

Broking

Shipping markets performed well, with long-term charters and newbuilding business allowing us to significantly build the forward order book

Share of revenue



Services

- Dry cargo
- Containers
- Tankers
- Specialised products
- Gas
- LNG
- Sale and purchase
- Offshore
- Renewables
- Futures

Dry cargo

It was a year of recovery for dry bulk markets with returning confidence, a rebound in trade volumes, moderate fleet growth and more logistical inefficiencies. This led to soaring rates, with the Clarksons average bulker earnings index reaching a 13-year high in the fourth quarter.

The year started with a rare first quarter rise in freight rates, led by an increase in trade within the Asia-Pacific region. China's early economic rebound gave strength to the market at a time when many charterers traditionally wait for a seasonal lull to the market before taking freight cover. As overall trade improved, a record number of ships were waiting at Chinese ports and delays intensified with strict quarantine rules and restrictions on crew changes.

During the second quarter rates were firmer with a robust start to China's construction and East Coast South America's soybean seasons. Iron ore shipments improved while coal trade continued to rise sending seaborne dry bulk trade in excess of 1.2bn tonnes for the first time in a single quarter.

Building on the sound seaborne trade foundation and with Europe and the US's exit from lockdown, pent-up demand and optimism resulted in rates reaching 12-year highs in October, as did many commodity prices.

In Asia, however, a second wave of COVID-19 sent many Southeast Asian nations into renewed temporary lockdowns and heightened quarantine requirements in ports in the third quarter. Adding to the already high waiting times in ports, a super typhoon in the Pacific and a hurricane in the US Gulf caused further disruptions. Fleet inefficiencies increased to levels similar to those seen at the start of the year, with significant additional capacity tied up at ports in China.

China's intervention to cool commodity prices from record levels led to severe steel production cuts and lower output in other industrials. Additionally, the fall-out from a high-profile real estate debt default added to the weaker sentiment and led to a steep decline in iron ore prices which resulted in a downward correction in Cape rates followed by the smaller ship sizes in the fourth quarter. Freight rates founded a temporary floor with additional coal demand and seasonal year-end iron ore supply growth before heading for the seasonal slowdown.

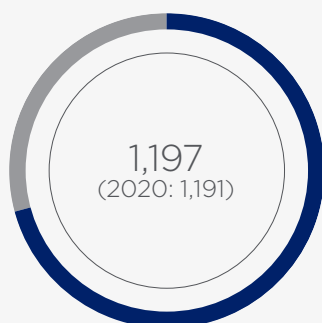
Segmental split of underlying profit before taxation



Forward order book for 2022

US\$165m
2020: US\$116m

Employees



More information:
[www.clarksons.com/
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Container freight rates and containership charter earnings reached all-time highs in 2021 and ended the year at, or close to, record levels.



The annual average year-on-year seaborne trade growth is estimated at 3.8% in 2021, the highest in four years, following a 1.6% contraction in 2020. The fleet expanded by 3.6% although additional capacity was added with ships re-entering the fleet following lengthy waiting times at Chinese ports during 2020 when Australian coal cargoes were banned from discharging. This resulted in a net fleet growth nearer to 5% over the year. Nevertheless, the rebound in trade was enough to absorb that fleet growth and send average freight rates to 12-year highs.

Looking forward, on an average basis we expect rates to match the average annual levels we have seen in 2021 given limited fleet growth, solid base-case demand expectation and continued COVID-19-related fleet inefficiencies. However heightened geopolitical tensions and a broader economic slowdown in China are expected to lead to reduced seaborne demand in 2022.

Decarbonisation efforts in the shipping industry ahead of the forthcoming IMO and EU carbon mandates of 2023 will gain more traction during 2022 as owners, operators and charterers prepare for the changing regulatory environment ahead. Net fleet growth might be lower than anticipated with high carbon emitting vessels forced into early retirement.

We remain well represented around the globe in the three main dry cargo markets: capesize, panamax and supra/handymax.

Containers

The container shipping sector experienced extraordinary market conditions throughout 2021. These were driven by the combination of a strong rebound in global container trade volumes and major COVID-19-related logistical disruption, including port congestion, which significantly reduced available capacity.

Container freight rates and containership charter earnings reached all-time highs in 2021 and ended the year at, or close to, record levels. The SCFI spot box freight rate index exceeded 5,000 for the first time at the end of 2021, having repeatedly set new all-time highs throughout the year, and the index averaged 3,773 during 2021 (2020: 1,234). The Clarksons Containership Timecharter Rate Index rose to 402 in October 2021, more than double the previous 2005 high, although some segments saw a slight easing towards the year-end. Multi-year period charters have become the norm, and near-term available vessel capacity in most size segments remains extremely limited.

The containership sale and purchase market saw a new record volume of activity in 2021, with 1.6m TEU of capacity sold across the year. Secondhand asset prices saw major gains and the Clarksons Containership Secondhand Price Index stood at 110 at the end of 2021 (end of 2020: 41). The price for a 10-year old 6,600 TEU containership, for example, surged from US\$34m at the end of 2020 to reach US\$115m at the end of 2021.

2021 saw an impressive rebound in global container trade volumes, with box trade estimated to have grown by 6.1% in TEU following the decline of 1.3% in 2020. Surging trade volumes have been driven by a range of factors including pent-up demand, major stimulus, consumer spending patterns focusing more heavily on goods than services and in the main an improving macro-economic backdrop. Port congestion and other logistical disruption (including the blockage at the Suez Canal in March and an acute shortage of box equipment) has proved pivotal. The level of containership capacity 'at port' across 2021 averaged 35% of total fleet capacity (37% in late October 2021), materially higher than the average between 2016 and 2019 of 31%.

Containership fleet capacity grew by 4.5% in 2021 (2020: 2.9%). However, with sentiment buoyed by market conditions, containership newbuild contracting set a new annual record in 2021 at 4.3m TEU across 569 units, taking the order book to 23% of total fleet capacity (end of 2020: 11%); this may generate supply pressures when new vessels are delivered over 2023-24.

The containership fleet's GHG footprint remains firmly in focus, particularly against the backdrop of a continued ramp-up in decarbonisation regulation. Over the last decade, slower operating speeds and an increased share of 'eco' vessels (33% of fleet capacity was 'eco modern' at the end of 2021) have helped reduce boxship emissions but there remains much to do. Uptake of alternative fuels (24% of order book capacity alternative fuel 'capable' at end 2021) has continued and approximately 700 units in the fleet had at least one energy saving technology ('EST') fitted at the end of 2021.



Container shipping market conditions appear likely to remain extremely firm in 2022, even if vessel charter earnings and box freight rates see some easing at some point, with industry expectations of prolonged disruption and continued firm demand. Global seaborne box trade is projected to grow by approximately 4% in 2022, with fleet capacity growth next year at a moderate 3.6%.

Buoyed by a rising market, our Containers business continued to grow. Despite not having regular face-to-face contact, our international team assisted clients to arrange multi-year chartering deals, secondhand sales and newbuild contracting.

Tankers

2021 was characterised by generally weak earnings for tankers as oil demand, refinery runs and oil supply declined to below pre-pandemic levels on average.

Global oil supply in the first quarter was 8% lower than in the equivalent period in 2020, largely due to the steep oil production cuts implemented by the 'OPEC+' countries and reduced production levels in the US. Oil demand, oil supply and refinery runs recovered very strongly throughout the year. Both global oil demand and supply are estimated to have risen by as much as 6% in the fourth quarter relative to the first quarter of the year, albeit still 2% below the average level for 2019. Overall, the global oil trade in 2021 remained broadly unchanged year on year and 8% lower than in 2019.

Growth in the deep sea tanker fleet was well below average levels at 1.8%, with deliveries below long-run average levels and an increase in removals from the fleet. However, the low levels of demand kept earnings suppressed.

Clarksons' published average earnings for non-eco and non-scrubber fitted VLCCs fell by 94% when compared with the strong levels seen in 2020. Clarksons' published average earnings for non-eco and non-scrubber fitted Suezmaxes and Aframaxes in 2021 fell by 76% and 63% respectively when compared to 2020. For the same period, in the products tanker sector Clarksons' published earnings for non-eco and non-scrubber fitted LR2 and LR1 products tankers trading on the key Middle East to Far East route fell by 73% and 64% respectively and by 58% for non-eco and non-scrubber fitted MR products tankers.

Tanker freight markets in 2021 were less volatile than in 2020. Vessel earnings remained at generally low levels throughout the year although there were some spikes which were generally caused by various delays to vessels. In all of the major sectors of the deep sea tanker market, the fourth quarter showed the strongest vessel earnings, reflecting both the normal seasonal uplift and the sharp rise in global oil demand and supply.

Global oil demand and supply are expected to continue recovering strongly throughout 2022. Newbuilding deliveries are expected to remain below average levels whilst removals from the fleet are expected to remain elevated above long-run average levels.

Our global deep sea team performed well, assisted by our continued investment in IT, despite the challenging market conditions and an inability to travel. The projects desk, which we have strengthened in recent years, was extremely active and concluded longer-term charters, which is important when freight rates are depressed.

Specialised products

The specialised products market continues to be driven by the underlying demand from China and the wider Asian markets. The reliance on 'Made in China' plastic goods continues to support the bulk chemical shipping markets. Elsewhere, we continue to see rapid development in the biofuels sector. Regulation, particularly from the EU, is the key factor in this regard with the growing global environmental movement helping to contribute to the transition away from traditional crude oil and natural gas derived vehicle fuel feedstocks. Biofuels will continue to be crucial to the growth of seaborne trade in future years and to the specialised products business. We estimate that seaborne trade grew by 1.3% in 2021 to 371m tonnes following a 1.2% contraction in 2020.

In 2021 the Clarksons' Specialised Products Spot Chemical and Edibles Oils Index performed below the long-run average of the previous 12 years. During the second and third quarters, freight rates showed gradual increases, driven by higher bunker pricing, trade flow disruption caused by severe weather disruption in Houston, and to a lesser extent the blockage of the Suez Canal. As we approached the end of the third quarter and the start of the fourth, a combination of port lockdowns in China caused by COVID-19, and the resulting lack of pilots, as well as a brief uptick in Asia CPP activity, saw the market in the Far East become very tight. Benchmark freight rates rose to the highest point in



the last six years and recorded a 22% rise over the year, whilst edible oil freight rates recorded a similar increase of 23%. The direct impact of this was a greatly improved earnings environment for owners, especially those operating in the Far East, which remains the primary driver for these increases in freight rates.

In 2022, we expect seaborne trade to grow by 4.5%, supported by a continued increase in exports from the Middle East and US where chemical project investment is beginning to pick up. Future fleet growth prospects look minimal with appetite for newbuildings remaining muted due to high prices, lack of yard space and investment interest focused elsewhere. After less than 1% net fleet growth in 2021 and around the same level expected in 2022, the fleet is due to contract year on year from 2023 onward based on the current picture.

The chemical tanker fleet was 60m DWT at the start of 2021. 2m DWT was added to the fleet through the year and 1.7m removed. The order book stands at just over 6% of the fleet at the start of 2022. The weak tanker markets led to tonnage oversupply throughout the year; the ability for owners to triangulate their voyages around CPP legs was made more challenging due to the lack of products tonnage demand which weighed heavily on earnings, particularly in the West.

The green transition is one of the drivers for the fleet replacement. The looming EU ETS and EEXI/CII regulations in 2023 will no doubt raise questions over operating costs, tonnage efficiency and alternative fuel choice. The specialised fleet could see further contraction because of these regulations, with scrapping a more cost-viable alternative. Conversely, the diverse nature of the sector from a cargo perspective is complex yet positive. Alternative fuel developments in the methanol space and growth in the demand for biofuel have led to greater interest in the sector. The breadth and depth of the specialised products business is unparalleled and we remain in a unique position to advise and support all our stakeholders on their green agendas, in conjunction with our dedicated in-house Green Transition team.

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As we enter 2022, sentiment is subdued after the emergence of the Omicron variant, but the market is in a much improved position compared to January 2021. Although uncertainty remains, the future for our market is optimistic. This, combined with a petroleum products sector that is showing some early signs of recovery, as well as a very low order book, will continue to provide a floor for freight rates and earnings over the coming year.

Gas

The LPG carrier market fared well in 2021.

VLGC freights averaged US\$34,019 per day compared with US\$34,923 in 2020.

LPG seaborne trade levels continued to rise, growing by approximately 5% year on year. Tonne-miles also continued to increase, supported by strong import demand in Asia which pulled a growing North American export slate East in order to cover the shortfall in Middle Eastern exports as OPEC cuts continued to take their toll. North American exports were up by 17%, with over 69% of those volumes going to Asia.

Despite the growth in voyage duration and volumes, the impact of the addition of 18 newbuildings in 2021 resulted in only a marginal decrease in freight rates. The LGC market continued to gain support from increased waiting times for the VLGCs transiting the new Panama Canal; consequently assessed 12-month time charter rates rose from US\$29,059 per day to US\$29,202. Midsize sector freight rates rose from an average of US\$26,479 per day to US\$27,170 in 2021, underpinned by flat fleet supply combined with increased LPG trade volumes.

Trade volumes are expected to continue to increase in 2022, supported by a recovery in Middle Eastern LPG exports and continued growth in North American supply. The forthcoming influx of newbuilding deliveries in both the VLGC and Midsize segments remains a challenge, but the ageing profile of the fleet may see the removal of some older units thereby mitigating some of the impact.

Our shipping and product teams continue to grow and provide multifaceted solutions (including newbuildings, secondhand sales and longer-term charters) to our clients, against a backdrop of volatility in the market.



PCG

The market for the smaller LPG carriers in 2021 started to show marked improvement as the year progressed, most notably in the fourth quarter, despite a disappointing start to the year.

