



SEA CARGO
CHARTER

Annual Disclosure Report 2022



June 2022

Sea Cargo Charter

Amaliegade 33 B, 3rd floor
1256 Copenhagen K
Denmark

www.seacargocharter.org
info@seacargocharter.org

© Sea Cargo Charter

Foreword

For the first time, we, Signatories of the Sea Cargo Charter, are disclosing the climate alignment¹ of our maritime chartering activities. This marks a significant milestone for us as well as for the industry and sends a clear signal that as charterers, we have a role to play in promoting responsible environmental stewardship throughout the maritime value chain.

Building on the growing momentum globally towards climate action and climate risk disclosure, we launched the Sea Cargo Charter in October 2020. Led by the example of the Poseidon Principles, a framework for responsible ship finance, we created a standard for emissions data collection and reporting, thus setting a benchmark for responsible reporting in the maritime sector. As Signatories to the Sea Cargo Charter, we committed to transparently reporting the emissions generated by our chartering activities based on collected data. This report is testament to our commitment to contributing to the decarbonization of shipping, and it is only the beginning of an exciting journey.

This report represents significant effort and collaboration over many months. By bringing together charterers, operators, shipowners, and expert communities, the Sea Cargo Charter has provided us with a framework to actively integrate climate considerations into our chartering decisions. Implementing the Sea Cargo Charter and reporting our climate alignment required us to work more than ever in partnership with shipowners and business partners.

Almost two years after we started our journey, we can already observe major improvements in data sharing.

The journey has not been without its difficulties, and we have certainly climbed a steep learning curve. Nevertheless, today we are benefiting from these efforts. We understand the climate impacts of our business activities at a much more granular level than before, and we can back up our decision-making both at the operational and strategic levels with real data. Only two years ago this seemed unimaginable. This assures us that industry-wide change is possible when we all take responsibility and hold ourselves accountable.

We acknowledge that there are still steps to be taken to further strengthen the Sea Cargo Charter methodology and more accurately reflect the environmental impact of our activities. Even best practice activities in some cases did not perform as well as expected against the decarbonization trajectory and we aim to address any weaknesses in the methodology so that it incentivizes responsible behavior to the greatest extent possible. As the science underpinning our work continues to improve, we look forward to maintaining our efforts to further develop and improve the Sea Cargo Charter.

We urge the readers of this first Annual Disclosure Report to not read it as a league table. All Signatories to the Sea Cargo Charter have very different profiles and activities, and comparisons are thus difficult. What we do share is our belief that there is a positive feedback loop between transparency and action and our intention to limit adverse environmental impacts

of global seaborne trade on people and planet. Our involvement with the Sea Cargo Charter has resulted in many learnings, and we are determined in our resolve to continue the journey. We look forward to seeing our continued efforts result in improved climate alignment over the coming years. And we invite others to join us to amplify this impact to the benefit of our companies, the maritime industry, and society as a whole.

June 2022



Jan Dieleman

Chair, Sea Cargo Charter Association
President, Cargill Ocean Transportation



Rasmus Bach Nielsen

Vice Chair, Sea Cargo Charter Association
Global Head Fuel Decarbonisation, Trafigura Maritime Logistics

¹ See **Key terms** on page 52 for definitions.

Executive summary

The Sea Cargo Charter is a global framework for measuring and reporting how ship charterers' activities align with society's goals. This report marks the first time Signatories disclose the climate alignment of their activities, and the first disclosure of climate alignment using the Energy Efficiency Operational Indicator (EEOI) as a metric.

Signatories to the Sea Cargo Charter recognize that their role in the industry affords them opportunities to promote responsible environmental stewardship and drive change throughout the maritime value chain. The Sea Cargo Charter provides them with the tools to foster collaboration with shipping business partners, gain insights that enhance strategic decision-making, and address the impacts of climate change.

In this report, 25 Signatories disclose the climate alignment of their overall chartering activity for 2021. Together, these 25 Signatories moved over 15% of total bulk cargo transported by sea in 2021. The results show that the activities of twelve Signatories were aligned with the IMO's Initial GHG Strategy.

The simple average climate alignment score was 2.7%, representing the average of all of the reported scores calculated with each score being assigned equal weight. This means that on average, Signatories were 2.7% misaligned with the decarbonization trajectory in 2021. Scores ranged from -26.1% to 46.2%, and sixty percent had a score of +5% or less. A negative score implies alignment while a positive score denotes misalignment to the decarbonization trajectory.

Based on feedback from Signatories and a wider shipping stakeholder group, the Sea Cargo Charter has motivated a step-change in attitudes towards sharing emissions and activity data between charterers and owners. Signatories reported 84% of their annual activity on average, being unable to obtain data from shipowners or operators for the remaining voyages. In the twelve months since the start of data collection, many Signatories now have a near complete overview of the carbon intensity of their activity which can help them make chartering decisions based on environmental credentials.

Furthermore, this was the first opportunity to see how the Sea Cargo Charter methodology can be applied in practice with measured data, which has in turn exposed some areas that may require some development to ensure better accuracy. This is particularly relevant to liquefied gas carriers as well as chemical tankers for which alignment is subject to some methodological uncertainty, as explained in section 4 of this report. The Sea Cargo Charter remains committed to continuously improving the reporting methodology. This implies embracing new scientific evidence and revising the methodology as needed to ensure that the Sea Cargo Charter continues to be a salient tool for Signatories and a credible public disclosure initiative.

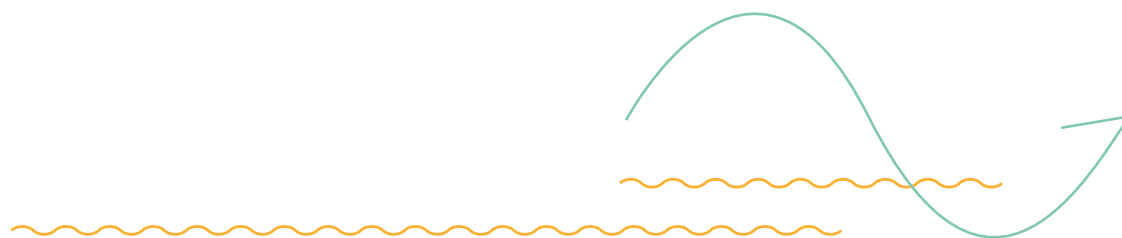




Table of contents



1
Introduction
5

3
**Climate alignment
& decarbonization trajectories**
14

2
**The significance of the
Sea Cargo Charter**
11

4
Reporting results
19

5
**Fulfilling the Signatory
requirements**
25

Key terms
52

References
54

Acknowledgements
55



1. Introduction

About the Sea Cargo Charter

The Sea Cargo Charter is a global framework for assessing and disclosing the climate alignment of ship chartering activities around the globe with the aim of promoting international shipping decarbonization. It enables cargo owners, operators, and shipowners to align their chartering activities with responsible environmental behavior and shape a better future for the maritime industry and society as a whole.

The Sea Cargo Charter sets a benchmark for what it means to be a responsible charterer. By establishing a common, global baseline to quantitatively assess and disclose the alignment of chartering activities with climate targets, it also serves as an important tool to support responsible decision-making. Led by four principles, Signatories to the Sea Cargo Charter comply with transparency requirements under a robust and industry-appropriate climate alignment assessment methodology and carefully considered accountability and enforcement requirements that support practical and robust data collection and analysis practices.

The Sea Cargo Charter was established to support charterers in integrating climate considerations into their business decisions in line with the climate-related goals of the International Maritime Organization (IMO). It was developed in an effort spearheaded by a diverse group of cargo owners – Anglo American, Cargill, Dow, Total, Trafigura – and shipowners – Euronav, Norden, Stena Bulk – in collaboration with Stephenson Harwood and with expert support provided by the Global Maritime Forum, UMAS, and Smart Freight Centre.

The Sea Cargo Charter was launched in October 2020, one year after the launch of the Poseidon Principles, which similarly establish a framework for assessing and disclosing the climate alignment of ship finance portfolios. Both frameworks share the same vision and ambition and are articulated around the same four key principles. They were recently followed by the insurance sector whose representatives now commit to the Poseidon Principles for Marine Insurance.

Figure 1.
Evolution of the Sea Cargo Charter



Scope

The Sea Cargo Charter is applicable to all bulk charterers: those with interest in the cargo on board; those who simply charter out the vessels they charter in; disponent owners; all charterers in a charterparty chain; companies involved in pools. It must be applied by Signatories in bulk ship chartering activities that are:

- on time and voyage charters, including contracts of affreightment and parceling, with a mechanism to allocate emissions from ballast voyages
- for voyages carried out by dry bulk carriers, chemical tankers, oil (crude and product) tankers, and liquefied gas carriers
- and where a vessel or vessels are engaged in international trade (excluding inland waterway trade).²

In recognition of the diversity of a charterer's role, the Sea Cargo Charter adopts a twin approach: firstly, flexibility as to the Signatories' choice of reporting segments, so as to encourage the widest adoption possible; secondly, certain minimum reporting requirements so as to maximize impact.

As to choice of reporting segments:

SEGMENT 1

Charterparties where the Signatory is the only time charterer and there is no charterparty chain or, if there is a charterparty chain, the Signatory is the final time charterer.

SEGMENT 2

Charterparties where the Signatory is the voyage charterer.

SEGMENT 3

Charterparties where the Signatory is an intermediate time charterer in a charterparty chain, or the bareboat charterer.

SEGMENT 4

Owned vessels: if, in addition to being a charterer on certain transactions, Signatories or companies within the same group also own vessels, they can also choose to include voyages of their owned vessels in their reporting.

As to minimum reporting requirements, Segments 1 and 2 are mandatory, Segment 3 is optional. Segment 4 is optional and only open to Signatories also reporting within Segments 1-3.

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

[Visit the Sea Cargo Charter website](#)

² Until 31 December 2021, vessels under 5000 gross tonnage are excluded. Starting from 1 January 2022, vessels under 5000 GT are also included.

The Principles

Principle 1

Assessment of climate alignment

// **We will annually assess climate alignment in line with the Technical Guidance for all chartering activities.** //

Our commitment:

Signatories will, on an annual basis, calculate the greenhouse gas (GHG) emission intensity and total GHG emissions, and will assess climate alignment (carbon intensity relative to established decarbonization trajectories) of their chartering activities. This requirement takes effect for each Signatory in the following calendar year after the calendar year in which it became a Signatory.

