



The 4th Quarter of 2019 Management Discussion and Analysis (MD&A)

Our Key Performance Indicators:

Consolidated Financial Performance (US Dollars Terms):

The results, audited by EY Office Ltd., show you the latest financial position of Precious Shipping Public Company Limited and its subsidiaries ("the Company"). The earnings per day per ship during Q4 came in at USD 10,628, taking the annual figure to USD 9,622. Please look at the Market Segmentation report that shows you the relative performance of the PSL fleet's earnings per day per ship compared to the Index ships. In this quarter, daily operating costs were USD 4,788, which has taken the annual costs to USD 4,778 per day per ship, or slightly higher than our target of USD 4,750 for the year and higher than the actual of the previous year. The EBITDA was USD 13.30 million during Q4 and USD 44.49 million for the year. In Q4 we made a net profit of USD 0.87 million, with earnings per share of Baht 0.02. This is the first quarterly profit for this year. In year 2019, we made a net loss of USD 7.25 million, with loss per share of Baht 0.15.

THE HARD FACTS	2019	2018	Q4 2019	Q4 2018
Highest earnings per day per ship in USD	24,937	20,557	24,937	20,557
Average earnings per day per ship in USD	9,622	11,063	10,628	11,274
Av. earnings per day per Handysize ship in USD	9,002	10,355	9,132	10,461
Av. earnings per day per Supramax ship in USD	9,961	11,038	12,121	11,242
Av. earnings per day per Ultramax ship in USD	10,712	12,772	12,502	13,239
Operating cost per day per ship in USD	4,778	4,621	4,788	4,785
EBITDA in million USD	44.49	68.20	13.30	17.77
Net Profit/(Loss) in million USD (excluding Exchange gain (loss) and Non-recurring items)	(7.07)	14.26	0.94	4.64
Net Profit/(Loss) in million USD	(7.25)	14.10	0.87	4.56
Earnings (Loss) Per Share in Thai Baht (excluding Exchange gain (loss) and Non-recurring items)	(0.14)	0.30	0.02	0.10
Earnings (Loss) Per Share in Thai Baht	(0.15)	0.29	0.02	0.10

Consolidated Financial Performance (Thai Baht Terms):

For the year ended 31 December 2019, the Company incurred a net loss of Baht 228.49 million as compared to a net profit of Baht 456.20 million in 2018. The main reasons for the changes are as follows:

1. The absolute Net Vessel Operating Income (Vessel Operating Income net of voyage disbursements and bunker consumption) for the year 2019 were 17 percent lower than the Net Vessel Operating Income for the year 2018. This is mainly due to the decrease in the average earnings per day per Vessel which declined from USD 11,063 in 2018 to USD 9,622 in 2019, because of weaker Dry Bulk Freight market. The fleet size as on 31 December 2019 was 36 vessels.
2. Absolute Vessel running expenses are 3% lower compared to the Vessel running expenses in 2018, mainly due to the lower exchange rate used in translation from US Dollar to Thai Baht. However, when measured in US Dollars, the average Vessel operating expenses (Opex) per day per Vessel (including depreciation/amortisation of Drydocking/Special Survey expenses) increased from USD 4,621 for 2018 to USD 4,778 for 2019, mainly on account of higher drydocking and special survey expenses.
3. Administrative expenses (including management remuneration) for 2019 came in Baht 92.83 million higher than the figure in 2018, mainly due to the increase in legal fees related to the ongoing arbitrations with Saintry Shipyard and a one-time recognition of the additional severance pay rates as required under the Labor Protection Act (No. 7) B.E. 2562.
4. Finance cost for 2019 were Baht 122.42 million lower than the figure in 2018, due to lower interest expenses because of lower outstanding long-term loans.

Market Segmentation: During Q4, the Baltic Handy Size Index (BHSI) averaged 565 points, derived from the average Time Charter (TC) rate of USD 8,190. Compared to that, **our Handysize earned USD 9,132 and outperformed the BHSI TC rate by 11.50%**. During Q4, the Baltic Supra Index (BSI) averaged 956 points, derived from the average Time Charter (TC) rate of USD 10,764. In comparison, **our Supra/Ultra earned USD 12,121 and outperformed the BSI TC rate by 12.61%. Our Ultras earned USD 12,502 and outperformed the BSI TC rate by 16.15%** (as there is no special index for the Ultras, we have compared them with the BSI). Our target to outperform both the indexes was achieved.

The SET Opportunity Day will be held at the SET building at 9:00 hours on the 19th day of February 2020. We hope that many of you will attend this event where the Company will get a chance to thoroughly discuss the 2019 results and the prospects for 2020. For those of you who cannot attend physically, the SET [live web casts](#) the presentation giving you a chance to be present via the web.

Ship recycling has had a slow year with a total of 8.23 MDWT of ships being recycled during 2019 across all sectors of the dry bulk market as compared to 5.25 MDWT in 2018. The existing age profile at the end of the year 2019 (60.62 MDWT or 6.94% of the world fleet being greater than 20 years old), together with low levels of the order book to fleet ratio (9.31% up to end 2023), should result in the world dry bulk fleet growing at the slowest pace since the turn of the century. **Healthier recycling is expected in 2020 due to the number of 20+ year old ships in the world fleet as well as regulatory pressures from BWTS and IMO2020 on these ships.**

Long Term versus short term Charters: The long-term charters, over 1 year, already booked as of 31st December 2019 are shown in the chart below. As can be seen, our forward four

year (2020 to 2023) rolling book is currently at the 15.8% level with a visible revenue stream of USD 115.80 million.

Year	2019	2020	2021	2022	2023
Total Available Days	13,140	13,176	13,140	13,140	13,140
Fixed T/C Days	2,409	2,196	2,190	1,992	1,825
%age Fixed T/C Days	18%	17%	17%	15%	14%
Av. T/C Rate/Day in USD	13,585	13,875	13,875	14,211	14,550
Contract value in million USD	32.7	30.5	30.4	28.3	26.6

It is our intention to continue to charter out our ships on long term period contracts whenever practical and economically viable.

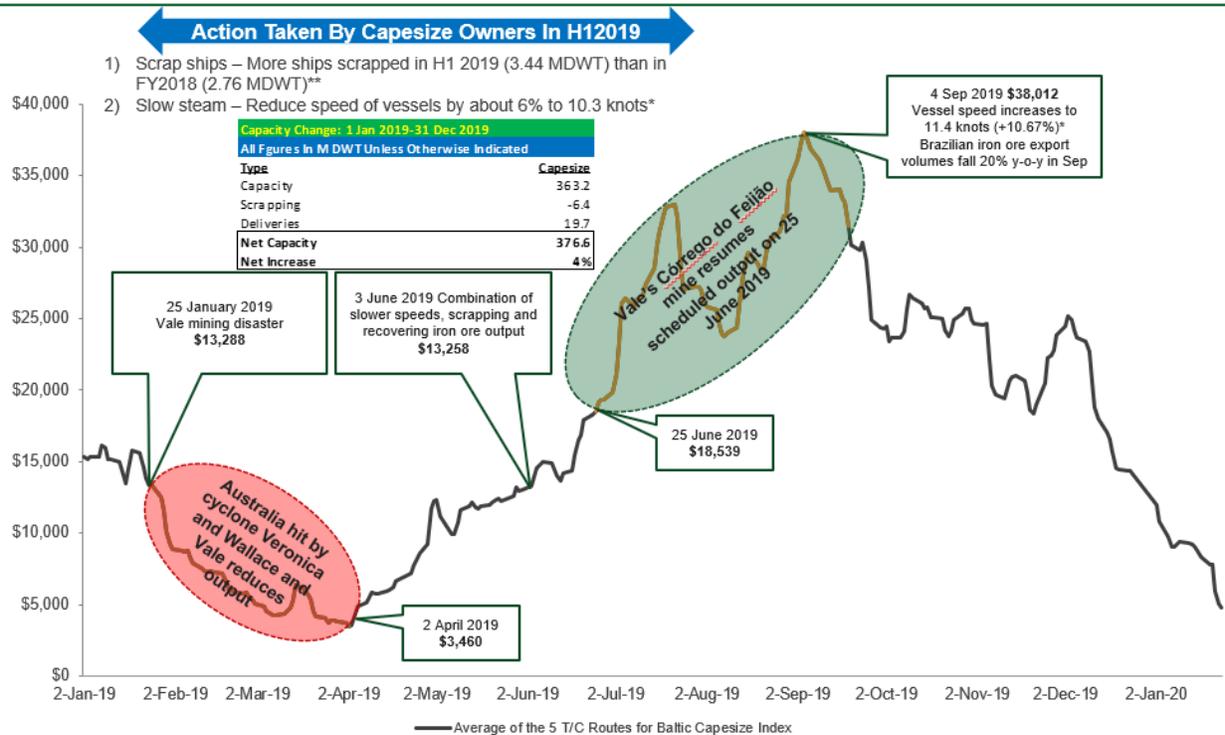
BDI Developments and our read of the market:

The Baltic Dry Index started the year at 1,282 points; averaged 798 points in Q1; 995 points in Q2; 2,030 points in Q3; and 1,562 points in Q4; and ended the year at 1,090 points on the 24th December 2019. Though demand has grown as can be seen from the cargo numbers for China, **net increase in supply has accelerated to 32.61 MDWT to take the year end number to 873.43 MDWT.** 8.23 MDWT of dry bulk ships have been recycled in 2019 compared to last year's 5.25 MDWT. **If recycling doesn't accelerate, the BDI will continue to remain very volatile, solely dependent on what the demand side does. In other words, ship-owners are not helping their cause by not recycling older ships, making the recovery in 2020 and onwards slower, extremely volatile, and totally dependent on demand continuing to outperform.**

To understand the Dry Bulk Freight Market during 2019 we looked at the average daily Time Charter rates of the Capes that started the year at USD 15,344 per day on 2nd of January. On the 25th of January 2019, the day that the infamous Brumadinho mining disaster took place in Southern Brazil, Capes were averaging USD 13,288. This incident which resulted in the **loss of more than 250 lives, effectively shut down all mines in Southern Brazil** that annually exported approximately 90 MMT of iron ore out of an annual total export volume of about 390 MMT. **At the same time, there were two major back-to-back tropical storms, Veronica and Wallace starting on 18th March and ending on 16th April, in Australia that further reduced Iron Ore availability.** As a result, the **daily Cape rates collapsed to USD 3,460 by the 2nd of April.** Cape owners then took two steps. **More Capes were scrapped in the FH of 2019 (3.44 MDWT) than in all of 2018 (2.76 MDWT).** Secondly, **Cape owners reduced their ship speeds by 6% to about 10.3 knots an hour.** Due to these two steps, despite the lack of Iron Ore cargoes being available in 'normal' volumes from either Brazil or Australia, supply of Capes tightened enough so that **these ships were earning USD 13,258 per day by the 3rd of June!** Cape rates stood at USD 18,539 on 25th June, which is when Brazil's Brumadinho mine recommenced normal operations. The storm impact in Australia had reversed by this time as well. **Cape time charter rates went up like a rocket, thereafter, resulting in daily rates reaching USD 38,012 by the 4th of September!** Of course, by then owners of Capes increased the speed of their ships to 11.4 knots an hour, or by 10.67% from the low on 2nd April, adding a lot of 'extra' supply of ships into the market. Cape rates then started to decline to reach USD 14,337 on 24th December, the last trading day of the year. **The two clear takeaways from these time charter rate changes are: supply demand balance has almost been reached; and, any small changes in cargo**

availability/demand or any small change in supply of ships, through recycling or slow steaming, can have an extraordinary impact on the daily Time Charter rates.

Supply & Demand Imbalances and Their Impact on Capesize Rates



Notes: *Speed reduction estimate from DNB Markets (4 Oct 2019), ** Internal Estimates, Source: Capesize vessel rate data – Clarksons, as on 22 Jan 2020

Coming to **IMO2020** and its possible impact on the geared Dry Bulk sector (10K to 70K DWT). In our sector of the market, just **5.22% of ships by DWT (17.29 MDWT)** are scheduled to fit **Scrubbers** whilst most owners (94.78% or 313.83 MDWT including new buildings delivering till end 2023) are burning compliant low sulphur fuel oil (LSFO). In this sector, at the end of 2019, there were 313.38 MDWT of ships of which **31.79 MDWT were over 20 years of age**. When these **older ships** were designed and built prior to 1999, the average price of oil was just **USD 19.7 per barrel**, with the price dipping to as low as USD 10 per barrel during the throes of the Asian crisis in 1998/2000. **The average price of oil from 2000 to 2019 has averaged USD 61.8 per barrel** with a peak of USD 147 per barrel reached in 2008. **In the era of cheap oil ships were designed for power rather than for fuel economy**. The reverse has been true since 2007 with power being the proverbial sacrificial lamb on the altar of fuel economy. **From 1st January 2020, all ships are forced to consume LSFO which will be much cleaner for the environment but certainly more expensive**. To minimize this higher cost of LSFO, ships speeds will be slowed. As explained in the above paragraph on the Capes, **slowing of ship speed reduces or tightens the supply of ships**. Besides, the 10.14 % of ships older than 20 years of age that consume more LSFO per day, as they were designed in an era of cheap oil with power and not fuel economy in mind, will find it increasingly difficult to get gainful employment, further tightening the already tight supply of ships in the geared sector. **One way or another, through increased recycling of the older and more fuel-thirsty ships built 20 or more years ago or from slowing down of the younger ships to minimize the high cost of burning more expensive LSFO, we would get a pleasant supply side dividend starting from Q1 2020 onwards**. With the forward order book in the geared sector representing just 5.87%, **new deliveries will not be able to match**

the reduction in supply due to increased recycling and slow steaming. The freight market may therefore have strong enough legs to keep running in the coming years!

China has been the stellar performer, and this has helped to drive time charter rates higher as the year progressed. However, with the coming **onset of Chinese New Year on 25th January 2020 weakening demand**, the BDI will follow the traditional seasonality script of a sharp decline, ending about a week after Chinese New Year. This decline would normally be followed by a sharp upturn in rates thereafter making a traditional V shape movement. **With the new directives on restricted manufacturing** in key industries in **14 provinces from 2019 through to 2021**, we had predicted at this time last year, that **the BDI in these future years would reach a peak in mid-October followed by a decline till end February before the V shaped recovery manifests itself all the way to mid-October.** It appears that our reading of the 'new' BDI seasonality has been spot on.

We have done some statistical analysis on data from the IMF (world GDP growth rates) and Clarksons (tonne mile growth rates) starting from 2000 to the end of 2019 and found that **over the 20 year period, the average difference between** world GDP growth rates and tonne-mile growth rates is not statistically different from 0.0%. This indicates that the data at hand provides a good **heuristic or rule of thumb that if you add 89 basis points to world GDP growth rates you would arrive at tonne-mile growth rate for that year.** This means that you would be more often right than wrong when you use this rule of thumb to determine tonne mile growth rate.

The latest pronouncements from the **IMF indicate that world GDP growth rates for 2019 would be 2.9%; for 2020 3.3%; and 3.4% for 2021 hence tonne-mile growth rates would be about 4.19 and 4.29%** in 2020 and 2021 if we were to apply the rule of thumb heuristic that we have got from the 20 years data that we have analyzed. **According to Lloyd's List Intelligence Dry Bulk Outlook tonne-mile growth rate would be 3.7% for 2020.**

Our read of the **growth in supply based on Clarksons data has a net fleet growth rate of 4.07% for 2020 and 1.97% for 2021.** Please note that we have **NOT assumed any pressure on recycling** due to IMO 2020 in our supply side calculations.

If our conservative reading of both the demand growth rates and the supply side turns out as per our predictions, then 2020 and 2021 should be reasonably good years.

We have a Phase I deal on the current trade war between the US and China! The latest news from Bloomberg indicates that **China will increase purchases from the US, over the 2017 baseline, by USD 100 billion per annum for 2 years and the US has agreed not to post any further tariffs on exports from China.** The three raw materials that China could easily buy from America would be grain, coal and oil/gas. In 2019 China imported 150.5 MMT of coal from Indonesia which is about 6 days away from China. **If this 150.5 MMT was substituted by American coal, then it would take 42 days or be 7 times more tonne mile intensive than the same volume of coal from Indonesia.**

On the supply side we expect **net supply to increase at about 4.07% during 2020 and 1.97% during 2021 whilst tonne-mile demand should be growing at around 2.7% in 2020 (asper Clarksons research),** which is more than double the demand growth seen in 2019, when supply grew by 3.88%. **This gap between expected demand growth (take your pick from our heuristic model 4.19%, Lloyd's List's 3.7% or Clarksons 2.7%) and our expected supply growth in 2020 of 4.07%, with ZERO pressure on increased recycling from IMO2020, should make for an increasingly volatile market.** If, as suggested under the heading 'regulatory

pressures', **the supply side gets a dividend by the recycling of the very old ships**, slow steaming by the rest of the owners who are using LSFO, and forced down time in dry docks for those owners who are still retrofitting scrubbers, then **the market would further benefit from this tightening of available ships on the supply side.**

We are currently more confident about the prospects in 2020 than we were a few weeks ago thanks to the **process of global economic tensions being resolved**; a big win for the conservatives **removing the uncertainty of Brexit**; a **Phase 1 Trade Deal** being announced between the US and China; signing of the **'new' NAFTA trade deal between USA, Mexico and Canada**; the US Federal Reserve confirming that it would provide **enough liquidity to ensure short term interest rates do not spike**; and the **Chinese government** clearly stating that they **would employ as much stimulus as was needed** to keep their economy chugging along at a brisk pace. The fly in the ointment, as usual, was **President Trump's assassination of the 2nd most powerful man in Iran, General Soleimani**, ratcheting geopolitical tensions to new highs.