The Handysizes continued to benefit from healthy US Ethylene and Ethane exports. Freight rates for benchmark 22,500 cbm Semi Ref carriers rose from US\$18,639 to US\$19,500 per day. The larger ship market supported recovery in the smaller sizes, underpinned by relatively flat fleet supply. Freight rates were supported by unplanned outages at refineries and crackers. In the smallest size categories, freights for 3,500 cbm pressure carriers in the west rose from US\$220,000 pcm to US\$225,000 pcm whilst those for the 3,200 semi-refrigerated vessels rose from US\$227,000 pcm to US\$280,000 pcm. The recovery in freight rates for the smaller sizes is expected to continue as the age profile of the fleet deteriorates and there are limited newbuildings.

LNG

The LNG shipping market began 2021 on a strong note for spot LNG freight rates and term LNG supply contracts agreed. LNG freight rates surged on the back of strong heating and restocking demand in Asia and Europe; several LNG export plants outages in the Pacific and Middle East replaced by US LNG export cargoes; severe delays for LNG carriers through the Panama Canal; and limited available tonnage.

In 2021 the spot headline rates for conventional 160,000 m³ Tri-Fuel Diesel Electric ('TFDE') tonnage climbed 50.5% year on year and averaged US\$89,179 per day. LNG freight rates were volatile in 2021. Starting at US\$195,000 per day at the start of the year, rates declined to US\$28,500 per day in early March as a result of changing weather conditions in Asia and a reduction in US exports. Throughout the summer rates were in the US\$50,000-US\$70,000 range before surging to a peak of US\$210,000 per day at the start of December. By the end of the year, rates were back at US\$80,750 per day.

The wider spreads between Asia and the US and between Asia and Europe led to a significant volume of spot tonnage fixed for long-haul voyages from the US Gulf Coast to Far East Asia, increasing tonnage demand.

LNG tonnage demand grew by 13.8% during the year to reach an all-time high of 1,744bn tonne miles, driven by the growth of long-haul voyages. Trade between the Atlantic Basin and the Pacific Basin climbed 38.2% to 64.6m mt. The average laden distance sailed by LNG carriers increased 7.6% to 4,588 nm in 2021, compared to 4,265 nm a year ago.

Global LNG trade volumes rose by 5.8% to 381.1m mt in 2021, as higher volumes from the US (whose exports surged 50.2%), Egypt (fivefold increase) and Australia (which replaced Qatar as the largest LNG exporter) were partially offset by losses from Nigeria, Trinidad & Tobago, Norway, Peru and Angola.

On the demand side, Japan-Korea-Taiwan remained the largest demand area with 141.0m mt of imports, but China overtook Japan as the world's largest LNG importer with 81.0m mt against Japan's LNG imports of 75.2m mt.

2021 saw 53 conventional LNG carriers (2020: 32) and 4 FSRUs (2020: 4) (also able to operate as LNG carriers) delivered from shipyards, 21 more than the previous year. 84 conventional LNG carriers were ordered in 2021 compared with 32 in 2020. Two medium-size LNG carriers were also ordered for projects in China.

Tonnage demand is expected to increase again in 2022, led by growth in LNG export volumes. Demand for LNG cargoes is underpinned by restocking in Asia and Europe and China's gas demand growth, supported by the increased import capacity of 10m tonnes per annum. Trade flows are also expected to be supported by four LNG export projects scheduled for commissioning in 2022: the 5m mt Sabine Pass T6 and 10.0m mt Calcasieu Pass in the USA, the 3.4m mt Coral South FLNG in Mozambique and the 3.8m mt Tangguh T3 in Indonesia. Newbuild ordering is expected to continue into 2022. This is supported by several liquefaction projects which anticipate reaching final investment decision this year, by portfolio players holding long-term FOB supply contracts from projects under construction and by players looking at renewing existing tonnage with more efficient LNG carriers.

+40%

increase in global sales volumes in the secondhand market versus 2020

Sale and purchase Secondhand

The global sale and purchase ('S&P') markets continued to recover in 2021, with sales volumes reaching record levels (over 147m dwt and US\$47bn reported). Despite some remaining COVID-19-related disruption (particularly around crew transfer), the S&P markets have been extremely active, supported by highly cash-generative and strong charter markets (aside from tankers), a generally improved economic outlook and the potential impact of upcoming regulations. Transaction volumes increased most notably in the containership sector, underpinned by the exceptional global freight markets, with over US\$14bn of sales (500 ships) reported, more than triple the previous record level in dollar terms. Activity also increased significantly in the bulkcarrier (961 units of US\$16bn reported, more than doubling in value) and tanker (522 units, US\$11bn) sectors.

Asset values increased most rapidly in the containership sector, with some price levels doubling or even tripling in value during the year, with Clarksons' overall secondhand price index almost doubling from 93 to 183 points. Values also increased in the bulkcarrier sector (our 5-year-old 'eco' capesize index increased from US\$36m to US\$47m over the year) against the backdrop of improving charter markets, while tanker values still increased slightly (our 5-year-old VLCC index increased from US\$63m to US\$70m) despite weak charter markets. Escalating newbuild pricing (with many newbuild values up 30-50% in 2021) and scrap prices (up from approximately US\$400/ldt at the start of the year to a peak of around US\$600/ldt in the fourth quarter) have also provided support to secondhand pricing levels. Recent S&P trends amongst the major shipowning countries continued, with Greek owners still the biggest buyers and sellers of tonnage, whilst Chinese entities were also notably active in 2021.

Our Secondhand business benefitted from these market conditions and global sales volumes increased by 40%. This was further enhanced as asset values rose. In tankers, despite an extremely poor freight market throughout the year, the owning community deployed profits generated from the other sectors in a form of counter-cyclical buying activity. We sold more tankers than any other sector, largely thanks to a mandate to handle the sale of a major Asian owning group which had gone into liquidation with in excess of 50 vessels in the fleet. The client recognised the breadth and reach of our offering which is a testament to the hard work and dedication of the team. Whilst such mandates do not come along regularly, we believe our track record in this

space will help us win further mandates. All our offices globally contributed to our success with London, Athens, Shanghai, Tokyo and Copenhagen all reporting a significant increase in volumes of concluded transactions. In Shanghai and Tokyo new team members joined and enabled us to access new clients.

As we move into 2022 we feel confident that the markets will allow us to continue where 2021 has left off.

Newbuilding

Activity in the global newbuilding market picked up significantly during the year, with order volumes doubling to 48m CGT and US\$110bn. This represents the firmest level of ordering since 2014, supported by strong underlying shipping markets, improving economic outlook and interest in alternative fuels. Investment was dominated by the containership sector, with record orders of 4.3m TEU and US\$43bn placed. There was also strong activity in the LNG and LPG sectors, with orders of US\$22bn placed. We also saw a strong second half of ordering in the car carriers market and a steadier flow of bulk carrier and tanker newbuilds.

Newbuild prices generally rose by around a third over the year, with 50% increases for larger containership pricing, as major shipyards booked up capacity. After a period of decline, the global order book backlog edged up again through 2021 to 90m CGT, although this remains relatively low in historic terms at 9.4% (by dwt) of the current fleet capacity. Shipyard output remained relatively steady year on year, totalling 32m CGT, with Chinese yards (42% market share) and South Korean yards (32% market share) delivering the majority of tonnage.

The green transition continues to dominate planning across the maritime industry, including an increasing emissions regulatory framework from the IMO and EU alongside wide-ranging policy announcements from stakeholders across maritime. This is increasing fleet renewal requirements, with clients' focus on decarbonisation intensifying and alternative fuels and ESTs becoming central to newbuilding discussions. The share of the current order book that is alternative fuelled increased to 35% of tonnage by the end of 2021, up from 28% a year ago and 10% five years ago. This includes 31% of order book tonnage set to use LNG as a fuel. Our activity over the period is reflective of this trend, with close to 60% of our contracting activity over 2021 having a capability to utilise alternate fuels/propulsion, and in turn giving us a significant insight into the adoption of these technologies going forward.



3,450

**Wind turbine generators
installed globally in 2021**

Our global newbuilding teams performed exceptionally over the period with a record year of contracting activity in both Korea and China. There were notable transactions in containers, LNG carriers, drybulk vessels and tankers driven by speculative demand, as well as significant project business leveraging the breadth of service provision the Group offers to our client base.

We remain well placed to take advantage of market developments driven by regulation and our robust contracting experience will continue to provide unparalleled levels of market insight, value and validation to our client base.

Offshore General

2021 saw improvement in the traditional offshore oil and gas business, while offshore renewables (wind) continued to see growth. Commodity prices strengthened significantly through the year, with oil prices up more than 50%, and Brent and WTI seeing their strongest performance since 2016 and 2009 respectively. Natural gas prices have also generally remained at high levels, across North America, Asia and Europe. Oil and gas companies have seen very strong performance with record-high operating cash flow for many of the companies in the sector. However, despite the very strong cash generation, exploration and production spending continues to be restrained by an increased focus on decarbonisation and prioritising direct shareholder returns and debt. The offshore sector saw increased activity levels in 2021 and we have seen improvements in all the sub-sectors and across most or all geographical regions when compared with 2020, despite these headwinds.

We expect 2022 to progress in the same direction, with likely further improvement in activity levels and a corresponding positive impact on fleet utilisation and day-rate levels.

The continuing strong growth for offshore wind is underpinned by solid, long-term drivers; the energy transition and the desire to decarbonise energy supply. 2021 was another year of very high authorisation activity for offshore wind farms, following a record level in 2020. This provides a solid backdrop for many years ahead of increasing offshore activity levels.

Drilling market

Total offshore rig demand measured by active (contracted) rigs saw some improvement through 2021, having bottomed out in the early part of the year. At December 2021, there were 360 jackup rigs on contract (2020: 343). In the floater segment, 119 rigs were on contract (2020: 110). Utilisation also improved through last year, with working utilisation levels in December 2021 at 81% for jackups (2020: 76%) and 74% for floaters (2020: 66%). Average dayrates for floater rigs also started improving in 2021, albeit with significant regional differences. Dayrates for jackups remained largely flat throughout the year as jackup idle capacity was higher. That segment remains more fragmented, with more contractors offering rigs, and contract durations on average shorter. The floater segment has seen more consolidation and retirement of rigs, and the available relevant capacity is currently largely controlled by a limited number of players. Most of the world's large drillers have now been through some form of refinancing, and the current round of restructuring seems to be coming to an end. Following these restructurings, we have also seen several of the larger companies in the segment consolidate, a process we think is likely to continue in 2022.

Subsea field development market

Authorisations of new offshore field developments saw some improvement in 2021. The major subsea contractors continued to see a strong order intake through the year with combined backlog building slightly more than 10% over the year. 2021 represented the third year in a row that saw backlog growth for the major subsea engineering, procurement and construction ('EPC') contractors. As the average lead-time to execution for these companies is typically 12-24 months, we will see offshore activities ramp up from 2023 onwards. 2021 also saw a significant increase in contract awards for new floating production storage and offloading ('FPSO') units, with seven new contracts awarded globally, up from only four in 2020, illustrating the underlying improvement in the subsea field development market. However, the chartering market for subsea vessels in 2021 remained challenging due to lag-effects. We expect the backlog build witnessed by the larger contractors in 2020 to also lead to improving market conditions for subsea vessel owners. Certain vessel categories started to see increased utilisation and higher rates driven by high activity in the offshore wind sector, with wind farm operators sourcing support vessels from subsea oil and gas. We expect to see continued improvement ahead in the subsea chartering market.

The chartering and newbuild teams brokered a number of specialised newbuilds with an aggregate value of US\$1bn which will be needed to install the massive pipeline of 200 GW of offshore wind production projected to be installed by 2030.

Offshore support vessels

The market for OSVs also saw meaningful improvement throughout 2021. Overall, activity for PSVs globally has recovered to pre-COVID-19 levels and the number of vessels in layup has come down. We have also seen tightened availability in several regions for specific vessel categories. Average dayrates have strengthened significantly. With overall activity levels likely to continue to improve in 2022, particularly within drilling, we expect to see further market strengthening throughout the year for the OSV sector.

Offshore renewables (wind)

As expected, all renewables sectors experienced growth through 2021 with the offshore wind sector continuing its vigorous growth trajectory throughout the year. An additional 3,450 wind turbine generators ('WTGs'), representing a capacity of 18.7 GW, were installed globally, driven by a surge in China pushing total global capacity to 50.6 GW. At the end of the year there were 253 farms and 10,831 turbines in operation.

Sanctioned Final Investment Decisions ('FID') amounted to 5.3 GW for Europe and 7.0 GW in total, excluding mainland China. FIDs and project sanctioning amounted to US\$25bn and in 2022 is forecast to reach US\$36bn. The global energy market is set to grow at a 2.4% compound annual growth rate until 2050; and the global offshore wind market is expected to grow at 15-20% per annum with the UK poised to be the largest market in the European region for the foreseeable future.

2021 also saw the first FID for a large-scale offshore wind farm in the US and, when combined with large announced Engineering Production, Construction and Installation contracts, opens up an exciting new market. Other new markets are also showing very interesting development, with Poland awarding 6.0 GW of capacity, and Japan awarding its first large auction, notably 1.7 GW to a Mitsubishi-led consortium. 2021 saw a long list of new pledges for renewable energy, with several countries including Germany, Denmark and the Netherlands upping their offshore wind capacity targets by 2030, a key milestone for the industry. The WTG producers (primarily Siemens Gamesa, Vestas and GE) introduced technological advances including a record breaking 15 MW capable WTG. The introduction of new



technology in conjunction with larger projects reinforces the benefits of economies of scale and thus lowers the levelised cost of energy ('LCOE'). Renewable energy from offshore wind will act as a leading energy source to decarbonise power and provides a platform for reducing CO₂ emissions. Renewable energy created by offshore wind is also close to benefitting from advances in Power-to-X ('P2X') storage and offtake solutions using green hydrogen or ammonia.

