GAR Global Arbitration Review

The Guide to Energy Arbitrations - Seventh Edition

Legal crossroads: geopolitics, state intervention and energy arbitration

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The energy industry nurtured and shaped what we now know as international arbitration, and, for a host of reasons – resource nationalism, oil price drops, geopolitics, climate change, sanctions and pandemics among them – it has remained one of the discipline's biggest clients.

The Guide to Energy Arbitrations, published by Global Arbitration Review, provides coherent and comprehensive coverage of the most common, difficult and unusual issues faced by energy firms, from some of the world's leading authorities.

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Legal crossroads: geopolitics, state intervention and energy arbitration

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INTRODUCTION

This chapter assesses current trends in state intervention in the energy sector and focuses on three examples: (1) the imposition of tariffs and sanctions; (2) critical mineral policies; and (3) carbon-pricing policies, examining the impact of each on energy investments and related disputes.

First, what do we mean by state intervention? For present purposes, state intervention refers to sovereign or quasi-sovereign actions that affect private rights, the allocation of commercial risks and revenues, and the structure of energy markets.

States have always been key actors in the energy sector. Of course, there are economic rewards that states may reap from participation in energy investments, but they also have a social and political duty to provide affordable energy to their populations. As such, states must balance contradicting priorities. They safeguard sovereign rights over energy resources and regulate domestic activity, while at the same time investing in or attracting foreign investment for long-term energy projects, or partnering with other states to secure energy supply.[1]

Notwithstanding that public-private coordination has long been a necessary feature of energy investments, the extent of state intervention has fluctuated. The 1970s and 1980s were periods of intense state intervention: producing countries nationalised foreign-owned oil assets, state-owned companies became global producers and importing states such as the United States imposed price controls. This was followed by periods of relative liberalisation, when oil and gas supermajors expanded, state-owned entities were privatised and cross-border single markets were established (eg, in the EU).

Now, however, states are increasingly unwilling to rely on free markets and private enterprise to ensure their energy security. Indeed, as Canadian Prime Minister, Mark Carney, proclaimed in Davos 2025, states are navigating a "rupture in the world order".[2] Successive factors, not least covid-19, the Russia–Ukraine war, a stuttering energy transition and conflict in the Middle East, have contributed to inflationary pressures, commodity price volatility and global supply-chain disruption, the consequence of which is likely to be energy insecurity, protectionist measures and resource nationalism. Against this background, two interlinked revolutions are taking place: the digital and energy transitions. Energy resources are the key to both of these, and states are prepared to intervene to establish secure supply.

Given this, rising state intervention in domestic and international energy markets is no surprise. Reconciling energy security concerns with the demands of the green transition within the current geopolitical context is perhaps one of the greatest challenges that governments face today. As we discuss below, measures adopted by states range from national policies (eg, price controls, subsidies, levies and changes to regulatory regimes) to international measures (eg, the imposition of sanctions and tariffs on foreign states).

STATE INTERVENTION AS (NON)-DIPLOMACY – SANCTIONS AND TARIFFS

States are increasingly willing to use trade measures to influence global energy markets, as well as the behaviour of other states and overseas investors. Sanctions and tariffs are perhaps the most visible manifestation of state intervention, as their explicit purpose is to reshape global supply chains.

SANCTIONS

Four years since Russia's invasion of Ukraine, Western states have intensified sanctions targeting Russia's energy sector. In October 2025, the UK, EU and United States imposed sanctions on Russia's largest oil companies.[3] Notably, the EU effectively prohibited EU operators from transacting with Russia's largest oil companies, except for narrow exceptions such as imports of oil from third countries or shipments under the G7 price-cap schemes.[4] The EU also banned imports of Russian:

- liquefied natural gas (LNG) as of 1 January 2027 for long-term contracts and within six months of the entry into force of the sanctions for short-term contracts;[5] and
- seaborne crude oil and refined petroleum products, which is expected to reduce Russia's annual revenue by €8 billion per year.[6]

In February 2026, the EU renewed its sanctions package on Russian oil, imposing a full-time maritime-services ban, listing an additional 43 vessels as part of Russia's shadow fleet, and adding bans on maintenance and service provisions for LNG tankers and icebreakers.[7]

