



POSEIDON PRINCIPLES

2023 Annual Disclosure Report



December 2023

Poseidon Principles

Amaliegade 33 B, 3rd floor
1256 Copenhagen K
Denmark

www.poseidonprinciples.org
info@poseidonprinciples.org

© Poseidon Principles

Foreword

We are very pleased to present the fourth Annual Disclosure Report of the Poseidon Principles. Since its launch in 2019, the initiative has grown to represent over three quarters of global ship finance, a testament to the growing impact of our collective commitment and the importance of transparency in propelling the maritime industry towards decarbonisation.

This year has been a pivotal one for the maritime industry, with the unprecedented outcomes of the International Maritime Organization's (IMO) MEPC 80 meeting exceeding our expectations and beginning to pave the way for transformative changes. It is with pride that we take note of our own role in this outcome, as the Poseidon Principles called for concrete leadership from the IMO in June to clarify ambitions for a 1.5°C future to enable cross sector engagement.

In September, signatories unanimously decided to align the Poseidon Principles methodology for this Disclosure Report with the revised strategy from the IMO including reaching net zero by or around 2050 along with emission reduction checkpoints in 2030 and 2040, a shift to well-to-wake, and more comprehensive coverage of greenhouse gases. These new ambitions bring many practical changes, and we acknowledge the existing challenges and uncertainties when it comes to implementation. In the absence of complete official protocols from the IMO, the signatories, advisory, and secretariat have worked tirelessly to update procedures to follow the revised strategy and its provisional implications within a remarkably tight timeline.

This Annual Disclosure Report stands as a testimony to our unwavering commitment and the ongoing journey. When compared to the emission trajectories historically used by the Poseidon Principles, climate alignment scores have improved, showing the tangible impact the initiative has had in decarbonisation. As we navigate through the first test of revised trajectories, we know that the road ahead is challenging and with no small degree of uncertainty. While many scores may not align with the ambitious new IMO GHG strategy, we still view this as a success, due to the dedication of each signatory to transparency and climate science and the ability of the initiative to adapt quickly to the continuous evolution of climate reporting.

Looking forward, we recognise the essential step of understanding portfolio climate alignment in providing support to clients in their decarbonisation journey. 2024 will see us continue to fine-tune trajectories and methodology, building on both the lessons learned from the process of this report and accounting for the impact of the evolving IMO decision-making regarding implementation of the revised strategy after MEPC 80.

In the event the assessment results in changes to the assumptions, those signatories affected will be able to restate their 2022 results. We will take note of discussions between the IMO and the passenger shipping sector as the review of CII regulations takes place.

We will also consider whether transparency around absolute emissions from this sector in relevant signatories shipping portfolios is useful pending any official changes in the IMO methodology.

We extend an invitation to join us, now 34 signatories strong, in celebrating our accomplishments while simultaneously preparing for the challenges ahead as we approach the fifth anniversary of the Poseidon Principles. For the two signatories who are reporting for the first time, we congratulate them on their achievement.

December 2023



Michael Parker

Chair, Poseidon Principles
Chairman, Global Shipping, Logistics and Offshore, Citi



Paul Taylor

Vice Chair, Poseidon Principles
Global Head of Maritime Industries, Société Générale



Table of contents



1
Introduction
6

3
**Climate alignment and
decarbonisation trajectories**
17

2
A pivotal year in shipping
10

4
Reporting results
23

5
**Fulfilling the signatory
requirements**
31

Key terms
62

References
63

Acknowledgements
64

1. Introduction

About the Poseidon Principles

The Poseidon Principles are a framework for assessing and disclosing the climate alignment of ship finance portfolios. They establish common global baselines to qualitatively assess and disclose whether lending portfolios are in line with adopted climate ambitions.

Signatory institutions commit to transparently reporting their portfolio climate alignment on an annual basis and implementing the Poseidon Principles into their internal policies, procedures, and standards. In this, they are supported by a robust and industry-appropriate climate alignment assessment methodology and carefully considered accountability and enforcement requirements that support transparent data collection and analysis practices.

The Poseidon Principles were developed in an effort spearheaded by global banks (Citi, Société Générale, and DNB) in collaboration with leading maritime companies (A.P. Møller - Mærsk, Cargill, Euronav, Gram Car Carriers, Lloyd's Register, and Watson Farley & Williams) and supported by the Global Maritime Forum, Rocky Mountain Institute, and UMAS.

The Principles aim to support financial institutions in integrating climate considerations into their lending decisions in line with global climate-related goals. They not only help the signatory institutions improve decision-making at a strategic level but also shape a better future for the shipping industry.

As a cornerstone of global connectivity, shipping delivers vital goods through international supply chains and will continue to do so in the future. However, the significant carbon footprint of the industry poses an urgent challenge: for the world to decarbonise, shipping must decarbonise. Finance plays a powerful role in this transformation.

Scope

The Poseidon Principles are applicable to relevant lenders, lessors, and financial guarantors, including export credit agencies (ECA). Signatories must apply the Poseidon Principles to all business activities:

- 1) that are credit products (including bilateral loans, syndicated loans, club deals, and guarantees) secured by vessel mortgages or finance leases secured by title over vessel or unmortgaged ECA loans tied to a vessel; and
- 2) where a vessel or vessels fall under the purview of the International Maritime Organization (IMO) (e.g. vessels 5,000 gross tonnage and above which have an established Poseidon Principles trajectory whereby the emissions intensity can be measured with IMO Data Collection System (DCS) data).

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.



➔ [See the previous Annual Reports here](#)

The Principles

Principle 1

Assessment

Signatories will annually assess the climate alignment of their shipping portfolios using a robust and industry-appropriate methodology outlined in the Technical Guidance¹. This entails measuring the emissions intensity of a shipping portfolio relative to a defined decarbonisation trajectory.

The requirement to assess climate alignment takes effect the calendar year after a financial institution becomes a signatory. In other words, if a financial institution joins in October 2023, they will not be required to assess climate alignment until 2024.

¹ The Technical Guidance is a separate, lengthy, document which outlines the requirements and methodology used by signatories to assess climate alignment. It can be found on the [Poseidon Principles website "Resources" page](#). An updated version reflecting the changes for this report is expected to be complete in early 2024.

Principle 2

Accountability

Signatories will rely on the International Maritime Organization (IMO) standards and Recognized Organizations (RO), along with data types, data sources, and reporting pathways identified in the Technical Guidance for the collection and provision of identical unbiased information for all steps of assessing climate alignment.

This includes honouring mandatory IMO regulations for collecting and reporting fuel oil consumption information in the IMO Data Collection System (DCS).

Principle 3

Enforcement

Signatories will include a covenant clause, or a binding agreement, in all new shipping business activities which ensures access to high quality data and compliance with the Poseidon Principles. They also commit to working with clients to gather the necessary information to assess climate alignment.

Principle 4

Transparency

Signatories will publicly acknowledge their participation in the Poseidon Principles and publish their climate alignment scores in the Annual Disclosure Report and their own corporate reports each year.

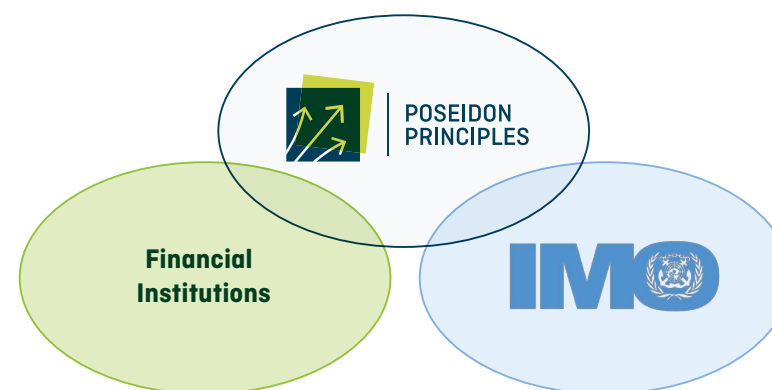


Figure 1.

The Poseidon Principles relationship to financial institutions and the IMO.

The signatories



34 leading banks, jointly representing a bank loan portfolio to global shipping of approximately USD 240 billion, have come together to commit to the Poseidon Principles.

→ See all signatories [here](#)

Steering Committee

ABN Amro – Florin Boros, Senior Director, Shipping Lending & Anastassia Tcherneva, Head of Shipping Clients

BNP Paribas – Vincent Pascal, Head of Shipping & Offshore Finance EMEA

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

Credit Agricole – Thibaud Escoffier, Global Head of Ship Finance

Credit Suisse, a UBS Group Company – Joshua Alexander Walter, Director

Danish Ship Finance – Sara Møller Jensen, Head of Sustainability & Mette Slot Lykke, Sustainability Officer

Danske Bank – Tom Erik Vågen, Business Manager

Development Bank of Japan Inc – Michiyo Machida, Managing Executive Officer & Yuichiro Yamaguchi, Head of Ship Finance

DNB – Christos Tsakonas, Head of Global Shipping

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

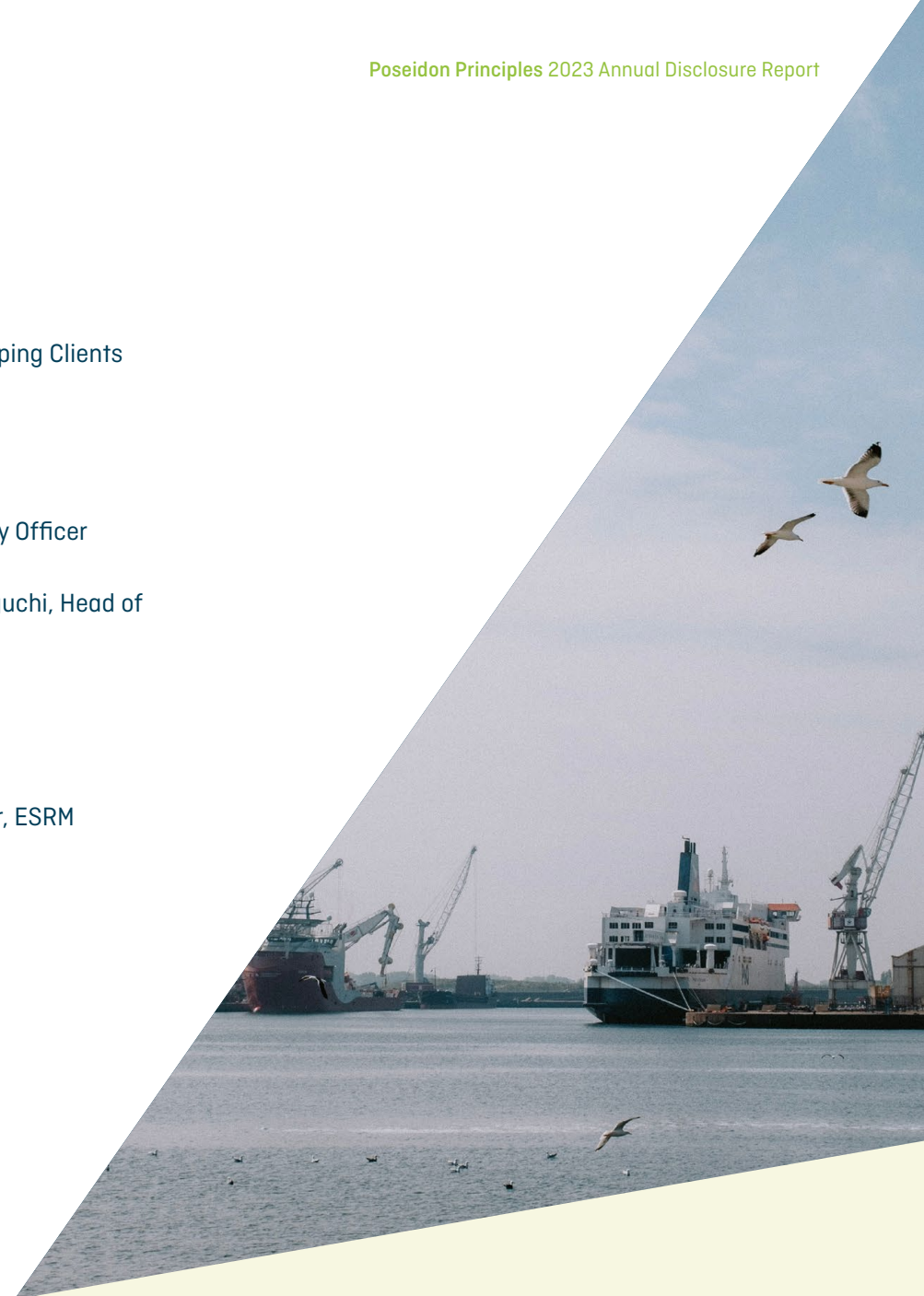
KfW IPEX-Bank – Dominik Höhn, Team Head Mobility & Arne Osthus, Vice President

Société Générale – Paul Taylor, Global Head of Maritime Industries (Vice Chair)

Standard Chartered – Heng Chih Chwen, Director, Shipping Finance & Ryan W. Bjorkquist, Director, ESRM

SuMiTrust Bank – Masaya Noda, Head of Shipping

→ [Learn more about the governance of the Poseidon Principles](#)



2. A pivotal year in shipping

The shipping industry has faced several challenges throughout 2023, including severe congestion of major ports, lack of personnel, inflation, and sanctions resulting from the Russia's war on Ukraine. These have caused many unpredictable operational impacts which the industry will continue to adapt to in the future.

Despite these obstacles, the industry saw significant progress as well, most notably the IMO's revision of its greenhouse gas (GHG) strategy.

On top of this, there was continued development of initiatives and measures that support decarbonisation like the Zero Emissions Maritime Buyers Alliance (ZEMBA)², mechanisms to incentivise green shipping corridors, notably in the United States, Australia, Germany and Japan, and the European Union's adoption of the FuelEU Maritime initiative and its decision to include shipping in the Emissions Trading System (EU ETS)³.

Shipping transports over 80% of internationally traded goods, involves two million seafarers, and produces around 3% of global GHG emissions⁴. The IMO's revised strategy has set a clear imperative for the sector to reach net-zero by 2050. Achieving this will require major changes across the entire value chain, from material changes to vessel engines, the development of new fuels, and the updating of existing climate assessment methodologies.

² Learn more about the ZEMBA [here](#).

³ Global Maritime Forum. [2023]. [National and regional policy for green shipping corridors](#).

⁴ United Nations. [2020]. [Review of Maritime Transport 2023](#)



How have the IMO's emission reduction ambitions changed?

Before the 80th convening of the IMO's Maritime Environment Committee (MEPC 80), which took place in London in July 2023, the Poseidon Principles issued a statement calling for the IMO to provide leadership and clarify the ambition for a science based, 1.5°C future through intermediate and 2050 emission targets⁵. The last Poseidon Principles Annual Disclosure Report also stated that a combination of industry action and policy support were essential ingredients for shipping to decarbonise. Both ingredients materialised at MEPC 80.

The focus of the meeting was to formalise a revised strategy for emissions reduction from international shipping to supersede the existing initial strategy agreed upon in 2018. The resulting revised strategy, formally known as Resolution MEPC.377(80) or the 2023 IMO Strategy on Reduction of GHG Emissions from Ships **[2023 IMO GHG Strategy]**⁶, aims for **net-zero emissions from international shipping "by or around" 2050**. This is significantly more ambitious than the initial strategy, which aimed for a 50% reduction in emissions from international shipping in 2050 compared to 2008 levels.

The 175 IMO member states showed a spirit of compromise when agreeing to concrete **indicative checkpoints in 2030 and 2040 for emissions reductions** in the final stretch of the negotiations. These checkpoints state that annual GHG emissions should be reduced, compared to 2008 levels, by at least:

- **20%, striving for 30%, by 2030**
- **70%, striving for 80%, by 2040**

It is important to note that the indicative checkpoints in 2030 and 2040 are specified as "total annual GHG emissions", not net emission reductions. Only the 2050 target includes "net-zero emissions", leaving it ambiguous whether this specific target includes or excludes offsets.

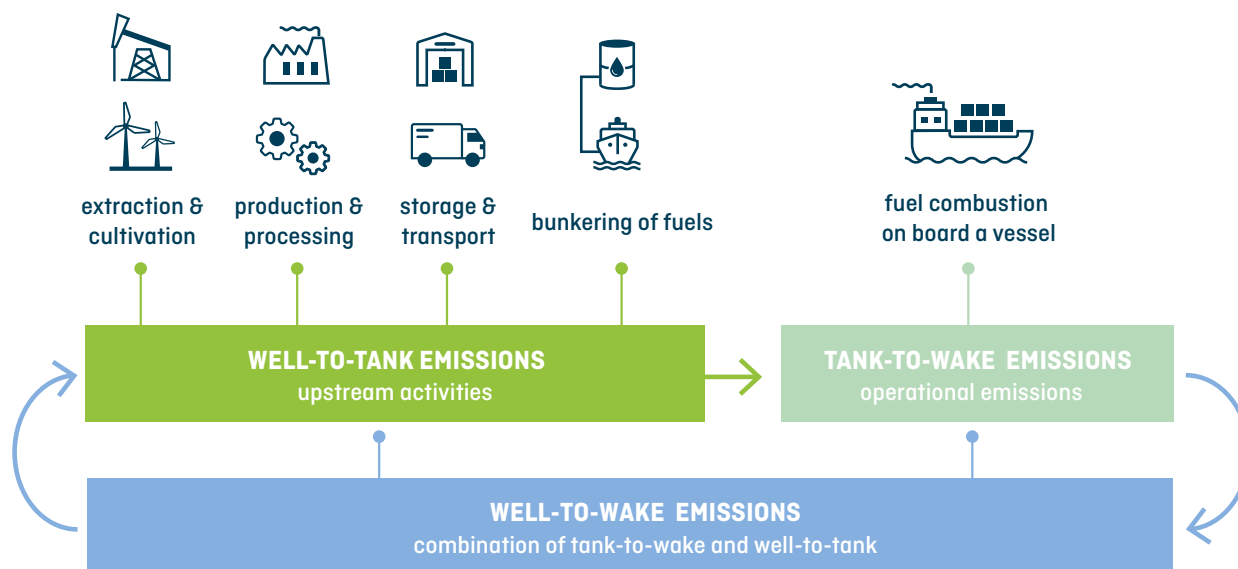
⁵ Learn more and read the statement [here](#).

⁶ The full text of Resolution MEPC.377(80) is available to the public [here](#)

The revised strategy also introduces an ambition for zero or near-zero emission fuels and technologies to make up at least 5% percent, striving for 10% percent, of the energy used by international shipping by 2030.

The final notable change involves including the impact of **other GHG species** besides carbon dioxide (CO₂) and a move from considering only operational emissions, or a “tank-to-wake” CO₂ perspective, to considering full **lifecycle emissions**, or a “**well-to-wake**” CO₂e perspective.

All these aspects of the revised strategy provide a clear and crucial signal to governments and industry that the use of zero-emission fuels need to scale rapidly from 2030 onwards. This must be supported by regional and national policies as well as with operational improvements within the full maritime supply chain that fill the gaps from ambition to concrete action.



Tank-to-wake, well-to-tank, and well-to-wake emissions: What is the difference?

Tank-to-wake emissions: from fuel combustion on board a vessel, or “operational emissions”.

Well-to-tank emissions: from upstream activities including extraction, cultivation, production, processing, storage, transport, bunkering of fuels.

Well-to-wake emissions: a combination of tank-to-wake and well-to-tank. This accounts for both the emissions from upstream activities and operation of a vessel, or the “full lifecycle”.

Figure 2:

Visual representation of the differences between tank-to-wake, well-to-tank, and well-to-wake emissions

The role of transparent finance in decarbonisation

Finance plays a critical role in the decarbonisation of the shipping sector because of its ability to incentivise and support tangible climate activities. This includes the alignment of shipping finance towards GHG reduction strategies through transparency as done with the Poseidon Principles. Transparent climate reporting allows for benchmarking climate impact which can then be used to make informed business decisions. Additionally, financial institutions can build the appetite for lenders to supply sustainability-linked loans, increase the capital available for infrastructure and research, and play an important role in equally distributing these funds around the globe⁷.

While there is still a long road ahead, there are successes to celebrate. The Poseidon Principles framework continues to be used by signatories as a tool to engage in fact-based conversations about decarbonisation with their clients. This year especially, the increased ambition from the IMO has made signatories reconsider practices to ensure their activities support the sustainability of the sector.

The Poseidon Principles have also inspired similar transparency initiatives in other sectors like steel, aluminium, and soon aviation, and has served as an example of how finance can play a role in accelerating climate action⁸.

When considering the IMO ambition for the industry⁹ to use at least 5% zero or near-zero emission fuels by 2030, the financial sector is partially on track. Sustainability linked loans and bonds issued to shipowners remained stable in 2022, showing continued appetite for lenders to support this industry. However, the work must not stop there.

With the clear ambition set by the IMO, it is more important than ever that ship finance continues to contribute to the decarbonisation of the shipping industry by transparently disclosing the environmental impacts of ship finance portfolios and allocating funds to support the necessary changes. Transparency around this is especially important in the face of continuously evolving ambitions, climate science, and reporting standards.

7, 9 UMAS and UN Climate Change High Level Champions. (2023). [Climate action in shipping progress towards shippings 2030 breakthrough](#).

8 American Academy of Arts and Sciences. (2023). [Forging Climate Solutions: How to Accelerate Action Across America](#).

Collaboration across maritime transparency initiatives

The Poseidon Principles for Financial Institutions and Poseidon Principles for Marine Insurance¹⁰ joined with the Sea Cargo Charter¹¹ for the first time to co-host an event at the Global Maritime Forum Annual Summit in Athens in October 2023. These three initiatives, which all originated in collaboration with the Global Maritime Forum, all share a common objective: fostering transparency on emissions reporting to promote international decarbonisation of the shipping industry.

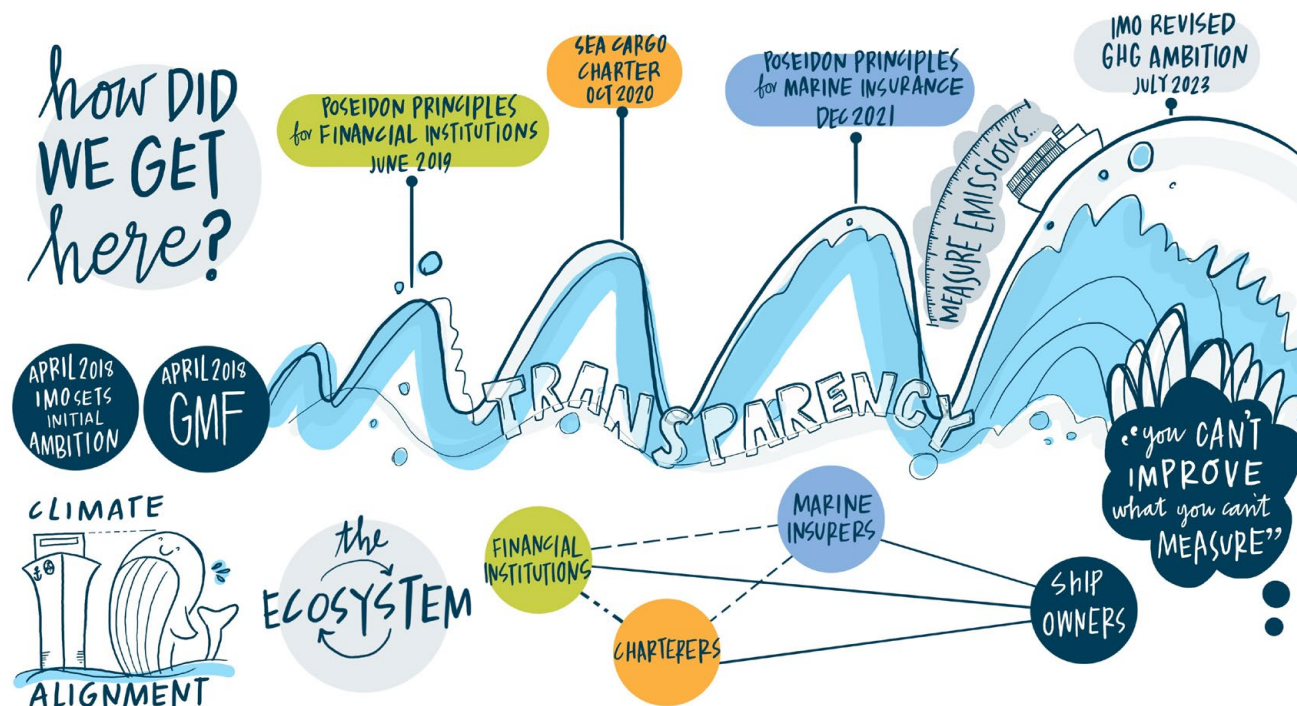
The event brought together more than 60 influential stakeholders representing various sectors within the maritime ecosystem, including charterers, financial institutions, marine insurers, shipowners, service providers, and brokers.

The discussions explored the common challenges confronting shipping's green transition and the potential for collaborative efforts to address critical issues within the supply chain.

There was also a major focus on the crucial role of transparency and open dialogue in understanding emissions data linked to shipping activities, as well as how to manage risk while addressing increasing regulations and shifting consumer expectations.

Figure 3:

Timeline of the development of the three transparency initiatives within the maritime ecosystem. Both Poseidon Principles initiatives and Sea Cargo Charter are hosted by the Global Maritime Forum.