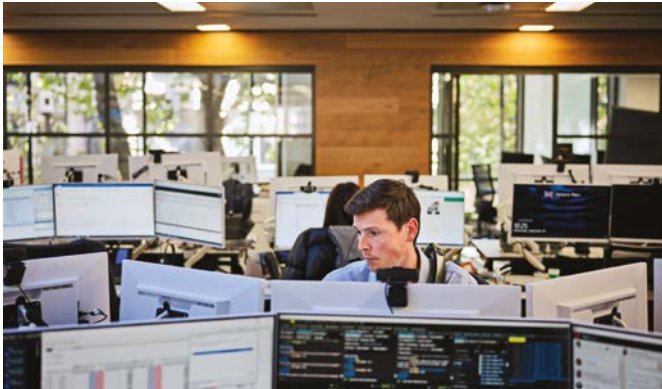
A total of 45 ships (excluding the Chinese domestic market), designed to work with offshore wind farms, were ordered during the year at an aggregate value of US\$2.7bn, up 20% from 2020.

The outlook for the offshore wind space remains bright, and we expect a very busy year for the industry in 2022.

Our renewables business has identified vessel procurement services (chartering) and newbuild services as the key area of expertise but with an increasing attention on advisory and sale and purchase activities. We are the leading advisor to the UK/EU and the nascent US markets. The renewables business also launched a new service, Advisory, Intelligence and Research ('AIR'), in the year. We are well positioned to gain from the further expansion of the industry as it matures into a global energy industry.

The chartering and newbuild teams managed and closed several milestone deals, concluding a record number of years of timecharter. They also brokered a number of specialised newbuilds with an aggregate value of nearly US\$1bn which will be needed to install the massive pipeline of 200 GW of offshore wind production projected to be installed by 2030.

The start of 2021 saw a high level of capital markets activity in the segment, with IPOs and M&A across many segments and there remains a high ESG focus, although investors are becoming more selective, requiring a firmer outlook and a clearer path to profitability from companies. The renewables business has assisted in various commercial and financial transactions, including several IPOs, supporting the wider Financial division.



Futures

The links between the Futures desks has been effective in 2021. We have had very good cross-over of clients meaning that we have traded with more clients this year than in any previous year.

Dry FFA

2021 was the best year in the last decade for the dry FFA market.

The year saw relatively low dry bulk rates in the first quarter, but the futures market saw much bigger volumes. As the year progressed volumes remained high as rates increased in the third quarter, seeing the highest rates since the financial crisis. Rates slipped more than expected during the fourth quarter but remained well up on last year.

Swaps

Capesize rates in 2021 averaged US\$33,333 per day, over US\$20,000 higher than in 2020; daily traded volume increased to 3,187 lots (2020: 2,015 lots). Similarly, the panamax market saw rates nearly triple relative to 2020 to average US\$25,562 per day; daily traded volume increased to 4,628 lots (2020: 2,957). The supramax market saw the biggest growth with rates more than tripling at \$26,770 per day and daily volume doubling to 1,686 lots.

Options

The panamax options market became the big story of the year with volumes up 67% to 238,140 lots. The capesize option volumes shrank by 34,788 lots to 141,925 lots. Supramax volumes, similar to swaps, more than doubled to 16,775 in the year.

Currently, full year 2022 contracts are trading above US\$24,000 per day on capesizes and US\$22,000 per day on panamax.

Wet FFA

In 2021 tanker FFA market volumes were down on the previous year reflecting challenging market conditions as mentioned in the tankers section on page 32.

Our volumes increased, despite the fall in market volumes.

Carbon

Prices of EU Allowances in the EU ETS reached a 15-year and a then all-time high of €88.88 on the back of broad-based economic recovery and firmer energy markets. The highly liquid market on which European industrial installations hedge their carbon price exposure saw high volatility and firm trading volumes throughout the year.

Awareness of the world's largest carbon market gained traction in 2021 and more interest was generated by COP 26 in Glasgow. Knowing that shipping will be adopted into the EU ETS from 2023 helped drive further enquiries to the Carbon desk from owners, operators and charterers with European exposure.

As well as the regulated carbon market, we have seen considerable interest from shipping-related clients for voluntary offsets as part of their internal strategy and investment into new projects.

As the industry adjusts to the green transition, we are well placed to meet client demand for information and to enable access to the market. We see the year ahead as being one of continual development and expansion of our client base for the daily transactions of both regulated and voluntary environmental products.

The right solution, delivered

Clients value our ability to analyse positions and global availability of assets in the niche rig transport market and to offer competitive solutions. A recent deal saw the team deliver a unique and creative solution for the jackup rig Atlantic Amsterdam, which was transported using the Northern Sea Route in its entirety, from the Port of Grenaa, Denmark to Qingdao, China – a never before taken route for a single rig transportation.

The collaboration between our towage, salvage and transportation team (based in London) and the offshore shipbroking team (based in Singapore), and their deep understanding of the circumstances created by the size of the rig, meant that they were able to source and fix the required tugs and specialist transport vessel.

No matter how complex the challenge, we're committed to meeting the unique needs of our clients.



Financial

An exceptional year for our Financial division as investor confidence in the underlying markets improved

Share of revenue



Services

- Securities
- Project finance
- Structured asset finance

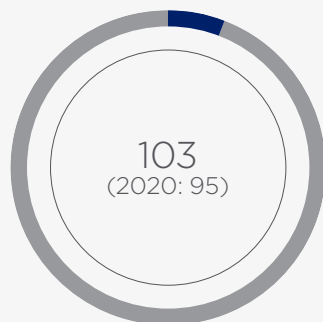
Securities

2021 marked a year of strong economic recovery supported by US\$16tn of global stimulus, the roll-out of vaccines and pent-up demand. Against this backdrop, 2021 was the best shipping year since 2013 and shipping equities had a solid year, with an average gain of 41% based on 66 listed companies. Container equities were the best performing sector with a gain of 244% whilst dry bulk equities increased by 130%. LNG carrier equities ended the year 52% higher. The shipping banking team completed 11 capital market and M&A/advisory transactions and raised a total of US\$0.8bn in capital, maintaining a leading position in capital markets for shipping.

Segmental split of underlying profit before taxation



Employees



'Green and Tech' are dominating post-COVID-19 planning, with the focus intensifying on reducing the shipping industry's emissions. Carbon regulations will continue to be increasingly important in 2022, with a forward-looking stock market likely to price in the positive effects of emissions savings technologies. Companies with eco-vessels are likely to benefit from upcoming carbon regulations due to lower fuel consumption and emissions, with carbon taxes in the EU also expected to have an impact. Consequently, companies with a young eco-fleet, or the ability to invest/renew, could see a multiple expansion. With the recovery from COVID-19 continuing and disruption likely to take time to unwind, market sentiment remains positive. While risks remain and progress may be uneven, the improving economy, limited order book in many sectors and the green transition are all supportive tailwinds for the moment.

Global energy markets continued to rebalance in 2021 and helped oil prices improve through the year with an average US\$71 per barrel, up 72% compared to 2020. The total capital commitments for new offshore oil and gas projects amounted to US\$85bn, also up 72%. These factors have positively impacted the offshore drilling space where utilisation has developed positively throughout the year. Dayrates have also seen a positive impact, particularly for high specification floaters where dayrates above US\$300k per day in the US Gulf of Mexico have been seen. In terms of market dynamics, several drillers have emerged with sustainable balance sheets after completing their chapter 11 processes, which have laid the ground for further consolidation in the sector. Asset transactions are taking place at a higher pace. On the capital markets side, we assisted Borr Drilling in completing two equity raises in 2021, whilst newly established Deep Value Driller financed the acquisition of the drillship Bolette Dolphin through



More information:
[www.clarksons.com/
services/financial](http://www.clarksons.com/services/financial)

The IEA expects renewables as a share of the electricity generation mix to have reached an all-time high of 30% globally in 2021. Key technologies such as wind and solar continue to see falling costs and increased competitiveness.



a private placement, and Shelf Drilling raised a senior secured bond. The OSV market conditions have also improved during 2021 and activity levels are currently above pre-COVID-19 levels. However, the sector is still too fragmented and companies are struggling with stretched balance sheets. We expect to see more ongoing restructurings in the OSV segment in 2022 which will eventually trigger more M&A and capital markets activity. We assisted Tidewater in raising a US\$175m senior secured bond to repay existing debt in 2021.

The outlook for global installed offshore wind capacity continues to look strong with installed capacity for 2030 expected to reach more than 250 GW, translating to a circa six times increase from today's levels. This market backdrop made 2021 an active year for owners of offshore wind service vessels, a segment which has experienced increased focus and attention due to strong demand outlooks combined with limited availability of specialised offshore wind tonnage. Key players in this segment have focused on increasing their market position through newbuild orders and consolidation ahead of the vessel supply deficit expected to materialise going forward. With a strong ESG profile and attractive market fundamentals, the capital markets have remained open for high-quality offshore wind service vessel companies, and 2021 was an active year for capital markets transactions within this segment. Over the year we advised companies such as IWS and Edda Wind on their IPO in Norway, and assisted Eneti Inc. with raising equity on NYSE. There were two notable M&A transactions in the WTIV segment during 2021, with Eneti Inc. merging with Seajacks and OHT merging with Seaway 7. From a capital markets perspective, the outlook for 2022 remains positive, largely driven by solid market fundamentals combined with continued newbuild ordering activity. We see large equity needs across the offshore wind service vessel segments to fund capex programmes for both listed and private players. Given the availability of attractive bank financing for offshore wind vessel projects, the key focus is expected to remain on private and public equity offerings as opposed to high yield bond issues.

In 2021 the metals and minerals team completed 11 transactions and raised a total of US\$1.9bn in capital with US\$0.9bn in bonds and US\$1.0bn in equity. This resulted in total revenue of NOK142m. Equity accounted for NOK42m of total revenue, whilst debt and advisory accounted for NOK94m and NOK6m respectively. The year-on-year revenue growth was an extraordinary 351% as the number of completed transactions and revenues per transaction both increased, driven by the strong tailwinds in commodities and the strength of our long-term relationships. Going forward, we expect mining majors to have strong balance sheets and liquidity and thus will focus on M&A and potential investments in juniors. Furthermore, we expect to see a significant demand for construction financing for battery minerals and projects within the battery value chain supported by the general demand for electrification.

Renewable energy continued to break ground and most sub-sectors exhibited strong growth rates. The IEA expects renewables as a share of the electricity generation mix to have reached an all-time high of 30% globally in 2021. Key technologies such as wind and solar continue to see falling cost levels and improved competitiveness, and new projects are being announced, backed up by continued commitments to fast track the energy transition. In capital markets, renewable energy and cleantech saw a particularly strong interest in the beginning of the year and, in Oslo, almost half of all listings were related to ESG or the energy transition. With increasing interest rates and concerns about inflation, ESG stocks saw more headwinds during the second half of the year. One sector that stands out is the carbon capture industry, which has experienced a breakthrough year with a 150% increase in European carbon prices. Stocks have surged and the market is recognising that carbon capture will be an important element in reaching the Paris Agreement goals. 2021 was another year with extraordinary numbers in terms of megawatts announced and capital employed and invested in renewables. It was a good year for our renewables team with multiple transactions completed across hydropower, carbon capture, biocarbon and cleantech. For 2022 we expect to continue to see robust investor demand for ESG projects and companies and, as we expect increased interest for more mature companies, we anticipate a higher level of M&A across technologies.



2021 has been our most active year since 2008 in project finance.

In 2021, the fixed income group team completed eight transactions with total capital of US\$1.1bn raised. Straight bonds accounted for most of this, but we also placed several sale and leaseback transactions and convertible debt. Our primary deals were aided by historically low interest rates and issuers took advantage of the favourable terms available. The outlook for 2022 is somewhat mixed as interest rates have already started to increase, and we expect this to continue, although this does create opportunities, with many companies keen to utilise the credit markets before terms deteriorate. Equities are still exhibiting record levels of volatility and with rising interest rates and inflation fears we expect this trend to persist, benefitting the convertible bond primary market. There is currently a market rotation from IT and healthcare into energy, materials and financials, which should give a tailwind to our core sectors going forward.

Currently, worries about rising inflation, monetary policies and the Ukraine situation continue to dominate the world's financial markets. With the conflict in Ukraine, and the extensive economic sanctions from the US and the EU, the already high energy prices could rise further. With high energy prices, companies will see rising costs, increasing the cost of manufactured goods, which would decrease household purchasing power and have a negative effect on growth. As in 2021, proper planning and solid execution will continue to be important ingredients for our continued success.

Project finance **Shipping**

In 2021 there was a welcome increase in rates for container ships and dry bulk vessels, with multipurpose ('MPP')/heavylift carriers leading the way.

The strong momentum on the earnings side and lagging ship values created interesting opportunities to acquire vessels at historically low asset prices with good time charters and historically low residual value risk that generate a strong cash yield to investors.

2021 has been our most active year since 2008, structuring and placing a total of 27 vessels with a transaction volume of US\$0.4bn through asset plays, joint ventures and leasing structures. Transactions comprised 15 drybulk vessels, six MPP/heavylift vessels, three container ships, two emergency rescue and response vessels and one exploration cruise ship. During the year, we also successfully sold 14 vessels from existing projects, returning capital and profits to our investors.

In 2022 we are optimistic that our projects will continue to perform well backed by strong market fundamentals including record low order books, high newbuilding prices, limited global yard capacity and a healthy demand outlook.

Real estate

2021 was an extraordinary year for the Norwegian property market which reached an all-time high with a total transaction volume of more than NOK155bn, 54% higher than in 2020 and by far the highest volume recorded for a single year in Norway. December's volume of NOK45bn comprising 71 transactions ended the record year. The previous all-time high for the Norwegian property market was NOK105bn in 2019.

We also had record total transactions for the year. This comprised both acquisitions and divestments, amounting to NOK13bn. During 2021 we arranged for 24 new real estate projects totalling NOK8bn, whilst in the same period securing solid returns for our investors by selling 11 projects totalling NOK5bn. Our dedicated sales desk facilitated secondhand trading in our projects worth NOK1bn.

