

The drive towards decarbonisation and sustainability is resulting in greater collaboration between shipowners and equipment suppliers as ESG ratings dominate the procurement process, reports Patrik Wheater

nvironmental, Social and Governance (ESG) data has been used for years by finance firms looking to align investment with the corporate ethos, but the drive towards ocean sustainability is resulting in more maritime industry companies using ESG metrics not only in the procurement process but as a way of meeting their own emissions abatement targets.

Shipowners and operators in particular are implementing ESG strategies to help make more informed decisions on how best to decarbonise and cut greenhouse gas emissions by 50% by 2030, compared to 2008 levels.

For instance, while Norway's Siem Offshore has a history of investing in clean tech across its fleet (it was one of the first to pioneer the use of selective catalytic reduction (SCR) to reduce NOx emissions) all procurement decisions are now defined by a comprehensive ESG strategy based on Norwegian Shipowners' Association (NSA), European Union (EU), Corporate Sustainability Reporting Directive (CSRD), and European Sustainability Reporting Standards (ESRS) guidelines.

"The starting point was about saving fuel, saving money for the charterers [who foot the fuel bill], but it's about reducing emissions now," said Siem Offshore's ESG Director, Jon August Houge.

Siem Offshore, an IMPA member, has worked actively with





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JON AUGUST HOUGE ESG Director Siem Offshore

ESG initiatives for several years, but to better coordinate work throughout the whole organisation, an ESG group was established in October 2021. In March 2022 a dedicated ESG Director was appointed to strengthen and support ESG priorities.

The company, which operates a fleet of 28 specialised offshore vessels, is committed to ordering only zero emission vessels from 2030 and operating a climate neutral fleet from 2050.

"Compared to 2008, we are probably down at least 20-30% in relative emissions based on the Carbon Intensity Indicator (CII), which is common for bulkers and tankers but not mandatory for offshore vessels," said Houge.

"We devised a CII algorithm more appropriate for an offshore fleet and this shows how many grammes of CO_2 we are emitting per hour of operation offshore. Going forward, we are seeing that we need to cut emissions by 3% per year to reach our targets, but we have come a long way already," he said.

As part of its ESG strategy, the shipowner has introduced a number of emissions abatement initiatives, including hybrid propulsion systems running on battery power and low sulphur fuel, high voltage shore power systems, and the use of vessel optimisation software to better manage fuel consumption, ship transit speeds, balance trim, and so on. Another initiative is the biannual cleaning of ships' hull, which Houge said results in a 6-8% reduction in annual fuel consumption.

While soaring gas prices are nudging LNG out of the alternative fuel market for most offshore vessel charterers, Siem Offshore has gone down the low sulphur fuel and hybrid diesel/electric route.

"We have looked at future fuels, but right now it's a big step to retrofit an existing vessel. For newbuilds, running dual fuel combustion engines on ammonia or methanol will be no problem in a couple of years. But making this fly as a business case for retrofit installation is presently challenging."

Nevertheless, the company continues to investigate the use of hydrogen fuel cells, ammonia and methanol as clean energy solutions for existing and newbuild tonnage.

Green methanol as a marine fuel forms a key part of DFDS's ESG strategy. Yet, while it is well known the Danish ferry operator plans to convert some of its roros to run on the fuel by 2025, selecting the right methanol supplier has required a procurement strategy rethink.

"We have to ensure we have the right fit in relation to our needs," said Thomas Lau Kristiansen, Senior Category Manager, DFDS. "We are measuring suppliers on nine different parameters and then based on the outcome of that assessment we decide if they should be categorised as an A, B, C or D supplier."

Once categorised, especially category A suppliers, Kristiansen's team takes a deeper dive with more in-depth questions to determine if there is a fit.

While IMPA member DFDS is currently in dialogue with a large number of potential methanol suppliers, and is close to making a decision, Kristiansen said the majority of suppliers are looking for off takers willing to offer a long-term commitment.

But given that the market for green ammonia and green methanol (as a marine fuel) is in its infancy, investors need more than a 10-page power point and some optimistic ideas on which to base their procurement decisions. Suppliers need to assure buyers they can deliver on their promises.

Commenting on DFDS's procurement procedures in general Søren Hvalsøe Sondrup, Head of Procurement Operations & Data Excellence, explained how a buyer's ESG strategy can commercially benefit the supplier.

"An ESG rating helps assure us that our suppliers are at least focused on sustainability and interested in reporting on their performance. We are seeking to work with suppliers who are rated or agree to be rated by a recognised third-party organisation. Therefore, we are discussing the topic both with a target group of incumbent suppliers and new potential suppliers.

