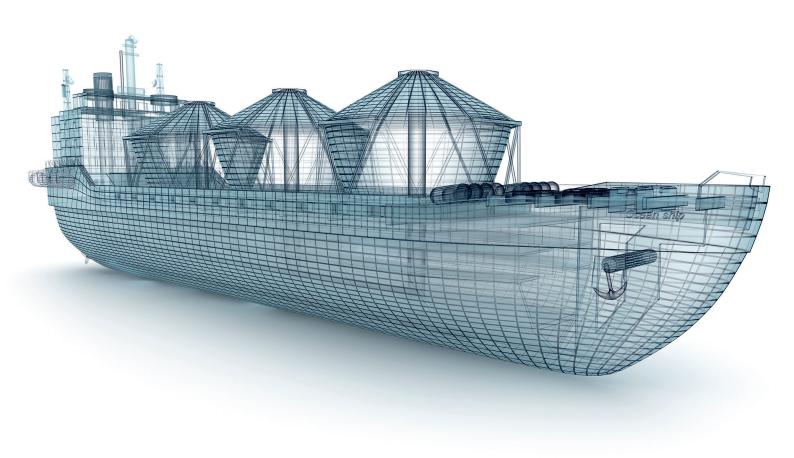


Transparency in shipping



A special report

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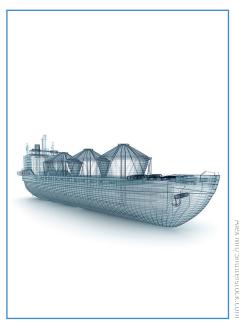
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Transparency

From the sweeping twin tectonic shifts of digitalisation and decarbonisation to the forensic concerns of sanctions compliance and financial governance the opening up of shipping is the singular issue at the heart of the industry's future



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Change is afoot, courtesy of the blockchain-fuelled digital standardisation that is required to replace the archaic systems of trade.

Global trade efficiency relies on it, shipping's decarbonisation transition demands it and both financial and security regulators are monitoring it — the maritime sector's future is focused on issues of transparency at every level, **Richard Meade** reports

ransparency is the common thread that runs through the most fundamental questions with which the shipping industry is grappling right now.

Amid a slew of Lloyd's List headlines and a special investigation exposing hidden flows of sanctioned oil cargoes, 'dark-ship' subterfuge and offshore obfuscation, that may sound a counterintuitive assertion to make.

Yet a confluence of security, financial and regulatory forces are systematically hoisting the sector's corporate veil and slowly changing the fabric of the industry in the process.

This is not a singular process; our transparency thesis rests on a disparate body of evidence covering digital, environmental and regulatory trends.

Nor are we describing a uniform revolution. As is so often the case in shipping, we see a vanguard of proactive leaders — but for the majority, change has been gradually coerced, imposed and ultimately enforced by outside forces well beyond the limited scope of the industry's own agency.

From the sweeping twin tectonic shifts of digitalisation and decarbonisation

to the forensic concerns of sanctions compliance and financial governance — the opening up of shipping is the singular issue at the heart of the industry's future.

Digital transparency

The inexorable force of digitalisation is arguably the most visible vanguard of this trend towards transparency.

The interconnectedness of the digital revolution doesn't just look favourably on transparency — it requires it.

An average end-to-end container shipment involves more than 30 organisations, more than 100 people and more than 200 information exchanges.

Yet the processes and technology supporting such shipments rarely matches up — and that is a story recreated billions of times over, via \$14trn of maritime trade globally that has remained stubbornly analogue and inefficient.

This is now starting to change, courtesy of the blockchain-fuelled digital standardisation that is required to replace the archaic systems of trade currently conducted via an inconsistent mess of e-mail, paper, fax and misaligned Excel spreadsheets.



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To link port and terminal operators, cargo owners, customs authorities, freight forwarders, brokers and transportation companies in a seamless process requires a shift in the way the industry works.

While the coding of the digital ecosystem that is supporting this shift has been the focus to this point, the more revolutionary aspect of this shift has, in fact, been the realisation that we need to work in a way that is collaborative and allows for that increased collaboration with other parties, including competitors.

Understanding the technicalities of blockchain initially proved something of a barrier for many, but that process of building trust has gradually managed to win over a majority — at least in the container sector — and the ubiquity of blockchain projects across major cargo interests has forced the hand of even the most reluctant maritime luddites to engage.

Put simply, blockchain lets people who have no particular confidence in each other collaborate. It is a machine for creating trust and, when everyone trusts the information in that chain, value can be created across the entire supply chain ecosystem.

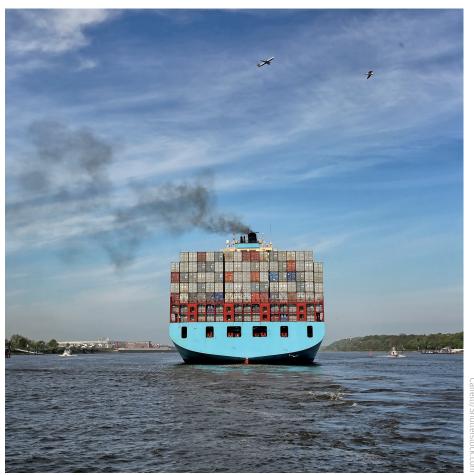
In practical terms, it means that companies can stop spending all of their time and money dealing with the zero value-add of getting information all in one place, trying to standardise it and translate it into a consumable format and doing stuff with the information after spending all that time getting it in a single location.

The opacity of shipping is well understood, but much of that is to do with the volume of information flowing across seaborne trade and the siloed nature of how it is retained and processed.

Getting that information into a standardised and usable format sits at the heart of all digital projects.

And, while that process comes with the privacy and security standards built in, the overall trend is one of enhanced visibility across and increasingly integrated supply chain.

In digital terms, transparency is not just desirable; it is fundamental to the whole process. However, our argument is not just one of data transparency.



Many shipowners' access to cargo, capital and ports could be at risk if they are considered not to be doing enough to reduce their CO2 footprints.

Carbon transparency

Shareholders are demanding robust corporate governance, which is now being measured, ushering in an era of ever-more detailed reporting on the industry's activities and accountability for its carbon output in the process.

Charterers, financiers, governments, counterparties and society at large are forcing through new environmental, social and governance requirements that are making sure capital doesn't flow in the direction of those who refuse to step out of the shadows or account for their emissions.