Principle 2

Accountability

// **We recognize the important role that verification mechanisms play in providing unbiased information to the industry. We will make our best efforts to rely on such mechanisms, and any mandatory regulations, as explicitly identified in the Technical Guidance, for the provision of information used to assess and report on climate alignment.** //

Our commitment:

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

Principle 3

Enforcement

// **We will ensure ongoing compliance with the Sea Cargo Charter for new chartering activities through contractual means by using the Sea Cargo Charter Clause in charter parties. We will contribute to the update of the Sea Cargo Charter Clause through the annual review process.** //

Our commitment:

Signatories will agree to work with owners, disponent owners and business partners to collect and process the information necessary to calculate carbon intensity and total GHG emissions and assess climate alignment.

Principle 4

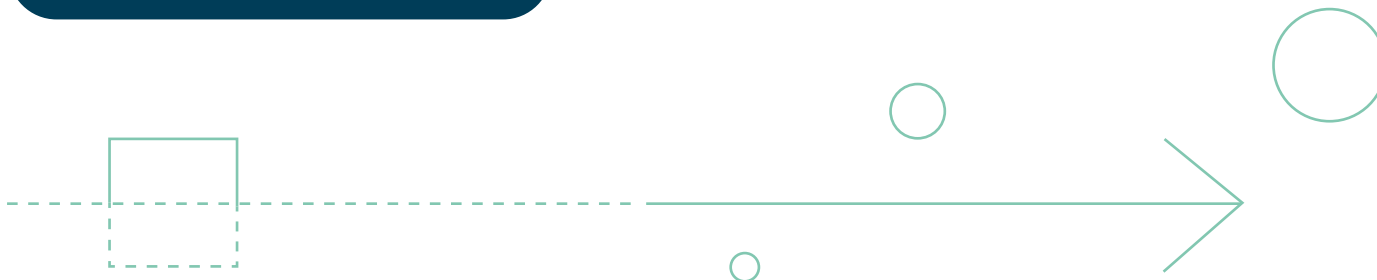
Transparency

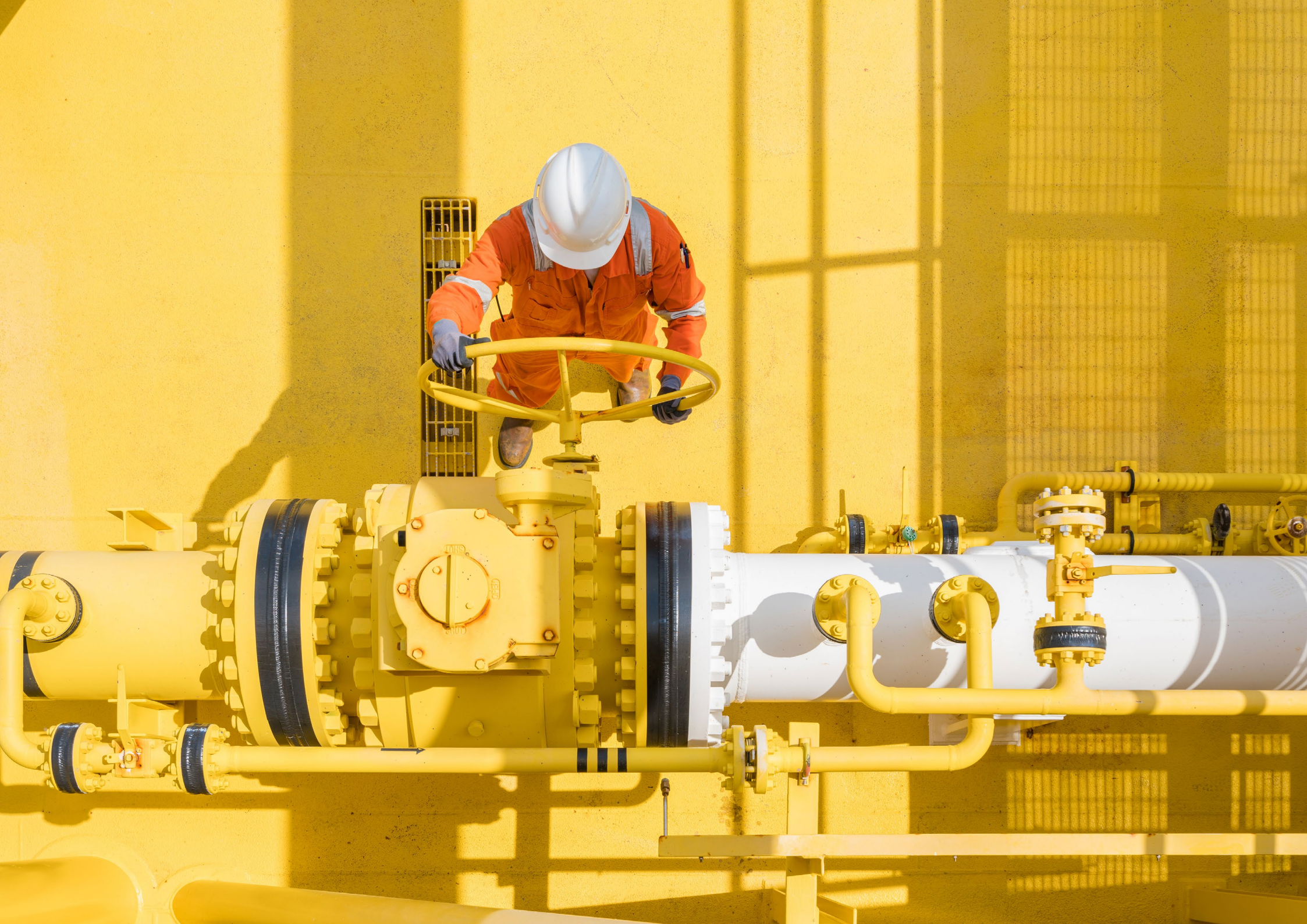
// **We will publicly acknowledge that we are a Signatory of the Sea Cargo Charter and we will publish the results of the climate alignment scores of our chartering activities on an annual basis in line with the Technical Guidance.** //

Our commitment:

1. Upon becoming a Signatory, the Signatory will publicly acknowledge that it is a Signatory of the Sea Cargo Charter.
2. On an annual basis, each Signatory will report the vessel category climate alignment scores and total annual activity climate alignment score of its chartering activities and supporting information, as per the Accountability requirements, to the Secretariat no later than April 30. This requirement takes effect for each Signatory in the calendar year after the calendar year in which it became a Signatory.
3. On an annual basis, each Signatory will publish the vessel category climate alignment scores and total annual activity alignment score of its chartering activities in relevant institutional reports on a timeline that is appropriate for that Signatory. This requirement takes effect for each Signatory in the calendar year after the calendar year in which it became a Signatory.

[Read the Technical Guidance](#)





The Signatories

33 companies have come together to commit to the Sea Cargo Charter. Signatories are bulk charterers who have an interest in advancing good environmental stewardship through their business activities from a variety of segments – agricultural products, chemicals, oil & gas, energy, metals, mining, cement, wood - as well as commodity traders, shipowners, and pools.



Global Chartering

Global Chartering is a joint venture between ArcelorMittal and Drylog



[See all Signatories here](#)

Steering Committee

All Signatories are members of the Sea Cargo Charter Association, the governing body of the Sea Cargo Charter. The Steering Committee, composed of 15 committed Signatories, coordinates the Association and the Sea Cargo Charter on behalf of its members.

ADM – Hans Christian Jensen, Director Global Ocean Freight, and Jonathan Canaan, Senior Operations Manager

Anglo American – Peter Lye, Director and Head of Shipping

Bunge – Marcio Valentim Moura, Global Logistics Director

Cargill Ocean Transportation – Jan Dieleman, President (Chair), and Eman Abdalla, Global Operations and Supply Chain Director

Chevron – Matt Turns, General Manager for Strategy & Business Performance

Cofco International – Alessio La Rosa, Global Head of Freight, and Salvatore Castellano, Freight Trader

Dow – Jürgen Willemsen, Bulk Marine & Terminals Mode Leader

Equinor – Heidi Aakre, Vice President Shipping

Louis Dreyfus Company – Seb Landerretche, Global Head of Freight, and Martin Viquesnel, Technical Supervisor

Mærsk Tankers – Eva Birgitte Bisgaard, Chief Commercial Officer, and Lars Sprogø Bentzen, Head of Partner Services

Norden – Henrik Røjel, Head of Fuel Efficiency and Decarbonisation

Shell – Claire Wright, General Manager Shipping Commercial & Strategy (Treasurer), and Justine Clark, Shipping Consultancy Manager

Torvald Klaveness – Engebret Dahm, Chief Executive Officer, Klaveness Combination Carriers, and Martin Prokosch, Vice President, Head of Klaveness ZeroLab

TotalEnergies – Sebastien Roche, Head of Shipping Technical Department

Trafigura Maritime Logistics – Rasmus Bach Nielsen, Global Head Fuel Decarbonisation (Vice Chair)

[Learn more about governance of the Sea Cargo Charter](#)

2. The significance of the Sea Cargo Charter

The significance of the Sea Cargo Charter is best understood within the context of the maritime shipping industry. Societal demands as well as environmental regulation and standards are increasing, and the continued success of the maritime sector is intrinsically linked to the well-being and prosperity of the society it supports. Therefore, all maritime industry participants must play a role in addressing adverse impacts resulting from the industry's activities. This requires deliberate action and collaboration across the maritime value chain, as well as the support of governments and regulators.

The Sea Cargo Charter is part of a growing global momentum towards climate action and climate risk disclosure. Launched in October 2020 with 17 founding Signatories, the Sea Cargo Charter now counts 33 committed cargo owners, shipowners, and pools. Together, they represent significant volumes of cargo shipped by sea and thus a substantial part of shipping emissions.