As always, the dry bulk market will have the same macro issues of supply/demand balance dominating the narrative. **Demand has strengthened as the year 2019 has progressed** but recycling has been so weak that **net supply has grown by 32.61 MDWT or 3.88% during 2019**. **As supply and demand balance is very close, the secular recovery would be characterized by extreme volatility as any small change in demand or supply would have a disproportionate impact on the BDI and profitability.**

The volatility of the BDI (634 points on 4th February 2019 and 2,518 points on the 4th September 2019) should not have come as a surprise to anybody that has been reading our quarterly newsletters or our Annual Reports of the last few years. We have been consistently saying that the demand supply balance has almost been reached or is very close. But with ship recycling having come to a complete halt **it has been the demand side that had been holding up the market and the BDI**. And we kept warning anyone that would listen that **though the fundamentals look good, ship owners weren't helping their cause by bringing ship recycling to a virtual halt**. We had all along, suggested that the dry bulk recovery would be solely demand led and would, therefore, be extremely volatile, prone to any movement, no matter how small or large, in the demand side of the cycle. **The net supply** growth rate has been more than needed in the interim years since Q1 2016 and **appears set to grow during 2020 and 2021 at an average rate of 3.06% per annum** based on relatively conservative assumptions. The reason for that growth has been the strength of the market. The stronger the market, the weaker the recycling of ships, as a result, net fleet growth has been stronger than anticipated over the last two/three years **as recycling has remained weaker than anticipated**. The demand side had been hurt with the trade war between the USA and China continuing to grow during 2018 and 2019 **hurting sentiment around the world and slowing down economic growth rates, resulting in lower tonne-mile growth rates for all cargoes during 2019**. Weaker demand, due to the economic slowdown in world GDP growth rates, being exacerbated by the seasonal slowdown in demand due to the approaching Chinese New year on 25th January 2020 and the anti-pollution drive in China via forced reduction in manufacturing reducing demand for raw materials in the Steel/Cement/Aluminum industries in the winter months, **coinciding with the faster net growth in tonnage, due to ridiculously low recycling rates has resulted in the current sharp correction in the BDI**, and its component sub-indices, going into the end of 2019 and the start of 2020. The solution has been ever-present but **ship owners are their own worst enemies and their refusal to get on with recycling has led us to the current situation where the demand side of the market is no longer able to absorb all the ships that haven't been recycled**. So, is there a fundamental problem on the demand side? We don't think so. **The demand side has been hit by a confluence of factors** starting with the trade war, slowing world GDP growth rates,

traditional Chinese New year slowdown, accidents at various iron ore mines in Brazil and weather related slowdowns in Australia - all **coinciding with the accumulated growth in the net supply of ships over the last few years due to a virtual halt in ship recycling. The perfect storm, you could say. And yet the solution is staring ship owners in their collective faces. Recycle more ships; stop ordering additional new ships; delay new ships already ordered. Simple, but apparently impossible to get done.**

Others' reading of the market:

Monthly Iron Ore export volumes from Brazil steadily declined over Q1 and hit a low of 17.6 MMT in April 46% lower than average monthly volumes over 2018. Chinese crude steel production over the first 10 months of the year is up 7.5% YoY and floor space under construction has been growing at around 9% YoY since April. November also saw China's manufacturing sector come out of contraction, a positive sign for raw material demand. We still don't see a particularly exciting demand picture for Capes in 2020. Growth in the iron ore trade limited by peak steel production in China, and iron ore majors' strategy of profit margins over export volumes is a bearish signal for freight. And the 27.7 MDWT of Cape capacity slated for delivery in 2020 (8% of the current trading fleet) represents another hurdle for the market to overcome. However, we do expect the slow steaming effects of IMO2020 and the capacity off-hire for further scrubber installations to provide a welcome boost to utilization in the coming months. (Braemar ACM – 5 Dec 19)

On Friday, several bricks got knocked out of the market's proverbial "wall of worry" all at once. **First** there was an early and unexpectedly big win for the Conservatives in the UK, which **eliminated the dreaded tail risk of a hung parliament that would further drag its feet on Brexit.** Then, the **US and China appeared to come to some sort of trade agreement** (though you could describe it as more of a "trade truce"). The **Federal Reserve also announced it would aim a fire hose of liquidity** to soothe money market nerves ahead of the year-end, and **China suggested it would improve its fiscal stimulus to boost its economy.** (Bloomberg: Five Things to Start Your Day – 16 Dec 19)

Should American investors, \$6 trillion richer after the stock market's best year in six, take shelter now, convinced a reckoning is at hand and the good times won't last? As far as earnings, the economy and equities themselves are concerned, **the answer is no.** Or at least, not necessarily. Past performance isn't always indicative of future results. But if you're looking at the size of this year's gains and deciding they somehow doom 2020 to be a disaster, history suggests a more nuanced approach is called for. **Good stretches in stocks are not usually followed by bad ones. When the S&P 500 has risen 20% or more over a calendar year, it's had positive returns in the next year two-thirds of the time.** Average gains were more than 6.5%, according to Bespoke Investment Group. **Record stocks have usually foretold improving earnings, as well.** "The market is forward-looking and taking in all the positive data, and there's more positive data right now than negative," Katerina Simonetti, a senior vice president at UBS Financial Services, said in an interview at Bloomberg's New York headquarters. **"The market is positioned for growth in 2020."** (Bloomberg – 28 Dec 19)

China's manufacturing sector continued to expand output in December, adding to evidence that the world's second-largest economy is stabilizing as the signing of a phase one trade deal with the US nears. The manufacturing **purchasing managers' index remained at 50.2,** according to data released by the National Bureau of Statistics on Tuesday. The outlook for export-oriented

firms brightened, with a **sub-index of new orders for export rising above the 50 mark for the first time since May 2018**, production recovered for a second month and output prices narrowed their decline. (Bloomberg – 31 Dec 19)

China's central bank trimmed the amount of cash that lenders must hold in reserve, injecting funds into the economy and signaling continued action to reduce borrowing costs for companies. The required reserve ratio for commercial lenders will be lowered by 50 basis points from Jan. 6, releasing about 800 billion yuan (\$115 billion) of liquidity into the financial system, the People's Bank of China said on its website Wednesday. The cut aims to help banks reduce their lending rate to businesses, the PBOC said in a separate statement. **Currently, the required reserve ratio is 13% for big banks and 11% for smaller ones.** (Bloomberg – 2 Jan 2020)

In 2020, the dry bulk trade is forecast to grow by 3.7% to 5.58bn tonnes. Over the next five years, total growth is forecast at 3.7% per year, compared with 3.1% in the previous five years. (Lloyd's List – 2 Jan 2020)

The view from Beijing is looking a bit rosier. The testiest days of the trade war seem to have receded. Economic growth is stabilizing. Reforms are being unveiled and markets opened. Well, the 2020 outlook isn't all rosy, to be sure. **The situation in Hong Kong remains unpredictable.** America's presidential election won't make the relationship with China any simpler or a **phase-two trade deal any more likely.** And Beijing is still **trying to defuse the country's massive debt problem.** But China does appear to be in a better place today than it was a year ago. As 2019 opened for business, the mood was acutely dour. It began with a contraction in Chinese manufacturing stoking concerns about growth, made all the worse when Apple announced a surprise cut to its sales forecast because of weakness in China. By comparison, the start to 2020 feels far more agreeable. Take trade for example. **A phase-two deal seems tough, but phase-one looks like it's "in the bag,"** as White House adviser Peter Navarro put it. What's more, **the latest data indicate improving economic conditions. China's much-watched manufacturing sector showed expansion for a second consecutive month in December**, after contracting in each of the six months prior. Other early indicators for China's economy, from **copper prices to South Korean exports, suggest the same trend.** There's even reason for **optimism on a slightly longer horizon.** In the final weeks of 2019, **Beijing announced a slew of reforms aimed at revamping state-owned firms, supporting the private sector and ensuring the freer movement of labor.** Those measures, together with earlier **pledges to give foreign companies greater access to Chinese markets, could bolster growth for years to come.** Of course, all of that could change with the blink of a tweet. But at least for now, there's an **argument to be made for why Beijing should be feeling a bit more cheer heading into this year.** (Bloomberg: Next China – 3 Jan 2020)