Lending to shipping has already begun to hinge on shipowners' ability to satisfy the banks' ESG criteria.

In terms of transparency, the message is clear: the more traditional shipowners that wish to stay more opaque will find access to capital very difficult going forward.

And that is significant, considering the fact there is a huge lack of capital for the industry at a time when it faces the dual challenges of decarbonisation and disruptive technologies — such as blockchain, artificial intelligence and autonomous shipping — which will not

only change the way we work and run our business, but will also change the way we live.

Today, the big miners, energy companies and traders are all under huge pressure to clean up their act.

Regulators are demanding better risk management; investors are looking for commitment to future clean growth; and campaigners are fighting for bolder commitments.

The nascent emergence of plans from cargo interests to introduce bunker levies to cover cost differentials in opting for zero-carbon fuels, together with transparent charterparties accounting for carbon emissions, indicates a future where cargo interests call the shots in terms of vessel choice.

Of course, these are broad-brush trends that will not apply uniformly across the industry.

Among the smaller charterers, transparency is less of an agenda-setter than you may think — and for many state-sponsored shipping companies, politics is arguably a bigger driver of behaviour than market demands to end opaque practices.

SPARESCNX

Bringing Order To Inventory Chaos





Even the murkier end of the shipping industry's known grey area is being reduced, thanks to increasingly sophisticated data analysis.

A quick glance at this year's Lloyd's List Top 100 Ports tells you all you need to know about China's influence over market dynamics, where transparency is a much more complex affair than simple ESG requirements.

Such trends are inevitably uneven; but in our view, the ultimate direction of travel for operators — regardless of size, corporate structure or region — is now clear.

Those already trading on their sustainability credentials are voluntarily operating with unprecedented levels of transparency regarding their carbon emissions. Yet the voluntary nature of such efforts will inevitably remain short-lived.

At some point, we expect that many shipowners' access to cargo, capital and ports could be at risk if they are considered not to be doing enough to reduce their CO2 footprints.

Today's monitoring and reporting of emissions will soon enough segue into market-based measures and accountability for carbon will come with a price tag.

Once carbon is transparently priced into maritime trade, that will create a new benchmark of industry transparency — forcing the entire maritime supply chain to account for the full lifecycle of its emissions, not just the specific 'tank-to-wake' emissions currently being considered at a regulatory level.

Owners who fail to meet decarbonisation obligations will effectively lose their licence to operate over the coming years.



While our own evidence points to a persistent pattern of deceptive practices, increased scrutiny has only increased the need for additional transparency and due diligence from everyone else



Regulatory transparency

The final pillar of our transparency argument rests upon enforcement of regulation, both regional and global.

While the global nature of shipping's cross-border markets is porous and flawed, the regulatory noose is tightening sufficiently in some areas that ensure transparency is never far from the boardroom agenda.

Financial regulation has been intensifying for several years in the wake of successive economic crises and the rise of the compliance officer — finance's feared in-house policeman — was only partly related to an increasingly politicised sanctions risk that has been so dominant in the industry headlines of late.

Banks fined for aiding corruption, money-laundering — and, yes, sanctions-busting — have beefed up their compliance, risk, legal and internal-audit teams, even as cutbacks elsewhere were made.

And, while there may have been some talk in the financial press of banks having reached "peak compliance", staffing and investment are likely to remain well above pre-crisis levels.

Shipping's offshore status is unlikely to change overnight, but there is a growing international agenda targeting anonymous shell companies as the getaway cars of tax-evaders and money-launderers.

When it comes to the murkier end of shipping's deceptive practices, there has never been a bigger target on shipping's back.

As Lloyd's List's recent investigation series into 'subterfuge shipping' revealed, there is still an underbelly of shipping operators determined to evade the evolving complexities of sanctions.

Our data-led investigation highlighted how some opaque operators go to great lengths to cover their tracks, not least through regular flag-hopping and class-hopping.

Yet while our own evidence points to a persistent pattern of deceptive practices, heightened scrutiny has only increased the need for additional transparency and due diligence from everyone else.

Legitimate shipping companies are, generally speaking, not knowingly looking to test American resolve when it comes to sanctions — but there is a risk of getting caught out.

Until recently, the defence has been that few have the resources to perform the requisite degree of due diligence to unravel the highly complex networks that support proscribed ventures. Such excuses increasingly don't wash with the regulators.

Dark corners will always exist, but a lot of the privacy that shipping offered in the past has been lost in favour of accountability.

Global trade is becoming more transparent and resistance is increasingly futile.

Creditworthiness and compliance checks, the ubiquitous 'KYC' due diligence, audited financial statements and third-party reports investigating any historical payment problems — this is all now standard practice.

What was once offered up in the hope of earning reputational reward is now considered a basic entry to market expectation from counterparties no longer willing to take on financial risk.

Even the murkier end of the shipping industry's known grey area is being rapidly reduced, thanks to increasingly sophisticated data analysis and the forensic attentions of international governments and agencies that now monitor every aspect of shipping's trade links.

Consider the subterfuge tactics of Iran's fleet 'going dark', engaging in ship-to-ship transfers, setting up shell companies and generally playing an elaborate game of cat and mouse to disguise cargo origins.

Try as they might, such strategies are not working. The risk to Iran's fleet is well understood, but Lloyd's List is not alone in being able to uncover the companies and structures at play; intelligence agencies, financial and insurance institutions are all tracking activities.



While the transition of power in the US may signal some changes in terms of sanctions policy, nobody should think the focus on shipping transparency will be downgraded.

The potential of inadvertently falling foul of this scrutiny on account of unverified third-party providers should be keeping more owners up at night.

While the Trump administration politicised the process, the US-led upgrading of sanctions risk for shipping had been in the works for some time, notably from the financial and insurance sectors.

For those banks and insurers seeking to apply transparency to the opaquest end of seaborne trade, many are only just realising how far they still need to go in order to mitigate the risk that the Trump era in some way helped expose.

While the transition of power in the US may signal some changes in terms of sanctions policy, nobody should be thinking that the focus on shipping transparency will be downgraded as a result.

The requirement to monitor maritime risk is now embedded within financial, insurance and political processes - and all signs point to increased complexity, not less.

Transparency risk mitigation

The trend towards transparency is less a universal theory of everything and more a loosely linked series of coalescing forces, but it warrants attention as a direction of travel.

