

Shipping's climate footprint and the financial industry

by Ewa Kočańska

In their first *Annual Disclosure Report 2020*, the Signatories of the Poseidon Principles have publicised their ship finance portfolios' climate alignment scores for 2019. As the first sector-specific climate initiative for lending institutions, the initiative demonstrates how the financial sector can help move industries towards a low carbon future by ensuring their investments are environmentally responsible. With 20 leading banks as Signatories, one-third of global shipping finance power is now part of the Poseidon Principles initiative. According to the results, just three out of the 15 financial institutions included in the report align with the decarbonisation targets set by the International Maritime Organization (IMO).

The Poseidon Principles, launched in June of 2019 by the Global Maritime Forum, provides a global framework through which decarbonisation efforts in the shipping industry align with financial and lending decisions, consistent with IMO objectives. The report, released in December 2020, draws the banking industry's attention to the fact that they have been issuing loans to major industries without giving enough consideration to the ecological consequences of their investments. This initiative directly involves the financial sector in greenhouse gas (GHG) emissions reduction through measured, data-based, and transparent, environmentally conscious lending.

The Poseidon Principles decarbonisation strategy aims to reduce the total annual GHG emissions by at least 50% compared to 2008 (the IMO Absolute Target) and to reduce CO₂ emissions per transport work by at least 40% by 2030, pursuing efforts towards 70% by 2050 compared to 2008 (the IMO Intensity Targets).

The members also strive to actively work with their clients and partners to implement the four Poseidon Principles. These principles include an annual assessment of climate alignment – where each member assesses its climate alignment according to the Technical Guidance for all Business Activities; accountability – where Signatories commit only to use data types and sources as well as service providers

identified in the Technical Guidance in their alignment analysis; enforcement – where Signatories contractually require compliance with the Poseidon Principles in new business activities; and transparency – where Signatories publicly acknowledge membership in the Poseidon Principles initiative and publish their shipping portfolio climate alignment score annually. These principles are not designed to be static; it is expected they will change according to the data collected, new research, and variations in global climate-related targets (and possibly also feedback from stakeholders who aren't directly involved).