China's soybean demand in the 2019-20 marketing year (October-September) could reach up to 90 MMT, up 9% year on year and 6% higher than the USDA's December WASDE report, due to a recovery in pig and sow herds in recent months, according to S&P Global Platts Analytics. **China's hog production capacity has continued to recover, with breeding sow herds restocked for three consecutive months since September**, according to Chinese Ministry of Agriculture and Rural Affairs. **In December, sow herds in China grew 2.2% month on month**, it said. **China's pig feed production has been on a four-month rising streak since September**, sources said. **In December, the pig feed increased 2% month on month.** "The robust restocking of hog production (since September) laid a solid foundation for accelerated soybean demand recovery in China in 2020," a Shanghai-based crusher said. (Platts – 9 Jan 2020)

According to Chinese customs data, **coal import in December 2019 came in at 2.8m tonnes, down 73% from 10.2m tonnes in December 2018.** December 2019 imports were 10% of the 2019 monthly average, and follow a trend first witnessed in 2018, when December imports came in at 42% of the annual average. **In the period from 2013 to 2017, December imports were 116% of the annual average.** We see environmental regulations as one of the drivers behind the drop, as annual quotas are consumed within the first eleven months of the year. The drop in coal imports took **2019 to an import growth of 6.8%, compared to a YTD import growth figure of 9.8% in November. It was one of the main drivers behind the sudden fall in Cape rates in December 2019, which fell 41% to USD14.3k/day by the end of the month.** (DNB Markets – 16 Jan 2020)

In addition to strong manufacturing, **China's steel production ramped up significantly in December 2019 and produced close 996.34 MMT of steel,** with production growing at 11% year-on-year and 12% month-on-month. Strong steel production comes off a boost in spending on infrastructure projects, which lifted steel mills' profit margins. (Braemar ACM - 21 Jan 2020)

Despite repeated promises from India's government to reduce the country's coal imports and increase domestic self-reliance, volumes just continue to rise. **In the 12 months of calendar 2019, India imported 206 MMT of coal, including both thermal coal and coking coal,** but excluding petcoke. This represented an increase of 5.1% y-o-y from the 195.9 MMT imported in 2018 and was 11.0% more than the 185.6 MMT imported in 2017. **What is surprising, is that imports are rising despite India's sharpest economic slowdown since the global financial crisis. Logistical challenges, heavy rains and frequent strikes and protests have hit output at state-run Coal India, which accounts for more than four-fifths of India's coal production.** Utilities increased coal imports in 2019 despite electricity demand growing at the slowest pace in six years as the broader economic slowdown stifled industrial output. Indonesia remains the top supplier of coal to India in 2019 with 91.3 MMT up 10.5% y-o-y and now accounting for 44% of India's total seaborne coal imports. Australia remains in second place, accounting for 22% of India's total seaborne coal imports. South Africa is in third place, accounting for 18% of India's total imports. Volumes from the USA have significantly declined this year, but USA still account for 6% of India's imports. Out of the total 206 MMT of coal shipped to India last year, 33% was shipped on Capes, about 39% on Panamax or Post-Panamaxes, and 28% on Supras, with only sporadic cargoes on Handies. (Banchemo Costa – 25 Jan 2020)

Government and academic experts in the US have developed a vaccine against African swine fever that's proved 100% effective, according to the American Society for Microbiology. Both high and low doses of the vaccine, developed from a genetically modified prior strain of the virus, were effective in pigs when they were challenged 28 days after inoculation, the report said. (Bloomberg – 29 Jan 2020)

In the bulker sector the market balance, and the resulting **vessel earnings in 2019, were significantly impacted by "nonheadline" factors related to the environmental and regulatory backdrop, and IMO 2020.** The amount of time capacity was out of service for SOx scrubber retrofit had a huge impact, with the average days for a completed scrubber retrofit repair yard visit being 36 days. As a result, **scrubber retrofit time reduced capacity growth from 4.0% to 3.0%.** (Clarksons – 31 Jan 2020)

For the first time on record, the Baltic Cape Index has drifted into negative territory. This market weakness can be attributed to several factors: higher fuel costs, the Lunar New year which perennially weakens Q1 demand arrived earlier than usual in 2020, and finally a virulent outbreak of coronavirus in China which has led to an extension of the New Year holiday to the 2nd February.

The principle cause for the weakness in the Cape market is, however, more prosaic: rain. Some of Brazil's heaviest seasonal rains in a century have disrupted operations at several major mining firms. According to sources, Vale has already claimed force majeure on approximately 2 MMT of iron ore shipments as landslides and severe flooding led several municipalities to declare a state of emergency. Other iron ore exporters are considering similar actions. Whatever these other exporters decide, **Brazil's iron ore shipments are already down by over 34% y-o-y to 19.8 MMT in January compared to the over 30 MMT exported in January 2018.** This Brazilian story elicits unfortunate memories of the catastrophic failure suffered at the Brumadinho tailing dam last year. This disaster was a major contributing factor to the **50 MMT annual decline in Brazil's 2019 exports. With significant Cape and VLOC tonnage set to deliver in the first half of 2020, and further rains due to hit Brazil's northern operations later this quarter, many believe that the current hardships are unlikely to abate until Q2.** It should be noted, however, that despite Brazil's drop in exports last year, the Cape market's inherent volatility still allowed it to achieve a higher average annual time charter rate compared to 2018, which some could argue was fundamentally stronger. Given that, **January 2020's performance should not be taken as an indication of this year's ultimate performance, dire though it may now seem.** (Howe Robinson Research – 31 Jan 2020)

Key Supply Side Developments:

Supply Side developments disappointed in the world bulker fleet. We started 2019 with 840.82 MDWT and have increased to 873.43 MDWT for a 3.88% net fleet growth during 2019. A further 5.79% (50.61 MDWT) is scheduled for delivery in 2020. If we were to apply a slippage factor of 10% (it was actually 2.72% in 2019) to these scheduled deliveries and further assume that recycling reaches 10 MDWT (it was 8.23 MDWT in 2019) per annum we would be left with **a net fleet growth of 4.07% (908.98 MDWT) in 2020 and another 1.97% (926.91 MDWT) in 2021.** This, of course, **does not account for any IMO2020 regulatory pressure producing a supply side dividend** of a significant amount of older ships heading for the recycling yards or slowing down their speeds considerably to minimize burning expensive LSFO in their engines.

When do ship owners recycle their ships? When they are **very old** or when they are not so old BUT they **do not make ends meet AND regulatory pressures require capital expenses** to be incurred in the immediate future. The freight markets are therefore the single largest driver of ships to the recycling yards. The lower the freight markets the greater the number of ships ending up at the recycling yards. 2016 is the perfect example of this inverse relationship. **Q1/2016 was a disaster with the BDI touching a new historic low** every day before bottoming out **at 290 points** in February 2016. The **Q1/2016 total for recycled ships was 14.22 MDWT, compared to 8.23 MDWT of ships being recycled in 2019** (average BDI during the year being 1,353 compared to 673 in 2016) reaffirming the inverse relationship of recycling with BDI. Net supply of ships, therefore, grew in dry bulk from 840.82 MDWT at the start to 873.43 MDWT by the end of 2019. But despite similar percentage growth in the supply side in 2017 and 2018, the time charter rates have risen as the year has progressed, to reasonable levels by the end of 2019. This suggests that **supply demand balance is within striking distance.**

The question is **how will owners react to the market conditions during 2020 and 2021?** If the markets remain reasonably strong, as anticipated, then recycling will slow down, however due to **the very low forward order book (9.31% or 81.34 MDWT) net increase in supply in 2020 and 2021 would be approximately 4.07% (35.55 MDWT) and 1.97% (17.20 MDWT) per annum respectively.** This gap between expected demand growth (take your pick from our heuristic

model 4.45-4.55%, Lloyd's List's 3.7% or Clarksons 2.7%) and our expected supply growth in 2020 of 4.07%, with ZERO pressure on increased recycling from IMO2020, should make for an increasingly volatile market. If 'forced' recycling increases the rate of assumed recycling due to the IMO2020 regulatory pressures in 2020 and 2021, we could have a few very interesting years ahead!