While transparency of operations will be a prerequisite to access finance and charters for some, the playing field is likely to become increasingly uneven in other areas.

The inexorable force of digitalisation is partly responsible for peeling away shipping's opaque patterns of behaviour, but it is not the whole story and it will require differing strategies from companies.

Those seeking to avoid inadvertently getting caught in an increasingly complex web of regulatory compliance need to proactively monitor the lack of transparency at the murkier ends of their own supply chains.

As we noted following our recent subterfuge investigation, the issues surrounding secrecy in shipping have been on the regulatory agenda for literally decades.

Yet surely it cannot be long before transparency standards expected of every other major global industry in the 21st century are applied to shipping as well.

Much of this disclosure revolution is positive and overdue, but this is not a shift that the sector can passively accept without question.

With increased transparency comes complexity and significant risk that needs to be carefully navigated.

hen Saudi Arabia's national tanker company sold two vintage crude carriers for scrap more than two years ago, the shipowner never imagined the vessels would instead continue trading Iranian crude.

Yet, at an age when other very large crude carriers are being dismantled on the beaches of Pakistan or India, the 24-year-old *Penny H* is reborn and anchored at Malaysia's Malacca lightering zone.

The Panama-flagged *Peron* also has a second life. The vessel now shuttles Iranian crude to and from China from Malaysian and Indonesian waters upon receipt of cargoes from other tankers via ship-to-ship transfers.

The former Bahri-owned tankers are at the centre of a subterfuge shipping network linking tankers delivering US-sanctioned crude to China from Iran via Malaysia. Some 300,000 bpd to 400,000 bpd is estimated to be shipped this way, evading US penalties.

Along with *Penny H* and *Peron*, a host of elderly tankers sold to cash buyers for recycling have re-emerged in these sanctioned trades. (The US reimposed sanctions on Iran's shipping and energy industries in late 2018.)

Furthermore, in the maritime industry's own version of identity theft, other tankers have masqueraded as long-scrapped vessels, hijacking old International Maritime Organization numbers and altering transponder signals to mimic dead ships.

These subterfuge shipping practices have diverted elderly tankers normally destined for subcontinental scrapping, helping push demolition rates in the sector to 23-year lows in 2020.

The aged fleet of some 125 vessels are solely engaged in shipping Iranian and Venezuelan crude. The average age of the vessels is 19 years — a time when most owners typically would scrap ships, especially when charter rates for tankers are at the lowest in a decade.



Ownership links can be inferred when tracking where the VLCCs deliver cargoes after undertaking STS transfers.

From scrapping to sanctions-busting

Data transparency has revealed this internecine network, which is characterised by ownership opacity and a host of evasive shipping practices.

Buying tankers from cash buyers is just one of many tactics that defines this complex network.

Like *Penny H* and *Peron*, Lloyd's Register withdrew classification of the 21-year-old, Panama-flagged very large crude carrier *Impalas* last year, noting that the vessel was sold for recycling.

These VLCCs now inhabit a regulatory 'no-man's land' since their sale for demolition. Greek shipowner John Angelcoussis sold *Impalas*, then known as *Maran Castillo*, in December 2019.

Nothing is known about the new owner, except an address provided by a Hong Kong shelf company, Impala Shipping Ltd. However, ownership links can be inferred when tracking where the VLCCs deliver Iranian-origin cargoes after undertaking STS transfers off Malaysia.

Over the past 12 months, *Impalas* and *Peron* have called at Sinopec's Dongjiakou and Daxi Dao terminals and at berths owned by Qinqdao refinery.

Both vessels also discharged cargoes at CNPC's Dalian refinery and the Xianredao oil terminal at Yingkou port in the north of China. *Peron* also called at Sinopec's Rizhao terminal.

Sinopec is the government-owned China Petroleum and Chemical Corp, and the largest charterer of tankers on the spot market.

CNPC, or Petrochina, is also state-owned and, along with Sinopec, accounts for more than half of the country's refinery capacity.

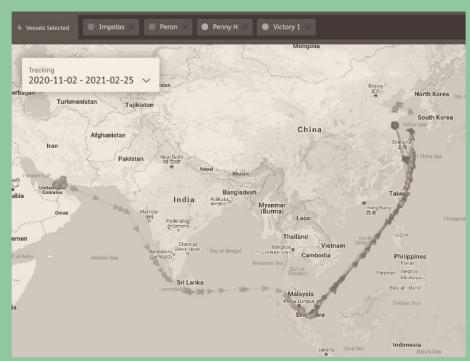
TRACKING THE SUBTERFUGE FLEET

Cross-referencing data provides greater transparency to reveal more about a vessel and its purpose than the anonymous beneficial owner ever intended. Lloyd's List focused on four tankers to show how it's done









Source: Lloyd's List Intelligence



In the maritime industry's own version of identity theft... tankers have masqueraded as long-scrapped vessels, hijacking old IMO numbers and altering transponder signals to mimic dead ships

Michelle Wiese Bockmann

A network of fake addresses, false declarations and absence of due diligence is allowing Iranian and Venezuelan-linked shipowners to ship millions of barrels of oil without penalty or insurance



The Cheong K Building in Hong Kong is the address given for the unknown registered owner of Penny H. The VLCC is a veteran of sanctioned Iranian trades after being sold for scrap by its Saudi Arabian owner in late 2018.







For the past 12 months, the VLCC *Penny H* has been sitting at the Malacca anchorage undertaking

Automatic Identification Satellite signals switched off to evade detection.

STS cargo transfers with Iranian-linked ships. Most

are conducted with



Source: Lloyd's List Intelligence



The aged fleet of some 125 vessels, with an average age of 19 years, is solely engaged in shipping Iranian and Venezuelan crude.

Penny H is a veteran of sanctioned trading. The VLCC — formerly known as *Wu Xian* − was first identified by Lloyd's List in April 2019 as central to a fleet of six Chinese-owned VLCCs shuttling crude to and from Iran via Malaysia for onward transfer to China.

Later that year, the vessel was sanctioned by US regulators for its links to Iran and remains blacklisted.

Bahri had sold the VLCC in November 2018. At the time, it was reflagged to Palau — a registry typically used by cash buyers to sail ships to recycling yards for their final voyage.

A month later, Wu Xian reflagged to Panama and recommenced trading. After this, the vessel registered in Sao Tome & Principe and changed name.