Signatories to the Sea Cargo Charter recognize that their role in the industry affords them opportunities to promote responsible environmental stewardship and drive change throughout the maritime value chain. They joined the Sea Cargo Charter eager to lead the way in international shipping decarbonization and contribute to a low carbon future. By joining, Signatories commit to measure emissions from their chartering activities and to publicly report how their activities align with the IMO's ambition to reduce total annual GHG emissions by at least 50% by 2050 compared to 2008 levels. This report is the first time they collectively meet this commitment.



The first disclosure of climate alignment using EEOI

This first disclosure under the Sea Cargo Charter is also the first disclosure of climate alignment using the Energy Efficiency Operational Indicator (EEOI) as a metric. Although inspired by the Poseidon Principles, which use the Annual Efficiency Ratio (AER) to measure carbon intensity, the Sea Cargo Charter adopted a metric that requires collection of a wider set of data. The selection of EEOI was guided by an ambition to measure the performance of a voyage's carbon intensity in real operating conditions. This high level of granularity provides the most accurate representation of a voyage's climate impact by relating emissions to actual transport work.

In order to calculate their EEOI, Signatories collected information, such as the amount of fuel consumed, the distance traveled, and the amount of cargo transported for each of their voyages. Gaining access to this data is, however, not simple. Supply chains in the maritime industry are complex and the sharing of data between their component parts is not a norm. There are often confidentiality issues in the way because the data is viewed as business sensitive information. At the same time, for a company to identify the right actions to lower its emissions, it needs to understand where emissions emerge in their activities and what drives them. This need led to the establishment of a new regime of data collection.

Moreover, emissions from voyage charters are commonly classified by the Greenhouse Gas Protocol as Scope 3 emissions which, by definition, are emissions from activities not owned or controlled by the reporting organization. However, companies are being increasingly held accountable for all the emissions that are emitted as a result of their commercial activities.

The Sea Cargo Charter establishes a mechanism to increase data sharing throughout the charterparty chain, boosting transparency and creating accountability along the maritime supply chain. As adoption of the Sea Cargo Charter spreads within the industry, the accessibility and quality of data are expected to increase.

Beyond the disclosure

Public disclosure plays an important role in ensuring the legitimacy and efficacy of the Sea Cargo Charter. In addition, it provides Signatories insights into their activities and allows them to support their decision-making at the operational and strategic level.

The Sea Cargo Charter was developed to provide charterers with a shared methodology to assess and track their performance against the IMO's ambition to reduce GHG emissions from international shipping by at least 50% by 2050 compared to 2008. It has created unprecedented transparency and accountability, which in turn calls for action.

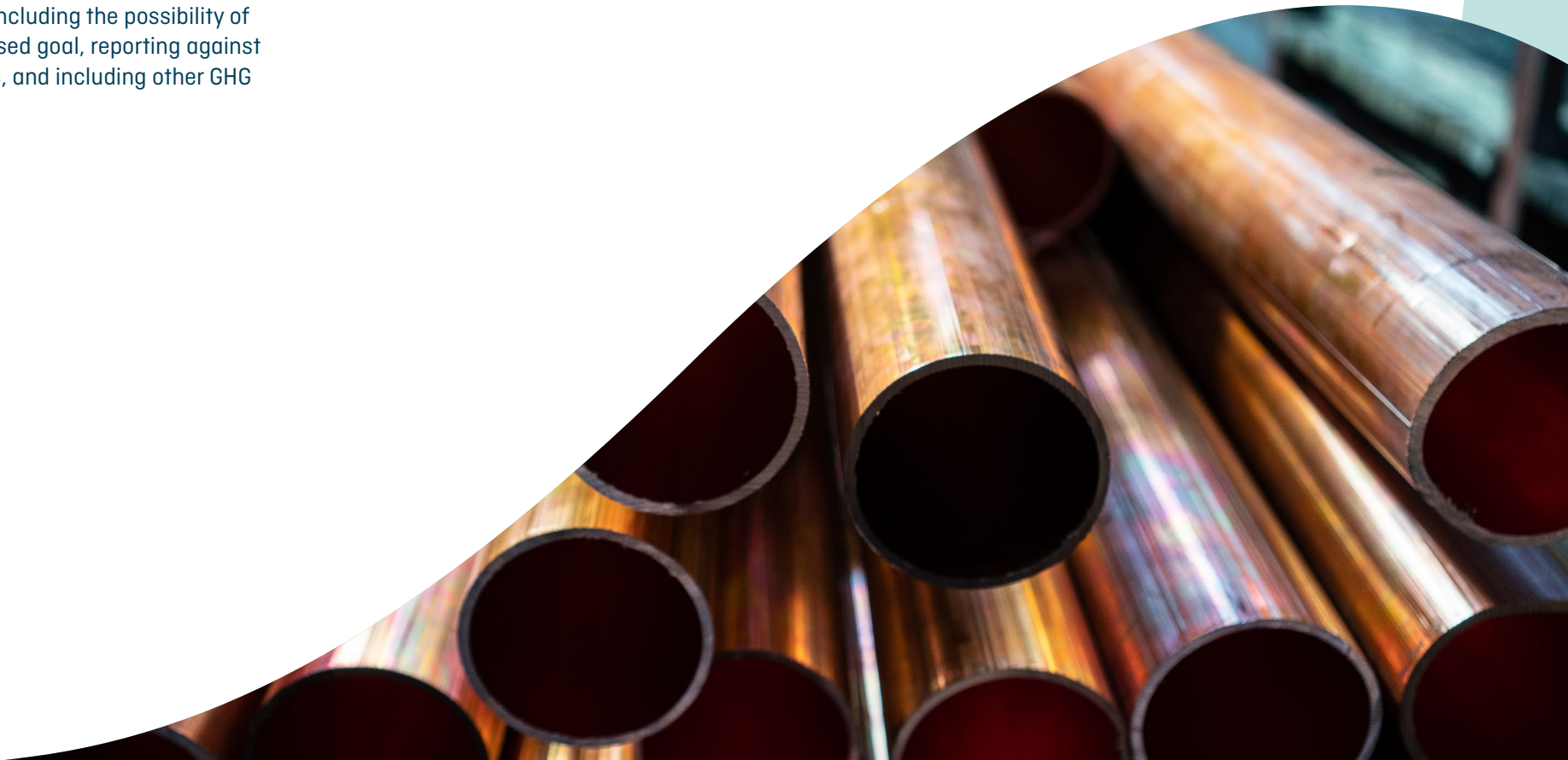
Adding to the increasing pressure exercised by investors, shareholders and customers, companies are gradually being required by regulators to report on their GHG emissions and meet minimum standards. This trend is only expected to intensify, and targets to become more stringent. The basis of competition will shift in most industries and every company will be affected in one way or another. In this context, the Sea Cargo Charter provides a voluntary risk management framework that allows companies to anticipate these trends and stay ahead of the curve. The Signatories disclosing their climate alignment in this report are demonstrating their preparedness to shareholders, customers, and business partners.

The Sea Cargo Charter has and will continue to shape how companies integrate climate considerations into business decisions. Through unprecedented data sharing, Signatories can retroactively measure the environmental impact of their activities, identify the factors driving their emissions, and make informed decisions about future activities. To maintain their license to operate and their competitive advantage in today's fast-paced environment, companies will need to embrace an adaptive approach.

We are in the 'Decade of Action' which calls for accelerating our collective efforts to work towards a sustainable future for seaborne trade. We thus invite all charterers to play their part in promoting responsible environmental stewardship and join forces in this initiative.

Looking ahead

The Sea Cargo Charter is intended to evolve over time. The recent Intergovernmental Panel on Climate Change (IPCC) reports clearly stress the urgency of reducing emissions with no further delay. Evidence shows that an emissions reduction of 50% by 2050 will not suffice to meet the Paris Agreement and keep the global temperature rise below 1.5°C of pre-industrialized levels. The Sea Cargo Charter will therefore carefully evaluate possibilities of going beyond the level of ambition set by the IMO, including the possibility of having a temperature-based goal, reporting against whole lifecycle emissions, and including other GHG species.



3. Climate alignment & decarbonization trajectories

Signatories to the Sea Cargo Charter have committed to reporting the climate alignment of their shipping activities for each calendar year. Underpinning this annual activity score are individual voyage climate alignment scores which express the difference (as a percentage) between measured carbon intensity and the required ship type/size decarbonization trajectory value for the year under review.

Figure 2 shows a stylized depiction of a decarbonization trajectory (blue line) for a ship type and size category. Each dot represents the carbon intensity of a voyage. The green dots represent voyages that are aligned, while the red dots represent vessels that are misaligned because they lie above the decarbonization trajectory.