We expect high activity to continue into 2022 with an attractive transaction market in Norwegian property.

Our investment management operation continues its positive development. Our first fund Oslo Opportunity 1 is in the process of realising its last investments, while our second fund Oslo Opportunity 2 was fully subscribed with NOK0.8bn in equity in the first quarter of 2021. Approximately one third of this capital has now been deployed. We plan to raise further capital and establish new funds in the coming year.



In recent years the real estate sector has made a significant leap towards the technological and environmental trends driven by authorities, entities, tenants and ultimately investors. The demand for technologically advanced, energy efficient and sustainable buildings are ever increasing, along with the ability to create engaging buildings and neighbourhood environments which are enjoyable places to live, work and socialise. Our project development business was further strengthened in 2021, bringing in further professional expertise and capacity to this ever-increasing complex development environment in-house.

Structured asset finance

In the first half of 2021 activity in the asset finance market was high. A general stabilisation in the financing markets, buoyed by positive demand and increased vessel earnings, provided the backdrop for a raft of financings especially for newbuildings as buyers sought to commit orders ahead of the increased pricing implemented by the shipyards. Mainstream shipping banks and Export Credit Agencies ('ECAs') continued to provide most of the newbuilding finance for the blue-chip names that are financing green projects. Leasing companies, notably some of the larger Chinese leasing companies, secured some of this financing but had to reduce margins to compete. Their successes in newbuilding finance were largely limited to the few deals requiring higher leverage or residual risk transfer.

Outside the newbuilding market, there was plenty of activity in refinancing existing senior debt with the source of capital spread between the second-tier shipping banks, leasing companies and the myriad of alternative lenders including those using green funds.

In the second half of 2021, we saw a decrease in newbuilding finance activity and a corresponding increase in de-leveraging and refinancing at lower cost, especially in the container sector. Chinese leasing companies received a large number of early repurchase option requests as the liner companies sought to use their substantial cash resources to repay or lock in lower finance rates. Furthermore, some of the mainstream shipping banks and ECAs began to expand their customer base as high earnings improved borrower credit ratings and balance sheets. For the very best financing deals with green credentials, competition is increasing and margins are reducing.



In 2022 we expect that the general higher earnings environment will result in fewer highly leveraged deals, with the mainstream shipping banks and ECAs continuing to be the lenders of choice, especially for green projects. We believe that leasing companies will generally need to offer lower margins and take more residual risk if they wish to secure financing for this type of project. Cheaper refinancing, balance sheet optimisation and de-leveraging is expected to provide the majority of opportunities for lenders and lessors alike in the coming months.

We concluded a number of vessel financings for newbuildings and secondhand acquisitions and are currently closing a number of mandates. We remain positive for 2022, albeit we anticipate it to be more challenging to find good newbuilding financing projects.

Support

A strong performance in the year

Share of revenue



Services

- Gibb Group
- Stevedoring
- Short sea broking
- Agency and freight forwarding/customs clearance
- Egypt agency

Gibb Group

Gibb continued to grow quickly. This was mostly due to the expansion of the new Safety and Survival business which benefitted from the growth of offshore renewables. Our Mavric in-house product was well received and saw positive growth and market penetration. We also started to hire out safety and survival equipment.

The new operation in Ijmuiden, Netherlands opened and has started to find traction as it acquires stock.

Stevedoring

2021 was a weak year, owing to a poor harvest in 2020 which was compounded by Brexit-prompted export volumes prior to the end of 2020. The 2021 harvest proved little better, with UK grain exports remaining weak. Imports have remained strong and much above prior years levels, but the additional import volumes are less than the decreased export volumes. We have therefore returned warehousing capacity to our landlord.

The immediate outlook for 2022 is similar.

Short sea broking

High freight rates have made it tough for short sea charterers to accept. Despite this, commissions earned set new records.

Agency and freight forwarding/customs clearance

2021 saw the reintroduction of customs borders for European Community origin and destination cargoes for the first time since 1992. Accordingly, albeit relatively slowly at first, Belfast saw a huge growth in turnover in this sector. 2022 will see further tightening of border rules and customs procedures which will help this operation.

Segmental split of underlying profit before taxation



Employees



More information:
[www.clarksons.com/
services/general-port-
services](http://www.clarksons.com/services/general-port-services)

Gibb Group grew quickly due to the expansion of the new Safety & Survival business, buoyed by the growth of offshore renewables.



Agri bulks, aggregates and scrap had a good year, with underlying growth in the construction sector. As with stevedoring, grain exports had a weak year. This was hindered further by the closure of the Southampton export terminal for 10 months and the rebuilding of a major part of the Tilbury terminal following an explosion in 2020 which demolished 40% of the port capacity. Grain imports were strong throughout the year.

Offshore renewables had a strong year seeing projects finished in Moray East, Hornsea and Triton Knoll. We had greater than expected support from dredging vessels preparing the Hinkley Point power station inlet and outlet pipes. We won Seaway 7's support contract for cabling work on Seagreen, which is positive for the future.

Egypt agency

Agency business in Egypt performed robustly in 2021.

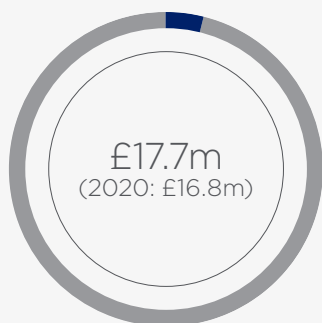
As the global economy started to recover and bunker prices rose, our agency business improved particularly for Suez Canal transit volumes, which increased by 21% year on year.

The liner business continued to provide an excellent service to clients and we expanded our offering to continue to provide clients with the best possible service.

Research

A robust performance continuing our long-term growth trajectory

Share of revenue



Services

- Digital
- Services

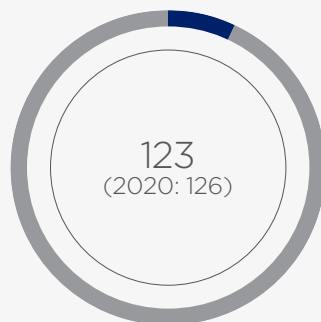
Research, the data and analytics arm of Clarksons, performed robustly during 2021, continuing its long-term growth trajectory.

Our unique flow of powerful and highly relevant research and data, during a period of market complexity and volatility, has been extremely well received by our clients and achieved an excellent profile for the Group. The use of innovative technology and algorithms has continued to expand the depth and quality of our proprietary database, supporting a strong pipeline of product development and an encouraging flow of sales enquiries. Data and research synergies supporting the Broking, Financial and Support divisions were also strengthened during the year, alongside enhanced data provision to the end-to-end freight **Sea/** platform.

Segmental split of underlying profit before taxation



Employees



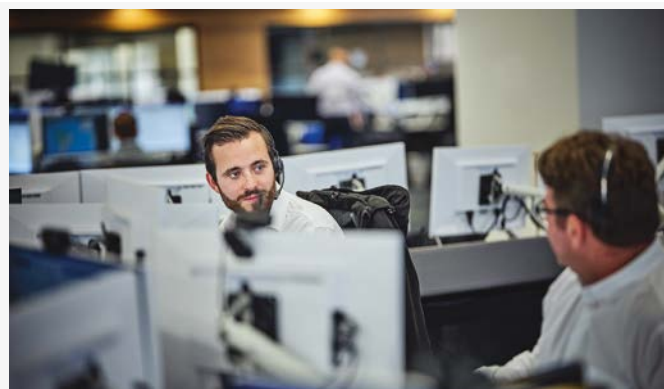
We remain market leaders in the provision of independent data, intelligence and analysis around shipping, trade, offshore and energy. Millions of data points are processed and analysed each day to provide trusted and insightful intelligence to a global client base, typically via recurring revenue agreements. This uniquely powerful data and intelligence underpins the workflows and decision-making of many organisations across the complex and dynamic global maritime industry, including shipowners, financiers, shipyards, suppliers, charterers, class societies, insurers, universities and governments. Our teams in London, Shanghai and Singapore have grown, supporting a constant flow of data expansion, innovation, digital platform development and market relevant content. During 2021, specific investments were made in both our data analytics team, which specialises in developing proprietary algorithms and expanding the depth and quality of our database and indices, and our market research team, which provides expert analysis and content. We also expanded our sales capacity and our investment focus in Asia Pacific continued, with the region contributing strongly and now responsible for 26% of headcount.

In 2021, we continued to pursue our long-term strategy to focus on data, intelligence and insights around the energy transition and green transition. We released updates to our Energy Transition Model, providing decarbonisation scenarios with specific maritime-relevant segmentation, and successfully launched Renewables Intelligence Network, our offering focused on the offshore wind sector. There has also been a very positive reaction from our clients to the further expansion of our wide-ranging research and data around the fuelling transition, including the profiling of the 2.4% of global CO₂ emitted by the shipping industry and the



More information:
[www.clarksons.com/
services/research](http://www.clarksons.com/services/research)

Our uniquely powerful data and intelligence underpins the workflows and decision-making of many organisations across the complex and dynamic global maritime industry.



tracking of uptake of alternative fuels. During the year, Research supported the Group-wide initiatives to partner clients through their decarbonisation pathways, contributing to internal awareness initiatives and providing emissions benchmarking data and vessel intelligence used within the carbon module of the **Sea/** suite.

Digital

Research's world-leading digital platform provides immediate access to our powerful data, analysis, forecasts and insights. In 2021, the number of users of our single access integrated platform reached 10,000 and there was encouraging growth in digital sales, up 19% across the year. There are specific development plans for each of our digital products to ensure data, research content and functionality remain market-leading.

Major digital products include:

Shipping Intelligence Network ('SIN')

SIN is the market-leading commercial shipping database, providing wide-ranging data and analysis tracking, and projecting shipping market supply and demand, freight, vessel earnings, indices, asset values and macro-economic data around trade flows and global economic developments. Sales of SIN grew strongly in 2021, benefitting from our detailed tracking of freight and earnings recovery (the cross segment ClarkSea Index averaged a post-2008 high of US\$28,700 per day), rebounding trade volumes (already above pre-pandemic levels at 12bn tonnes) and widespread congestion (our newly launched Container Congestion Index peaked at 37.5% compared to a pre-COVID-19 average of 31.3%). The introduction of expanded near-term data, including port calling, congestion and vessel activity indices, was particularly well received by our clients, as was our COVID-19 impact assessment insights and reporting. Further improvements to SIN are planned for the first half of 2022.

World Fleet Register ('WFR')

Sales of our WFR, which provides comprehensive tracking of the world fleet and shipbuilding industry, grew an encouraging 24%. Growth has benefitted from a focus on the fuelling transition, supporting stakeholders across maritime with understanding the market impact of complex emissions regulations and their tracking of technology uptake across the world fleet (alternative fuelled order book share is now 35%).

Renewables Intelligence Network ('RIN')

Launched in 2021, RIN provides data, intelligence and analysis around offshore renewables, including the fast-growing offshore wind market. Offshore wind is a hugely exciting growth market, expected to play a vital role in energy transition. Our data suggests that global capacity increased by over 50% in 2021 to 51 GW whilst our modelling suggests it could reach 229 GW by 2030 and up to 9% of global energy supply by 2050. Whilst this is a competitive research area, we are already gaining good traction, and feedback from clients and the other divisions has been very positive.

World Offshore Register ('WOR')

Our comprehensive offshore register provides detailed intelligence on offshore oil and gas field infrastructure and the offshore fleet. Offshore oil and gas remain an important element of the energy mix, accounting for 17% of global energy supply (24.5m bpd of offshore oil production, 123bn cuft of offshore gas production in 2021). Research is the market leader in data provision to the insurance industry, where our data is used as the core reference in identifying rigs and platforms.

Offshore Intelligence Network ('OIN')

Offshore oil and gas markets are showing signs of recovery, with our index of earnings across the offshore fleet up 23% in 2021 to reach its highest level since 2015 by year-end. Our data and analysis of utilisation, dayrates and market supply and demand for the offshore fleet including rigs, OSVs, subsea and floating production continues to be well received by clients.

Sea/net

Developed in conjunction with the Group's technology business (Maritech), our vessel movement system **Sea/net** blends satellite and land-based AIS data with our leading database of vessels, ports and berths. We continue to improve the depth of our underlying movement and deployment data. Despite strong competition there has been good sales growth across 2021, supported by the roll-out of new features.



Services

Our dedicated services and consultancy activities, including the development and management of important long-term relationships with key corporates across the maritime sector, performed particularly well during the year. Interest in tailored data, which often becomes embedded into client systems and includes API delivery via our platform, remained high while our provision of specialist insights, forecasting and scenario modelling to key partners also expanded. We were actively engaged in consultancy during the year, including industry sections for capital market documents, studies for governments and policymakers and several consultancy projects for owners and financiers that collaborated with the Broking and Financial divisions.

As the industry standard source in the provision of authoritative, consistent, independent and well documented valuations delivered through a dedicated team, Clarksons Valuations remain market leaders in providing valuation services to shipowners and financiers. Despite the reducing portfolio size and valuation requirements of some of our long-term European banking clients, there was increased marketing to ship finance and leasing institutions across the year, including in Asia, with several successful multi-year portfolio agreements secured. A review of new European Banking Authority guidelines issued to financiers around property and maritime valuations has been carried out with additional documentation produced and enhancements to the Clarksons Valuations digital technology platform rolled out. A number of valuation clients have been provided with emissions benchmarks and analysis alongside their traditional asset valuations, with the valuations team increasingly analysing the impact of alternative fuels and ESTs on fleet value as the fuelling transition gathers pace. The valuations team has actively supported the sale and purchase broking teams in the active market during the year.