By mid-2020, the unknown owners falsely claimed the vessel was flying the Tanzanian flag.

For the past 12 months, in its new incarnation as *Penny H*, the VLCC has been sitting at the Malacca anchorage, undertaking STS cargo transfers with Iranian-linked ships.

Most are conducted with Automatic Identification Satellite (AIS) signals switched off to evade detection. Classification and flag registry are unknown, as is the status of P&I insurance to cover liability for oil and bunker spills.

The Panamanian registry is now investigating Impalas, noting intermittent AIS signals, a common tactic used to obfuscate the origin and destination of cargoes.

Trawling through these changes adds fresh layers of detail about the modus operandi, as well as links to other tankers bought for shipping Iranian crude.



These subterfuge shipping practices have diverted elderly tankers normally destined for subcontinental scrapping, helping push demolition rates in the sector to 23-vear lows in 2020



The former registered owner of Penny H was Marshall Island company Gemini Marine (No.6) Ltd, Lloyd's List Intelligence data shows.

This matches the structure used for several other sold-for-scrap vessels briefly managed by Green Ocean Ship Management Private Ltd, based at Mumbai, India.

Current ISM management appears linked to another two elderly VLCCs in the subterfuge fleet, the Dijboutiflagged Latin Venture and Hondurasflagged FT Island.

The hunt to divert scrapped tonnage for trading remains in play. The latest scrap-to-trading tanker identified is the Liberian-flagged Victory I.

Cash buyers Last Voyage DMCC, an affiliate of Indian recycler Priya Blue Industries, bought the 2009-built aframax tanker at a court auction last July.

The technical and ISM management was assigned to Machtrans Ship Management, a company often involved in managing vessels on their last voyage to a scrap yard.

Shortly afterwards, the registered owner changed to Czar Shipping, according to P&I provider, West of England P&I.

Instead of heading for the scrap yard, Victory 1 re-emerged in Dubai in December and sailed for Sharjah's outer port limits in the United Arab Emirates.

Vessel tracking reveals that on January 27, the tanker conducted an STS there with product tanker Ella IX, which had previously loaded Iranian-origin crude.

Carrying sanctioned cargo voids any insurance policy liability for oil or bunker spills, yet Victory 1 sailed directly to China via the Singapore Strait, the world's busiest waterway.

The tanker was at anchor at the Huahai Energy Laizhou terminal as of February 25.

Priya Blue did not return an email from Lloyd's List seeking comment on Victory 1's movements.

Despite the lack of ownership visibility, the cross-referencing of data provides greater transparency about these and other tankers that typically fall outside regulatory scrutiny.

Port calls — or the absence thereof as well as flag and ownership changes, vessel-tracking and STS arrangements all reveal more about a vessel and its purpose than the anonymous beneficial owner ever intended.

Data accuracy is driven by successful digital transformation

Incorrect data is costing shipping and logistics lost revenue and an inability to drive real operational excellence

hipping and logistics companies have adopted digital transformation more slowly than most other industries.

This digital journey is still in its infancy, and many companies are struggling with manual processes, inconsistent data and old, fragmented IT systems.

The reason why transformation fails is contested; some claim the shipping industry is ancient, conservative, and too complex to change — while others claim we have not yet seen robust-enough innovation to empower the much-needed change.

No matter the reason; the fact remains that the industry is out of sync with the world's technological advances and now is the time for this upgrade.

The method is integrated IOT solutions, built bespoke for shipping.

Large shipping and logistics companies all place digital transformation at the top of their agenda, but their progress has been too slow.

Internal actors try to make their mark by challenging the status quo and driving change. They invest in corporate venture capital structures and fund digital ventures to get ahead of the competition, but they are often met with the massive challenges that come from automating a fragmented and variant ecosystem.

(Venture capital funds injected \$20bn into the logistics sector between 2017-2019, a 76% compound annual growth rate since 2014).

Most shipping and logistics companies have accumulated technical debt since their inception. These businesses often run their operations on decades-old IT



systems with an overlay of new software solutions that add complexity rather than drive efficiency.

Day-to-day decision-making suffers when data is incorrect, and this results in lost revenue and an inability to drive real operational excellence.

Inaccurate inventory information is estimated to cost the shipping industry billions of dollars every year, and this is a costly negative in this highly competitive, low-margin business where every dollar counts.

Digital change must be driven from the top of these organisations. This will bring much change to tightly coupled processes and, since change brings risk, it must be mitigated.

It is therefore the responsibility of our leaders to push the digital agenda. Failure to do so will result in some shipping companies falling further behind competitors that are embracing change and reaping rewards.

It seems many modern leaders understand this, but exactly how to go about that change is what is most challenging.

Therefore, the ability to choose the

Technology is presenting vital opportunities to better understand our businesses, but seizing these opportunities will require leadership teams to drive the change, and engage the front lines

> Johnny Slattery General manager **SparesCNX**

right digital transformation partner is the difference between success and failure.

Success will be achieved by putting the end-customers' experience before an organisation-wide agenda of status quo to "keep things the same, so the system is stable".

Success is also not only about fixing the technology but about changing the technology in combination with workers' operating procedures.

Driving change takes time, focus and deliberate effort to reach the end goal.

To successfully embark on this journey, we need to support all the layers that interact with this efficiency upgrade, aiming to make day-to-day life more manageable for all involved.

It is SparesCNX's experience that successful digital transformation on the front lines comes from a seamless interaction between hardware, software and improved processes simplifying the IT landscape.

The time for change is now. We are ready — and you are too!

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Transparency is a key part of the decarbonisation puzzle, according to a Sea Cargo Charter group spokesman.

Transparency vital for charterers' low-carbon shift

The drive towards
transparency of emissions
data from shipowners is
a journey that still has a
long way to go before it
becomes a reality. The Sea
Cargo Charter is a start,
but only 19 companies
have signed up so far,
Nidaa Bakhsh and
Inderpreet Walia report

ransparency is becoming increasing integral for shipping to serve environmental, social and governance objectives.

Vessel performance and efficiency are key focal points, with transparency on emissions data more important than ever before, given the low-carbon goals set by regulators.

Major charterers are leading the charge, but there is a long way to go in changing overall sentiment.

The Sea Cargo Charter was set up in October last year, with 17 signatories who are required to report emissions from their chartering activities on an annual basis, with climate alignment scores published. Two more companies have since joined.

