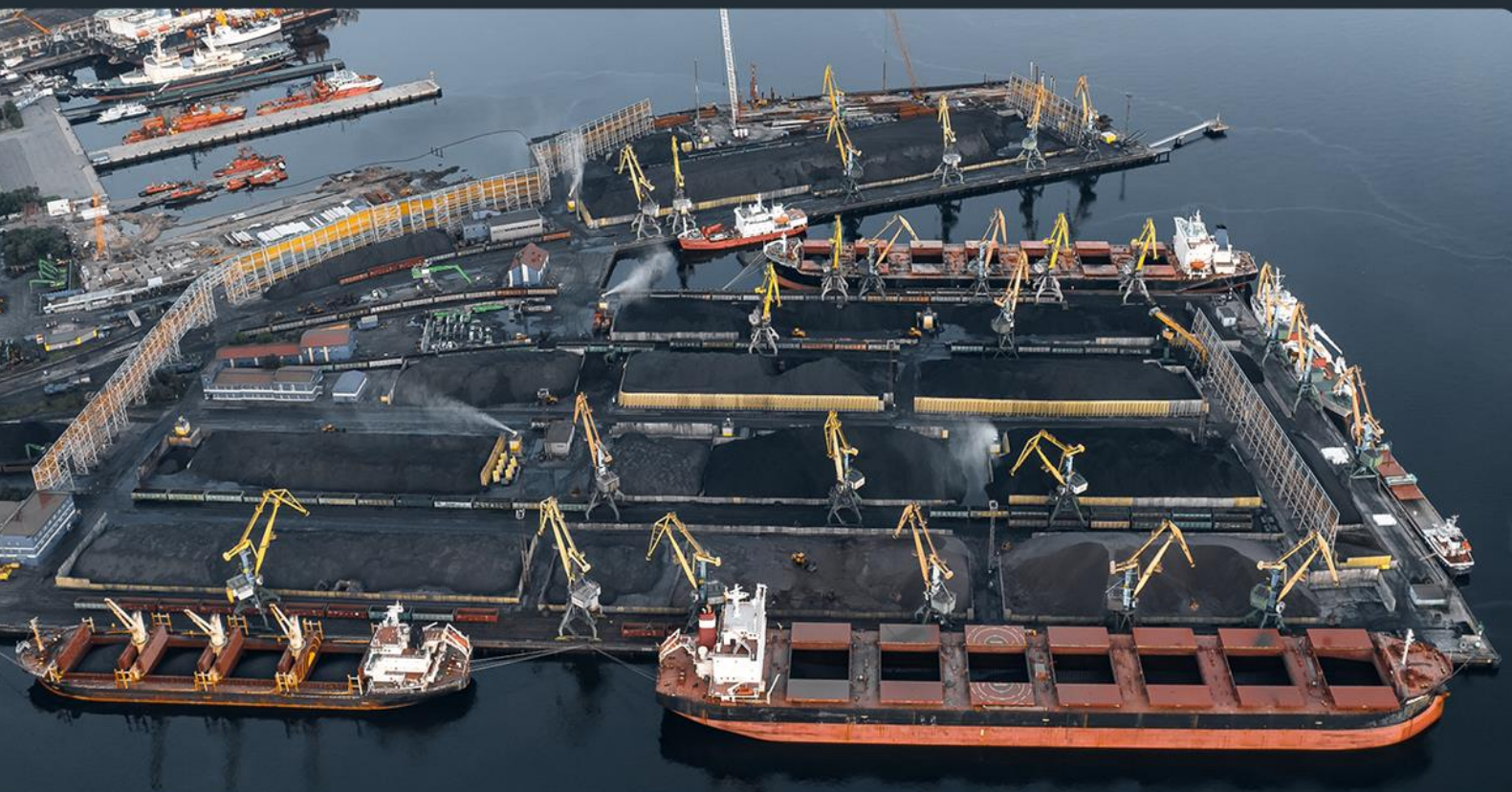


Financial Risk in Australia's Coal Ports

Export terminals are not immune to coal mine risk

Andrew Gorringe, Energy Finance Analyst, Coal Sector



Contents

- Key Findings.....3
- Executive Summary.....4
- Coal Supply Chain Interdependence7
- Climate Change Risks8
- Climate Policy Risks9
- New Coal Projects Declining Despite Record Prices 12
- Coal Terminals 13
- Governments Should Shift Focus Towards Australia’s Future Export Industries 17
- Regulation of Coal Logistics Infrastructure Could be Improved 18
- About IEEFA..... 21
- About the Authors..... 21

Figures

- Figure 1: Geographic Concentration of Fire Risk – Coal Mines and Ports.....8
- Figure 2: Australia’s Coal Export Market Trends..... 10
- Figure 3: China’s Return to Coal to be Short-lived 11
- Figure 4: Bulk Commodity Prices 12
- Figure 5: Coal Port Throughput Trends 14
- Figure 6: Annualised Loss Rates in Business Lending from Transition Climate Risks,
by ANZSIC division..... 19

Key Findings

Banks and credit ratings agencies' outlook for coal terminals is outdated amid the ongoing climate transition and higher risks facing coal mining. Despite these trends, they continue to maintain positive credit outlooks and provide debt financing for Australia's coal ports.

New coal projects are increasingly difficult to finance and approve, and new coal supply will not keep pace with declining volumes from existing mines.

In periods of depressed demand, marginal coal miners may cease production, leaving the remaining operators to cover higher port costs.

Climate change risks continue to add financial burdens to the coal export supply chain and are only set to worsen over time. The risks to ports are not independent to those faced by miners.



