HUNTER VALLEY COAL REPORT

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In its 33rd year of production

Yancoal sells down coal stockpiles capitalising on high coal prices

Yancoal Australia Limited has reported 36.7 million tonnes (Mt) of attributable coal production for 2021 (38.3Mt - 2020).

Through selling down coal stockpiles accumulated in prior periods, Yancoal achieved attributable mine production sales of 37.5Mt, (37.9Mt in 2020.) capitalising on the current high coal price. Full-year sales include an increased proportion of higher revenue-generating metallurgical coal," commented Yancoal Australia Chief Executive Officer, David Moult.

Run of mine coal production of 16.9Mt 100% basis was down 1% from 3Q 2021. Attributable saleable coal production of 9.3Mt was down 6% from 3Q 2021 while 9.9Mt Attributable mine production sales were down 5% from 3Q 2021.

"Wet weather and reduced equipment operating hours due to COVID-19 response requirements affected production at most mines. Heavy rainfall in the fourth quarter further impacted production as most of the open-cut mines in NSW were already near their water storage capacity limits," said Mr. Moult.

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"Coal prices peaked during the quarter and finished at elevated levels. Compared to the prior quarter, our overall realised price increased by A$54/tonne to A$209/tonne for the 9.9 million tonnes attributable sales volume in 4Q 2021."

"For 2021, our average realised price was A$141/tonne, an increase of 72% on the average realised price achieved in 2020 (A$82/tonne). The international coal market and broader energy markets remain somewhat supply-constrained, which is likely to support thermal coal indices in the coming months," Mr. Moult said.

"Elevated coal prices in the prior quarter enabled Yancoal to repay US$500 million of debt from available cash during October 2021. The prepayments will save around US$82 million in total finance costs over the loan period.'

"International coal indices rallied through the year, peaking in October at previously unseen levels. Yancoal's average realised coal price jumped each quarter and was A$209/tonne in the fourth quarter. Just 12 months earlier, it was A$72/tonne."

"Our average realised coal price for 2021 was A$141/tonne, significantly higher than the A$82/tonne achieved the previous year. Considering our realised price lags index prices due to contract structures, and given coal indices remain elevated, the outlook for Yancoal's realised price at the start of 2022 is positive," Mr. Moult said.

"Heavy rainfall is forecast to continue through January 2022 as the La Nina weather pattern continues. The rainfall affected both mining operations and rail logistics. The sites continually review the current and projected weather conditions in order to assess all possible recovery options. Management of excess site water levels is a priority across all NSW operations and will continue into 2022."

"The Middlemount mine had modest disruptions during the quarter and primarily delivered to plan. An additional excavator commenced operations during the quarter, and additional haul trucks were delivered in December. We expect the extra equipment will support additional output in 2022."

"Although rainfall does not affect underground operations, water accumulation at the Ashton longwall mining location reduced output in October. A longwall move was underway during much of December, with the resumption of mining scheduled in mid-January."

"The Stratford-Duralie mine was less impacted by rainfall than the mines in the Hunter Valley during the quarter and achieved a monthly ROM record in October. The wash plant also delivered a high yield during the quarter. Late in the quarter, the wash plant had to be shut down following the partial failure of a reinforced earth wall at the ROM coal bin. A temporary mobile crushing plant has been installed while the team implements the preferred rectification plan," said Mr. Moult.

"Late in the quarter, our workforce availability was impacted by increasing COVID-19 case numbers in the Hunter Valley community, with positive cases and isolation requirements affecting Moolarben, Mount Thorley Warkworth (MTW), Hunter Valley Operations (HVO) and Ashton underground operation. The occurrence of logistics and supply chain delays also increased toward the end of the quarter due to COVID-19 disruptions."

At Mount Thorley Warkworth (MTW), pre-existing high-water storage levels exacerbated the impact of rainfall on the operations. The constrained capacity to remove this additional water from mining locations meant the resumption of mining following heavy rainfall in November and December took longer than commonly experienced. The team at MTW are working on more permanent solutions to address the water storage issues and anticipate implementing additional water storage capacity commencing in 1Q 2022."

"Although rainfall does not affect underground operations at the Ashton Mine (NSW), water accumulation at the longwall mining location reduced output in October. A longwall move was underway during much of December, with the resumption of mining scheduled in mid-January."

"Heavy rain affected mining at the Yarrabee mine in Queensland. Two site evacuations took place when haul roads and access roads were subject to flooding. Late in the quarter, weather conditions improved and some of the mining downtime was recouped."

Mr. Moult said that Middlemount in Queensland saw modest disruptions during the quarter and primarily delivered to plan.

"An additional excavator commenced operations during the quarter, and additional haul trucks were delivered in December. We expect the extra equipment will support additional output in 2022."he said.

Whitehaven Coal December 2021 quarter coal sales up 144% on pcp

Whitehaven Coal Limited achieved an average price of A$211 per tonne for sales of own coal during the December 2021 quarter, an increase of 144% higher on the previous corresponding period (pcp).

December 2021 quarter managed run-of-mine (ROM) production was 3.2 million tonnes (Mt) and managed saleable coal production 3.0Mt.

Total December quarter managed coal sales of 4.0Mt. are reported and managed own coal sales of 3.5Mt.

	Quarter Ended			Year to Date		
Thousands of tonnes	**Dec 2021**	Dec 2020	Change	**Dec 2021**	Dec 2020	Change
Managed ROM Coal Production	**3,235**	5,138	(37%)	**8,398**	9,622	(13%)
Managed Saleable Coal Production	**3,024**	3,949	(23%)	**7,683**	8,806	(13%)
Managed Sales of Produced Coal	**3,520**	3,924	(10%)	**7,740**	9,537	(19%)
Managed Sales of Purchased Coal	**451**	537	(16%)	**877**	955	(8%)
Total Managed Coal Sales	**3,971**	4,461	(11%)	**8,617**	10,492	(18%)
Managed Coal Stocks at period end	**2,148**	2,276	(6%)	**2,148**	2,276	(6%)

"Unusually heavy rain in the quarter caused local flooding that saw road access to the mines and Gunnedah Coal Handling and Preparation Plant cut off for up to two weeks," said Whitehaven Coal.

"Flooding is estimated to have caused approximately 600kt – 700kt of ROM production at Maules Creek to be deferred and 100kt – 200kt of ROM production at the Gunnedah open cuts to be deferred."

The Company said that the spread of COVID throughout NSW has resulted in an increase in the number of workers self-isolating, with associated production impacts of 200kt in the December quarter.

"Maules Creek (NSW) delivered ROM production of 2.0Mt in the December quarter, 39% below pcp.

"December quarter saleable coal production of 1.8Mt was 15% below pcp, reflecting reduced processing days due to the loss of access to site."