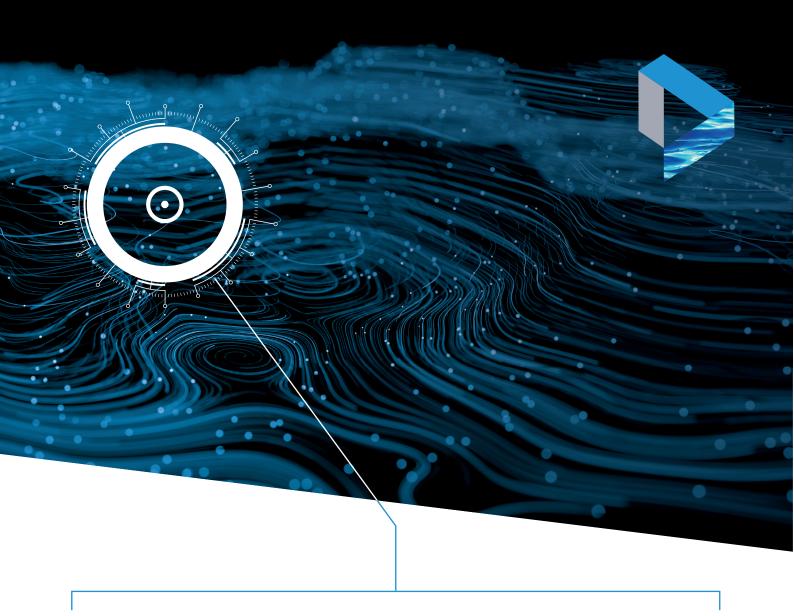
"Transparency is the key to making a

difference, of bringing about change," said a group spokesman. "It is an important piece in the decarbonisation puzzle."

The first report is due in the summer, using figures from 2020. Data can then be built up that will shape decisions.

Cargill, a global commodities trader, which was one of the initial signatories, said transparency was a key theme in its sustainability report last year and will feature again in this year's report, due to be published in May.

Initiatives like RightShip, which focuses on safety, and ZeroNorth, a Maersk Tankers start-up on vessel performance optimisation, also "creates more transparency and, as the world gets increasingly digital, we expect this to keep growing", said a Cargill spokeswoman.



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Global container line Maersk used to have a ranking system that was based on manual data input, but it is working on "a more holistic, automated digital set-up", which will broaden the scope from a bunker data focus to also include indicators of operational, commercial and safety performance, according to a spokesman.

Trafigura, another commodities giant, said it has routinely requested fuel use and emissions data as part of its contractual terms with owners after completion of each voyage, alongside the standard incident and safety reporting.

As one of the founding signatories to the Sea Cargo Charter, it is working on this data collection becoming an industry standard. It is also running a trial with RightShip to analyse vessel efficiency, while it manages the data for all of its bareboat and time-chartered fleet internally.

"The drive towards transparency of emissions data from shipowners, as well as market carbon levies and lower carbon fuel technologies, will in turn drive changes in requirements from shipowners," said a company spokesperson. "It is a journey and we haven't yet reached the end destination on this challenge."

Owners have historically been disinclined to share information with counterparties, due in part to issues of mistrust. However, technology has a role to play in bringing owners and charterers together.

Cheniere Energy has said it plans to provide cargo emissions data to its liquefied natural gas customers from 2022.

The company's 'Cargo Emissions Tags' are designed to enhance environmental transparency by quantifying the estimated greenhouse gas emissions of LNG cargoes from the wellhead to the delivery point.





Cheniere will use operational data from its Sabine Pass (pictured) and Corpus Christi liquefaction facilities as part of its analysis.

It will use operational data from its Sabine Pass and Corpus Christi liquefaction facilities as part of its analysis.

"Cheniere is ideally positioned to collaborate with domestic and international value chain participants to provide improved transparency and advance the global transition to a lower-carbon future," said chief executive Jack Fusco.

Democratising the industry

"A change is afoot in shipping, with decarbonisation and transparency working together to democratise the industry, as people share information

66

The challenge is to shift the current connotations of technology so that owners and charterers realise it can be a win-win situation



Roberto Coustas Co-founder and chief executive DeepSea Technologies

about the performance of vessels," said co-founder and chief executive of DeepSea Technologies Roberto Coustas, who is based in Athens.

"Currently, there is no real tangible incentive for owners to share their performance information. For shared data to be meaningful, it has to be accurate and trusted," he said.

This is the first year the company has been working together with owners and charterers, helping them make collective decisions using a third-party platform.

"Technology is bridging the gap between them and can have a major positive impact on both."

For Thai dry bulk owner Precious Shipping, however, transparency initiatives are considered a farce.

The company was looking into a design for an ultramax that would run on methanol, cutting the carbon footprint by 8% and removing all other issues such as particulate matter and sulphur oxides.

However, major charterers who were approached did not fully support the move, and were only willing to pay a "small premium" for the cleaner vessel versus using standard fuels on a five-year charter, despite the owner having to pay vast sums upfront for the investment in the new technology.

"As a result of such a disappointing outcome, we have slowed down our exploratory foray into lower carbon footprint ships, as the 'big boys' will not pay for that pleasure, nor give you a long enough time charter cover to recoup your costs," the company's chief executive Khalid Hashim said.

"No matter how many existing initiatives are there, or are on the horizon, if the charterers are not willing to pay a premium for future-oriented ships, I am afraid that none of these initiatives make any real difference except to pay lip service to the 'green credentials' of such charterers," he ventured.

Meanwhile, container shipping line Ocean Network Express said in a survey conducted last year that climate change ranked sixth among 17 key sustainability topics, including customer service, marine pollution, container and cargo safety, human rights and ethical business conduct.

"Inquiries on decarbonisation and impact on climate change are on the increase, and high attention by our customers is one of our motivations to accelerate environmental commitments," the company said.



It uses an internal tool to calculate CO₂ emissions per teu per trade and shares the data with customers as needed.

ONE also monitors and measures the productivity of all its terminals, and collaborates with some by enhancing communication and data-sharing so both parties can improve efficiency.

It is clear that transparency has been driven increasingly by decarbonisation efforts, and investments in new technology



As a result of such a disappointing outcome, we have slowed down our exploratory foray into lower-carbon footprint ships

> **Khalid Hashim** Chief executive **Precious Shipping**

and reporting will likely be scaled up within the next five years, said Mr Coustas.