Sea/ Enhancing the way shipping professionals work

Sea/ has performed well in 2021 with continued adoption of the whole product suite. We have launched the industry's first end-to-end freight trade negotiation and management platform, which was well received by clients. Customer satisfaction and product delivery has been at the forefront of our technology offering and this has been strengthened by successive roll-outs of features and enhancements across **SeaFix/** products.

Sea/trade, one of the key products in the **SeaFix/** suite, was launched in early 2021 and enables clients to collaborate, negotiate and capture the complex world of maritime freight transactions. With the successful signing of four key mining majors, Maritech continued to gain significant traction in the shipping market in the second half of 2021.

The **SeaFix/** product suite has been further enhanced by the delivery of a series of integrations with third-party software solutions including the Veson IMOS Platform, Rightship Safety Score, GHG rating and inspection status, and Windward AI's sanction product. Together, these ensure that information key to a freight transaction is available earlier in the fixture process.

Sea/net continues to benefit from expanded product functionality resulting in increased adoption. Supported by the expansion of our intelligence module **Sea/analytics**, clients are provided access to key information and data focusing on commodity flow and marine analytics helping, for example, to understand the impact of vessel supply and port congestion. These modules represent a cornerstone of the **Sea/** suite with powerful and clear insights amidst the noise of information overload.

We continue to see significant market adoption for **Sea/contracts** and Recap Manager, the Maritech contract management modules. **Sea/contracts** has benefitted from enhancements resulting in better change control across clauses, improved access to clause libraries, and simplified linking. In 2021 we achieved a 62% growth in fixture volume and the pipeline of new customers in all market sectors remains strong for 2022.

In the offshore industry, **Sea/response**, which delivers an essential service in providing critical information on the location and equipment onboard vessels in the proximity of an emergency, enjoyed a third-generation release in collaboration with Oil Spill Response. This has further enhanced an already strong product offering.

There continues to be industry focus on international shipping's decarbonisation and we are delighted to demonstrate our commitment to this objective by collaborating with our clients and providing the next generation of industry solutions. In the second half of 2021, Maritech launched **SeaCarbon/**, a complete CO₂ shipping toolkit for the maritime industry. So far, we've tracked more than 1,400 voyages equating to 9.9m nautical miles resulting in the saving of 4.2m tonnes of CO₂. We're excited to continue to innovate and expand our **SeaCarbon/** offering in 2022.

There remains an increasing demand for digital solutions across maritime sectors. Due to the strong adaptability demonstrated by our sales, customer success and support teams, together with collaboration with clients, our global client base has continued to expand significantly, and we expect this to continue.



Global trend: Green transition

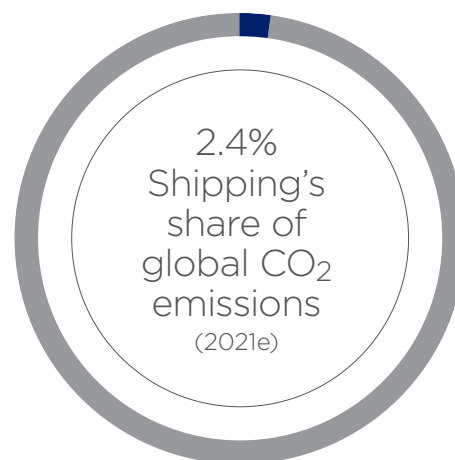
Context

The past decade has seen seven of the warmest years on record and in 2021 levels of atmospheric CO₂ reached an all-time high. The need to transition to a green and sustainable economy is an urgent priority for society, and corporates globally and the shipping industry must play their role in reducing their own greenhouse gas emissions whilst managing changing energy production and energy trade. We estimate that the world shipping fleet produced around 855mt of CO₂ in 2021, some 2.4% of global output, and whilst shipping remains the most carbon efficient means of transport, further acceleration of decarbonisation strategies is crucial. There are already significant emissions reduction targets set by governmental bodies, such as the IMO and the European Union, and by key maritime stakeholders, including financiers and charterers. In post-COVID-19 planning, policies to moderate climate change have become an even greater priority for many stakeholders across the shipping industry. The impacts of the green transition across the maritime industry will be deep and long-standing, requiring huge investment, technology change and innovation.

What this means for Clarksons

The green transition is central to our strategy. We strive to manage our own operations sustainably, and by evolving our market-leading service offering, we can facilitate positive industry change by supporting our clients to develop, validate, execute, finance and monitor their policies and strategies to decarbonise. We invest in data, intelligence, expertise and technology to provide market-leading support to cargo interests and shipowners in executing their freight, carbon and fleet renewal decisions that combine commercial opportunities with the meeting of environmental targets. We are investing to become a leading service provider in offshore wind. Our Financial teams are already active in green financing initiatives and increasingly across the specialist battery mineral and renewables industries. Our technology team has developed innovative emissions reporting and monitoring tools including **SeaCarbon/**. Our expanded research provides world-leading data and intelligence to governments, regulators, trade associations and academic institutions around eco technology uptake across the world shipping fleet, the economic impact of emissions regulation and the impact of energy transition on the maritime industry, helping frame debate and policy decisions.

Shipping's share of global CO₂ emissions (2021e)



■ Shipping	2.4%
■ Other	97.6%

Source: Clarksons Research

Shipping's share of global CO₂ emissions

2.4%

Estimated amount of CO₂ produced by the world shipping fleet in 2021

855mt

Global trend: Technology

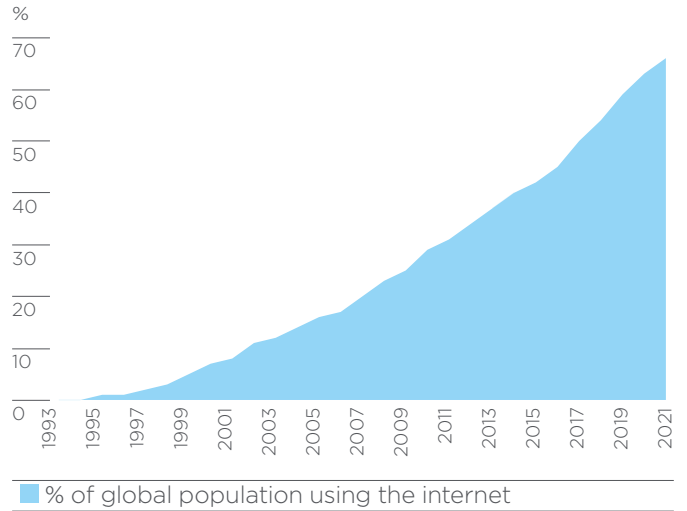
Context

Like many industries, digital technology change is introducing opportunities to radically improve efficiency, regulatory compliance and transparency across shipping. As they have been across society, these trends have been amplified within the shipping industry during the COVID-19 pandemic, with growing demand for digital services and solutions that leverage these opportunities around the freight transaction process and the monitoring and management of risk and emissions. Whilst a range of new technology entrants are also looking to exploit these opportunities, industry participants are increasingly keen to work with established partners with critical mass and industry understanding.

What this means for Clarksons

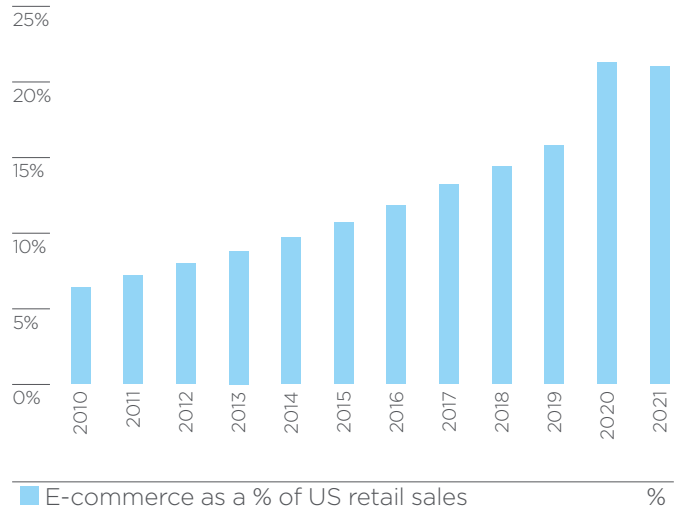
Technology is central to our strategy. Our investments into the innovative **Sea/** suite of technology products have created a transformative end-to-end digital freight platform for the shipping industry. Delivering efficiencies, productivity and risk mitigation, the **Sea/** suite has already become embedded within the workflows of many of the world's largest cargo interests as our global profile, proprietary data, deep understanding of freight and long client relationships encourage increasing uptake. Managed by our technology business, Maritech, the **Sea/** suite also complements our traditional broking offering whilst creating exciting opportunities for growth. Our broader investments into the digitalisation of our workflows and the evolution of digital support systems are long-standing and provide a competitive edge for our Broking, Financial and Support teams. Our Research business continues to utilise innovative technology to generate and deliver its proprietary data and intelligence, with growing demand across the industry to integrate data into client internal digital systems.

Global growth in internet access



Source: Clarksons Research

Growth in e-commerce



Source: US Department of Commerce

Growth in internet access over the last ten years

130%

Increase in US retail e-commerce vs pre-COVID-19 levels

33%

Shipping trend: Trade growth

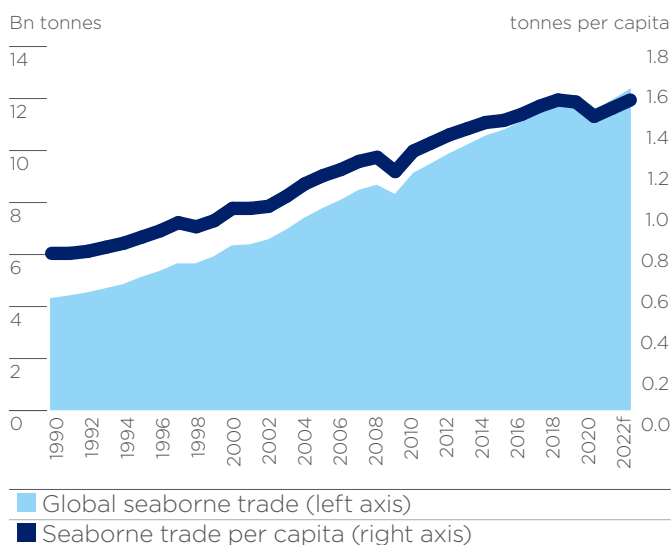
Context

Over the past 20 years, seaborne trade and shipping capacity have expanded significantly, creating a broader and more complex industry by geography and by commodity. Seaborne trade volumes have increased by 90% over this period and today remain 40% larger than at the financial crisis. Volumes have been resilient and recovery complex and volatile during COVID-19 disruption. Emerging markets, supported by population growth, have been central to expanding volumes with Asian imports growing from 2.6bn tonnes to 7.0bn tonnes since 2000. Individual shipping segments, such as specialised products, LNG and LPG, have evolved into more significant markets. Shipping companies, traders and cargo interests have become more consolidated, global and mature in their approach with increasing demands for highly professional support.

What this means for Clarksons

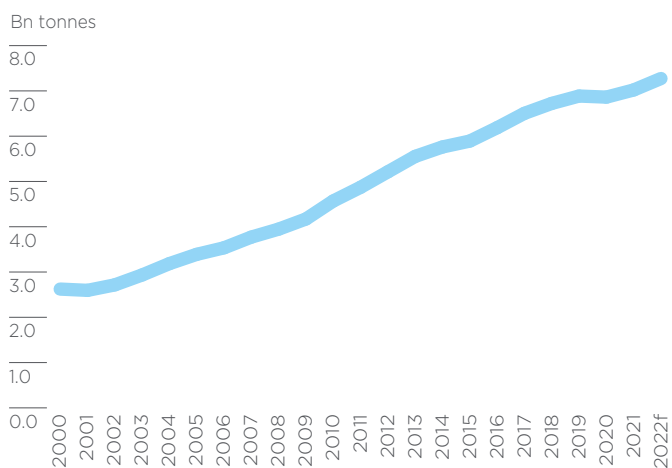
As an essential part of the freight supply chain and market leaders across all major cargo sectors, our Broking teams benefit from growing global volumes of cargo traded and ships chartered. Our strategy to develop and maintain market-leading positions and specialised expertise diversified across all cargo segments has been increasingly important as the global trade matrix has evolved. Our strategy to build a truly global network of offices, expanded again in recent years, allows us to combine global reach with local relationships, knowledge and expertise. Our deep understanding of increasingly complex trade flows, and the range of economic, geopolitical and seasonal factors that impact both positively and negatively on growth trends, make us a trusted advisor and provider of market insights and intelligence to cargo interests and shipowners. Our synergies, offering and scale are increasingly attractive to clients looking for solutions that increase productivity and efficiency, leveraging off our innovative technology and trusted data solutions that help differentiate our service offering and add value to our clients.

Global trade 1990-2022(f)



Source: Clarksons Research

Asia seaborne imports 2000-2022(f)



Source: Clarksons Research

Global trade carried on ships

85%

Increase in container trade volumes, Q1 2020 to Q4 2021

16%

Shipping trend: Energy transition

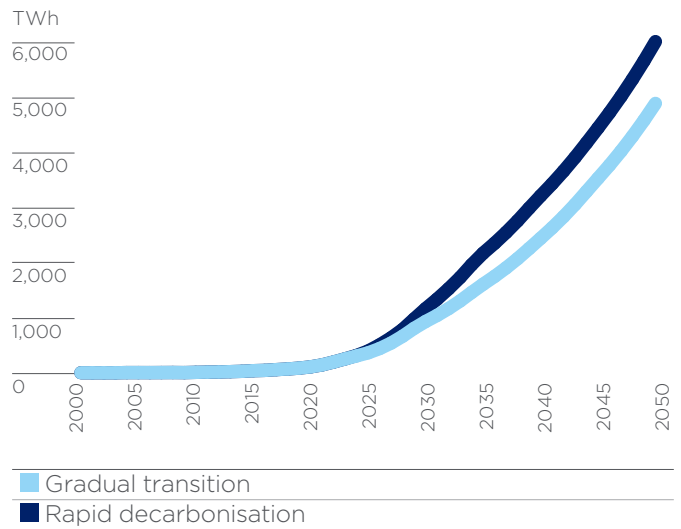
Context

As pressures build globally to find solutions to moderate climate change, the energy transition will cause fundamental change to shipping, trade, offshore and energy. Offshore renewables, which saw record new capacity start up in 2021, is expected to play a vital role in this transition and expand significantly from its current 0.3% of global energy supply. A dedicated fleet is evolving to support the development and maintenance of offshore wind farms as the industry becomes more global and moves further from shore. Close to 40% of seaborne trade, equivalent to around 4.3bn tonnes, is energy transportation and despite underlying growth in energy demand over recent decades, the mix of energy sources and growth rates is changing as environmental pressures build. With strong growth trends in gas and more mature trends in coal, shipping requirements and investment needs are also changing. From an energy production perspective, a significant 17% of global energy still continues to be met by offshore oil and gas production.