What others' say about Supply Side Developments:

The 5.1 MDWT (47 vessels) delivered in October is the largest monthly inflow of bulk carriers during 2019. So far **this year a total of 35.2 MDWT (387 vessels) has been added to the fleet** comprising 21 VLOC, 40 Capes, 18 Post Panamax, 109 Panamax, 113 Supras and 86 Handysize; **the equivalent figure for 2018 was a much lower 24.5 MDWT (269 vessels). Demolition** on the other hand remains subdued with just 4 vessels heading for the breakers in October with **this year's total a lowly 68 ships (6.4 MDWT deadweight). Net fleet growth for 2019 across all sectors is 3.4%** with Panamax currently running at 5.2%. Despite a firm freight market for most of Q3, **concerns about the economic outlook and uncertainty about the impact of the new 2020 IMO fuel regulations has led to very little recent new building activity** thus the **nominal orderbook has shrunk down to around 88 MDWT**, though this will of course be boosted by a certain number of stockboats. **Contracting this year has focused on the smaller sizes with 47 Ultra/Supras and 35 Handysize being added to the orderbook compared to just 5 VLOC. 2020 at present has a particularly high concentration of deliveries with about 550 vessels of around 57 MDWT slated to come out of shipyards next year.** (Howe Robinson Research – 8 Nov 19)

Shipyard output has returned to an upward trend in 2019 and could reach around the 100 MDWT mark in 2019. This has driven faster supply-side growth this year than initially expected, but **the remaining orderbook now stands at just 9% of the fleet, the lowest level for over 20 years.** Against a backdrop of broadly improving market conditions, the orderbook has proved responsive and deliveries have generally been prompt, enabling many owners to get their new 'toys' in good time. (Clarksons – 22 Nov 19)

Key Regulatory Developments:

Regulatory impacts should see many more ships heading for the recycling yards in 2019 and 2020. The Ballast Water Treatment System (BWTS) convention came into force on the 8th of September 2017. All new vessels with keel laid after this date are required to be fitted with IMO approved ballast treatment plants. All existing vessels are required to retrofit such plants in a phased manner along with surveys associated with first renewal of IOPP (International Oil Pollution Prevention) certificate after 8 September 2019. Any ship that is older than 20 years of age would then become a potential recycling candidate when the next five-year renewal of the IOPP certificate becomes due after the effective date. The cost benefit to retrofit an expensive BWT system would be too great a risk to run, especially when 20-year-old ships are valued around recycling levels, besides IMO2020 will ensure such older ships will find it impossible to get regular employment. **This will make the 'recycling' decision easier.**

The **Environmental Protection Alliance**, an NGO, has [written an open letter](#) to one of the leading dry-bulk players in the market **criticizing them for their adoption of Scrubbers.** The letter itself is interesting and makes some very valid points, but the sad part is that the Charterers,

our clients, do not take such environmental issues to heart merely paying lip service instead. They, like the owner singled out in this letter, are **all trying to profit from the IMO2020 legislation which is designed to prevent pollution by disregarding this anti-pollution tenet completely and simply looking at their profitable bottom lines. As Greta Thunberg would have said, 'Shame on you.'**

IMO2020 will result in 'cleaner low sulphur' oil being burnt by ships from 1st January 2020, except those owners who fit/retrofit scrubbers on their ships, and thereby reduce the level of pollutants reaching the air that we breathe as well as the 'acid' rain that results from such emissions. **The impact of IMO2020** would essentially be as follows:

- **Older ships would struggle** to either retrofit scrubbers, due to their high capital cost as well their high running costs, or struggle to burn 'cleaner low sulphur' oil in their engines. Those older ships that would have their 20th, 25th or 30th birthday during 2020, would have to struggle with the **extremely expensive special survey costs** associated with special surveys of such older ships together with the **costs of retrofitting a BWTS** as well as the impending IMO2020 deadline. The world Dry Bulk fleet had 60.62 MDWT of ships in this 'older' ship category of which 31.75 MDWT were in the 'geared' ships sector where PSL operates. **Some or all these ships will certainly end up in recycling yards.** Others will experiment with burning compliant LSFO blends and diesel oil in these old engines designed to burn HSFO. Such experiments could **result in a lot of breakdowns/delays to such ships** and clients would be hesitant, to put it mildly, to place any of their cargoes on such ships.
- **Ships that are burning LSFO would operate at more economical slower speeds** as the price differential between HSFO and LSFO is \$300+ per tonne. This would result, combined with the impacts associated with the effect of IMO2020 described in the preceding paragraph, **in a supply side dividend with supply shrinking enough to cause some sort of a freight rate spike.** How high would the freight rate spike be or how long it would last is any one's guess.
- The number of ships that are fitting/retrofitting scrubbers **in the Dry Bulk fleet** are 1,254 (1,068 retrofits and 186 new buildings as per Clarksons data base at the end of 2019). Out of a total of 12,868 dry bulk ships in the world fleet or 954.77 MDWT, including all the new buildings in the order book up to end of 2023. **The 191.34 MDWT or 20.04% of ships with scrubbers** would be pumping soluble Sulphur/Nitrogen/particulate matter and, God knows what else, into the water, **transferring the pollution from the sky into the seas.**
- **The total number of ships fitting/retrofitting scrubbers** in the world fleet, not just dry bulk ships, including those from the order book would be **3,866 ships** out of a total world fleet of 102,092 ships **or just 3.78% of the world fleet.** The question is, **will the oil majors/refineries produce HSFO to cater to this small minority of ship owners?** If they do, then it means that they would have to dedicate certain refineries/storage tanks/pipelines/delivery vehicles (barges/small tankers) to service these 3.78% of owners who have opted to burn HSFO. The cost benefits of doing this would be something that the refineries would have to consider and, just maybe, HSFO would not be sold at any appreciable discount to LSFO but possibly at a small premium?
- The ships that are planning to or actually **fitting scrubbers would face their own set of challenges** that would include, **bans from using open loop scrubbers in ports,** extraordinary **scrutiny of their exhaust gasses** to ensure that their scrubbers, for which we understand there are no standards, are actually emitting minimal Sulphur oxides into the atmosphere, **corrosion of the piping system** within the scrubbers as well as at their **outlet pipes** (Hydrex.com, the underwater welding specialists, state that there has been a rash of such underwater welding requirements from scrubber fitted ships), **installation of**

heavy duty pumps to handle the constant high pressure flow of water in the scrubber piping system **requiring the use of two generators at sea** instead of just one, **spares/repairs/maintenance of scrubber systems, manpower needed** to operate and handle scrubbers, etcetera.

- During FH 2020 a lot of these ‘scrubber’ ships will be in dry docks fitting these ‘refineries’ to enable them to be compliant with IMO2020 emission rules. **Various reports have suggested that this would reduce overall supply in the dry bulk world fleet by as much as 1.5 to 2% in FH 2020.** This will assist the freight market by reducing the available supply of ships.
- For those ship owners taking the **sensible route of not installing scrubbers and instead burning LSFO** they will face the future **worrying about availability of LSFO, compatibility of various different blends of LSFO, getting their ships tanks ‘cleaned’** by bunkering small quantities of MGO in ‘empty’ tanks to ‘clean’ them of any residues of HSFO, **Bunkering LSFO starting sometime in SH 2019** (Q3 or Q4) in all available ‘empty’ tanks, **having clear guidelines for ship staff** on how to receive, store and use LSFO, etcetera.
- At some point in time, **dumping toxic/sulphuric wastewater from ‘open loop scrubbers’ into the oceans will come back to haunt us with such ships being banned from pumping their toxic wastewater into our oceans/seas.** MPA Singapore, China, and a host of other countries from Europe to the Americas and from Asia to Middle East have banned the use of ‘open loop scrubbers’ in their territorial waters. How long will it be before the **world realizes that it would be best to ban the dumping of wastewater generated by ‘open loop scrubbers’ anywhere in the oceans/seas?** It’s like saying that a small portion of an aircraft (territorial waters of any country/port) is declared as a ‘nonsmoking’ zone whilst the rest of the aircraft (oceans/seas) are designated as an unrestricted smoking zone, and we know how *that* ended!