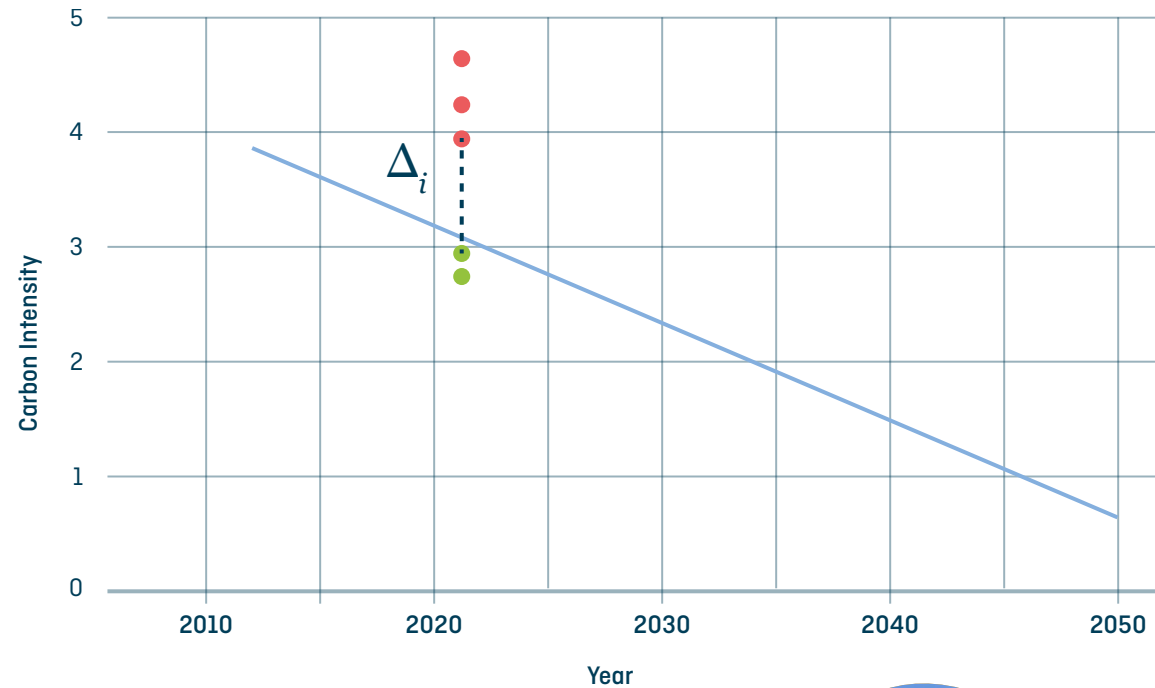
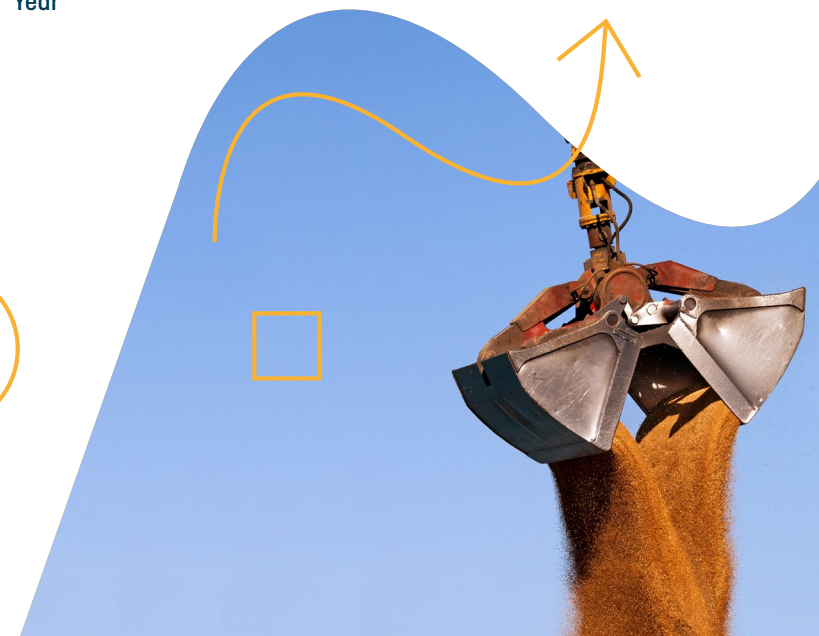
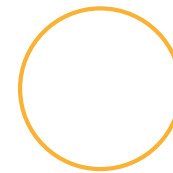


Figure 2.
Assessing alignment at the voyage level



Decarbonization trajectories in the Sea Cargo Charter

The trajectories used in the Sea Cargo Charter were constructed by connecting historical carbon intensity data relating to the Fourth IMO GHG Study with the IMO's Initial GHG Strategy. The Strategy sets out the following levels of ambition:

1. To reduce the total annual GHG emissions by at least 50% by 2050 compared to 2008 ("the IMO Absolute Target").
2. To reduce CO₂ emissions per transport work by at least 40% by 2030, pursuing efforts towards 70% by 2050 compared to 2008 ("the IMO Intensity Targets").

The Sea Cargo Charter trajectory is consistent with achieving a 50% reduction in absolute carbon emissions by 2050 compared to 2008 levels (the minimum absolute threshold of the IMO Absolute Target above). Under a demand scenario from the Fourth IMO GHG Study,³ this represents an 81% reduction in global carbon intensity by 2050 on 2008, which is more ambitious than the IMO Intensity Targets. To ensure both targets can be met, the Sea Cargo Charter uses the minimum of the IMO's Absolute Target.

³ The projection of foreseeable growth is taken from the Fourth IMO GHG Study scenario RCP 2.6 SSP2. This scenario is selected because it is most aligned with decarbonization in the wider economy, and most closely represents the rate of GDP and trade growth that has been observed in recent years (between 2012 and 2018).

At the time that the trajectories were constructed, historical data was available up to 2018 from the Fourth IMO GHG Study. Values for the total transport demand, total CO₂ emissions, and aggregate carbon intensity in 2008, 2012 and the projections for 2050 are shown in Table 1.

	2008	2012	2050
Total transport demand (billion tonne nautical miles)	46,000	54,000	119,000
Total CO ₂ emissions (million tonnes)	921	848	461
Estimated aggregate carbon intensity (gCO ₂ /tnm)	20.0	15.7	3.9

Table 1.

Transport demand, emissions and carbon intensity for international shipping

Figure 3 plots the carbon intensity values in Table 1 and a linear trend line connecting them. There are many different assumptions that could be applied to specify the shape of the curve that defines the rate of carbon intensity reduction between 2012 and 2050. As it stands, the trajectories do not account for projected efficiency or alternative fuel technology uptake by the industry and are not designed to forecast any changes in operating profile. The linear nature of the trajectories provides a method to overcome uncertainty introduced by projections relating to technology uptake or operational variation. The chosen trajectory represents a gradual and consistent rate of improvement on average across the fleet; the assumption applied here is for a constant improvement year-on-year, which is described by a straight line between 2012 and 2050.

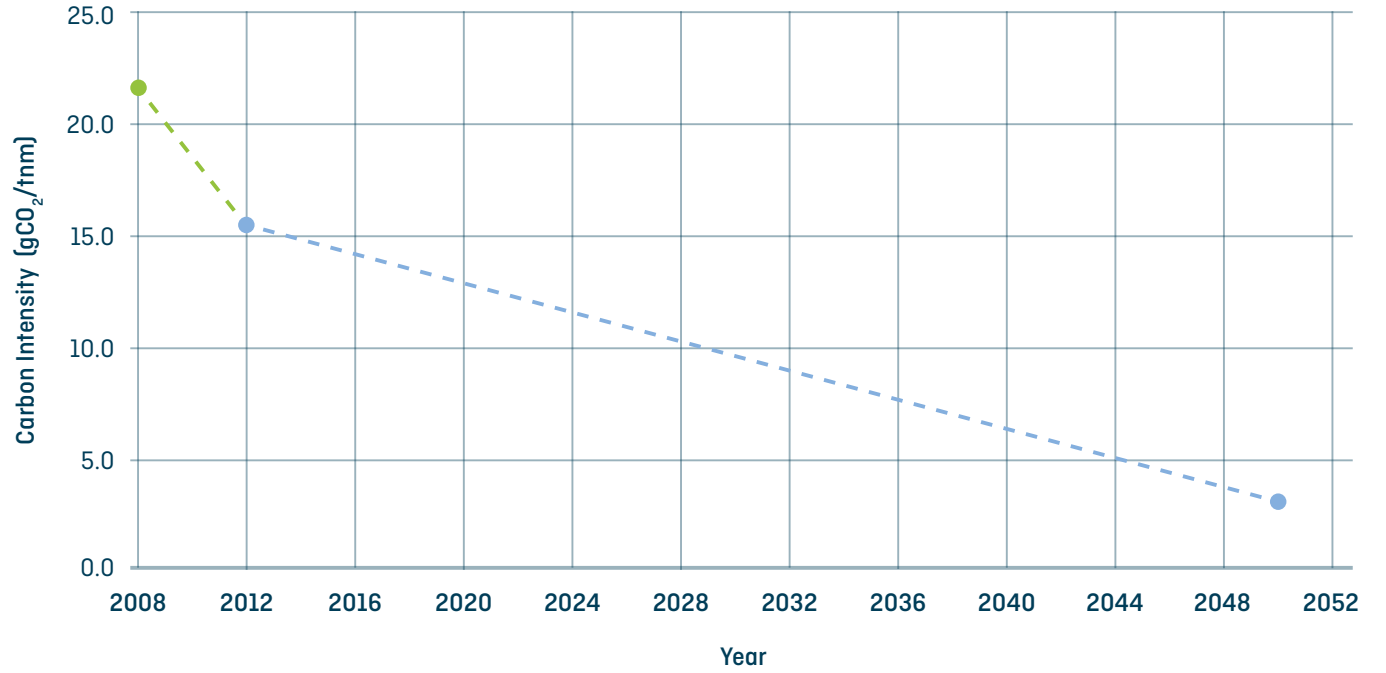


Figure 3.
Global decarbonization trajectory



Figure 4 transforms the global decarbonization trajectory (Figure 3) into the rate of reduction required per year relative to 2012. For example, to be in line with the trajectory, voyage EEOI (in gCO₂/tnm) would need to reduce by 10% every five years. Each ship type and size category needs to achieve the same rate of reduction relative to their respective 2012 baseline.

Carbon intensity can be measured in a number of different ways. To provide the most accurate representation of a voyage’s climate impact, carbon intensity is ideally calculated using measured performance in real operating conditions. The IMO established the voluntary EEOI which relates the amount of CO₂ emissions to the actual quantity of cargo transported whilst also taking into account any time spent on ballast.

$$EEOI = \frac{\text{total CO}_2 \text{ emitted during voyage (ballast + laden)}}{\text{amount of cargo transported} \times \text{total distance laden}}$$

Since this data is not available to charterers (except those chartering vessels on time charter), they are required to collect it directly from owners through agreements set in place in charter parties. For this purpose, the Sea Cargo Charter Association has drafted a clause and reporting template⁴ to ease the administrative burden of both Signatories and owner.