Similarly, in 2025, the United States introduced sanctions on individuals, firms and tankers tied to Venezuela's oil trade,[8] and later in the year physically seized sanctioned oil tankers.[9] Then, following US military intervention and the capture of Nicolas Maduro, officials indicated that they expected the Venezuelan government to allow them to direct oil sales and proceeds, limiting the role of US competitors in the sector.[10]

The United States has now eased sanctions on Venezuela's energy sector, issuing licences that permit international energy companies to operate oil and gas projects and negotiate contracts to bring in fresh investment.[11] The authorisation for oil-majors operatorships requires payments of Venezuelan royalties and taxes to go through the US-controlled Foreign Government Deposit Fund.

Sanctions have also been a feature of US policy towards Cuba. Following a prolonged period of increased economic sanctions on Cuba, the US administration has tightened enforcement of the longstanding US embargo, expanding sanctions to target Cuba's fuel and energy supply chains. The US Treasury designated additional vessels and shipping companies accused of transporting Venezuelan crude and refined products to Cuba.[12] These measures prohibit US entities from dealing with the designated Cuban entities and restrict their access to the US financial system.[13] The impact of the sanctions has been significant: Venezuela was believed to provide about half of the island's oil needs (circa 35,000 barrels of oil a day).-[14] Invoking powers under the International Emergency Economic Powers Act, the United States has also threatened tariffs on any country that directly or indirectly supplies oil to Cuba.[15] While initially denying formal talks, the Cuban government has since confirmed it is in the initial stages of negotiations with the United States and confirmed it has increased production of domestic crude and gas as well as solar generation.[16]

TARIFFS

In April 2025, referred to as Liberation Day, the United States imposed widespread tariffs. The nature and scope of the tariffs is in flux given the ongoing trade talks and other developments. However, examples of energy-related tariffs include: (1) 10% tariffs on Canadian crude oil and natural gas; (2) 25% tariffs on Mexican energy exports; (3) global tariffs of 50% on copper, steel and aluminium imports (with certain exemptions such as for the UK); [17] and (4) in August 2025, 25% "penalty" tariffs against India for buying Russian

crude, which it revoked in February 2026 following a trade deal from which India has since been permitted to derogate following the outbreak of the conflict with Iran.[18]

Sanctions and tariffs both have profound implications on energy-related investments. Sanctions regimes create a complex web of compliance obligations for investors operating across multiple jurisdictions. An investor based in the EU with assets in a sanctioned state and financing from the United States may find its operations are commercially unviable or illegal. Similarly, tariffs may make the import/export of energy resources or materials required for energy production prohibitively expensive and force supply chains to reorient.

There have been numerous investor-state claims relating to sanctions regimes, particularly relating to EU sanctions on Russia.[19] Russian and Belarusian investors commonly allege fair and equitable treatment (FET), expropriation or most-favoured-nation (MFN) violations. In fact, EU sanctions in July 2025 explicitly (and somewhat remarkably) addressed investor-state proceedings commenced by Russian persons. It is not difficult to imagine a similar increase in investor-state claims in response to tariffs. Tariffs that discriminate against imports from particular states may engage MFN obligations, depending on treaty drafting and the measures at issue. Sanctions and tariffs may also trigger contractual disputes relating to provisions commonly included in many standard-form agreements, such as price-variation mechanisms (if sellers seek to pass additional costs to the buyers), ***force majeure*** clauses and change-in-law provisions.

CRITICAL MINERALS

State intervention is also apparent in the resurgence of industrial and critical-minerals policies. Demand for critical minerals – defined as minerals essential to economic or national security that are sensitive to political risk, protectionism or abrupt supply constraints – has grown exponentially.[20] The recognised drivers are the digital and energy transitions. Rapid development of consumer electronics, artificial intelligence and data centres requires minerals for screens, high-performance chips and motors.[21] Similarly, renewables – the focus of the green transition to date – are considerably more mineral intensive than hydrocarbons.[22] Electrification, EVs and battery storage all require minerals; demand is estimated to grow rapidly, including a 50–60% increase in demand for cobalt and rare earth elements by 2040.[23]