9 The Poseidon Principles for Marine Insurance are a global framework that enables insurers to assess and disclose their climate alignment. [Learn more here.](#)

10 The Sea Cargo Charter is a global framework for assessing a disclosing the climate alignment of ship charting activities. [Learn more here.](#)

A pivotal year for the Poseidon Principles

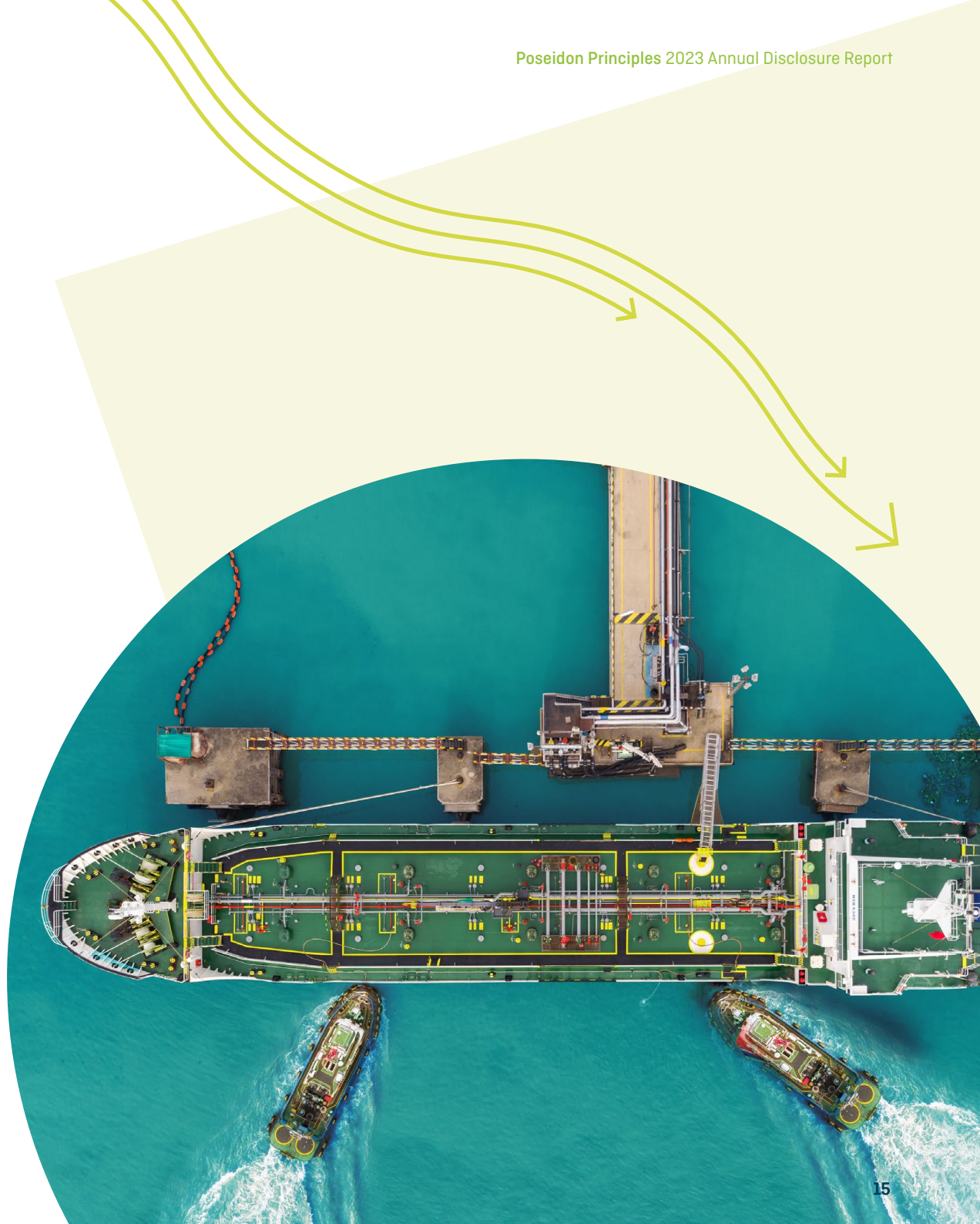
The 2023 Annual Disclosure Report marks the fourth time signatories publicly report their climate alignment scores. The initiative has grown in number, with 34 signatories from 13 different countries together representing around 80% of the global ship finance portfolio.

This report collates data reported by 30 signatories for their activities throughout 2022. Four signatories joined in 2023 and were not required to assess climate alignment this year.

In September 2023, Signatories decided unanimously to **fully adopt the IMO's revised GHG strategy into the Poseidon Principles methodology**¹¹, despite some remaining uncertainties. This decision, which occurred in the middle of the Poseidon Principles reporting cycle, underscores the integral part the initiative aims to play in meeting the new global shipping regulator's ambitions.

From their inception, the Poseidon Principles were designed to be a living framework, continually evolving to meet the dynamic challenges of climate change. The continued growth of the initiative shows its ability to stay at the forefront of climate reporting.

¹¹ To learn more about the changes to the methodology, see section 3 and the official press release about the decision [here](#).



A note on the 1.5°C temperature goal

In September 2022, signatories committed to aligning the Poseidon Principles to the ambition of the Paris Agreement. While the IMO's revised strategy was more ambitious than expected, there are shortcomings in terms of alignment with the Paris Agreement and reaching a 1.5°C temperature goal.

However, upon analysis of the impact of MEPC 80, the GHG reduction levels used to define the new Poseidon Principles trajectories are quite close to the 1.5°C pathway for shipping (Figure 4). Because of this similarity, the Poseidon Principles decided to concentrate on incorporating the forward-looking IMO revised strategy and postponed introducing an additional trajectory aligned with a 1.5°C future for this reporting cycle.

While this means that the trajectories used to measure climate alignment in this report are not aligned with a 1.5°C temperature goal, incorporating trajectories which represent the 2023 IMO GHG Strategy is still a significant step toward aligning with the Paris Agreement.¹²

Looking ahead

As previously stated, the Poseidon Principles were designed to be dynamic rather than static. Their continuous evolution ensures the strength of the Principles, adapting in response to ongoing research or relevant issues for the sector. It is anticipated that there will be ongoing future revisions as the Poseidon Principles remains dedicated to maintaining its position as an industry leader.

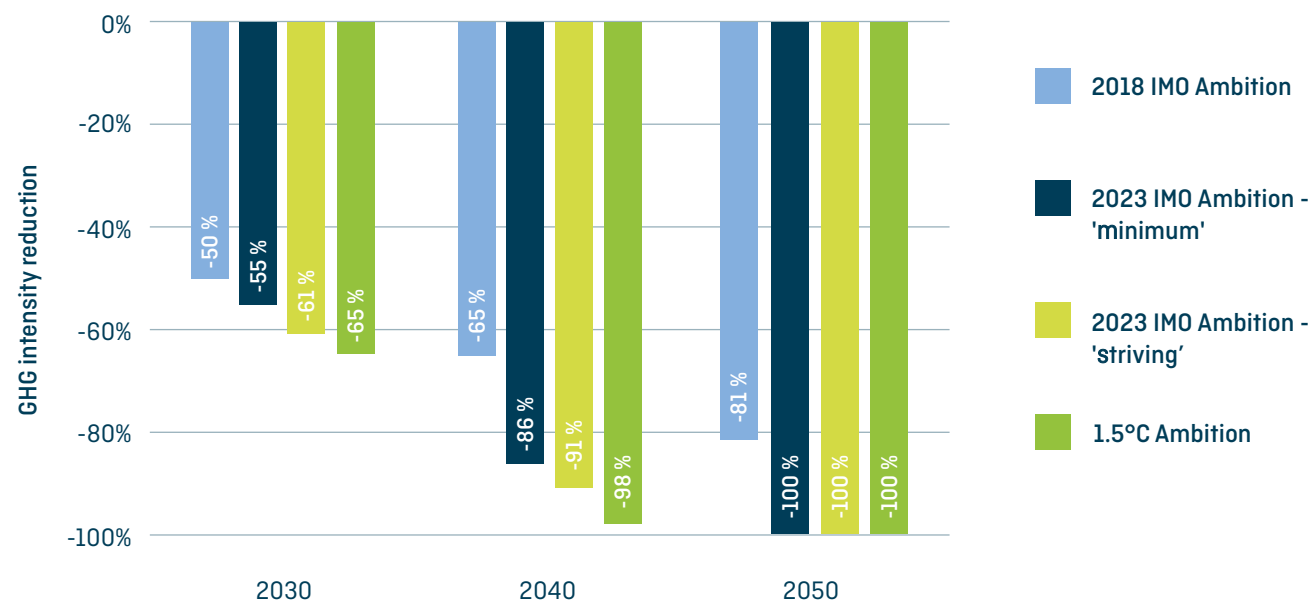


Figure 4:

Comparison of GHG intensity reduction needed between IMO goals used in the Poseidon Principles and for a 1.5°C future¹³.

¹² These values have been taken by an internal analysis done by the Poseidon Principles advisory (UMAS) in July 2023 to understand the impact of MEPC80.

¹³ To learn more about how these changes have been incorporated Poseidon Principles methodology see section 3.

3. Climate alignment and decarbonisation trajectories

Poseidon Principles signatories commit to reporting the climate alignment of their shipping portfolios each year through a climate alignment score. The climate alignment score is made up of individual scores for each vessel in a signatory's shipping portfolio.

Climate alignment measures the difference, as a percentage, between a vessel's actual emissions and its respective decarbonisation trajectory. When all vessel scores within a portfolio are averaged together, the overall score represents how aligned the entire portfolio is to the decarbonisation trajectory.

Figure 5 shows a stylised depiction of a decarbonisation trajectory (blue line) and annual emissions intensity of a vessel. Green dots represent vessels that are aligned, or below the decarbonisation trajectory. Red dots represent vessels that are misaligned, or above the decarbonisation trajectory.

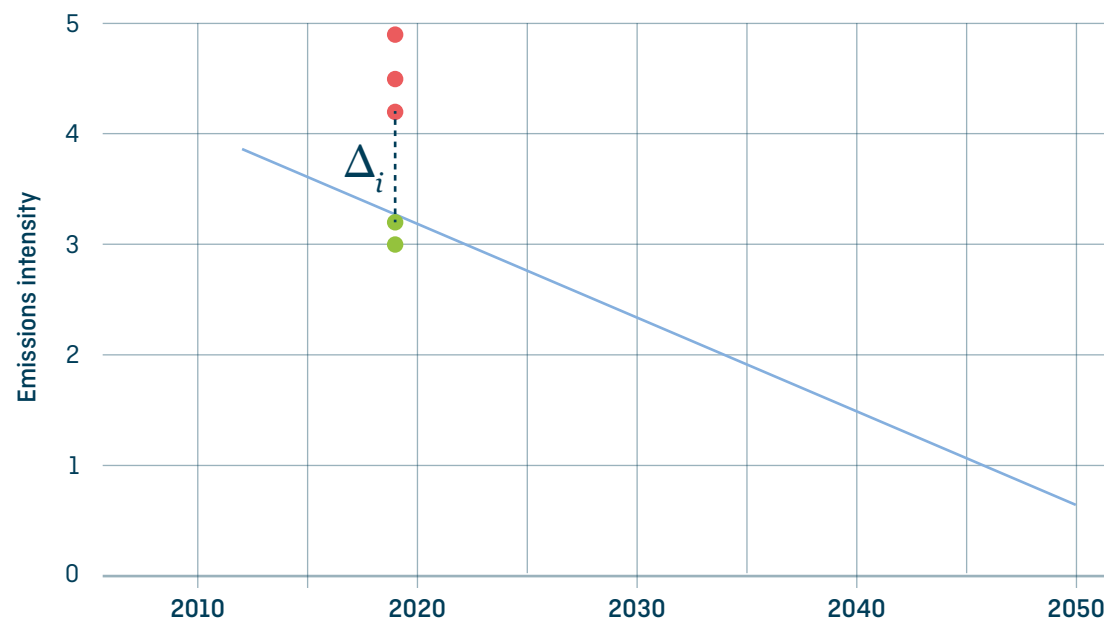


Figure 5.

Assessing alignment at the vessel level.

Changes to reporting after MEPC 80

The Poseidon Principles have been historically aligned to the IMO's initial level of ambition, which involved a 50% reduction of carbon emissions from international shipping compared to 2008 levels. Following MEPC 80, Signatories unanimously decided in September 2023 to incorporate a significant revision to their framework for evaluating and reporting climate alignment to incorporate the 2023 IMO GHG Strategy¹⁴.

After extensive work carried out by the Poseidon Principles Technical Committee and advisory, the methodology was updated to include the IMO revised GHG strategy. The three major changes required were:

- 1. Updating the decarbonisation trajectory.**
- 2. A shift from tank-to-wake to well-to-wake.**
- 3. Expanding the emission boundaries.**

Other aspects of the 2023 IMO GHG Strategy that that do not directly impact the Poseidon Principles methodology but are important to consider include that the emissions intensity of vessels should decline with further improvement of energy efficiency and zero or near-zero GHG emission technologies should represent at least 5%, but striving for 10%, of the energy used by international shipping by 2030. This gives a clear directive to the industry of the importance of the uptake of zero or near-zero GHG fuels.

14 See the official press release [here](#)

1. Updating the decarbonisation trajectory

The decarbonisation trajectory represents the emission intensity reduction required to meet certain decarbonisation ambitions. For the purposes of the Poseidon Principles, and consistent with the current interpretation of the 2023 IMO GHG Strategy, the decarbonisation trajectories used were updated to consider:

- The “**minimum**” interim targets of 20% GHG reduction in 2030 and 70% GHG reduction in 2040 relative to 2008.
- The “**striving**” interim targets of 30% GHG reduction in 2030 and 80% GHG reduction in 2040 relative to 2008.
- **A net-zero GHG target in 2050**
- **A well-to-wake carbon dioxide equivalent (CO_{2e}) perspective.**

The existing methodology was retained to establish an overall decarbonisation emissions intensity trajectory for the industry based on carbon budget and transport work demand projections. This resulted in two separate decarbonisation trajectories, shown in Figure 6. These trajectories are benchmarked at 2018 for all the vessel type categories based on emissions intensity data from the IMO Fourth GHG Study¹⁵.

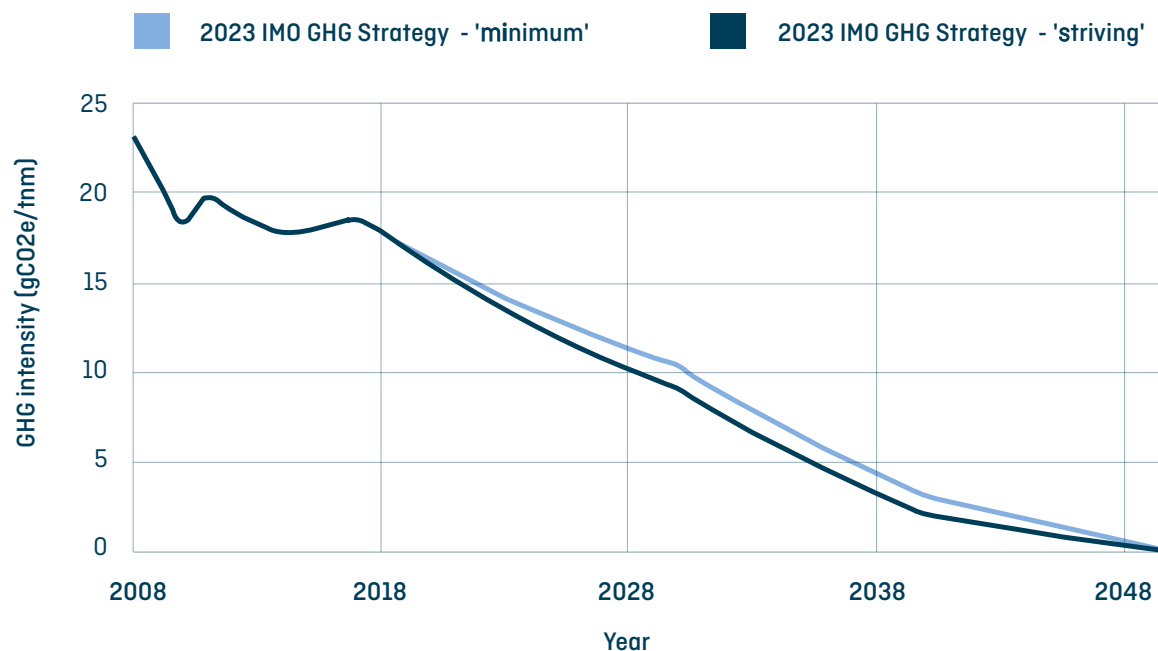


Figure 6.

Emissions intensity decarbonisation trajectory based on 2023 IMO GHG Strategy

¹⁵ Data from the IMO Fourth GHG Study regarding emissions intensity is provided on a tank-to-wake CO₂ basis thus a conversion factor is applied to translate AER values into a well-to-wake CO_{2e} basis based on historical fuel mix. All details provided in the Technical Guidance to be published early 2024.

2. A shift from tank-to-wake to well-to-wake

The move from a tank-to-wake to a well-to-wake perspective requires the use of emission factors to incorporate the impact of the full lifecycle of a fuel. It is expected that the IMO will publish detailed guidance (LCA Guidance)¹⁶ around the life cycle GHG intensity of marine fuels and the use of well-to-wake emission factors in its final form at MEPC 81 in March 2024.

This left an interim gap between the IMO setting its new ambition which includes a well-to-wake perspective and the formalisation of official well-to-wake emission factors.

The use of well-to-wake emission factors

Well-to-wake emission factors are important to quantitatively assess the environmental impact of the full life cycle of a fuel. These factors take into account all of the emissions associated with a fuel, from its extraction and production to its transportation and use.

This is important because the emissions from different stages of a fuel's life cycle can vary significantly. For example, some fuels, such as biofuels, may have higher upstream emissions (from their production and transportation) than conventional fuels, but lower downstream emissions (from their combustion).

By using well-to-wake emission factors, one can get a more accurate picture of the environmental impact of different fuels and make informed decisions about which fuels to use.

This year, signatories had the challenging task of reporting at this higher level of detail without formal IMO guidance while relying on IMO DCS data that was missing necessary details. To fill the gap and provide guidance to signatories, the Poseidon Principles Technical Committee and advisory worked to collect an interim set of well-to-wake emission factors¹⁷ based on the most up-to-date climate science to be used this year. The intention is to assess and adopt the IMO LCA Guidance for the 2024 Annual Report.

3. Expanding the emissions boundary

The previous IMO ambition and Poseidon Principles trajectory only considers one GHG species, CO₂. The 2023 IMO GHG Strategy expands the emissions boundary to CO₂e from only CO₂. CO₂e consists of CO₂, CH₄, and N₂O GHG species. This had to be incorporated into both the decarbonisation trajectories and the calculations of emissions intensity.

¹⁶ IMO MEPC. (2023). [Guidelines on Life Cycle GHG Intensity of Marine Fuels \(LCA Guidelines\) - MEPC.376\(80\)](#).

¹⁷ The complete list of emission factors used can be found in the Technical Guidance to be published early 2024, found on the [Poseidon Principles website "Resources" page](#).

Other updates to the Poseidon Principles methodology

A change to continuous baselines

Following observations by signatories, it was acknowledged that the previously used “stepped” emissions intensity baselines for each vessel category presented challenges when calculating climate alignment. This was especially apparent for vessels at the edges of existing size groupings. To mitigate this, “continuous” required emissions intensity baselines were adopted to avoid these steep “step” changes in emissions intensity requirements (Figure 7).

A continuous baseline is created for each vessel type and is repeated for each year up to 2050 for both the IMO revised strategy “minimum” ambitions and “striving”. The new baselines create a more “continuous” relationship between vessel size and required emission intensity. This approach has been successfully implemented into the Sea Cargo Charter initiative in its latest 2023 report and those learnings have been integrated into the Poseidon Principles. It should be noted that continuous baselines will only be used for reporting against the 2023 IMO GHG trajectories and not the pre-existing trajectory.

Continuous baselines are widely used for maritime benchmarking such as by the IMO MEPC Energy Efficiency Design Index (EEDI) and the more recent Carbon Intensity Index (CII) regulation.

To obtain a continuous baseline for the purposes of the Poseidon Principles, a curve is fitted through a plot of the median emissions intensity of a vessel size grouping vs. the median vessel size in that grouping. This is based on data published in the Fourth IMO GHG Study. The result is a power law fit¹⁸ with a high coefficient of determination (R_2)¹⁹.

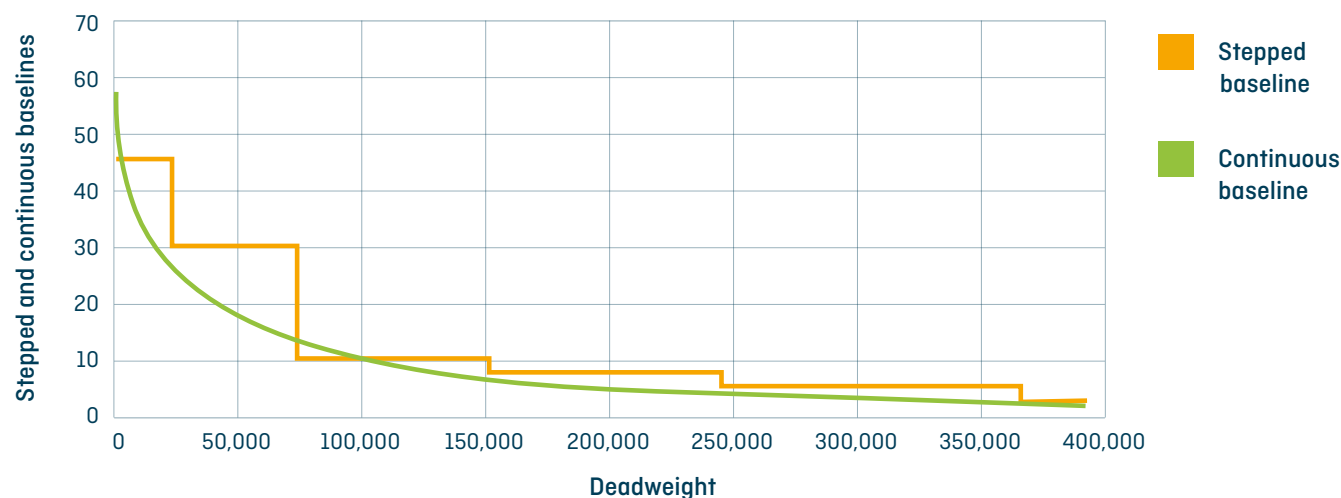


Figure 7.

Example illustration of the difference between a stepped and continuous required emissions intensity baseline.

¹⁸ A power law fit is the relationship in which a relative change in one quantity gives rise to a proportional relative change in the other quantity.

¹⁹ The coefficient of determination describes how well a statistical model predicts an outcome. A high value indicates a strong relationship between the dependant and independent variables.

Future considerations

This report was compiled during a major transition of the industry. The IMO MEPC 80 decision occurred in July 2023, which is in the middle of data collection and reporting for the Poseidon Principles signatories. It is important to acknowledge the tight timeline to introduce the changes posed by the IMO's revised strategy official protocols and operational measures are still in the works. Some areas of particular interest to consider in 2024 include the impact of the forthcoming LCA Guidance and vessel categorisation.



4. Reporting results

The following results encompass the climate alignment scores of 30 signatories based on data from 2022, an increase of two signatories over last year's report. The four signatories who joined in 2023 were not required to disclose information.

Some key takeaways from the signatories' written responses show a comprehensive and evolving approach to integrating environmental considerations into maritime financing. This includes a strong focus on adapting to new environmental regulations, supporting their clients' decarbonisation journeys, using data-driven approaches to align with broader sustainability and climate goals, and a commitment to support the maritime industry's transition to net zero. Many signatories also acknowledge the significant challenges ahead, especially with the new IMO ambition. There is an overall understanding of the urgency and magnitude of the task at hand to keep improving energy efficiency and reducing emissions, while also ensuring the most accurate representation of the real-life differences between diverse sectors, from tankers to cruise ships, which enables all parts of the industry to succeed.

Benchmarking climate alignment scores against new IMO ambitions

The Poseidon Principles aim to stay up to date with the latest available global evidence and developments, especially at the IMO. An important milestone achieved for the first time this year involves benchmarking climate alignment scores against two new trajectories aligned with the 2023 revised IMO ambitions, while also reporting against the previous IMO ambition to allow for comparison with past years' disclosure results.

- **Poseidon Principles trajectory aligned with the 2018 IMO GHG Strategy:** the **"50% CO₂ reduction trajectory"** is a targeted minimum 50% reduction in absolute operational (tank-to-wake) CO₂ emissions by 2050 (compared to 2008 levels). This is the benchmark against which signatories have been assessed from the inception of the Poseidon Principles.
- **New! Poseidon Principles trajectories aligned with the 2023 IMO GHG Strategy:** the **"minimum"** and **"striving"** trajectories, which have been detailed in Section 3, are both net zero by 2050, with interim targets set at 2030 and 2040 (compared to 2008). These trajectories are reported considering lifecycle (well-to-wake) CO₂e emissions, which includes new GHG species.

In addition to the above three trajectories, signatories had the option to disclose **distinct climate alignment scores for cargo and passenger vessels**, offering a nuanced perspective on their shipping portfolios. Fifteen signatories reported the climate alignment scores of their cargo vessel finance portfolios, and eleven signatories reported their passenger vessel scores.

Signatories were also asked to report the proportion of their activity included in the climate alignment assessment (the **reporting %**), which is calculated based on the percentage of debt in their portfolio. There are a variety of reasons a signatory may not report on certain parts of their portfolio, including not being able to access the data, sanctions related to global conflicts, or vessels changing owners in the given year. The simple average²⁰ proportion of activity reported across the 30 signatories was **95.4%**. Five signatories reported 100% of their activities, up from three of the 28 signatories who reported last year. All signatories reported at least 70% of their activities, with 26 reporting more than 90% of their portfolio. This number, again, has considerably improved from last year where 19 of 28 signatories reported more than 90% of their portfolio, indicating an increased interest in reporting across stakeholders.

²⁰ The simple average is the average where all reported information is assigned an equal weight.

Results against the trajectory aligned with the 2018 IMO GHG Strategy

The results show that 11 portfolios were aligned with the 50% CO₂ reduction trajectory, representing over a third of all signatories, up from a quarter last year. The simple **average score against this trajectory was +2%**, meaning that, on average, the portfolios are 2% above the 2018 ambition of the IMO (or slightly misaligned). This is a considerable improvement from last year's average of +9.7%. Signatories' scores against this trajectory ranged from -13.5% to +18.5%, with 63% reporting a score of +5% or less, marking yet another considerable improvement from the previous year's range of -12.5% to +57.3%, with 50% reporting a score of +5% or less.

Results for the optional cargo and passenger vessel scores showed the same positive trend. Six cargo vessel portfolios were aligned, representing 40% of reported data, up from four portfolios aligned, or 31% of reported data last year. However, the simple average score for cargo portfolios remained relatively stable at +1.7%, compared to +0.8%. The range of scores for cargo portfolios also showed minimal change, from -9.8% to +11.9% this year, as opposed to the range of -10.7% to +7.4% reported last year (on 2021 data). An improvement is noticeable in the percentage of cargo scores of +5% or less, which increased from 62% last year to 73% in this report.

Passenger vessel portfolios demonstrated significant improvements, with climate alignment scores ranging from +0.6% to +32.4% this year compared to +26.8% to +82.8% last year. The simple average result of +12.4% for passenger vessels is a marked improvement from the +46.6% reported last year, with over a third of signatories reporting a score of +5% or less, improving from zero last year.

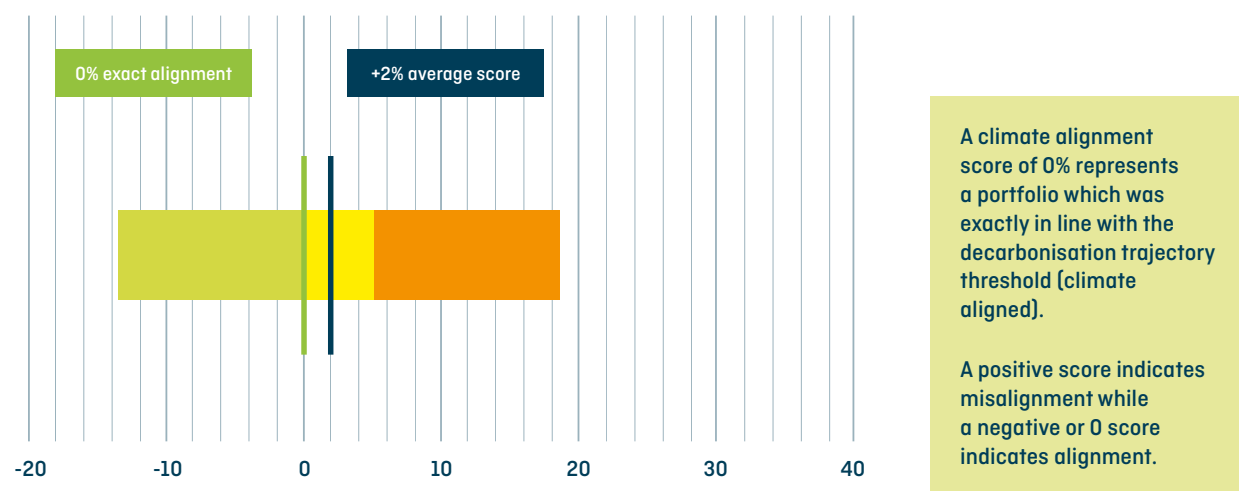


Figure 8.

