



POSEIDON PRINCIPLES

Annual Disclosure Report 2020



December 2020

Poseidon Principles

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Foreword

This report represents the first time Signatories of the Poseidon Principles disclose the climate alignment of their ship finance portfolios. It marks a significant milestone in the joint efforts of the Signatories, for global ship finance, and for climate finance as a whole. We commend our fellow Signatories for their pioneering efforts to be transparent and accountable for our role as financiers in promoting responsible environmental stewardship through the vessels we finance.

Since the launch of the Poseidon Principles in June 2019, Signatories have been working to bring the Principles from paper to practice. We have committed to implementing the Principles in our internal policies, procedures, and standards, to work in partnership with our clients to learn from each other, and to assess and disclose the annual climate alignment scores of our ship finance portfolios in this report. We have also grown in numbers, from 11 Signatories at launch, to now 20 banks and export credit agencies which cover over one third of global ship finance.

As Signatories, we will continue to reflect on collective progress and to allow the Principles to evolve and expand over time. This ensures the Principles remain robust and up to date with international goals to limit adverse environmental impacts in the global maritime sector.

The first reporting period of the Poseidon Principles has ended, but the adventure of the Poseidon Principles has only just begun. Financial institutions who are considering becoming Signatories should be inspired by the success of the Poseidon Principles to date. We encourage other institutions to join us, and we invite others to engage in collaborative efforts to support international shipping’s contribution towards the greater goals of society.

December 2020

Michael Parker
Chair, Poseidon Principles Association
Chairman, Global Shipping, Logistics and Offshore, Citi

Paul Taylor
Vice Chair, Poseidon Principles Association
Global Head of Shipping and Offshore, Societe Generale



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Introduction

About the Poseidon Principles

The Poseidon Principles are a framework for assessing and disclosing the climate alignment of ship finance portfolios. They create common global baselines that are consistent with and supportive of society's goals to better enable financial institutions to align their portfolios with responsible environmental impacts.

The Poseidon Principles establish transparency requirements for Signatories. They are supported by a robust and industry-appropriate climate alignment assessment methodology and carefully considered accountability and enforcement requirements that support data collection and analysis practices.

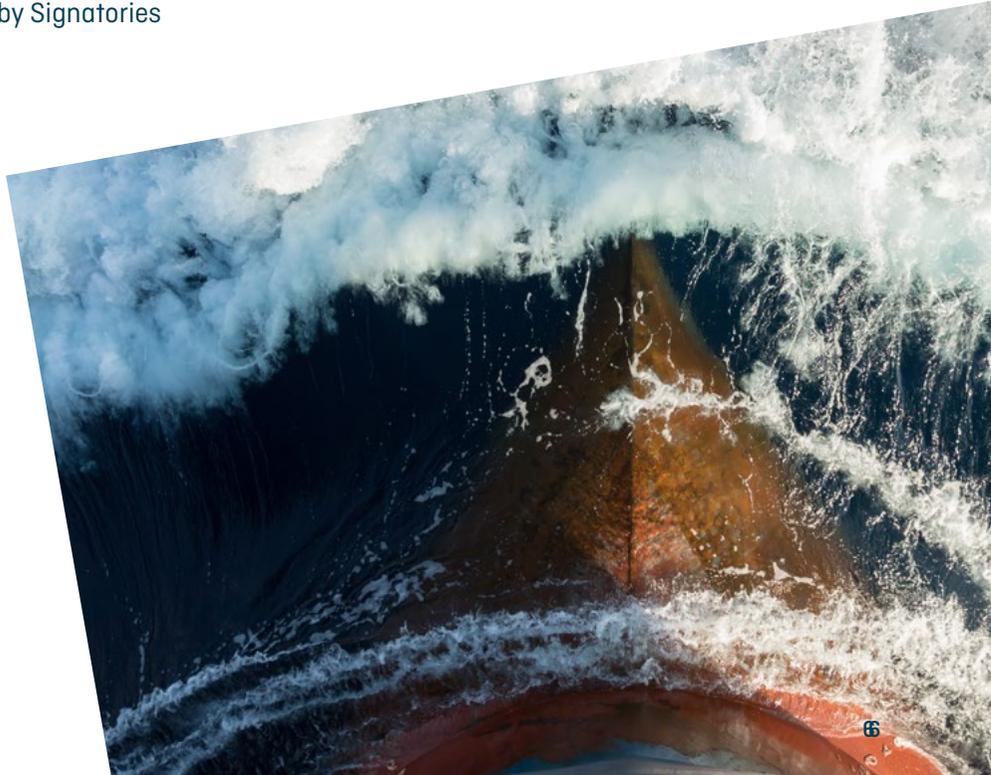
They were developed in an effort spearheaded by global shipping banks – Citi, Societe Generale, and DNB – in collaboration with leading industry players – A.P. Møller Mærsk, Cargill, Euronav, Gram Car Carriers, Lloyd's Register, and Watson Farley & Williams – with expert support provided by the Global Maritime Forum, Rocky Mountain Institute, and University College London Energy Institute/UMAS.

The Principles aim to support financial institutions in integrating climate considerations into lending decisions in line with the climate-related goals of the International Maritime Organization (IMO). They not only serve the Signatory institutions to improve decision-making at a strategic level, but also shape a better future for the shipping industry and society.

Scope

The Poseidon Principles are applicable to lenders, relevant lessors, and financial guarantors including export credit agencies. The Poseidon Principles must be applied by Signatories in all Business Activities that are 1) credit products – including bilateral loans, syndicated loans, club deals, and guarantees – secured by vessel mortgages or finance leases secured by title over vessel and 2) where a vessel or vessels fall under the purview of the IMO (i.e., vessels 5,000 gross tonnage and above engaged in international trade).

Climate alignment is currently the only environmental factor considered by the Poseidon Principles. This scope will be reviewed and may be expanded by Signatories on a timeline that is at their discretion.



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.

1. The significance of the Poseidon Principles

At the time of launch, the Poseidon Principles became the first sector-specific climate alignment agreement for financial institutions. This climate alignment report marks another major milestone – the conclusion of the first reporting period under the Principles.

The Poseidon Principles have been made possible due to the evolution of responsible lending. The 11 founding Signatories recognized their role within ship finance to promote responsible environmental stewardship across the maritime ecosystem. The initiative has grown to include 20 Signatories – in this report, 15 of these institutions, most of which became Signatories in 2019, publicly disclose the climate alignment of their portfolios for the first time.

By bringing together financial institutions, shipowners, and expert communities, the Poseidon Principles allow shipping banks to actively integrate climate considerations into lending decisions.

From avoiding adverse impacts to active involvement

The significance of the Poseidon Principles must first be understood in the context of how voluntary efforts by private financial institutions have evolved over the past two decades. At the end of the 1990s, it was a common belief that financial institutions should not be linked to potential adverse environmental or social impacts of the companies or projects they financed. Today, a number of initiatives directly connect finance and the environmental impacts of lending activities.

The Principles for Responsible Banking, established by the United Nations Environment Programme Finance Initiative in 2019, are one such initiative. They state that financial institutions are expected to proactively “contribute to society’s goals.” This transition is the result not only of tremendous shifts in public expectations, shareholder demands, and regulatory scrutiny, but also by the proactive responses by leaders in the financial sector.

This shift began in 2003 with the launch of the Equator Principles, which set minimum standards for financial institutions for assessing and managing the social and environmental risks associated with their investments within project finance. Following the launch of the Paris Agreement over a decade later, financial institutions began to make and escalate sustainable finance commitments and introduce screening or exclusionary policies around fossil fuel-related financing. With the launch of the Financial Stability Board’s Task Force on Climate-related Financial Disclosures (TCFD) in 2017,

the primary focus of many financial institutions – and now also of regulators – became to better understand and manage climate change-related financial risks. Environmental risk management and transparency elements from the TCFD and Equator Principles were used as an inspiration for the creation of shipping-specific standards in a comparable global framework that would become the Poseidon Principles.

The Poseidon Principles play a significant role in ushering in the next phase of this evolution – one where financial institutions actively drive solutions through transparent disclosure commitments. Previous initiatives established a common understanding of climate change-related risk, provided a risk-assessment approach applied to project finance, and launched disclosure frameworks for financial institutions. The phase of active involvement is what makes the Poseidon Principles groundbreaking: they are the first sector-specific initiative which measures and reports real emissions data. Signatories of the Poseidon Principles commit to assess where a financial portfolio sits relative to a decarbonization trajectory based on the IMO goals, and to then disclose their portfolio-level climate alignment score publicly on an annual basis. This allows responsible shipping banks to disclose their portfolios’ environmental impacts, with the intention that Signatories strive to align their portfolios with the decarbonization trajectory.