A third driver has emerged in recent years: the defence industry. As states engage in rearmament amid geopolitical tension, demand is rising for minerals with military applications, such as advanced weaponry, guidance systems and radar.[24] Just one F-35 jet requires over 900 pounds (around 400 kilograms) of rare-earth metals.[25]

There is another factor. Mineral production is concentrated – and processing even more so – which means that a handful of states enjoy outsized influence. For example, South Africa produces 92% of the world's platinum-group metals.[26] The Democratic Republic of the Congo is responsible for over 70% of cobalt production.[27] China is the largest minerals producer, accounting for a significant share of global mining output in 2024, including 22% for lithium, 61% for rare earth elements and 87% for natural graphite.[28] Importantly, China also dominates refining – its share of global refining includes around 44% for copper, 70–75% of lithium and cobalt and 90% of rare earth elements and battery-grade graphite.[29] This means that, even if not mined in China, minerals are sent there to be processed, making China the lynchpin in global supply chains.

States in the West have started to respond, introducing industrial policies for the first time in 40 years. These vary and, while all have a similar objective, the means differ:

- The UK was initially content to rely on international collaboration, likely because, in its own words, it has "limited natural resources" and depended on "relatively concentrated, opaque global supply chains". However, amid criticism that its strategy lacked firm targets and funding, the UK launched a new Critical Minerals Strategy in November 2025, in which it aims to meet at least 10% of annual demand through domestic extraction and refining, introduces a 20% recycling target and imposes a "60% rule" to prevent over-reliance on any single country.[30]
- The EU is somewhat more ambitious. It aims to achieve mineral independence by 2030 and requires member states to extract at least 10% of their annual mineral consumption domestically, process 40% or more within EU borders and recycle at least 25%.[31] In December 2025, it launched the RESourceEU Action Plan in which it backed its targets with €3 billion in funding and a "matchmaking" platform for buyers and suppliers.[32]
- Canada has taken a different tack. It has sought to level the playing field by introducing stricter environmental and labour regulations and restricted foreign investment to keep resources under its or allies' control.[33]
- Finally, the United States. Before this administration, it adopted a diversification strategy as well as subsidies and tariffs aimed at jumpstarting domestic production. The focus was onshoring and "friendshoring" – entry into international partnerships to reorient supply chains – for example, the Minerals Security Partnership with Australia, India, Japan, the UK and the EU. Now, however, the United States has declared its dependence on China a national emergency and enacted a plan to "Unleash America's Offshore Critical Minerals and Resources", by: (1) removing environmental barriers to accelerate domestic investment; and (2) creating a US$12 billion minerals stockpile in addition to its national defence stockpile.[34]

There has been debate over whether these policies – examples of state intervention intended to counter state-sponsored practices – have been or are likely to be effective. While there has been progress, China's share of both production and processing is going up, not down, despite diversification efforts. Part of the problem is that state intervention is often not sufficient on its own. Mines take an average of 16.5 years from discovery to first production,-[35] which makes it difficult to expand supply quickly and, of course, even if domestic production increases, there is little processing capacity in the West. Moreover, if mining and refining minerals is not commercially viable, it is difficult to incentivise private enterprise – technology changes, demand fluctuates and prices are volatile, all of which are unattractive to international mining companies used to long-term investments. The logical next step is yet more state intervention in the form of tax credits, subsidies, guaranteed price floors and state participation.

The other question is whether states in the West are willing to pay the price of increasing domestic production and processing. The background to China's dominance is not (or not only) complacency in the West, but the environmental impact. Western states' complex permitting regimes and the need to coordinate between multiple agencies mean it is unlikely that production can ramp up as quickly as the policies anticipate. This is the paradox facing governments in the West: states cannot mine the minerals required to power the

green transition because of the environmental protections intended to support it. The West's strategy is to focus on the circular economy and make China's mining businesses less competitive by imposing strict environmental and other standards – however, while that may affect domestic markets, it is unlikely to move the global dial and will, of course, take time.