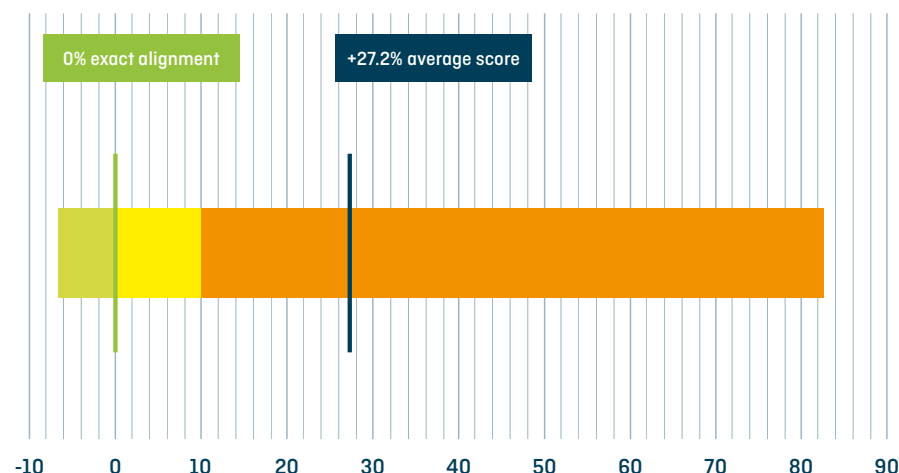
Portfolio climate alignment scores for the 50% CO₂ Reduction Trajectory. This graphic shows the range of reported scores, with a green line at 0% (an aligned portfolio score), a blue line at +2% to show the average, and a yellow box to represent +5% or less.

New! Results against the trajectories aligned with the 2023 IMO GHG Strategy

Relative to the “**minimum**” trajectory, scores ranged from -6.8% to +82.7%, with a simple average of **+27.2%**. Three signatories had a score of +10% or less.. Relative to the “**striving**” trajectory, scores ranged from -3.3% to +92.8%, with a simple average score of **+32.1%**. Two signatories had a score of +10% or less. One signatory’s scores were aligned with both “minimum” and “striving” trajectories.

On a more granular level, results for the cargo vessels show that the climate alignment scores relative to the “minimum” trajectory ranged from +6.7% to +51.1%, with a simple average of +20.8% and one signatory reporting alignment within +10% or less.

As for the “striving” trajectory, scores ranged from +10.7% to +56.7%, with a simple average of +25.3%. For passenger vessels, scores ranged from +57.5% to +92.2%, with a simple average of +71.5% for the “minimum” trajectory. The reported climate alignment scores for the “striving for” trajectory ranged from +63.8% to +99.4%, with a simple average of +78.3%.

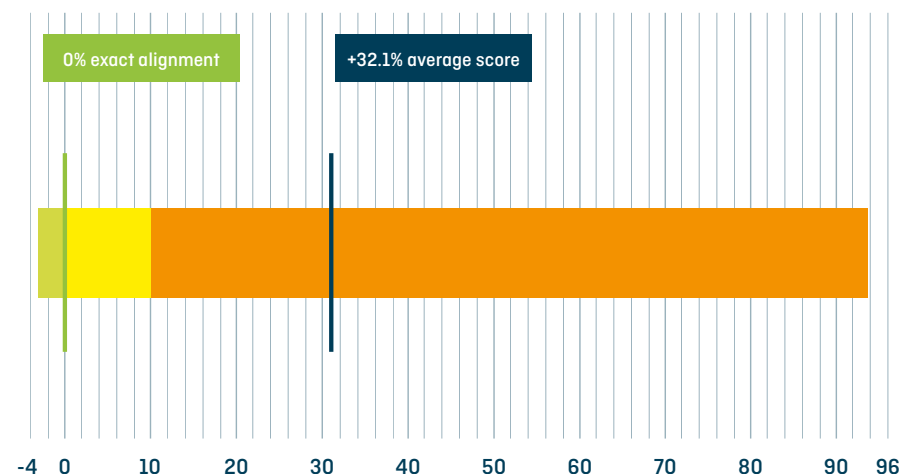


A climate alignment score of 0% represents a portfolio which was exactly in line with the decarbonisation trajectory threshold (climate aligned).

A positive score indicates misalignment while a negative or 0 score indicates alignment.

Figure 9.

Portfolio climate alignment scores against the 2023 IMO GHG Strategy - “minimum”. This graphic shows the range of reported scores, with a green line at 0% (an aligned portfolio score), a blue line at +27.2% to show the average, and the yellow box to represent +10% or less.



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

A positive score indicates misalignment while a negative or 0 score indicates alignment.

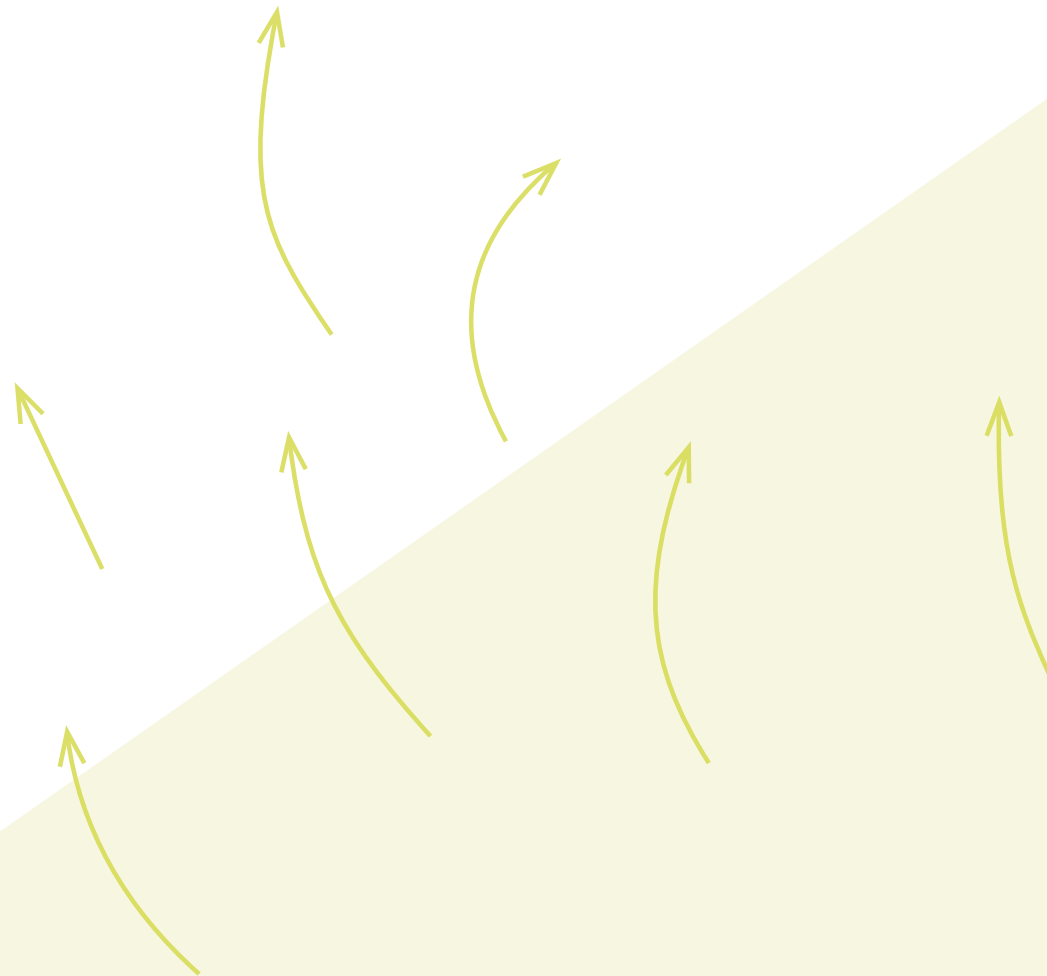
Figure 10.

Portfolio climate alignment scores against the 2023 IMO GHG Strategy - “striving”. This graphic shows the range of reported scores, with a green line at 0% (an aligned portfolio score), a blue line at +32.1% to show the average, and yellow box to represent +10% or less.

Further considerations

It is important to highlight the collective enhanced ambition represented by adopting and reporting against these new trajectories, especially as it marks a commitment to reporting in a well-to-wake perspective (full lifecycle CO₂e emissions) compared to a tank-to-wake (operational CO₂ emissions) perspective which has previously been the case. Several signatories mentioned the challenge of adapting to this noteworthy increase in ambition, as it requires them to further develop initiatives, practices, and dialogue with clients to promote and accelerate the implementation of net-zero sensitive practices, technologies, and business models. However, the significant positive trend seen over the previous four years of reporting should affirm optimism about the signatories' ability to adapt to this new challenge.

Additionally, supporting the shipping sector's transformation and helping to finance decarbonisation is a long-term journey, with effects visible over multiple years. One or more misaligned climate alignment scores do not mean that it is impossible for the entire portfolio to align. However, it may take time to establish a downward trend in line with the trajectories as material changes are made and technology advances.



Factors influencing climate alignment scores

Reporting against the 2023 IMO GHG Strategy trajectories incorporated several method developments which individually influence the climate alignment scores. In combination, this explains why the climate alignments from the 2023 trajectories can vary significantly relative to the alignments calculated against the 2018 trajectories. The following are some of the key drivers of those differences:

1. Fundamentally, the 2023 IMO GHG Strategy trajectories represent **a step-change in ambition**, and this means that in most cases, a portfolio will appear worse (more misaligned) against a 2023 trajectory than the 2018 IMO GHG Strategy trajectory.
2. Conversion of the IMO's interim targets (2030 and 2040) into a trajectory requires an assumption about the overall 'shape' of the trajectory, for example whether there should be a constant rate of reduction over the period to 2030, or a slower initial rate of reduction that accelerates. The assumption applied was for a constant rate of reduction (to 2030). This has created a sudden and significant **increase in the reductions** needed for alignment in 2022, relative to the 2018 IMO GHG Strategy trajectory.
3. For the 2023 IMO GHG Strategy trajectories, several **ship types** (passenger vessels and RoRo) had their trajectories produced using ship-type specific demand forecasts. Some ship types

(e.g. cruise ships), are forecast by these sources to have a higher demand growth than the total fleet's average growth rate. The consequence is that the 2023 IMO GHG Strategy trajectory for cruise ships is steeper (e.g. it requires a greater rate of reduction in GHG intensity) than the trajectory for many other ship types. This is one of the factors explaining why many banks are reporting passenger ship misalignments that are significantly greater than their cargo ship misalignments, and greater than their passenger ship misalignment as calculated using the 2018 IMO GHG Strategy trajectories.

4. The **change to continuous baselines** has only been applied to the 2023 IMO GHG Strategy trajectories, and this introduces some additional effects that can have strong effects modifying portfolio alignment for certain ship types and sizes. The previous method flattered some ships because it applied the same GHG intensity target for all ships within a size range (which meant that ships towards the upper limit of the size range had a less onerous alignment target than ships at the lower limit of the size range). For larger ships especially, the new continuous baselines can set a significantly more onerous GHG intensity target than the previous method (still used for the 2018 IMO GHG Strategy trajectory), even before some of the other effects explained here have been considered.

These new ambitions and the resulting trajectories were only ratified at MEPC 80 in July 2023, coinciding with ongoing data collection and reporting for Poseidon

Principles signatories. Additionally, the scores in this report are based on data from 2022, before the new IMO ambition was set. It can take time to incorporate new ambitions into existing processes and business, especially in the middle of the year. Lessons learned from the application of the new trajectories will need to be reflected on, and as required method and key assumptions will be adjusted.

Furthermore, at the vessel level, some vessel types can perform relatively better or worse when comparing their respective decarbonisation trajectories. This can be explained by a few factors not limited to their age, the way they are operated, and the baseline trajectory value and vessel type or size category. However, it is important to note that reported results have improved over the years.

As highlighted in the previous section along with signatories' comments in Section 5, some of the misalignment can also be attributed to global events such as Russia's war on Ukraine and the effects of normalisation from the impacts of COVID-19. As it was the case last year, a small number of vessels can disproportionately impact the overall climate alignment score of an entire portfolio, particularly if those vessels also have a high outstanding debt relative to others in the portfolio. On this basis, some financial institutions found that a limited number of vessels made an outsized contribution to their overall score. However, seeing the positive improvement of climate alignment scores against the 2018 IMO GHG strategy, several signatories are optimistic for the future while still recognising that immense challenges lie ahead.

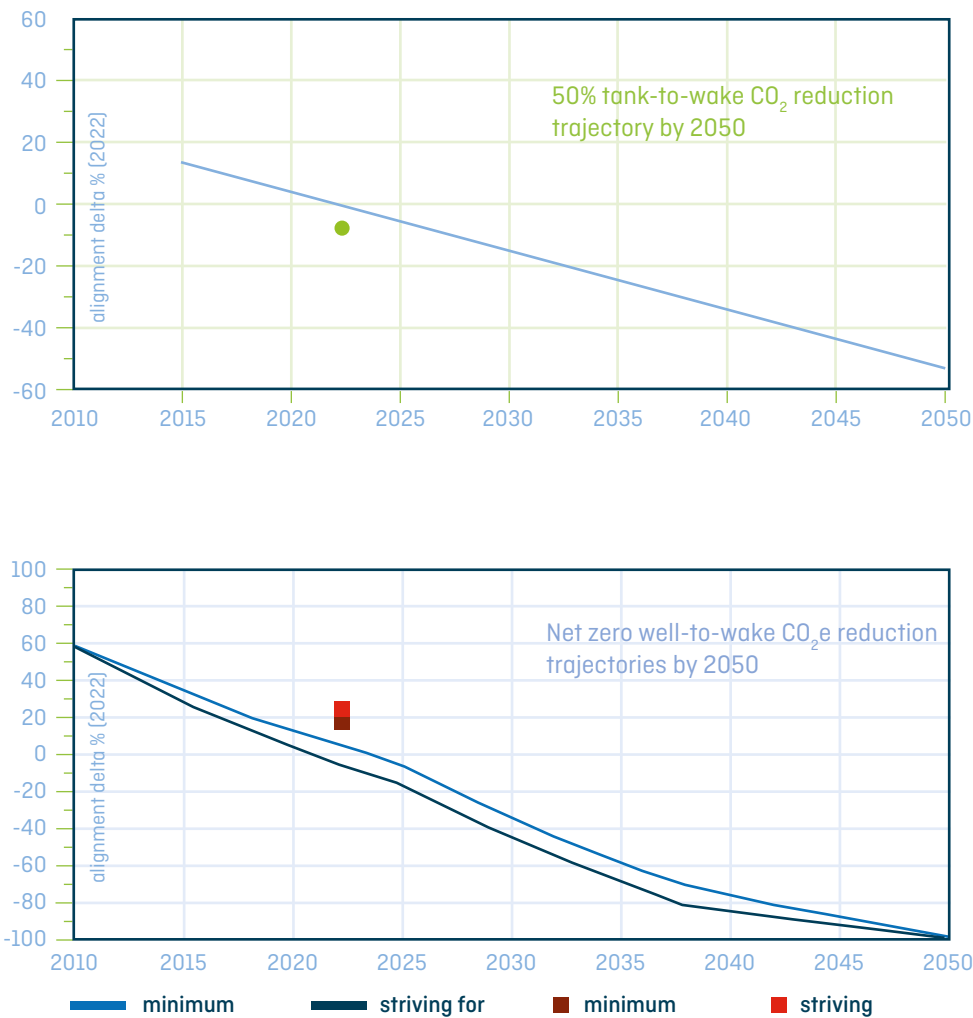
Understanding the outcomes for 2023

The positive influence of the Poseidon Principles has created early awareness of the value of transparent emissions monitoring through climate alignment and its ability to inform financial institutions operating in the shipping sector. At the end of the fourth year of the Poseidon Principles, it is clear that signatories are using their commitment to drive evidence-based dialogues with their clients and make informed lending decisions by integrating climate alignment into their portfolio risk management. Consistent and significant year-on-year improvements have been observed across the signatories as a collective, primarily attributed to improved decision-making for new financing opportunities, increased energy efficiency, and the adoption of new technologies.

In addition to acknowledging the positive change in climate alignment scores against the 50% CO₂ reduction trajectory, the signatories have confirmed their ambition and commitment to achieving net zero across all their portfolios by 2050 by incorporating the 2023 IMO GHG Strategy trajectories within months of the initial adoption by the IMO. It's also worth highlighting that while it was obligatory to report against either the "minimum" or the "striving" trajectory, all signatories decided to voluntarily report against both trajectories, further solidifying their commitment to net zero by 2050.

Adopting the 2023 IMO GHG Strategy is a new and evolving exercise that was carried out within just months of MEPC 80. This means that measures will be taken by the signatories, advisory, and the Technical Committee to further enhance and fine-tune methodology for the next Annual Disclosure Report, including considering improving the methodology for passenger and shuttle tanker vessels, paying close attention to ongoing discussions at the IMO on improvements to metrics used and exceptions related to the Carbon Intensity Indicator (CII). In the event that material changes are made during these reviews of the 2023 IMO GHG Strategy trajectories, we will consider a restatement of the 2022 results in 2024 reflecting any changes.

Financial institutions have an important role to play in leading the industry to meet the short and long-term emission reduction goals and objectives introduced by the IMO. Despite the challenges meeting these ambitions entail, there's an overall commitment by signatories to adapt to new standards and collaborate with clients to support the industry in its transition.



How to read climate alignment scores

The lines represent the rate of change required to align with their respective IMO ambitions over time. The points on the graph represent the climate alignment score being reported, with the y-axis representing the climate alignment delta respective to the line, and the x-axis representing the year being reported (2022). This alignment score updates yearly, based on the alignment delta for the year.

A positive score, or point above the line, indicates misalignment of the portfolio. Misalignment of a portfolio means the emissions of the given year are greater than the emissions goal of the given IMO ambition. A negative or 0 score, or a point below the line, indicates alignment of the portfolio. Alignment of a portfolio means the emissions of the given year are lower than the emissions goal of the given IMO ambition.

Please note that both graphs are for illustrative purpose only.

Figure 11.

Example of the two portfolio climate alignment scores



5. Fulfilling the signatory requirements

→ ABN Amro	32	→ KfW IPEX-Bank	48
→ BNP Paribas	33	→ MUFG Bank	49
→ Bpifrance Assurance Export	34	→ Nordea Bank Abp	50
→ CaixaBank S.A.	35	→ OCBC	51
→ Citi	36	→ SACE	52
→ Crédit Agricole CIB	37	→ SBI Shinsei Bank, Limited	53
→ Crédit Industriel et Commercial (CIC)	38	→ SEB	54
→ Credit Suisse AG, a UBS company	39	→ SMBC Bank	55
→ Danish Ship Finance	40	→ Société Générale	56
→ Danske Bank	41	→ SpareBank 1 SR-Bank	57
→ DekaBank Deutsche Girozentrale	42	→ Sparebanken Vest	58
→ Development Bank of Japan	43	→ Standard Chartered Bank	59
→ DNB	44	→ Sumitomo Mitsui Finance and Leasing Company, Limited	60
→ Export Finance Norway	45	→ Sumitomo Mitsui Trust Bank, Limited	61
→ Finnvera Oyj	46		
→ ING Bank N.V.	47		



What are your key takeaways from your climate alignment score?

The score for the reporting year 2023 is higher than the previous year. Contributors to this, amongst others, were the disruptions faced by the shipping sector in the wake of the Russia-Ukraine conflict, and the continued higher magnitude of maritime trading activity after the peak of the Covid pandemic. Several sub-segments in our portfolio are well under their respective trajectories while some sub-sectors and a handful of outlier vessels have an outsized contribution to the higher alignment score. These vessels and sub-sectors are disadvantaged by the nature of their trade and the operational requirements for the vessels operating therein. This is the fourth year in which we are reporting on the Poseidon Principles, and with the support of our clients, we were able to achieve an impressive reporting score of 97.8% across our financed fleet.

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

Over the past year, we have been successful in structurally embedding the Poseidon Principles alignment scores into our decision-making for all new financing opportunities in the sector. Climate alignment and plans to future-proof the fleet are discussed for every transaction. We are developing products specifically targeted at incentivising improved efficiency, better climate performance and accelerated decarbonisation: investments in alternative fuels, dual-fuel engines, and retrofit programmes. We are working to understand the implications of the new IMO targets and the 'Minimum' and 'Striving' trajectories based on well-to-wake emissions, for our financed fleet. We are closely following the developments related to new technologies and alternative fuels to ensure that our value proposition supports the sustainability transition of the sector and our clients.



In 2022, ABN AMRO Bank set an ambition to achieve net zero across our multiple sectors, including shipping. During 2023, we conducted an in-depth analysis of our fleet portfolio, and translated this ambition into a trajectory. Our aspiration is to emerge as one of the world's leading decarbonisation banks for shipping and we are making strides towards this goal.

Anastassia Tcherneva, Head of Shipping Clients



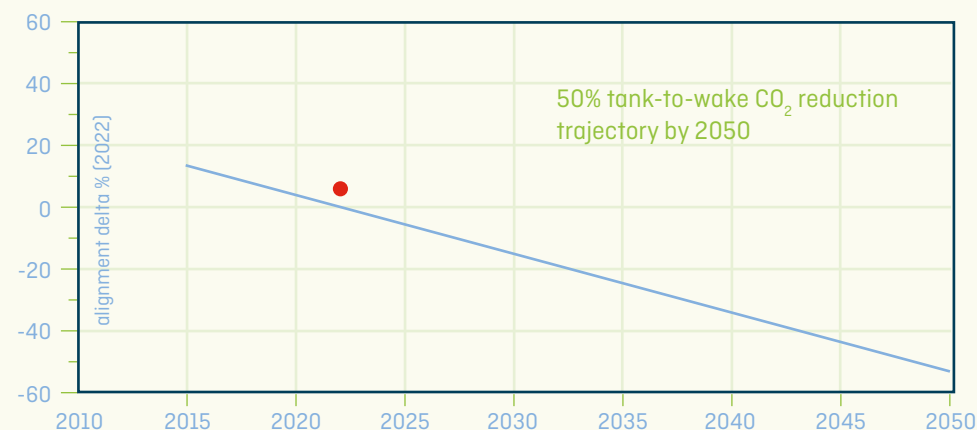
2018 IMO GHG Strategy

Portfolio climate alignment score

7%

Cargo vessels climate alignment score

7%



2023 IMO GHG Strategy

Portfolio climate alignment score

minimum

19.1%

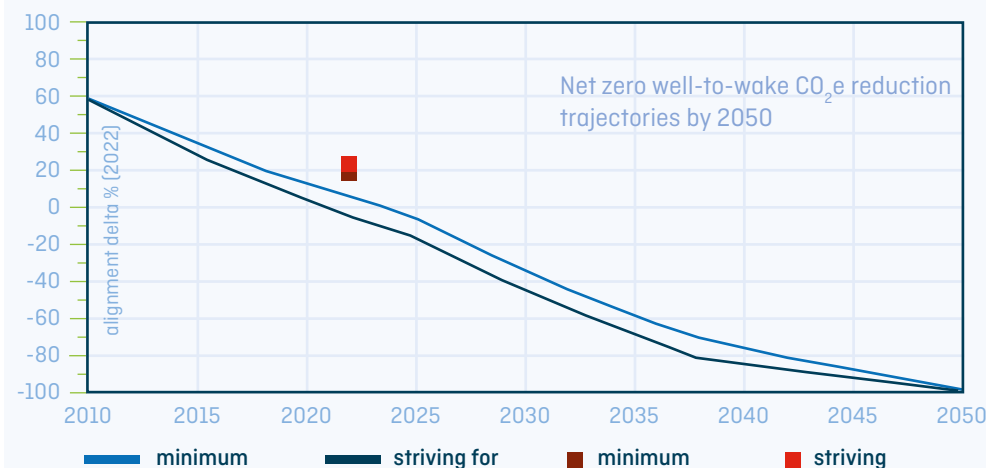
striving

23.6%

Cargo vessels climate alignment score

19.1%

23.6%



Signatory as of December 2019

Reporting percentage: 89.2%



What are your key takeaways from your climate alignment score?

The portfolio climate alignment is influenced by both cargo and passenger vessels in the portfolio. While our cargo vessel portfolio is aligned with the initial IMO GHG strategy, our cruise and ferry-ropax portfolio is misaligned by +16.5%, which led to an overall misalignment of +3.6%.

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

The Poseidon Principles have created an early awareness of the importance of monitoring the carbon footprint of our ship financing business. This will continue, and be reinforced, by our parallel commitment to the NZBA. So carbon intensity metrics will continue to play an increasing role (among other KPIs) in setting our business strategy for the future.



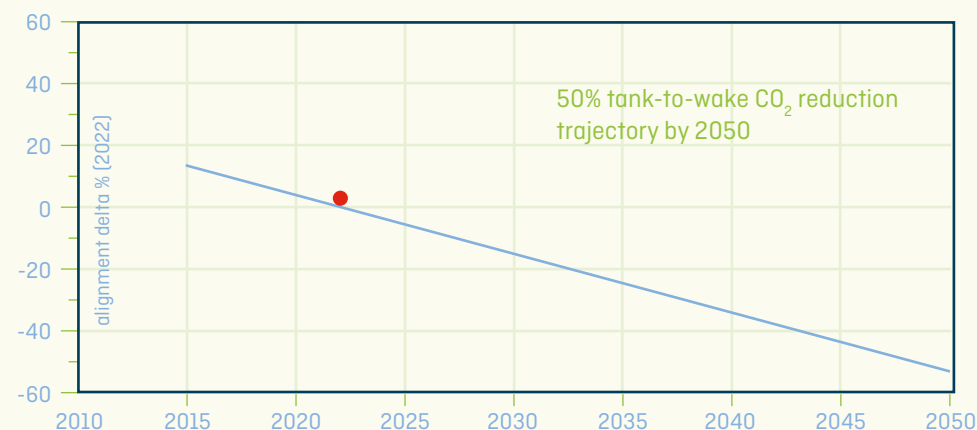
Comparing 2022 with 2021, we take comfort in the positive evolution of the score for our global portfolio, including full alignment for our cargo shipping exposure - for the first time since we started measuring carbon intensity four years ago. The scores against the new IMO trajectories (post MEPC 80) demonstrate the magnitude of the challenges ahead with over 25% misalignment of our global portfolio already under the revised "Minimum" GHG strategy, of which ca. 16% for our cargo shipping exposure. Passenger vessels continue to stand out (misaligned by 68% under the Minimum trajectory), which has a material bearing given the share of the cruise portfolio within our global portfolio. This demonstrates the need to activate all the levers to decarbonisation and that banks must remain engaged throughout for supporting this collective long term imperative for the maritime industry.