"Sales volumes for the quarter of 1.8Mt were 16% below pcp reflecting saleable coal volumes. Equity metallurgical sales of semi-soft coking coal for the December quarter were 0.25Mt, representing 18% of Maules Creek sales volume."

At Narrabri (NSW), the longwall was relocated from panel 109 to 110 during the quarter and managed ROM production at Narrabri was 0.4Mt. Longwall production recommenced on 22 December."

"A tight labour market restricted the availability of contract labour to complete the longwall move necessitating redeployment of mine development labour," said Whitehaven Coal.

"The step around from panel 110A to panel 110B is scheduled to commence in May 2022 and be completed in late June 2022."

"Coal prices continued at attractive levels through the December quarter and remain well supported for the near future given strong underlying demand and persistent supply-side disruptions, commented Whitehaven Coal Managing Director and Chief Executive Officer, Paul Flynn.

"Whitehaven has unfortunately not been immune to recent heavy rains that impacted large parts of regional New South Wales and Queensland as La Niña made its presence felt for the second Australian summer in a row."

Port movements were impacted by high winds and swell on multiple occasions in the quarter. In addition, the harbour operated under fresh water conditions from 29 November to 22 December due to flood waters, which restricted vessel movements.

The period ended with a combined vessel queue of ~50 across PWCS and NCIG.

"While we remain very confident about ongoing favourable supply and demand dynamics, there is elevated uncertainty associated with COVID's impact on workforce availability and resourcing through our supply chains."

"The strong balance sheet and robust market environment is an appropriate backdrop to provide an update on our capital management strategy with our half year results," said Mr. Flynn.

<u>South32 Dendrobium longwall move impacts quarterly production</u>

South32 Limited reports that Illawarra Metallurgical Coal saleable production decreased by 23% (or 951kt) to 3,145kt in the December 2021 quarter following an extended longwall move at the Dendrobium mine, New South Wales.

The Company said that it made no energy coal sales of low-margin coal wash, with elevated freight rates making them uneconomic in the period.

South32 share	1H21	1H22	HoH	2Q21	1Q22	2Q22	2Q22 vs 2Q21	2Q22 vs 1Q22
Total coal production (kt)	4,096	**3,145**	(23%)	1,725	1,888	**1,257**	(27%)	(33%)
Total coal sales[19] (kt)	4,027	**3,255**	(19%)	2,087	1,708	**1,547**	(26%)	(9%)
Metallurgical coal production (kt)	3,262	**2,767**	(15%)	1,399	1,575	**1,192**	(15%)	(24%)
Metallurgical coal sales (kt)	3,165	**2,877**	(9%)	1,697	1,490	**1,387**	(18%)	(7%)
Energy coal production (kt)	834	**378**	(55%)	326	313	**65**	(80%)	(79%)
Energy coal sales (kt)	862	**378**	(56%)	390	218	**160**	(59%)	(27%)

“The implementation of additional COVID-19 workforce restrictions in New South Wales has the potential to further impact labour availability across the June 2022 half year,” South32 said.

The Company said that it expects to provide updated production guidance for FY22 and FY23 at its financial results announcement for the December 2021 half year, as it continues to monitor the impact of COVID-19 and progress design of an alternate mine plan for the Dendrobium Next Domain life extension project.

“Lower December 2021 half year production and sales volumes, and higher price-linked royalties arising from the significant increase in prices year to date, are expected to result in our Operating unit costs for the December 2021 half year being approximately 20% above our FY22 guidance (US$101/t).”

Illawarra Metallurgical Coal’s Dendrobium Next Domain life extension project was declared as State Significant Infrastructure by the New South Wales Government on 4 December 2021.

“We are working towards the completion of an alternate mine plan and the submission of an environmental impact statement for the project in the March 2022 quarter,” said South32.

Port of Newcastle 2021 exports increase - coal remains strong

New figures released reveal that Port of Newcastle, New South Wales’ import/export volume performance of 2020 strengthened in 2021, despite global supply chain challenges and the continuing impacts of the pandemic.

Global demand for Australian coal dipped slightly, but overall remained resilient and consistent with records of the past five years despite China-imposed trade restrictions, and the record thermal coal spot price.

“In 2021, Port of Newcastle handled 4697 ship movements and 166.1 million tonnes (Mt) of cargo including coal, dry bulk, bulk liquids, roll-on roll-off cargo, general and project cargoes and containers. This represents an increase of 1.6Mt of overall trade compared with 2020, with an extra three per cent of vessels visiting the port in 2021,” said Port of Newcastle Acting CEO, Nick Livesey.

“Many people don’t realise that the Port handles 25 different cargoes through its deepwater global gateway, only one of which is coal. We have seen increased demand for diversified trades across the board, including wheat, fertiliser, steel, cement, fuels, project cargo and aluminium” said Matthew Swan, the Port’s Acting Executive Manager Business Development.

"Achieving highest diversified trade volumes recorded since 1997, last year saw fertiliser imports grow 69 per cent year on year in 2021, with over 720,000 tonnes exported through the Port. After years of long drought impacting supply, wheat exports also surged, up 900 per cent on 2020 with over 3 million tonnes of the commodity travelling through the Port."

"Mass tonnes of aluminium exported, predominantly to Korea and Japan, increased to its highest annual export rate in five years, with over 90,000 metric tonnes passing through the Port, valued at $295 million. Strong demand from NSW infrastructure and construction sectors supported steel trade also reaching its highest import/export levels since the closure of BHP Steelworks over two decades ago," Mr Swan said.

The latest Port trade data for 2021 comes as the Port prepares to take significant milestone steps in 2022 on its continued diversification journey.

"With a deepwater shipping channel operating at 50% of its capacity, significant Port land available and enviable access to national rail and road infrastructure, in 2022 Port of Newcastle will see a range of projects and initiatives come to fruition that will support the further diversification of our trade," said Mr. Livesey.

Whitehaven Coal Narrabri Stage 3 Extension gets DPIE approval

The NSW Department of Planning & Environment (DPI&E) has recommended that Whitehaven Coal Limited's proposed Narrabri Underground Mine Stage 3 Extension Project be approved.

The Project has now been referred by the DPI&E to the NSW Independent Planning Commission (IPC) for determination under Ministerial delegation.

"In May 2021 the Applicant, Narrabri Coal Operations Pty Ltd (NCOPL), lodged a project Amendment Report which removed 31 hectares from the surface development footprint, relocated some surface components to reduce impacts on a threatened plant species, and incorporated flaring of pre-mining drained gas to reduce greenhouse gas emissions," the DPI&E states.

"Based on this assessment, the Department considers that NCOPL has designed the project in a manner that achieves a good balance between maximising the recovery of a coal resource of State significance and minimising the potential environmental impacts."