What others’ say about Regulatory Developments:

As the global population rises, urban areas around the world are booming, and that means more and more buildings are going up. By one estimate, **the world will add 2 trillion square feet of buildings by 2060—the equivalent of putting up another New York City every month for the next 40 years.** There’s good and bad news in that statistic. The good news is that living in the city generally equates to a higher quality of life—you have access to better schools, health care, and job opportunities. The bad news is that the **buildings themselves are a big contributor to climate change**, and one of the five areas where we need to drive a lot of innovation if we’re going to avoid a climate disaster. There are two ways in which buildings are responsible for greenhouse gases. The first is the construction phase: **Buildings are made of concrete and steel, both of which produce a lot of emissions when they’re being made.** In fact, **these two materials account for around 10% of the world’s annual greenhouse gases.** And right now, we don’t have practical ways to make either one without releasing carbon dioxide. (The Bill Gates Blog – 28 Oct 19)

A new report from environmental group ‘Seas at Risk’ **outlines the comprehensive environmental benefits of slower ship speeds.** Proposals to reduce ship speed would not just **make a big dent in shipping’s climate impact but would massively reduce air pollution, underwater noise pollution, and the incidence of fatal collisions between whales and ships,** all issues that the IMO must also deal with. (TradeWinds – 11 Nov 19)

Estimating, based on a wide range of assumptions, **the world shipping fleet's fuel consumption is set to total 265 MMT this year, with CO2 output at 819 MMT.** This total is similar in size to the overall annual CO2 output of Germany, but it is also worth noting that shipping's CO2 total last year was equivalent to only 2% of total world CO2 emissions. With shipping's cargo base amounting to about 60,000 billion tonne-miles of seaborne trade this year, the world fleet's CO2 output equates to an estimated 'intensity' of 14t of CO2 per million tonne-mile transported. Compare this to historical estimates for rail (16-190t per mill. tonne-mile) and road (128-290t) which highlight shipping's relative 'carbon efficiency'. Air cargo clocks in at anywhere between 700t and 2,900t per tonne-mile. But of course, shipping accounts for c.85% of all international trade, so the absolute total remains a challenge. Furthermore, shipping's carbon output has an interesting timeline. In 2008 the world fleet's total CO2 output measured an estimated 1.0 BMT and had dropped by 19% by 2018. Growth in trade (37% in tonnes) and the fleet (74% in GT) has been outweighed by the impact of more fuel efficient 'eco' vessels and reductions in average speed, down an estimated 16% across the world fleet since 2008 (the crucial baseline year for the IMO targets). But of course, the decarbonization targets are still daunting, and 'business as usual' is not an option. Changes in trading patterns, speed and vessel technology may all be needed to meet the goals. Putting shipping's carbon emissions into context can be helpful. Across transport modes, shipping looks like a positive option on a per tonne-mile basis, and its CO2 output has already dropped by c.20% since 2008. However, carbon targets are still tough, and owners, shippers and participants across the industry spectrum still have plenty of debate and challenging decisions ahead of them yet. (Clarksons – 15 Nov 19)

The IMO, which met in London last week to discuss how the shipping industry can continue to decarbonize, has agreed that a goal-setting approach is the best way to reduce carbon emissions in the short-term. The IMO concluded that a mandatory goal-based approach will provide flexibility and incentive for continued innovation across the industry and will be the best way to reduce emissions. Two methods were recognized, including a technical and an operational approach, and implementation and enforcement would be developed at the next meeting in London next year. Full details of the approach will also be resolved next year. With a longer-term perspective, and in order to encourage the uptake of alternative low and zero-carbon fuels in the shipping sector, IMO agreed on the establishment of a dedicated workstream for the development of lifecycle GHG/carbon intensity guidelines for all relevant types of fuels. This could include, for example, biofuels, electro/synthetic fuels such as hydrogen or ammonia. (Arctic Shipping – 18 Nov 19)

The biggest carbon polluters don't always advertise that fact loudly. In fact, one of the industries with the worst climate impact is all but ignored, even though its product literally supports our existence. I'm talking about the cement industry, which dumps more than 2 BMT of carbon into the air each year to make its ubiquitous building material, roughly three times as much as the aviation industry. Today the world churns out 4 BMT of cement every year. As more people move into cities, developing countries modernize their infrastructure, and the world transitions to new energy systems, our appetite for cement is only expected to grow. By 2050, we could be producing close to 5 BMT of cement a year. (Grist – 20 Nov 19)

Using the spreads reported by ICE (Intercontinental Exchange), it's currently cheaper to operate a vessel on HSFO. However, that excludes the costs of installing the necessary scrubbing equipment on each ship. And, let's not at all forget the wash water impact to our oceans. In retrospect, it can be the most important small yet big thing we are not focusing enough on. Producing HSFO is a relatively simple procedure, and there is no lack of grades of crude oil and older refineries with which to produce it. However, no one produces HS residual fuel because they want to. Certainly not, if the price has fallen heavily against crude as refiners will do

all they can not to produce it. The money spent on installing scrubbers appears to be a very smart investment, however, HSFO will likely sell at a surprisingly high number that may hurt obvious favorable economics. (Xeneta – 10 Dec 19)

Shipping is calling for the creation of mandatory payments from companies to **fund an independent research and development body that will help accelerate maritime decarbonization.** Under the proposal being made to the International Maritime Organization by eight leading shipping associations, **shipowners would pay \$2 per tonne of fuel oil each of their ships consumes into a newly formed international maritime research fund to help finance decarbonization research and development projects.** They said the fund, which would be set up by the IMO, **would raise about \$5bn over a decade,** based on the estimate that the global fleet will consume an average 250 MMT of fuel oil annually. They hope the fund can be up and running by 2023. **We really do have to start seeing the appearance of zero-carbon ships in the 2030s, because the pressure created by the IMO 2050 target is so great.** (Lloyd's List – 18 Dec 19)

A South Korea-flagged large dry bulker has been found by the Chinese authorities to have been burning non-compliant fuel after the 2020 sulphur cap formally took effect on January 1. The Qingdao Maritime Safety Administration examined the vessel as part of port state inspection activities on Friday. **A test of a fuel sample detected 0.68% sulphur content, which exceeds the stipulated ceiling by 30%,** local media reported. It was the first violation case found at the Chinese port, one of the largest in the world, since the implementation of the rules by the International Maritime Organization from the beginning of this year. A QMSA official said the **excess sulphur content was likely a result of improper fuel blending** while the fine for violating the sulphur restriction is between Yuan10,000 (\$1,435) and Yuan100,000 per ship. (Lloyd's List – 7 Jan 2020)

Pakistan's government is **prohibiting the use of open-loop scrubbers at the port of Karachi** in yet another push-back against the sulphur emissions abatement technology. The Standard P&I Club said on Tuesday that the government has **banned the discharge of wash-water from open-loop scrubbers,** which some owners have installed on board their vessels to comply with the 0.5% global sulphur limit, at the port. (Lloyd's List – 22 Jan 2020)

Norway's Eidesvik Offshore is claiming **a world first with a plan to fit an ammonia-powered fuel cell to a platform supply vessel (PSV).** The ShipFC project, which will test a carbon-free tool at a time when shipping and regulators are wrestling with how to reduce shipping's carbon footprint, involves the 6,000-dwt Viking Energy (built 2003) and a partnership with 14 companies including oil major Equinor and NCE Maritime CleanTech. (TradeWinds – 23 Jan 2020)

Our read of Trade Sanctions/Tariffs:

Nothing has changed in our views on this subject as stated in our last quarterly newsletter, which we are repeating. **Trade sanctions/tariffs, in and of themselves, cannot destroy demand so long as the sanctioned commodity is either available from some other supplier/country or is substitutable by a similar priced commodity with similar/identical attributes. All sanctions/tariffs do is to make shipping of such commodities more inefficient. If this change in supplier/country results in congestion; slower loading of ships (compared to the original supplier/country); and an increase in ton-mile, then that is best for the dry bulk markets.**

Others' read of Trade Sanctions/Tariffs:

President Trump announced a month ago that his administration had clinched a trade deal with China. Well, the first in a series of deals, which the White House now refers to as “phase one.” Since then, **countless declarations of “winning,” but agreeing to a deal only “if the terms are right,” have added to the year and half long conflicting cacophony of rhetoric about the content of any trade agreement with China.** US exports to China from the bustling Port of Los Angeles decreased for 12 consecutive months. Retail and technology have announced losses in the billions. According to the National Retail Federation, consumers and businesses have paid an additional \$38 billion from the start of the trade war in February 2018 through September 2019. **So, as the bluster blows and promises of winning mount, the actual flow of trade paints a very different picture.** (CNBC – 13 Nov 19)

Liu He, China’s top negotiator on trade, spoke with U.S. Trade Representative Robert Lighthizer and Treasury Secretary Steven Mnuchin on Tuesday morning, China’s Ministry of Commerce said in an online statement. **“Both sides discussed resolving core issues of common concern, reached consensus on how to resolve related problems (and) agreed to stay in contact over remaining issues for a phase one agreement,”** the Chinese-language statement said, according to a CNBC translation. (CNBC – 25 Nov 19)