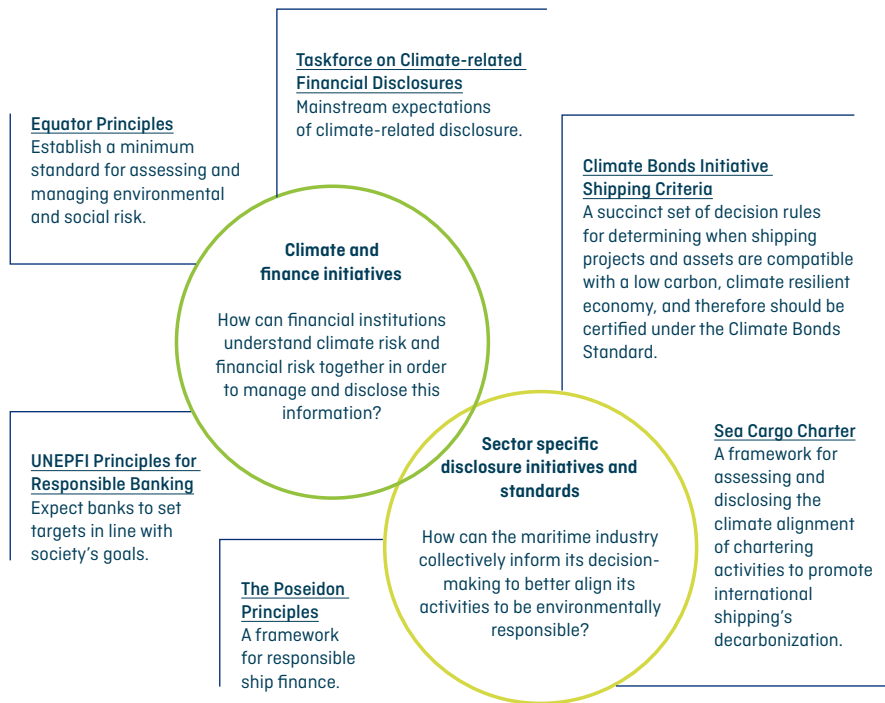
The (mis)alignment

The climate alignment indicator measures (in percentages) the deviation between a vessel's carbon intensity against the one required to be in line with a decarbonisation trajectory that meets the IMO objectives. Ship's carbon intensity depends on several factors such as its size, type, and cargo loads; it is also sensitive to speed, amount of time spent in port and at sea. A new IMO regulation requires owners of ships of gross tonnage 5,000 and above to collect data, which allows for calculations of the Annual Efficiency Ratio (AER). AER considers fuel consumption, distance travelled, and deadweight tonnage at summer draught, and that's the metric that has been adopted by the Poseidon Principles to measure ships' climate alignment.

Out of the 15 Signatories included in the annual report, three portfolios aligned with the IMO's initial GHG strategy. These include Export Credit Norway, with a portfolio score of -44.92% alignment delta (the lower the number, the more IMO-aligned the institution), Bpifrance Assurance Export (-43.43%), and ING (-0.36%). The average score was +1.2% above the benchmark, and the scores ranged from -44.92% to +32%. Out of the misaligned Signatories, half scored +5% or less. Sparebanken Vest (+29.11%) and Amsterdam Trade Bank (ATB; +31.58%) are two institutions that are most out of alignment with the Poseidon Principles emissions reduction targets.

The banking institutions attribute their results to a plethora of reasons, but all are overall satisfied with the tools, data, and carbon emissions analysis provided by the Poseidon Principles. For instance, ING representative explains that thanks to the initiative, the bank has "quantitative data" to communicate with clients and stakeholders to further support them in achieving their decarbonisation goals. IG's Stephen Fewster, Global Head of Shipping Finance, attributed his organisation's positive results to their clients, "I am delighted to report our first portfolio result under the Poseidon Principles aligns with the IMO pathway. This reflects our focus on lending to first-class owners and financing modern

Fig. 1. How the Poseidon Principles came to be

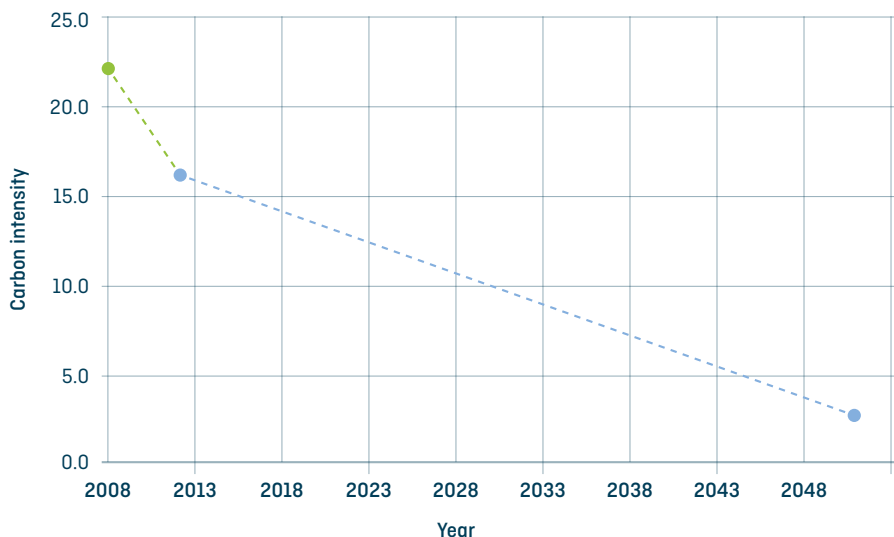


Source for all figs. and Tab. 1: Poseidon Principles. Annual Disclosure Report 2020

Fig. 2. Global carbon intensity trajectory

	2008	2012	2050
Total transport demand (million tonnes)	42,000	49,000	169,000
Total CO ₂ emissions (million tonnes)	921	796	461
Estimated aggregate carbon intensity (gCO ₂ /tnm)	22.0	16.3	2.7

Transport demand, emissions and carbon intensity for international shipping



assets. However, this is only the start, and I look forward to cooperating with the Poseidon Principles Association and clients to ensure that the industry meets the IMO 2030 and 2050 targets.” Likewise,

Nordea (+6.7%), one of the founding Signatories, appreciates the instruments and important data from the Poseidon Principles which serves as a “good starting point” to do an in-depth analysis

of their shipping portfolio. “The data from the Poseidon Principles will over time enable us to gain additional insight into our shipping portfolio and enable a fact-based dialogue with our customers regarding decarbonisation,” said the Nordea statement included in the report.