"Overall, the Department considers that the major economic and social benefits for the local area and to NSW outweigh the potential impacts, and that the project is approvable subject to the recommended conditions."

The proposed Project involves continuation of longwall mining with the Stage 2 mining area of the existing Narrabri Mine, an extension of longwall mining to the south of the mine to extract an additional 82 million tonnes of Run-of-Mine coal, and ancillary surface infrastructure to support mining. Mining is proposed until 2044.

Prior to determination by the IPC, a Public Hearing will be held on Monday 14 February at 08.30am AEDT.

Persons wishing to apply to speak at the electronic public hearing must complete the registration form on the IPC website by no later than 12pm AEDT on Wednesday 9 February 2022.

If you would like to have your say on this project but are unable to participate in the public hearing, comments can be submitted in writing to the Commission up to one week (seven days) after the public hearing via email, post or our online portal: www.ipcn.nsw.gov.au/have-your-say

The deadline for written submissions is 5pm AEDT on Monday 21 February 2022.

NSW Coal Titles application and renewal

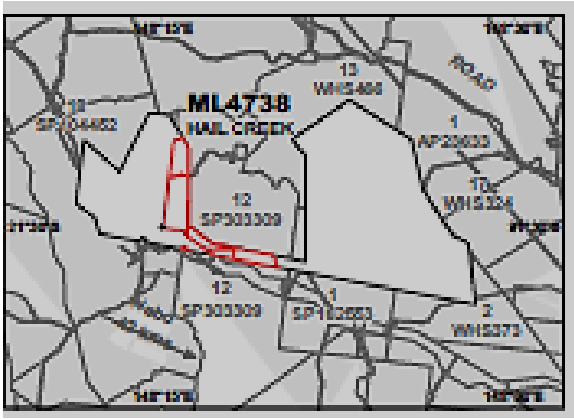
The NSW Government has given Notice of receipt the following applications have been received:
Exploration Licence Application No. 6415, Wilpinjong Coal Pty Ltd, area of 1667.6618 hectares, for Group 9, dated 17 December 2021. (Orange Mining Division).

Exploration Licence No. 8315, Saxonvale Coal Pty Limited and Nippon Steel Australia Pty Limited, Counties of Hunter and Northumberland, Map Sheet (9132), area of 789 hectares, for a further term until 13 October 2027. Renewal effective on and from 12 January 2022.

Marubeni Resources JV seeks further drill area at Queensland operation

The Queensland Minister for Resources has given notice in accordance with section 29 of the Native Title Act 1993 (Cth) of the proposed approval to conduct drilling and other activities on land not included in the surface area covered by the Mining Lease (ML) 4738 shown below under the Mineral Resources Act 1989 (Qld).

Marubeni Resources Development Pty Limited, Hail Creek Coal Holdings Pty Limited and Sumisho Coal Development Queensland Pty Limited seek approval to conduct drilling and other activities on the ML for a period of two years.



The ML embraces an area of 1690 hectares, located approximately 42 km North West of Nebo, in the locality of the Isaac Regional Council, Queensland.

Comment invited on Sojitz Blue Gregory Crinum Extension Project

Sojitz proposes to extend the Gregory Crinum Coal Mine M-Block, located in the Central Queensland Bowen Basin.

M-Block is located directly west of the existing mining area on mining lease (ML) 1923, originally granted and approved for underground mining on 14 March 1985 with additional ‘surface rights’ granted under the Mineral Resources Act 1989 (Qld) between 1986 and 2014.

The Project is fully authorised at a State level and holds an environmental authority (EA) (EPML00945013) and water licence 577145 to enable dewatering of ML1923.

The Sojitz proposal states that addition of these surface rights following the commencement of the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) on 16 July 2000, and Sojitz’s proposal to use both open-cut and underground coal extraction mean that Sojitz has elected to refer the Project under the EPBC Act for consideration on whether it is a controlled action.

"Mining of M-Block will utilise conventional open-cut mining methods for the first 3 years, with underground access to be established from the highwall. Gregory Crinum already has significant established infrastructure including rail loading, Coal Handling and Processing Plant (CHPP), tailings dams and workshops that will be utilised for M-Block. The use of this existing infrastructure will keep the overall surface disturbance at M-Block to a minimum," Sojitz states.

"The additional infrastructure to support M-Block includes open-cut and underground mining areas to support the continuation of Gregory Crinum at the current 2 million tonne per annum rate; upgraded rail crossing and access road to provide access to the new mining area for coal haulage and general transport; ventilation boreholes to support underground mining; dewatering bores and pipelines as required; minor laydown areas."

The project will have a range of positive social and economic impacts. The Gregory Crinum Mine currently employs approximately 400 people mostly from the Emerald region. M-Block will continue to provide ongoing employment opportunities for these people.

As the Project is referred under the EPBC Act for consideration on whether it is a controlled action, public comment has been invited.

Further information is available at Australian Government Department of Agriculture, Water and the Environment.

<u>First shipment of liquified hydrogen from Latrobe Valley brown coal leaves Australia for Japan</u>
Australian-made hydrogen will be shipped from Victoria to Japan following the arrival of the Suiso Frontier carrier at Port of Hastings as part of the Hydrogen Energy Supply Chain (HESC) pilot project.

Prime Minister Scott Morrison said the HESC project was a world-first that would make Australia a global leader, aiming to produce 225,000 tonnes of clean hydrogen each year in the Latrobe Valley.

"A successful Australian hydrogen industry means lower emissions, greater energy production and more local jobs," the Prime Minister said.

"The HESC project is key to both Australia and Japan and our hydrogen industries. In addition to our Government's support for HESC, we have recently established the Australian Clean Hydrogen Trade Program and committed up to $150 million to the first round that will focus on clean hydrogen supply chains with Japan.

"Last year, our countries affirmed our mutual ambitions and desire to work together to advance the development of low emissions technologies when we agreed the Japan-Australia Partnership on Decarbonisation through Technology.

"This project demonstrates the benefits of that cooperation.

"The HESC project puts Australia at the forefront of the global energy transition to lower emissions through clean hydrogen, which is a fuel of the future."

The clean hydrogen will be produced from local brown coal, with carbon dioxide from this process to be captured and securely stored in the CarbonNet project's offshore reservoir in Gippsland.

To coincide with the milestone, the Morrison Government is announcing $7.5 million to support the next $184 million pre-commercialisation phase of HESC. The Government is also committing $20 million for the next stage of the CarbonNet project. This funding is contingent on additional commitments from the Victorian and Japanese Governments, and the HESC business partners.

This brings the Australian Government's total commitment to the HESC project to $57.5 million (leveraging $8 dollars for every Commonwealth dollar invested).