"For the industry to really change, the mentality of both owners and charterers on what technology means has to change. The challenge is to shift the current connotations of technology so that owners and charterers realise that it can be a win-win situation. That's the only way that meaningful change can happen, at the pace that we envision."





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The EU Monitoring, Reporting and Verification database first went live in 2018.

The landmark database continues to change, resulting in a significant increase in recorded shipping emissions for 2019 and raising familiar questions about its reliability and future use as the bedrock of EU emissions regulations, Anastassios Adamopoulos reports

he European emissions database was anticipated by many to set the standard for emissions reporting and transparency in shipping. More than a year and a half into the process, it risks falling below expectations.

For those paying attention, the annual European shipping CO2 emissions had supposedly fallen in 2019.

That is what the European Union's official emissions data told us, anyway. However, it turns out the data was somewhat inevitably false.

The problem is that the data itself was not — or does not appear to have been - wrong; it was just different to what it is today. And that will most probably continue to be the case in a few months' and perhaps even a year's - time.

According to the latest data, in 2019, the ships sailing to and from and calling at ports in the European Economic Area

emitted 145.5m tonnes of CO2. That is almost 9% higher than the 133.5m tonnes of CO2 the data originally showed for 2019 when first published in late June last year.

This increase also means that CO2 emissions of EEA-related voyages actually grew from 2018 to 2019 — albeit by less than 1m tonnes of CO2.

To be fair, the number of ships that emitted CO2 in 2019 also jumped from 10,843 reported in July 2020 to 11,866 in early February. So the increase in emissions itself makes sense in that regard.

The composition of the different sectors' share in the 2019 emissions has also not changed much within the two time periods.

Containerships are still the biggest single polluting segment, accounting for more than 30% of total CO2 emissions, despite representing just over 15% of the total fleet.

Meanwhile, ro-pax ships have the highest proportional emissions relative to their fleet.

What is problematic here is that there is any change at all. Why have more than 1,000 ships been added to the database since it went live on June 30, 2020?

Why is the data constantly being revised, when all companies should have handed relevant information to verifiers by April 30, 2020?

The problem partly springs from a lack of real clarity with regard to authority.

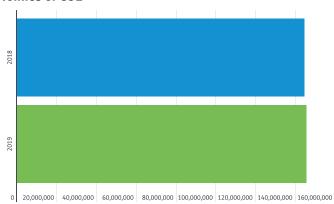
The European Commission has been clear that it bears no responsibility on the contents of the database and that this rests with the verifiers.

The verifiers, on the other hand, are often simply responding to clients who act belatedly. Such companies will not be too fussed about acting quickly unless legally required to do so.

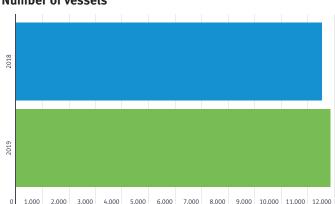
CO2 emissions from ships at EEA ports

Latest EU emissions data shows an increase in emissions, year on year

Tonnes of CO₂



Number of vessels



Source: FMSA\Thetis MRV

This cycle is so profound that the amendments are not limited to the most recent data. Even the 2018 EU Monitoring, Reporting and Verification database continues to be amended.

In fact, there have been 245 different versions of the 2018 database. The last was published on January 20, 2021.

The MRV database, the cornerstone of EU emissions policy and the pride of the bloc, is still a database in flux where monumental changes are allowed freely without any real impediment.

This is hardly a new phenomenon and to anyone tracking emissions and data, it will come as little surprise. Lloyd's List has written extensively on this matter in the past.

However, the shortcomings do not appear to have been rectified and the inconsistencies persist just as the European Commission pursues unprecedented measures on shipping's GHG emissions.

The Commission is looking to include shipping into its Emissions Trading System and will likely require ships to have

The MRV is arguably the most transparent emissions database in the broader maritime sector today. Yet for it to serve the purpose of a policy tool, the EU needs urgently to address the shortcomings that have been clear and evident for some time



carbon-intensity limits on the fuels ships burn. The MRV will be the foundation and, to some extent, the implementation tool - for both these policies.

The MRV is arguably the most transparent emissions database in the broader maritime sector today.

It can be a massively useful tool for anyone invested in the sector and allows for public scrutiny of individual ships and therefore individual companies. The significance of this cannot be understated.

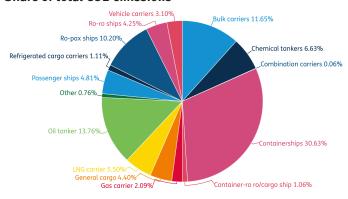
Yet for it to serve the purpose of a policy tool, the EU needs urgently to address the shortcomings that have been clear and evident for some time.

There have been efforts by the European Parliament to reform the MRV and address some of the challenges. However, this has yet to move forward and it is still unclear when negotiations for this proposal will recommence.

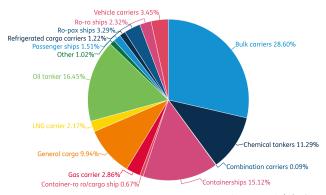
Time is running short. If the EU wants to take the reins on shipping decarbonisation, it must strengthen its signature database and prevent the data divergences that are harming its credibility.

Containerships claim the biggest emissions share

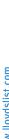
Share of total CO2 emissions



Vessels



Source: EMSA\Thetis MRV





Ask the Analyst with Sebastian Villyn

Lloyd's List Intelligence's team of experts on the issues shaping shipping

The data-sharing paradox

The key to unlocking the maritime transparency treasure chest is access to comprehensive data. What do you do if parts of the data key are removed or locked away? Sebastian Villyn reports

igitilisation, automation and analytics will drive the future of shipping, so access to comprehensive data is key to mitigating risk and ensuring operational efficiency.

Solutions will come from multiple organisations; they cannot occur in a vacuum, and it is recognised that sharing data is necessary and mutually beneficial.

However, even among maritime data pioneers, there is a certain level of trepidation.

The maritime industry's slow move towards more transparency and information sharing is held back by a degree of unwillingness both from governments, flag states, port state control regimes, shipowners and the leading body itself, the International Maritime Organization.

This leads to a data-sharing paradox: how do you create tomorrow's solutions if opacity is the preferred industry approach?

Managing big data

Large-scale data collection and data management is resource-intensive and you need specialist companies to aggregate information in a methodical way.