Executive Summary

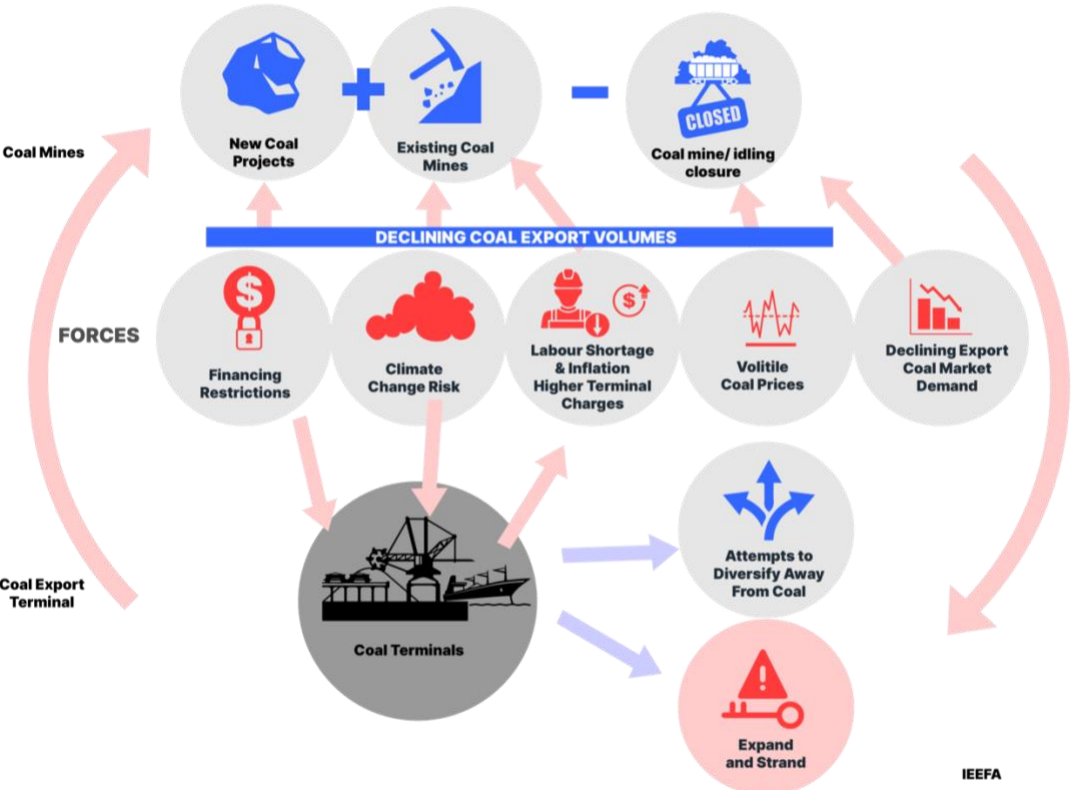
Coal ports were once regarded as stable fixed-income investments, but this is increasingly not the case.

Investments in infrastructure like ports and railways have historically been seen as dependable, low-risk assets. Recently, credit ratings agencies have been showing renewed confidence in Australia’s coal export terminals.

However, it’s no longer viable to treat coal mines and their export ports as distinct industries with independent cash flows and creditworthiness. A new set of risks are arising and converging to magnify the counterparty risk throughout the entire coal supply chain, driven by high coal price volatility combined with climate change and the energy transition.

The rising costs of terminal charges are adding to coal miners’ cost inflation woes. Mining labour shortages curtail expansion plans and increase unit production costs. Extreme climate events risk damaging infrastructure and disrupting supply, while trading-partner decarbonisation policy measures will reduce demand. With increased pressure to meet higher financing costs, circular dependencies are driving a concentration of risk across the sector, as shown below.

Climate change forces, dependency and financial risk concentration



- **Export coal volumes** delivered to ports are a function of the addition of new mines to replace depleted or idled mine production. The Australian government expects supply of both thermal and metallurgical coal to decline. New mine approvals are constrained and some miners such as BMA, owner of Hay Point Coal Terminal, say they will not develop any new coal projects in Queensland. When served by multiple port alternatives, there are also competitive forces attracting miners to secure port capacity on the most favourable terms.
- **Financing restrictions** from traditional banking sources are forcing coal miners to look to higher-cost alternative lenders. The banks' climate-policy exclusions are currently aimed at coal mines and coal power stations but could in future extend to coal infrastructure, which is highly leveraged and faces greater refinancing risks if exclusions are widened.
- **Climate change risk** is currently assessed separately for coal miners and for transport infrastructure such as ports. However, supply chain infrastructure from coal pit to port is geographically concentrated such that an impact to part of the chain affects the whole system. The less obvious policy-related climate change risks entail emissions reductions efforts both at a mine level and of our trading partners.
- **Labour shortages** and other cost inflation are impacting coal miners. Port terminal charges have also increased, adding to miners' fixed operating costs. While recently these pressures have been masked by record prices, they will erode cashflow margins in periods of depressed prices.
- **Volatile prices** are being experienced in both thermal and metallurgical coal markets. A downturn would squeeze margins of the highest cost producers and risk further decline in port volumes. In the long term, the port will seek recovery of fixed costs from the remaining shippers, in turn raising their costs. It's an interdependent system.
- **Declining export coal demand** risks are accelerating. Financiers and ratings agencies seem to hold the view that strong demand for Australian (premium) coals will persist well into the future. Their assumption that any gap left by a departing miner will be readily filled by a newcomer needs to be examined in the light of a structurally declining coal market.
- **Coal terminals are** experiencing declining export volumes in FY2023. However, the risks to coal terminals are often considered immaterial as their capacity is covered by take-or-pay contracts to coal miners, transferring the volume risk to the miner (shipper). But there is an interdependence between the two, even though banks and rating agencies appear to consider them separate industries.
- **Attempts to diversify** to expand non-coal future revenues in response to lower coal throughput and transition risks are being widely considered. On the rail infrastructure side, Aurizon has embarked on a strategy to grow its non-coal revenues.
- **Expansion of** coal infrastructure is being considered by some in light of optimistic demand regarding new coal projects. While not surprising, commitments to sign up for long-term supply contracts are no guarantee of success. At the Wiggins Island Coal Export Terminal (WICET), only three of an original eight bullish shareholders remain – the rest are insolvent or otherwise paid out their commitments.

Australia's coal export terminal throughput is running well below capacity and declining. While the volume risk of lower throughput is generally transferred to the coal miners – through take-or-pay arrangements or shareholder agreements – this underutilisation can lead to several adverse outcomes. Ports located in urbanised areas may have more success in diversification than those in remote regional locations due to their greater flexibility to adapt infrastructure to meet growing demand for containerised shipping. Following record profits in 2022/3, established miners have paid down debts and returned funds to shareholders. This is in contrast to new junior miners, who might be expected to have a higher probability of default (PD) in the event of a downturn.