It is estimated the 225,000 tonnes of carbon neutral liquefied hydrogen (LH2) produced by HESC in a commercial phase will help reduce global emissions by around 1.8 million tonnes per year, or the equivalent of emissions from 350,000 petrol cars.

Minister for Industry, Energy and Emissions Reduction Angus Taylor said the arrival of the Suiso Frontier was an important milestone for Australia's technology-led approach to reducing emissions.

"The HESC project has the potential to become a major source of clean energy which will help Australia and Japan both reach our goals of net zero emissions by 2050, Minister Taylor said.

"Not only this, but the HESC project is delivering jobs and economic activity for Victoria, with a clean hydrogen sector potentially able to generate more than $50 billion in additional GDP by 2050."

Minister for Resources and Water Keith Pitt said the HESC project combined a number of technology elements, including a new way to use Latrobe Valley coal.

"The HESC project demonstrates the importance that Australian resources, such as local Latrobe Valley coal, will have in development of new low emissions industries," Minister Pitt said.

"The development of HESC and CarbonNet will build on Australia's reputation as a safe, stable and reliable exporter of resources and energy to the world, including throughout the COVID-19 pandemic,"

"Australia's resources and energy exports are estimated to reach $379 billion in the current financial year and to continue to support Australia's economic growth and jobs, particularly in regional Australia," he said.

The Government is investing more than $1.3 billion to accelerate the development of Australia's hydrogen industry, including $464 million to develop clean hydrogen industrial hubs in regional Australia, including a potential hub in the Latrobe valley.

Energy transitions require innovation in power system planning – IEA

A recent International Energy Association (IEA) article explores how system planning, and in particular assessments of system adequacy, will need to innovate and evolve to allow power systems to keep delivering secure and affordable electricity supply during energy transitions.

The research draws on modelling of the Chinese power system undertaken by the IEA.

"The past year has seen a rising number of countries pledging to reach net zero emissions in the coming decades. Even many countries without net zero pledges are pursuing increasingly ambitious decarbonisation plans. Meeting these targets will reshape the power sector in the coming decades," the IEA notes.

"In 2021, the IEA released its landmark global roadmap, Net Zero by 2050, which detailed two parallel transformations for the power sector as it decarbonises. The first is that variable renewables will increasingly be the foundation of low carbon power generation."

"The second is that power will be responsible for an increasing share of total energy demand, as electrification becomes a pathway to decarbonisation. Emerging economies are central to global emissions reduction, since they typically have high shares of fossil fuel generation and because electricity demand is expected to significantly increase along with economic growth and greater electricity access."

"Increasing shares of variable renewable energy such as solar and wind will mean power systems need to become more flexible. At the same time, the traditional providers of this flexibility, mainly thermal power plants, will play a smaller role as decarbonisation objectives require their reduced use. Variable renewable generators depend on the availability of the sun and wind, and thus require complementary technologies to ensure that the balance between supply and demand is maintained at all times."

"New technologies, in particular batteries and other energy storage, biomass, and thermal plants either with carbon capture and storage or burning clean fuels will therefore play an increasing role to supply this flexibility," said the IEA.

"At the same time, growing use of electricity and new demand sources represent a huge opportunity to create a world where flexible demand is at least as important as flexible supply technologies."

"Such a system is going to look very different than today's power sector, and these changes mean we need to alter how we plan for a secure electricity system. Our understanding of demand needs to be much more than just how peak demand evolves, and our understanding of supply needs to be much more than how much dispatchable capacity is installed and what is the risk of an outage during supply peaks. In short, it is not sufficient to look only at the system's ability to stay balanced during selected tight moments."

Shifting away from centralised thermal power plants as the main providers of electricity makes power systems more complex. Multiple services are needed to maintain secure electricity supply. In addition to supplying enough energy, these include meeting peak capacity requirements, keeping the power system stable during short-term disturbances, and having enough flexibility to ramp up and down in response to changes in supply or demand.

IEA modelling for China in the Announced Pledges Scenario in 2060 illustrates how the technologies providing these services will be more varied in a net zero world compared with today.

Company News – AustChina Holdings, BHP Group, CS Energy, Fitzroy Australia Resources, Hexagon Mining, Incitec Pivot, Informa Connect Australia, NSW Independent Planning Commission, Sojitz Corporation, Tigers Realm Coal

AustChina Holdings Limited has entered into a non-binding Memorandum of Understanding with Fortress Capital Limited to conduct due diligence on a new technology that could enhance AustChina's energy portfolio through the conversion of solid fuels including coal, to generate cleaner environmentally responsible electricity. "This process has the potential to reduce carbon emissions and utilise fuel sources such as coal, municipal household and commercial waste that would otherwise go to landfill to produce energy for its own purposes or for sale to the electricity grid," AustChina Holdings said in a statement. AustChina will, after completion of the due diligence by March 2022, determine the applicability of the technology, and optimal application of the technology for the advancement of its energy portfolio. If the technology is beneficial, AustChina Holdings will secure the exclusive rights to the technology within Australia, all countries in the Middle East and will have first right of refusal to any territory outside the exclusive territory. AustChina has a JORC coal resource at its Blackall project, Queensland, of 1.3 billion tonnes of which 30 million tonnes is an Indicated Resource and the remainder Inferred Resource. The company said that it continues to explore methods for best use of its coal resource at Blackall and other energy projects.

BHP Group has announced that the UK Court has issued the Court Order sanctioning the Plc scheme of arrangement to effect unification. BHP said that it is anticipated that the Plc Scheme will become effective at 9:00pm (GMT) on 28 January 2022, when the UK Court Order is expected to be delivered to the UK Registrar of Companies.

CS Energy Limited has provided $123,000 in funding to 13 community groups in the Banana Shire and Western Downs Region Council areas of Queensland as part of its Community Sponsorships Programme. CS Energy offers two sponsorship rounds per year to community groups and not-for-profit organisations located in the regions that host its operations. CS Energy Chief Executive Officer, Andrew Bills, "In this latest round we've supported projects such as vital equipment for schools, safety upgrades for sporting clubs and events that contribute to the culture and lifestyle of the Biloela and Western Downs regions." "I encourage local not-for-profit groups to apply for our next round which opens on Thursday 20 January 2022," said Mr. Bills.

Fitzroy Australia Resources has lodged application to amend the environmental authority for the Carborough Downs project in Queensland. The application relates to the inclusion of a new relevant resource tenure for the authority that is a new mining lease on the Carborough Downs environmental authority EPML00959213. In making this decision under section 230 of the EP Act, the administering authority states that it is satisfied that the amendment application is for an environmental authority for a new mining lease.