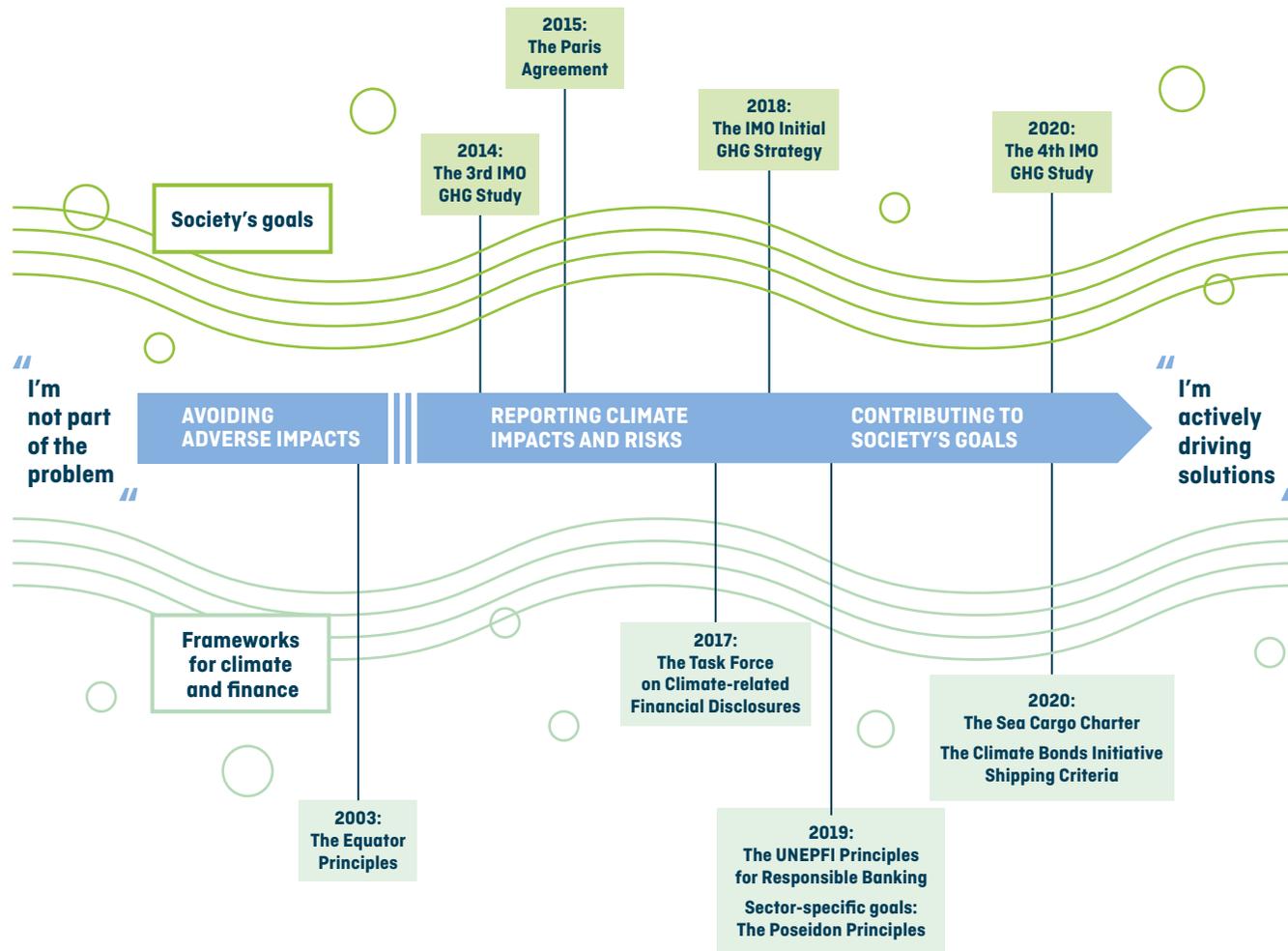


Figure 1. Evolving expectations about finance and climate

A framework for responsible ship finance

The significance of the Poseidon Principles must also be understood within the context of the maritime shipping industry. Societal demands and environmental regulation and standards are increasing, and the continued success of the maritime sector is intrinsically linked to the well-being and prosperity of the society it supports. Therefore, all maritime industry participants must play a role in addressing adverse impacts resulting from the industry’s activities. This will require deliberate action and collaboration across the maritime, energy, infrastructure, and finance sectors, as well as the support of governments and regulators.

One of such challenges is the decarbonization of seaborne trade. The intent and design of the Poseidon Principles recognizes that while ship finance cannot – and should not be expected to – decarbonize the shipping industry on its own, it can and should play a significant role through transparent disclosure of environmental impacts of ship finance portfolios. The Poseidon Principles serve as a model for leadership throughout the shipping and financial sectors, one that has already inspired a similar agreement for cargo owners – the Sea Cargo Charter – and which is likely to inspire further agreements between financial institutions in other sectors. The Climate Bonds Initiative launched a set of shipping criteria with a methodology that is aligned with a similar methodology to the Poseidon Principles to support the assessment and certification of green bonds to be compatible with a low carbon, climate resilient economy.

These developments and initiatives make it clear that the evolution of aligning climate considerations and responsible finance has just begun. Working with their clients, financial institutions can proactively contribute to the transition to a low carbon future.

The Poseidon Principles also offer Signatories insight into their portfolios and provide the opportunity to further investigate their environmental impact, to work with their clients to address them, and thus to proactively shape the strategic direction of their financing activities. The Principles focus on establishing a global baseline; financial institutions must continue to compete as businesses for clients and projects.

To this end, the Poseidon Principles are not envisaged to be static. They are designed to be improved and strengthened over time with the availability of new data, new research, and new globally agreed goals. With the requirements of the Poseidon Principles as a starting point, it should be recognized that some Signatories may choose to go beyond these obligations and be more ambitious. Some Signatories may choose to additionally assess their portfolios relative to the Paris Agreement’s well-below 2°C objectives, which requires a steeper decarbonization trajectory. It is recommended that, where possible, these additional efforts rely on the four foundational Principles: assessment, accountability, enforcement, and transparency. While not included in this report, their supplementary activities are included in their own institutional reporting.

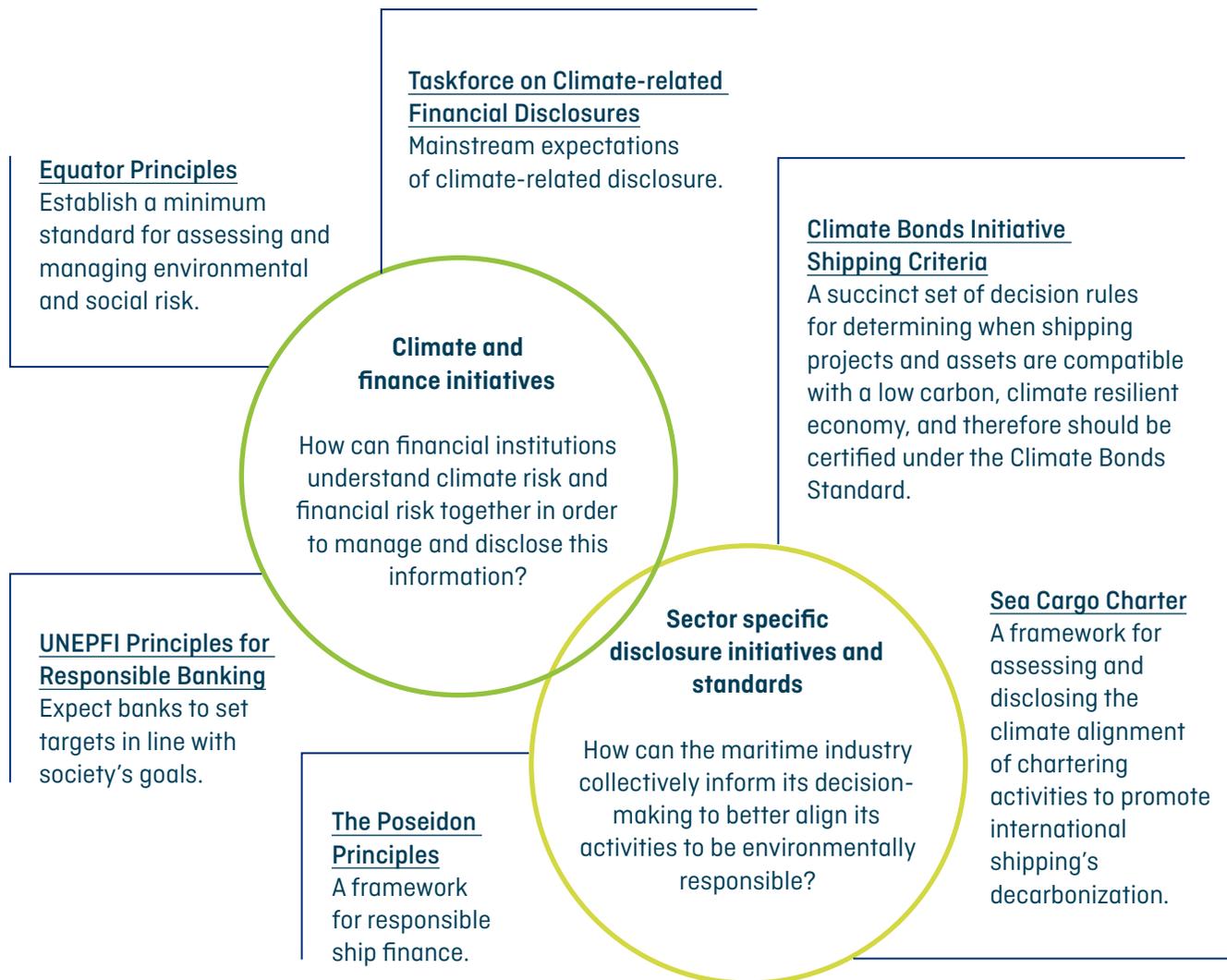


Figure 2. How the Poseidon Principles came to be

The Signatories

20 leading banks, jointly representing approximately USD 150 billion, or one third of global shipping finance, have come together to commit to the Poseidon Principles.



Steering Committee

ABN Amro – Joep Gorgels, Managing Director, Global Head Transportation and Logistics, and Florin Boros, Associate Director, Global Transportation and Logistics, North Europe

Citi – Michael Parker, Chairman, Global Shipping, Logistics and Offshore (Chair)

Crédit Agricole CIB – Thibaud Escoffier, Managing Director, Global Head of Ship Finance

Credit Suisse – Mark Bamford, Director

Danish Ship Finance – Michael Frisch, Director, Chief Commercial Officer

Danske Bank – Tom Erik Vågen, Business Manager

DNB – Christos Tsakonas, Head of Global Shipping

ING – Stephen Fewster, Managing Director and Global Head of Shipping (Treasurer)

Societe Generale – Paul Taylor, Head of Shipping and Offshore (Vice Chair)

SuMiTrust Bank – Koichi Onaka, Global Head of Shipping

See all Signatories [here](#).

2. Climate alignment and decarbonization trajectories

Signatories to the Poseidon Principles have committed to reporting the climate alignment of their portfolios for each calendar year. Underpinning this portfolio score are individual vessel climate alignment scores for vessels in a bank's portfolio.

Climate alignment measures the difference (as a percentage) between a vessel's carbon intensity and the carbon intensity required to be in line with the vessel's decarbonization trajectory.¹ Figure 1 shows a stylized depiction of a decarbonization trajectory (blue line) for a ship type and size category. Each dot represents the annual carbon intensity of a vessel. The green dots represent vessels that are aligned, while the red dots represent vessels that are misaligned because they lie above the decarbonization trajectory.