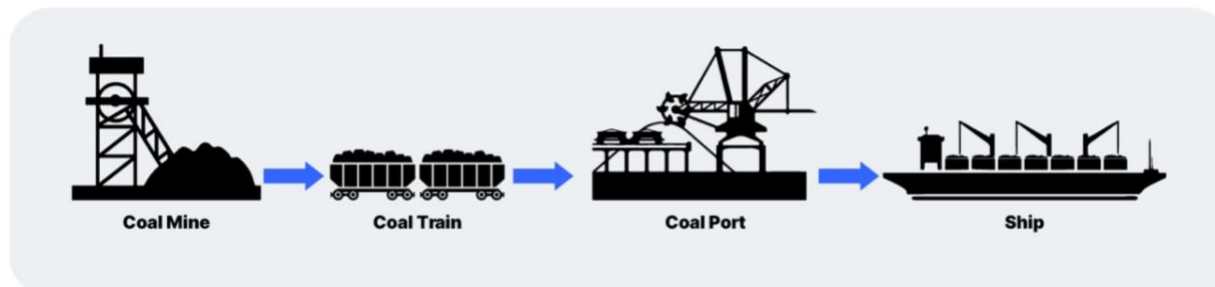
Investors are increasingly requiring companies to account for their emissions amid growing public concern over climate change. Scope 3 emissions, from the burning of our exported coal, are more extensive than Scopes 1 and 2, which occur within our domestic shores. As a visible symbol of exported emissions, coal ports in particular face an elevated risk, as Australia's environmental accountability may encompass these downstream Scope 3 emissions in future.

Banks are increasing their climate-related disclosures; setting targets for fossil-fuel exits; sharpening environmental, social and governance goals (ESG) policies; and greenwashing. ESG policies and scores need to be reworked to reflect climate risk and financial risks. Coal ports are highly leveraged and as such face greater refinancing risks if exclusions are extended further. Banks' coal exclusion policies need to be robustly reworked to exclude coal capacity investments along the entire value chain – mining, power generation and transport infrastructure.

How governments leverage this opportunity as well as addressing the challenge of achieving net zero emissions by 2050 remains uncertain. It seems unlikely to be accomplished by supporting developments of long-lived port assets that facilitate fossil fuel exports. Responses to these challenges by financial market regulators, banks, insurance companies, super funds and governments need to accelerate.

Coal Supply Chain Interdependence

The coal logistics infrastructure including mining is sometimes referred to as a value chain or pit-to-port supply chain. It is fundamental to Australia's coal exports operations – linking various mines through heavy-rail coal haulage connections to coal export ports.



Coal supply chains are heavily integrated operations. There are nine coal terminals operating on the east coast of Australia, serving the NSW and Queensland coal fields. Some coal terminals list miners as shareholders, others are independently owned. Terminals typically recover costs from users (mines) through long-term take-or-pay access agreements.

It is no Longer Viable to Ignore the Interdependence Between Coal Mines and Their Export Ports

Recently, credit ratings agencies have been showing renewed confidence in Australia's coal export terminals. In August 2022, Fitch revised its outlook for Newcastle's NCIG to positive (BBB-), on the strength of faster debt repayment by shippers, now due five years ahead of previous target.¹

Then this September, it affirmed its outlook for North Queensland Export Terminal Pty Ltd's (NQXT) senior secured debt rating at BB, stating: "The senior secured rating takes into account the stable cash flow from the medium-term take-or-pay contracts with port users. The contracted capacity is less than the nominal capacity of 50 million tonnes per annum (Mtpa), but captive mines in the Northern Bowen Basin and Galilee Basin underpin steady contracted volumes."²

However, it's no longer viable to treat coal mines and their export ports as distinct industries with independent cash flows and creditworthiness. A new set of risks are arising and converging to magnify the counterparty risk throughout the entire coal supply chain, driven by high coal price volatility combined with climate change and the energy transition.

¹ Fitch Ratings. [Fitch Revises Outlook on Newcastle Coal Infrastructure Group to Positive; Affirms Ratings at 'BBB-'](#). 18 August 2022.

² Fitch Ratings. [Fitch Affirms North Queensland Export Terminal at 'BB+'; Outlook Stable](#). 6 September 2023.

Climate Change Risks

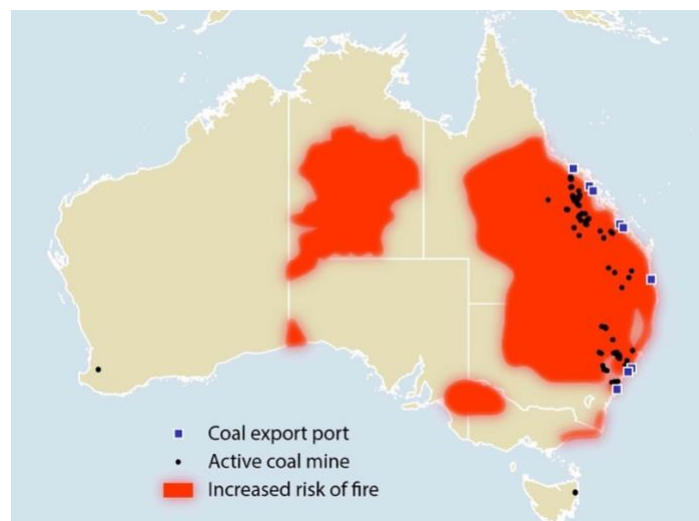
The most obvious climate change risks are the physical impacts of extreme weather. With miners still recovering after recent severe flooding events, the Australian government highlights new climate-induced risks to ports in its September 2023 Resources and Energy Quarterly report (REQ): “The new El Niño season is likely to bring about sustained dry conditions over the remainder of 2023, though summer storms remain a risk factor for ports and shipping.”³

Exposure exists both through the destruction of physical assets as well as interruption to supply resulting from outages.

Considering the increased risk of intense weather such as floods, drought, heatwaves and/or bushfires, this can impact operations across the coal supply chain. A major weather event in a region most frequently affects some or all of the pit-to-port supply chain elements. However, the nature of the logistics supply chain is that the production outage is experienced by all operators in the supply chain. Coal terminals have been operating below capacity due to production shortfalls across the industry – some of which have been caused by weather impacts such as recent floods.

It’s a similar situation in Canada where Teck Resources in October 2023 reported lower than expected coal sales “due to slower than anticipated supply chain recovery following the impacts of B.C. wildfires and the labour disruption at B.C. ports, and plant challenges”.⁴

Figure 1: Geographic Concentration of Fire Risk – Coal Mines and Ports



Source: National Council for Fire and Emergency Services,⁵ IEEFA.

³ Department of Industry, Science and Resources. [Resources and Energy Quarterly: September 2023](#).