Hexagon Mining Inc. has won the Mining Magazine 2021 Fleet and Equipment Award for its autonomous mission management system, marking the third time in six years that Hexagon has been honoured. The annual awards celebrate excellence and a commitment to advancing the state of play in mining. "Recently launched in partnership with Liebherr, the autonomous mission management system orchestrates autonomous fleet and unmanned mine traffic movements throughout the mine for optimised autonomous haulage," said Hexagon. "The one-platform approach to integrating multiple life-of-mine solutions empowers mines pursuing an autonomous future. Hexagon, a global leader in digital reality solutions, calls this the Power of One - a holistic, life-of-mine smart solution connecting sensors and software, infield apps and cloudware to empower digital transformation." Hexagon won Mining Magazine's Safety Award in 2017 and 2019 for its vehicle intervention system and operator alertness system, respectively. Hexagon was also shortlisted among the 2021 finalists in the safety and drill and blast categories. Hexagon's Mining division solves surface and underground mine challenges with proven technologies for planning, operations and safety. Hexagon has approximately 21,000 employees in 50 countries.

Incitec Pivot Limited has increased its production of AdBlue, a critical diesel exhaust fluid compound, by around 800 per cent. The Company recently produced over 3 million litres of AdBlue in a week, representing around 75 per cent of Australia's AdBlue needs. Incitec Pivot has also commissioned a dedicated AdBlue distribution facility in Brisbane, Queensland, which has the capacity to load the equivalent of three B Double trucks per hour. The 24/7 operations will allow more AdBlue to get to market efficiently and help boost consumer confidence. The Federal Government reached an agreement with Incitec Pivot in December 2021 following pressures in the urea market and implications of this on the supply of diesel exhaust fluid. Minister for Industry, Energy and Emissions Reduction, Angus Taylor, announced the establishment of the AdBlue Taskforce, led by James Fazzino, Chair of Manufacturing Australia and former CEO of Incitec Pivot, along with Andrew Liveris, former Chairman and CEO of The Dow Chemical Company and Director at Saudi Aramco, and Dr Cathy Foley, Australia's Chief Scientist. Additional industry members will be confirmed in due course. "The Taskforce will work across government and with industry to develop solutions to any potential future supply constraints. Options being explored include alternative international supply options for refined urea, bolstering local manufacturing capabilities and technical options at the vehicle level," Minister Taylor said.

Informa Connect Australia will present the Longwall 2022, the 20th Anniversary Australian Longwall Mining Conference on 7 and 8 March at the Crowne Plaza Hunter Valley New South Wales. Longwall 2022, the Nation's only gathering for elite underground coal miners, will aim for a return to the face-to-face networking and shared learning that has come to define the event alongside in-depth case studies, learnings through the COVID crisis, and technical insights. Topics to be presented include:

- The latest safety initiatives in the industry and key learnings
- Automation, remote operations, and data science to deliver further safety in longwall operations
- Productivity improvements to enhance tonnage

- Best practice longwall moves
- Gas drainage advancements
- Ventilation
- New technology and its application
- Skilled labour shortages, and strategies to overcome this
- Attracting a new generation of longwall miners to the industry

Further information and registration

NSW Independent Planning Commission is required to monitor and report on its key performance indicators (KPIs) in its annual report and quarterly on the Commission's website for state significant determinations. The Minister for Planning's Statement of Expectations for the Independent Planning Commission identifies key performance KPIs to ensure the ongoing timeliness and quality of its decisions. The Commission is expected to meet the following timeframes:

- 5 weeks (35 calendar days) for routine determinations (no public meeting or hearing) and modifications with political donations;
- 8 weeks (56 calendar days) for determinations subject to a public meeting; and
- 12 weeks (84 calendar days) for determinations subject to a public hearing.

The Commission has announced that, as at 31 December 2021, it is beating its timeframe KPIs for all case types:

- Routine determinations: 25 days
- Determinations subject to a public meeting: 45 days
- Determinations subject to a public hearing: 61 days.

Sojitz Corporation, CS Energy Ltd. and Nippon Engineering Consultants Co., Ltd. will begin a demonstration to transport renewable hydrogen produced in Australia to the Republic of Palau archipelago of islands, where there is currently a high dependence on fossil fuels for energy. This demonstration project specifically involves the use of solar power generation to produce green hydrogen in Queensland which will then be transported to Pacific Island countries for utilisation in small fuel cells and hydrogen fuel vessels that have the potential to popularise hydrogen use on islands. Sojitz said that it will serve as the representative for the project, and will provide overall management for the project, conduct a field study in Palau, and support the implementation of equipment. As joint partners on the project, CS Energy will generate and supply green hydrogen, while Nippon Engineering Consultants will conduct a study of hydrogen applications and forecasted hydrogen demand that accounts for the energy market demands in Pacific Island countries. The Queensland Government, who provided support for this application, announced a hydrogen strategy in 2019 which is supporting the development of a large-scale hydrogen industry in Queensland.

Tigers Realm Coal Limited (TIG) mined 303kt of run of mine coal from its Russian project and delivered 249kt to port at Beringovsky. Overall, during 2021 TIG mined 1 025kt of ROM coal which is 29% higher than in 2020. The quarterly average stripping ratio decreased from 3.5:1 in the September quarter to 3.4:1 in the December quarter. "Average annual stripping ratio for 2021 amounted to 4.0:1, a significant decrease from the 5.3:1 of 2020 which was due to focussing our mining activities on Seam 3, which material will be sent for further processing with CHPP in 1H 2022. Coal haulage to port increased to 926kt, a 47% increase over 2020. Maximum truck haulage per day reached 5kt<" TIG said in its December 2021 quarterly report. During 2021 TIG's loading rate increased to 8.2kt per weather working day (pwwd) compared to 6.5kt pwwd in 2020. "As TIG's port has a limited navigational season with weather conditions, particularly toward the end of the season, which can be unpredictable, it is critical to maximise loading when weather allows," said TIG. Multiple factors impact average loading rates, among these are effective scheduling of bulker arrivals, pre-season & intra-season dredging so that barges are able to work with maximum loads and proper planning of inter-season maintenance." TIG said that the building of 5th 500t barge is in progress and that TIG expects to receive the barge on site by the start of the 2022 shipping season. "This additional barge will further increase TIG's annual loading capacity and it has also been configured with a front-access ramp to enable better handling of incoming equipment and spares than the currently utilised 100t barges," said TIG.