⁴ See the Sea Cargo Charter Clause at: <https://www.seacargocharter.org/wp-content/uploads/2021/11/Sea-Cargo-Charter-Clause-v2.0-Nov21.pdf>

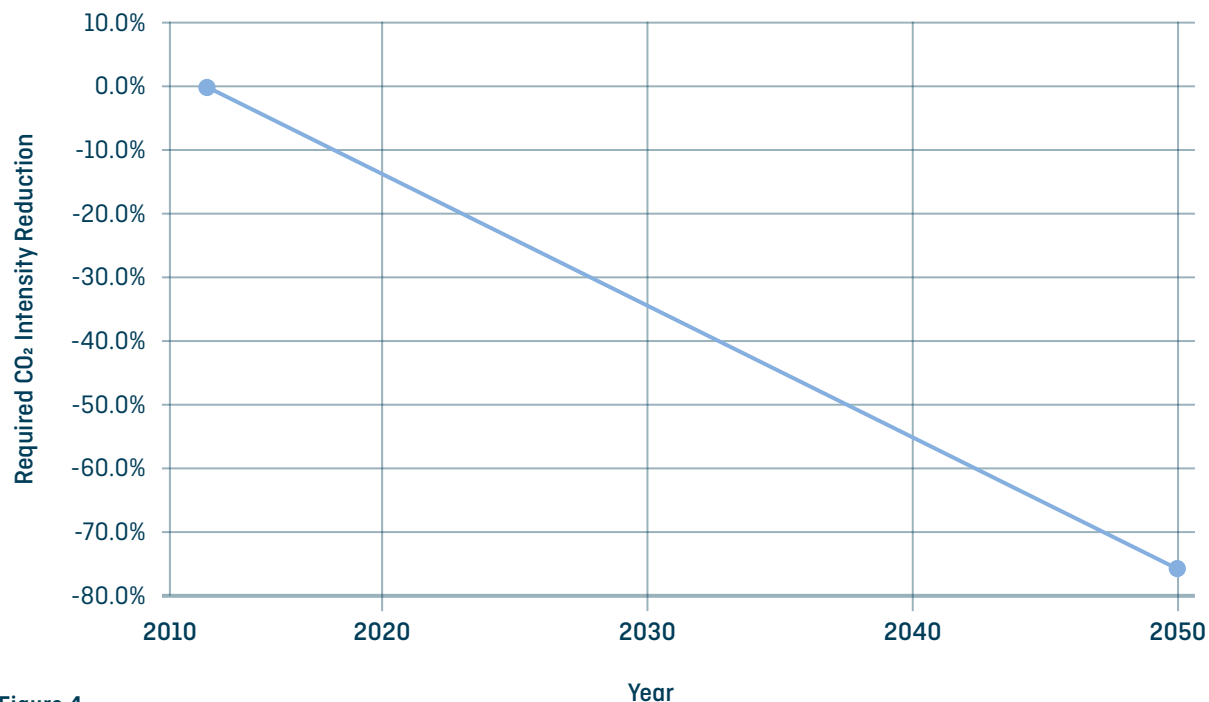


Figure 4. Required CO₂ intensity reduction

From the very beginning of this initiative, collecting and disclosing alignment against measured data has been the priority rather than using estimates or assumptions which introduce further uncertainty and may skew alignment scores.

There are several operational levers that can be used to reduce EEOI. Maximizing loading and utilization by reducing ballast legs helps increase the amount of transport work carried out whilst on a voyage. On the vessel side, more efficient engines operated at

optimal loading and not sailing at excessive speeds to avoid waiting at terminals can help reduce emissions. In the near future, the use of zero emission fuels will present another important lever that can be used to improve EEOI and, subsequently, alignment to the decarbonization trajectory. Depending on the kind of charter being undertaken (spot, time, bareboat), the charterer and owner have differing ownership of the above factors. Communication through data sharing can thus result in mutually beneficial decision-making.

Continuous baselines for required carbon intensity

As mentioned, each vessel category has a unique benchmark for decarbonization that follows the global carbon intensity reduction. While the Signatories of the Sea Cargo Charter report aggregated alignment of voyages within vessel type and size categories as spelled out in the Fourth IMO GHG study, the required intensity for each voyage is related to the size of the vessel through the adoption of continuous baselines. Figure 5 illustrates the continuous baseline for bulk carriers for 2021 where the required intensity is related to the deadweight of the vessel performing the voyage. While this deviates from the Fourth IMO GHG Study structure, it is an elegant method of avoiding problems created by comparing vessels at the edges of size bins to the mean carbon intensity value for that size and type.

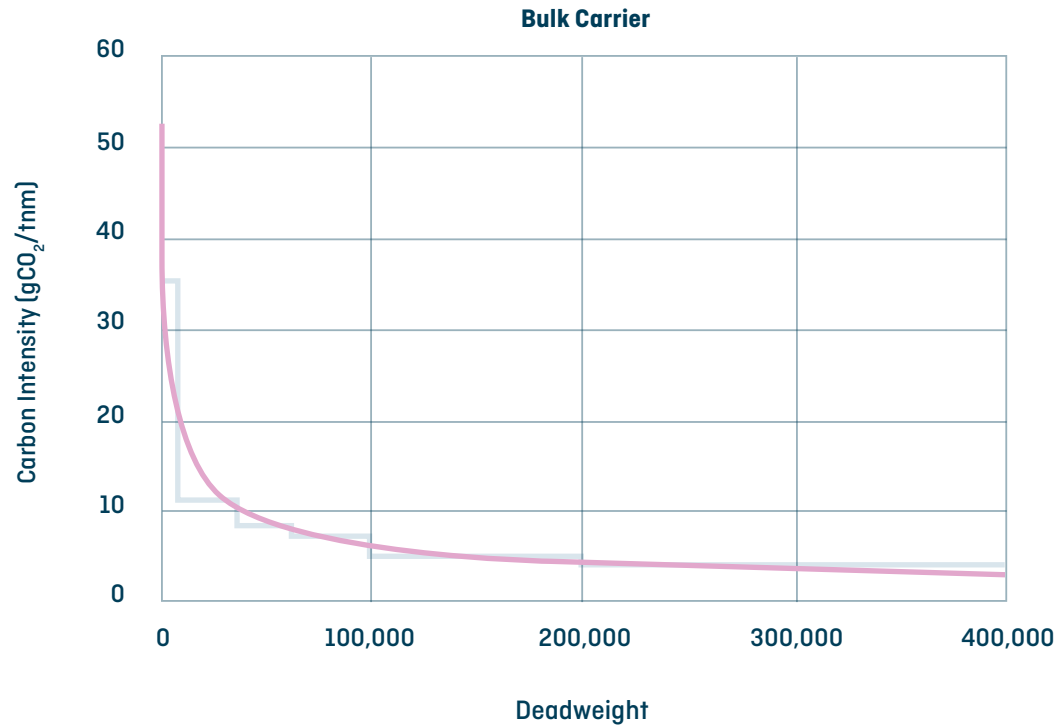


Figure 5. Continuous and stepped carbon intensity baseline for bulk carriers for 2021



4. Reporting results

In the Sea Cargo Charter Annual Disclosure Report, 25 Signatories have reported the climate alignment of their chartering activity for 2021. Together, these 25 Signatories moved over 15% of total bulk cargo transported by sea in 2021. The results show that the activities of twelve Signatories were aligned with the IMO's Initial GHG Strategy, representing just under half of the reported results. Signatories reported 84% of their annual activity on average, being unable to obtain data from shipowners or operators for the remaining voyages.

The simple average score was 2.7%; the average of all of the reported climate alignment scores calculated with each score being assigned equal weight. Without data on each Signatory's total shipping activity, it was not possible to calculate a weighted average, which would be a more appropriate statistic to summarize the distribution of scores given that Signatories have different trades and levels of activity. Scores ranged from -26.1% to 46.2%, and sixty percent had a score of +5% or less, as shown in Figure 6. A negative score implies alignment while a positive score denotes misalignment to the decarbonization trajectory.

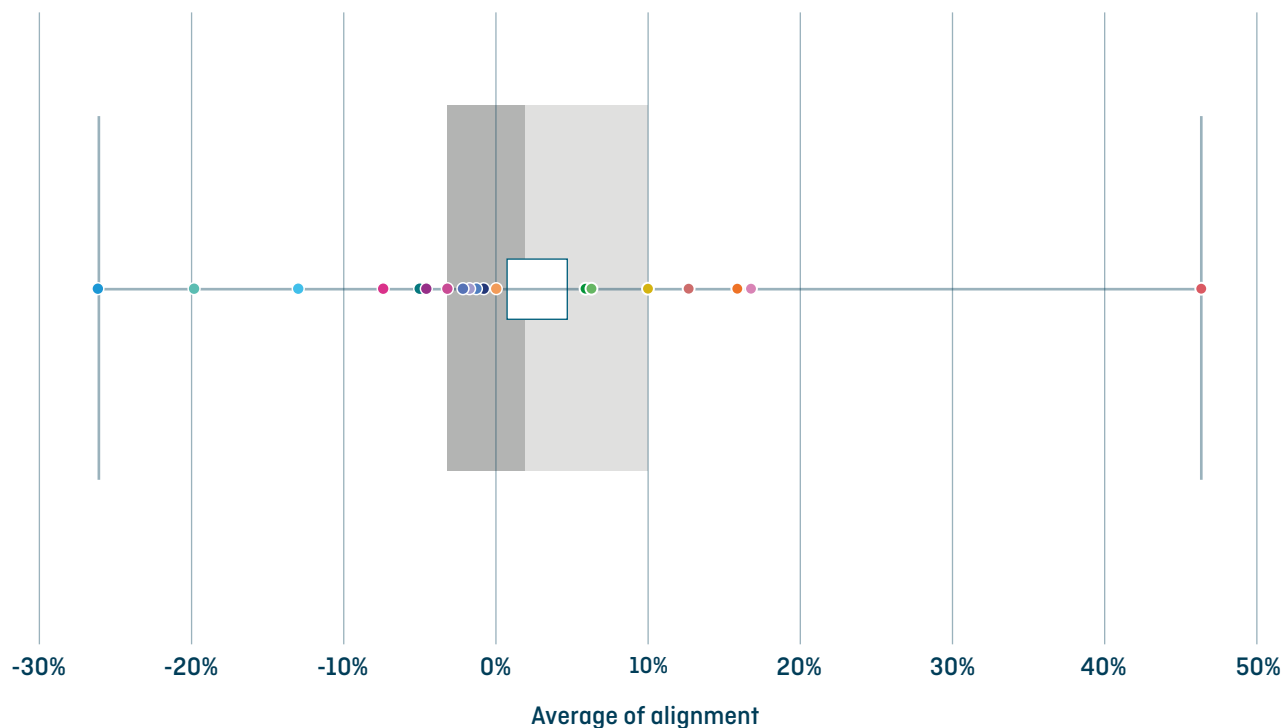


Figure 6. Box plot illustrating range of overall Signatory annual activity alignments



How to read this graph

A box plot is a good way of presenting a data set to show variation but describe distribution over a range. The dots represent data points and their position in the box or along the whisker communicates where they fall within quartiles of the dataset. Points along the whiskers fall in the first and fourth quartile while the points in the dark and light side of the box fall in the second and third quartiles. Where the colours meet in the box represents the median while the white box presents the mean.