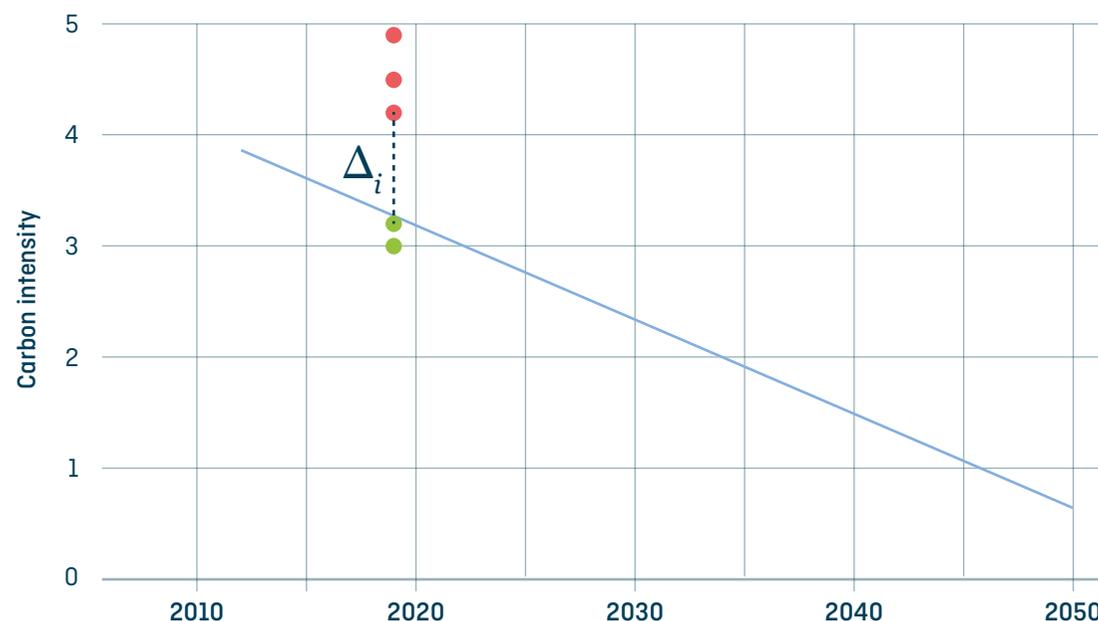


Figure 3.
Assessing alignment at the vessel level

¹ A decarbonization trajectory is a representation of how many grams of CO₂ a single ship can emit to move one tonne of goods one nautical mile (gCO₂/tnm) over a time horizon. There is one decarbonization trajectory for each ship type and size category. This ensures that ships are compared on an apples-to-apples basis given carbon intensities vary as a function of ship type and size.

Decarbonization trajectories in the Poseidon Principles

The trajectories used in the Poseidon Principles were constructed by connecting historical carbon intensity data relating to the Third IMO GHG Study with the IMO’s Initial GHG Strategy. The Strategy sets out the following levels of ambition:

1. To reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 (“the IMO Absolute Target”).
2. 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 Poseidon Principles trajectory is consistent with achieving a 50% reduction in absolute carbon emissions by 2050 compared to 2008 (the minimum absolute threshold of the IMO Absolute Target above). Under a demand scenario from the Third IMO GHG Study², this represents an 88% reduction in global carbon intensity by 2050 on 2008, which is more ambitious than the IMO Intensity Targets. To ensure both targets can be met, the Poseidon Principles use the minimum of the IMO’s Absolute Target.

² The projection of foreseeable growth is taken from the Third IMO GHG Study scenario RCP 2.6 SSP2. This scenario is selected because it is most aligned with decarbonization in the wider economy, and most closely represents the rate of GDP and trade growth that has been observed in recent years (between 2012 and 2018).

	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

Table 1.

Transport demand, emissions and carbon intensity for international shipping

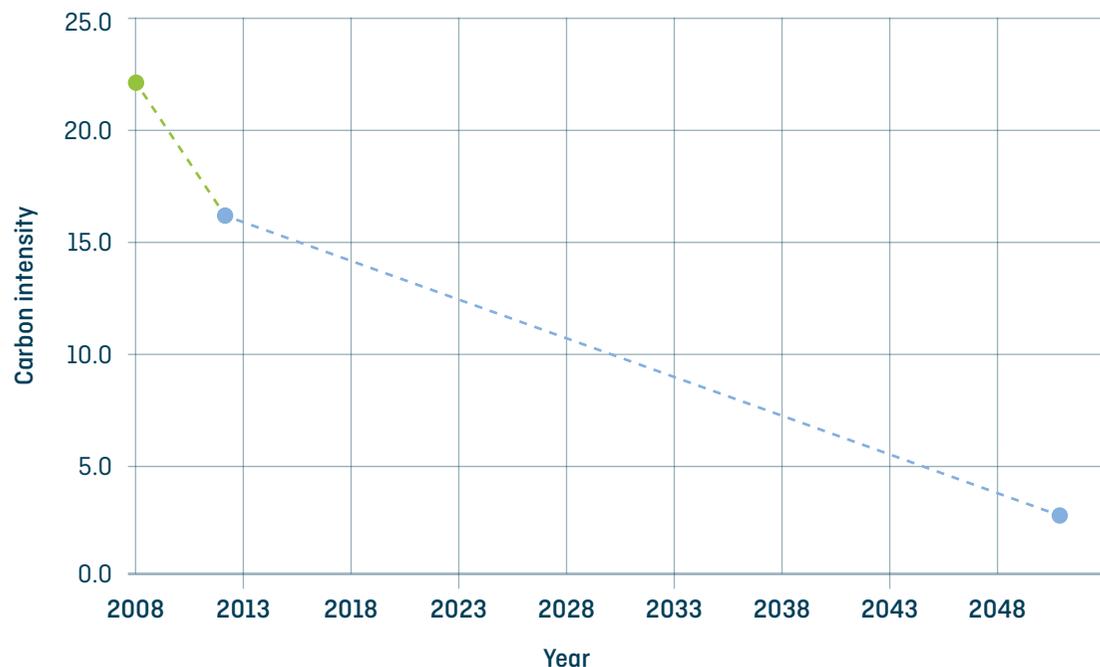


Figure 4.

Global carbon intensity trajectory

At the time that the trajectories were constructed, historical data was available up to 2012 from the Third IMO GHG Study. Values for the total transport demand, total CO₂ emissions, and aggregate carbon intensity in 2008, 2012 and the projections for 2050 are shown in Table 1.

Figure 4 plots the carbon intensity values in Table 1 and a linear trend line connecting them. There are many different assumptions that could be applied to specify the shape of the curve that defines the rate of carbon intensity reduction between 2012 and 2050. As it stands, the trajectories do not account for projected efficiency or alternative fuel technology uptake by the industry and are not designed to forecast any changes in operating profile. The linear nature of the trajectories provides a method to overcome uncertainty introduced by projections relating to technology uptake or operational variation. The chosen trajectory represents a gradual and consistent rate of improvement on average across the fleet; the assumption applied here is for a constant improvement year-on-year, which is described by a straight line between 2012 and 2050.

The rate of reduction required per year is relative to the most recently available reliable data point (2012, taken from the Third IMO GHG Study) in Figure 4. Figure 5 transforms the global carbon intensity trajectory (Figure 4) into the rate of reduction required per year relative to 2012. For example, to be in line with the trajectory, a vessel's AER (in gCO₂/t-nm units) would need to reduce by 11% every five years. Each ship type and size category needs to achieve

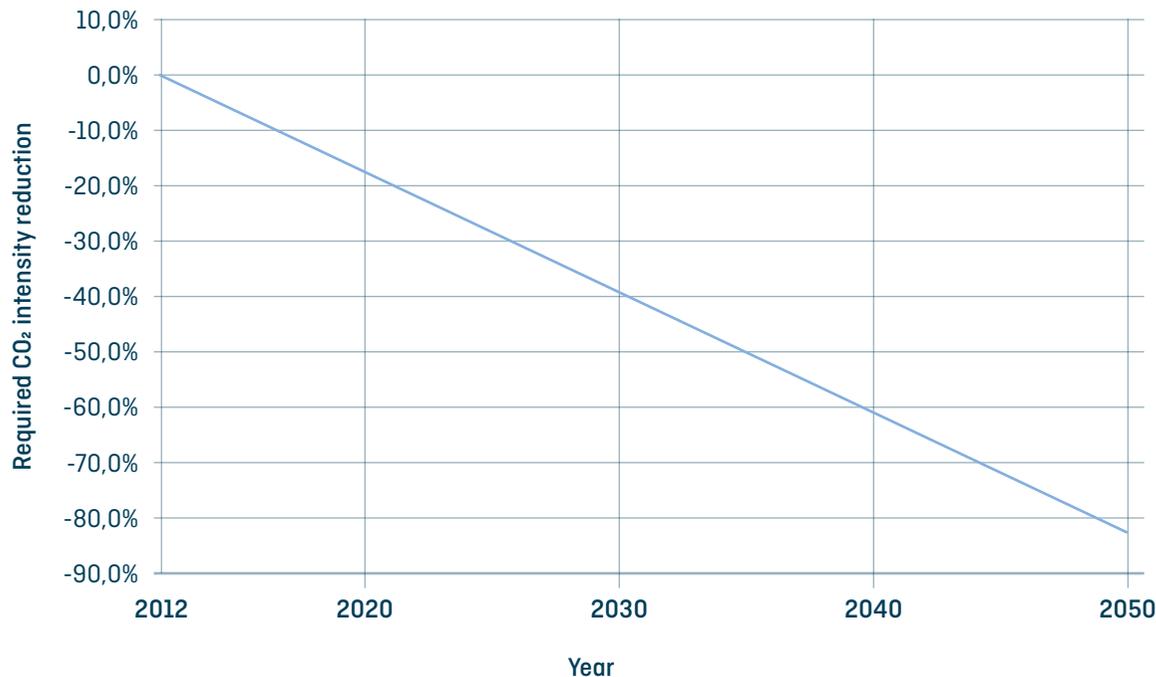


Figure 5.
Required CO₂ intensity reduction

the same rate of reduction relative to their respective 2012 baseline.³

Carbon intensity can be measured in a number of different ways. To provide the most accurate representation of a vessel's climate impact, the carbon

intensity of a vessel should be measured from its performance in real operating conditions instead of using a design specification metric (e.g., the Energy Efficiency Design Index).

A new IMO regulation requiring shipowners with ships of 5000 GT and above to collect data was enacted in 2018 and enables a carbon intensity metric called the Annual Efficiency Ratio (AER) to be calculated. It is recognized that AER is less accurate at estimating a vessel's

³ With the exception of Ferry-pax only, Cruise, and Ferry RoPax, which have different rates of reduction as the denominator is gross tonnage (GT) instead of tnm,

carbon intensity than some other metrics (e.g. Energy Efficiency Operational Indicator “EEOI”) because it uses a proxy for transport work which approximates loaded miles by assuming that the ship is full for all miles travelled in a year. In practice, the actual cargo carried by a ship is often less than its maximum capacity and many ships (e.g. tankers and bulkers) operate with ballast (empty) voyages where for several voyages a year they have no cargo.

