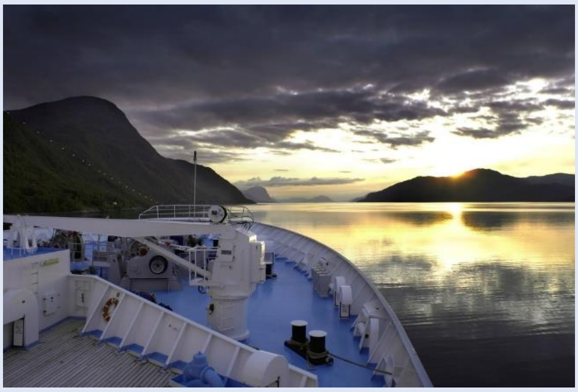
JAMES CLAYTON I FEBRUARY 2023

Headwinds for the Poseidon Principles

The Poseidon Principles provide a platform for financing shipping's sustainable future, but the technical guidance underpinning the initiative remains under scrutiny.

In July 2023, the International Maritime Organization's Maritime Environment Protection Committee (MEPC) will consider revising the UN agency's strategy on greenhouse gas emissions from ships. Moving on from a current target to reduce CO_2 emissions from ships by at least 50% by 2050, based on 2008 levels, influential administrations seek to accelerate towards net-zero or even zero by 2050.



The modification would also apply to the 'decarbonization trajectory' observed by The Poseidon Principles – launched in 2019 as a framework for financial institutions to assess the alignment of their shipping portfolios with IMO goals for GHG emissions.

By the end of 2022, 30 shipping banks representing around $200bn of available ship finance (two thirds of the market) had signed up to The Poseidon Principles. Signatories include a standardized loan covenant clause in each new finance agreement, requiring shipowners to provide specific data to their financiers. To measure and manage progress, lenders and lessors will apply a principle of 'climate alignment' to all credit products where a vessel or vessels fall under the purview of the IMO. They also commit to sharing 'climate alignment' scores on an annual basis.

Banks are already actively evaluating the environmental credentials of owners before investing in newbuilds and retrofitting older vessels. Société General's global head of maritime industries, Paul Taylor, told January's Marine Money Ship Finance Forum, in London, that every shipping client is rated for commitment to net zero and quality of reporting on sustainability issues.

With IMO rules themselves evolving, aligning also requires the ability to adapt. The Poseidon Principles were updated in September 2022 to anticipate an MEPC shift towards a Net Zero 2050 target for ships. However, headwinds are expected at the coming MEPC for a proposed switch from 'tank-to-wake' accountability on GHG emissions from ships, to a broader 'well-to-wake' evaluation that takes account of the entire fuel value chain - a change already anticipated by another revision made to the Poseidon Principles last year.

Aspiration and accountability

While the true ambition of shipping's environmental aspirations may once more grab headlines post-MEPC, the way climate alignment is assessed will also continue to test a set of Principles tied to the data types, sources, service providers and technical guidance established by the IMO.

Classification Societies and other Recognized Organizations are obliged to derive carbon intensity performance for Poseidon Principles participants in an unbiased way so that signatories can assess and report climate alignment. In practice, portfolios are assessed for carbon intensity based on IMO's approach of establishing a Carbon Intensity Indicator for each ship to measure efficiency in transporting goods/passengers by grams of CO_2 emitted per carrying capacity and nautical mile.

IMO's CII became mandatory under MARPOL Annex VI from January 1, 2023, rating existing ships on an A-E scale which reflects CO_2 emissions against transport miles.

In theory, the IMO approach would reward owners on the favoured 'decarbonization trajectory' with a better CII rating, with lower carbon performers outperforming other ships of their type/size to and proving attractive to charterers. Similarly, a portfolio financed under the Poseidon Principles would be distinguished by a high volume of aligned ships, high loan values associated with aligned ships, or a combination of these factors.

Real world impacts

In fact, the scheme's own assessment mechanism has exposed the way shipping's aspirations for sustainability can be quickly thwarted by real world events. The recently published Poseidon Principles Annual Disclosure Report for 2021, for example, indicated only seven of the 28 signatory institutions as meeting their aims on alignment, with an average score of 9.7% above target an increase over the 7% achieved in 2021.

The poor alignment scores were reputed to have been strongly driven by the impact of Covid-19 on the cruise industry. During lockdown, many cruise operators put their ships in warm lay-up and powered them using conventional carbon-based fuels. With transport miles limited, or sometimes zero during a lay-up, carbon intensity performance necessarily deteriorated, even though the cruise ships were generating far fewer emissions in absolute terms.

Where cruise ships were declared separately for 2021, they were on average 46% above alignment, while cargo vessel portfolios that were reported separately were nearly aligned at just 0.8% above target.