Nothing provokes protectionism like interventionism. As states in the West compete to shore up supply, producers are incentivised to adopt measures aimed at exerting greater control, leading to resource nationalism – of which there have been many recent examples. More than half of new treaty cases in 2024 related to extractive industries, including cases involving critical minerals such as manganese and rare-earth elements.[36] It is not, however, always those states that frequently populate Maplecroft's Index that enact such measures. Western states have introduced foreign investment restrictions, made changes to the regulatory environment and sought to domesticate production at the expense of overseas investors. In 2022, Canada ordered three Chinese companies to divest their interests in Canadian lithium miners, albeit it retracted that decision under much criticism, forced divestiture being a hallmark of resource nationalism. It is not therefore beyond the realms of possibility that, as the cycle of state intervention and protectionism continues, we may see an increase in contentious renegotiations involving, and FET-standard treaty claims against, Western states. At the very least, there is a risk that foreign investors will hesitate before investing in states with robust mineral policies, which may frustrate the purpose of those policies, as many require private enterprise to achieve their aims.

CARBON PRICING

Another prevalent form of state intervention is the imposition of carbon-pricing schemes. Carbon pricing seeks to align the costs of consuming carbon-intensive fuels or using carbon-intensive processes with the social "price" of these activities, creating economic incentives to shift investments, production and consumption towards low-carbon alternatives.[37]

Decarbonisation objectives and international commitments under the Paris Agreement remain a key driver of carbon-pricing policies.[38] Carbon pricing can also be a source of funds for governments, with emissions trading schemes (ETSs) and carbon taxes generating around US$100 billion for government budgets in 2024.[39] States are also using carbon pricing alongside regulatory standards, green industrial policies and social welfare programmes to deliver structural changes to their economies.[40]

Carbon pricing can take three forms:

- ETSs are schemes capping the amount or intensity of greenhouse-gas (GHG) emissions generated by the targeted entities, which must surrender emission units or allowances to cover their emissions within a compliance period.[41] Covered entities can trade allowances for a price determined by the market.[42]
- Carbon taxes are taxes on entities for their level of GHG emissions.[43]
- Carbon creditingis the process of issuing emissions-reduction units, which companies can trade, to project activities in recognition of quantified and verified emissions reductions.[44]

The EU ETS is the largest state-mandated carbon-pricing scheme, covering approximately 40% of EU GHG emissions.[45] It uses a cap-and-trade model to establish an EU-wide carbon price, with the cap declining annually through a linear reduction aligned with a 62%

emissions-reduction target by 2030.[46] The system is now being expanded through EU ETS2, which will cover CO2 emissions from fossil fuels used in structures and industries not covered by the original ETS, nearly doubling the share of EU GHG emissions covered by carbon pricing to approximately 75%.[47]

ETSs are expanding, particularly among large middle-income economies. China's national ETS covers the cement, steel and aluminium sectors and generates approximately three gigatons of GHG emissions.[48] In December 2024, Brazil approved legislation to establish its own Brazilian GHG ETS, and India has adopted regulations for a Carbon Credit Trading Scheme covering nine energy-intensive industrial sectors.[49]

A notable development is the emergence of carbon border adjustment mechanisms (CBAMs), which seek to address the increase of emissions in non-EU countries as a result of relocation of CO2intensive production outside the EU due to carbon pricing.[50] The EU's carbon border adjustment mechanism (CBAM) ensures that the ETS carbon price applies to imports, levelling the playing field between EU and non-EU producers.[51] The UK will introduce its own CBAM from January 2027, and other states such as Japan, Turkey and Chile are also developing similar mechanisms.[52]

As of April 2025, there are 80 carbon-pricing instruments worldwide (compared to 10 in 2005), including around 43 carbon taxes.[53]

Ultimately, the consequence is that the attractiveness of high-emitting investments may decline. Carbon-pricing schemes make GHG emissions expensive and force businesses to internalise the added costs, treat them as ordinary business expenses and seek to reduce them.[54] It follows that, over time, low-emission producers will gain market share over high-emission producers, and consumers will turn to low-emissions products due to their cost advantage. Carbon pricing also affects the relative competitiveness of different energy sources.[55] The cost of fossil fuels is sensitive to coal and natural-gas prices, making it particularly susceptible to carbon pricing, whereas renewables such as wind and solar do not have this issue.[56]

There is also a risk of stranded assets for investors in carbon-intensive sectors. If consumer and investor preferences shift, existing markets and supply chains may be disrupted, and investors holding assets in sectors that become uneconomic under carbon pricing face the prospect of writing down or abandoning investments made on the assumption of different regulatory frameworks.