Diary Dates

31 Jan – 02 Feb 2022	**IMARC - POSTPONED** IMARC expect to announce new dates within the coming weeks
Feb – Apr 2022	**NSW Resources Regulator 2022 Small Mines Roadshow** Dates and locations
22 Feb-02 Mar 2022	**MINEXCHANGE 2022 SME Annual Conference & Expo** Salt Lake City Utah USA
24 Feb 2022	**Austmine Mining Innovation Roadshow Newcastle** Noah's on the Beach Newcastle Further information
07-08 Mar 2022	**Longwall 2022** Crowne Plaza Hunter Valley NSW Further information
08 Mar 2022	**Resource Industry Network - International Women's Day Business Lunch** Mackay QLD
24-25 Mar 2022	**Resource Industry Network – 2022 Safety Conference** Mackay QLD
29 Mar 2022	**International Conference on Coal Geology and Geophysical Methods** Sydney NSW
28-30 Mar 2022	**Bowen Basin Geologists Group – Bowen Basin Symposium** Mackay Conference and Exhibition Centre QLD More information

28-29 Mar 2022	**Future of Mining Australia** Sofitel Sydney Wentworth NSW https://australia.future-of-mining.com/aus/en/page/home
05–13 May 2022	**Australian Institute of Geoscientists – 8th Mines and Wines Conference 2022** Further information
12 May 2022	**Queensland Mines Rescue Service Memorial Cup** Broadmeadow Mine QLD
21 Jul 2022	**First State Cup (EK Healy Cup)** Ensham Mine QLD
30 Aug 2022	**International Conference on Clean Coal Technology** Sydney NSW
09–16 Sept 2022	**International Mines Rescue Competition (IMRC)** National Mine Health and Safety Academy 1301 Airport Rd Beaver, West Virginia USA
20 Oct 2022	**58th Australian Mines Rescue Competition** Southern Mines Rescue Station NSW

Personnel

Vale – Fred Moore

Mining veteran Fred Moore has passed away peacefully at home with family by his side. He was 99 years old.

Mr. Moore started working in mines in western NSW aged 14 but moved to Dapto in the 1950s and worked in Southern District coal mines, where he became an activist within the Miners Federation and broader South Coast union movement.

He passed away in the same home in Dapto that he moved to all those years ago.

The esteem Mr. Moore is held in was demonstrated in 2020 - when May Day activities were cancelled due to COVID, the community brought May Day to Fred's Dapto home, planting flags in his front lawn. He had not missed a May Day celebration since he was 10 years old.

The May Day movement, the annual marches, toasts and activities were his favourite annual events as he took pride in marching at the head of both the Wollongong and Sydney parades and as a life member of both committees.

Mr. Moore was the first life member of the Miners Federation. He is known not only for fighting for the rights of the region's coal miners and working class but also his activism for women's and Aboriginal rights.

He personified values of solidarity, decency, respect and justice and leaves a legacy of struggle and working class leadership that will inspire workers for many generations to come.

Mr Moore was an activist until the end and a regular presence in the CFMEU Mining and Energy Union Wollongong office, which is aptly named Fred Moore House.

On May Day and every day that workers are fighting for justice, whether it be on the picket lines, in rallies, marches and in the workplace, he will be sadly missed.
Vale by kind courtesy of Mining and Energy Union

Bis Industries Limited has announced the appointment of **Elena O'Connor** to the new role of Chief Commercial Officer. Ms. O'Connor is also a member of the company's Diversity & Inclusion Steering Committee.

White Energy Limited Director, **Travers Duncan** has made the decision to retire and has tendered his resignation.

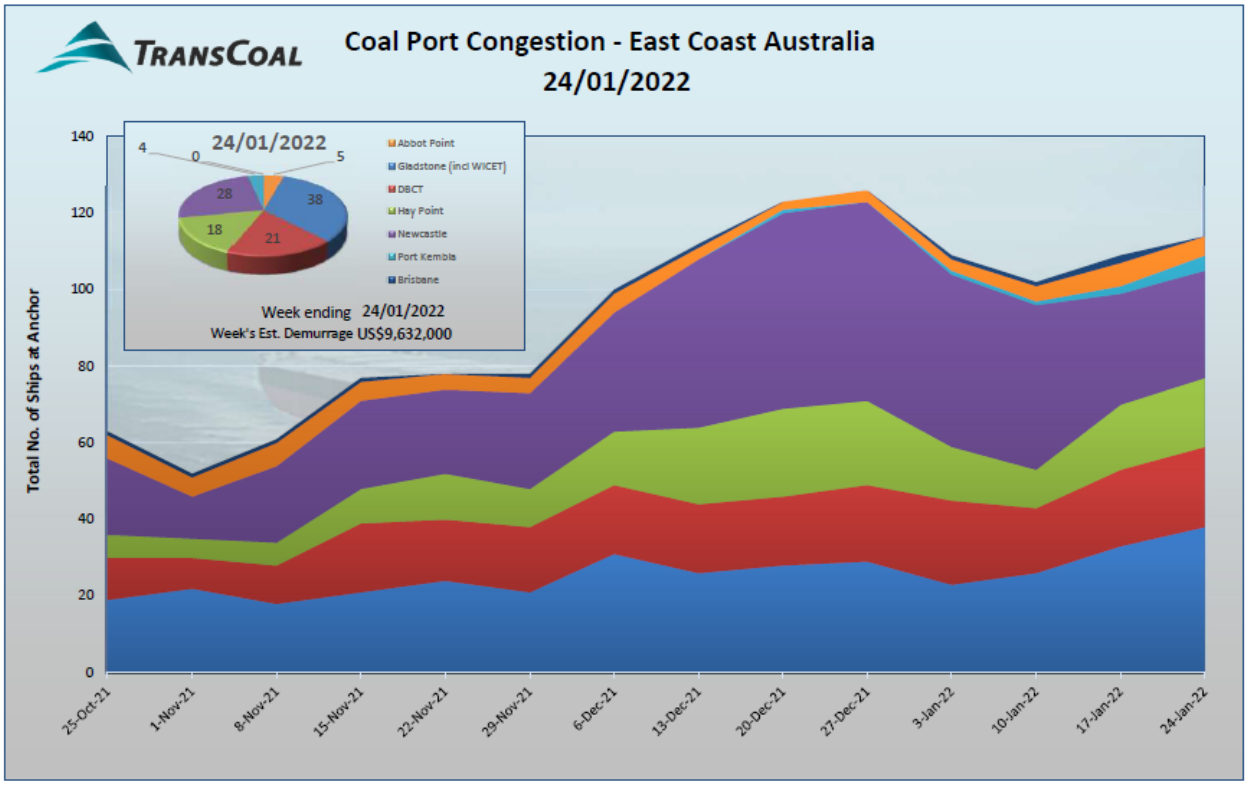
Safety
Weekly Incident Summary
Source: NSW Resources Regulator