⁴ Teck Resources. [Teck Provides Steelmaking Coal Sales and Pricing Update](#). 15 October 2023.

⁵ National Council for Fire and Emergency Services. [Seasonal Bushfire Outlook Spring 2023](#).

Coal ports and the coal mine basins in Australia are geographically concentrated on the east coast. It's not just bushfires that pose a risk. Climate change is anticipated – with 'high and very high confidence' – an increase in both flooding (increased intensity of extreme rainfall events) and heatwaves (average temperatures increase, with more hot days).⁶

Extreme weather events are probably going to impact the coal pit-to-port supply chain in Australia on an ongoing basis.

Climate Policy Risks

Australia's major coal markets facing decline

All of Australia's major coal trading partners have net zero commitments. However, a view held by some ratings agencies is that demand for Australia's coal will hold up well in the energy transition.

Credit ratings agency S&P recently declared its view on export demand: "Our outlook on Australian coal continues to be supported by its high quality, as well as strong demand from Asian markets. Metallurgical coal (and by extension steel) will benefit from economic growth in the region, while demand for thermal coal will gain from escalating energy requirements that are unlikely to be fully met through renewable sources."⁷

This is a somewhat dated view of Australia's export coal markets. As reported by IEEFA in May 2023, the REQ cautioned that "thermal coal demand has become fragile" and "the overall peak in global thermal coal trade is likely to have passed".⁸

Australia's largest export coal markets – Japan, South Korea and Taiwan – are in decline. This combined market underpins most of Australian coal producers' profits. It represents a massive concentration of risk, accounting for more than two-thirds of Australian coal, according to producers' annual reports.

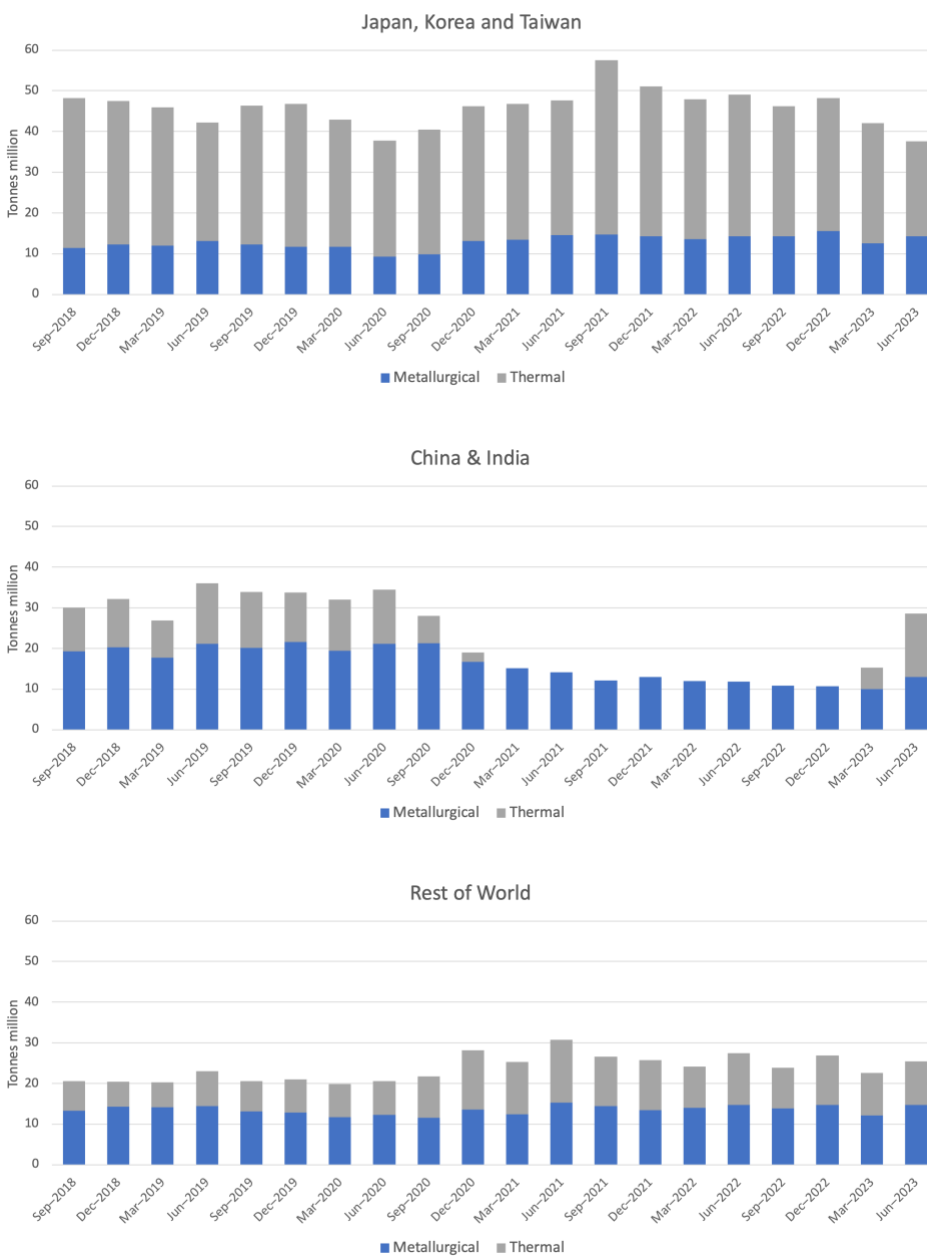
For Australia's premium markets, record 2022 coal prices demanded for Australian coal have forced these markets to rethink their supply chains and destroyed demand for Australian coal. This premium market continues to decline ([Figure 2](#)).

⁶ Climate Change in Australia. [Climate information, projections, tools and data](#).

⁷ S&P Global Ratings. [Aurizon Operations' Capital Management To Improve Rating Headroom; 'BBB+/Stable' Rating Affirmed](#). 27 April 2023.

⁸ IEEFA. [Australian government forecasts peak thermal coal exports in three years but further downside risks for Asian seaborne market remain](#). 24 April 2023.