Big data companies like Lloyd's List Intelligence, through its Seasearcher platform, aggregate data on vessels and companies into analytics and complex models.

We ingest about 350m AIS messages a day, which are processed into more than 210m published positions, as well as researching ultimate beneficial ownership on the live trading merchant fleet, offering greater transparency.

We rely greatly on information that is shared with us by flag states, classification societies, P&I clubs, national registries, coastguard authorities, the Lloyd's Agency network and others.

The transparency of these institutions allows us to collect more data and present enhanced risk models.

However, when gathering so-called 'big data' through our terrestrial AIS network



How do you create tomorrow's solutions if opacity is the preferred industry approach?

and multiple data partners, we have found that certain datasets are 'out of bounds' due to GDPR concerns or sensitive personal or company data, despite much of this being available if you click your way through a few levels of CAPTCHA controls or company websites.

Vessel ownership continues to be cloaked in darkness, which has a detrimental impact on seafarer rights, counterparty risk and safety.

During the Covid pandemic, the IMO has focused on seafarer abandonment. However, if there really was backing for the plight of the seafarers, more pressure would be placed on comprehensive ownership registers for ships, both through national corporate registers and through requirements put in place by flag states, PSC authorities, classification registries and others during vessel vetting.

Company registers

Political shifts, like Brexit, impact access to data. In December, the Swedish Companies Registration Office (Bolagsverket) announced that from January 1, 2021, access to the service (Näringslivsregistret) would be restricted for UK-based companies.

Bolagsverket's regulation stipulates it is not allowed to transfer information from the insolvency register or the trade ban register to a country that is not a member of the EU or the EEA (Lloyd's List Intelligence does

have a Swedish-registered company). This is somewhat peculiar, as most Swedish company filings are publicly available to download on hitta.se.

Insolvency data can be helpful as part of detecting whether a company is using the identity of a defunct company to carry out illicit trades, so the move is puzzling.

It is also in stark contrast with the Danish and Norwegian public company registers (EU and EEA countries, respectively) and the UK's Companies House, where company filings, insolvency data and even beneficial ownership information is readily available, free of charge.

Singapore has a comprehensive public registry but, as seen with the Hin Leong bankruptcy scandal, there are many ways to avoid publication of financial filings. And in some jurisdictions, these are only accessible by law enforcement and tax authorities, which again reduces the level of transparency.

On the other hand, there are some positive developments in the Singapore bunkering sector towards more transparency, driven by blockchain technology and creative companies.

The Financial Action Task Force, an intergovernmental organisation focused on developing policies to combat money laundering and terrorism financing, has put pressure on several countries for the

Lloyd's List Intelligence

implementation of Registers of Beneficial Ownership. This keeps a list of countries where there are deficiencies in their regimes to counter money laundering and terrorist financing. Panama and Bahamas, two large flag states, are on this list. However, the road towards achieving this is long, and might not untangle the myriad of offshore registered company entities behind a vessel.

The 'gold standard'

As seen in the case of the Swedish registry, the line between public or private (sensitive) data, access rights, data protection and data of 'legitimate interest' is becoming increasingly blurred.

However, granular vessel specifications and comprehensive fleet data is held by multiple industry actors, including Port State Control (PSC) authorities, classification societies, flag states and maritime information aggregators.

Among the pioneers of data transparency are The International Association of Classification Societies (IACS), whose Quality System Certification Scheme (QSCS) is seen as the industry 'gold standard'.

The IACS classes recognise a mutual benefit in classification records being accurately and timely reported when a vessel changes class. Withdrawing or suspending a vessel's class, or the de-flagging of a vessel, is mostly standard practice.

However, for certain flag states, certain non-IACS classification societies and some P&I clubs, the willingness to share information is limited. The pressure to not share data they might hold on individual vessels usually comes from their customer base (i.e. shipowners), especially those on which the data shines a less-flattering light.

The commercial ambitions to increase their share of the world shipping fleet and appease shipowners is weighed against staying compliant, and the increased pressure to de-flag, withdraw class, or remove cover from vessels and vessel owners that might be engaged in illicit behaviour.

In its 'subterfuge shipping' series of articles, Lloyd's List highlighted vessels suspected of shipping Venezuelan and Iranian crude. Investigations have found that the principals behind these vessels engage in flag jumping and seem to favour certain flag states and P&I clubs. Among these are the East of England P&I Club (not to be confused with the West of England or North of England P&I Clubs), and the Djibouti flag state.

Djibouti is a small flag state (currently

In numbers

Lloyd's List Intelligence tracking data



470,000+

Vessels across classes A and B



350m+

AIS messages processed daily



Validated vessel positions daily



8,000+

Ports covered



5m+

Port callings confirmed annually



Lloyd's Agents globally

Source: Lloyd's List Intelligence

fewer than 50 flagged vessels), which for years had mainly had a limited number of domestic tugs and general cargoships in its register. However, in 2020, it saw six ships internationally trading crude oil tankers sign up.

At a time when compliance is at the fore, most flag states, classes and P&I clubs recognise it is important that their records are timely and accurately reflected, thereby also supporting other players in the market to stay compliant. However, many industry players have a long way to go in supporting this move.

MoUs, basic principles and the IMO

There are some areas where data sharing has become more restricted

In November 2017, the IMO recommended further information sharing between PSC regimes, as part of their ongoing "harmonisation and information-sharing strategy", including considering a move away from black/grey/white lists and expanding on "an individual ship risk profile approach".

Fast-forward to 2021 and, while there might be better information sharing between the PSCs, data sharing with data aggregators is not keeping up with the times.

The Paris Memorandum of Understanding of Port State Control (Paris MoU) and its 27 European PSC authorities (conducting ca. 17,000 inspections annually) announced shortly afterwards that it would stop providing bulk data sets of granular PSC information to third-party data providers. This was effective on January 1, 2019 and remains in place today.

The Caribbean MoU follows a similar approach, with limited information publicly

visible apart from inspection counts. This means a large volume of granular PSC data is held in antiquated online searchable databases, which is not the complete key to transparency.

The move was strongly urged to be reconsidered by the International Union of Marine Insurance, which noted that PSC information is used for risk assessments in the insurance industry. Lloyd's List Intelligence voiced its concerns to the Paris MoU, collecting testimonials from actors in the industry who saw this as a backwards step from the MoU's mission statement of safety at sea.