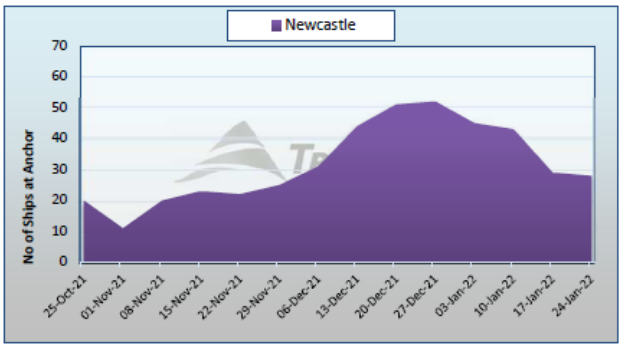
Weekly Incident Summary for week ending 14 January 2022

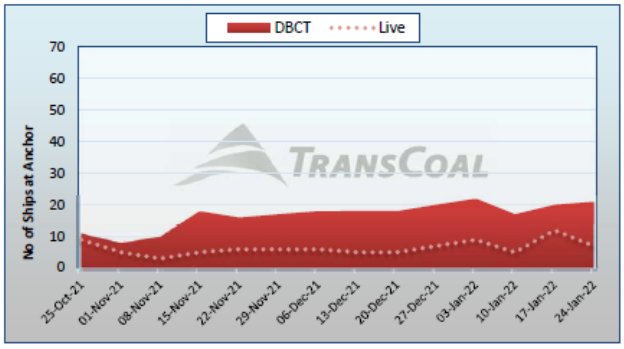
The NSW Resources Regulator has released its Monthly Business Activities Report for December 2021
View the Report

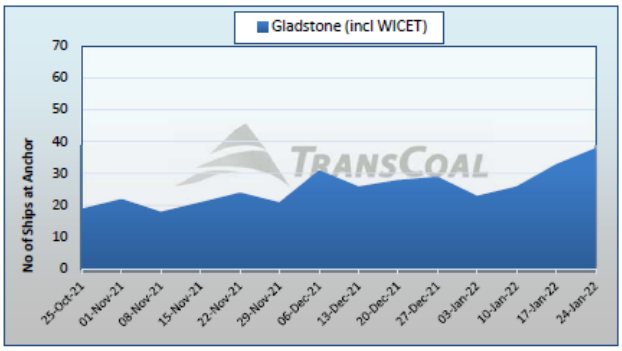
TransCoal Port Congestion Graphs

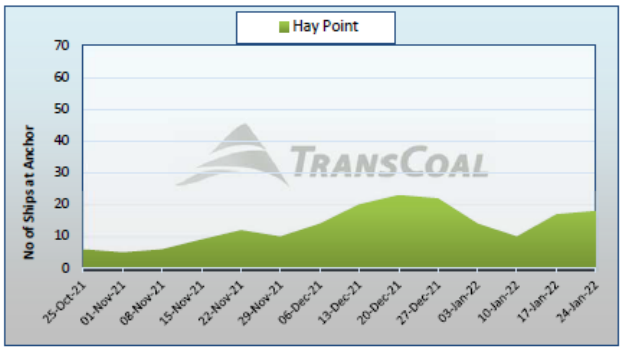
24 January 2022 - The overall vessel queue increased from 109 ships last week to 114 this week. Queensland's queue increased from 78 ships last week to 82 this week. New South Wales' queue increased from 31 ships last week to 32 this week.

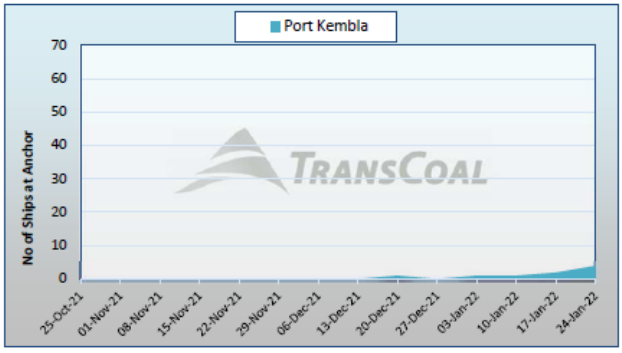


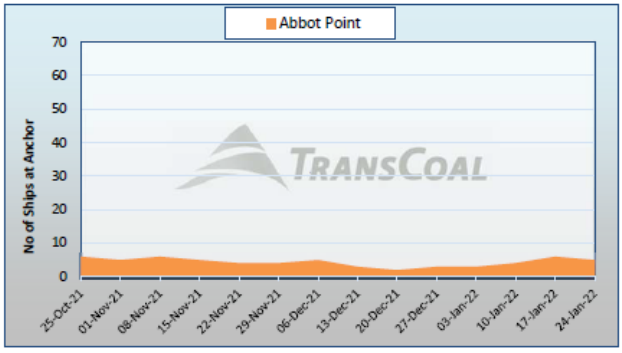












Braemar ACM Weekly Scope
25 January 2022

Vessel DWT	Australian Round Voyage			Far East Mediterranean/Continent			Mediterranean/Continent - Far East		
	Last week	This Week	Change	Last week	This Week	Change	Last week	This Week	Change
28,000	$19,000	$18,000	-$1,000	$18,000	$17,500	-$500			
32,000	$20,000	$19,000	-$1,000	$19,000	$18,500	-$500			
38,000	$23,000	$22,000	-$1,000	$21,500	$21,000	-$500			
58,000	$20,000	$16,500	-$3,500	$15,500	$15,500	$0	$29,200	$27,100	-$2,100
74,000	$17,000	$17,000	$0	$16,000	$14,000	-$2,000	$19,500	$26,000	$6,500
180,000	$8,637	$4,873	-$3,764	-$4,253	-$8,684	-$4,431	$36,195	$28,389	-$7,806

Note: The trades 28K, 32K, 38K & 52K & 58K DWT sizes rates are assumed to be DOP South East Asia. All other sizes are assumed DOP North Asia.

Vessel DWT	1 year period	3 year period
38,000	$20,000	$18,000
58,000	$18,500	$13,000
82,000	$22,500	$18,000
180,000	$22,250	$19,850
210,000	$28,000	$24,500

CAPESIZE
A slightly softer tone was felt in the Pacific this week as we saw C5 lose around 25 cents in value since Monday. As the West Australia miners move towards mid-February dates, it has resulted in ships with earlier dates scrambling to find cover. A fresh cargo came into the market today looking for 5-7 February laycan in Teluk Rubiah, heard to have fixed at low $4/mt range, which we calculate it to be around negative $2,500/day on a standard Baltic type. However, we believe that this fixture does not reflect the current sentiment in the market as we are seeing more peripheral demand from operators looking to take cover in light of upcoming Chinese holidays next week. In addition, we are seeing some interest from Panamax operators, who are willing to take a Cape given current market levels. As we move towards mid-week, we expect more activity and rates in the Pacific to be range bound.