Figure 2: Australia’s Coal Export Market Trends



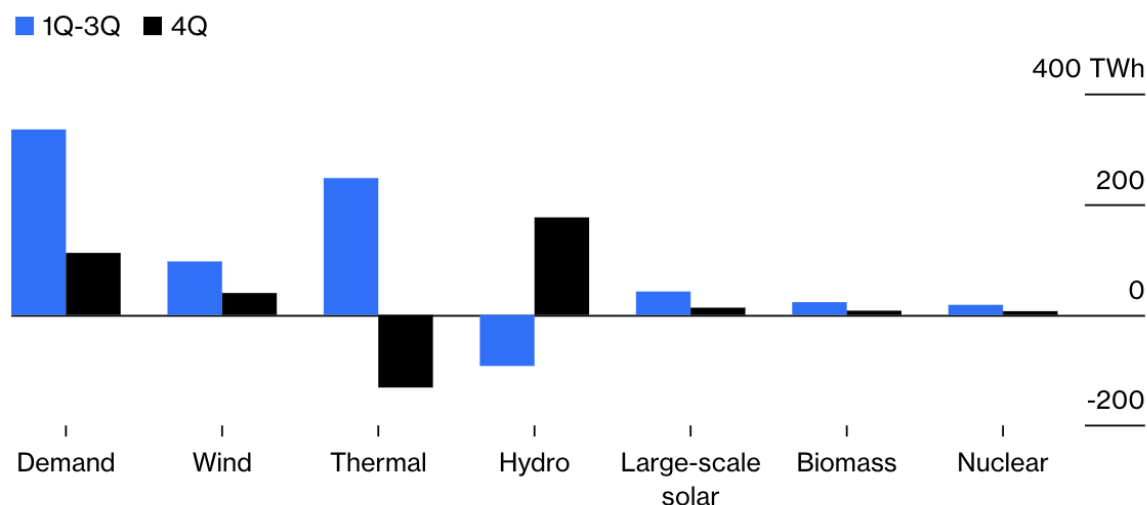
Source: Department of Industry, Science and Resources⁹, IEEFA

While demand for lower-quality thermal coal from China has rebounded following reopening of trade borders, this is likely a temporary spike according to Bloomberg (Figure 3).

⁹ Department of Industry, Science and Resources. [Resources and Energy Quarterly: September 2023](#).

Figure 3: China's Return to Coal to be Short-lived

Thermal power, mostly coal, supplied the bulk of additional demand in China so far this year. The fourth quarter should see it fall.



Source: Bloomberg, Bloomberg Opinion calculations.¹⁰

Note: Graph shows change in generation in 2023 relative to the same period of 2022. Figures for 4Q incorporate forecasts based on historic utilisation, capacity and output levels. Small-scale solar is not included.

Demand for Australia's metallurgical coal is linked to the global demand for steelmaking and the impact of steel makers moving away from coal inputs to decarbonise operations. Technology transitions have a history of being non-linear and happening faster than expected. The steel technology transition away from coal is already accelerating.

As Australia's key coal markets of Japan, South Korea and Taiwan enter permanent decline, the opportunity to increase exports to replacement markets elsewhere in Asia region is diminishing.

In its September 2023 REQ, the Australian government sees ongoing risk in investing in all coal types: "Metallurgical and thermal coal producers face growing constraints on availability of finance. Banks have increasingly sought to pivot away from all forms of coal in favour of renewables and related commodities. Hopes among some producers that metallurgical coal would be unaffected have not been entirely borne out. This is likely to place some further constraint on metallurgical coal investment over coming years."¹¹

¹⁰ Bloomberg, [China's Return to Coal Looks Set to Be Short-Lived](#), 18 October 2023

¹¹ Department of Industry, Science and Resources, [Resources and energy quarterly](#), September 2023.

Scope 3 Emissions Accountability

The Scope 3 emissions, from the burning of exported coal, are more extensive than those generated within Australia's shores (Scopes 1 and 2). According to the AFR: "Our total coal exports, when burned overseas, contribute around 1000 million tonnes [of CO₂], about 2.5% of the world total." The Scope 3 emissions generated from Australian coal burned overseas is estimated to be more than double Australia's total domestic greenhouse gas emissions.¹²

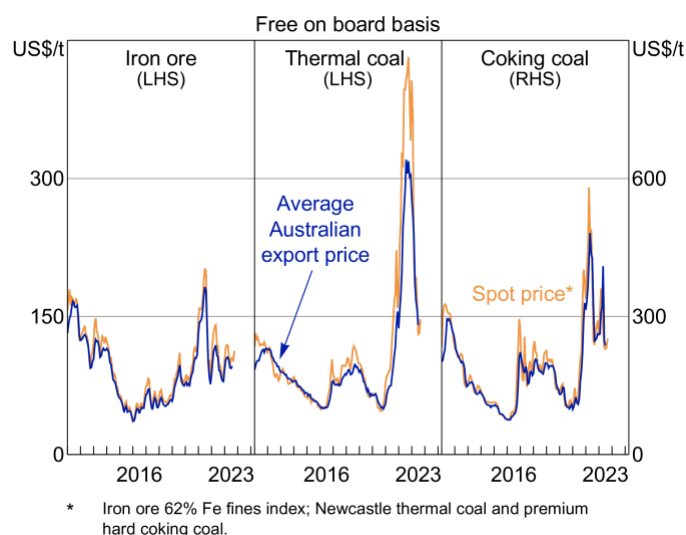
IEEFA recently released a report highlighting how major miners no longer have an excuse not to have measurable Scope 3 emissions targets.¹³ Public scrutiny is growing in the face of mounting concern over climate change, with flood, bushfires and heatwaves becoming increasingly common. Coal ports in particular are a visible symbol of Australia's exported emissions.

Ports face an elevated risk as Australia's environmental accountability and future disclosure requirements may come to encompass these downstream Scope 3 emissions.

New Coal Projects Declining Despite Record Prices

Although Australian coal rallied to record highs in 2022 ([Figure 4](#)), few new coal mines have been announced.

Figure 4: Bulk Commodity Prices



Sources: ABS; Bloomberg; McCloskey by OPIS; RBA.¹⁴

¹² Ember. [Coal mine-to-plant explorer](#).

¹³ IEEFA. [Big mining's downstream steel emissions](#). 12 October 2023.

¹⁴ Reserve Bank of Australia. [Commodity Prices](#). 4 October 2023.

Prices are likely to remain volatile. Some attribute the price volatility to underinvestment in coal supply. In its September 2023 Resources and Energy Quarterly report (REQ), the Australian government noted: “Markets would also likely become more unpredictable and volatile while adjustments to supply and demand occur.”

Recent developments suggest a positive outlook for M&A in existing coal mines in preference to developing significant greenfield coal mines.