The potential for carbon pricing to cause investor-state arbitration is less clear. Carbon pricing does not typically feature expressly in investment treaties and, when it does, it is usually identified as an area where states may cooperate.[57] There is also a broader trend to amend treaties so that claims cannot be brought in respect of climate change measures, including measures to reduce GHG emissions.[58] Nevertheless, it is conceivable that investors could bring claims against states that have introduced carbon taxes or ETSs that erode the value of their investments by making them less competitive. Following a change in government, new administrations may decide to alter carbon-pricing policies, affecting the investment climate, which is a common cause of treaty claims. Whether these claims succeed will vary. Some tribunals have found that state action taken to pursue legitimate policy objectives is not expropriation whereas others have expressed a view that a state's alleged public interest does not override an investor's legitimate expectations or right to compensation.[59]

Investor-state claims may also be brought by those investing in carbon credits. Where forms of state intervention erode the value of a foreign investment in carbon markets, this could potentially give rise to claims under investment treaties. The question of whether carbon credits constitute an "investment" will be crucial. In ***Koch v Canada,***[60] Koch filed an International Centre for Settlement of Investment Disputes (ICSID) claim against Canada after it reversed an ETS in Ontario.[61] Canada contended this was in the public interest (ie, to reduce gas prices and remove a cost burden for Ontario businesses).[62] In its final award, the tribunal found that carbon credits were not an "investment" under the North American Free Trade Agreement (NAFTA).[63] However, it is noteworthy that carbon credits have been considered intangible property in the English courts, and may therefore comprise an "investment" under many bilateral investment treaties (BITs).[64] The expansion of carbon-pricing mechanisms may also lead to contractual disputes.[65] As the carbon credit industry remains largely unregulated, and there is no accepted way of measuring credits, there is scope for disputes on the amount of GHG emissions produced, the proper calculation and valuation of allowances and delays in the issuance of carbon credits.

CONCLUSION: PRACTICAL TAKEAWAYS

State intervention in the energy sector is intensifying and diversifying. For practitioners, several practical takeaways emerge.

First, contractual risk allocation requires fresh attention. Sanctions and tariffs can render supply arrangements uneconomic or illegal overnight, so ***force majeure***, change-in-law and price-variation clauses should be stress-tested against plausible intervention scenarios.

Second, multi-jurisdictional compliance is now a precondition to viability. Overlapping sanctions regimes mean that compliance with one jurisdiction may create exposure under another. By mapping the full web of applicable restrictions at the outset and revisiting the analysis regularly as regimes evolve, investors can anticipate their exposure and avoid getting trapped.

Third, due diligence for energy-transition investments should extend to supply-chain dependencies, single-country exposure and the status of domestic policies in relevant jurisdictions.

Fourth, the investor–state dispute landscape is expanding. Western governments are now introducing investment restrictions, forced divestitures and sweeping regulatory changes that may themselves give rise to FET and MFN claims. Available treaty protections should be assessed at the structuring stage and the growing trend towards carve-outs for climate change measures should be monitored.

Finally, as the cycle of intervention and counter-intervention continues, so too does the importance of building flexibility into investment structures, maintaining robust dispute resolution mechanisms and staying alert to the political dynamics driving regulatory change.

ENDNOTES

[1] Peter Cameron, *International Energy Investment Law: The Pursuit of Stability* (2nd edn, Oxford University Press 2024).

[2] CBC News, "Read Mark Carney's Full Speech on Middle Powers Navigating a Rapidly Changing World" (CBC News, 20 January 2026)

https://www.cbc.ca/news/politics/mark-carney-speech-davos-rules-based-order-9.7053350\ accessed 16 March 2026.

[3] UK Foreign, Commonwealth & Development Office, "Huge Blow for Putin's War Machine as UK Sanctions Russian Oil" (15 October 2025) https://www.gov.uk/government/news/huge-blow-for-putins-war-machine-as-uk-sanctions-russian-oil\ accessed 16 March 2026.

[4] European Commission, "EU Adopts New Sanctions Against Russia" (23 October 2025) https://commission.europa.eu/news-and-media/news/eu-adopts-new-sanctions-against-russia-2025-10-23_en\ accessed 16 March 2026.