Vincent Pascal, Head of Shipping Origination - EMEA



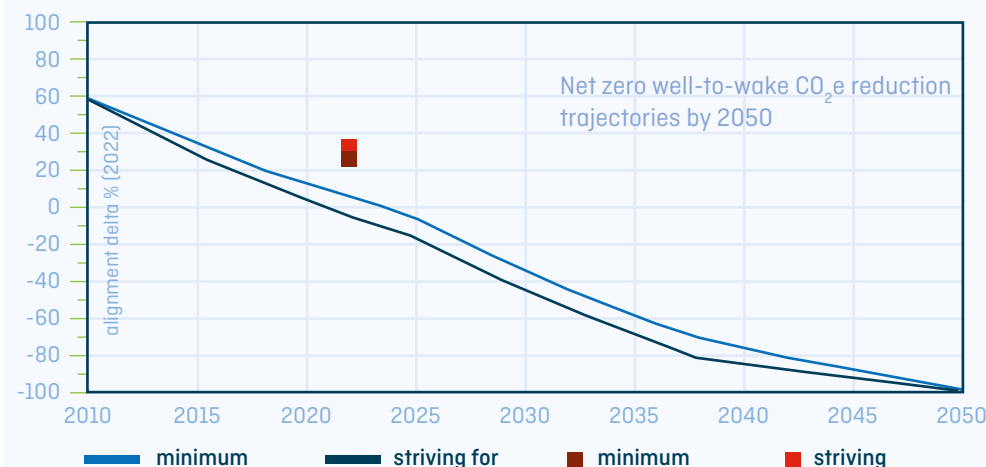
2018 IMO GHG Strategy

Portfolio climate alignment score	3.6%
Cargo vessels climate alignment score	-0.02%
Passenger vessels climate alignment score	16.5%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	27.2%	32%
Cargo vessels climate alignment score	15.6%	19.9%
Passenger vessels climate alignment score	68.5%	74.8%



Bpifrance Assurance Export

Signatory as of January 2020



Reporting percentage: 100%

What are your key takeaways from your climate alignment score?

While still being impacted by the methodology for passenger vessels, our climate alignment score for the IMO initial strategy has significantly improved, thanks to the entry in our portfolio of new, modern and more energy efficient ships, demonstrating that we are on the right track. However, a new challenge lies ahead of us with the ambitious IMO revised strategy and its revised trajectories.

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

The transparency enshrined in the Poseidon Principles is an efficient tool to follow our portfolio's decarbonisation journey and to align our support accordingly. Our 2022 climate alignment score for the IMO revised strategy nonetheless demonstrates the need to support more energy efficient ships, with a mix of different alternative fuels to be considered to significantly reduce emissions from the maritime industry.



Our climate alignment score in the IMO initial strategy has improved for the second year in a row, and quite significantly this year. It shows that the cruise ships in our portfolio are more energy efficient and indicates we are on the right track. However a new challenge lies ahead of us with the IMO revised strategy and its impact on our portfolio, particularly LNG-fueled ships. We will continue to strongly support the decarbonisation of the cruise sector, paying a close attention to the development of less emitting and more efficient ships.

François Lefebvre, General Manager of Bpifrance Assurance Export



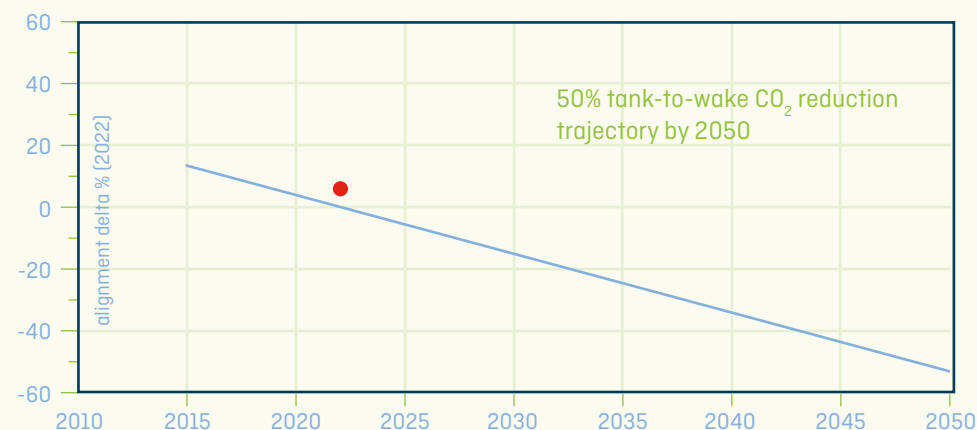
2018 IMO GHG Strategy

Portfolio climate alignment score

6.3%

Passenger vessels climate alignment score

6.3%



2023 IMO GHG Strategy

Portfolio climate alignment score

minimum

82.7%

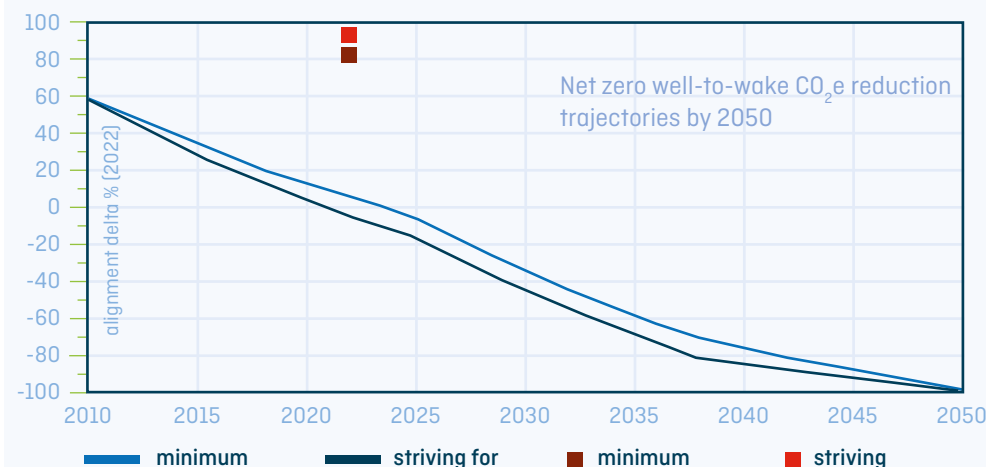
striving

92.8%

Passenger vessels climate alignment score

82.7%

92.8%



CaixaBank S.A.

Signatory as of June 2022

Reporting percentage: 96.5%



What are your key takeaways from your climate alignment score?

Given that our shipping portfolio comprises less than 100 vessels, we realize that few individual vessels with high misalignment have high impact on the overall portfolio climate alignment. Excluding just 4 vessels with the highest negative impact would improve our climate alignment to 6.2%. High-speed crafts should be separated from Ferry-RoPax (as done by IMO in its CII regulation). Beyond that, we question the revised trajectories for Cruise and Ferry-RoPax, which constitute a significant share of our shipping book.

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

Since becoming signatory to the Poseidon Principles we are assessing each individual transaction on its GHG impact. We ask owners to provide AER predictions for the financing tenor and assess each vessel against Poseidon Principles trajectories and CII together with our technical advisors.



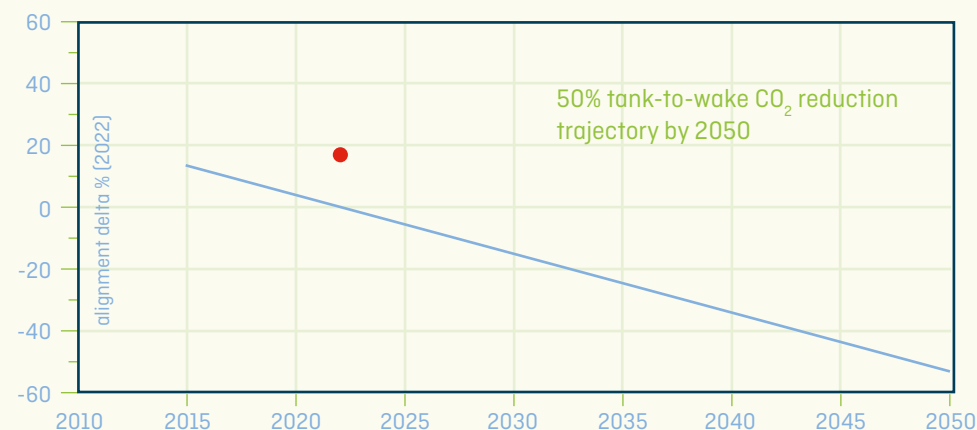
As member of the Net Zero Banking Alliance we are fully committed to decarbonisation of all our activities. We regard the shipping industry as important activity for CaixaBank and consider the GHG impact in every new financing. Poseidon Principles are one among other standards we apply in our assessments. We hope that Poseidon Principles will solve remaining challenges with regard to its metrics.

Roger Torrella, Executive Dto. Asset Finance



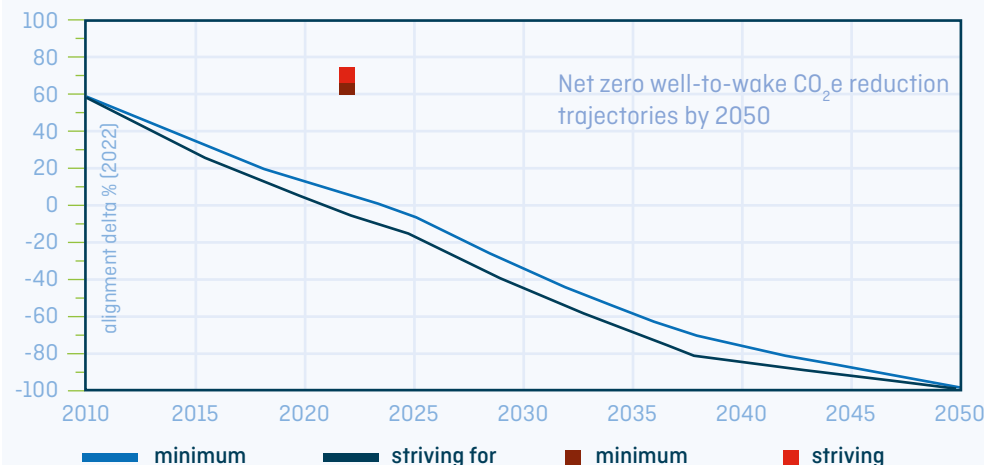
2018 IMO GHG Strategy

Portfolio climate alignment score	18.5%
Cargo vessels climate alignment score	11.9%
Passenger vessels climate alignment score	32.4%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	64.3%	70.3%
Cargo vessels climate alignment score	51.1%	56.7%
Passenger vessels climate alignment score	92.2%	99.4%



Founding Signatory as of June 2019

Reporting percentage: 92%



What are your key takeaways from your climate alignment score?

Citi is pleased to report our alignment score for 2022, which was supported through a normalisation of shipping activity post the COVID disruptions experienced resulting in an improvement in the Citi IMO initial GHG strategy alignment score compared to last year. The announcement of the IMO revised GHG strategy during the summer of this year has materially increased the ambition of the shipping industry and Citi remains focussed on meeting our climate goals. Incorporating the additional trajectories for this year's reporting, including the new methodology capturing a continuous baseline and well-to-wake carbon factors, has impacted key parts of the Citi portfolio, especially concerning the passenger vessels. We believe more work is required to further optimise the Passenger calculation framework to ensure the nature of their operations are captured. Citi looks forward to further supporting the optimisation of the methodology for the new trajectories as further guidance is provided by the IMO.

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

As the new IMO CII and EEXI has come into effect this year and the inclusion of shipping within the EU ETS framework starting from next year, Citi is continuing to partner with clients on aiding in implementing the next generation in shipping technology. 2023 has presented a significant increase in activity through the continued ordering of alternative fuelled vessels and retrofitting emissions reduction technology on existing vessels. The commercial imperative in meeting this emission reduction is also becoming more apparent from both our clients and our client's customers. Citi is focussed on supporting our clients in meeting both the revised IMO target and, importantly, through the transition process.

[Link to institutional report](#)



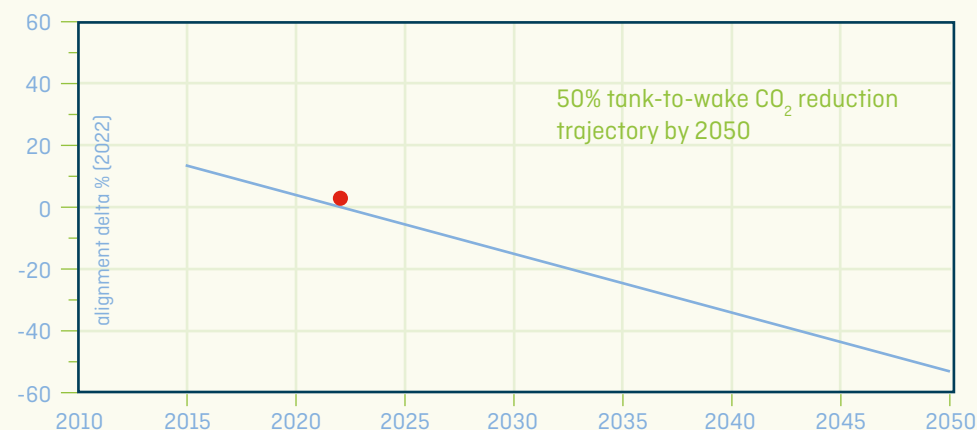
It is reassuring our results for 2022 are closely aligned to the original IMO ambition but as we see from measuring our portfolio against the new higher ambition trajectories we all face the challenge to work with our clients to make the necessary investments in the new vessels and technologies that will make the IMO strategy a reality. Demand signals for the zero emission fuels have been sent by the IMO as the global regulator and as the key industry for all others engaged in international trade it is in everyone's interest to accelerate the decarbonisation of the maritime value chain. Innovation including the potential of new nuclear technology will make the eventual alignment of the industry with the Paris Agreement possible.

Michael Parker, Chairman of Citi Global Shipping, Logistics & Offshore



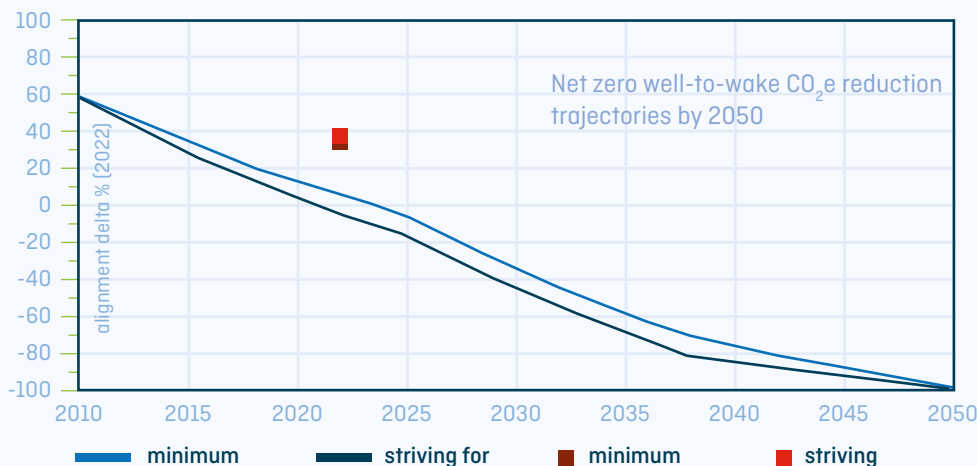
2018 IMO GHG Strategy

Portfolio climate alignment score	2.5%
Cargo vessels climate alignment score	3.1%
Passenger vessels climate alignment score	0.9%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	33%	38%
Cargo vessels climate alignment score	22%	26.6%
Passenger vessels climate alignment score	70.1%	76.4%



Credit Agricole CIB

Founding Signatory as of June 2019

Reporting percentage: 99.3%

What are your key takeaways from your climate alignment score?

Our 2022 score shows a noticeable improvement in the alignment of our portfolio. Both the carbon intensity and the absolute emissions of our portfolio of cargo ships keep decreasing, as we continue to support our shipping clients in funding newer, greener vessels. The carbon intensity of our portfolio of passenger ships, despite the AER formula still awaiting to be corrected by the IMO, is also improving as we pivot our financing support towards modern, fuel efficient assets.

A measure of our portfolio's alignment with the new IMO trajectories, still very much a work in progress that will be restated several times as the IMO publishes its WtW factors, illustrates the challenges ahead.

Regarding the cruise segment, pending the IMO correction factors, we would actually recommend to adopt a more realistic AER measurement methodology based on pax/lower berth capacity and/or cruise vessel occupancy rather than gross tonnage. As it stands, the current methodology does trigger the wrong incentive to finance small vessels with high emissions per passenger instead of large-capacity fuel-efficient vessels with low emissions per passenger.

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

The Poseidon Principles have been and will continue to be, in addition to our NZBA trajectory, a great tool to engage with our shipping clients on the all-important task of decarbonising shipping, by and large one of the most "hard to abate" sectors. This is a long haul journey.



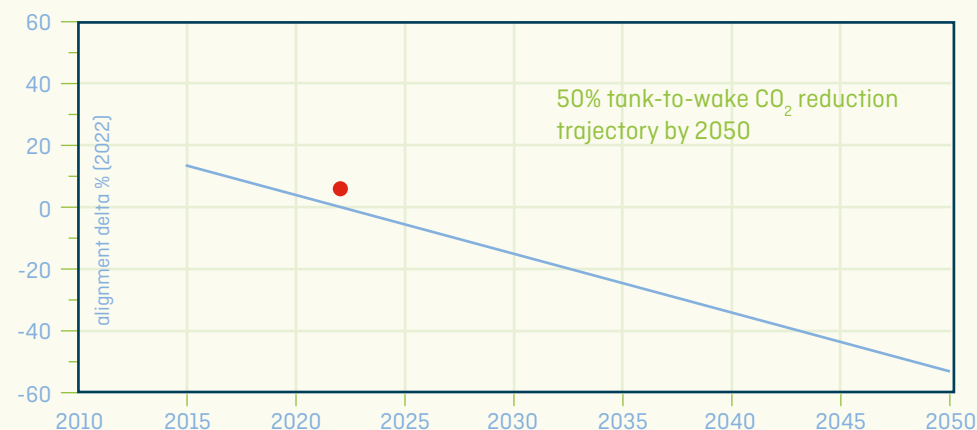
The task at hand, gradually decarbonising the maritime sector by supporting our shipping clients in funding the construction of their next generation of low-to-zero-emission vessels and/or financing the retrofit of their existing ships, is a great challenge. It will call for lending strategies that will need to be both ambitious and realistic.

Thibaud Escoffier, Global Head of Ship Finance



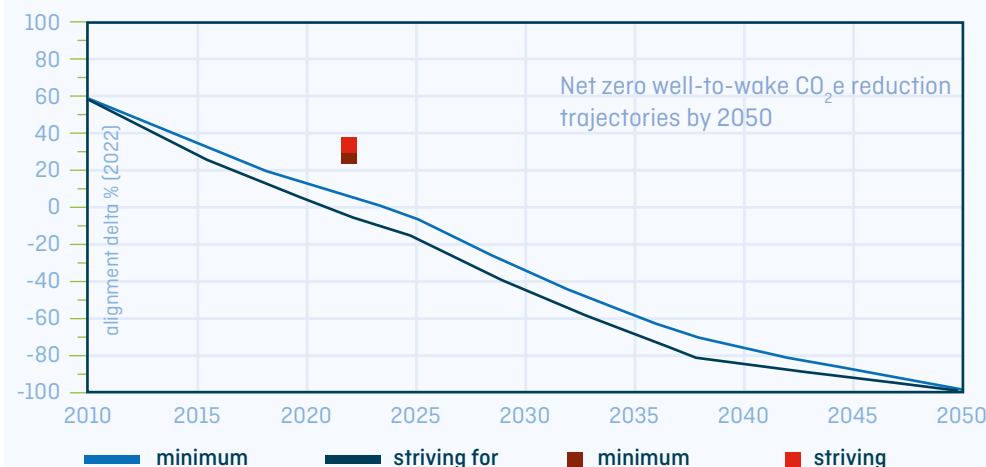
2018 IMO GHG Strategy

Portfolio climate alignment score	6.5%
Cargo vessels climate alignment score	3.9%
Passenger vessels climate alignment score	14.5%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	29%	33.9%
Cargo vessels climate alignment score	19.5%	23.9%
Passenger vessels climate alignment score	58%	63.9%



Crédit Industriel et Commercial (CIC)



Signatory as of November 2019

Reporting percentage: 97%

What are your key takeaways from your climate alignment score?

The new Well to Wake CO₂e methodology impacted very negatively our alignment score, passing from -4% to +22,7%, which will potentially open internal discussions on targeted class of asset to be financed in the future.

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

This will set new priorities for our financing. It should accelerate investment strategy towards new technologies (e-fuel compatible assets, sail propelled, retrofit actions).



The new ambitious target adopted by the Poseidon Principles, following the IMO historical decision after MEPC 80, sets new challenges for us to accelerate the implementation of new technologies in the industry. We intend to further develop initiatives already taken to promote disruptive technologies and business models.

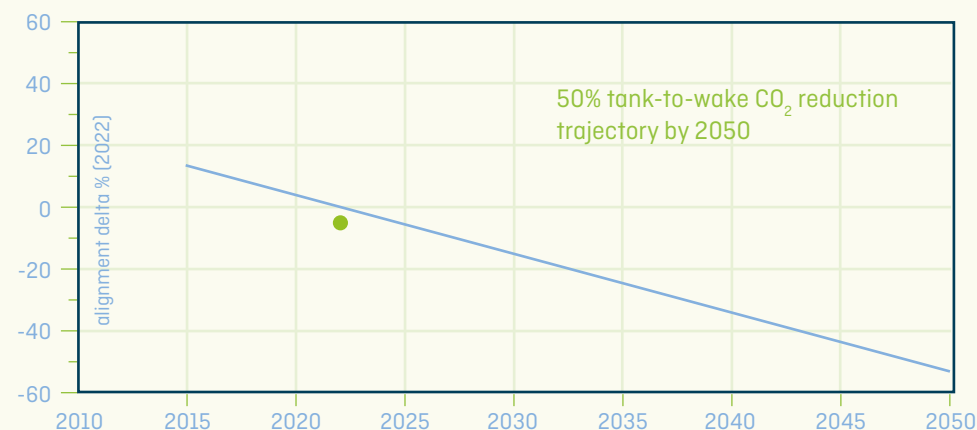
Jean-Philippe Guillon, Global Head of Asset Finance



2018 IMO GHG Strategy

Portfolio climate alignment score

-4%



2023 IMO GHG Strategy

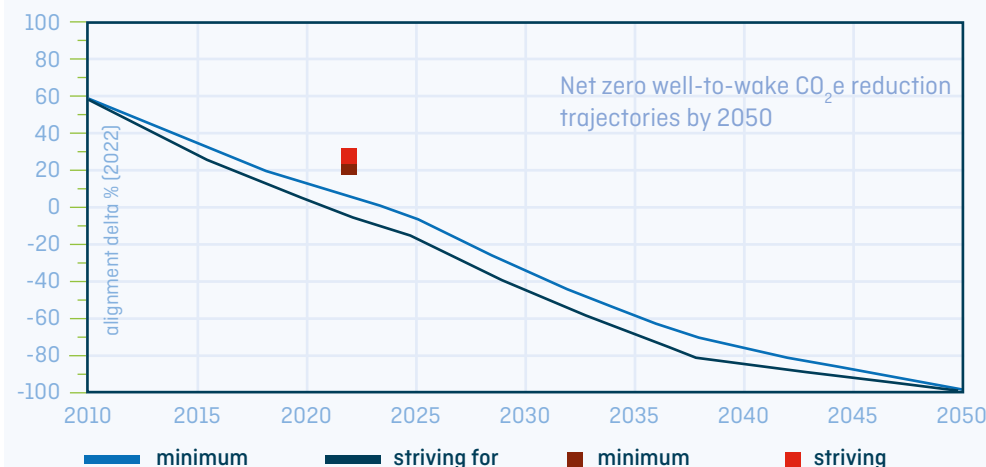
Portfolio climate alignment score

minimum

22.7%

striving

27.2%



Credit Suisse AG, a UBS Group company

CREDIT SUISSE

Signatory as of January 2020

Reporting percentage: 96.9%

What are your key takeaways from your climate alignment score?

This is our third year of disclosure under the Poseidon Principles. We are pleased with the further improved reporting level and responsiveness of our clients. With our portfolio alignment under the "IMO initial GHG Strategy" remaining below trajectory we note that results under the "IMO Revised GHG Strategy" are reflective of the integration of lifecycle fuel emissions, methodological adjustments and the more ambitious stance taken by the IMO as an outflow of MEPC 80. Results continue to be materially driven and may fluctuate each reporting year by ship types, vessel operations, markets, trading patterns and portfolio composition. Ongoing work at the Poseidon Principles, enhanced regulatory guidance and other external factors such as the increasing availability of different fuel types are expected to impact future results. Whilst the use and publication of climate alignment scores facilitates transparency, long term and sustainable alignment of shipping portfolios will require further rigid and well-coordinated decarbonisation efforts by the industry.

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

The Poseidon Principles are embedded in our sustainability and risk assessment process for Ship Finance which forms part of the bank's ship financing strategy. Understanding clients' decarbonisation strategies is important to us as determining our future alignment score under the Poseidon Principles. We are assisting clients in lowering the GHG emission intensity of their fleets through customized products (which include financings for vessels equipped with solar panels, air lubrication, or other energy saving technologies as well as green loans). The transparency of data and the participation in decarbonisation initiatives, including the Poseidon Principles, assist in informing and supporting our client discussions.



This is our third disclosure under the Poseidon Principles and the third result below the original IMO trajectory. The results under the IMO Revised GHG Strategy are reflective of the integration of lifecycle fuel emissions, methodological adjustments and the more ambitious stance taken by the IMO. We continue to focus on transparency, as well as increasing the dialogue with our clients to help them in their own decarbonisation ambitions.