Currently, data collection on the mass of cargo and miles travelled while loaded on individual voyages is not collected through the IMO DCS or available with global coverage from publicly accessible data sources to enable the calculation of EEOI. Should the IMO amend the DCS regulation to include data on mass of cargo carried and miles travelled while loaded, or this data becomes available elsewhere at appropriate coverage and accuracy, the metric used to calculate climate alignment under the Poseidon Principles may be adapted to reflect this.

The Poseidon Principles’ Technical Guidance is expected to evolve as and when the IMO creates new policies, including the expected adoption of amendments to MARPOL relating to the energy efficiency of the existing fleet. However, in order to meet the ambition set by the IMO’s Initial Strategy, the Principles will stand by its selection of operational carbon intensity as a basis to judge the climate alignment of vessels.

Decarbonization trajectories in light of the latest GHG emission data

The Fourth IMO GHG Study, published in July 2020, provides up-to-date estimates of carbon emissions of the global shipping fleet, and retrospectively presents its carbon intensity in 2008⁴, as well as carbon intensity trends from 2012 through to 2018. International shipping emissions increased from 921 million tonnes in 2008 to 937 million tonnes, or a 1.7% increase. The upward trend in emissions over the time period 2012-2018 highlights that global emissions have not peaked, and climate policy to advance the shift to low carbon solutions will be necessary if absolute emissions are to be decoupled from economic growth.

However, when emissions are compared to the amount of transport work done per year (i.e. in carbon intensity terms), carbon intensity improved for international shipping as a whole, as well as for most ship types. Carbon intensity, as an average across international shipping, declined by 22% and 32% compared to 2008, measured using the AER and EEOI respectively. International shipping is therefore at least more than halfway there to achieving the 40% reduction goal set by the IMO’s Intensity Target by 2030 compared to 2008 levels.

However, improvements in carbon intensity of international shipping have not reduced at the same pace each year. More than half of the reductions were achieved between 2008 and 2012, and the pace of carbon intensity reduction has slowed since 2015. The increasing average ship size played a dominant role in the carbon intensity reduction in all typical ship types when compared with the year 2008, yet this trend was more subdued when compared with the year 2012, except for container ships and liquefied gas tankers which saw increases in ship size. The relatively more stable fleet size composition between 2012-2018 supports the use of 2012 as a baseline year for each ship type and size category in the Poseidon Principles.

Compared to 2012 levels, AER reduced globally by about 11% in 2018.⁵ As a global fleet average, carbon intensity trends are consistent with the 13% reduction that is required by the Poseidon Principles trajectory in 2018. This means that if financial institutions had portfolios representing the average fleet, they are likely to have been able to achieve performance gains similar to the improvement targets in the Poseidon Principles criteria in 2018. However, given the fleet’s rate of carbon intensity improvement was observed in 2018 to be slowing, it may become harder to continue to meet the criteria as we move through the 2020s, unless further steps are taken.

⁴ The Third IMO GHG Study estimated shipping emissions from 2008-2012 but did not provide carbon intensity metrics.

⁵ The global fleet AER presented here is represented in CO₂/t-nm. For Ferry-pax only, Cruise, and Ferry RoPax, the denominator is gross tonnage [GT] instead of tnm, therefore this global fleet average does not include these sectors.

Climate alignment and decarbonization trajectories

Individual ship type/sizes have reduced their carbon intensity at different rates between 2012 and 2018. As a result, depending on a bank's exposure to different ship types in its portfolio, if the ships performed as 'average' ships, they may have done better or worse than the Poseidon Principles trajectories over 2012-18. Carbon intensity is also sensitive to a number of parameters, such as speed, time spent in port, or the days a ship spends at sea. Therefore, even if there is climate alignment in one year, certain market conditions could cause it to become misaligned over time.



4. Reporting results

Climate alignment

In the Poseidon Principles Annual Disclosure Report, 15 Signatories have reported their overall ship finance portfolios' climate alignment score for 2019. These results show that three portfolios were aligned with the IMO's initial GHG strategy, representing twenty percent of the results, while twelve portfolios were not.

The average score was +1.2%, with scores ranging from -44.92% to +32%. The average climate alignment score of reporting Signatories was broadly in line with the 4th IMO GHG study discussed in the previous section;⁶ of the misaligned Signatories, half had a score of +5% or less.

A ship finance portfolio can be aligned as a result of a high volume of aligned ships, high loan values associated with aligned ships, or a combination of these factors. To the extent that ships within a particular ship type resemble its global fleet peer equivalent, a bank's portfolio score would be influenced by a higher exposure to ship types which performed better (or worse) than other ship types on average. Additionally, a smaller number of ships in a portfolio increases the sensitivity of high or low climate alignment scores of individual ships,

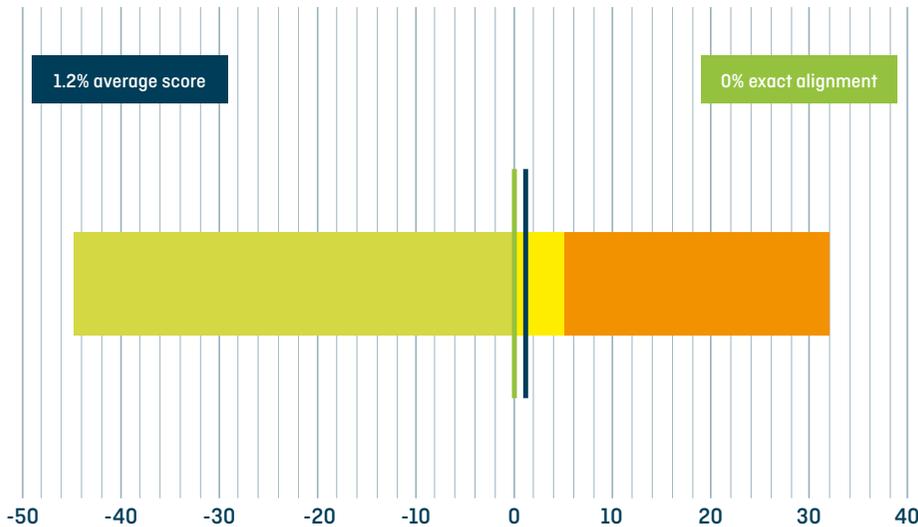


Figure 6. Portfolio climate alignment scores. This graphic shows the range of reported scores, with a green line at 0% (an aligned portfolio score), a blue line at +1.2% to show the average, and the yellow box to represent 5% or less.

A climate alignment score of 0% represents a portfolio which was exactly in line with the decarbonization trajectory threshold (climate aligned).

A negative score indicates a portfolio's carbon intensity is lower than required by the decarbonization trajectory (climate misaligned).

particularly if those ships also have a higher debt outstanding. On this basis, some financial institutions found that a limited number of vessels accounted for a significant portion of their overall score.

At the ship level, different vessels perform relatively better or worse compared to their decarbonization trajectories. This can be explained by their age, which in some ship types can sometimes be a proxy for technical efficiency, how they were operated, and the

baseline trajectory value per ship type/size category they are starting from.

A common claim is that modern built ships will have better carbon intensities. However, studies⁷ have shown that vessels with even the same technical efficiency and age can have widely different carbon intensity

⁶ A key distinction between portfolio climate alignment and the global fleet average is that ships' climate alignment values are weighted by debt outstanding, whereas the global fleet average is weighted by tonne-miles. Additionally, just like their exposure to different ship types may differ between financial institutions, it could also diverge from the global fleet composition.

⁷ O'Keeffe & Smith (2016) "A Case Study of Fuel Monitoring and Efficiency Indicators for INTERTANKO".

values, due to a ship being operated differently – e.g., its speed, time in port, amongst other operational factors.

Indeed, in the pages that follow, some Signatories came to different conclusions about the influence of age on their portfolio, with several surprised that even with a new fleet, the newest vessels might not have the best carbon intensity. This information is therefore testing hypotheses and allowing financial institutions to each understand the drivers of their overall portfolio's carbon intensity, as well as the relative carbon intensity of different ship types. This is an essential step for Signatories to support the decarbonization of the shipping industry.

As such, this first climate assessment reporting provides Signatory financial institutions with a unique understanding of their ship finance portfolios' climate footprint, and it enables financial institutions under the Poseidon Principles to work proactively with their shipping clients and other important stakeholders to shape a better future for international shipping and society.





5. Fulfilling the Signatory requirements

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→ Amsterdam Trade Bank	23	→ DNB	31
→ BNP Paribas	24	→ DVB	32
→ Bpifrance Assurance Export	25	→ Export Credit Norway	33
→ Crédit Industriel er Commercial	26	→ ING	34
→ Citi	27	→ Nordea	35
→ Crédit Agricole CIB	28	→ Societe Generale	36
→ Danish Ship Finance	29	→ Sparbanken Vest	37

ABN AMRO

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

As Poseidon Principles Signatory, working on the climate alignment score has helped us to create valuable and new insights in our portfolio of ship finance transactions. We now have a baseline assessed from where we can work on deep dives into various subsectors. The data behind the alignment score enables us to cooperate with our clients in a focussed manner on the ambitions of the maritime industry and its stakeholders to promote international shipping’s decarbonization.

How will the Poseidon Principles influence your business activities and decision-making in the future?

In our lending decisions sustainability parameters play an important role. Our due diligence becomes more complete with the actual vessel data of which the AER is composed. It also gives us a tool to have a dialogue with our clients and to jointly create impact that will support further decarbonisation of shipping.

ABN AMRO wants to contribute to the international objectives of the Paris Agreement by measuring, reporting and steering on its portfolio. The Poseidon Principles and the data that it generated will help us with that reporting and steering in the future.

[Link to institutional report](#)

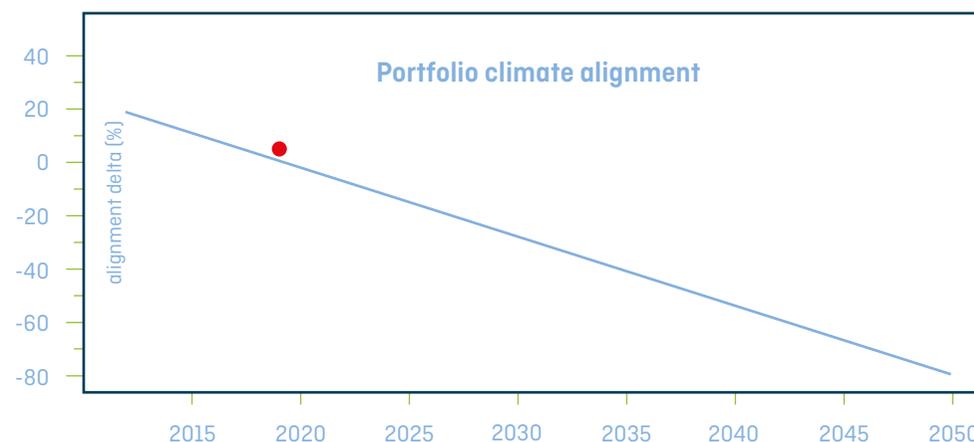


As leading ship finance bank with a strong focus on sustainability, we understand that we have a responsibility and can use our ambition to promote sustainability in the maritime value chain; from the construction of a ship, the operation during its lifetime and to responsible ship recycling. We regard the Poseidon Principles as an additional good tool for our ambition. It creates insight and transparency and enables us to work with our shipping clients on decarbonization of shipping.