What this means for Clarksons

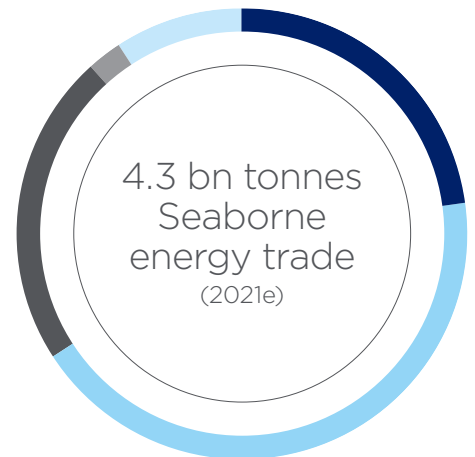
Our strategy commits to growing our participation in the renewables sector. We have built out a dedicated renewables broking and advisory team, focused on the offshore wind industry, working closely with clients in this rapidly expanding sector and executing a significantly increased level of newbuilding and chartering business in 2021. Our Support and Financial businesses, leveraging our expertise in offshore oil and gas, have also built dedicated renewables teams that are growing as they become increasingly active. Our Financial team is growing its presence and activity across the renewables market, to include specialist battery minerals, carbon and hydrogen. We have developed and launched new research and intelligence on the global offshore wind industry, including Renewables Intelligence Network. Our understanding of energy markets and our deep relationships with energy producers and traders allow us to provide an unrivalled service to support our clients in their ship chartering, asset and financing strategies as they manage energy transition. We are well positioned as market leaders in the growing gas transportation markets of LNG and LPG. Through our research, we have invested to produce intelligence that allows understanding of the potential impact of long-term energy mix changes on the maritime industry.

Offshore renewables growth scenarios 2000-2050



Source: Clarksons Research

Energy transportation share (2021e)



	Bn tonnes
Steam coal	1.0
Crude oil	1.8
Oil products	1.0
LPG	0.1
LNG	0.4

Source: Clarksons Research

Growth in global offshore wind GW capacity in 2021

58%

Shipping trend: Fleet evolution

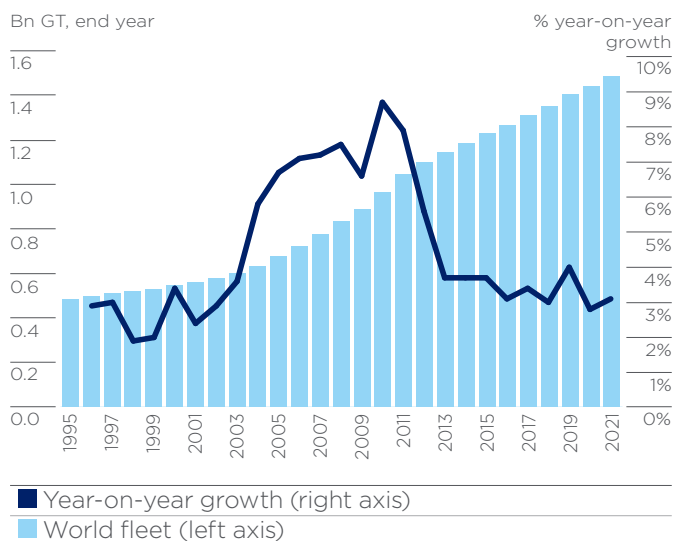
Context

Over the past 20 years, the capacity of the world's shipping fleet has grown by over 150% to over 2.1bn dwt as the shipping industry has expanded to meet its crucial role in servicing global trade. Although fleet growth has started to moderate in recent years, helping markets recalibrate, the world fleet is still 70% larger than at the start of the financial crisis, providing greater potential volumes for our asset broking teams. The dynamics across the shipping fleet are also becoming increasingly complex, with trends towards slower speeds, increasing length of haul, storage plays, 'tiering' of charter markets, shipyard consolidation and congestion. The financial landscape for the shipping industry has also changed significantly since the financial crisis, impacting the number of financial institutions participating and the scale of finance available and leading to many shipowners and cargo interests diversifying their funding sources and investigating new and more complex financing solutions and structures. Green issues specifically, and ESG more broadly, are increasingly impacting the policies of ship finance institutions and access to finance for cargo and vessel owners. Despite these trends and complexities, financing the world shipping fleet and its renewal to meet decarbonisation targets remains hugely capital intensive, with today's shipping and offshore fleet valued at US\$1.6tn and the world order book at close to record lows.

What this means for Clarksons

Our strategy, to develop Broking teams that are market leaders through the full lifecycle of the asset and across every ship type operating in the world fleet, benefits from the increased fleet capacity and greater volumes of vessels bought and sold in recent years. The guidance and execution that our market-leading Financial teams can provide across the more complex ship finance landscape, at a time of increasing investment needs around the green transition, is unique in the market. Our deep expertise, combined with an innovative approach, allows us to support our clients to raise finance across capital markets, project finance, debt markets and through leasing structures. Our offering also includes an integrated service to support ship finance institutions and investors divesting of assets or engaged in restructuring and bankruptcy cases and supporting clients acquiring loan books. Our understanding of the world's shipping fleet, both at an aggregate trend level and on an individual asset basis, is unrivalled. This understanding builds on the synergies between our Broking, Financial and Research teams and supports our clients in their decision-making through our complex and multi-cyclical supply and demand markets. Our research coverage has been built out to cover all markets and offer unique understanding of the expanded global fleet and shipbuilding capacity position. Our valuations, leveraging our understanding of the more complex dynamics driving the world fleet, continue to be trusted as the market-leading source across the finance sector.

World fleet growth 2000-2021



Source: Clarksons Research

Value of world fleet (including order book)



	US\$bn
■ Tankers	211
■ Bulkers	305
■ Boxships	374
■ Gas	149
■ Other vessels	319
■ Offshore	212

Source: Clarksons Research

% of the world 'deep sea' cargo fleet 'in port' in October 2021, representing record congestion

33%

Shipping trend: Fuel transition

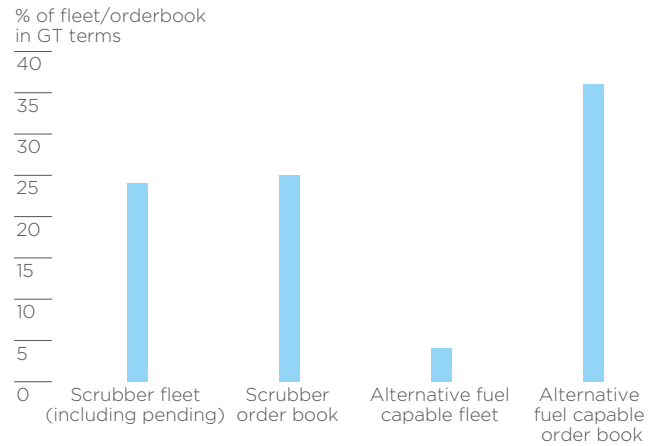
Context

Today the shipping industry produces 2.4% of global CO₂ emissions and 1.8% of all greenhouse gases. The transition away from conventional fuel use is central to reducing emissions across the shipping fleet. New and complex environmental regulations and policies are being introduced across the shipping industry, many of them directly impacting fuel choice and fuel economics. These regulations and policies are also increasingly impacting supply and demand dynamics and commercial decisions across the shipping markets, including the speed of vessels, which are down by an average of 18% since 2008 helping reduce overall emissions. Significantly increased investments in fleet renewal, technology and port infrastructure will be needed to facilitate the fuelling transition. There are challenging strategic decisions for shipowners and cargo interests given uncertainties around propulsion technology and timing of investment decisions. At the start of 2022, 36% of the global order book by tonnage was capable of using alternative fuels, up from 10% five years earlier.

What this means for Clarksons

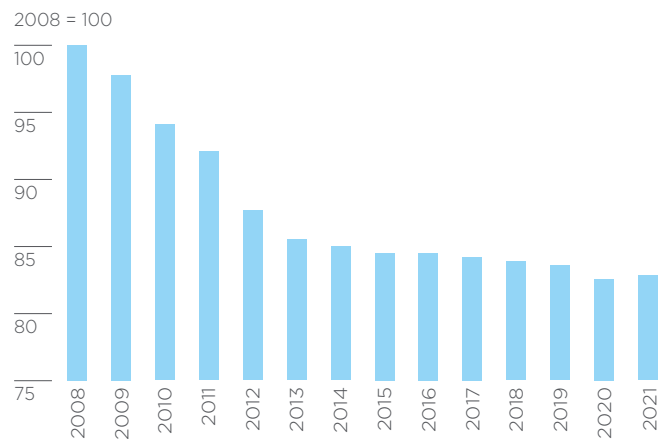
Clarksons is uniquely placed to advise, execute and finance fleet renewal strategies, building on our unrivalled track record with alternative fuelled newbuilding projects by continuing to invest in our expertise and offering. We have established a dedicated advisory team to work with our Broking and Financial teams to develop and execute decarbonisation strategies for our clients. We are uniquely placed to understand and explain the economic impact of new regulations and policies. This allows us to guide clients on how markets may respond and support clients in adapting their chartering and asset owning strategies, including the execution of fleet renewal programmes and chartering strategies. We have initiated an experienced team to provide advisory and broking services for the growing carbon credits market. We have developed technology to track and report CO₂ emissions. The wide-ranging research data and intelligence we have developed, including coverage of eco equipment and technology on board ships, alternative fuels and ESTs, CO₂ emissions benchmarking, vessel speeds and bunkering facilities, is widely used by the shipping industry and policymakers as a trusted source.

Environmental uptake, January 2022



Source: Clarksons Research

Average vessel speed index 2008-2021



Source: Clarksons Research

Share of order book tonnage capable of using alternative fuels in early 2022

36%

Our strategy

Our strategy is to create long-term sustainable value for all of our stakeholders.

We do this by building on our strong performance, which allows us to maintain and develop our position as the global market leader in shipping services.

Breadth

Expanding our breadth to better tailor our integrated offer

With an expanding and industry-leading range of products and services that span the maritime, offshore, trade and energy markets, we are uniquely positioned to deliver bespoke commercial solutions to our clients and enable them to make smarter and better informed decisions. As the market makes increasing strides towards a more sustainable future, Clarkson's investment in renewables and sustainability expertise positions us to lead this vital change from the front.

What we achieved in 2021

As client focus on decarbonisation strategies increases in profile, Clarkson's launched its Green Transition offering, supported by a Green Transition team. The offering is based on an advisory service which helps clients to make cleaner, smarter decisions across the full lifecycles of their shipping activity, incorporating research, technology, broking and financial services. Responding to the growing demand for technology from our clients, we have also continued to invest in our **Sea/** suite of technology products, launching further modules during the year and enhancing a number of existing modules.

Reach

Extending our reach to support clients globally

Our global presence enables us to meet client needs wherever and whenever they arise. With 52 offices in 23 countries on six continents, and growing, we share understanding, culture, IT systems and high standards of corporate governance across our business, as we use our local knowledge to provide our clients with truly global, cross-border advice.

What we achieved in 2021

We grew our key international hubs in Singapore and Oslo, diversified the services provided for the Group from our New Delhi office and accessed flexible technology resources and talent pools in new locations.

Understanding

Stronger understanding of clients' needs

Our client base ranges from oil majors to raw material producers and long-established shipowning families. We have worked with many of our clients for generations, building a deep understanding of their businesses and providing the services that have helped them to prosper. We have more touch points across the industry than anyone else and use our leading technology and authoritative intelligence to offer unique and tailored solutions to meet our clients' needs.

What we achieved in 2021

We launched our Green Transition offering to our clients, providing clients with a consultative approach to finding bespoke solutions to devising and executing their decarbonisation strategy. Enabled by our broad service offering covering research, technology, broking and financial services, our approach has been enabled by our deep understanding of both our clients' needs and the evolving regulation. The renewables business also launched a new service, Advisory, Intelligence and Research ('AIR'), to support project development, execution, operation and management in offshore wind.

People

Empowering people to fulfil their potential

We are committed to attracting and retaining the best people, providing them with the tools and training that empower them to fulfil their potential. Our employees have access to our leading technology and authoritative intelligence, enabling them to support our clients to make smarter and better informed decisions.

What we achieved in 2021

We continued to evolve our competency framework and actively use it in performance management and promotion decisions, creating transparency and a level playing field for all.

Trust

Maintaining trust in shipping intelligence

As a globally-respected market leader in the provision of data and intelligence, our research is widely trusted across the shipping industry to inform effective decision-making. Our database tracks over 160,000 vessels and 8,000 offshore oil and gas fields.

What we achieved in 2021

During the year, Research has further enhanced its coverage of the green transition. Renewables Intelligence Network was successfully launched, providing data, analysis and intelligence focused on the offshore wind sector. Updates to our Energy Transition Model, which provides decarbonisation scenarios with specific maritime-relevant segmentation, and the expansion of our wide-ranging research and data around the fuelling transition, have also been positively received. Research has also worked with other divisions in partnering our clients through their decarbonisation pathways and providing emissions benchmarking data and vessel intelligence used within **SeaCarbon/**.