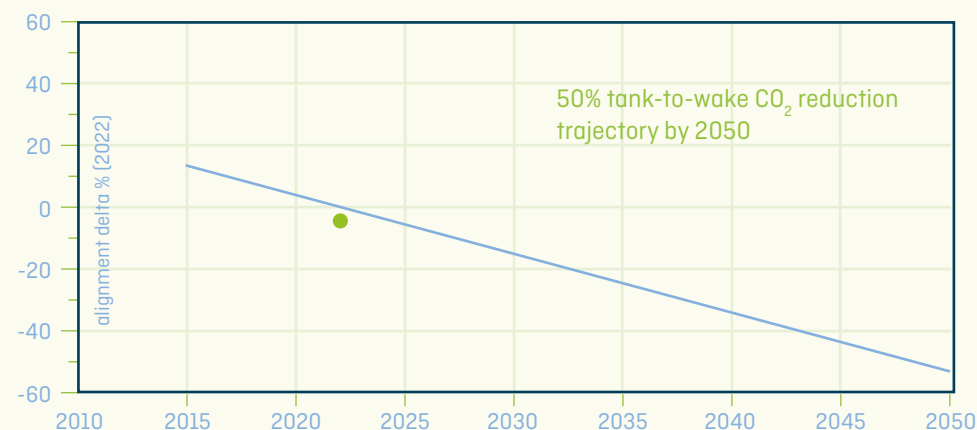
Mario Béhé, Head of Ship Finance



2018 IMO GHG Strategy

Portfolio climate alignment score

-4.6%



2023 IMO GHG Strategy

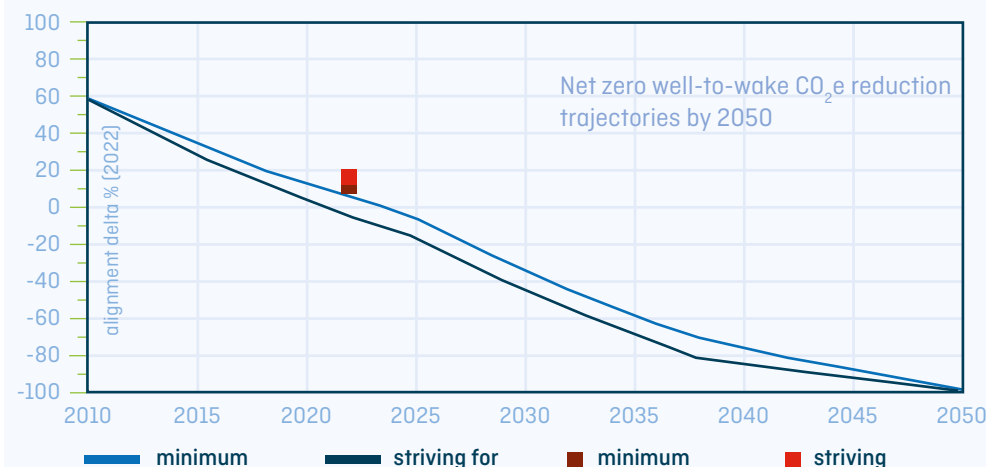
Portfolio climate alignment score

minimum

11.5%

striving

15.7%



Danish Ship Finance

Founding Signatory as of June 2019



Reporting percentage: 98%

What are your key takeaways from your climate alignment score?

We are pleased with the improvement in our climate alignment score against IMO's initial GHG strategy and with this year's high levels of reporting, in which we secured data for 98% of the portfolio. We simultaneously acknowledge the longer road ahead in aligning our portfolio with IMO's revised GHG strategy, which has resulted in significantly steeper decarbonisation trajectories. Aligning our portfolio with these new trajectories will require intensified dialogue with clients and closer monitoring and steering of our portfolio.

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

The past years' commitment to the Poseidon Principles has contributed valuable insights into the environmental performance of our shipping portfolio. Moving forward and in recognition of the enhanced common ambition to reach net zero close to 2050, these insights will come to play an increasingly decisive role in our lending decisions within the broader and multifaceted assessment of our clients on key ESG issues and their overall transition readiness.

[Link to institutional report](#)



This year we report a noticeable positive development in our result against IMO's Initial GHG Strategy– with a climate alignment score of +3.7% for 2022 compared to last years' results of +5.7%. Our portfolio would have been aligned if the negative impact of only five vessels out of a portfolio of nearly 600 vessels were removed.

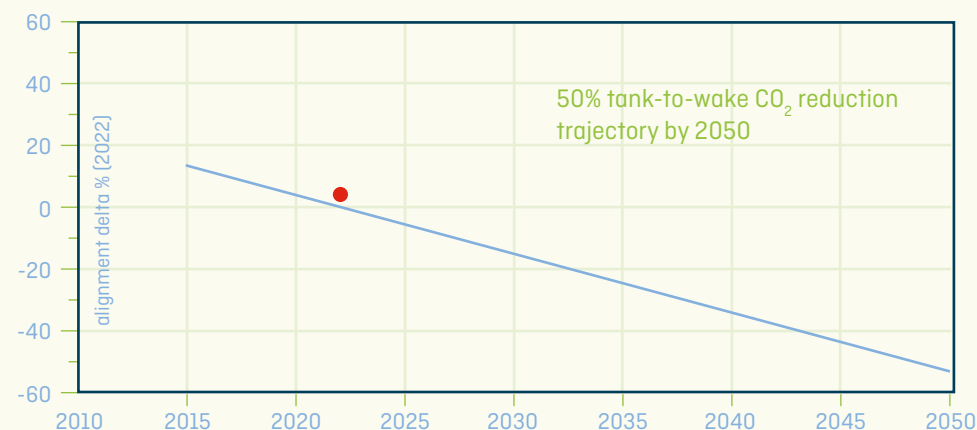
Sara Møller Jensen, Head of Sustainability



2018 IMO GHG Strategy

Portfolio climate alignment score

3.7%



2023 IMO GHG Strategy

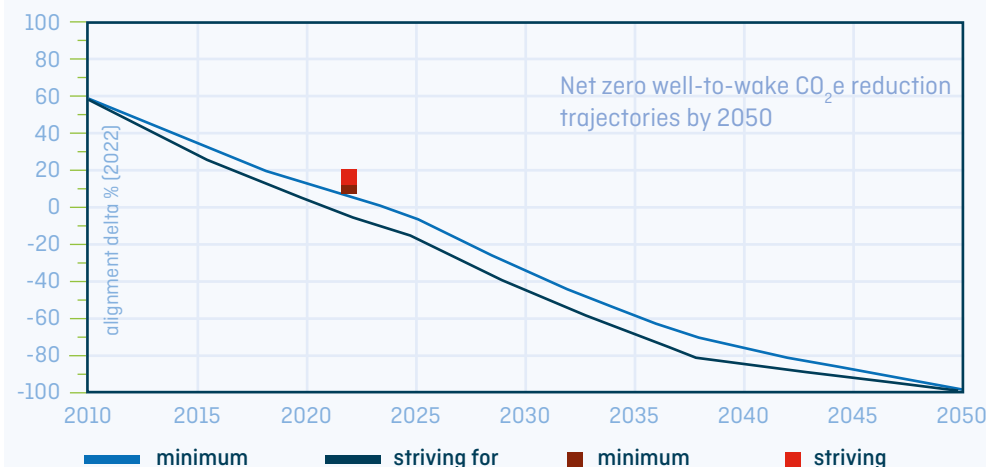
Portfolio climate alignment score

minimum

12%

striving

16.2%



Danske Bank

Founding Signatory as of June 2019

Reporting percentage: 100%

What are your key takeaways from your climate alignment score?

IMO initial target

As previous years, we see that that most of our financed vessels are performing well, while a few vessels are, due to their special operational trade, alone lifting the score to +8.6%. For example, when using the CII correction factor on our fleet of shuttle tankers, the alignment score improves to -1.2%.

IMO revised target

We see that the first reporting against the new IMO targets impacts vessel segments differently and gives us valuable knowledge in future vessel evaluation.

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

The assessment of a vessel's AER is today an important factor when discussing new transactions with our shipping customers. And, in addition to being a useful monitoring tool, our Poseidon Principles commitment is also expanding our knowledge base which we believe is helping us to make good business decisions.



The underlying analysis of this years' figures confirms that our continued focus on modern, flexible and efficient tonnage is the right way to go. We will continue to use the Poseidon Principles as one of many tools when supporting the energy transition in the maritime industry.

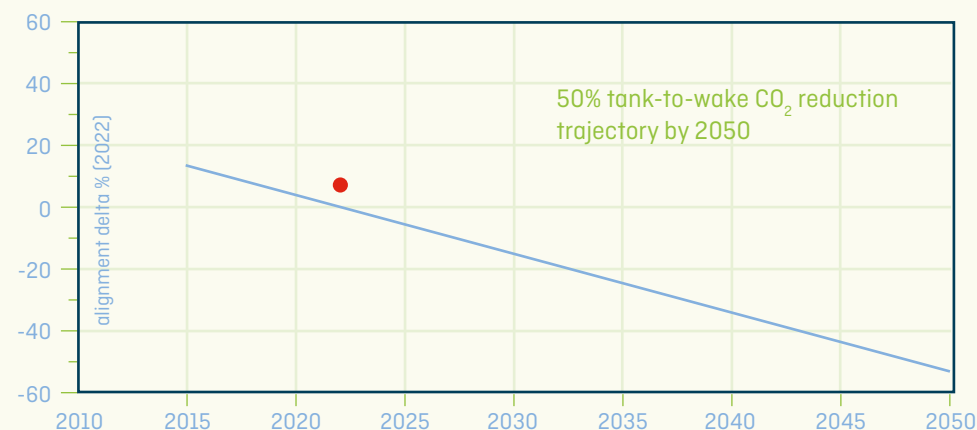
Einar Stavrum, Global Head of Shipping, Danske Bank



2018 IMO GHG Strategy

Portfolio climate alignment score

8.6%



2023 IMO GHG Strategy

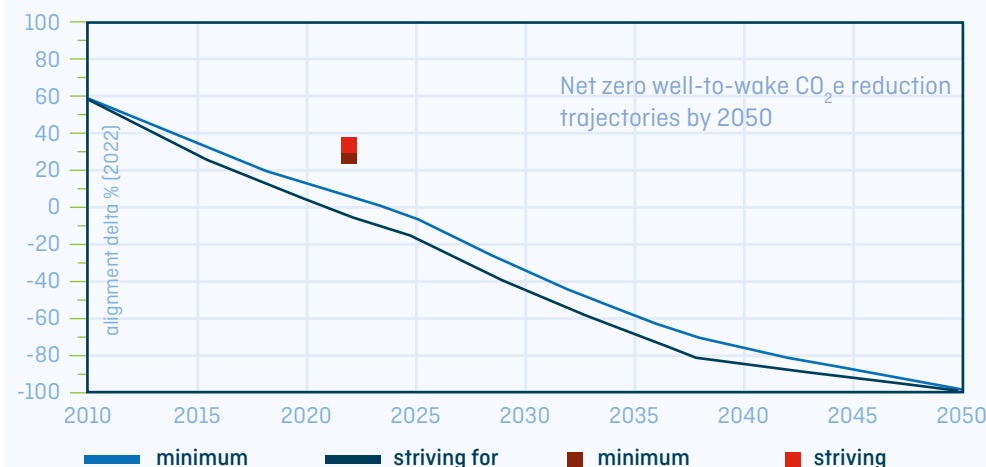
Portfolio climate alignment score

minimum

28.9%

striving

33.7%



DekaBank Deutsche Girozentrale



Signatory as of April 2022

Reporting percentage: 98.6%

What are your key takeaways from your climate alignment score?

Even though the Covid 19 crisis eased over the course of 2022, the global economy was impacted by the Russia-Ukraine conflict. Ultimately, exogenous factors continued to have a negative impact on Deka's portfolio alignment score, partly due to intensive shipping operations in some segments. The essential factors identified for a significant reduction in CO₂ emissions in international shipping, namely (i) investments in more sustainable facilities and (ii) the most efficient operation of these ships in combination with more sustainable fuels, were pursued by us in 2022, although we can only actively influence (i). Compared to 2022, the weighted portfolio AD-Score has improved from 5.2% to 4.1%. This was due to (a) Portfolio changes & (b) exclusion of one vessel from the scope of reported activities in coordination with UMAS because, according to the client, it was merely idling during the reporting period (just December 2022).

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

In line with our business strategy, Deka continues to invest only in the most modern and sustainable assets. The methodology of the Poseidon Principles and the resulting assessment of a ship's AER has already become an integral part of our activities in the vessel financing process and in discussions with our customers before the start of the 2022 reporting period. We always take into account the impact of a vessel on our portfolio alignment score and thus consciously make financing decisions based on the criteria defined by the Poseidon Principles. In 2022, we took the path towards a more sustainable and decarbonised shipping industry a step further together with our customers.

[Link to institutional report](#)



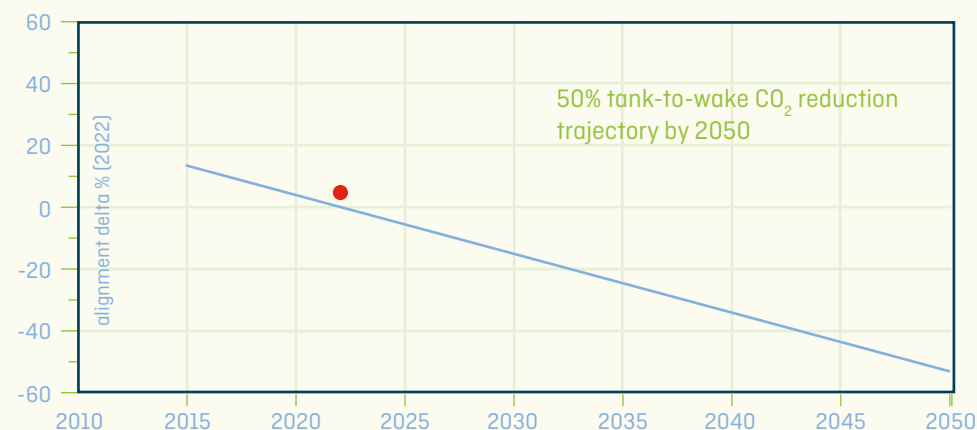
In order to proactively counteract the severe negative impact of the climate change and support new, eco-friendly technologies, Deka joined the Poseidon Principles in 2022. In its second year, sustainability remains the central and irreversible component of DekaBank's business model. Deka supports its customers in meeting these challenges and consciously aligns its ship lending activities with the Poseidon Principles.

Dr. Marco Albers, Head of Specialised Lending, DekaBank



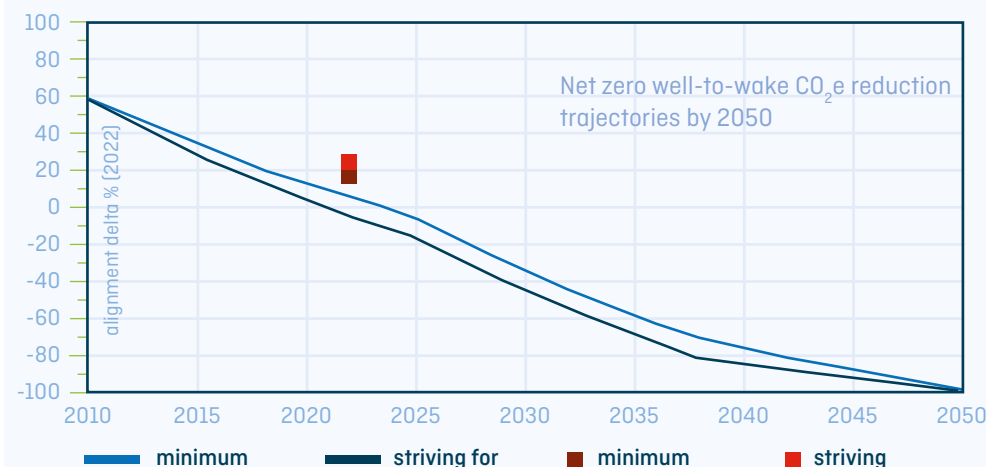
2018 IMO GHG Strategy

Portfolio climate alignment score	4.2%
Cargo vessels climate alignment score	3.5%
Passenger vessels climate alignment score:	28.2%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	17.8%	22.1%
Cargo vessels climate alignment score	16.6%	20.8%
Passenger vessels climate alignment score:	63.2%	69.3%



Development Bank of Japan Inc.



Signatory as of May 2021

Reporting percentage: 91%

What are your key takeaways from your climate alignment score?

While the LCA guidelines needed for a full life cycle GHG intensity assessment are still under discussion at the IMO, we disclosed our climate alignment score this year based on the new IMO GHG reduction strategy announced in July 2023. We consider this a meaningful attempt to comprehend the carbon footprint of our ship finance portfolio and our commitment toward decarbonisation under the new IMO strategy. The process showed us that particular types of vessels have an important impact on the score, giving us new insights for future financing.

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

As this is our third disclosure since signing on to the Poseidon Principles, we are still discussing the impact of the Principles on our business and decision-making from various perspectives. At the very least, however, the data from the Poseidon Principles enables us to make a fact-based analysis regarding decarbonisation. We will continue to proactively support the efforts of businesses to decarbonise through transition finance, sustainability-linked loans, and the new Zero-Emission Accelerating Ship Finance Program we established with Class NK.



We are pleased to present our third year of reports. We appreciate our clients' cooperation in reporting, which enabled participation this year to rise to 91 percent. As a new member of the steering committee, I am proud to be a part of the ambitious effort that is the first reporting based on the new IMO GHG reduction strategy. This year's results pointed to the long road towards the decarbonisation of the shipping industry under the new IMO GHG reduction strategy. DBJ is promoting the GRIT Strategy — G (Green): Realisation of a green society; R (Resilience & Recovery): Construction of a flexible, strong, safe, and secure infrastructure; I (Innovation): Initiatives for innovation; and T(Transition/Transformation): Strategic initiatives for transition — as a means of contributing to a sustainable society through investment and finance. Based on the GRIT Strategy, DBJ is committed to supporting decarbonisation efforts in the shipping industry and actively participating in the activities of the Poseidon Principles Association.

Michiyo MACHIDA, Managing Executive Officer



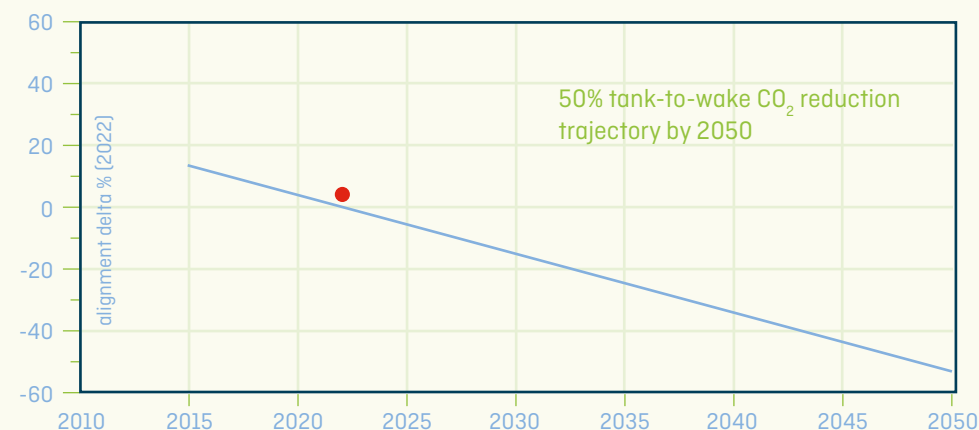
2018 IMO GHG Strategy

Portfolio climate alignment score

4%

Cargo vessels climate alignment score

4%



2023 IMO GHG Strategy

Portfolio climate alignment score

minimum

30.2%

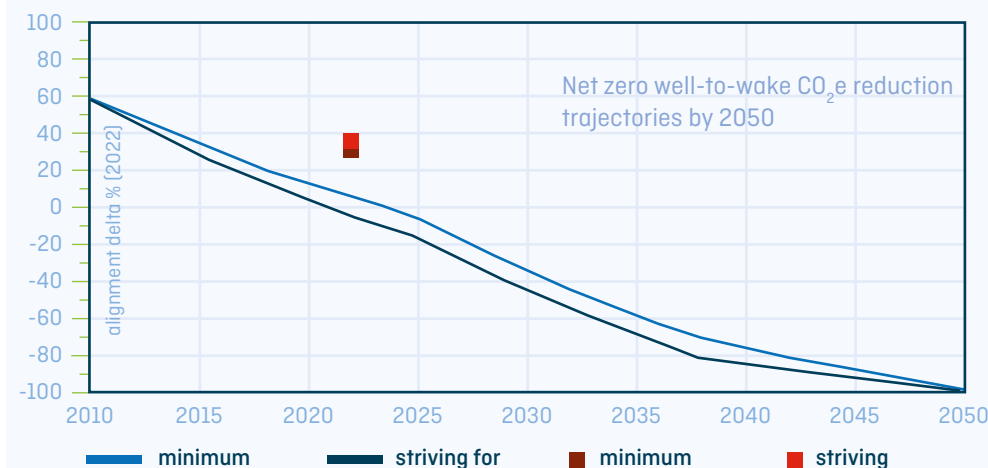
striving

35%

Cargo vessels climate alignment score

30.2%

35%



Founding Signatory as of June 2019



Reporting percentage: 92.4%

What are your key takeaways from your climate alignment score?

We are extremely pleased to record a positive development in our climate alignment score this year and a significant reduction in our AER numbers. The improvement reflects the increased efforts of our clients and the proactive measures taken to optimise operations, improve efficiency and ultimately reduce emissions. It is also a result of our capital allocation strategy and deal prioritization. With Covid-19 now behind us, the cruise market which had a significant negative impact on AER numbers in previous years has now normalized. It is also worth mentioning that our portfolio includes shuttle tankers. If we were to apply IMO approved Correction factors for these vessels, our total portfolio alignment would improve by 4-5% points in each of three trajectory categories.

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

We are actively using the Poseidon Principles data and the insights gained from client conversations around emissions and transition in our day-to-day decision making. We are also using the data to track the overall carbon intensity of our portfolio, for which we have set specific reduction goals for 2030 and 2050, and for reporting of financed emissions. We are actively using emissions and carbon intensity data to provide sustainable and transition financing solution to our clients. It is now the fourth year we are reporting Poseidon Principles' scores and the process has proven to be a useful addition to our capital allocation decisions on our path to decarbonisation of our portfolio.



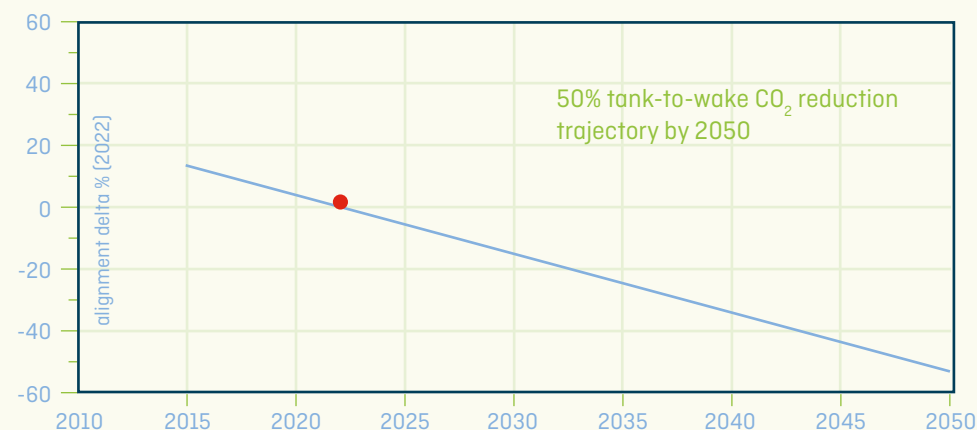
With the Poseidon Principles now embracing the revised IMO targets, the finance community is sending a very strong signal to the maritime community about the level of ambition and the way forward. As climate challenges are becoming more imminent and net zero deadlines are approaching, there can be no doubt that financial institutions have a very significant role to play in shaping the path to decarbonisation.

Christos Tsakonias, Global Head of Shipping



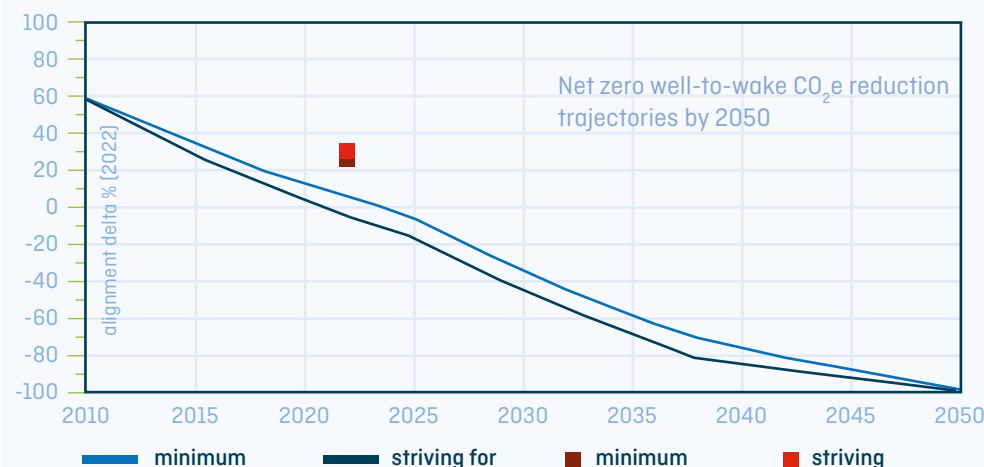
2018 IMO GHG Strategy

Portfolio climate alignment score	1.4%
Cargo vessels climate alignment score	-0.4%
Passenger vessels climate alignment score	11.5%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	25.7%	30.5%
Cargo vessels climate alignment score	17.6%	22%
Passenger vessels climate alignment score	70.9%	77.3%



Export Finance Norway

Signatory as of November 2019

Reporting percentage: 100%



What are your key takeaways from your climate alignment score?

The alignment with the new IMO ambition and misalignment with the previous ambitions was an unexpected result. However, upon analysis with the Poseidon Principles advisory, it was revealed that the scores are a result of the change to continuous baselines, which made it easier for vessels in our portfolio to fall under the emissions intensity baseline this year which is then reflected in our overall climate alignment score.

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

The part of our portfolio falling under the scope of the Poseidon Principles is unfortunately limited as the majority of our vessels are offshore service vessels or vessels that are not considered to be trading internationally and/or are below 5000 dwt. In terms of exposure, 58 % of Eksfins shipping portfolio remains outside of the scope of the Poseidon Principles. For the vessels in our portfolio covered by the Poseidon Principles they provide a valuable tool for understanding the carbon intensity of those vessels. However, as of now, the Poseidon Principles have yet to form the basis for decisions relating to our business activities.