Joep Gorgels, Global Head Transportation & Logistics



Portfolio climate alignment score: 5%



AMSTERDAM TRADE BANK

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Although the overall portfolio was found to be noticeably out of alignment with the emissions reduction targets set in the Poseidon Principles, yet certain (types of) vessels have been identified that had significant impact on the overall portfolio score. The performance of such “under performing” vessels will need to be closely monitored and actions for improvement will need to be considered by the relevant stakeholders.

How will the Poseidon Principles influence your business activities and decision-making in the future?

By considering to finance more fuel-efficient vessels while taking into account even more their most reasonably anticipated trading patterns. 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.

[Link to institutional report](#)

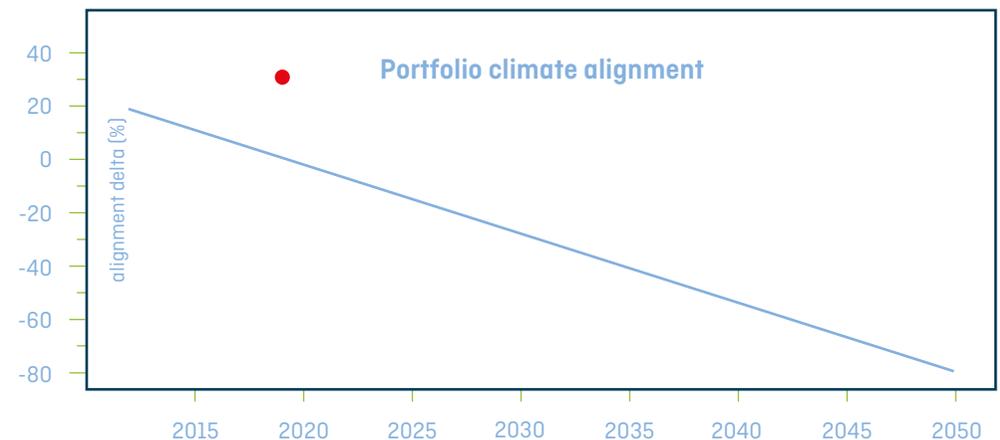


It gives me a great pleasure that Amsterdam Trade Bank has completed its first Poseidon Principles assessment. This is another concrete step for ATB to continue to improve further its Shipping Finance business while accounting for its environmental impact. This is not a sprint, but rather a marathon which requires a lot of small, but steady steps over time.

Iraklis Tsirigotis, Head of Shipping Finance, Managing Director



Portfolio climate alignment score: **31.58%**



BNP PARIBAS

Signatory as of December 2019



What are your key takeaways from your climate alignment score?

These results emphasize BNP Paribas’s commitment to the de-carbonization efforts in the shipping sector. We are at the very beginning of an important journey, where Signatory banks have already helped to raise the awareness level among all industry stakeholders.

How will the Poseidon Principles influence your business activities and decision-making in the future?

We will be further analyzing the outcomes of this first reporting year in order to determine how this will be incorporated into our future business strategy. For instance, this will be a building block to align our portfolio with the Paris Agreement goal in accordance with the PACTA methodology.

[Link to institutional report](#)

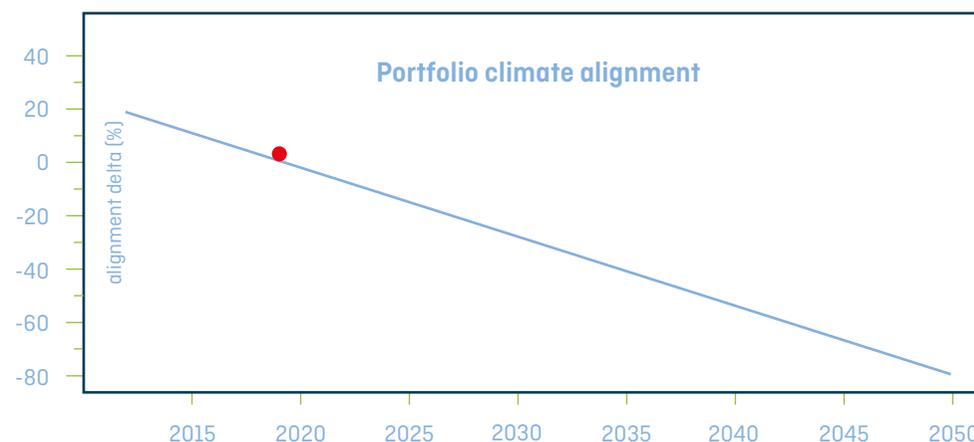


BNP Paribas reiterates its commitment to the Poseidon Principles and recognizes that reducing the carbon footprint is an important objective for the global shipping industry. We are committed to ensuring that our business is conducted in an environmentally responsible way and will continue to support this through our business strategy and together with our clients.

Vincent Pascal, Head of Shipping and Offshore Finance EMEA



Portfolio climate alignment score: **2.88%**



BPIFRANCE ASSURANCE EXPORT

Signatory as of January 2020



What are your key takeaways from your climate alignment score?

Measuring our climate alignment score allowed us to gather concrete figures on the carbon impact of our shipping portfolio. These data helped us validate different hypotheses we had on the industry and figure out the remaining paths needed to achieve the sustainability targets set by the International Maritime Organization.

How will the Poseidon Principles influence your business activities and decision-making in the future?

The Poseidon Principles – and the clear greenhouse gas reduction trajectory they rely on – constitute an important tool for us to better calibrate our future offer and help us keep on accompanying the French exporters of the shipping sector in their ecological transition, for example by incentivizing the demand for less polluting propulsion systems.

[Link to institutional report](#)

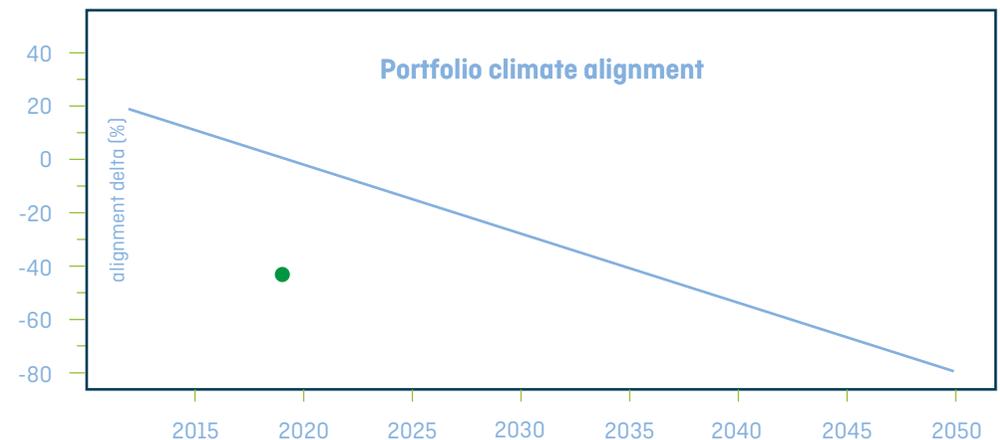


Decreasing the carbon footprint of our cruising portfolio falls within a larger set of measures taken by the French government to encourage transition towards greener industries, and the Poseidon Principles represent an efficient way to provide actual figures enabling all the players of this specific industry to better set and reach their decarbonization objectives.

François Lefebvre, General Manager



Portfolio climate alignment score: **-43.43%**



CREDIT INDUSTRIEL ET COMMERCIAL

Signatory as of November 2019



What are your key takeaways from your climate alignment score?

Technical specifications proved to be important in the AER results of our portfolio but operational management seems also critical and a key parameter to monitor over time. Age is also not an issue and old designed vessels properly operated may even stand below the reference curve.

How will the Poseidon Principles influence your business activities and decision-making in the future?

The Poseidon Principles will surely have an impact on our portfolio monitoring and the decision making process for future financings as well as the conditions that will be applied to them, with the objective to fall under the reference curve. More attention will then be paid to our client ESG policy. We will continue to accompany our clients in their investments with more focus on new emerging green technologies.

[Link to institutional report](#)

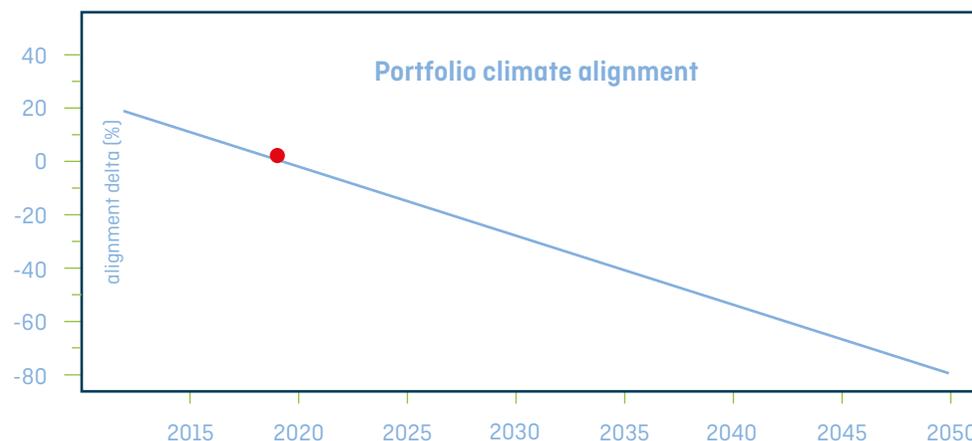


We thank our shipowner clients who have been very cooperative for this first “harvesting” data campaign concluded in a very tight schedule. This is the clear demonstration of their commitment to a greener shipping and their willingness to be actors of the energy transition for shipping.