Growth

Growing our business to improve performance

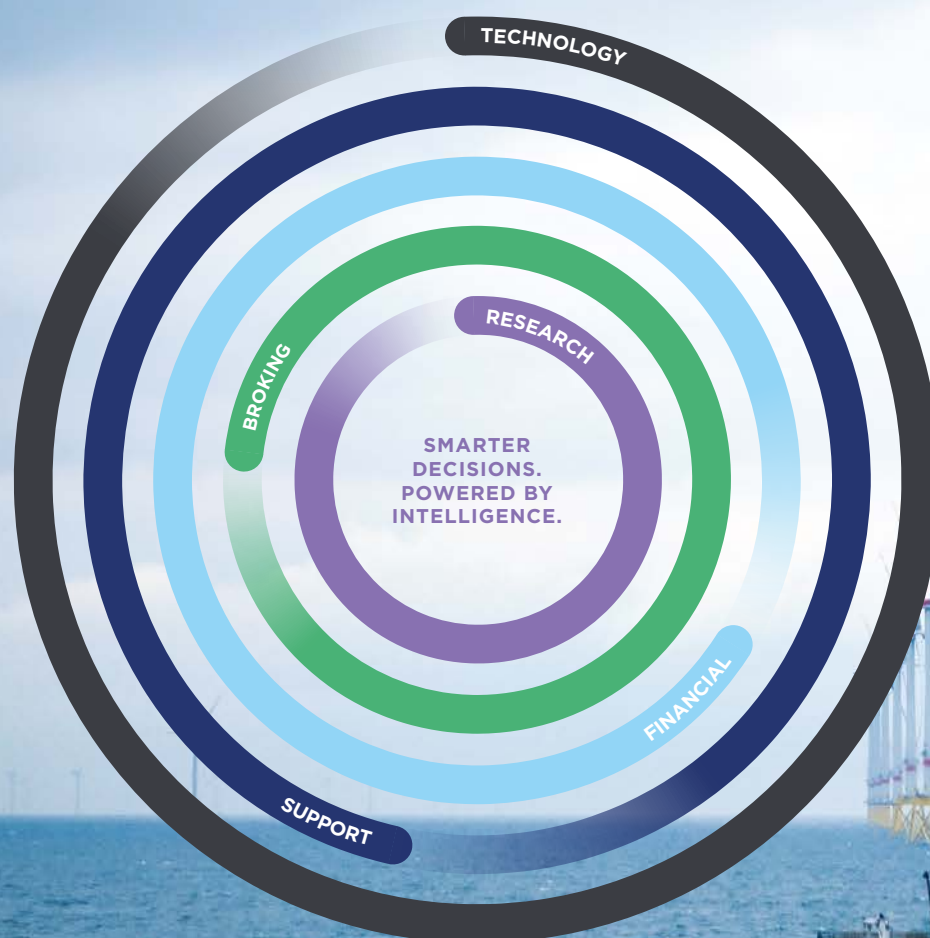
We are a consistently profitable and cash-generative business that is focused on creating long-term value for our shareholders. We do not rest on our laurels as the market leader across our core sectors, and invest to build on our position through the provision of 'best in class' advice and service to our clients.

What we achieved in 2021

We have maintained our progressive dividend policy and increased our dividend for the 19th consecutive year, whilst remaining cash-generative and increasing our free cash resources¹. We also achieved a 55.3% year-on-year increase in underlying profit before taxation¹.

¹ Classed as an APM. See pages 218 and 219 for further information.

Our business model



How it works

We have a deep heritage and market-leading reputation

Our position at the heart of the shipping industry has been built over 170 years. We offer an end-to-end global service and our clients remain loyal to us due to our unrivalled service, breadth of knowledge and industry-leading range of products that span the maritime and financial markets.

We have the best people in the business

The quality of our people has always been our biggest differentiating factor, and our people are our most important asset. We focus on attracting, retaining and developing the best talent in the market, and our people have a track record of delivering for our global client base.

We take time to understand our clients' needs

We tailor our approach to each and every client, building long-term relationships as their trusted advisors. We work closely alongside our clients to understand the challenges they face in a rapidly evolving world, drawing on the expertise from across our four divisions to provide them with tailored solutions and services and the intelligence and tools they need to make smarter and cleaner decisions.

We provide clients with authoritative intelligence

Research sits at the heart of everything we do, allowing us to produce and validate data, supply analysis and insight, and provide valuations across all sectors of the shipping and offshore markets. It enables us to provide bespoke solutions for our clients and support them in making fully informed business decisions across their freight and asset owning strategies.

We provide clients with robust technology platforms and tools

Our investment in technology complements the expertise of our people and provides our clients with real-time intelligence for decision-making and innovative tools for trade. Our cutting-edge technology continuously drives innovation across our industry and enables us to provide bespoke solutions for our clients.

We facilitate smarter, cleaner, global trade

Pressure is growing globally to find solutions to moderate climate change. This will result in fundamental change to shipping, trade, offshore, energy and renewables. We are playing a significant role in the move towards a cleaner future for global trade. Through our Green Transition offering, which encompasses the full lifecycle of global maritime activity, we are committed to helping our stakeholders across the industry with the critical decisions that they will need to make to facilitate these changes.

We enable smarter, cleaner global trade by empowering our clients and our people to make better informed decisions using our market-leading technology and intelligence; and in doing so, meet the demands of the world's rapidly evolving maritime, offshore, trade and energy markets.

Broking share of revenue: 77%

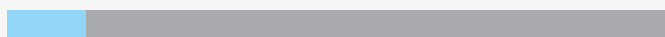


We earn a broking commission based on the value of the freight, the hire or the asset. On our derivative broking services we earn commission based either on the underlying contract value or as a fixed fee per contract.

Our brokers act as intermediaries between shipping principals. Our teams have the expertise, experience and support structure to enable these deals to happen.

We bring together charterers who have cargoes to move, and owners of vessels capable of transporting those cargoes. We help the principals negotiate the terms of a voyage, a timecharter hire or a contract of affreightment, including the freight or hire rate. Our specialist broking teams deal in all major markets in the world's major shipping centres. We also help clients contract newbuildings, buy and sell secondhand vessels, and arrange the scrapping of older tonnage. Additionally, we provide derivative broking services to enable principals to manage and mitigate their risks.

Financial share of revenue: 12%



We earn commissions and fees from these financial services activities.

The Financial division provides full investment banking services, project finance and bespoke asset finance solutions to the shipping, offshore and natural resources markets. We help clients to manage risk, fund transactions and conclude deals which are not available through more traditional routes. The Financial team liaises with a range of potential investors in order to raise funding for clients' projects.

Support share of revenue: 7%



We earn fixed agency fees and revenue from the sales of supplies.

The Support division provides the highest standards of support with 24/7 attendance to vessel owners, operators and charterers at a wide range of strategically located ports. We provide vessel agency, project logistics, vessel chartering, freight forwarding, warehousing, crew travel and industrial supplies.

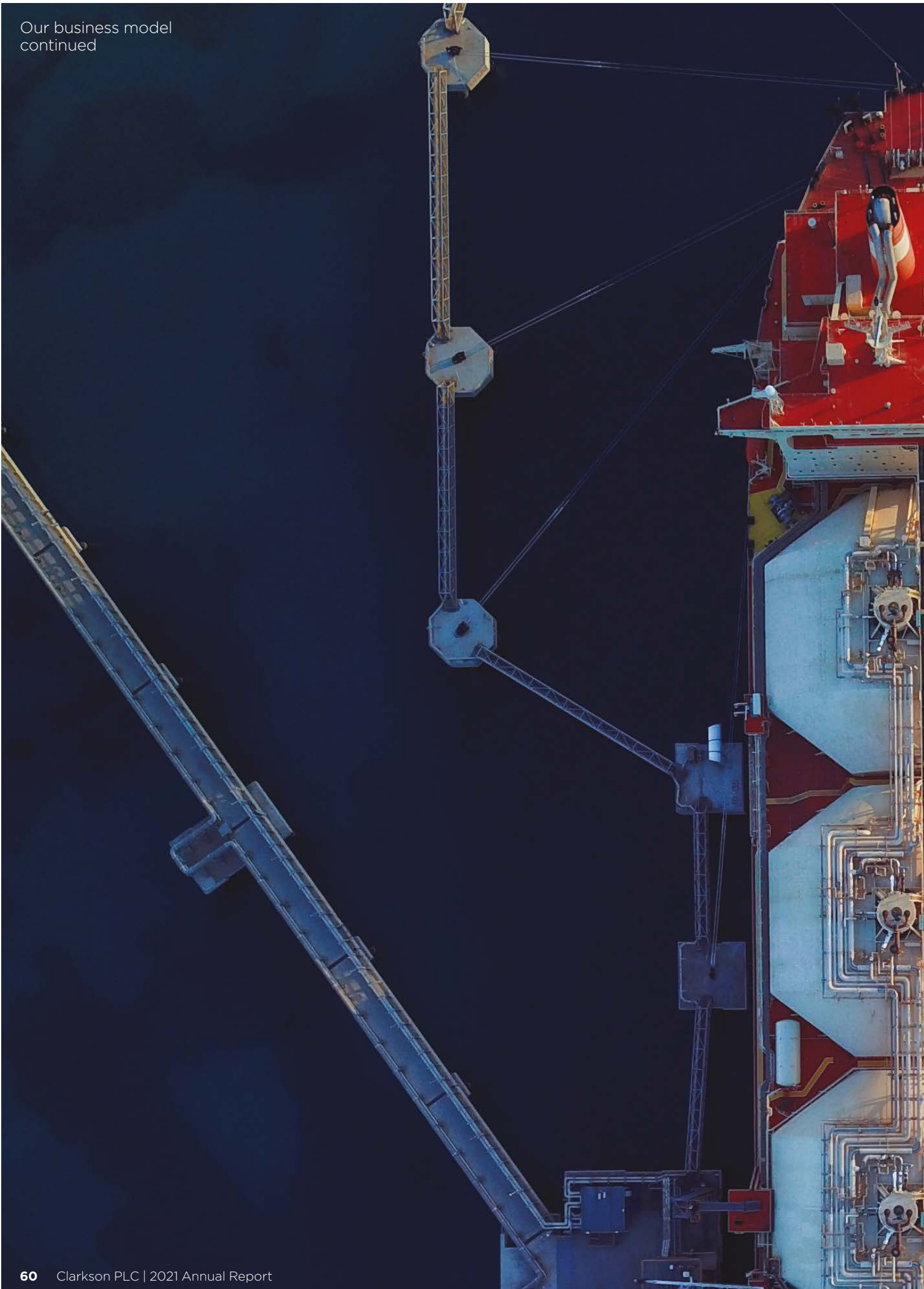
Research share of revenue: 4%

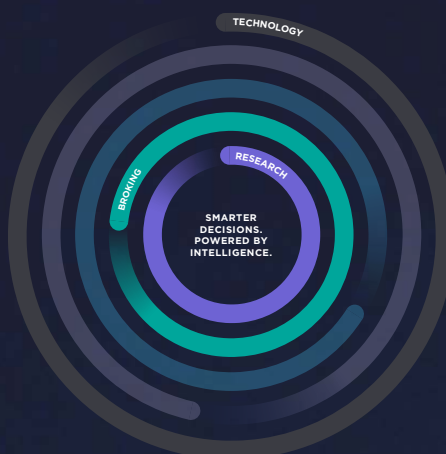


We earn revenue from digital products, including Shipping Intelligence Network, Offshore Intelligence Network, World Fleet Register, World Offshore Register, Renewables Intelligence Network and **Sea/net**, besides specialist services, including data feeds, consultancy, valuations and market reports.

The Research division provides and sells data covering every aspect of our market. We are a leading provider of intelligence and data across maritime, trade, offshore and energy, giving clients access to the information they need to operate their businesses more effectively. We provide information on fleets and technology, holding data on 160,000 vessels, across more than 900 shipyards and with over 30,000 data points on machinery and 'eco' models. This information is available via various subscription models and is relied on by shipping professionals to inform strategies and decision-making. In addition, we are the world's leading provider of valuation services to shipowners and the financial community.

Our business model
continued





Leading positive change through cross-divisional collaboration

Our Green Transition team brings together experts from across the Group to deliver smarter and cleaner outcomes for our clients.

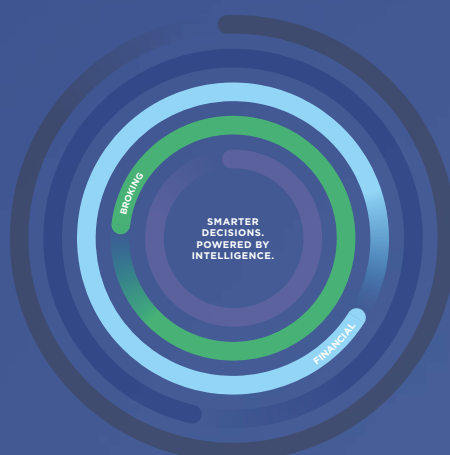
Our projects and newbuilding businesses within the Broking division and our Research division collaborated to provide our global mining client, Anglo American, with strategic advice and evaluation on fuelling options that would deliver emissions savings on its iron ore trade. The outcome was an order of LNG-fuelled bulk carriers placed through our Newbuildings desk, some with 5 to 10 year-time charters attached.

As part of their decarbonisation strategy, our client also implemented the **SeaFix/** and **SeaCarbon/** modules from our **Sea/** platform to monitor and measure their CO₂ emissions.

We're proud to work in partnership with our clients, using our broad service offering, market-leading intelligence and technology and unique position at the heart of global shipping to enable sustainable global trade.

Our business model
continued





Working together across the globe to build back better

As the world sharpens its focus on ‘building back better’, the expertise of our renewables team is increasingly in demand from clients who wish to ‘pivot’ from the oil and gas industry into the rapidly growing offshore wind market.