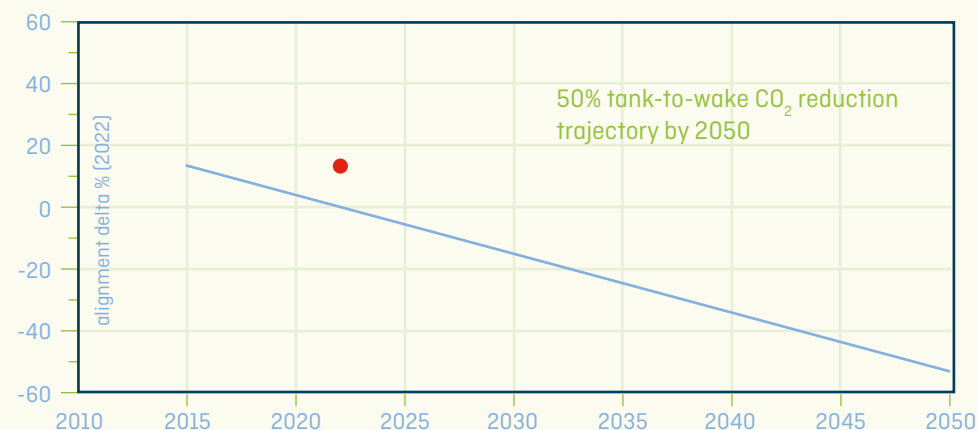
We are pleased to see that Eksfin's Poseidon portfolio is showing itself to be well aligned with the updated well-to-wake carbon factors and revised trajectories. As always, the Poseidon Principles calculations gives us valuable insight to our shipping portfolio. In our total shipping portfolio, which entails a large number of vessels outside the scope of the Principles, an increasing number of the vessels are future fuel ready or have already installed equipment reducing emissions such as batteries.

Solveig Frøland, Head of Maritime & Yards



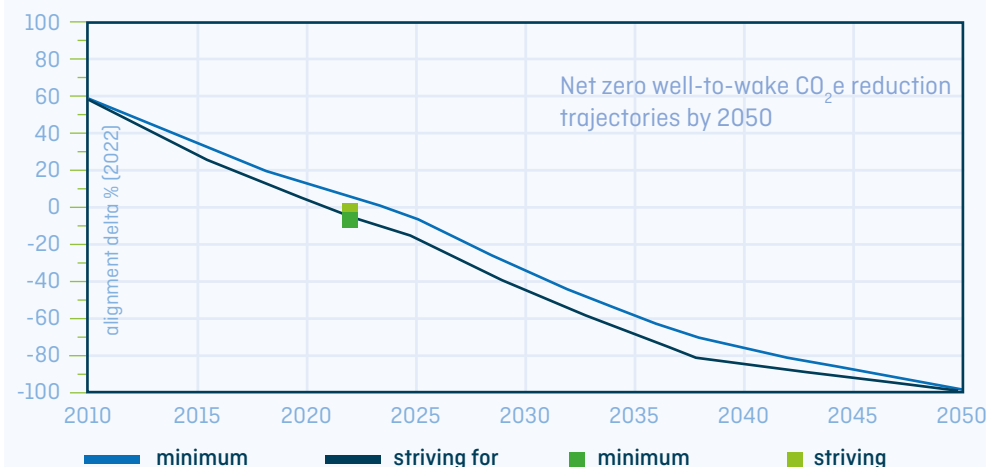
2018 IMO GHG Strategy

Portfolio climate alignment score **13.6%**
 Passenger vessels climate alignment score: 10.6%



2023 IMO GHG Strategy

Portfolio climate alignment score **-6.8%** **minimum** **striving**
 Passenger vessels climate alignment score -18.2% -15.1%



Finnvera Oyj

Signatory as of March 2021

Reporting percentage: 99.96%



What are your key takeaways from your climate alignment score?

The cruise shipping industry, which is significant in Finnvera's export credit guarantee exposure, has recovered from the exceptional years, and ships are operating normally again. This was reflected in our score aligned with the original IMO 50% target, which was well below the target, and explains the volatility compared to 2021. Measured by this trajectory, we are on a good path. However, in relation to the new IMO Revised GHG Strategy target, we do not yet reach the trajectories. The new trajectories take more widely into account the full life cycle of the various fuel-related emissions, such as methane emissions. The impact of the change in calculation method is most evident in regard to default emission factors of LNG. This has a concrete effect on Finnvera's score since approximately two-thirds of our ship finance portfolio covered by the Poseidon Principles are LNG-powered vessels.

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

We calculated the emissions of our ship finance portfolio for the third time. The Poseidon Principles have brought measurability and comparability to the monitoring of the climate impacts of Finnvera's ship finance. The climate alignment score gives us valuable information about the climate effects of our financing and that of the shipping industry, which covers a considerable share of our exposure. It also supports assessing the effects of Finnvera's own operations. The calculation has improved the quality of the data as a source for assessment, based to which we are also able to specify our reporting on climate impacts.

[Link to institutional report](#)

Mitigating climate change is a key strategic issue for Finnvera. In recent years, we have been actively developing measures in line with our climate targets. However, the ambition of measuring emissions has risen faster than the technological development. In the long run, we believe that the transition in the shipping industry will lead to solutions with fewer emissions. A good example of a future development is the NEcOLEAP project of the Meyer Turku shipyard in Finland, where the aim is to develop a climate-neutral cruise ship concept by 2025. The project is financed by Business Finland, which is part of the Team Finland network along with Finnvera. As an export credit agency, Finnvera also has good opportunities to influence the development of climate solutions, as we essentially finance new projects and new technology aiming to build more environmentally efficient ships than the current ones.

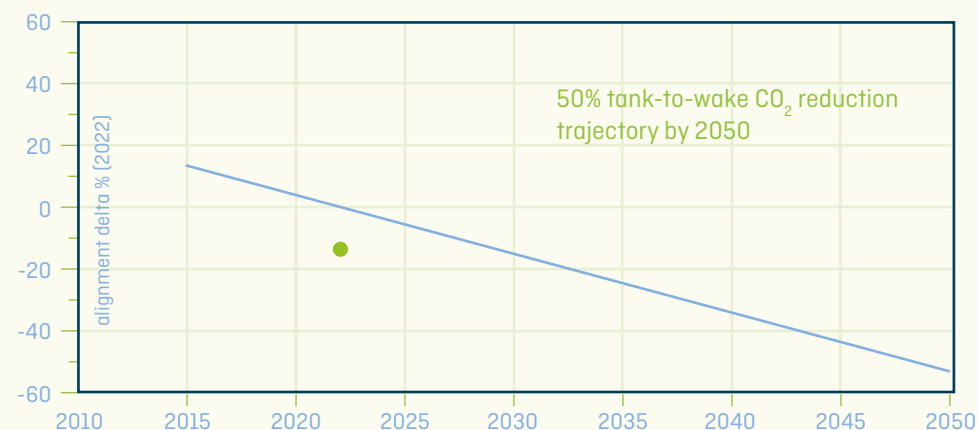
Jussi Haarasilta, Executive Vice President



2018 IMO GHG Strategy

Portfolio climate alignment score

-13.2%



2023 IMO GHG Strategy

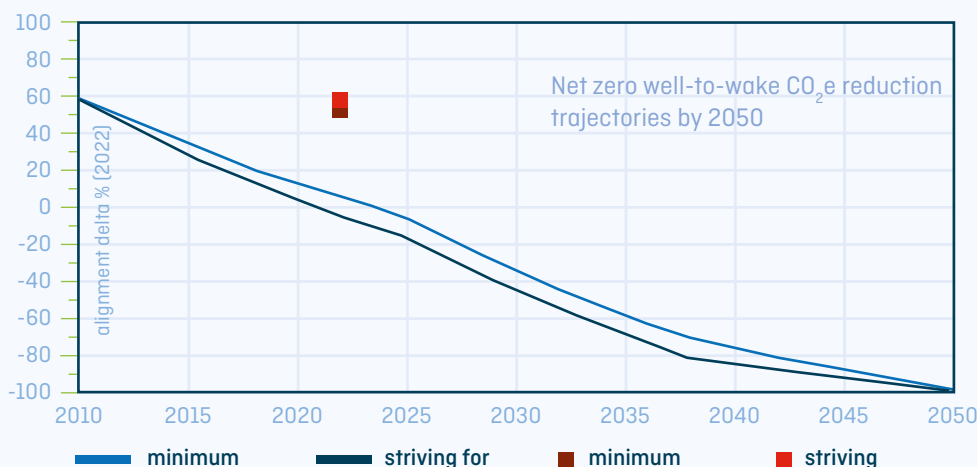
Portfolio climate alignment score

minimum

53.2%

striving

58.9%



What are your key takeaways from your climate alignment score?

Consistent with our results of the previous years, we are pleased to have achieved a portfolio alignment score below the Poseidon Principles IMO 50% trajectory for the 4th year running. This result reaffirms our approach of financing market leading companies who are in the forefront of shipping's energy transition. The score also reflects the effectiveness of our strategy with respect to client profile, asset types and sustainability leadership. Recognising the heightened ambition of the revised trajectories, we are satisfied that the results against the IMO "striving" and "minimum" trajectories position our portfolio well to pursue the intermediate and long-term IMO targets in the coming years. Going forward, the availability of low carbon fuels and associated propulsion technology will be key factors. To this end, it becomes all the more important for us to deepen our engagement with our clients and provide innovative financing solutions to enable their decarbonisation efforts be it through retrofits, new build vessels or other energy saving measures.

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

An assessment of the debt-weighted impact of every ship finance transaction on the overall portfolio alignment score is now an integral part of our internal process. Likewise, an asset level evaluation consistent with the Poseidon Principles framework is a key consideration in our internal decision making. With the adoption of the revised trajectories, the client's mid to long term transition plan becomes an important aspect in meeting the future climate alignment requirements. In this regard, we are increasingly evaluating how we can support our clients, be it for their investments in efficiency improvements or by facilitating the use of low carbon fuels for their vessels in the coming years. This will be crucial to achieving the substantial emissions reductions required to align with the revised Poseidon Principles trajectories.

[Link to institutional report](#)

I am pleased to report that that for the 4th year running ING has outperformed the IMO 50% Poseidon Principles trajectory. It is also satisfying that ING, along with other signatory banks of the Poseidon Principles, have proactively adopted the ambitious targets consistent with IMO's revised strategy approved at MEPC 80 earlier this year. Achieving alignment with the revised trajectories will be challenging in the near-term until the transition to low carbon fuels gains traction as their production scales up. We see this as an opportunity to work together with our clients and the wider stakeholder groups to steer the shipping industry towards net zero and 1.5°C aligned pathways. ING is committed to striving for progress and supporting its clients in implementing their transition strategy.

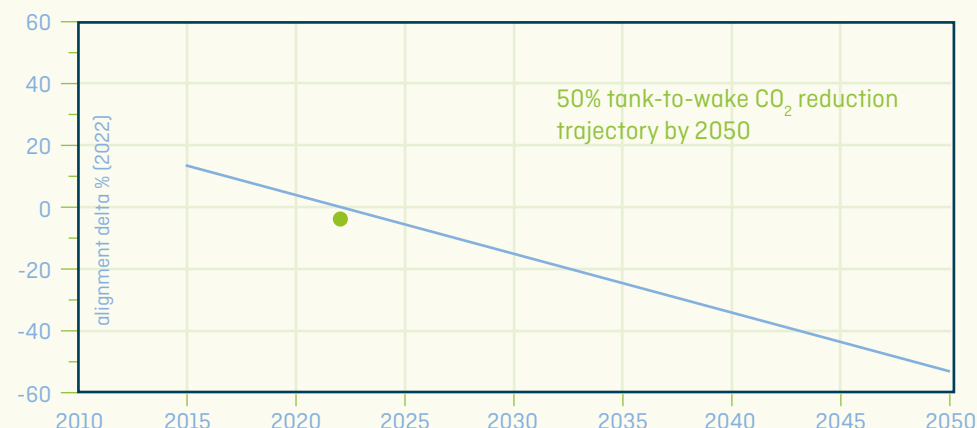
Stephen Fewster, Global Head of Shipping Finance, ING and Treasurer of the Poseidon Principles Steering Committee



2018 IMO GHG Strategy

Portfolio climate alignment score

-3%



2023 IMO GHG Strategy

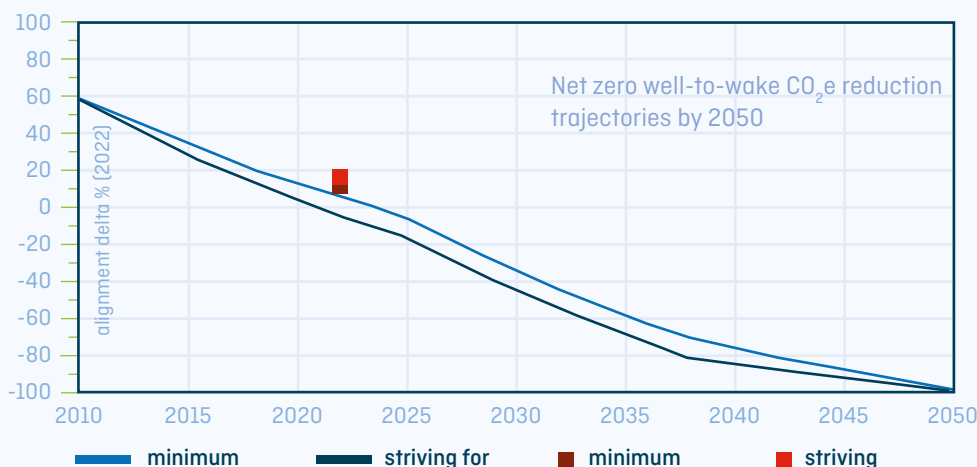
Portfolio climate alignment score

minimum

12.4%

striving

16.6%



KfW IPEX-Bank

Signatory as of September 2022

Reporting percentage: 94.9%

KfW IPEX-Bank

What are your key takeaways from your climate alignment score?

Our alignment score is strongly influenced by the portfolio mix. While our cargo portfolio is well aligned with the initial IMO strategy [-9.8%] we are seeing a general misalignment of our cruise portfolio [+15.2%]. Overall, the bank's maritime portfolio is showing a misalignment of 6.0%, that is largely driven by the bank's sizable cruise share. The 2022 data is still moderately affected by the pandemic, i.e., cargo ships idling due to port congestion and cruise ships only slowly returning to full operation during the 2nd half of the year. Regarding the cruise segment we recommend the technical committee to adopt a more reasonable AER measurement methodology based on pax/ lower berth capacity and/or cruise vessel occupancy rather than gross tonnage. Otherwise, the current methodology could trigger the wrong incentive to finance small vessels with high emissions per passenger instead of large efficient vessels with low emissions per passenger.

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

Providing sustainable finance is a key topic for KfW IPEX-Bank. We have assessed the EEDI for any newly financed vessel since 2011 and introduced stringent sector guidelines in 2019 setting out minimum EEDI requirements to align our portfolio with the IEA Sustainable Development Scenario (SDS). The data retrieved under the Poseidon Principles is extremely valuable to back-test the operational performance of the underlying vessels in our credit portfolio and to make future financing decisions supporting the transformation of the global maritime industry.



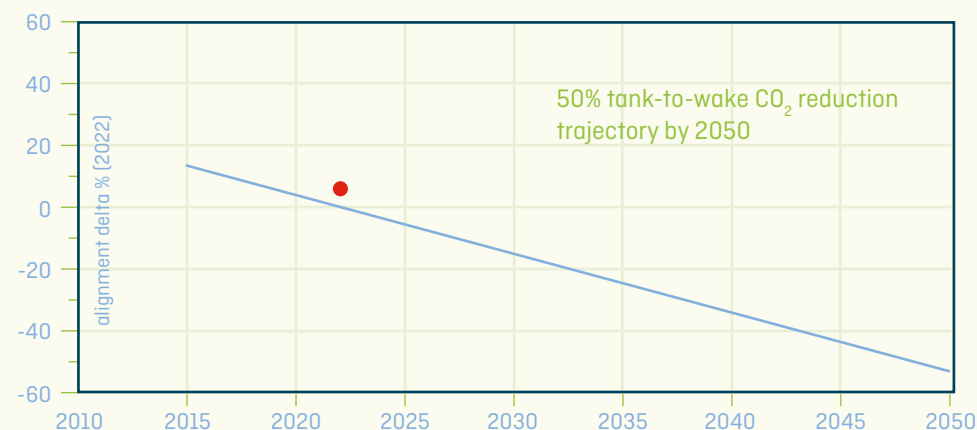
KfW IPEX-Bank's ambition is to be one of the leading transformation banks. We very much value the introduction of the Poseidon Principles helping us to transform our shipping credit portfolio as well as to support our clients to finance the most energy efficient vessels and together promoting the transformation of the maritime industry towards net zero. The results from our first Poseidon Principles reporting are quite promising particularly for the cargo side of our business. On the face of it, the data for our cruise portfolio indicates a misalignment that would require immediate corrective action. And while the efficiency of cruise vessels in 2022 may have been reduced by the pandemic, the numbers obviously overly exaggerate this effect. The cruise industry has consistently been leading technical innovation and will continue to be at the forefront of the transformation.

Andreas Ufer, Member of the Management Board



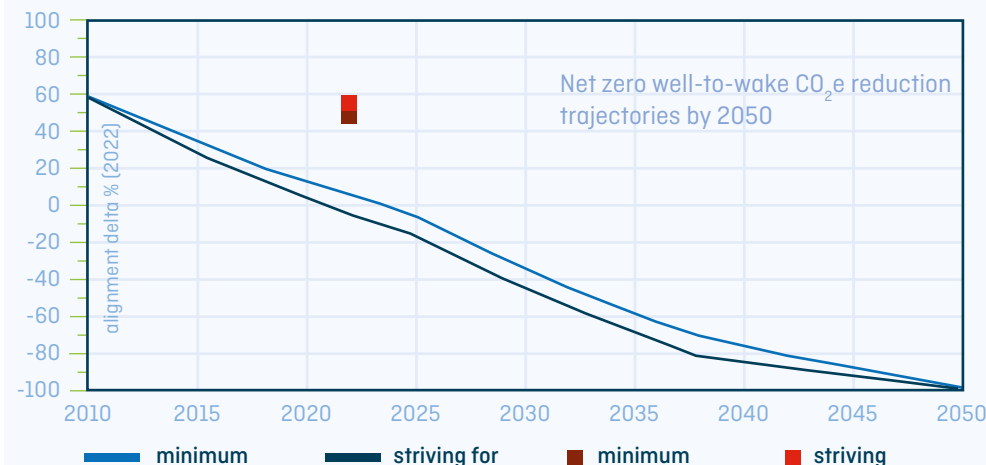
2018 IMO GHG Strategy

Portfolio climate alignment score	6%
Cargo vessels climate alignment score	-9.8%
Passenger vessels climate alignment score	15.2%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	49%	54.6%
Cargo vessels climate alignment score	6.7%	10.7%
Passenger vessels climate alignment score	73.6%	80.1%



Signatory as of March 2021


Reporting percentage: 85%

What are your key takeaways from your climate alignment score?

This is the second year as a signatory of the Poseidon Principles. Thanks to our clients, our reporting percentage has improved from 71.4% in 2022 to 85.0% this year. Our climate alignment score is 3.9% (IMO Initial GHG Strategy) meaning, continuing from last year, our portfolio is broadly aligned with the decarbonisation trajectory. However, when applying the new revised trajectories, our climate alignment scores are 26.2% (IMO Revised GHG Strategy -minimum trajectory) and 30.9% (IMO Revised GHG Strategy -striving trajectory). Although results are dependent on the macroeconomic, political and social environment and will be influenced by the development of new technology, we will build our portfolio from a long-term perspective, analysing and utilising the results every year.

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

The Poseidon Principles enable MUFG Bank to be on the same page with our clients and to discuss each of our objectives to align with the IMO's new ambition to reach net-zero GHG emissions in the shipping sector around 2050. We are highly focused on engagement with our clients and will continue making efforts to understand the latest challenges for the energy transition to net-zero in the shipping sector. We will work closely with our clients to help them achieve their strategies on carbon neutrality taking into account future technology development and innovation for decarbonisation.

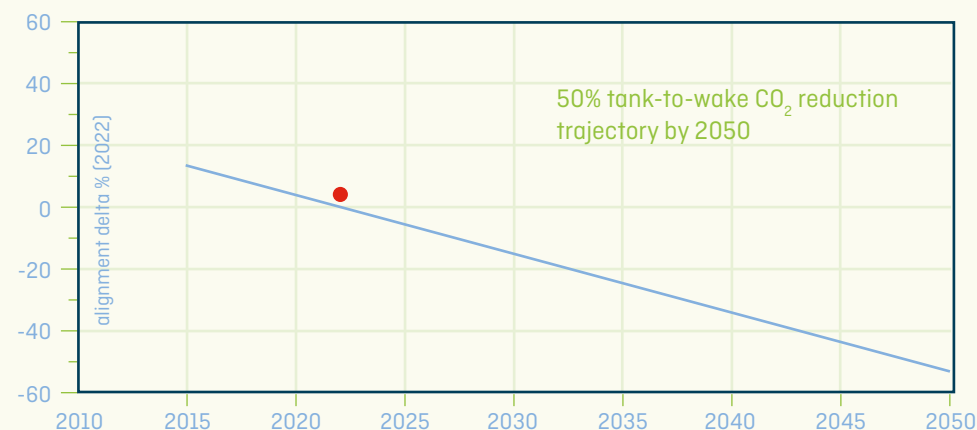


We would like to express our gratitude to our clients for providing data continuing from the previous year. Our clients are working actively toward realising carbon neutrality. We intend to work closely with them in their endeavors to accomplish transition and reach their carbon neutral goals.

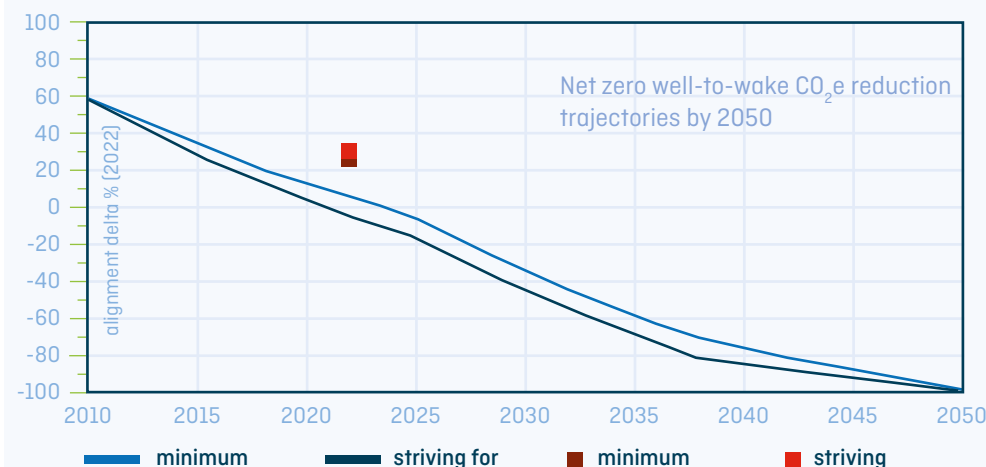
Koichiro Oshima, Managing Executive Officer, Head of Financial Solutions Group



2018 IMO GHG Strategy

Portfolio climate alignment score
3.9%


2023 IMO GHG Strategy

Portfolio climate alignment score
minimum
26.2%
striving
30.9%


Nordea Bank Abp

Founding Signatory as of June 2019

Reporting percentage: 99.9%

Nordea

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 reporting achieving close to a 100% reporting rate for four successive years. The Poseidon Principles enables us to track the decarbonisation of our shipping portfolio over time 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. Adjusting the alignment score of the portfolio to account for Shuttle Tanker Correction Factors, the portfolio is aligned with respect to the IMO Initial GHG Strategy trajectory. This emphasizes the magnitude correction factors could impose to segments that, arguably, has been unfavourably represented in existing trajectory methodologies.

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

The data from the Poseidon Principles enables us to have a fact-based dialogue with our customers regarding decarbonisation. This will pave the way for a more decarbonised shipping sector in the future. When evaluating new transactions, the Poseidon Principles data is an important consideration and part of our decision making material.



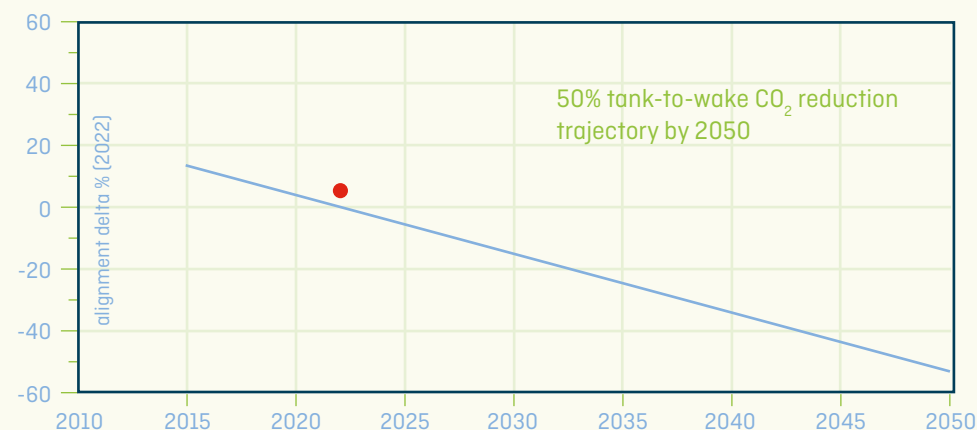
Nordea is proud to be part of the Poseidon Principles and we view the initiative as an important contribution in the decarbonisation of shipping. We are pleased with response that we have obtained and with the impressive commitment that has been demonstrated from our clients. Nordea is committed to be transparent on the carbon footprint of our shipping portfolio and to work closely with our clients to ensure continuous decarbonisation of the maritime sector to align with 2030 and 2050 targets.

Geir Atle Lerkerød & Thor-Erik Bech, co-Heads of Shipping



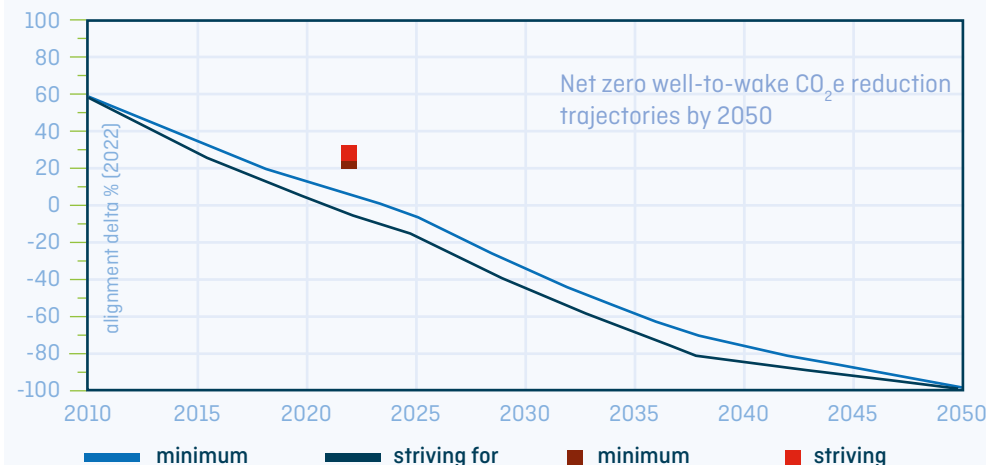
2018 IMO GHG Strategy

Portfolio climate alignment score	5%
Cargo vessels climate alignment score	5.3%
Passenger vessels climate alignment score	0.6%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	23.1%	27.7%
Cargo vessels climate alignment score	21.1%	25.6%
Passenger vessels climate alignment score	57.5%	63.4%



Signatory as of December 2021

Reporting percentage: 96.5%

What are your key takeaways from your climate alignment score?