Most of the Signatories operate in specific markets and the particular characteristics of their trade and associated vessels thus affect their annual activity alignment. Chemical tankers typically handle several parcels from different cargo owners, bulk carriers may have long ballast voyages for repositioning, and crude tankers typically have high boiler and auxiliary loads due to cargo heating. These trade-specific factors can have a significant impact on voyage EEOI and thus on overall alignment. Given this diversity of operational and trade profiles amongst Signatories, the Sea Cargo Charter disclosure gives insight into the alignment at a vessel category level, as shown in Table 2 and Figure 7.

Bulk carrier 0-9,999 (dwt)	16.62%	Liquefied gas tanker 0-49,999 (cbm)	27.35%
Bulk carrier 10,000-34,999 (dwt)	13.12%	Liquefied gas tanker 50,000-99,999 (cbm)	1.11%
Bulk carrier 35,000-59,999 (dwt)	2.40%	Liquefied gas tanker 100,000-199,999 (cbm)	37.70%
Bulk carrier 60,000-99,999 (dwt)	1.41%	Liquefied gas tanker 200,000-+ (cbm)	-
Bulk carrier 100,000-199,999 (dwt)	4.69%	Oil tanker 0-4,999 (dwt)	-
Bulk carrier 200,000-+ (dwt)	-6.64%	Oil tanker 5,000-9,999 (dwt)	5.08%
Chemical tanker 0-4,999 (dwt)	-2.43%	Oil tanker 10,000-19,999 (dwt)	29.60%
Chemical tanker 5,000-9,999 (dwt)	116.01%	Oil tanker 20,000-59,999 (dwt)	-14.90%
Chemical tanker 10,000-19,999 (dwt)	42.24%	Oil tanker 60,000-79,999 (dwt)	-19.83%
Chemical tanker 20,000-39,999 (dwt)	32.17%	Oil tanker 80,000-119,999 (dwt)	-26.31%
Chemical tanker 40,000-+ (dwt)	11.55%	Oil tanker 120,000-199,999 (dwt)	-23.91%
		Oil tanker 200,000-+ (dwt)	-27.06%

Table 2.

Average voyage alignment by vessel category

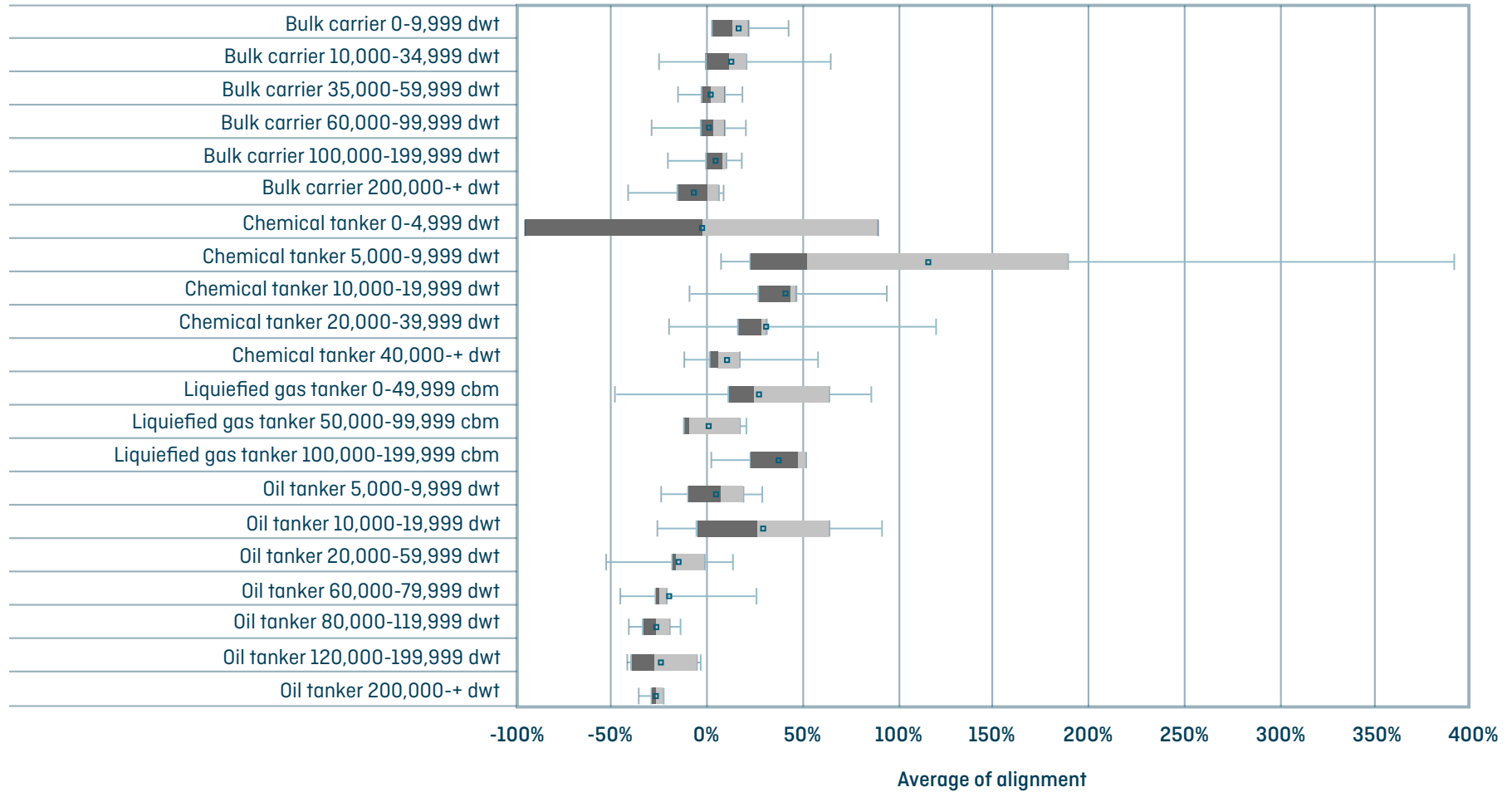


Figure 7. Box plot illustrating range of Signatory weighted vessel category level alignment

The reporting from 2021 shows that the Signatories' overall annual activity was, on average, well aligned for oil tankers, with bulk carriers being only marginally misaligned. Activity from chemical tankers and liquefied gas carriers appears to be misaligned and that there is significant variation of alignment scores across Signatories when compared to the other two vessel types.

Generally, we see that vessels in the smaller categories across all vessel types are less aligned when compared to other sizes of the same type. One reason for this is the high diversity of ship designs and heterogeneous operating profiles even within the same vessel type, making the required carbon intensity baseline a median that may be more or less applicable depending on the predominant activity in a Signatory's overall portfolio of activities.

Bulkers	5.3%
Chemical tankers	39.9%
Liquefied gas carriers	22.1%
Oil tankers	-11.1%

Table 3.
Average alignment of vessel activity by type

With regards to liquefied gas carriers, a relatively small number of Signatories have reported activity in this segment (especially for the larger sizes) making the impact of outliers more prominent in influencing the average alignment. Figure 8 shows the variance in the smallest size category, which can also be seen very clearly with a range of alignment between -48% and 86%. The heterogeneity in propulsion systems in the liquefied gas carrier vessel segment creates further difficulty when trying to compare even vessels

in the same category. This is further complicated by uncertainty around onboard machinery and proportion of energy obtained through cargo boil-off in the case of LNG (forced or natural) and other liquid fuels. Given the complexity of this particular sector, a deep understanding of the underlying assumptions included in the estimates of the Fourth IMO GHG Study is necessary to understand where methodological artefacts might differ from actual operation.

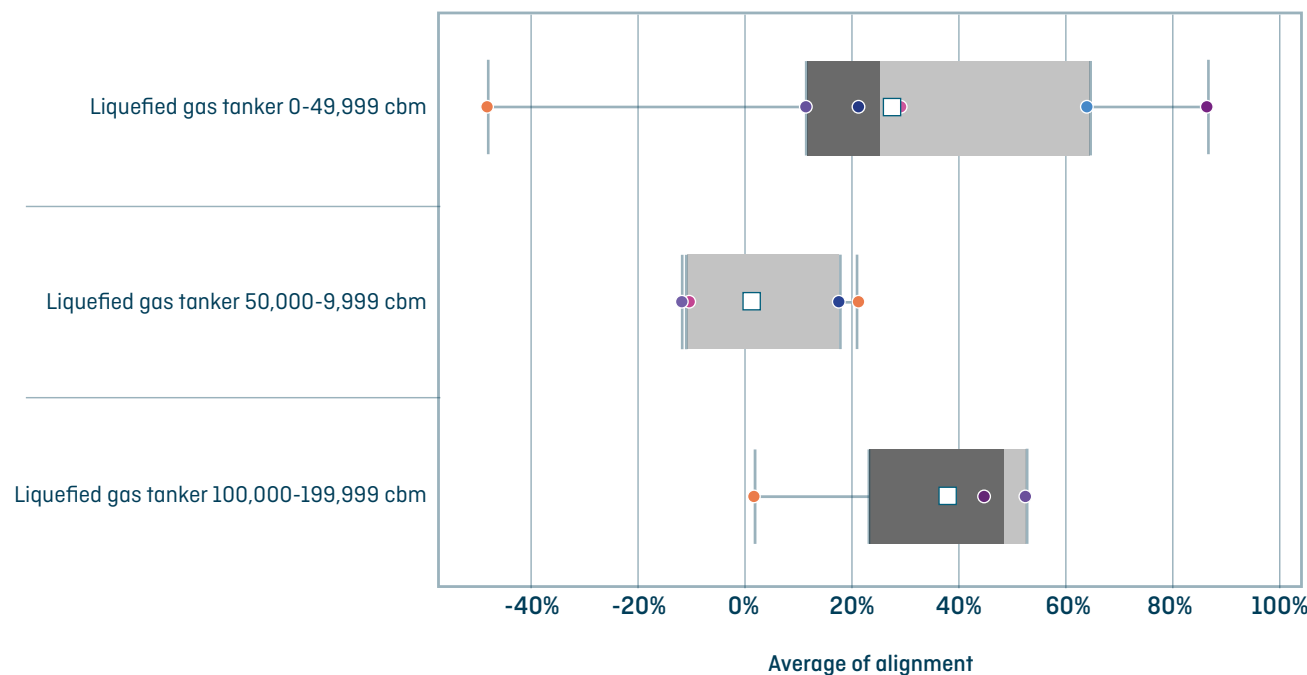


Figure 8.
Box plot illustrating range of Signatory weighted activity alignment values for liquefied gas carrier voyages

Chemical tankers also appear to be particularly misaligned, especially those falling between 5,000 and 9,000 DWT, as shown in Figure 9. An artefact that was apparent from the data collection undertaken by Signatories is the difficulty in choosing which vessel category to report their voyages. Several of these vessels can be classed under multiple types (chemical, product and/or oil tanker), which makes the choice of category for reporting unclear. Additionally, these vessels can be used to transport all three types of cargo with masters designating the voyage according to the cargo rather than the vessel type when reporting data to Signatories.

