanium Industry Co., Ltd paid RMB 409.81 per tonne in the first half of 2025 and RMB 590.85 per tonne in the second, near or below the Anhui market and far below the December levels.¹³⁶

3.9 Benchmarks for sulphuric acid

EPR 19 records that the TZMI *Pigment Cost Study* 2025 shows the Chinese sulphate-route producers delivered acid cost at a single uniform figure, below the range paid by sulphate-route producers in competitive markets.¹³⁷ The figures are confidential to Tronox under its licence and appear in the confidential version of EPR 19. EPR 19 also records that the

¹³¹ LB Group Co., Ltd, [Annual Report 2025](#).

¹³² EPR 19, Attachment 2 (Exhibit A-2-1, business licence).

¹³³ China Sulphuric Acid Industry Association, [Weekly regional quotations for 98% sulphuric acid](#), 22 April 2025 and 24 June 2025.

¹³⁴ Baichuan Yingfu, [National average price of 98% sulphuric acid](#), 21 January, 20 June and 13 November 2025.

¹³⁵ Tronox calculation from the sulphur purchase prices disclosed in LB Group Co., Ltd, [Annual Report 2025](#).

¹³⁶ Anhui Annada Titanium Industry Co., Ltd, [Annual Report 2025](#).

¹³⁷ EPR 19.

European Commission benchmarked sulphuric acid for the same goods on undistorted import prices into Brazil.¹³⁸

Published import statistics for 2025 give the same result.

Benchmark, 2025	Price (US\$/t)	Basis	Price (RMB/t)	Multiple of LB's average cost
Imports into Brazil, full year, 540,500 tonnes, none from China	108.0	FOB	776	2.4
Imports into Türkiye, January to November, 469,200 tonnes	136.6	CIF	982	3.1

The Brazilian figure is from the Brazilian trade ministry's Comex Stat data¹³⁹ and the Turkish figure from UN Comtrade.¹⁴⁰ Yuan amounts are converted at the 2025 average rate of 7.1875 yuan to the US dollar, and are before duty and inland delivery. Each multiple compares the benchmark with LB Group's simple average purchase price for 2025 of RMB 322 per tonne excluding VAT. The European Commission benchmarked acid in its investigation of titanium dioxide on import prices into Brazil, at CNY 912.61 per tonne,¹⁴¹ and in its 2026 expiry review of persulphates on import prices into Türkiye, at CNY 880 per tonne for 2024.¹⁴² The 2025 figures fall in the same range.

3.10 Ferrous sulphate: a waste by-product turned into revenue

Sulphuric acid impacts the cost of titanium dioxide for Chinese producers in a second way. Sulphate-route production yields large quantities of ferrous sulphate from its waste acid, and EPR 19 showed that the value a producer elects for ferrous sulphate can significantly impact the cash cost of titanium dioxide across a range of about US\$770 per tonne.¹⁴³ Ferrous sulphate is now a valuable co-product for sulphate TiO₂ producers significantly impacting these producers ability to undercut and undersell Tronox, based in no small part on the market distortions associated with sulphur and sulphuric acid. LB Group's iron-series products, which include ferrous sulphate, earned revenue of RMB 2.23 billion at a gross margin of 57.73% in 2025, based on demand from lithium iron phosphate producers who use the products to make cathode materials for EV batteries.¹⁴⁴

LB Group describes ferrous sulphate in these terms itself. Its 2025 annual report refers to "the company's waste by-product ferrous sulphate"¹⁴⁵ and states that making lithium iron phosphate from ferrous sulphate and other by-products of titanium dioxide production "provides titanium dioxide producers with a new, high-value route for handling large quantities of by-product ferrous sulphate".¹⁴⁶ A stream that sulphate-route producers must

¹³⁸ EPR 19, referring to Commission Implementing Regulation (EU) 2025/4, recital 169.

¹³⁹ Ministério do Desenvolvimento, Indústria, Comércio e Serviços (Brazil), [Nota Técnica No. 1420/2026](#), from Comex Stat data.

¹⁴⁰ [UN Comtrade data for HS 2807](#), as compiled by GTAIC.

¹⁴¹ [Commission Implementing Regulation \(EU\) 2024/1923](#).

¹⁴² [Commission Implementing Regulation \(EU\) 2026/99](#).

¹⁴³ EPR 19.

¹⁴⁴ LB Group Co., Ltd, *Annual Report 2025*.

¹⁴⁵ LB Group Co., Ltd, *Annual Report 2025*, p 16.

¹⁴⁶ LB Group Co., Ltd, *Annual Report 2025*, p 27.

otherwise handle as waste has become a source of revenue, and the State offers an income tax concession on revenue from iron salts recovered from chemical industry waste liquids (section 3.3).

Where a producer credits revenue of that size against the cost of titanium dioxide, the recorded cost of the goods falls by the amount of the credit. The acid consumed in the joint process is shared between the two products in the same way. Tronox asks the Commission to establish how each sampled exporter allocates joint costs and co-product credits between titanium dioxide and ferrous sulphate, whether it claimed the income tax concession described at section 3.3 on its ferrous sulphate revenue in 2025, and to apply the acid benchmark within that joint cost.

3.11 Findings of other administrations

The European Commission replaced Chinese sulphuric acid costs with import-based benchmarks in its investigation of titanium dioxide and in its 2026 expiry review of persulphates, and in the latter listed State intervention in the supply of acid among the distortions it found.¹⁴⁷¹⁴⁸ The United States Department of Commerce has treated sulphuric acid supplied for less than adequate remuneration as a countervailable subsidy to Chinese citric acid producers, including in its administrative review for 2013, published in December 2015.¹⁴⁹

Tronox relies on the United States finding as evidence of the role of the State in the Chinese acid market. It is relevant here to competitive market cost under paragraph 43(2)(b)(ii).

4. Conclusion

For the reasons set out above and in EPR 19, Tronox respectfully requests that the Commission find that the sampled exporters' recorded costs of electricity, natural gas and sulphuric acid do not reasonably reflect competitive market costs for the purposes of paragraph 43(2)(b)(ii) of the Regulation, and replace them with the benchmarks proposed at section 3.9(b) and (c) of EPR 19, with the electricity benchmark set out at 2.12, and with the 2025 import prices into Brazil or Türkiye at 3.9 as the alternative benchmark for sulphuric acid. Tronox also asks the Commission to establish each sampled exporter's treatment of ferrous sulphate, as set out in 3.10.

Yours sincerely,

Tronox Limited

¹⁴⁷ [Commission Implementing Regulation \(EU\) 2024/1923](#).

¹⁴⁸ [Commission Implementing Regulation \(EU\) 2026/99](#).

¹⁴⁹ United States Department of Commerce, [Citric Acid and Certain Citrate Salts from the People's Republic of China: Final Results of Countervailing Duty Administrative Review](#); 2013, case C-570-938, December 2015.