Jean-Philippe Guillon, Global Head of Asset Finance



Portfolio climate alignment score: **1.1%**



CITI

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

As part of Citi’s continuing commitment to address the current and potential impacts of climate change, we are pleased to report our alignment score as part of the wider industry’s target to reduce emissions in line with the IMO’s global shipping emissions targets.

Our portfolio alignment score was broadly in line with our expectations. An estimated alignment of our portfolio based on the UMAS Fuel Use Statistics and Emissions (FUSE) model, which uses the same methodology as the Fourth IMO GHG Study, would be -0.6%, implying that the portfolio is in line with the Poseidon Principles decarbonisation trajectories. When compared to the 2018 global fleet average AER for comparable ship type and size categories in the Fourth IMO GHG Study, the AER of Citi’s ships (in 2019) were 8% lower.

How will the Poseidon Principles influence your business activities and decision-making in the future?

In all new vessel financing transactions, including renewals, we will evaluate 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, amongst other factors.

These factors will be compared with the overall portfolio to ensure the new transaction will support the portfolio to converge with alignment with the IMO emissions trajectory. With visibility of maturing loans in the portfolio, where vessels that are misaligned, the vessels in new transactions will need to be better aligned than maturing loans. New IMO regulations on technical and operational efficiency will help support this.

We will continue to work with our clients to assist them in achieving their environment goals and their alignment with IMO ambitions.

[Link to institutional report](#)

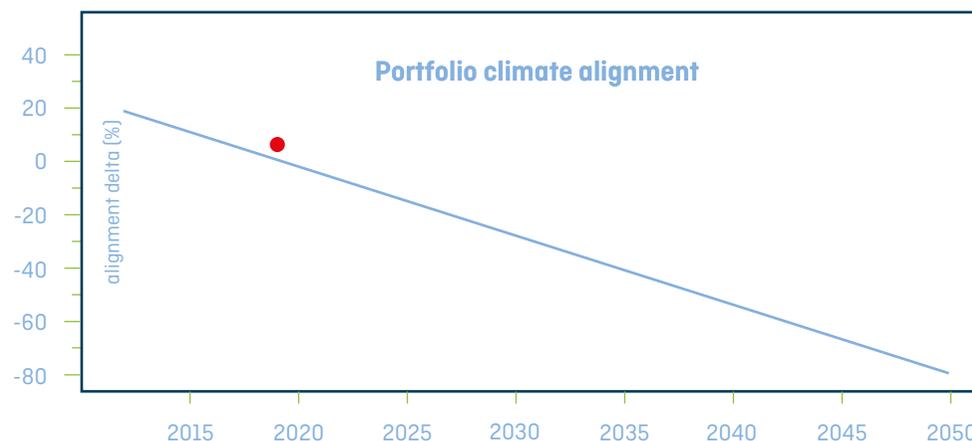


Citi is proud to be partnering with the other Signatories on this groundbreaking and transparent sector-specific climate alignment initiative. We will continue to work closely with our clients to help them in the ambitious decarbonisation of the Shipping industry. We encourage all lenders to the industry around the world who have not done so to join with us in helping bring about a safe and sustainable future for this key industrial sector.

Michael Parker, Chairman of Global Shipping, Logistics & Offshore



Portfolio climate alignment score: 6%



CREDIT AGRICOLE CIB

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Credit Agricole CIB’s climate alignment score reflects the high degree of granularity of our shipping portfolio. Our bank works with a large variety of shipping companies worldwide, from large corporates to smaller family-owned operators and across most segments of the market. Despite the prolonged shipping market downturn, Credit Agricole CIB has continuously been supporting its shipping clients in financing the renewal and rejuvenation of their fleets, and this also translates into our alignment score.

How will the Poseidon Principles influence your business activities and decision-making in the future?

As one of the founding members of the Poseidon Principles, Credit Agricole CIB will continue to work closely with its shipping customers as well as the other key stakeholders of our shipping sector, including ship-builders, export credit agencies, governments, classification societies, freight-providers and shippers, to support the decarbonisation of maritime transportation.

[Link to institutional report](#)

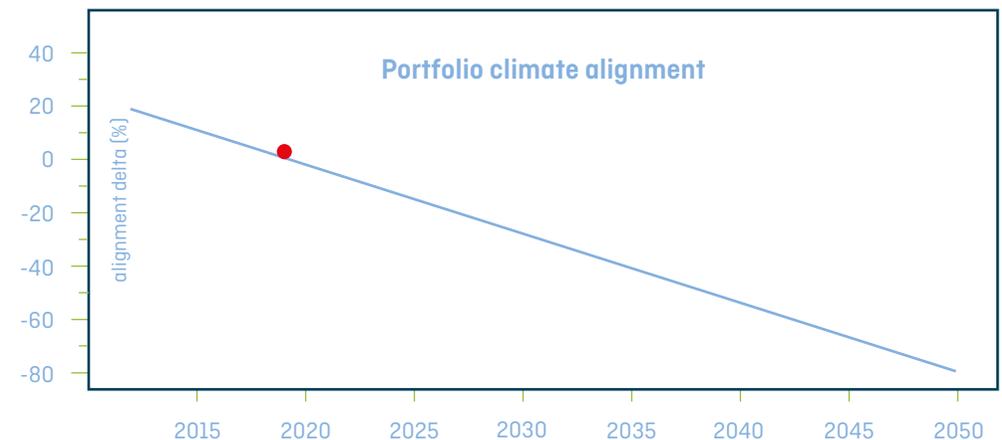


Reducing the carbon footprint of the maritime industry should be a priority for us all. As one of the world’s leading ship-finance banks, Credit Agricole CIB will be there to support the ship-owning community in their initiatives and investments leading to a measurable and sustainable decarbonisation of our shipping industry. The Poseidon Principles are one of the tools that will help us on this journey.

Thibaud Escoffier, Managing Director, Global Head of Ship Finance



Portfolio climate alignment score: **0.44%**



DANISH SHIP FINANCE

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Being a Poseidon Principles Signatory and working with our commitment to report our climate alignment has provided us with new insights about our portfolio. It has created a baseline from which we will continue our commitment to contribute to the shipping industry's transition to decarbonisation. Establishing this means that our dialogue with clients can become much more concrete and data-driven as we continue to analyse the results further. Lastly, we are delighted that our clients have embraced the initiative and overwhelmingly have shown their support.

How will the Poseidon Principles influence your business activities and decision-making in the future?

Sustainability parameters increasingly influence our lending activities, and with the Climate Alignment data available this trend will only be enhanced. The results for this first year help form our baseline for how each vessel in the different segments perform, and give us valuable insights about what parts of our portfolio we need to follow more closely. In this respect our decision-making in the future will be influenced by this data and how it develops, as we seek to work with our clients to support their transition towards a more sustainable shipping industry.

[Link to institutional report](#)

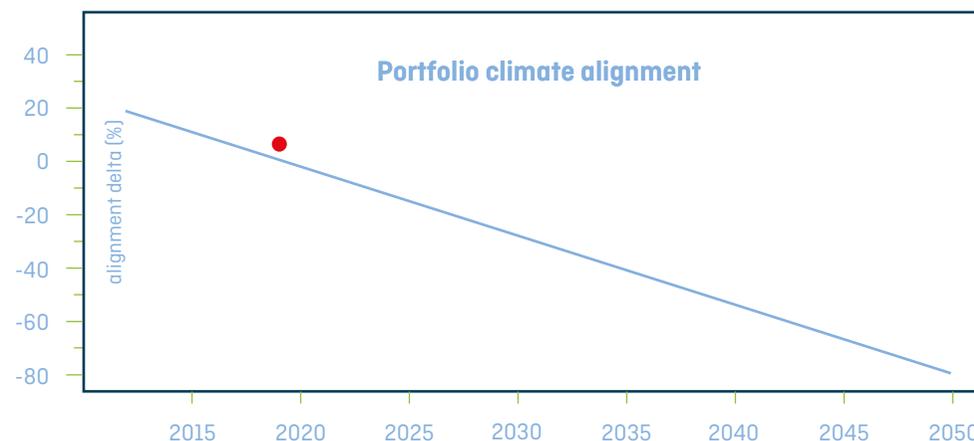


We are happy to present our first year of reporting and live up to our commitment to the Poseidon Principles. The initiative has been very well-received by our clients, and we look forward to our continued commitment and to be a part of shaping how the Principles will evolve in future years. We take our responsibility to contribute to the transition of the shipping industry serious, and we believe the Poseidon Principles is as a major milestone that will help accelerate a wider push for a sustainable transition of the industry.

Michael Frisch, Chief Commercial Officer



Portfolio climate alignment score: **6.72%**



DANSKE BANK

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Having a focus on financing modern tonnage, we were expecting to see a better score for the climate alignment of the ships we are financing. However, we are a bank with a strong Nordic focus and with a shipfinancing portfolio that mirrors Nordic owners and operators. This means that we are overweighted in some sectors that tend have a poor alignment score, while we have less exposure to some sectors that tend to score better.

How will the Poseidon Principles influence your business activities and decision-making in the future?

We are pleased to be part of the first Poseidon Principles reporting and look forward to use our findings actively in our discussions with our shipping customers in order to improve our portfolio climate alignment score in the years to come, and thereby supporting the international shipping sectors transformation and help finance its decarbonisation.

[Link to institutional report](#)

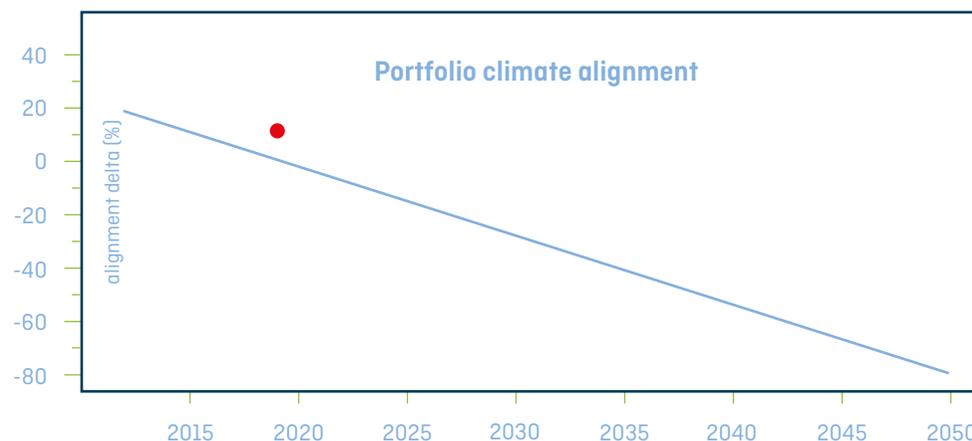


Introduction of Poseidon Principles reporting gives banks a helpful tool to actively monitor the carbon footprint of their shipping portfolios. Implementing lending criteria which contribute to reducing emissions and ensure compliance with future emission targets is a key priority. The Poseidon Principles are raising banks' environmental awareness and we in Danske Bank will use the Poseidon Principles actively going forward when supporting the shipping sector's efforts to reduce its carbon footprint.