BMA’s recent sale of its Daunia and Blackwater mines to Whitehaven Coal, saw strong interest from other miners.¹⁵ It followed the sale of the majority stake in Coronado Global Resources to billionaire Pavel Tyka in September 2023. Miners are signaling a preference for buy vs build.

It may indicate that miners, such as Whitehaven, prefer fast volume growth through acquisition and are not prepared to commit to the large capital expenditures on greenfield projects with long lead times required to develop volumes and achieve financial payback. The net result is that less greenfield coal mining projects are going ahead or are at least being delayed, as mining companies demonstrate a preference for acquisitions and expansions utilising existing infrastructure over new developments.

This, combined with an increasingly difficult approvals regime for coal mines with strict environmental standards, may limit the quantity of new coal supply capacity entering the market. Moreover, financing the construction of new coal mines with debt is becoming increasingly difficult, given the major banks’ lending restrictions aimed at new coal mine developments.

These restrictions on new thermal coal supply are echoed by the REQ: “Supply is expected to start declining structurally due to the relative lack of new thermal coal projects.” BMA, the owner of Hay Point Coal Terminal, has said it will not develop any new coal projects [metallurgical or thermal] in Queensland.

For a coal port to maintain its contracted capacity and throughput utilisation, new coal projects are required to fill the void left by depleted, mothballed and closed mines. The absence of these new contracts will impact the port’s debt service cover ratios.

Coal Terminals

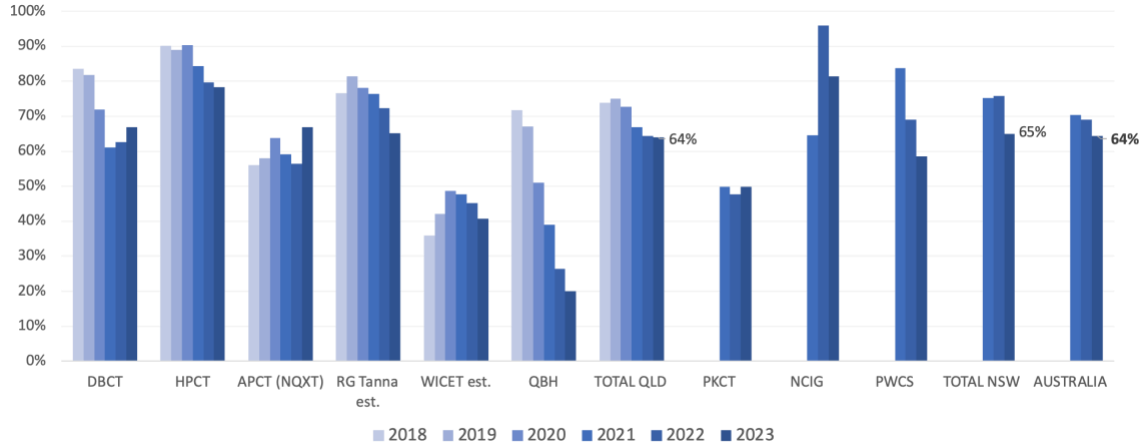
Coal Throughput Is Declining, While Transportation Costs Climb

Australia’s coal export terminal throughput is running well below capacity and declining. Overall average capacity utilisation for Queensland and NSW is estimated to be 64% in FY2023. This is split relatively evenly for Queensland at 64% across Dalrymple Bay, Hay Point, Abbot Point, Gladstone

¹⁵ IEEFA. [Daunia, Blackwater sale points to misplaced optimism over Australian metallurgical coal](#). 18 October 2023.

ports, and Brisbane. In NSW, capacity utilisation is at 65%, across its Port Kembla and Newcastle ports.

Figure 5: Coal Port Throughput Trends



Source: Port coal trade statistics, annual reports, NSW Coal Services, IEEFA. Note: Gladstone total throughput since 2021 apportioned to RG Tanna and WICET. NSW Newcastle total throughput for 2023 apportioned to NCIG and PWCS, in the absence of company reported data.

Although several terminals have fully contracted available capacity, throughputs are down overall. While the volume risk of lower throughput is generally transferred to the coal miners – through take-or-pay arrangements or shareholder agreements – this underutilisation can lead to several adverse outcomes.

To the extent that coal mines are located where they can choose to send their coal to alternative export ports, the underutilisation of the highest-cost port and rail (assessed as a whole) cost structure will tend to shift volumes to the lower-cost infrastructure paths. Any spare capacity at the favoured port(s) is snapped up, leaving them more highly contracted, whereas the lower-utilisation ports become stranded.

Miners may choose to hold onto favourable port capacity allocations, hence denying competitor projects such access; however, in doing so they are paying for a service that they are not using. In times of high margins this may be a viable strategy, but in a depressed price environment these increases in port and rail costs add to the miners’ cost inflation, making operations marginally viable. In addition, as reported by the Dalrymple Bay Coal Terminal (DBCT) shippers, capacity resulting from a defaulting expansion party is unlikely to be taken up by another party in the queue in the event of a downturn in the coal market.¹⁶

¹⁶ Queensland Competition Authority. [DBIM pricing method for 8X expansion](#). June 2021. Page 35.

Higher fixed port costs socialised across a declining pool of shippers will exacerbate the cost inflation being experienced in coal mining. In Yancoal's 2023 results it stated: "Given the Group's long-term take-or-pay arrangements for rail and port, transportation costs did not decrease in line with the 7% decrease in saleable production. This contributed to an increase in per saleable product tonne transportation costs from \$18 to \$25 over the same period."¹⁷

Price volatility risk of a downturn is amplified. It's firstly felt by the most marginal coal miners – high on the cost curve – causing them to close or idle production. This removes their volumes from the affected port, causing it to seek recovery of fixed costs from the remaining shippers, in turn raising their costs.

Established miners may struggle to hold traditional debt financing on the balance sheet in the face of refinancing risk, as recently experienced by Whitehaven.¹⁸ How higher cost structures and more volatile cashflow margins impact on assessed credit risk of the miners, and how these counterparty risks will be represented in ports' ratings, remains to be seen.

Attempts to Diversify Away from Coal

Coal export terminals are traditionally highly debt-financed, and their original project financing considers them stable, predictable and low-risk assets.

In September 2023, S&P downgraded Port of Newcastle, citing high debt levels and weaker financial projections and lower coal volumes in the next few years. It stated: "Trade diversification is important to gradually reduce reliance on coal and have continued access to cost-effective capital."¹⁹

In NSW, Port Kembla Coal Terminal (PKCT) is operating at less than 50% of its export capacity. Its main shareholder and primary supplier, South32, has abandoned plans to expand its mines in response to declining coal exports.