The impact that this may have becomes more apparent when one considers how vessels are classified in the Fourth IMO GHG Study in order to obtain the baseline EEOIs. Vessels are grouped according to how they are described in the vessel database used for emissions estimates based on the Automatic Identification System (AIS) data and technical specifications. Specific vessel types carry different assumptions when it comes to auxiliary and boiler loads in the Fourth IMO GHG Study algorithm, which therefore impacts the estimated carbon intensity. As this is the first time measured data is being compared to the decarbonisation trajectory on the basis of EEOI, the Sea Cargo Charter Advisory will be looking at understanding better how the above affects the alignment scores to ensure that the methodology is accurate and unbiased.

The learnings from this first year of reporting have shown that the initiative has been successful in normalizing emissions data sharing with charterers

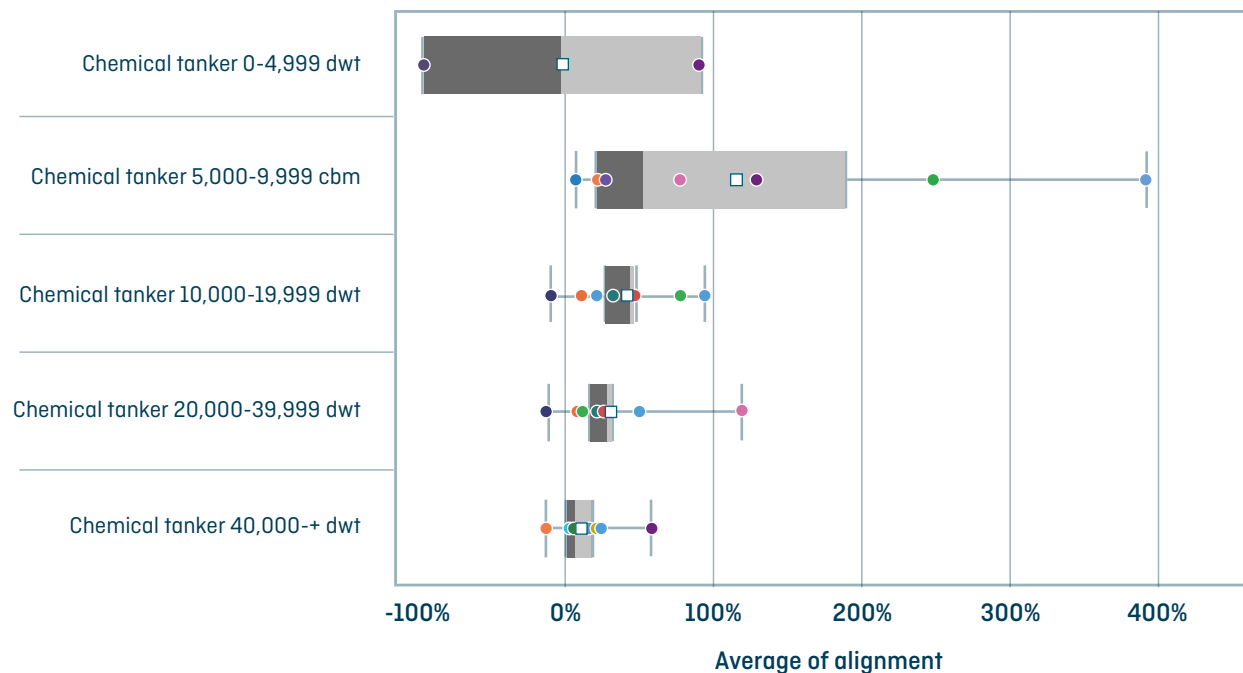


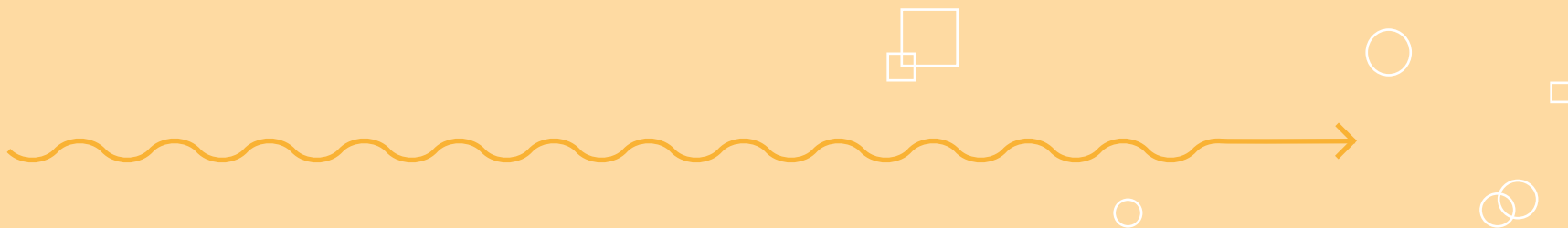
Figure 9. Box plot illustrating range of Signatory weighted activity alignment values for chemical tanker voyages

as evidenced by a very high reporting rate. While annual activity alignment is good on average, there is a high variation which is a reflection of the diversity of activities and trades of the Signatories. As the Sea Cargo Charter is still a nascent initiative in a rapidly developing landscape, the learnings from this year will be used to further improve the methodology with the aim of keeping it up to date with the latest science and enhancing its utility for charterers as they incorporate climate considerations into their decision-making.



5. Fulfilling the Signatory requirements

→ ADM	26	→ Holcim Trading	39
→ Anglo American	27	→ Klaveness Combination Carriers	40
→ Bunge	28	→ Louis Dreyfus Company	41
→ Cargill Ocean Transportation	29	→ Maersk Tankers	42
→ COFCO International	30	→ Nova Marine Carriers	43
→ Copenhagen Commercial Platform	31	→ NYK Bulkship Atlantic	44
→ Diamond Bulk Carriers	32	→ Shell International Trading and Shipping Company	45
→ Dow	33	→ Signal Maritime Services	46
→ DS Norden	34	→ Tata Steel	47
→ Eagle Bulk	35	→ Torvald Klaveness	48
→ Enviva	36	→ TotalEnergies	49
→ Equinor	37	→ Trafigura	50
→ Gunvor Group / Clearalake Shipping	38		





Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

In 2021, ADM announced a new goal to reduce in 25% our Scope 3 greenhouse gas emissions by 2035, against a 2019 baseline. We are currently focusing our reduction efforts on five material categories: purchased goods and services, fuel and energy related emissions, upstream transportation and distribution, waste, processing of sold products/goods. The climate alignment score will enable us to have a holistic view of the environmental impact of our ocean freight operations and will guide our decisions and processes towards the achievement of our Strive 35 sustainability goals.

How does the Sea Cargo Charter influence your business activities and decision-making?

We believe it is of utmost importance to reduce GHG emissions in the entire agricultural supply chain. We aim to mitigate climate change through renewable products and process innovations, supply chain commitments and a strategic approach to operational excellence -- with a focus on enhancing the efficiency of operations globally. We will continue to use internal and external resources to identify opportunities and take action to reduce our environmental footprint globally to meet our sustainability commitments, while mitigating the effects of climate change. We consider the standard methodology of the Sea Cargo Charter as an important resource to measure and report our emissions, which facilitates the dialogue with suppliers, customers and peers, allowing us all to have a common language.

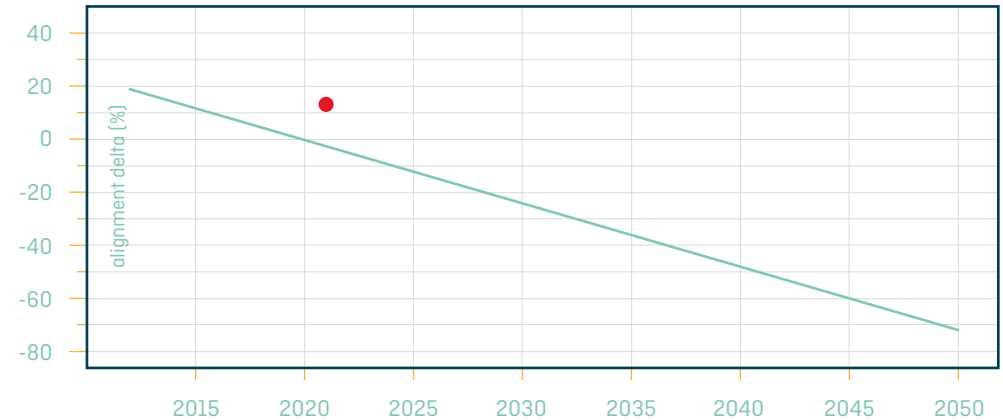


We made significant progress towards our decarbonization journey since we joined the Sea Cargo Charter. The framework provided by the initiative allowed us to measure our footprint and engage directly with our suppliers to address this matter in a harmonized way. Now with a clear baseline in place, we are identifying potential actions to reduce our individual emissions and create a positive change for ourselves and the industry.