"I think if you want to push the green agenda, then you have to work with the suppliers who are interested in that as well in general. That also means that we try to motivate our suppliers towards a rating rather than cutting them off in case they are not already rated, hesitant or less mature. If you don't work with suppliers just because they're not rated, then will they ever be rated? I think if you have a good supplier then buyers need to set a good example and help them get rated. There needs to be more cooperation to succeed and we in DFDS are committed to doing our part to drive the industry towards sustainable supply chains."

Siem Offshore's Jon August Houge agrees that "we need collaboration to make it happen", but so to do manufacturers.

Commenting on the commercial value, Dr Efi Tsolaki, ballast water manufacturer Erma First's Chief Scientific Officer, said achieving a good ESG rating can help investors identify and evaluate the risks of suppliers and their products.



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THOMAS LAU KRISTIANSEN Senior Category Manager DFDS

Oil-free bearings and seals pioneer Thordon Bearings, whose commitment to ocean sustainability can be traced back to the late 1980s, believes being "green" can commercially benefit shipyards too.

Craig Carter, Thordon's Vice-President Business Development, said: "In theory, you can find a supplier that offers a solution at the best price, but we are finding that because shipowners demand clean solutions more and more shipyards are evaluating suppliers on their ESG rating and commitment to sustainability. We have offered environmental solutions for decades, so pleased ESG is moving up the regulatory agenda and more companies see commercial value in it."

Since ESG data reflects how companies operate societally and environmentally, analysts believe it will also have an increasingly important role in reporting, monitoring, perhaps policing, of mandatory environmental requirements.

"If we can't measure something we can't improve it," said Graeme Sommerville-Ryan, the founder of not-for-profit maritime pollution mapper EyeSea, referring to a meeting where a well-known NGO stated that the maritime industry caused 20% of all ocean pollution but then admitted they had no data to substantiate the claim.

"When you dig down into the reports, flash graphics, and PR it becomes clear we know almost nothing about ocean and coastal pollution. The data

used to support a wide range of arguments, claims, and models are of surprisingly low quality; and this lack of information impacts the quality of decision-making," he said.

Sommerville-Ryan believes procurement decisions that incorporate a potential supplier's ESG record and involvement will make an enormous difference to the industry's work across a wide range of environmental sustainability initiatives and projects. He said the industry has access to plenty of information that could be better used to encourage positive change.

"Rules and regulations have a role to play, as they always have, but the more I am involved in this area, the more I believe we need a complete rethink of macro-level sustainability, because whatever we are doing isn't working. Regulation in itself doesn't deliver an outcome, and regulators are not the ones cleaning up the beaches [and oceans]."

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GRAEME SOMMERVILLE-RYAN Founder, EveSea

Autonomous vessels the key to decarbonisation

While there is greater awareness and understanding that the global maritime industry must act quickly to mitigate the impact of its operations on the marine environmental, the One Sea Association believes autonomous technology can hasten the pace.

One Sea, a high-profile, non-profit global alliance of leading advocates of digital and autonomous solutions, believes the technology can reduce carbon emissions and improve overall ship efficiency.

Sinikka Hartonen, the Association's Secretary General, said: "In terms of solutions, autonomous and automated navigation can benefit the environment by increasing voyage efficiency which in turn can contribute to decarbonisation. The technology can improve productivity and fuel efficiency as it continuously reacts to small changes rather than reacting intermittently to larger changes. This has been shown to reduce emissions for the same cargo volume transported."

Commenting on the obstacles preventing the wider take-up of autonomous solutions, Hartonen said: "The view of the regulatory horizon must be clearer to help provide certainty for investments. From an autonomous technology perspective, the lack of regulations and the existing barriers in the current regulatory framework have slowed the uptake of this technology."

Moving the needle on social, environmental and economic development is at the top of IMPA's agenda

For more than a decade, IMPA has been focusing on delivering better guidance and streamlined solutions for sustainable procurement. With hundreds of existing frameworks out there that helps our members buy responsibly, we are on a mission to add uniformity to this area in maritime. Our sustainability initiatives help the maritime community improve CSR performance, mitigate risks in the supply chain, and save costs, all while supporting the UN 2030 agenda.

IMPA ACT can help companies leverage best practice to meet the minimum global standard for social sustainability and build resilient supply chains: www.impa-act.org

IMPA SAVE brings knowledge of available sustainable solutions to the marine and offshore industry through collaborating with the industry's best and brightest: www.impasave.org