President Donald Trump on Monday accused Argentina and Brazil of hurting American farmers through currency manipulation and said he’ll slap tariffs on their steel and aluminum imports to retaliate. Trump also called on America’s central bank to take action to prevent other countries from devaluing their currencies. Both South American nations were among a group of US allies that Trump had exempted from steel and aluminum tariffs in March 2018. (Time Magazine - 2 Dec 19)

US soybean trades into China surged late Monday amid market talk that the Chinese government had released a fresh round of import quotas for US soybeans with six to eight from the US Pacific Northwest and at least two from the US Gulf, market sources said Tuesday. They said **the purported quota allocation was for 1-1.5 MMT of US soybeans** and interpreted the move as a Chinese government gesture of goodwill ahead of the December 15 deadline. (Platts – 10 Dec 19)

President Donald Trump signed off on a phase-one trade deal with China, averting the Dec. 15 introduction of a new wave of US tariffs on about \$160 billion of consumer goods from the Asian nation, according to people familiar with the matter. The deal presented to Trump by trade advisers Thursday **included a promise by the Chinese to buy more US agricultural goods,** according to the people. Officials also **discussed possible reductions of existing duties on Chinese products,** they said. The terms have been agreed but the legal text has not yet been finalized, the people said. (Bloomberg – 13 Dec 19)

US President Donald Trump said he will sign the first phase of a trade deal with China on Jan. 15, sealing an agreement that sees the Asian nation raising purchases of American farm goods in exchange for lower tariffs on some of its products. **The date has yet to be confirmed by the Chinese side. “The ceremony will take place at the White House,”** Trump said. A deal could **help stabilize China’s economy,** with analysts and traders predicting earlier this month that economic growth will come in at 5.9% in the new year as easing trade tensions and the prospect

of lower bank borrowing costs boost confidence. **The economy will grow by 6.1% this year and by 5.8% in 2021**, according to the median estimate of around 70 economists in a Bloomberg survey. (Bloomberg – 2 Jan 2020)

The US and China signed what they billed as **the first phase of a broader trade pact** on Wednesday amid persistent questions over whether President Donald Trump's efforts to rewrite the economic relationship with Beijing will ever go any further. The deal commits China to do more to crack down on the theft of American technology and corporate secrets by its companies and state entities, while outlining a **\$200 billion spending spree** to try to close its trade imbalance with the US. It also binds Beijing to avoiding currency manipulation to gain an advantage and includes an enforcement system to ensure promises are kept. (Bloomberg – 16 Jan 2020)

Key Demand Developments:

China

China's GDP growth numbers averaged 6.1% for the year 2019, marking the lowest growth since 1990. (National Bureau of Statistics – 17 Jan 2020)

China's Iron Ore imports in 2019 grew by 0.5% to 1070 MMT. (Reuters 14 Jan 2020)

Chinese crude steel production for 2019 increased by 8.3% to 996.3 MMT. (Reuters 17 Jan 2020)

China's Coal imports totaled 299.7 MMT in 2019 or 6.7% higher than the 280.8 MMT imported in 2018! (Reuters 17 Jan 2020)

Steel demand in China stayed firm in 2019 despite the world's second-largest economy coming under pressure from slowing domestic growth and a bitter trade war with the United States. The property market was more resilient than expected, and a push on infrastructure spending also fueled demand for steel as a vital building material. (Reuters 17 Jan 2020)

Chinese steel exports have slowed significantly to 64.3 MMT in 2019 compared to the 69.6 MMT in 2018 all of which is carried by geared ships from the Handy to the Ultramax sectors. (Argus Media 14 Jan 2020)

The Chinese authorities generally prefer utilities to use domestic coal, and local production has been trending higher. **Output reached 331.7 MMT in December, up 2.4% on the same month of 2018**, while full-year **production in 2019 was 3.75 BMT, up 4.2% from 2018.** (Reuters – 20 Jan 2020)

According to the newly released report from Global Energy Monitor, **China has increased its coal-fired power capacity by 43 gigawatts (GW), or 4.5%, in the period from Jan 2018 – Jun 2019.** Over the same period coal-fired power capacity fell by 8 GW for the rest of the world. The significant increase is the result of a spree of plant approvals given between 2014-2016, when the Chinese government for a certain period delegated the approval task to provincial governments. **With another 121 GW of coal-fired power plants under construction, it should bode well for future coal imports. However, approvals for new coal mine construction in China have also surged, with the government approving another 141 MMT of production capacity in the first**

half of 2019. Imports have increased this year, despite efforts to keep it at 2017 levels. Coal imports stood at 276 MMT for the first ten months of 2019, up 9.6% y/y. (Maersk Brokers – 22 Nov 19)

Chinese worldwide imports of soybeans are down around 7 MMT y-o-y as demand for feed has shrunk due to the devastating effect to their pig population from African Swine Fever. The epidemic has cut the country's huge pig herd by more than 40% to around 300 million head and triggered soaring pork prices and food inflation. The USDA forecasts a further fall in pig numbers in 2020 to 275 million, though recent figures from Beijing suggest that the fall in the number of breeding sows has now stabilized. If indeed the Chinese authorities can bring the disease under control and numbers of pigs in fact rise this could be a much-needed boost for the sub Cape market as Chinese soybean stocks at 28 MMT are at their lowest level since December 2017. Over the past couple of months China has committed to buying 8 MMT of US soybeans (at least half of which are tariff free) as part of ongoing trade negotiations between both countries. These purchases have **helped to boost US exports in the first half of November to 4.3 MMT of which 3 MMT is destined for China; indeed US soybean exports to China are now at 18 MMT for the year to date, 10 MMT more than this time last year but significantly below 26 MMT in 2017.** (Howe Robinson Research – 29 Nov 19)

China imported 90.7 MMT of iron ore in November, up 5.2% from 86.3 MMT in November last year. Year to date import is now at 969 MMT, down 0.9% on the 978 MMT imported in the same period last year. **By June, YTD import was down 5.7%, hence import growth has picked up in the latter half of the year.** Chinese PMI has gradually improved in the period, reported at 50.2 for November, an increase of 1.6% from 49.4 in June. **Coal import to China was 20.8 MMT in November, up 8.5% on the 19.2 MMT imported in November last year. Thus, coal import continues the strong trend in 2019, with total coal imports so far this year at 297 MMT, up 9.8% on 2019.** (DNB Markets – 13 Dec 19)

China's coal imports have raced ahead in 2019, surprising many who had predicted that the government would strictly clamp down on shipments in the later months just as it did in 2018. With economic growth at its weakest in decades amid a trade war with the US, import curbs were eased on the nation's most-consumed fuel to help mitigate the pain of a slowdown. **Underpinning forecasts for lower imports in 2020 is the outlook for rising domestic supply as China promotes bigger and more efficient mining operations.** For a country that burns and produces half the world's coal, the strength of **China's import curbs may vary depending on the government's competing priorities of protecting domestic miners and power plants.** **"The government wants to boost the economy any way it can, and a good way to do that is to let generators get the cheapest coal,"** said James Stevenson, global director for coal research at IHS Markit Ltd. **Zeng Hao, an analyst at Fenwei Energy Information Services Co., is among the few expecting China to further relax its grip on coal imports in 2020 as policy makers would be disinclined to intervene in "market-based activity" amid the slowing economy,** he said. (Bloomberg – 23 Dec 19)

Americas

One of the phenomena of the dry bulk market in 2019 has been the dramatic rises in Argentinian and Brazilian corn shipments which if volumes are maintained going forward will usher in a more permanent structural change in grain trade flows and their seasonal impact on the freight market. **Traditionally sub Cape markets have always peaked in May/June** as the sharp inflow of Brazilian soybeans to China and other Asian destinations provides a Q2 spur; but with China's reduction in soybean imports (estimated to be down around 8 MMT this year) on account

of the devastation to its pig numbers due to African Swine Fever, there will be significantly more grain moving from ECSA in Q3 with these new corn volumes and the later Argentinian soybean harvest. **China so often the conduit for cargo growth has had no influence on the expansion in the ECSA corn trades as it does not import this coarse grain from either Argentina or Brazil so other Asian destinations have fueled these increases.** ECSA corn exports to Continent and Mediterranean destinations are up nearly 50% YOY at 14.3 MMT. Whether ECSA can maintain these strong corn export volumes going forward will in part depend on USA's stance on whether it wishes to regain market share; **so far this year USA corn exports a down a massive 20 MMT at 34 MMT.** Clearly the severe Mid-West floods in Q2 disrupted the supply chain and led to **Mexico and Peru sourcing more product from Argentina and Brazil, but since then very weak international corn prices has seen USA consume a great proportion of their crop domestically where ethanol production from corn is on the rise.** If current volumes are maintained, we estimate **world seaborne corn trade will rise by 15 MMT (+9% YOY) in 2019 to 173 MMT surpassing annual wheat shipments (down 5 MMT YOY at 169 MMT) for the first time.** (Howe Robinson Research – 15 Nov 19)