[5] ibid.

[6] European Commission, "Sanctions Against Russia Following the Invasion of Ukraine: Sanctions on Energy" (24 October 2025) https://commission.europa.eu/topics/eu-solidarity-ukraine/eu-sanctions-against-russia-following-invasion-ukraine/sanctions-energy_en\ accessed 16 March 2026.

[7] European Commission, "Statement by President von der Leyen on the 20th Package of Sanctions Against Russia" (18 February 2026) https://ec.europa.eu/commission/presscorner/detail/en/statement_26_318\ accessed 16 March 2026.

[8] US Congressional Research Service, "Venezuela: Overview of U.S. Sanctions" (CRS In Focus IF10715, updated 21 February 2024) https://www.congress.gov/crs-product/IF10715\ accessed 16 March 2026.

[9] ibid.

[10] ibid.

[11] "US Eases Sanctions, Allows Oil Firms To Negotiate Venezuela Contracts" (S&P Global, 13 February 2026). https://www.spglobal.com/energy/en/news-research/latest-news/crude-oil/021326-us-eases-sanctions-allows-oil-firms-to-negotiate-venezuela-contractsaccessed 16 March 2026.

[12] "Millions of Cubans Plunged into Darkness as Fuel Crisis Deepens" (BBC News, 4 March 2026).https://www.bbc.co.uk/news/articles/cx2ggpq1742o\ accessed 16 March 2026.

[13] US Department of State, "Cuba Restricted List" (14 July 2025) https://www.state.gov/division-for-counter-threat-finance-and-sanctions/cuba-restricted-list\ accessed 16 March 2026.

[14] "Millions of Cubans Plunged into Darkness as Fuel Crisis Deepens" (BBC News, 4 March 2026) https://www.bbc.co.uk/news/articles/cx2ggpq1742o\ accessed 16 March 2026.

[15] The White House, "Addressing Threats to the United States by the Government of Cuba" (13 January 2026) https://www.whitehouse.gov/presidential-actions/2026/01/addressing-threats-to-the-united-states-by-the-government-of-cuba/\ accessed 16 March 2026.

[16] "Cuba Confirms Negotiations with US as Country Faces Effects of Oil Blockade" (BBC News, 13 March 2026) https://www.bbc.co.uk/news/articles/cwy8zv9gp0go\ accessed 16 March 2026.

[17] US Customs and Border Protection, "Official CBP Statement on Tariffs" (8 March 2025) https://www.cbp.gov/newsroom/announcements/official-cbp-statement-tariffs\ accessed 16 March 2026; The White House, "Fact Sheet: President Donald J Trump Imposes Tariffs on Imports from Canada, Mexico and China" (1 February 2025) https://www.whitehouse.gov/fact-sheets/2025/02/fact-sheet-president-donald-j-trump-imposes-tariffs-on-imports-from-canada-mexico-and-china/\ accessed 16 March 2026.

[18] "US Grants India Waiver on Russian Oil Purchases as Iran War Fuels Energy-Supply Worries" (CNBC, 6 March 2026) https://www.cnbc.com/2026/03/06/us-india-waiver-russian-oil-iran-war-energy-supply-worries-.html\ accessed 16 March 2026.

[19] For example: ***Mikhail Fridman v Luxembourg*** (PCA Case No. 2025-42); OJSC ***Belaruskali v Republic of Lithuania*** (PCA Case No. 2024-03); ***ABH Holdings S.A. v Ukraine*** (ICSID Case No. ARB/24/1); ***Emis Finance B.V. v Ukraine*** (ICSID Case No. ARB/25/10); ***Volga-Dnepr Airlines LLC v Canada*** (PCA Case No. 2025-09).

[20] World Economic Forum, "Critical Minerals: How Innovation Is Helping Us Reach Resources Closer to the Earth's Surface" (16 January 2026) https://www.weforum.org/stories/2026/01/critical-minerals-innovation-earth-surface/\ accessed 16 March 2026.