Decarbonisation marathon: when age isn’t a problem, but size does matter

In terms of shipping finance portfolios and their climate alignment, a portfolio can easily align either by having a high number of aligned vessels or high loan values pertaining to the aligned ships – or some combination of the two; while, of course, the opposite will work against the portfolio. Also, by having a smaller number of vessels, the portfolio becomes that much more dependent on the individual’s alignment score, especially if the ship also carries more debt. “On this basis, some financial institutions found that a limited number of vessels accounted for a significant portion of their overall score,” according to the report.

To that end, Sparebanken Vest believes that it is indeed the small number of ships in their portfolio that’s most responsible for their misalignment with the targets. “A limited number of vessels account for a significant portion of our total negative deviation on a portfolio basis. The Poseidon Principles are a highly useful tool for increasing our interaction with clients on environmental issues,” said Sparebanken Vest’s Ragnhild Janbu Fresvik, Group Director, Commercial Banking. The institution hopes that with the information and tools provided through the Poseidon Principles, they will be able to address the issue with the ship owner and correct their trajectory.

On the other side of that coin sits Export Credit Norway, a bank which mostly finances newbuilds. Their very good score of -44.92% is primarily due to the fact that their portfolio under the Poseidon Principles scope is “very limited, as most of our vessels are offshore service vessels which are not considered to be trading internationally and/or are below dwt 5,000” and therefore are not included in the report.

Perhaps surprisingly, the analysis found that vessel age may not play as big a role as it might have been assumed. The common thinking is that a newer ship will have a better carbon intensity. However, it appears that the ship’s operational factors, such as speed or time spend in port, affect its carbon intensity to such an extent

Fig. 3. The four Poseidon Principles

The Principles

Principle 1

Assessment of climate alignment

“ We will annually assess climate alignment in line with the Technical Guidance for all Business Activities. ”

Our commitment:

Signatories will, on an annual basis, measure the carbon intensity and assess climate alignment (carbon intensity relative to established decarbonization trajectories) of their shipping portfolios. This requirement takes effect for each Signatory in the following calendar year after the calendar year in which it became a Signatory.

Principle 2

Accountability

“ We recognize the important role that classification societies and other IMO-Recognized Organizations (“RO”) play in providing unbiased information to the industry and the mandatory regulation established by the IMO for the data collection and reporting of fuel oil consumption from ships, (the “IMO DCS”). We will rely on such entities and mandatory regulations as explicitly identified in the Technical Guidance for the provision of information used to assess and report on climate alignment. ”

Our commitment:

For each step in the assessment of climate alignment, Signatories will rely exclusively on the data types, data sources, and service providers identified in the Technical Guidance.

Principle 3

Enforcement

“ We will require that ongoing compliance with the Poseidon Principles is made contractual in our new Business Activities using standardized covenant clauses. We will contribute to the update and addition of standardized clauses through the annual review process. ”

Our commitment:

Signatories will agree to work with clients and partners to covenant the provision of necessary information to calculate carbon intensity and climate alignment.