Earlier this week **Vale announced they have suspended the use of the Laranjeiras dam, used in connection with their second largest iron ore mine, Brucutu.** According to Vale, the use of the dam is suspended while the “geotechnical characteristics” are being inspected. **Vale expects the dam shutdown to last between 1-2 months, during which operations at the Brucutu mine will run at only 40%. At full capacity, the Brucutu mine can produce 30 MMT of iron ore annually. The production estimate for Q4-2019 remains the same at 83-88 MMT. For 1Q-2020 the estimate is lower at about 68-73 MMT,** due to the gradual return to full operation, and seasonal related weather conditions. **In February 2019, the mine was ordered to halt operations completely, following the Brumadinho dam burst in late January.** (Maersk Brokers – 6 Dec 19)

Asia

Prime Minister Scott Morrison will fast-track A\$3.8 billion (\$2.6 billion) of infrastructure projects such as highways to boost Australia's economy, even as he rejects calls for additional stimulus as “panic measures”. While his government in April announced it would spend A\$100 billion on transport infrastructure over a decade, it will now bring forward some of that outlay into the next four years, according to excerpts of a speech to be delivered by Morrison later Wednesday. (Bloomberg – 20 Nov 19)

India's Prime Minister Narendra Modi must invest trillions of dollars on roads and other critical infrastructure if he's to pull the economy out of its slump, with at least half coming from provincial governments that are out of his control. **India will need to spend 235 trillion rupees (\$3.3 trillion) on infrastructure over the coming decade to return economic growth rates to more than 7.5%,** according to Crisil Infrastructure Advisor. That means Indian states will have to more than triple their contributions from the current decade, it said. “Unless states contribute nearly 50% of infrastructure investments, India's build-out momentum could taper sharply,” Sameer Bhatia, president of the S&P Group company, said in the report published Tuesday. (Bloomberg – 27 Nov 19)

Rest of the World

Coal mining has been a key industry in Russia for a long time and its role will be no less significant in the future as the world changes into renewable power generation. Nevertheless, the structure of Russia's coal trade is evolving. **In the first 9 months of 2019 Russia exported 132.7**

MMT of coal. This was an increase of 7.1%, or 8.8 MMT more, than in the same period last year. Russia quickly becomes the third largest exporting country over the years. The usual seasonality patterns have been on the rise this year. Russia's monthly export of coal elevated from a record 12.5 MMT in February 2019 to 15.7 MMT in July. The first quarter was declining in low volumes, like the previous year, which then increased to an almost steady growth with September being the highest in the last 2 years. As such, third quarter of the year is shown to be stronger, recording growth in volumes of 18.7% year on year compared to second quarter growth that cooled to an average of 5.7%. The destinations for these cargoes didn't change drastically. In the first 9 months of 2019 Russia sent 19.1 MMT to Mainland China, a boost of 26.5% year on year. Mainland China accounted for 14% of Russia's coal shipments this year. Another 10.4 MMT to the Netherlands, an increment of 31.6% from last year's 7.9 MMT, despite the European Union pledging to reduce carbon emission. In the same period, 10.9 MMT of coal were exported from Russia to Japan, up 16% year on year. Russia sent 7.1 MMT of coal to Taiwan, down a considerable 16.5% year on year. In the same period, only 0.8 MMT of coal were shipped from Russia to the UK, down a tremendous 55.6% year on year. The UK is slowly shutting down coal fired power station as it aims to phase out coal powered electricity by 2030 or earlier. Russia sees the Asian market as the destination for its growing coal production as the European market is gradually shrinking with EU countries moving to alternative energy sources. It is the world's developing Southeast Asian economies that are driving coal demand. (Banchemo Costa – 8 Nov 19)

South Africa is a major exporter of coal to global markets but is now facing a long-term decline in its export volumes and a re-shuffling of trade routes. In the first 10 months of 2019 South Africa exported 55.4 MMT of coal. This was a cutback of 6.2% year-on-year from 2018, in other words 3.7 MMT less than in the same period last year. Even more worryingly, it was 11.7% down from the same period of 2017. What is important to point out, is the systematic shift in the destinations of South African coal cargoes. Until a few years ago, South Africa was able to benefit from its central location to supply both the Atlantic and the Pacific markets, enjoying the role of swing supplier. This is not the case anymore, as the European coal market has been rapidly shrinking due to investment in renewables and poor economic growth and is also affected by cheap coal exports from Russia. As a result, South Africa managed to ship only 2 MMT of coal to Europe in the first 10 months of 2019. Europe now accounts for less than 5% on South Africa's coal exports. South Africa has never really managed to penetrate the lucrative East Asian coal markets – China, Japan, South Korea, as well as South East Asia, as it struggles to be price-competitive with Indonesian and Australian exports. On the other hand, South Africa has become increasingly reliant on the Subcontinent. India now accounts for 55% of South Africa's coal exports, and Pakistan for a further 14%. In the first 10 months of 2019, 30.5 MMT of coal were shipped from the Cape to India, a rise of 8.6% year-on-year. This is also 14.6% up from the 26.6 MMT shipped in the same period of 2017. Exports to Pakistan reached 7.8 MMT in January-October 2019, up 11.5% year-on-year compared to 2018, and 22.2% compared to the first 10 months of 2017. Another promising market is the rest of Africa. In the first 10 months of 2019, South Africa exported 2.9 MMT of coal to other parts of Africa, a gain of 39.1% year-on-year. It was the destination of 6% of South Africa's coal shipment this year. (Banchemo Costa – 29 Nov 19)

Demand for coal continues to experience sharply differing fortunes in the Atlantic and Indo/Pacific basins. Whilst coal consumption continues to grow in countries such as China, India, and Vietnam, the opposite is true in Europe. In recent years, annual import volumes have declined greatly, and the downward trend is clearly continuing in 2019. A further weakening in the future seems likely, amid sustained pressure from energy policy influences focused on decarbonization, diminishing the role of coal. Coal demand in Europe continues to shrink as a

result of rising renewables-based power generation, together with a combination of higher carbon and low natural gas prices, as well as slow economic growth and improved energy efficiency. **In 2018, total seaborne coal imports into Europe totaled 138.0 MMT, or about 12% of global seaborne coal trade. In the first 11 months of 2019 Europe's coal imports are down to 105.7 MMT from 124.7 MMT in the same period last year, indicating a 15.2% reduction year-on-year. Russia remains at the top spot in the first 11 months of 2019 as the largest supplier of coal to Europe with 33.9 MMT, +0.9% y-o-y and now accounting for 32% of Europe's total coal imports. The USA shipped 23.2 MMT of coal to Europe in Jan-Nov 2019, still in second place but down 12.1% y-o-y. Australian shipments were steady at 15.2 MMT, down 1.3% y-o-y. However, imports from Columbia crashed to 13.9 MMT in the 11 months of 2019, that is down 32.9% on the same period last year, and down 46.3% from 2017. Still, Colombia is the source for 13% of Europe's seaborne coal imports. Similarly, South African coal imports to Europe declined drastically to a poor 2.8 MMT, down 41.7% y-o-y. (Banchemo Costa – 20 Dec 19)**

Ukraine has become a major player in the grain export market for 2019 on the back of 2 years of excellent harvests and being regionally well placed to take advantage of strong corn and wheat demand. The near doubling of Ukrainian corn shipments y-o-y in Q1 and Q2 was important in maintaining some equilibrium to Atlantic markets in the first half of the year. **Ukraine exported a massive 20 MMT of corn in Q1 and Q2 (10.2 MMT in 2018) as it took advantage of the Q2 flooding in USA to increase market share to Europe and the Mediterranean whilst benefiting from trading tensions to increase sales to China. Wheat exports currently running at 16 MMT are up 35% y-o-y with exports to most destinations being largely carried in Handysize and Supra tonnage. Barley exports have seen a more modest rise (+0.5 MMT + 18% y-o-y) to 3.5 MMT with China at 1 MMT the major customer. Total grain exports from Ukraine for October and November at 9.3 MMT are already 1.2 MMT ahead of shipments in Q4 last year and on the back of another good harvest strong corn shipments in Q1 and Q2 will be potentially an important support whilst continued drought conditions in Australia should lead to increased wheat shipments to Middle East and South East Asian destinations.** (Howe Robinson Research – 20 Dec 19)