[21] SFA Oxford, "Critical Minerals in Artificial Intelligence and Digital Technologies" (2026) https://www.sfa-oxford.com/knowledge-and-insights/critical-minerals-in-low-carbon-and-future-technologies/critical-minerals-in-artificial-intelligence/\ accessed 16 March 2026.

[22] World Economic Forum, "Critical Minerals: How Innovation Is Helping Us Reach Resources Closer to the Earth's Surface" (16 January 2026) https://www.weforum.org/stories/2026/01/critical-minerals-innovation-earth-surface/\ accessed 16 March 2026.

[23] International Energy Agency, "Global Critical Minerals Outlook 2025" (2025), page 89, https://iea.blob.core.windows.net/assets/ef5e9b70-3374-4caa-ba9d-19c72253bfc4/GlobalCriticalMineralsOutlook2025.pdf accessed 16 March 2026.

[24] SFA Oxford, "Critical Minerals in Defence and National Security" (2026) https://www.sfa-oxford.com/knowledge-and-insights/critical-minerals-in-low-carbon-and-future-technologies/critical-minerals-in-defence-and-national-security/\ accessed 16 March 2026.

[25] Center For Strategic & International Studies, "Developing Rare Earth Processing Hubs: An Analytical Approach" (28 July 2025) https://www.csis.org/analysis/developing-rare-earth-processing-hubs-analytical-approachaccessed 16 March 2026.

[26] SOAS University of London, "Unlocking the Potential of Critical Minerals Extraction for Africa's Structural Transformation" (January 2025) https://www.soas.ac.uk/sites/default/files/2025-02/Unlocking%20the%20Potential% 20of%20Critical%20Minerals_WP5.pdf accessed 16 March 2026.

[27] ibid.

[28] International Energy Agency, "Global Critical Minerals Outlook 2025" (2025), page 271, https://iea.blob.core.windows.net/assets/ef5e9b70-3374-4caa-ba9d-19c72253bfc4/GlobalCriticalMineralsOutlook2025.pdf accessed 16 March 2026.

[29] ibid., page 271.

[30] UK Government Department for Business & Trade, "Vision 2035: Critical Minerals Strategy" (23 January 2026) https://www.gov.uk/government/publications/uk-critical-minerals-strategy/vision-2035-critical-minerals-strategy\ accessed 16 March 2026.

[31] European Commission, "Critical Raw Materials Act" (2025), https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en accessed 16 March 2026.

[32] European Commission, "Critical Raw Materials Act" (2025), https://single-market-economy.ec.europa.eu/sectors/raw-materials/areas-specific-interest/critical-raw-materials/critical-raw-materials-act_en accessed 16 March 2026.

[33] Government of Canada, "Canadian Critical Minerals Strategy" (12 September 2023) https://www.canada.ca/en/campaign/critical-minerals-in-canada/canadian-critical-minerals-strategy.html\ accessed 16 March 2026.

[34] The White House, "Unleashing America's Offshore Critical Minerals and Resources" (24 April 2025) https://www.whitehouse.gov/presidential-actions/2025/04/unleashing-americas-offshore-critical-minerals-and-resources/\ accessed 16 March 2026; Export-Import Bank of the United States, "Week in Review: Project Vault and the US Strategic Critical Mineral Reserve" (6 February 2026) https://www.exim.gov/news/week-review-project-vault-and-strategic-critical-mineral-reserve\ accessed 16 March 2026.

[35] International Energy Agency, "The Role of Critical Minerals in Clean Energy Transitions" (2021), page 129, https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary\ accessed 16 March 2026.

[36] UNCTAD, "Energy Supply and Extractives: Larger Share of Investor–State Arbitrations in 2024" (23 September 2025) https://investmentpolicy.unctad.org/news/hub/1775/20250923-energy-supply-and-extractives-larger-share-of-investor-state-arbitrations-in-2024\ accessed 16 March 2026.

[37] World Bank, State and Trends of Carbon Pricing (2025), page 73, https://openknowledge.worldbank.org/bitstreams/152de0c2-e2be-49d6-aec1-3be8ebad4f74/download\ accessed 16 March 2026.

[38] ibid., page 24.

[39] ibid., pages 9 and 40.

[40] ibid. page 14.

[41] ibid., page 18.

[42] ibid.

[43] ibid., page 74.

[44] ibid., page 18.