PSC authorities are all governed by the same basic principle: "The prime responsibility for compliance with the requirements laid down in the international maritime conventions lies with the shipowner/operator; responsibility for ensuring such compliance remains with the flag state."

However, more can be done to support enhancing the focus on compliance by granting comprehensive access to bulk datasets. The Paris MoU grey and black lists are still useful reference documents as an industry benchmark, but the restrictions placed on aggregating PSC inspections for individual vessels, which remain in place, limit the option for meaningful analysis that can make shipping safer.

Transparency in shipping

There has been a huge shift in how data is managed and shared. Gone are the days when you could rely on annual publications, or clunky online databases where you need to extract record by record. Companies are required to be more agile and data providers must be nimble.

Application Programming Interface (API) solutions are in high demand, and the Lloyd's List Intelligence tech team is constantly updating new APIs as it improves the captured data and models, so this can be integrated into new models for clients and data partners daily.

This is the key to unlocking the maritime transparency treasure chest, but it depends on the continued will of all industry stakeholders.

For more information about Lloyd's List Intelligence's services, please visit: https://www.lloydslistintelligence.com/ services/data-and-analytics or contact:

client.services@lloydslistintelligence.com

Sebastian Villyn is head of risk and compliance data at Lloyd's List Intelligence

he policies and procedures that have come to be known as 'ESG' are not new in themselves.
Certainly, many of the factors within the environmental, social and governance categories were in place long before the coronavirus pandemic struck.

Increasing concern for climate change, modern slavery, and the executive pay gap has generated media headlines for at least two years.

What has changed for global business — and for companies across the maritime sector — is that the rise of ESG issues has coincided with a shift in corporate influence from directors and shareholders to stakeholders.

It might be a consequence of the after-effects of the financial crisis and high-profile corporate failures — both of which led to a loss of trust in business — converging with the climate emergency.

This led to greater emphasis on stakeholder governance issues, and on the way in which directors fulfil their duty to take stakeholder interests into account in their decision-making.

Maritime stakeholders in this context are a broad cast of characters that includes employees, customers, suppliers, the wider community such as people living around a port, and the environment.

ESG is, therefore, much broader than climate change and the environmental impact of shipping.

Until now, the 'E' has been the dominant element of ESG-it is no surprise that the Poseidon Principles focuses on promoting "responsible environmental stewardship" throughout the maritime value chain.

Shipping's impact on the environment is measurable — the sector is thought to be responsible for up to 3% of the world's greenhouse gas emissions.



The rise of ESG issues has coincided with a shift in corporate influence from directors and shareholders to stakeholders.

Why ESG must go much further than climate change issues

Yet how deeply do shipowners dig into the ethnic diversity of a suppliers' employees? Would a charterer question a contract to trade cargo that might damage the environment or a local community?

The rise of what is termed 'stakeholder capitalism' is expected to seek reasons behind business practices that fail to meet expectations. And it is clear that investors are urging company directors to pay attention to all the elements of ESG.

There are important reputational aspects here, not only for whether companies have ticked the necessary boxes, but for how investigations are carried out.

The key to ESG is neither the 'E' nor the

'S' but the 'G'. Governance is at the heart of ESG: to do it well, directors must get the governance right.

In addition to understanding the purpose of the business they lead, directors should reflect on who will be impacted by the decisions they make.

And because there is a growing perception that companies which have embraced ESG — or at least started to push beyond environmental considerations — are well-run companies, there is an equally strong perception that these companies are likely to thrive in the long term, and are therefore a good investment.

One legal observer described ESG as "bringing humanity back to business".



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There have been developments within the European Union to include legislation on mandatory human rights and environmental issues.

It is an evolving picture. According to a European Union survey of businesses in the logistics supply chain, conducted in 2020, only about one-third of businesses undertake supply chain due diligence on human rights or environmental impact — and most of those only assess first-tier suppliers.

Most respondents accepted they were much more reactive to problems in the broader supply chain than proactive.

Audits of the supply chain are infrequent

— and even when discovered, issues rarely go beyond board level.

Graham Stuart, a partner in law firm Baker McKenzie's London office, said it is noteworthy that most respondents in the EU study felt that "voluntary approaches to addressing environmental and human rights issues in supply chains have failed to change sufficiently for the better the way in which businesses manage their responsibilities".

Respondents were in favour of mandatory, enforceable, cross-sectoral EU due diligence laws "to ensure legal certainty, a level playing field, and a single harmonised standard for business relationships through the supply chain",

Even where companies say they have taken ESG on board, it is clear that due diligence checks are basic, contractual obligations are unspecific, and supplier monitoring is usually missed. "Given this uneven response, a key area for business is to determine how much they need to do — and, as they move to a more regulated ESG world, what risks do they face if they don't do enough," Mr Stuart observed.

There is limited desire for ESG enforcement by governments and regulators. More likely, enforcement will be 'encouraged' by activist shareholders, non-government organisations, and by other businesses within the supply chain.

While hard enforcement in the form of fines might be imposed where environmental guidelines are breached, maritime businesses should not ignore the impact of 'soft' enforcement, which has consequences for customer trust and brand value.

The influence of shareholders in boardrooms and at AGMs is growing, especially when combined with media and lobbying initiatives.

Graham Stuart was speaking on a Baker McKenzie webinar. The law firm recorded a series of webinars under the title 'Demystifying ESG', including an introduction to ESG, and ESG and the supply chain. They can be found here: https://www.bakermckenzie.com/en/insight/publications/resources/esg-webinar-series

The aim will be to persuade both publicly listed and private companies to do better than merely achieve the minimum standards.

There have been developments during the coronavirus pandemic within the European Union to include legislation on mandatory human rights and environmental issues.

Essentially, businesses will be expected to collect information on specific risks and impacts in their supply chain, to take action to mitigate risks, and to report on steps they take.

Hardening attitudes

Whether regulated or not, the momentum behind ESG issues forms a critical part of a hardening of attitudes to transparency in business.

The culture of responsible business begins in the boardroom — but it should not end there.

Directors are responsible for cascading a culture of compliance throughout their company, with due diligence running beyond the first tier of suppliers, both upstream and downstream.

Staff on the ground should make ethical decisions that reflect consideration for environment, social and governance issues because these decisions impact both positively and negatively on brand value, reputation and investment opportunity.



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