Amid high-cost inflation being experienced by the Southern Coalfields miners and environmental difficulties facing expansion plans, there is a risk to PKCT coal exports beyond current approved mine lives. In the absence of new mines within its catchment area, and given the favourable cost structure of the Newcastle port, it is unlikely that any mine will fill the gap.

Given that PKCT mainly handles metallurgical coal, this demonstrates that 'diversification' into metallurgical coal is no guarantee of success.

The port has taken steps such as diversifying into LNG imports, importing coking coal for BlueScope to replace locally sourced metallurgical coal, exporting hydrogen, and importing containerised cargo.

¹⁷ Yancoal. [2023 Half Year Financial Report](#). Page 17.

¹⁸ Australian Financial Review. [Whitehaven's \\$2.65b cash pile can't soothe carbon-conscious lenders](#). 17 July 2023.

¹⁹ S&P Global Ratings. [Ratings Actions](#).

Elsewhere in the coal supply chain, Aurizon is repositioning its rail business strategy away from coal markets with the investment in bulk and containerised growth into the Port of Darwin.

There are opportunities in NSW and Queensland to replace declining coal exports with higher-value commodities such as critical minerals or value-added production. While hydrogen and green ammonia exports are being widely considered at ports around the country, thought needs to go into how infrastructure can best support this fledgling industry.

In general, ports located in urbanised areas may have more success in diversification than those in remote regional locations due to their greater flexibility to adapt infrastructure to meet growing demand for containerised shipping.

Coal Terminal Expansion and Financing Issues

The most recent Australian coal port infrastructure development was the Wiggins Island Coal Export Terminal (WICET) in Gladstone in 2015. Built with loans of \$US2.7 billion, it now reportedly has US\$2.0bn in debt, with refinancing decisions upcoming, and may capitalise on current market optimism.²⁰ It is understood to mainly handle thermal coal exports, and Australia's "big four" banks hold portions of the debt – despite them all having coal-financing climate targets but not explicit coal infrastructure divestment policies.

Since construction in 2015 following a coal boom, WICET has never operated above 50% throughput capacity levels. Three shareholders (Glencore, Coronado and Yancoal) remain from an original consortium of eight – the others have been in liquidation or paid out their long-term commitments. The latest to leave, Aquila Resources in September, paid a rumoured \$300m to exit according to the AFR, having spent "\$275.5 million on WICET port capacity alone since 2015 despite never shipping a single tonne of coal through the port".²¹

Also in Central Queensland, it's anticipated that Dalrymple Bay Infrastructure (DBI) will shortly confirm its \$1.4bn expansion of Dalrymple Bay Coal Terminal (DBCT). If so, it suggests favourable financial returns are anticipated from the 14Mt capacity increase. The 8X project feasibility study was paid for by access seekers – potential customers that are now negotiating commercial terms. With such optimism shown by the coal miners embarking on their new projects, they may well be encouraged to engage in contractual terms for the terminal's expanded capacity. The experience of WICET has demonstrated that this strategy is not without risk.

DBCT's expansion plans follow other DBI announcements that it will spend more than \$500m on sustaining and replacing existing coal infrastructure up to 2031.²² Questions remain on the

²⁰ Capital Brief. [Queensland coal terminal WICET kicks off talks for US\\$2bn refi](#). 19 September 2023.

²¹ Australian Financial Review. [Chinese steel giant wants out of Queensland after \\$300m settlement](#). 13 September 2023.

²² [Dalrymple Bay Infrastructure](#).

contracting and delivery risk of the nearly \$2 billion capex for the port, as large-scale infrastructure projects are prone to cost and schedule overruns.

With the acquisition of Daunia, Whitehaven has added some 4.7 Mtpa of DBCT port access to its existing capacity.²³ It has been seeking expansion capacity under the 8X terminal expansion plans for Winchester South. It remains to be seen whether these developments result in a reduced appetite now for 'expansion capacity' at DBCT. In its acquisition announcement it suggested that with Daunia it sought "synergies" to "share infrastructure and utilities" for Winchester South.

Financing restrictions by banks apply to coal mines and power stations, but not to coal infrastructure. While lending exclusions typically currently focus only on greenfield thermal coal mine projects, they are increasingly trending towards metallurgical coal as well.

The coal supply chain, including terminals, is not included in banks' divestment policies. Coal ports are highly leveraged and as such face greater refinancing risks if exclusions are extended further.

Governments Should Shift Focus Towards Australia's Future Export Industries

Earlier this year, Australia entered into an agreement with the U.S. to enable the trade of critical minerals from Australia to be included under the Inflation Reduction Act (IRA) and Bipartisan Infrastructure Bill. The deal provides access to funding, subsidies and market opportunities for Australia's critical minerals – but not coal. Australian businesses surveyed by the Australian Chamber of Commerce and Industry (ACCI) have identified U.S. as their favoured trading partner.²⁴

Queensland and NSW have a high export dependence on the coal extractive industry. Following recent coal royalty increases in both states, the reliance on coal exports has not been higher. Consideration needs to be given to the future beyond the peak of coal exports. Both states have signed up to net zero 2050 emissions reductions targets. Despite this, little has been done to end reliance on coal exports.

The energy transition is driving growth in demand for Australia's critical minerals and base metals, which will be required for the new economy. How governments will leverage this opportunity as well as addressing the challenge of achieving net zero emissions by 2050 remains uncertain. It seems unlikely to be accomplished by supporting developments of long-lived port assets that facilitate fossil fuel exports.

²³ Whitehaven Coal. [Transforming Whitehaven Coal](#). 18 October 2023.

²⁴ Proactive. [Australian businesses shift focus from China to US amid geopolitical uncertainty](#). 17 October 2023.

Regulation of Coal Logistics Infrastructure Could be Improved

Although the time horizon for the global energy transition is not clear, the impact on specific coal supply/export port geographies is even less certain. Furthermore, the divergence in the relative strengths of balance sheets among miners has never been greater. Following record profits in 2022/3, established miners have paid down debts and returned funds to shareholders. This is in contrast to junior miners or thinly capitalised project developers, who might be expected to have a higher probability of default (PD) in the event of a downturn.