[45] World Bank, A Guide to Developing Domestic Carbon Crediting Mechanisms (2021), page 2 https://documents1.worldbank.org/curated/en/182511615783768643/pdf/A-Guide-to-Developing-Domestic-Carbon-Crediting-Mechanisms.pdf accessed 16 March 2026.

[46] European Commission, "Trends in Carbon Intensity and the Macroeconomic Role of the EU Emissions Trading System" (17 November 2025) https://economy-finance.ec.europa.eu/trends-carbon-intensity-and-macroeconomic-role-eu-emissions-trading-system_en\ accessed 16 March 2026.

[47] ibid.

[48] World Bank, State and Trends of Carbon Pricing (2025), pages 9 and 25, https://openknowledge.worldbank.org/bitstreams/152de0c2-e2be-49d6-aec1-3be8ebad4f74/download\ accessed 16 March 2026.

[49] ibid.

[50] European Commission, "Trends in Carbon Intensity and the Macroeconomic Role of the EU Emissions Trading System" (17 November 2025) https://economy-finance.ec.europa.eu/trends-carbon-intensity-and-macroeconomic-role-eu-emissions-trading-system_en\ accessed 16 March 2026.

[51] ibid.

[52] World Bank, State and Trends of Carbon Pricing (2025), pages 26, https://openknowledge.worldbank.org/bitstreams/152de0c2-e2be-49d6-aec1-3be8ebad4f74/download\ accessed 16 March 2026.

[53] ibid., page 9.

[54] ibid., page 12.

[55] J. Andersson and J. Finnegan, The Economic Effects of Carbon Pricing and Border Adjustments (14 April 2025), pages 5–6, https://freepolicybriefs.org/wp-content/uploads/2025/04/20250414.pdf accessed 16 March 2026.

[56] ibid., page 4.

[57] The EU–Euratom–UK TCA (2020) contains the most significant investment treaty clauses in respect of carbon pricing, requiring each party to "have in place an effective system of carbon pricing" covering greenhouse gas emissions from electricity generation, heat generation, industry, and aviation.

[58] S. Finzio, M. Angelini, "Climate-Related Disputes and International Arbitration", in Global Arbitration Review's The Guide to Climate Change and Related Disputes (1st edn, 2024), page 10, https://globalarbitrationreview.com/guide/the-guide-climate-change-and-related-disputes/first-edition/article/climate-related-disputes-and-international-arbitration\ accessed 16 March 2026.

[59] M. Mangan, L. Lim, "Protecting Investments in Carbon Credits Through Investment Treaties" (OGEL Energy Law Journal, 2022), page 9, https://www.dechert.com/

content/dam/dechert%20files/knowledge/publication/2022/7/Protecting-Investments-in-Carbon-Credits-through-Investment-Treaties.pdf accessed 16 March 2026.

[60] Koch Industries, Inc. and Koch Supply & Trading, ***LP v Canada*** (ICSID Case No. ARB/20/52).

[61] M. Mangan, L. Lim, "Protecting Investments in Carbon Credits Through Investment Treaties" (OGEL Energy Law Journal, 2022), page 9, https://www.dechert.com/content/dam/dechert%20files/knowledge/publication/2022/7/Protecting-Investments-in-Carbon-Credits-through-Investment-Treaties.pdf\ accessed 16 March 2026.

[62] E. Kwan, R. Gao and C. Ma, "The Implications of Koch v Canada for Emissions Trading Schemes" (Kluwer Arbitration Blog, 24 May 2024) https://legalblogs.wolterskluwer.com/arbitration-blog/the-implications-of-koch-v-canada-for-emissions-trading-schemes/\ accessed 16 March 2026.

[63] ibid.

[64] ***Armstrong DLW GmbH v Winnington Networks Ltd*** [2012] EWHC 10 (Ch) (11 January 2012).

[65] S. Finzio, M. Angelini, "Climate-Related Disputes and International Arbitration," in Global Arbitration Review's The Guide to Climate Change and Related Disputes (1st edn, 2024), page 6, https://globalarbitrationreview.com/guide/the-guide-climate-change-and-related-disputes/first-edition/article/climate-related-disputes-and-international-arbitration\ accessed 16 March 2026

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