Over in the Atlantic, one of the Brazilian miners have lifted force majeure and is looking to take in tonnage from 4th February onwards. This is the first positive news in a couple of weeks which is welcomed for owners who are sailing west of Singapore. However, the same could not be said for other miners with most of them claiming to be well covered for February dates and next likely spot requirement will be from March onwards. Overall, fundamentals still look weak for the Brazilian market, and we will need to see more demand to provide any support to rates.

PANAMAX
The past week has further exacerbated the negative start Panamax sector has endured this year. The combination of thin cargo volumes vs a long tonnage count has seen the Panamax market further decline. This has been further aggravated by dwindling mineral requirements from the North Atlantic basin. Subsequently, the Asian market mirrored the Atlantic with considerable supply and demand imbalances. The exception in the market lies herein the thriving demand from Australia. However, this has done little to rectify the disparity in tonnage count.

One of the few positives to come from the last week has been the lifting of the Indonesian coal export ban. This has seen a conspicuous shift in market sentiment, which has largely been derived on the back of swelling in the FFA market.

An increase in demand derived from a healthier Indonesian market has seen cautious optimism but this has been somewhat tempered as analysts are aware that the physical fundamentals remain largely unchanged. The noise surrounding the incremental improvements seen in the Pacific may yet be stifled with the encroaching Chinese holiday period.

SUPRAMAX

Market remains on similar levels as last week, showing some temporary resistance before festivities in China. Vessels in Southeast Asia offer in the upper teens / $20,000/day mark for trips to China, while charterers' bids are in mid teens. There is some period demand with owners willing to compromise for shorter than longer in the $20,000/day to very low $20,000/day mark for Supramax, in view of the current uncertainty/ volatility. Ultramaxes are looking at $23,000-24,000/day range for 3-5 months.

With the ban in Indonesia seemingly over, market in the Indian Ocean started with a firm sentiment this week with positive indices. Without having seen any real reflection in the rates as yet, the mood was definitely more positive perhaps giving rise to a renewed sense that the CNY slump might have bottomed out. South Africa has seen an increase in cargo, but there appears to be enough tonnage to keep things on an even keel, with still some distance between TCE voyage and TC fixing in the market. With little options ex-ECI and hope of fresh cargoes ex-Indonesia, South Africa still remains the most viable option for owners from that potential ballast area. South Africa fronthaul rates for an Ultramax are at around $20,000-21,000/day DOP and for Supramax in the high teens. This rivals most of what they see from the coast.

PG and WCI remain the firmest area with a lot of owners wanting to stay in the region by discounting to stay in the area, around high teens to very low $20,000/day for a Supramax, delivery WCI or cash in and go to Bangladesh where we see levels creeping up into the mid to mid-high $20,000/day. Some uncertainty remains as to whether we have just reached a bottom or whether we are on an upward curve.

HANDYSIZE

The week began on the soft side with the market seemingly significantly oversupplied. Rates decline as a result, especially on the inter-Asia trips. Quick trips on spot for 32,000-34,000 dwt were heard fixed well into the mid teens. However, by ends week much of the prompt tonnage had cleared out and the cargo/tonnage count feels much more balanced. Rates seem to have stabilised in the region. Furthermore, rates for backhaul and short period remained mostly stable with only very small dips on these longer duration businesses. Short period interest remains high across both north and south Asia, however, not much has been heard concluded this week. The bid/offer spread on 32,000 dwt loggers for short period is around $20,000/day vs $22,000-23,000/day. Large non loggers Handys are fixing around low/mid $20,000/day for SP. For trips loading Australia, basis delivery Singapore, rates are as follows: 28,000 dwt at $15,000-17,000/day, 32,000 dwt at $17,000-19,000/day and 38,000 dwt at $19,000-20,000/day. Sentiment for next week remains muted and soft, given the more balanced tonnage/cargo count, rates are not expecting to slide as much as at the beginning of this week. Any recovery is not expected until post CNY, however sentiment is that we've seen the worst of the drops in Southeast Asia.

In the Far East, sentiment has been on the gloomier end, with activity further slowing down from lack of prompt requirements needing to be covered this week. As prompt tonnage accumulated there was downward pressure on spot / prompt TCT levels especially on the shorter duration trips. However, SP levels concluded only slightly lower as compared to last week's. CIS activity seemed parched most of the week but requirements for Vanino callers remained in demand, allowing a premium on such tonnages. Offers for short trips at the weeks close were seen roughly as follows 28,000/32,000/38,000 dwt at around $16,000-18,000/day / $18,000-20,000/day / $22,000-25,000/day. Longer duration trips and Australian inquiries remained subdued with some bids at low-mid teens on the $28,000 dwt at the start of the week. NoPac round voyage bids started around high teens basis Japan, against most starting offers around $23,000-24,000/day CJK-Japan range. Overall sentiment remains soft with a few prompt vessels remaining and is expecting to remain so until post-CNY.

Commodities (USD)						
Coal	Ther.Newc.6k	Change	Ther.Kalim 5k	Change	Cok.Prem.Oz	Change
	$225.25	$4.75	$97.50	$1.35	$444.50	$33.50

Bunkers (USD)						
Port	*HSFO*	*Change*	*VLSFO*	*Change*	*MDO*	*Change*
Singapore	$501.00	$22.00	$687.00	$11.00	$760.00	$18.00
Hong Kong	$528.00	$49.00	$704.00	$34.00	$747.00	$25.00
Japan	$575.00	$11.00	$693.00	-$33.00	$873.00	-$27.00
South Korea	$541.00	$11.00	$691.00	$16.00	$787.00	$34.00
As at 25 Jan 2022 (Source: Universal Bunkering Pty Ltd)						

Indices			
Date	*25 Jan 2022*	*18 Jan 2022*	*Change*
BHSI	1,065	1,162	-97
BSI	1,693	1,840	-147
BPI	1,988	2,223	-235
BCI	745	1,316	-571
BDI	1,343	1,644	-301
As at 25 Jan 2022 (Source: Baltic Exchange)			

Braemar ACM Dry Bulk Research Update - 25 January 2022

Some Indonesian miners cleared to export

- Following on from last week's update, it was reported 139 coal producers had met the Indonesian government's domestic market obligations and were cleared to resume exports as of Thursday.
- As a result, daily coal exports out of the country have started to ramp up in recent days, with liftings totalling 5.9m tonnes last week, more than double compared to the week previous.
- With a price cap set on domestic sales, coal miners in the country have preferred selling to the seaborne market to obtain higher prices.
- Daily export volumes hit their highest level in 2022 on January 22, amounting to 2m tonnes, compared to a daily average of 1.2m tonnes in 2021.
- Dry bulk congestion in the country, as a result, has declined this week as more cargoes were cleared for export, with several ships having opted to wait for the easing of restrictions instead of ballasting elsewhere for cargoes.
- Queues of unladen bulk carriers declined by 14.8% WoW in Indonesia, falling 15.3% below the 5-year average.