We are pleased to report an improved portfolio climate alignment score of -2.7% on the initial trajectory compared to 4.5% last year. This is not only an effect of normalisation from the Covid-19 pandemic, but also the industry and shipowners' continued efforts to improve operations thus reducing emissions.

After applying the CII Correction Factor for shuttle tankers, our climate alignment score is improved to -4.5%.

On the revised trajectories (based on IMO's latest trajectory) which brings us closer to the Paris Agreement's 1.5°C ambition and on a well-to-wake basis, we come up at 11.2% on the 'minimum' trajectory and 9.4% with the shuttle tanker correction factor applied.

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

Our strategy to focus on companies where the environment is front and centre of their daily operations and their strategic decisions have not changed. Our clients are involved in improving operations with retrofits and technology whilst investing with stakeholders into initiatives to find and apply alternative fuels. We will continue to support their efforts in this space.

[Link to institutional report](#)



We are pleased with the improved alignment score, which reflects our continued efforts to support customers to decarbonise. However, the journey to net-zero remains challenging as it will take some time before commercially viable low-carbon alternatives for the sector become available. However, with collective collaborative efforts of key stakeholders such as shipowners, charterers, shipbuilders, financiers, infrastructure and energy providers, we remain confident that practical solutions will develop. We thank all our customers and partners for their commitment to this cause.

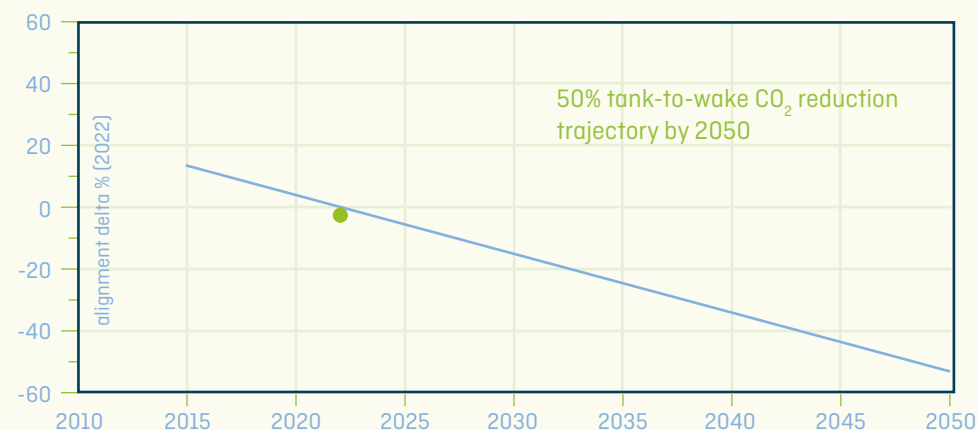
Angeline Teo, Global Corporate Banking



2018 IMO GHG Strategy

Portfolio climate alignment score

-2.7%



2023 IMO GHG Strategy

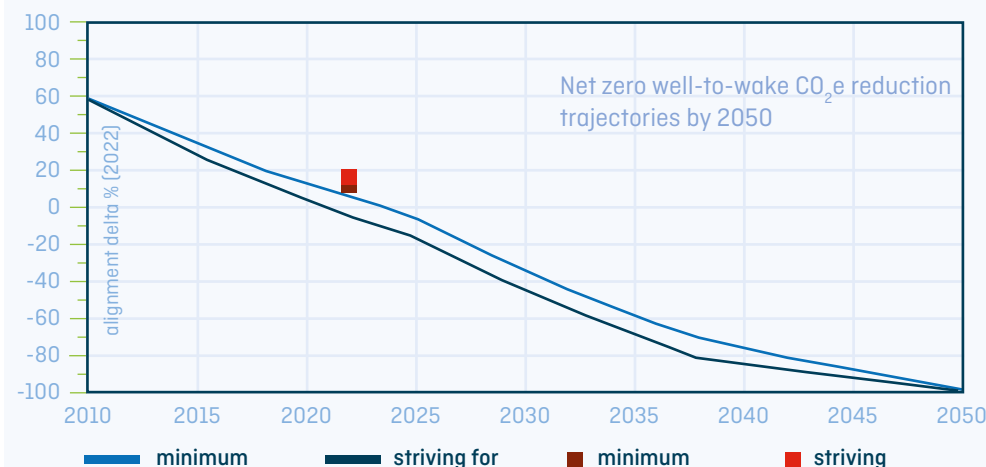
Portfolio climate alignment score

minimum

11.2%

striving

15.3%



SACE



Signatory as of October 2021

Reporting percentage: 96.9%

What are your key takeaways from your climate alignment score?

This is the second year of reporting since SACE's adhesion to the Poseidon Principles. This year we have further expanded the percentage of our shipping portfolio covered by the reporting reaching 97% (from 78% last year), thanks to a continued cooperation with the shipowners and the banks. Moreover, the number of ships included in this year's reporting has increased, with new vessels that become operational in 2022. Taking into consideration the trajectory based on the IMO's Initial Strategy, compared to last year SACE's score has significantly improved (from 51% to 15%). Although the result is still above the decarbonisation trajectory, this enhancement certainly represents a positive signal, even more considering the increase in the assessed portfolio. The Revised IMO Strategy has introduced more ambitious targets for the ship sector with new trajectories that are also included in this year's results on the climate alignment.

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

The ship sector, and in particular the cruise industry, represents the first sector of SACE's exposure. This is why SACE's adhesion to the Poseidon Principles marks a fundamental milestone in our assessment of the climate impact of our business activity. Last year we have conducted the first measurement of our entire portfolio's carbon footprint based on 2021 data and we are currently in the process of updating it to 2022. The work conducted through the Poseidon Principles has been a key component of the whole exercise, providing access to quality primary data and sound emission factors to calculate the emissions generated by a significant portion of our exposure. The recent updates in the Technical Guidance have contributed to further improve the methodology and render it closer to the Paris Agreement's objectives.



In line with the Poseidon Principles, for the second year SACE has assessed the climate alignment of a significant portion of its portfolio. Compared to last year our score has significantly improved. The new IMO Strategy incorporated this year within the Poseidon Principles' methodology presents more ambitious objectives for the industry. We will continue to monitor the evolution of the climate alignment of our shipping portfolio, while at the same time supporting our clients in their transition plans.

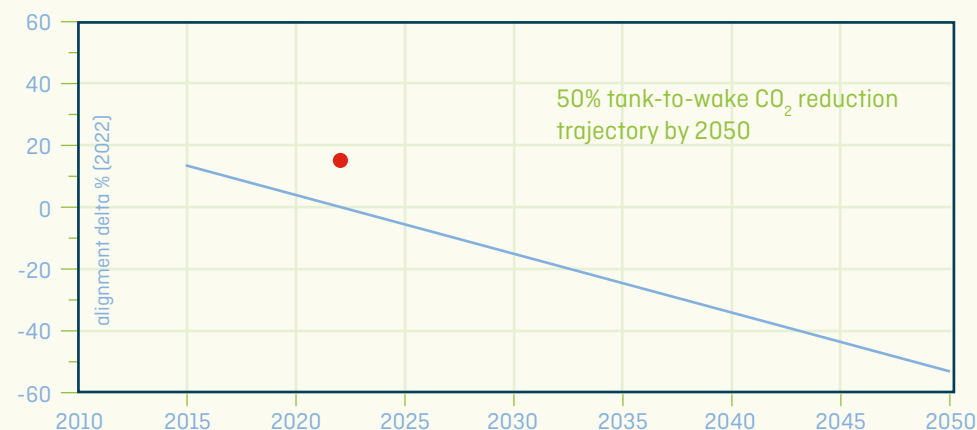
Giammarco Boccia, Managing Director, Business Corporate



2018 IMO GHG Strategy

Portfolio climate alignment score

15.2%



2023 IMO GHG Strategy

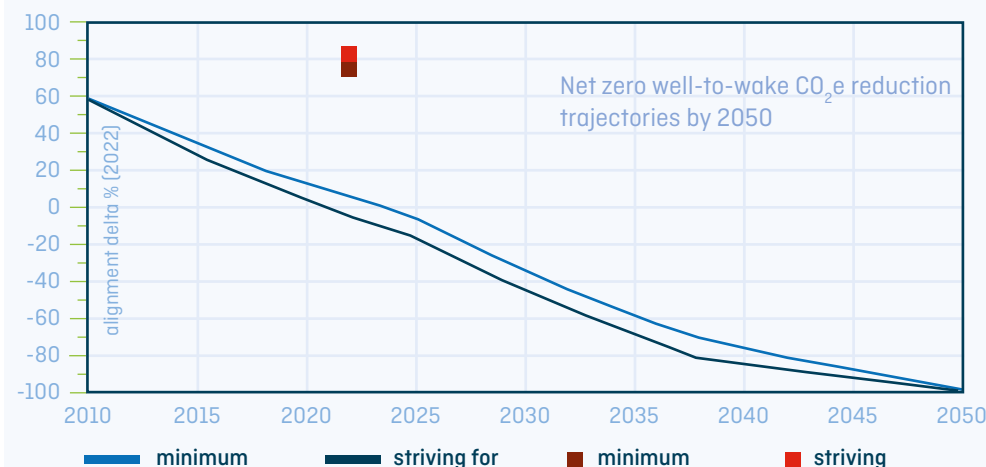
Portfolio climate alignment score

minimum

76.8%

striving

83.3%



SBI Shinsei Bank, Limited

Signatory as of December 2021

Reporting percentage: 87.2%



What are your key takeaways from your climate alignment score?

We are delighted to present our second annual report on our climate alignment performance. With the generous support of our valued clients, we have made significant progress in improving our score based on the initial GHG strategy and increasing our reporting coverage compared to the previous year. Our analysis also revealed that the choice of fuels can have a substantial impact on the score, due to the changes in the calculation methodology in line with the IMO's revised strategy (minimum and striving), such as adopting the well-to-wake approach. We remain committed to closely monitoring our shipping portfolio and exploring ways to enhance our score and contribute to the global reduction of GHG emissions in the shipping sector.

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

The Poseidon Principles have provided us with a wide perspective in terms of ESG and we are taking them into account when we have new finance opportunities. Through the activities of the Poseidon Principles, we engage with our clients to support their transition strategy and pursue our decarbonisation ambition. We will continue to align our strategy in the shipping finance business with the Poseidon Principles.



We proudly present our climate alignment scores for this year. The results show remarkable progress over the previous year and highlight our long-term commitment to achieving net zero by 2050. In accordance with the revised strategy of the Poseidon Principles, we will continue to partner with our clients to foster the green transition in the entire maritime industry.

Kenji Uesaka, Executive Officer/Head of Group Structured Solution



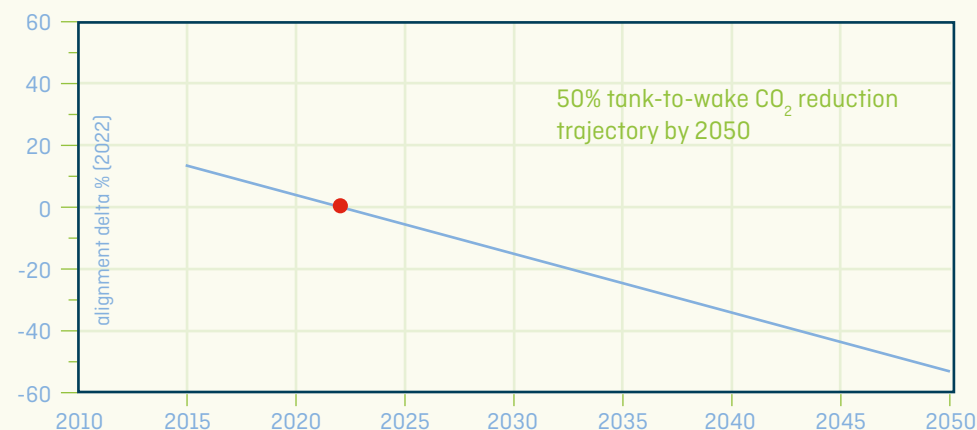
2018 IMO GHG Strategy

Portfolio climate alignment score

0.4%

Cargo vessels climate alignment score

0.4%



2023 IMO GHG Strategy

Portfolio climate alignment score

minimum

24.4%

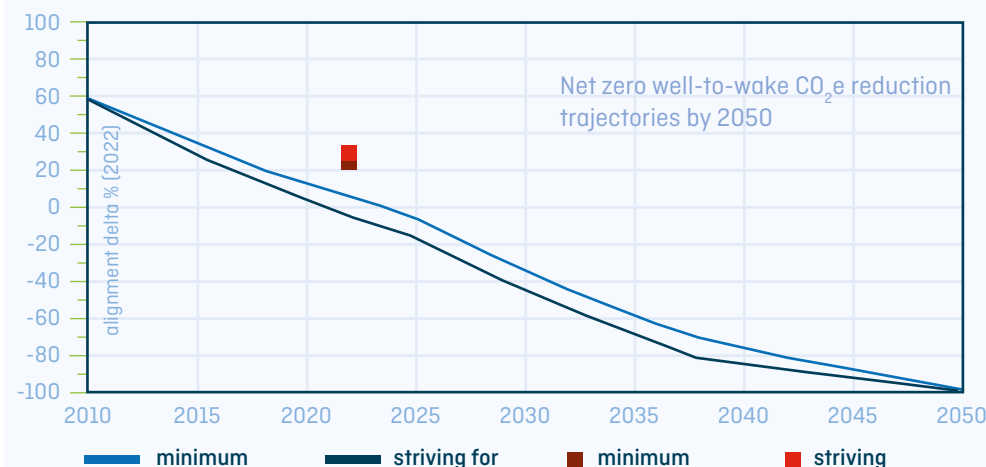
striving

28.9%

Cargo vessels climate alignment score

24.4%

28.9%



Signatory as of December 2020

Reporting percentage: 96%

What are your key takeaways from your climate alignment score?

Climate change is one of the biggest challenges of our time and as a bank we have an important role to play in supporting the global energy transition. SEB is very satisfied with the high response rate and the cooperation of our shipping clients in collecting the required data. This year we are pleased to report a score aligned with the IMO 2050 trajectory. After two years of negative impacts from the pandemic on the cruise segment, we see a significant improvement in this category this year. Our results under the revised trajectories are broadly in line with our expectations.

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

While SEB supports the increased ambition level to align with the IMO Revised GHG Reduction Strategy, the results under the new trajectories call for additional analysis and the reporting of at least another year in order to draw meaningful conclusions. We remain committed to engaging and allying with our customers in the pursuit of reaching the revised decarbonisation targets. We will continue using our observations and insights from the Poseidon Principles reporting as part of our decision-making tools to ensure portfolio alignment with the relevant trajectories over time.

[Link to institutional report](#)



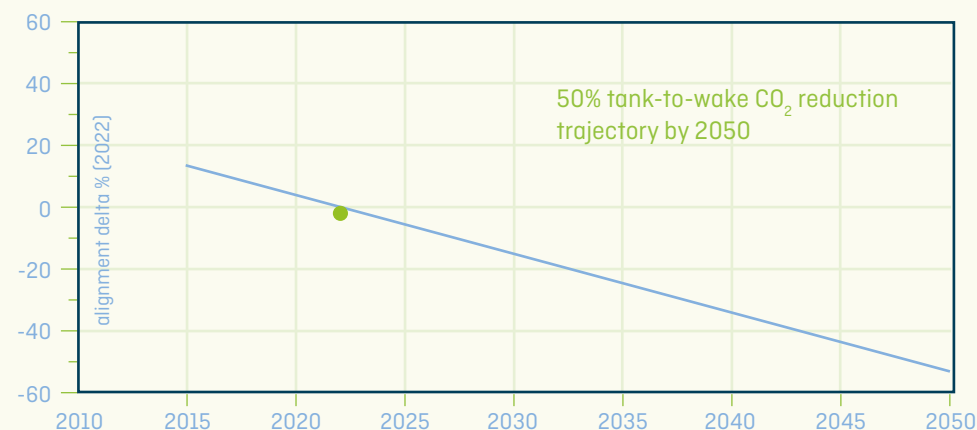
SEB is pleased to report an improved climate alignment score for 2022 while acknowledging the need to collectively accelerate the decarbonisation efforts of the shipping industry in light of the IMO Revised GHG Reduction Strategy.

Hans Christian Kjelsrud, Global Head of Shipping Coverage

2018 IMO GHG Strategy

Portfolio climate alignment score

-1.5%



2023 IMO GHG Strategy

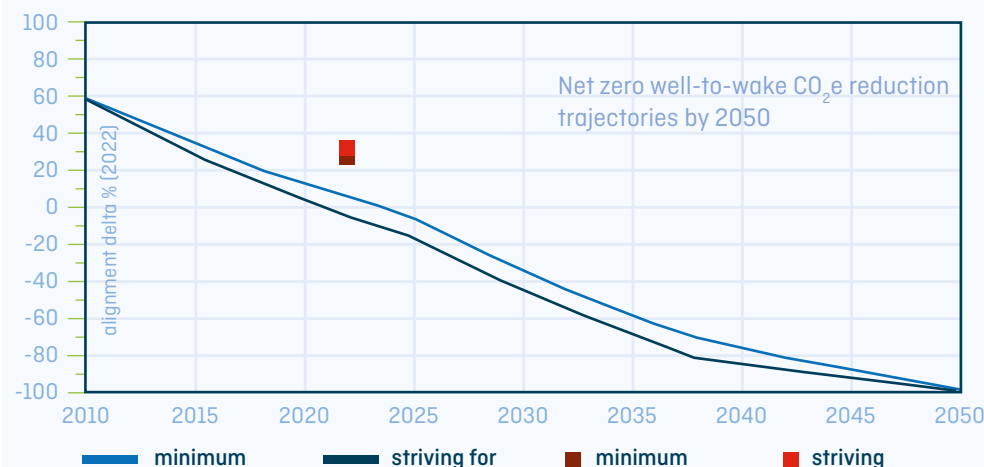
Portfolio climate alignment score

minimum

25.9%

striving

30.6%



SMBC Bank

Signatory as of January 2021

Reporting percentage: 73.8%



What are your key takeaways from your climate alignment score?

While our portfolio has continued to improve this year and is now aligned with the initial IMO GHG strategy, the impact of the IMO revised strategy is, as expected, significant. This is the case across all sectors, but especially relevant for a few such as cruise and car carriers, which despite not representing a large share of our portfolio, are nevertheless impacting our score significantly. As this is the first time climate alignment scores are calculated against the revised trajectories, this year represents a starting point, which will help us understand the performance of our exposure to the sector going forward.

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

With 3 consecutive years of granular data collected under the Poseidon Principles framework, we are able to deepen the analysis and understanding of our financed emissions. The Poseidon Principles are helping us shape the strategic direction required to continue reducing the carbon intensity of our portfolio, as we are conscious that the targets will become harder to meet each year.



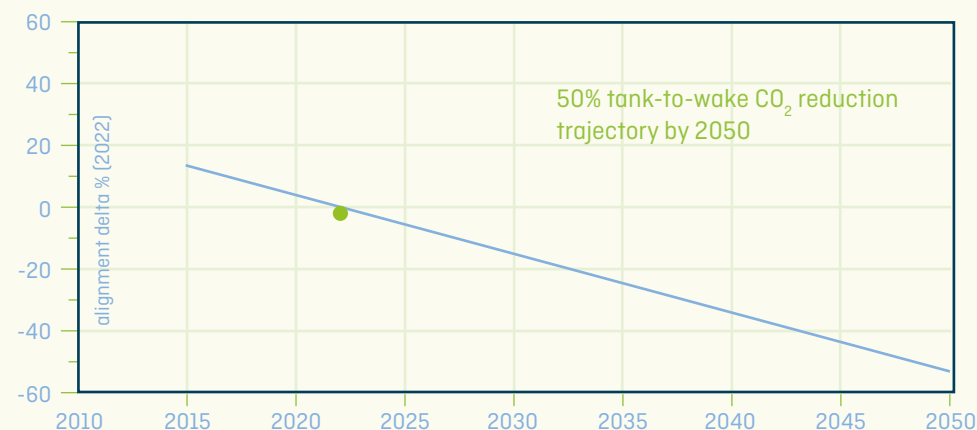
While our climate alignment score has improved again this year, we look forward to continue working with customers and other industry stakeholders to support the maritime sector transition journey. The more ambitious and comprehensive trajectories adopted by the IMO in July 2023 are challenging, as reflected by their impact on climate alignment scores, but are welcome as they will support informed lending decisions towards achieving net zero by 2050.

Guillaume Dufour, Head of Maritime Finance, EMEA



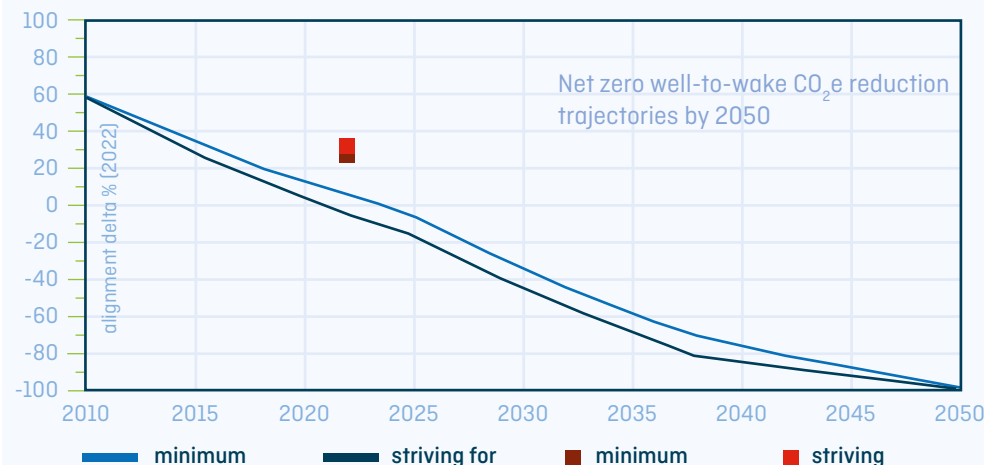
2018 IMO GHG Strategy

Portfolio climate alignment score	-0.6%
Cargo vessels climate alignment score	-1.1%
Passenger vessels climate alignment score	3.3%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	26.6%	31.3%
Cargo vessels climate alignment score	20.7%	25.2%
Passenger vessels climate alignment score	81.7%	88.5%



Société Générale

Founding Signatory as of June 2019



Reporting percentage: 99.6%

What are your key takeaways from your climate alignment score?

With the revision of the IMO strategy over the summer, the industry has now a better perspective on the challenges of decarbonisation. Our climate alignment score with the IMO's revised strategy, with a misalignment of +36.8% and +41.9% respectively against the minimum and striving for trajectories, demonstrates the importance that all stakeholders need to work even more closely to accompany the industry towards its ambitious goals. We will factor these initial results and adapt to this long-term challenge with even more dialogue and actions towards reaching this goal. As demonstrated with a reduced misalignment score against the IMO initial strategy of +0.7% (+15.4% in 2021 and +23.7% in 2020), our intensified lending policy over the past few years is bearing fruit, enabling an improved score. More stringent origination guidelines and market normalisation contributed to an improved alignment score of -2.5% for our cargo vessel portfolio (from +1.1% in 2021 and +2.8% in 2020) and a reduced misalignment on passenger vessels of +6.4% (from +45.2% in 2021 and +68.4% in 2020).

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

Société Générale's commitments towards the energy transition will continue to strongly influence our business activity and strategy, including more stringent lending guidelines. The ambitious revised strategy of the IMO will only be achievable if we collectively work towards accomplishing these goals, with shared effort across the overall ecosystem. The exponential ramp up of alternative technologies and feedstock will be instrumental in reaching the objective whilst a major focus on the on-water fleet will lead to wider adoption of slow steaming and retrofit. We will continue to engage in strategic dialogues with our clients to transform these challenges into opportunities and thereby help the maritime industries transition towards net zero.

Link to institutional report



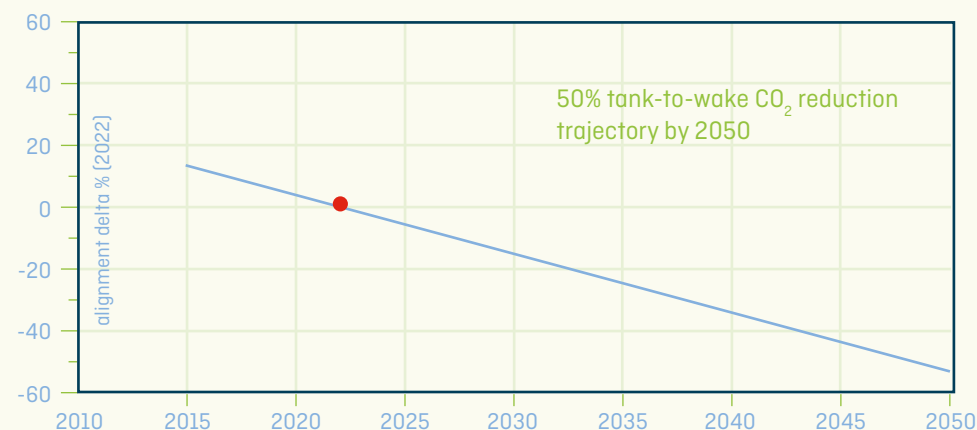
With 34 Poseidon Principles signatories and strong shipowner client support, there is a strong momentum throughout the industry towards climate alignment. The results against the published new IMO ambition illustrate the challenges we all face and the importance of stakeholder cooperation throughout the value chain to introduce new low-carbon fuels at the earliest opportunity whilst retro-fitting existing fleet with latest technologies. Wider banking targets to align with NZBA requirements will drive our business model in the years ahead with capital prioritised for best-in-class shipowners and vessels with a pathway to alignment.

Paul Taylor, Global Head of Maritime Industries



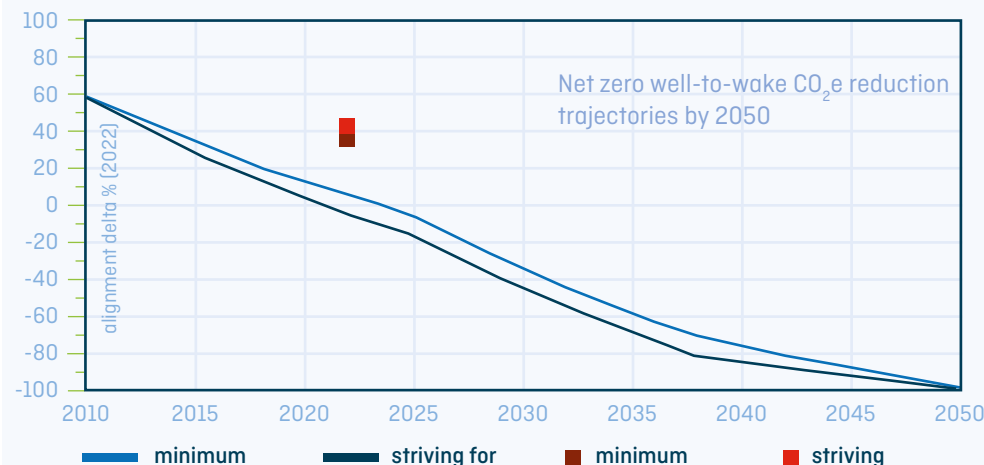
2018 IMO GHG Strategy

Portfolio climate alignment score	0.7%
Cargo vessels climate alignment score	-2.5%
Passenger vessels climate alignment score	6.4%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	36.8%	41.9%
Cargo vessels climate alignment score	19%	23.4%
Passenger vessels climate alignment score	68.3%	74.6%



SpareBank 1 SR-Bank ASA

Signatory as of November 2020

Reporting percentage: 100%



What are your key takeaways from your climate alignment score?