Our renewables teams in Oslo and Hamburg advised our client, traditionally a shipowner in the deepwater shipping/offshore and oil service segments, on how they might deliver construction, installation and maintenance services for the offshore wind industry. Utilising the local knowledge of our Shanghai team, our client placed a newbuild order with a Chinese shipyard for two state-of-the-art zero emission vessels which will efficiently support both the construction and maintenance phases of offshore wind farm operations.

Our offshore Aberdeen team worked with the renewables teams as the chartering broker in the tender process to match our client with a requirement for a vessel to assist the construction of the world’s biggest offshore wind farm.

Clarksons Platou Securities in our Financial division supported the listing of our client’s subsidiary on Euronext Growth Oslo.

Our global network of offices and collective expertise enabled us to work in partnership with our client, from introducing them to the possibilities of renewables through to signing their first charter contract for one of the world’s most prestigious wind farm projects.

20 years

We’ve been building our expertise in renewables for the last 20 years and we’re pleased to be using our local insights and global reach to help our clients to shape a more sustainable world.

Our stakeholders

Our clients

Who they are

We have over 5,000 clients globally which includes charterers, vessel owners, trust funds, investors and ship agents.

What they care about

- Integrity
- Quality of service
- Expertise
- Trusted advisor
- Innovation and technology
- Market leadership
- Sustainable products and solutions
- Business conduct

Why they are important to us

As the world's leading provider of integrated shipping services, our market-leading technology and intelligence set us apart. This allows us to influence client decisions at every step of the shipping lifecycle and form the trusted partnerships with our clients that continue to drive our business.

How we engage with them

Adopting a bespoke approach is key to how we engage with our clients. This will include:

- Client meetings and presentations
- Client forums
- Client feedback and input into product development
- Social media
- Website

Issues raised during the year

- The green transition, in particular the fuel transition (transition in the industry away from conventional fuels for vessels), energy transition (impact on trade flows of changes in energy usage) and growth of the offshore renewables market

Actions and outcomes

- Launch of the Green Transition team to work with clients on understanding evolving regulations and broader decarbonisation strategies
- Continued investment in and development of technological solutions (e.g. to facilitate decision-making to support decarbonisation of the industry, and to support negotiation and management of freight transactions)
- Digitisation of reports to make data more accessible

Our people

Who they are

We currently have over 1,600 employees across 52 offices in 23 countries.

What they care about

- Client service
- Maintaining market position
- Broad experience and leading the way in industry change
- Culture and values
- Training and development
- Employer brand
- Reward and benefits

Why they are important to us

As a trusted advisor to our clients leveraging market-leading intelligence enabled by technology, our people are our biggest asset. We continually strive to engage, develop and retain them.

How we engage with them

- Leadership and divisional management forums
- Employee Voice Forum
- Global conferences
- Active management
- Internal communications channel (Voyage)
- Social media
- Digital platforms
- Social and networking opportunities

Issues raised during the year

- The digital transformation of the industry
- The green transition
- CSR priorities
- Changing impact of COVID-19
- Remote working and impact on well-being

Actions and outcomes

- New training and development and cross-business collaboration on key market developments around digitisation and the green transition
- Funding and supporting charitable causes that are meaningful to our people and communities
- Enhancement of mental health-focused benefits provided to employees
- Evolution of ways of working and bringing the Group together: new channels of communication, new networks of collaboration and a consistency of knowledge sharing
- Continued focus on leading with compassion and empathy, and enhancement of focus on management and leadership skills and competencies

Our communities

Who they are

The shipping community, industry-related partnerships and the wider communities in which we operate.

What they care about

- Authoritative data and intelligence
- Sustainability
- Clarksons as a responsible company
- Employment opportunities
- Charities and community causes

Why they are important to us

All participants in the wider shipping community play an important role in shaping the industry in which we operate, as well as being potentially both our current and future clients. Furthermore, we want to have a positive and lasting impact on communities, and fundamentally believe that behaving in a socially responsible way is the right thing to do.

How we engage with them

- Publications and our database
- Sharing of expertise and knowledge through participation in industry forums and employee directorships of shipping-related boards
- Industry partnerships
- Volunteering
- Charitable donations
- Social media

Issues raised during the year

- The green transition, in particular the fuel transition (transition in the industry away from conventional fuels for vessels), energy transition (impact on trade flows of changes in energy usage) and growth of the offshore renewables market

Actions and outcomes

- Education of our stakeholders and partners in changing regulations and the development of strategies to support the green transition in the industry
- Provision of **Sea/** technology modules to maritime universities at a heavily reduced price
- Continued support of already established industry partnerships
- Focus on our local communities through charitable giving and employee volunteering
- First year of significant charitable giving by The Clarkson Foundation

Our shareholders

Who they are

Our shareholders range from small private investors to large institutional investors.

What they care about

- Operating and financial performance
- Strategy and outlook
- Shareholder value creation
- Dividend policy
- ESG performance
- Remuneration

Why they are important to us

Our shareholders own our business and provide us with the capital that enables us to continue to grow the business.

How we engage with them

- One-to-one meetings
- Investor roadshows
- Capital markets days
- Analyst briefings
- Half year and full year results presentations
- Annual Report
- AGM
- Website

Issues raised during the year

- Sustainability matters
- Diversity
- Executive remuneration

Actions and outcomes

- Continued strong financial performance
- Maintenance of the Company's progressive dividend policy
- Refreshing of the Board: appointment of a new Chair following an independent search process and enhancement of the technology experience on the Board through the appointment of a further Non-Executive Director
- Enhanced understanding of the Company's executive remuneration structures
- Capital markets day held in April 2021 to showcase our **Sea/** technology and respond to questions from investors on it

Section 172 statement

The Board recognises who our key stakeholders are, and values building strong relationships with them and gaining a better understanding of what matters to them and how our decisions will impact them. This helps to inform our decision-making, deliver our strategy in a sustainable way and meet our stated purpose. We are therefore committed to effective and regular engagement with each of the Company's stakeholders (as set out on pages 64 and 65).

The Board engages directly with shareholders and employees, and we receive regular updates from the Executive Directors on how management engages with other stakeholders. Further information can be found on direct engagement activities on pages 108 and 109 and on the Company's engagement with its stakeholders more generally on pages 64 and 65.

In their discussions during the year ended 31 December 2021, the Company's Directors have acted in the way that they consider, in good faith, would be most likely to promote the success of the Company for the benefit of its members as a whole (having regard to stakeholders and the matters set out in subsections 172(1)(a)-(f) of the Companies Act 2006). The Board considers these matters in all its discussions and decision-making, as set out below:

The likely consequences of any decision in the long term:

The Directors recognise the need to take a long-term view in every decision that they take. During the year, the Board had regard to this in considering the evolution of the Company's purpose, which underpins its strategy and the long-term creation of value for stakeholders.

Read more:

Our business model	→ Pages 58 to 63
Our strategy	→ Pages 56 and 57
Principal risks and uncertainties	→ Pages 90 to 94
Viability statement	→ Pages 94 and 95

The interests of the Company's employees:

Our people are at the heart of how we engage with each other, our clients, and the products and services that we provide. As the biggest differentiating factor for us, engagement with our employees is key to our success. The Board engages with employees principally through the attendance of our designated Non-Executive Director for employee engagement (Dr Tim Miller) at meetings of our Employee Voice Forum. This provides a means of ensuring two-way communication – Tim shares employee views and feedback with the Board following each meeting of the Forum, and updates the Forum on relevant Board matters. Tim's updates help us to take account of the interests of our employees when taking decisions. Our Executive Directors also provide updates on people matters at each Board meeting.

Read more:

Our stakeholders	→ Pages 64 to 65
Our impact	→ Pages 70 to 86
Purpose, values and culture	→ Page 106


The need to foster the Company's business relationships with suppliers, customers and others:


Our client base is diverse in terms of both size and needs, and our brokers' approach to engaging with our clients is bespoke to, and driven by, each client's needs. The most meaningful way for the Board to receive feedback gathered through this engagement is therefore through updates from management, including through the CEO's regular update to the Board and business presentations made by senior management. Trends in the marketplace and client feedback on products are also key elements that the Board takes into account in evolving the Group's strategy.

As with our clients, our stakeholders in the shipping community are diverse and management takes an appropriately tailored approach to engaging with them. The Executive Directors and senior management report back to the Board on key issues raised by our stakeholders, and updates are also provided by the Research division on the salient trends in the shipping community that frame our strategy.

Whilst we do not consider our suppliers to be a significant stakeholder in our business, we are committed to treating our suppliers fairly. In particular, we recognise the importance of prompt payment of invoices for our smaller suppliers, particularly in light of the pressure that the COVID-19 pandemic has placed on some suppliers. The Board receives regular updates on supplier payment practices. Our largest operating subsidiary in the UK complies with payment practices reporting, with circa 94% of all invoices being paid within 60 days and circa 78% being paid within 30 days.

Read more:

[Our strategy](#)  Pages 56 and 57

[Our stakeholders](#)  Pages 64 to 65

[Our impact](#)  Pages 70 to 86


The impact of the Company's operations on the community and the environment:


The long-term partnerships that our brokers form with our clients, our expertise and depth of experience in our markets and our broad service offering (enabled by technology and data) mean that we are uniquely placed to drive forward change in the shipping industry. This is embodied in our short-form purpose agreed by the Board this year - 'Enabling global trade, leading positive change'. Our Green Transition offering, launched this year, forms the framework within which we are working with stakeholders to move towards the decarbonisation targets set by the maritime industry.


We are reporting against the recommendations of TCFD for the first time this year. This has both sharpened the Board's focus on the risks and opportunities for the Company from climate change and reinforced our previous view that climate change is not a principal risk for us (albeit we consider it to be a thematic risk which potentially impacts across a number of our principal risks).


With regard to our own operations, whilst we are cognisant that as a largely office-based organisation our impact on the environment is modest, we are nonetheless committed to monitoring our greenhouse gas emissions and taking any actions that we can to minimise them. We are evaluating targets and metrics in this regard and will update further on this next year.

Read more:

[Roundtable](#)  Page 2

[Our strategy](#)  Pages 56 and 57


[Our impact](#)  Pages 70 to 86

[TCFD](#)  Pages 72 to 75

The desirability of the Company maintaining a reputation for high standards of business conduct:

As a Board we are acutely aware of our responsibility for setting the tone from the top, which ensures that we maintain our reputation for providing the highest quality of service for our clients whilst operating at the highest level of integrity. We achieve this through our Company's clear purpose, which is embedded through our values and culture. Our governance framework enables effective decision-making and clear accountabilities, supported by day-to-day policies and procedures which are communicated to all. This framework was enhanced during the year by the formalisation of our delegated authorities. We also refreshed our values to ensure that they reflect our aspirations for the business and our expectations of our people.

Read more:

[Our impact](#)  Pages 70 to 86

[Governance framework](#)  Page 104


[Purpose, values and culture](#)  Page 106


[Audit and Risk Committee Report](#)  Page 118

The need to act fairly between the members of the Company:

The Board is conscious of the need to balance the broad range of interests and perspectives of our shareholders in our deliberations, whilst acknowledging that not every decision that we make will deliver everyone's desired outcome. Board papers for principal Board decisions include a section on stakeholder interests and impacts, which supports us in considering how our decisions might affect our shareholders.

Read more:

[Shareholder engagement](#)  Pages 108 to 109

[Voting rights](#)  Page 144

The following decision demonstrates how section 172 matters were taken into consideration as part of Board discussion and decision-making.

**Principal decision taken during the year:
Launch of Green Transition offering**

Decision

The Group launched its Green Transition offering to clients in June 2021, set up specifically to guide clients through the decarbonisation of their maritime activity. Management built a core Green Transition team comprised of Managing Directors and subject matter experts from across global offices and divisions to together provide a consultative approach to clients who are looking to understand and reduce their shipping carbon footprint.

How the Board considered section 172 matters in taking its decision

Long-term consequences:

The Board considered whether the proposal to launch the Green Transition offering to clients was aligned with the Company's purpose and strategy. We were satisfied that the launch supports the Company's purpose – 'Enabling global trade, leading positive change' – and our Breadth and Understanding strategic objectives. We also reviewed whether the proposal would create long-term value for the Group's stakeholders and confirmed that it would.

Employees:

The Green Transition impacts on all the Group's divisions and employees and it was therefore crucial to ensure that they were equipped with the necessary knowledge and support to continue to perform their roles effectively. This is in line with the Company's purpose, which highlights the need to empower our people to make better informed decisions, and our strategic objective to empower people to fulfil their potential. A dedicated internal training programme on the Green Transition was launched and employees were invited to join a series of webinars to enable them to understand trends within the industry, how these trends were impacting our clients, and the digital tools and resources that the Group had developed. Alongside the direct support provided by the Green Transition team, this training has ensured that our employees have the tools they need to keep developing their own expertise and support our clients.

Fostering relations with clients:

As regulation around decarbonisation of the shipping industry grows increasingly complex, we need to help our clients to understand these changes and their impact, and to work in partnership with them to help them to achieve their goals. The Green Transition offering provides an advisory service to our clients and helps them to identify and deliver bespoke solutions from across our broad range of services.

Impact on communities and environment:

The impact of climate change on communities and the environment is a societal issue. The Green Transition offering demonstrates our intention to lead positive change in the shipping industry, helping our clients to understand and deliver on their decarbonisation obligations and strategy whilst meeting the needs of wider communities in a sustainable way.

High standards of business conduct:

We formed our core Green Transition team to bring together subject matter experts who are accountable for delivering this offering to our clients within the Group's governance framework.

Board engagement

The Board approved the launch of the offering and the Executive Directors have regularly updated us on progress. We received a deep-dive into various aspects of the offering and progress made at our Board strategy session in December 2021, which also gave us the opportunity to hear directly from members of the team.