Waiting for answers

Even though the CII is now in force, owners from different industry segments continue to highlight perceived shortcomings. A leading bulk carrier owner has pointed out that, since ships burn more fuel laden than in ballast, a ship sailing continuously unladen could achieve A-band performance where the same ship sailing laden for fewer days would create equivalent emissions but achieve a C-rating. Clearly not anticipated in reality, the scenario nonetheless highlights the system's vulnerability to manipulation: a ship waiting to load and possessing a tender notice to enter port might take the opportunity to clock up miles in ballast to boost its CII rating.

Again, as a calendar-based system, a ship's CII rating might be penalised arbitrarily due to days in port within the limits of a given year, where a rolling format could accommodate a standard deviation.

The methodology underlying the CII is subject to review, even though the instrument is now in force. Last year, relevant committee work limited a review of the way carbon emissions were estimated to ro-ro vessels. In doing so, however, notice was also given that correction factors to address adverse weather and waiting times would be reviewed in 2025.

MEPC's intersessional working group on greenhouse gasses has already had sight of a World Shipping Council (WSC) commentary on the IMO Data Collection System (DCS) used to derive the CII. In one passage, it proposes "disaggregating reporting of fuel use when ships are underway and at rest, for different fuel consumers (main propulsion engines, auxiliary engines and boilers) and to index emissions to cargo carried in preference to nominal capacity". In another, it advocates "recognizing that when quantifying cargo carried it is essential to recognize the fundamental differences between ship types and, by extension, the vital importance of using appropriate cargo-units for each ship type."

The Poseidon Principles Technical Guidance is expected to evolve as and when the IMO creates new policies, or if the Poseidon Principles Association decides to interpret the IMO's Initial Strategy differently.

Fuelling debate

However, other questions are also in play which challenge the basis for decisions being made at IMO and, by extension, for The Poseidon Principles. Some wonder whether CO_2 emissions can truly be considered the sole gauge of environmental impact in the shipping context.

While playing an important role in eradicating SOx and 85% of NOx from ship exhaust fumes, claims over the extent to which liquefied natural gas used as a marine fuel reduces overall GHGs are hotly disputed. When combusted, LNG is claimed to achieve 20%-25% lower CO_2 emissions than fuel oil, for example, but campaign group Transport & Environment cites IMO's own figures to note that - depending on the marine engine installed - between 0.2% to over 3% of LNG is not burnt at all.

As LNG is 90% methane, unburnt fuel that slips through the engine will be primarily composed of a gas which traps 86 times more heat in the atmosphere than the same amount of CO_2 over a 20-year time period. T&E asserts that about 80% of the LNG burned today by marine engines results in worse total greenhouse gas emissions than is the case for traditional engines running on fuel oil.

The same study also suggests that, to meet the Paris Agreement target to limit the global temperature rise to 1.5ºC by 2100, recently ordered LNG-capable ships will have to evolve to use scalable zero-emission solutions or be scrapped before their end of life. The LNG-capable fleet "value at risk" could be around $850bn by 2030, according to a recent study from UCL Energy Institute.

Separately, the UCL study highlights how advancing environmental regulation carries its own risk of creating stranded assets. Scrapping ships and building replacements also have environmental consequences, for example, and it can sometimes be less harmful to extend the life of an older ship than to replace it. Poseidon Principles Chairman Michael Parker has already suggested that entry into force of IMO's long-awaited convention on ship recycling would logically prompt an additional action points for signatories*.

There is hope…

There is no doubt that the Poseidon Principles have been an overwhelmingly positive initiative, but reservations remain over its focus on CO_2 emissions as the sole gauge of progress. Expanding the scope of the Principles, as well as accelerated uptake from other banks, alternative financiers and lessors, will be crucial next steps towards the transformational change envisaged in global ship finance.

*On Thursday 23 February, Campbell Johnston Clark (CJC) and SPNL - Shipping Professional Network London staged a discussion panel on 'Recent Trends in Green Ship Recycling'. Speakers include James Clayton, CJC, Darren Lepper, Clarksons, Philip Arcoumanis, Maritime Asset Partners and Ehud Bar-Lev, Lloyd's Register. For more information, please contact:

For queries and further information, please speak to your usual contacts at CJC.

[James Clayton](#)
Director
Jamesc@CJCLaw.com

Campbell Johnston Clark Limited (CJC) is an international law firm specialising in shipping and international trade. With almost 60 staff worldwide, CJC has offices in London, Newcastle, Singapore and Miami. The firm has a strong presence in the London and overseas shipping markets with clients and fellow practitioners alike.

CJC advises on all aspects of shipping and international trade law, from ship finance to dry shipping and comprehensive casualty handling, and everything in between. Our clients are based around the globe and include leading operators, ship owners, Fortune 500 and FTSE listed companies, start-up ventures, investment banks, private equity houses, P&I clubs, hull & machinery, and liability insurers.