We are very pleased that all our customers have been willing to share their data with us also this year, giving us a rate of reporting of 100%. Our alignment score in the Initial GHG IMO Strategy is still good, but as expected we are no longer aligned when calculating against the new IMO Revised GHG Strategy.

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

We use data from the Poseidon Principles calculations to have a more fact-based dialog with our shipping clients regarding decarbonisation. We engage in discussions with clients and encourage them to implement necessary improvements towards meeting the targets, where possible. Our experience is that most clients have a deep understanding of the decarbonisation issues and are planning investments accordingly.



We wholeheartedly support the increased ambitions of the Poseidon Principles in aligning with IMO's revised strategy, knowing full well that meeting the targets will be demanding for the shipping industry and for the banks supporting it.

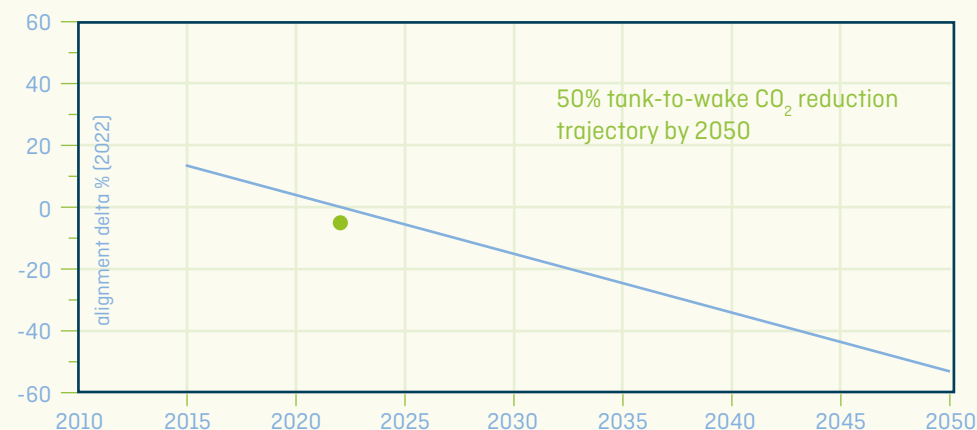
Stig Horsberg Eriksen, Head of shipping



2018 IMO GHG Strategy

Portfolio climate alignment score

-4.8%



2023 IMO GHG Strategy

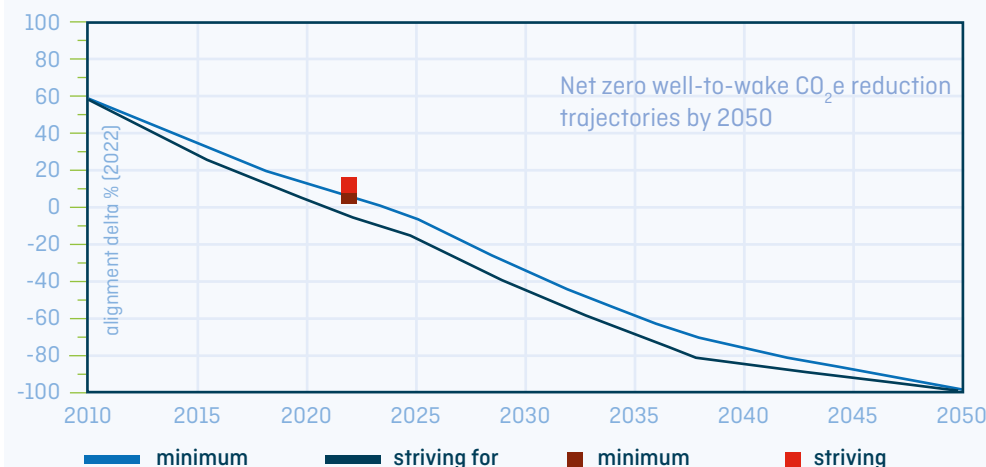
Portfolio climate alignment score

minimum

8.1%

striving

12.1%



Sparebanken Vest

Signatory as of September 2019

Reporting percentage: 100%



What are your key takeaways from your climate alignment score?

As expected, our climate alignment score is somewhat poorer under the IMO Revised GHG strategy than under the IMO Initial GHG strategy. We will intensify our efforts to ensure trajectory compliance for our portfolio also on a well-to-wake basis. AER as a calculation method has its challenges, and for some clients this gives a misleading result depending on trading patterns and cargo transported through the calendar year. We still acknowledge that AER is the best available method considering the data available for banks today.

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

The Poseidon Principles gives us a valuable tool in our dialogue with clients regarding CO₂ emissions. Sustainability linked loans and action plans are used to make sure that all efforts are made to reduce CO₂ emissions in our portfolio.



We are very happy that IMO has revised its GHG strategy and support the introduction of well-to-wake emissions and new trajectories in the Poseidon Principles. This gives us the opportunity to align our portfolio towards the Revised IMO GHG Strategy. The targets set are ambitious but also necessary considering our own ambitious target of reaching net zero in Sparebanken Vest within 2040.

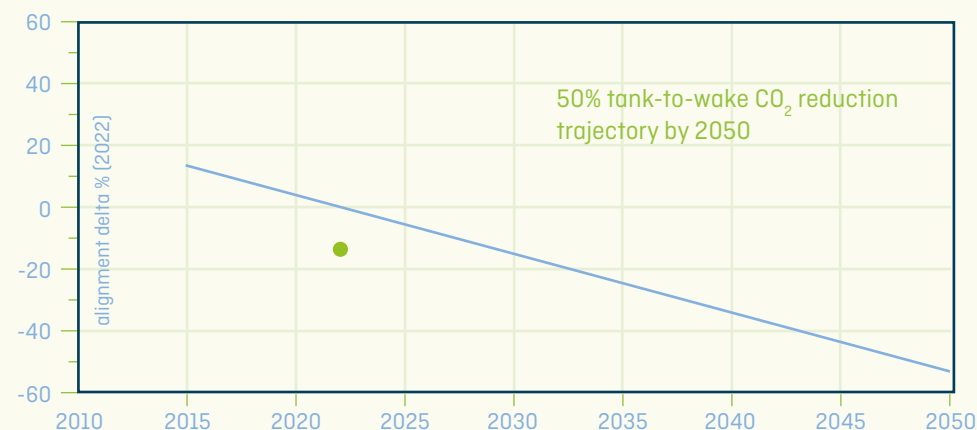
Marion Remoy, SVP - Ocean Industries



2018 IMO GHG Strategy

Portfolio climate alignment score

-13.5%



2023 IMO GHG Strategy

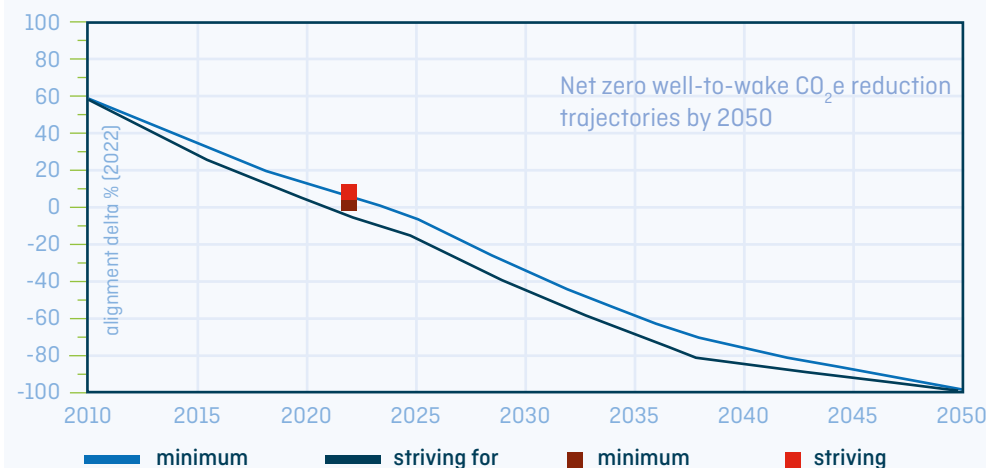
Portfolio climate alignment score

minimum

2.7%

striving

8.1%



Standard Chartered Bank

Signatory as of November 2020

Reporting percentage: 98.8%



What are your key takeaways from your climate alignment score?

This is our 2nd year of reporting, and we are pleased to have an improved level of response thanks to the cooperation of our clients especially with the Chinese Leasing Companies who had to seek this information from their charterers.

In our portfolio, we observed misalignment either due to the nature of the business model which limits movement such as LNG bunkering vessels or the start-up phase for newbuilds vessels and continue to work with the Poseidon technical team to address this.

Sector wise, we continue to observe the impact from the container sector, which enjoyed very strong profits in 2022, encouraging owners to sail faster, leading to higher mis-alignment scores.

Looking ahead, we are keen to observe the impact of CII coming into effect in 2023 which incentivises shipowners to optimise their emissions impact and see how this translates into next year's Poseidon Principles reporting.

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

As part of Standard Chartered's Net Zero by 2050 ambitions, we have used the Poseidon Principles as our industry benchmark with a 0% alignment delta target in 2030.

Looking ahead, as we obtain greater clarity on IMO's revised minimum and revised striving trajectories (i.e when IMO publishes the life cycle assessment LCA Guidelines / new CII curves that match the IMO revised strategy), data from Poseidon will be critical in assessing climate risk in our decision making process.



The maritime industry has taken a giant leap forward this year with respect to decarbonisation following the IMO's announcement in July that shipping has a more ambitious net zero target by 2050. We are delighted that the Poseidon Principles have reacted so quickly in evolving our methodology into IMO's striving ambitions. We are extremely excited to collaborate with our clients to see how these new benchmarks can be used to incentivize and reward the right behaviours, ultimately driving decarbonisation in this hard-to-abate sector.

Abhishek Pandey, Global Head, Transportation Finance



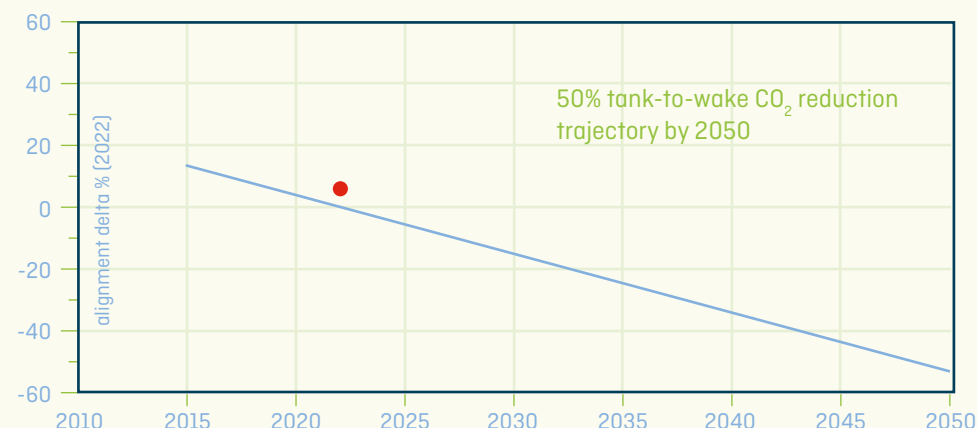
2018 IMO GHG Strategy

Portfolio climate alignment score

6.4%

Cargo vessels climate alignment score

6.4%



2023 IMO GHG Strategy

Portfolio climate alignment score

minimum

11.8%

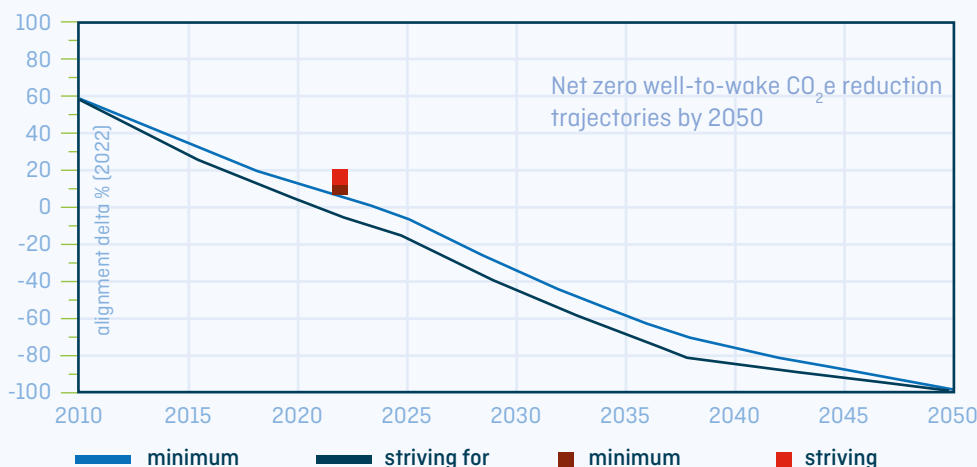
striving

16%

Cargo vessels climate alignment score

11.8%

16%



Sumitomo Mitsui Finance and Leasing Company, Limited



Signatory as of December 2020

Reporting percentage: 96.5%

What are your key takeaways from your climate alignment score?

SMFL is pleased to be reporting our climate alignment score for this year, reaffirming our commitment to the Poseidon Principles. With the contribution of LNG carriers with high environmental performance, our climate alignment score remains below the trajectory on the IMO initial GHG Strategy base, notwithstanding the evolving ambition each year. However, due to the steeper New Trajectory and revised Vessel GHG Intensity introduced from this year's report, our score based on the IMO Revised GHG Strategy is plotted above the trajectory.

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

Regarding the IMO revised GHG strategy target of the Poseidon Principles which aims to achieve zero GHG emissions by 2050, We are highly supportive of this revision and we would like to take on the challenge of improving the revised target for our Portfolio Climate Ailimente. Therefore, in order to achieve the Sustainable Development Goals (SDGs), which are part of the vision of SMFL's management philosophy, we are discussing the impact of the Poseidon Principles score and making decisions from various aspects with decarbonisation.



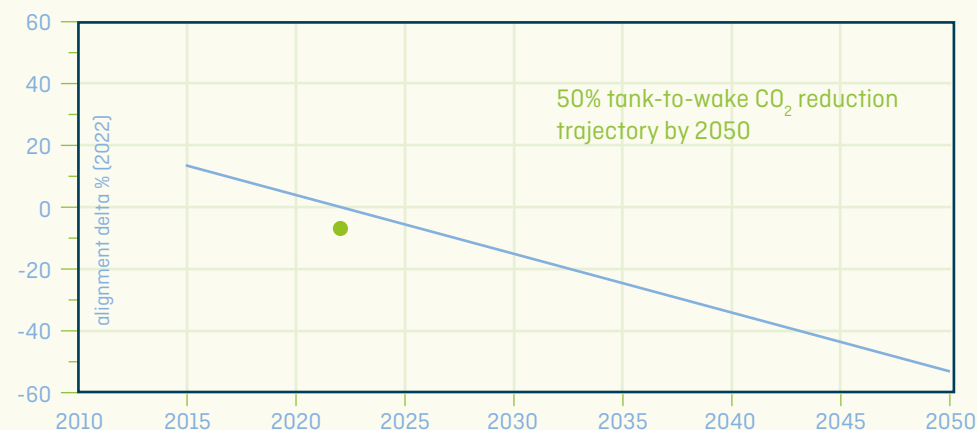
We at SMFL are pleased to make our annual disclosure which has improved from the last year on the IMO initial GHG Strategy base. However, based on the IMO revised GHG strategy, we are behind the target score. We will contribute to a sustainable society from a long-term perspective and strive to achieve our goals as soon as possible.

Shinichiro Watanabe, Senior Managing Executive Officer



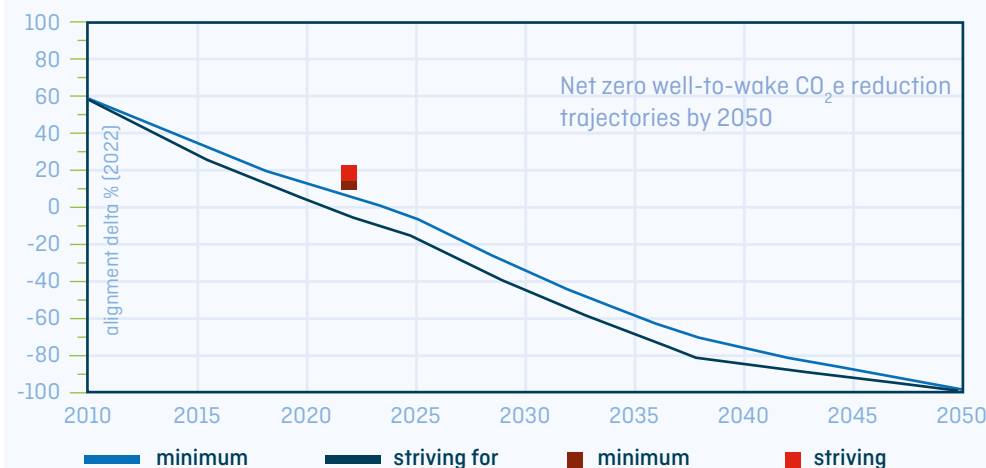
2018 IMO GHG Strategy

Portfolio climate alignment score	-6.8%
Cargo vessels climate alignment score	-6.8%



2023 IMO GHG Strategy

	minimum	striving
Portfolio climate alignment score	14.1%	18.3%
Cargo vessels climate alignment score	14.1%	18.3%



Sumitomo Mitsui Trust Bank, Limited

Signatory as of March 2020



Reporting percentage: 91.8%

What are your key takeaways from your climate alignment score?

Thanks to the support and cooperation of our clients, we have successfully completed the climate alignment calculation and are pleased to report the third year result. We consider that our overall climate alignment score 2022 was broadly in line with our expectation especially in case of alignment to the previous trajectory. For the alignment to the new trajectory, while we are still in the process of a detailed evaluation, we acknowledge again how ambitious it would be to realise “GHG Net Zero by 2050” and understand multiple adjustments to emission factors, contents of IMO DCS data etc are required in that respect. We will try our best to achieve the ultimate goal of GHG Net Zero by 2050, while also focusing on keeping dialogues with various stakeholders to support transition phase of decarbonisation.

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

We believe that it is a very important step to understand the current status of our shipping portfolio in terms of its climate impact and the degree to which it contributes to decarbonisation of the maritime industry. Granular analysis of our portfolio alignment score will help us understand in detail how each vessel in different sectors performs and will give us useful insights for the future sector-specific strategy of our shipping finance business. In addition to the single year result, the development of the portfolio alignment scores every year and the accumulation of data will provide valuable intelligence to enable us to shape our future high-level strategy across the maritime industry over the longer term.



We are delighted to announce this year’s result of the Climate Alignment calculation. As one of the leading global shipping finance banks, we believe that we can continue to support our clients whilst also playing a significant role in encouraging decarbonisation of the maritime industry. Our public Carbon Neutral Commitment and adherence to the Poseidon Principles is a testament to that commitment.

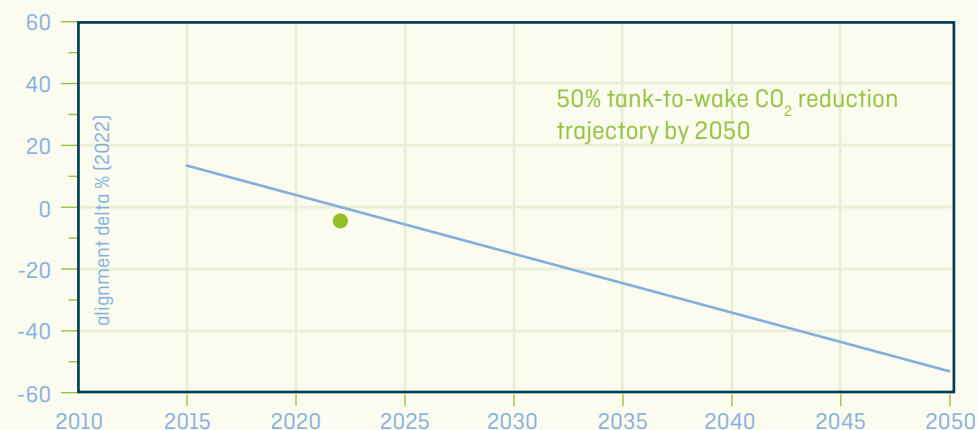
Masaya Noda, Managing Executive Officer, Global Head of Ship Finance



2018 IMO GHG Strategy

Portfolio climate alignment score

-4.5%



2023 IMO GHG Strategy

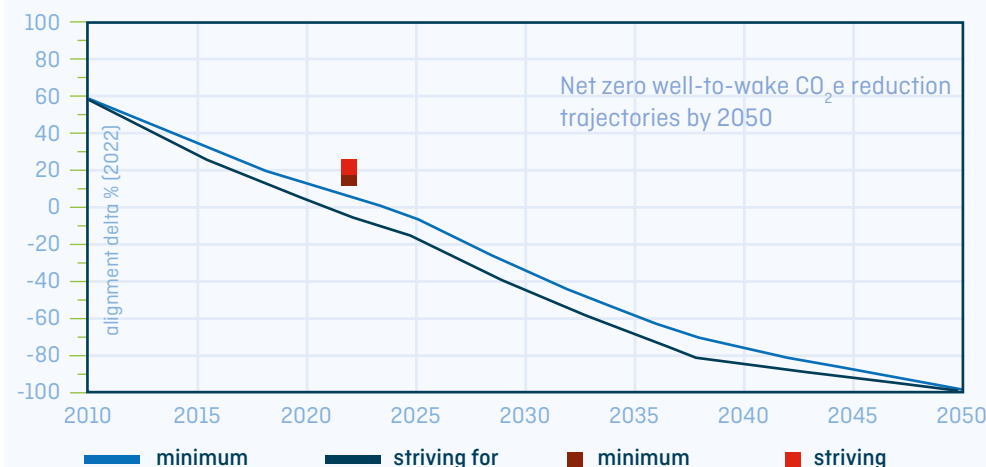
Portfolio climate alignment score

minimum

16.9%

striving

21.2%



Key terms

AER means the Annual Efficiency Ratio, a carbon intensity metric calculated in accordance with the Technical Guidance.

CII stands for Carbon Intensity Indicator. This is a rating system that the International Maritime Organization (IMO) developed, that measures how efficiently a ship transports goods or passengers and is given in grams of CO₂ emitted per cargo-carrying capacity and nautical mile. This will be a mandatory measure under MARPOL Annex VI, which comes into force in 2023, and will impact all cargo, RoPax and cruise vessels above 5,000 gross tonnage (GT) trading internationally.

Climate alignment is the degree to which a vessel, product, or portfolio's emissions intensity is in line with a decarbonisation trajectory that meets the corresponding IMO ambition.

CO₂ is the abbreviation for carbon dioxide. When used in this report in regards to emissions, it represents the carbon dioxide emitted, and does not include other greenhouse gasses.

CO₂e is the abbreviation for carbon dioxide equivalent. When used in this report in regards to emissions, it represents the greenhouse gases emitted expressed in terms of the equivalent measurement of carbon dioxide.

Decarbonisation trajectories are produced by the Secretariat based on agreed and clearly-stated assumptions.

ECA stands for Export Credit Agency.

GHG stands for Greenhouse Gas.

GHG intensity is the representation of the total well-to-wake emissions generated to satisfy a supply of transport work (grams of CO₂e per tonne-nautical mile [gCO₂e / tnm]). The Poseidon Principles use the AER metric for this calculation adapted to include upstream emissions as well as the impact of methane (CH₄) and nitrous oxide (N₂O)."

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.

LCA stands for IMO's Lifecycle Assessment model. This method refers to the assessment of greenhouse gas emissions from the fuel production to the end-use by a ship (well-to-wake); it results from the combination of a well-to-tank part (from primary production to carriage of the fuel in a ship's tank, also known as upstream emissions) and a tank-to-wake part (from the ship's fuel tank to the exhaust, also known as downstream emissions).

Maritime Green Corridors are specific shipping routes where the technological, economic and regulatory feasibility of zero-emission shipping is catalysed by public/private actions

MEPC stands for IMO's Marine Environment Protection Committee.

Signatory is a financial institution or ECA that has sent a formal declaration to the Poseidon Principles Secretariat, has had that declaration accepted, and has had that declaration announced.

Tank-to-wake emissions are from fuel combustion on board a vessel, or "operational emissions".

Technical Guidance is the fundamental document of the Poseidon Principles describing the principles and the methodology, accessible on the Poseidon Principles website.

Well-to-tank emissions are from upstream activities including extraction, cultivation, production, processing, storage, transport, bunkering of fuels.

Well-to-wake emissions are a combination of tank-to-wake and well-to-tank. This accounts for both the emissions from upstream activities and operation of a vessel, or the "full lifecycle".

References

American Academy of Arts and Sciences. (2023).
[Forging Climate Solutions: How to Accelerate Action Across America.](#)

Global Maritime Forum. (2023).
[National and regional policy for green shipping corridors.](#)

IMO MEPC. (2023).
[Guidelines on Life Cycle GHG Intensity of Marine Fuels \(LCA Guidelines\) - MEPC.376\(80\).](#)

UMAS and UN Climate Change High Level Champions. (2023).
[Climate action in shipping progress towards shippings 2030 breakthrough.](#)

United Nations. (2020).
[Review of Maritime Transport 2023](#)



Acknowledgements

The 2023 Annual Disclosure Report was developed by the Secretariat and the Advisory to the Poseidon Principles. Special thanks to all the **signatories** and the **Steering Committee** who, through a continuous review process of the methodology, ensure that the Poseidon Principles remain practical, effective, and ambitious.

The Poseidon Principles is one of three initiatives based on the same four Principles and developed with the Global Maritime Forum. Together with the Poseidon Principles for Marine Insurance and the Sea Cargo Charter, they share a common objective: fostering transparency on emissions reporting with the aim of contributing to reducing carbon emissions.

Secretariat



Ingrid Sidenvall Jegou, Project Director

Morgane Graffion, ESG Lead

Rita Hjelm, Project Coordinator

Ida Tang Mikkelsen, Project Assistant

Thao Do, Student Assistant

Justin Cremer, Senior Communications Manager

Trine Kirketerp-Møller, Communications Coordinator

Molly P Hannon, Senior Communications Manager

Advisory



Jean-Marc Bonello, Principal Consultant

Akash Kapur, Consultant

Tristan Smith, Director

Poseidon Principles

Amaliegade 33 B, 3rd floor
1256 Copenhagen K
Denmark

www.poseidonprinciples.org
info@poseidonprinciples.org

© Poseidon Principles