Einar Stavrum, Global Head of Shipping



Portfolio climate alignment score: **11.9%**



DNB

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

DNB runs a broad and diversified portfolio across major shipping segments. The climate alignment score has come out within the range we had expected. The process around the Poseidon Principles reporting and the final score have provided us with a solid foundation for understanding portfolio climate risk and the direction we need to take going forward.

The exercise has revealed variances between the various shipping subsegments. Analyzing and understanding these variances is what will help us get the full benefit of the Poseidon Principles and Carbon intensity data.

How will the Poseidon Principles influence your business activities and decision-making in the future?

The Poseidon Principles data, together with other climate related parameters, are becoming increasingly important parts of our credit decision process. They are a very useful tool especially when combined with qualitative assessments of goals, strategies and measures taken by clients on reducing emissions and improving energy efficiency.

[Link to institutional report](#)

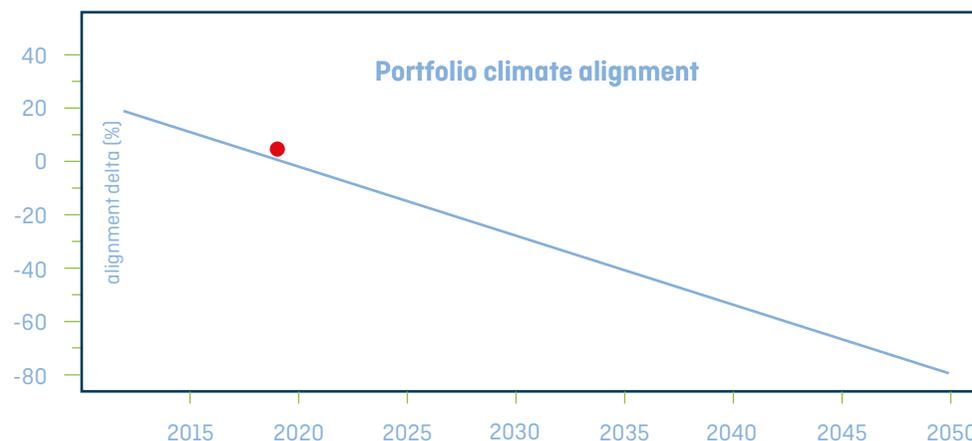


The Poseidon Principles have proven to be an extremely useful tool in understanding the carbon intensity of our shipping portfolio and the factors influencing it. Moreover, this exercise has given us a firm indication of how our portfolio and clients are positioned with respect to future regulatory requirements from the EU and IMO. With increasing focus and expectations related to addressing climate risk and carbon intensity from all our stakeholders the Poseidon Principles are definitely a step in the right direction.

Christos Tsakonas, Global Head of Shipping



Portfolio climate alignment score: **2.5%**



DVB

Founding Signatory as of June 2019



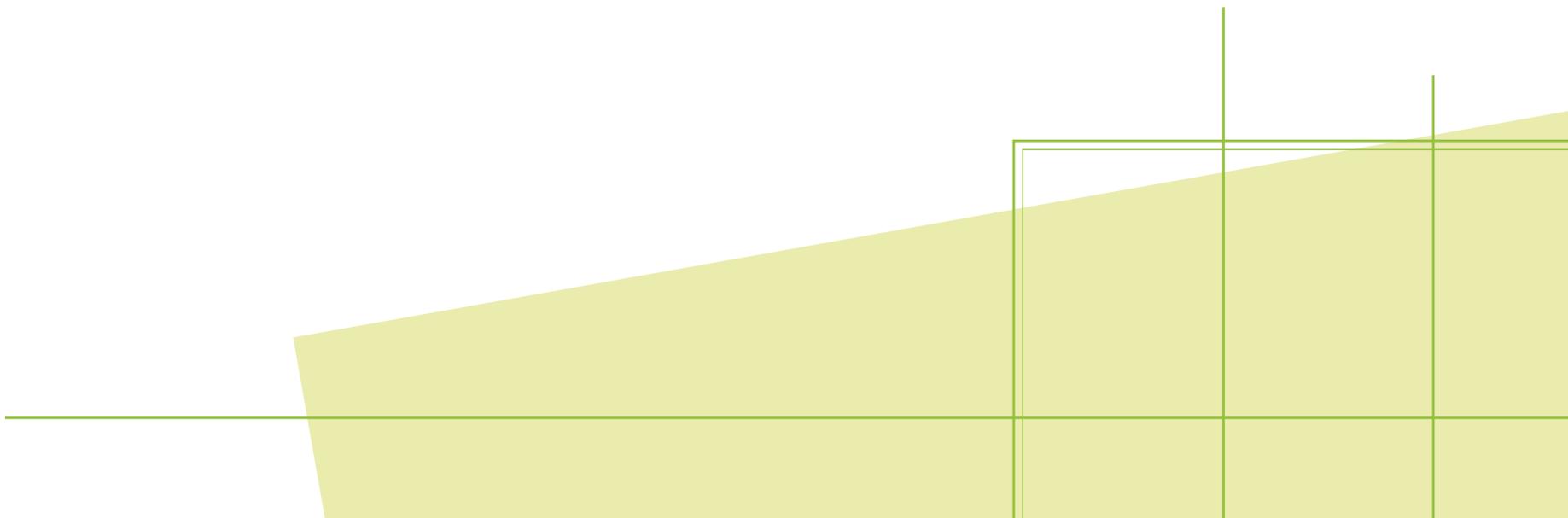
Non-Reporting

The Poseidon Principles give a clear signal that financial institutions want to support – and play their role in the decarbonization of the world fleet. As a shipping lender, DVB fully supports this initiative. After the sale of key business units in 2019, DVB's Board of Managing Directors decided to enter into an amortisation of its residual portfolios. As a result, DVB continues to manage its existing business as a fully operational bank but has discontinued active marketing and in principle the origination of new business in Shipping Finance. Although DVB's focus has shifted, the Bank will continue to support the Poseidon Principles.



Congratulations and a big Thank You to all who contributed to the Poseidon Principles initiative and this report, in particular the driving forces behind it!

Peter Bergman, Senior Vice President, Shipping Portfolio & Research



EXPORT CREDIT NORWAY

Signatory as of November 2019



What are your key takeaways from your climate alignment score?

The 2019 score is good, however given that there are fewer new builds delivered in 2020 the score is likely to go down next year.

The part of our portfolio which falls under the scope of the Poseidon Principles is unfortunately very limited, as most of our vessels are offshore service vessels which are not considered to be trading internationally and/or are below dwt 5000.

How will the Poseidon Principles influence your business activities and decision-making in the future?

As so few vessels in our portfolio fall within the scope, the Poseidon Principles have for the time being not had any influence on our business activities, but hopefully it will in the future.

[Link to institutional report](#)

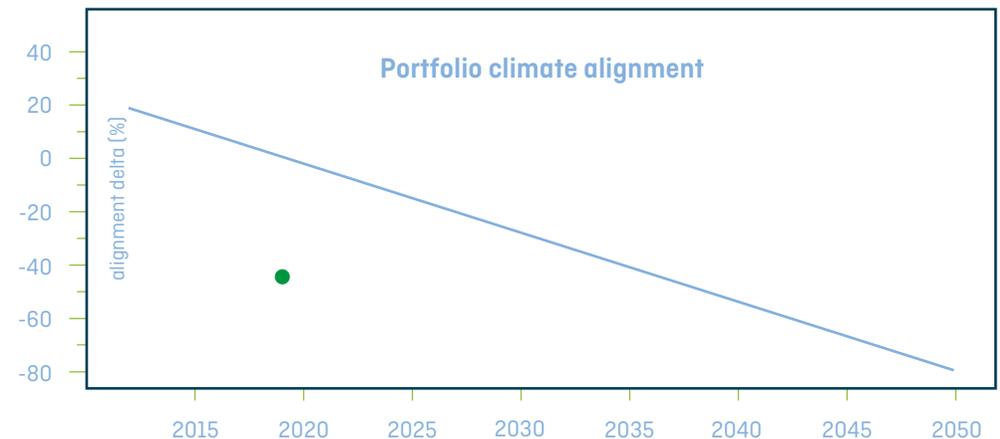


Export Credit Norway is mainly financing new builds. The portfolio's alignment with the IMO trajectory for reaching the 2050 goal is good. When financing older vessels, this generally entails environmentally friendly retrofits like the installation of scrubbers or ballast water treatment systems.

Olav E. Rygg, Head of Lending



Portfolio climate alignment score: **-44.92%**





Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Prior to signing up to the Poseidon Principles, ING held limited information on the AER of our portfolio. However, following our data analysis we're delighted to confirm that our portfolio is at par with the decarbonisation trajectory. We recognise that sub-segments within our portfolio are at differing stages and we are committed to help them reach their IMO targets.

How will the Poseidon Principles influence your business activities and decision-making in the future?

Having completed the first measurement of our portfolio we now have quantitative data on which to engage with our clients and all other stakeholders. Going forward we will look to assess the carbon footprint of each vessel we finance as part of our overall assessment. This is not to say we will not finance vessels that don't meet the IMO trajectory, but we will use the data to engage in constructive discussions with clients and assist them in taking the required steps in order to make progress towards meeting the IMO targets. This approach fits with our strategy of being a long term, reliable and consistent partner.

Our clients are prepared to share data in an open and transparent manner which is proven by the high disclosure rate. We expect that such information sharing and discussion will become ever more important especially as other institutions join the Poseidon Principles.