Stress tests by banks and credit rating agencies should evolve to better reflect climate factors. Traditional credit assumptions about the failure of one miner in the coal supply chain merely being replaced by another miner stepping forward to fill the gap need to be examined in the light of a structural declining coal market. Credit analysis scenario modelling needs to test accelerated adverse market conditions and divergence of PDs among the coal miner counterparties. They need to change the assumption of a substitution/ replacement miner stepping into the coal chain to replace volumes from exiting higher-cost miners.

According to the International Monetary Fund (IMF)'s September 2023 Global Financial Stability Report: "Without mandatory alignment or disclosure policies and meaningful carbon pricing, banks appear to continue to provide financing to fossil fuel firms without properly pricing the risk of stranded assets."²⁵

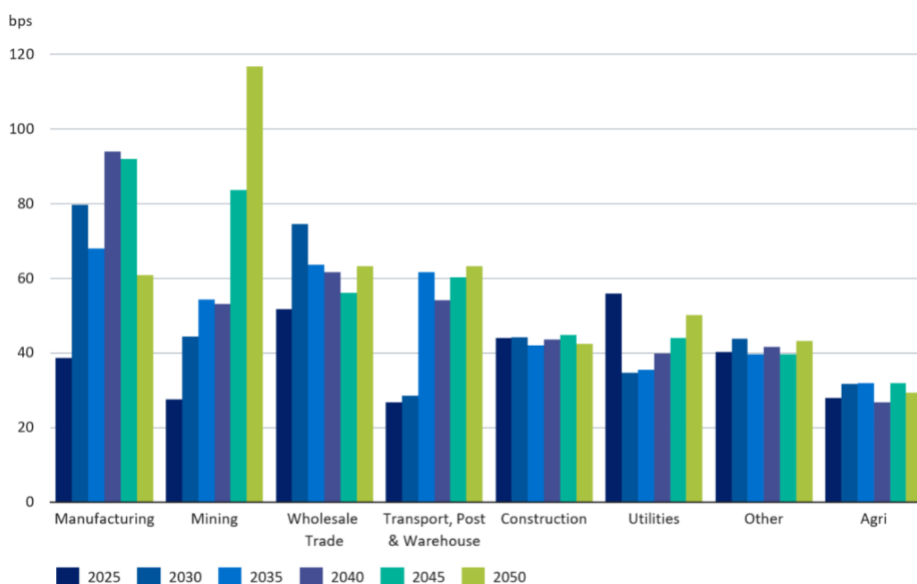
The Australian Prudential Regulation Authority (APRA)'s inaugural Climate Vulnerability Assessment (CVA) report in 2022 found that across Australia's five largest banks, "lending losses would be impacted under the climate scenarios that were evaluated. However, in the absence of a severe deterioration in macroeconomic conditions, these losses are unlikely to rise to a level that would result in severe stress for the banks."²⁶

While the CVA predominantly reviewed mortgage lending risks, the implications for coal infrastructure are clear. Investing in new port infrastructure, with a 50-year lifespan, is likely to see more than one economic cycle. The CVA recognised that the mining sector was highly exposed to transition risk (see [Figure 6](#)).

²⁵ International Monetary Fund. [Global Financial Stability Report](#). September 2023. Page 86.

²⁶ Australian Prudential Regulation Authority. [Climate Vulnerability Assessment – November 2022](#). 30 November 2022. Page 8.

Figure 6: Annualised Loss Rates in Business Lending from Transition Climate Risks, by ANZSIC division



Delayed Transition Scenario, static balance sheet

Source: APRA CVA report.

It found that: “Banks with lending exposures to these [emissions intensive and energy intensive] sectors face a higher possibility of rising defaulting loans and higher losses given default from potential reductions in the value of collateral securing the loans if they become stranded assets.”²⁷

What it didn’t explicitly recognise was the transference of risk to the coal infrastructure transportation sector, including ports. It noted “banks also qualitatively identified a range of secondary risks from extreme climatic outcomes that could impact factors including outdoor labour productivity, public infrastructure and wider supply chain dependencies. The banks did not assess these risks for counterparties in a quantitative manner.”²⁸ In other words, to the extent that credit risk quantification considers ‘mining’ and ‘supply chain’ as separate independent sectors, there could be potential to be underestimating unexpected losses.

There is a lack of financing exclusion policies for the coal supply chain including port and rail assets. Climate policies of banks need to be strong enough to incentivise highly leveraged port and rail operators to diversify their business models.

²⁷ Australian Prudential Regulation Authority. *Climate Vulnerability Assessment – November 2022*. 30 November 2022. Page 29.

²⁸ Ibid. Page 35.

It may be inadequate to assume risk transfer from coal export terminals via take-or-pay contracts, insulating them from fluctuations in export volumes and prices. The assumption that the demise of one miner will only be substituted with another is a rather simplistic view.

What's becoming clear is that rather than a steady predictable path of decline, factors such as high coal price volatility, climate change and global energy transitions are amplifying risks across the Australian coal supply chain. The decline will be anything but orderly and steady.

About IEEFA

The Institute for Energy Economics and Financial Analysis (IEEFA) examines issues related to energy markets, trends and policies. The Institute's mission is to accelerate the transition to a diverse, sustainable and profitable energy economy. www.ieefa.org

About the Authors

Andrew Gorringe

Andrew Gorringe is a coal sector energy finance analyst with IEEFA in Australia. Andrew has over 25 years' experience in modelling capital projects and investments and more than ten years' experience as an analyst in the coal sector at several major Australian coal producers. Andrew holds qualifications in engineering, finance and science including a master's degree in applied finance from Macquarie University. agorringe@ieefa.org

This report is for information and educational purposes only. The Institute for Energy Economics and Financial Analysis ("IEEFA") does not provide tax, legal, investment, financial product or accounting advice. This report is not intended to provide, and should not be relied on for, tax, legal, investment, financial product or accounting advice. Nothing in this report is intended as investment or financial product advice, as an offer or solicitation of an offer to buy or sell, or as a recommendation, opinion, endorsement, or sponsorship of any financial product, class of financial products, security, company, or fund. IEEFA is not responsible for any investment or other decision made by you. You are responsible for your own investment research and investment decisions. This report is not meant as a general guide to investing, nor as a source of any specific or general recommendation or opinion in relation to any financial products. Unless attributed to others, any opinions expressed are our current opinions only. Certain information presented may have been provided by third parties. IEEFA believes that such third-party information is reliable, and has checked public records to verify it where possible, but does not guarantee its accuracy, timeliness or completeness; and it is subject to change without notice.