Principle 4

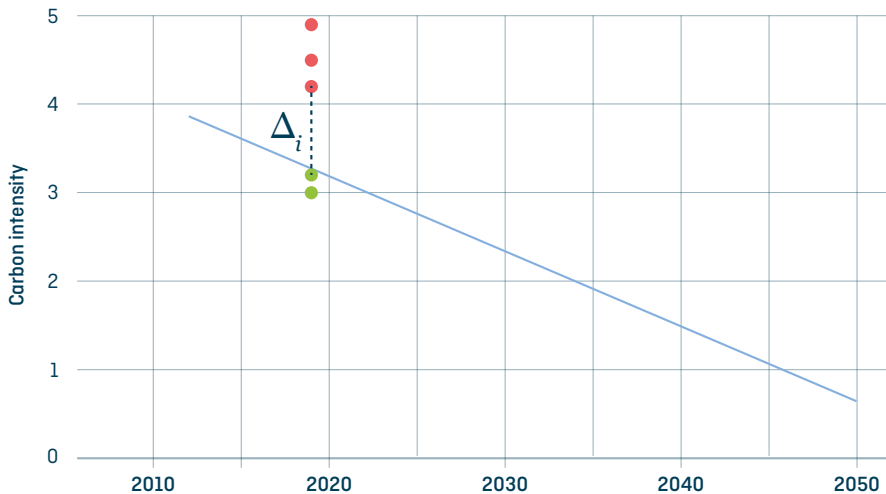
Transparency

“ We will publicly acknowledge that we are a Signatory of the Poseidon Principles and we will publish the portfolio climate alignment score of our Business Activities on an annual basis in line with the Technical Guidance. ”

Our commitment:

1. Upon becoming a Signatory, the Signatory will publicly acknowledge that it is a Signatory of the Poseidon Principles.
2. On an annual basis, each Signatory will report the overall climate alignment of its shipping portfolio and supporting information, as per the Accountability requirements, to the Secretariat no later than 30 November. This requirement takes effect for each Signatory in the calendar year after the calendar year in which it became a Signatory.
3. On an annual basis, each Signatory will publish the overall climate alignment of its shipping portfolio in relevant institutional reports on a timeline that is appropriate for that Signatory. This requirement takes effect for each Signatory in the calendar year after the calendar year in which it became a Signatory.

Fig. 4. Assessing alignment at the vessel level



that sometimes the oldest vessels have the best carbon intensity. For example, Crédit Industriel et Commercial (+1.1%) emphasised that while technical specifications play an essential role in the assessment, the “operation management” turned out to be especially significant in their score. Moreover, age is not a problem as long as the vessel is effectively operated, and when

that’s the case, it can “even stand below the reference curve.”

Additionally, ATB, while recognising that it is “noticeably out of alignment” with the Poseidon Principles’ emission reduction targets, has taken steps to identify ships that have contributed to the subpar score. The bank said that thanks to the Principles-inspired analysis, they

will now seek to finance more fuel-efficient ships, also paying attention to the vessel’s trading patterns which they found to be significant. “For instance, a large vessel with a large engine is likely not to be efficiently utilised on short routes and consequently its high emissions compared to the work done can influence the bank’s decision to finance it,” reads the ATB statement. Despite his bank’s below par score, Iraklis Tsirigotis, Head of Shipping Finance, Managing Director, is glad that the organisation has completed its first Poseidon Principles evaluation. “This is another concrete step for ATB to continue to improve further its Shipping Finance business while accounting for its environmental impact. This is not a sprint, but rather a marathon which requires a lot of small, but steady steps over time,” said Tsirigotis.

Further, ongoing investments in greening and maintenance of existing vessels can benefit decarbonisation efforts of a portfolio. The Crédit Agricole Corporate and Investment Bank (+0.44%), believes that its continued financial support, despite an economic downturn, of shipping clients in “renewal and rejuvenation

Tab. 1. The Poseidon Principles' Signatories' scores

Nº	Name	Score
1	Export Credit Norway	-44.92%
2	Bpifrance Assurance Export	-43.43%
3	ING	-0.36%
4	Crédit Agricole Corporate and Investment Bank	+0.44%
5	Crédit Industriel et Commercial	+1.1%
6	Société Générale	+2.05%
7	DNB	+2.5%
8	BNP Paribas	+2.88%
9	ABN AMRO	+5%
10	Citi	+6%
11	Nordea	+6.7%
12	Danish Ship Finance	+6.72%
13	Danske Bank	+11.9%
14	Amsterdam Trade Bank	+31.58%
15	DVB	-1

¹ Non-reporting

of their fleets” has contributed to their good score. “Reducing the carbon footprint of the maritime industry should be a priority for us all. As one of the world’s leading ship-finance banks, Credit Agricole CIB will be there to support the ship-owning community in their initiatives and investments leading to measurable and sustainable decarbonisation of our shipping industry,” said the bank’s Thibaud Escoffier, Managing Director, Global Head of Ship Finance.