[Link to institutional report](#)

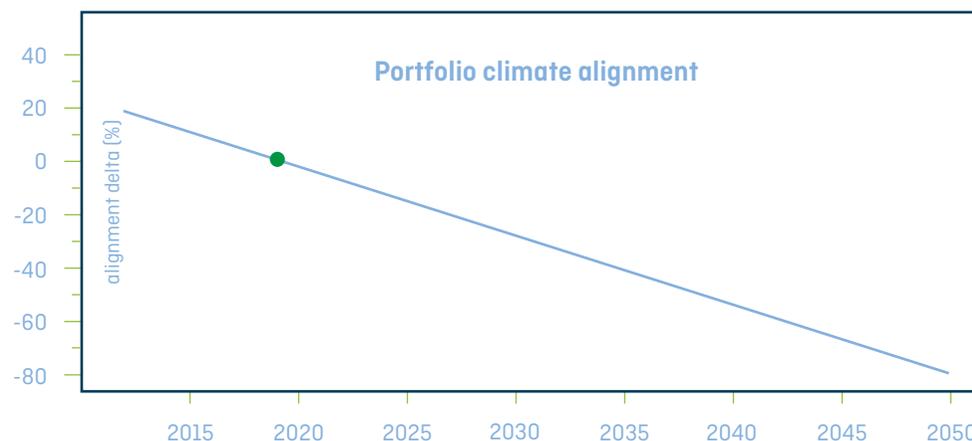


I am delighted to report our first portfolio result under the Poseidon Principles aligns with the IMO pathway. This reflects our focus on lending to first class owners and financing modern assets. However this is only the start and I look forward to cooperating with the Poseidon Principles Association and clients to ensure that the industry meets the IMO 2030 and 2050 targets.

Stephen Fewster, Global Head of Shipping Finance



Portfolio climate alignment score: **-0.36%**



NORDEA

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

Nordea is pleased to see the commitment from its shipping customers regarding the Poseidon Principles achieving close to a 100% reporting rate in the first year. The Poseidon Principles provide a good starting point for us in tracking the decarbonisation of our shipping portfolio and the data obtained has given us valuable additional insight into our portfolio. Nordea has a diversified shipping portfolio financing the majority of the segments. Some of the segment's trajectories have had outcomes that have influenced our portfolio more than expected.

How will the Poseidon Principles influence your business activities and decision-making in the future?

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. This will pave the way for a more decarbonized shipping sector in the future.

[Link to institutional report](#)

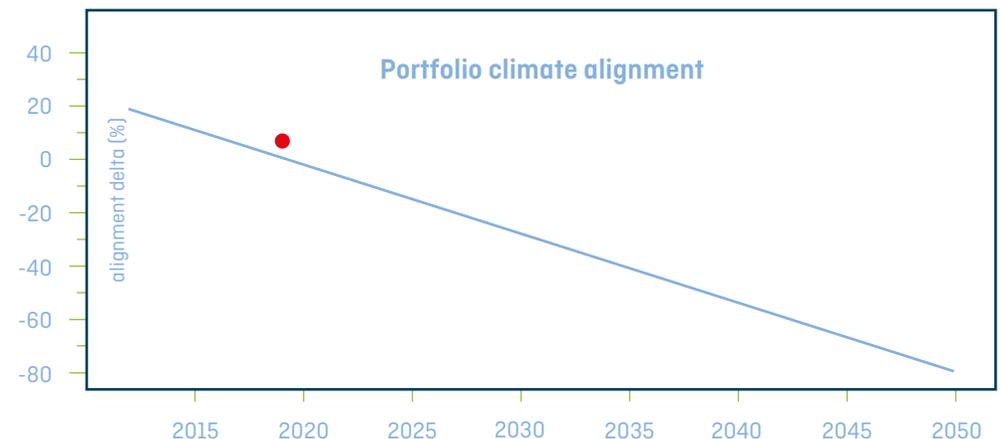


Nordea is proud to be part of the Poseidon Principles as one of the original signatories and we view the initiative as an important contribution in the global combat against climate change. We are pleased with the response that we have obtained during our first year as a Signatory and with the impressive commitment that has been demonstrated from our clients through the high response rate achieved. Nordea is committed to be transparent on the carbon footprint of our shipping portfolio and to work closely with our clients and other stakeholders to ensure that the maritime sector reaches the 2050 emission targets.

Geir Atle Lerkerød and Thor-Erik Bech, Co-Heads of Shipping



Portfolio climate alignment score: **6.70%**



SOCIETE GENERALE

Founding Signatory as of June 2019



What are your key takeaways from your climate alignment score?

The Poseidon Principles are a unique opportunity for Societe Generale to seek collective alignment with shipowners to optimise the energy efficiency of vessels, and further support them in their own energy transition. As evidence that the Bank has worked closely with its clients to secure the relevant information required, Societe Generale is pleased to report the carbon emissions on 95% of its shipping portfolio. These first year results reflect the shipping’s sector need and the industry ambition to decarbonise as well as the role banks can play as capital providers in this process.

How will the Poseidon Principles influence your business activities and decision-making in the future?

As a founding Signatory of the Poseidon Principles, Societe Generale aims to work with maritime companies who adopt the same high standards of maritime stewardship as itself. Accordingly, the Bank considers climate alignment as a key element of its credit decision on all vessel financings and is committed to improving its portfolio alignment in accordance with the IMO ambition.

[Link to institutional report](#)

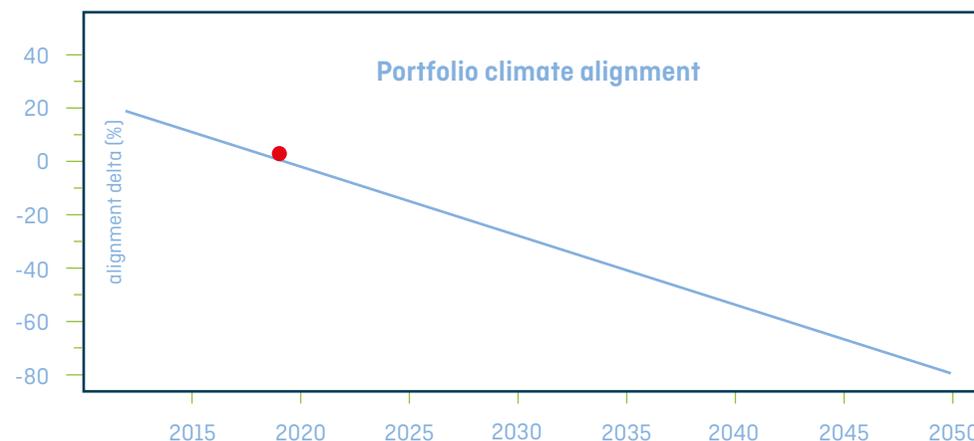


As a founding Signatory of this first sector-specific climate alignment initiative, Societe Generale committed to actively contribute to shipping’s decarbonisation and to build, with its clients, a sustainable future. We are proud to foster a valuable coalition within the industry and convinced that the collective transparency it encourages is key to achieving the highest environmental standards.

Paul Taylor, Global Head of Shipping & Offshore



Portfolio climate alignment score: **2.05%**



SPAREBANKEN VEST

Signatory as of September 2019



What are your key takeaways from your climate alignment score?

Clients are willing to share data, knowing that these will be treated with confidentiality. A limited number of vessels explain a majority of the alignment delta.

How will the Poseidon Principles influence your business activities and decision-making in the future?

AER will continue to be one of several tools applied in order to verify reduced emissions from our shipping portfolio. An alignment delta for an individual vessel will initiate a discussion with the vessel owner, with the ambition to agree on corrective measures that would reduce the alignment delta.

[Link to institutional report](#)

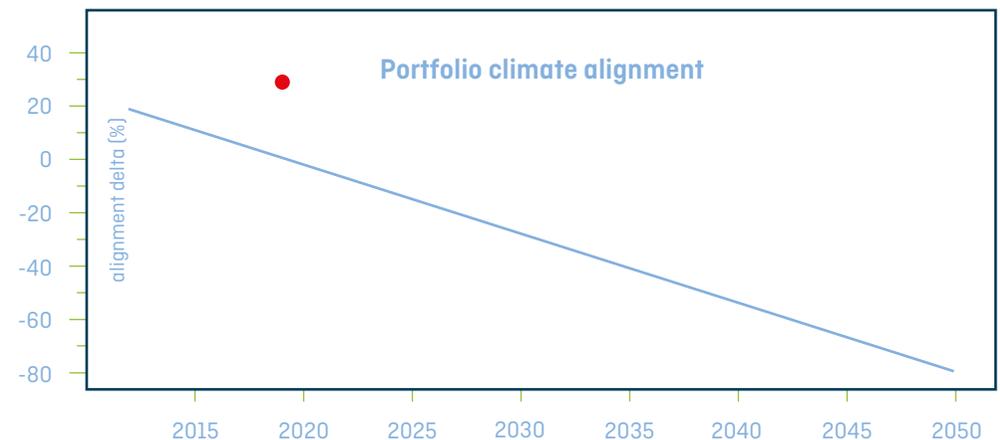


A limited number of vessels account for a significant portion of our total negative deviation on a portfolio basis. The Poseidon Principles are a highly useful tool for increasing our interaction with clients on environmental issues.

Ragnhild Janbu Fresvik, Group Director, Commercial Banking



Portfolio climate alignment score: **29.11%**



Key terms

AER means the Annual Efficiency Ratio, a carbon intensity metric calculated in accordance with Equation 1 as set out in Section 2.1 of the Technical Guidance.

Carbon intensity is the representation of the total operational emissions generated to satisfy a supply of transport work (grams of CO₂ per tonne-nautical mile [gCO₂/tnm]). The Poseidon Principles use the AER metric for this calculation.¹

Climate Alignment is the percentage difference between a vessel's carbon intensity and the decarbonization trajectory at the same point in time. The numbers included in this report are aggregated to the portfolio level for each Signatory, meaning each vessel is then computed to the weighted average using the debt outstanding.

Decarbonization trajectories are a representation of how many grams of CO₂ a single ship can emit to move one tonne of goods one nautical mile (gCO₂/tnm) over a time horizon. There is one decarbonization trajectory for each ship type and size category. This ensures that ships are compared on an apples-to-apples basis given carbon intensities vary as a function of ship type and size. These are developed for the Poseidon Principles Signatories by UMAS.²

EEOI is the Energy Efficiency Operational Indicator, developed by the IMO in order to allow shipowners to measure the fuel efficiency of a ship in operation.

IMO is the International Maritime Organization, a specialized agency of the United Nations, and the global standard-setting authority for the safety, security, and environmental performance of international shipping.

IMO DCS is the IMO's MARPOL Annex VI Data Collection System for Fuel Consumption.

1 See Section 2 of the Poseidon Principles Technical Guidance for additional information about climate alignment and methodology of the calculations.

2 See also Appendix 3 of the Poseidon Principles Technical Guidance for more information.

Acknowledgements

The Poseidon Principles were developed in an effort spearheaded by global shipping banks, leading industry players – ship owners, charterers, and classification societies – as well as the Global Maritime Forum, Rocky Mountain Institute, University College London Energy Institute/UMAS. Legal advice was provided by Watson Farley & Williams.

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