Clearly, this first report has allowed the Signatories to better understand the drivers of the ships’ carbon intensity in their portfolios and therefore cooperate with their clients and stakeholders to improve the industry’s GHG footprint. Statement from Citi (+6%), a founding Signatory, says that going forward, the organisation will consider “factors such as estimated alignment delta, age of vessel(s), retrofits, new fuel efficiency technologies, the operator’s efficiency track record, and the usual risk assessment” in all new financing as well as renewals. These points will then be assessed in regard to the overall portfolio to make sure that it aligns with the IMO emissions trajectory.

Moreover, the initiative helps organisations meet climate goals of other global climate initiatives. For example, BNP Paribas (+2.88%) said that the Poseidon Principles data are an important “building block” for the institution to align itself with the Paris Agreement objectives. “We are committed to ensuring that our business is conducted in an environmentally responsible way and will continue to support this through our business strategy and together with our clients,” said BNP

Paribas’ Vincent Pascal, Head of Shipping and Offshore Finance EMEA.

Open to criticism (and ‘cat’ diagrams)

The Warsaw-based maritime and climate change **Gliese Foundation** touched upon some problems within the report and offered advice on how to improve the reporting in the coming years. For example, the report says that their 20 signatories represent \$150 billion; however, the share of each bank is not disclosed. The report also doesn’t specify if any percentage (and if so – what percentage) of the bank’s portfolio was excluded from the analysis. Furthermore, it’s unclear whether each bank’s estimates were done internally (allowed pathway track) or by classification society (preferred pathway track). The Foundation believes that the above information is critical in properly assessing portfolio scores.

Moreover, according to the Gliese Foundation, the most important issue with the report has to do with the +1.2% average score of portfolio climate alignment; they believe that this number gives the wrong impression of the financial institutions as a whole being just 1.2% off from the ideal trajectory. The Foundation assumes (since it’s not otherwise specified) that the 1.2 number is a simple average and not a weighted one of the 15 members’ scores. The results of a few particularly well-performing or poorly doing institutions were certainly heavily influenced by a small portfolio of vessels with either high or low emissions, affecting the overall average.

The Gliese Foundation supposes that the actual weighted average is closer to 2.5-6%. The organisation has requested either information on each bank’s shares from the total amount of the 15 reporting banks or the

weighted average, calling the simple average “meaningless.” They also believe that given the four significant outliers among the banks, a box-and-whisker diagram would better illustrate the data. “The final results would be better captured in a small-size box with very long whiskers. If it were a cat, its mouth would have been small with whiskers quite long!” said the Gliese Foundation in their analysis of the report.

Decarbonisation springboard

Evidently, the Poseidon Principles *Annual Disclosure Report 2020* illustrates how by understanding what makes a ship carbon-efficient, financial institutions, through open dialogue and cooperation with clients, can establish proper fleet requirements to ensure their investments actively contribute to a GHG emissions reduction in the shipping industry. And even though, as the Gliese Foundation pointed out, some improvements in analysis and transparency methods could be implemented, the initiative certainly has an ability to be a driver for environmental responsibility and carbon neutrality.

As the first industry-specific project that assesses and publicly reports real emissions figures, the Poseidon Principles initiative can serve as an example for global organisations to start using financial investments as a springboard for decarbonisation of other sectors. Despite its critique, the Gliese Foundation underscored its overall support for the project, “In summary, the Poseidon Principles released a good report. We welcome and congratulate the signatories for this comprehensive document. If some parts of our policy brief may sound critical, it is because we are convinced that an essential role of institutions of the civil society, like Gliese Foundation, is to encourage public and private sector stakeholders to improve their disclosures and transparency.”

Indeed, this initiative could evolve to include other global issues where financial institutions’ collective influence can help improve and increase the contribution industries and their lenders make to society. ■