Hans-Christian Jensen, Director, Global Ocean Freight



Annual activity climate alignment score: 13.2%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	42.8%
10,000-34,999 dwt	21.3%
35,000-59,999 dwt	11.9%
60,000-99,999 dwt	12.4%
100,000-199,999 dwt	-1.4%
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	7.7%
10,000-19,999 dwt	22.2%
20,000-39,999 dwt	30.6%
40,000-+ dwt	23.5%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

Anglo American



Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

Anglo American has been driving a series of measures to improve the efficiency of its shipping operations. These efforts have started to yield the desired results and, in 2021, our operations were well within the limits of the permitted alignment trajectory. Anglo American transports the majority of its volume on bigger bulk carriers, which have the greatest impact on overall climate alignment scores. While we are seeing good efficiencies and improved utilization on smaller vessels, further attention and focus is needed for the larger ones. We are working continuously and collaboratively across the industry to improve efficiencies in our trading operations and our control on climate alignment.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter provides a standard framework for the Signatories to record, measure and report data that can be compared and benchmarked. This has allowed us to appropriately and accurately factor climate impact into our decision making process when reviewing nominations and operating voyages and contracts. Voyage alignment as a metric will help us to accurately assess carbon emission saving opportunities against all other considerations and help make informed and accountable decisions.

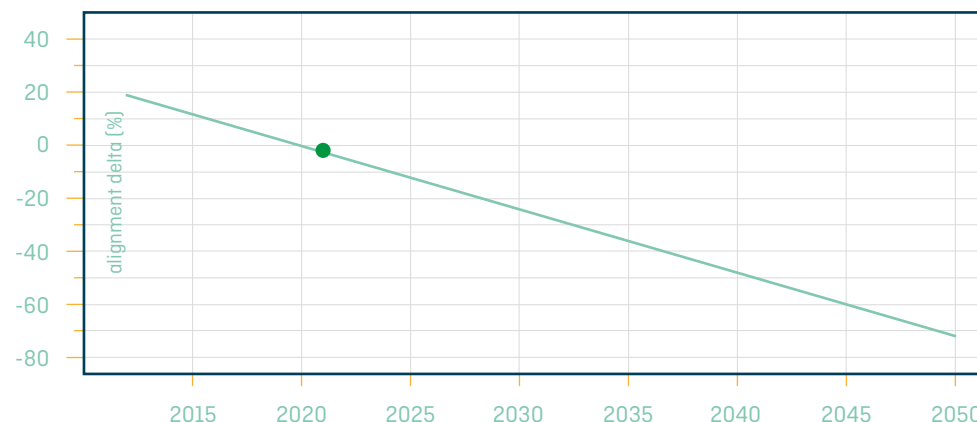


Anglo American is committed to playing an active role in accelerating the transition to a more sustainable shipping sector, a crucial component in our efforts to extend our positive impact beyond our mine sites. In 2021 we set out an ambition to achieve carbon neutrality across our controlled ocean freight activities by 2040. The Sea Cargo Charter's standard accounting framework allows us to track our decarbonisation trajectory consistently with International Maritime Organisation (IMO) standards, relying on transparent and accurate methodologies.

Peter Lye, Director and Global Head of Shipping



Annual activity climate alignment score: -0.9%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	-9.9%
35,000-59,999 dwt	-15.0%
60,000-99,999 dwt	-17.0%
100,000-199,999 dwt	1.4%
200,000-+ dwt	5.9%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

Bunge

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



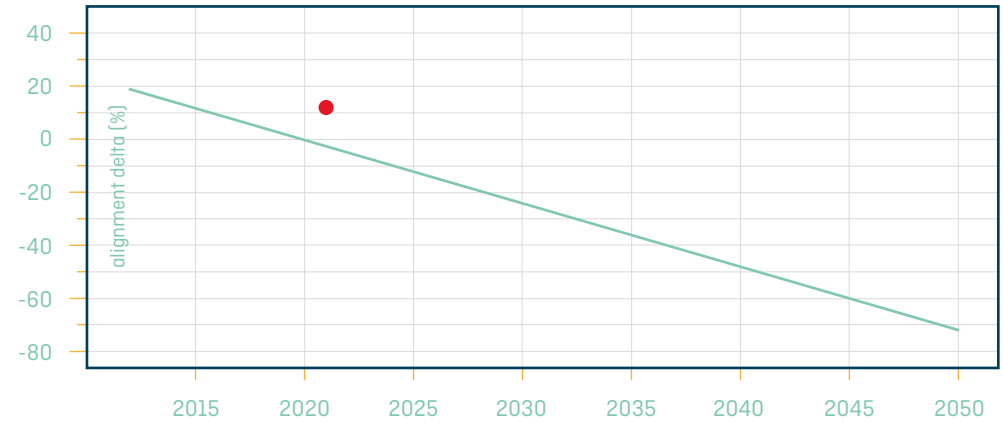
What are your key takeaways from your climate alignment score?

Measuring is the very first step to improve and we are happy to disclose our first year of reporting. Bunge will follow its sustainable path by using the climate alignment score as an additional tool to promote environment preservation enforcement and propose scalable solutions to global challenges.

How does the Sea Cargo Charter influence your business activities and decision-making?

Our strong environmental commitment coupled with Sea Cargo Charter accountability is a key success factor to identify robust levers to foster decarbonization through technical and operational innovation. We are currently implementing numerous process to optimize and quantify emission savings generated in order to meet our sustainable ambition.

Annual activity climate alignment score: 12.5%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	13.7%
35,000-59,999 dwt	18.8%
60,000-99,999 dwt	14.6%
100,000-199,999 dwt	9.9%
200,000-+ dwt	-4.8%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	24.8%
10,000-19,999 dwt	-8.8%
20,000-39,999 dwt	-11.3%
40,000-+ dwt	-10.9%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



The Sea Cargo Charter framework has been instrumental for building alignment in measuring emissions for the industry and for Bunge Supply Chains.

Marcio Valentim Moura, Global Logistics Director

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Excluded	Not Applicable



Cargill Ocean Transportation

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Whilst our fleet spans across many of the Sea Cargo Charter categories; the majority of our tonne-miles are within the mid size dry bulk categories where the results are consistent with 2021 operating conditions (increased port congestion and fleet speeds); and highlight the challenges our industry faces to achieve our long term carbon intensity goals. Whilst it is not possible to draw meaningful conclusions from the results in several of the Sea Cargo Charter categories (since the results are based on only a handful of voyages); we are diving deeper into the outperforming categories to see if there are lessons and efficiencies that can be replicated more broadly across the fleet.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter has already catalyzed improvements in our emissions data quality and quantity; and we are continuing to make advances in this regard throughout 2022. Cargill is committed to operating a more efficient fleet and achieve both the Sea Cargo Charter and our corporate emissions targets. We are working closely with our counterparties and wider stakeholders through various initiatives to deliver continual improvements in carbon intensity; spanning ship technical efficiency; operational efficiency; fleet and supply chain optimization. The Sea Cargo Charter supports this by providing a transparent mechanism against which we can measure the impact of our efforts; and by setting the targets that we work toward both short and long term.

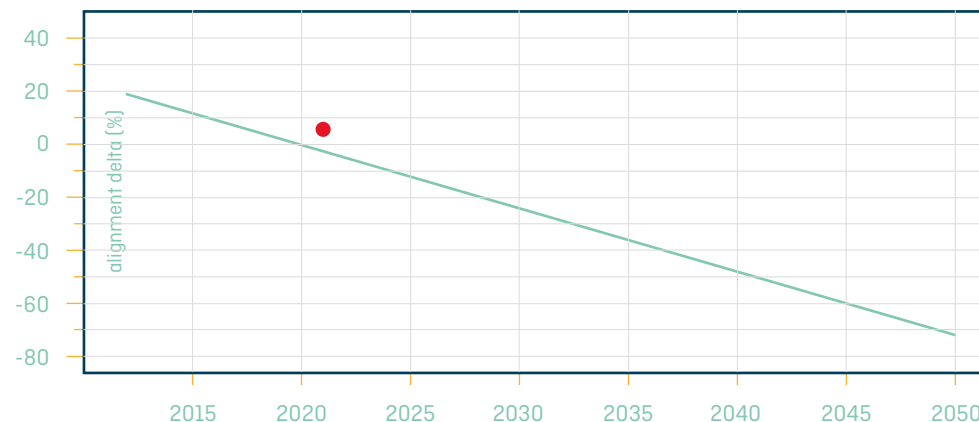


This inaugural reporting year for the Sea Cargo Charter is an important step in our decarbonization journey, and provides a starting point from which we can measure future improvements. Whilst our overall results are above the Sea Cargo Charter target intensity, we can see positive results in parts of the fleet; and welcome the challenge to strive towards long term, sustainable emissions reductions. In 2022 we continue to invest in and pilot new technologies and fuels to reduce the carbon intensity of our fleet.

Eman Abdalla, Global Operations Director



Annual activity climate alignment score: 5.9%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	6.0%
10,000-34,999 dwt	10.7%
35,000-59,999 dwt	5.6%
60,000-99,999 dwt	5.4%
100,000-199,999 dwt	14.2%
200,000-+ dwt	6.3%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	21.0%
10,000-19,999 dwt	11.7%
20,000-39,999 dwt	8.7%
40,000-+ dwt	-11.7%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	-45.1%
80,000-119,999 dwt	-40.8%
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Excluded	Not Applicable

COFCO International

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Overall, our climate alignment score for the reported activities seems to indicate that our voyages are overall aligned with the decarbonization trajectory. This metric provides us with greater clarity over the vessel categories in which we're making good progress and those where we need to focus on in 2022 and future years. Equipped with this, we will be able to make targeted efforts to improve our alignment with the category-specific decarbonization trajectories, especially for the vessel types where we may be lagging.

How does the Sea Cargo Charter influence your business activities and decision-making?

At COFCO International, we're taking steps to ensure that our vessels run as efficiently as possible and with decreased CO₂ emissions. This includes verifying Energy Efficiency eXisting ship Indexes (EEXI) before fixing time-chartered vessels, as well as fixing older tonnage for low-performing vessels. As a framework, the Sea Cargo Charter gives us the chance to look at the bigger picture in a fact-based and transparent manner. By calculating and reporting our alignment scores, we can better understand how consistent our decarbonization efforts are when compared with those of the wider industry and identify hotspots for further improvement.

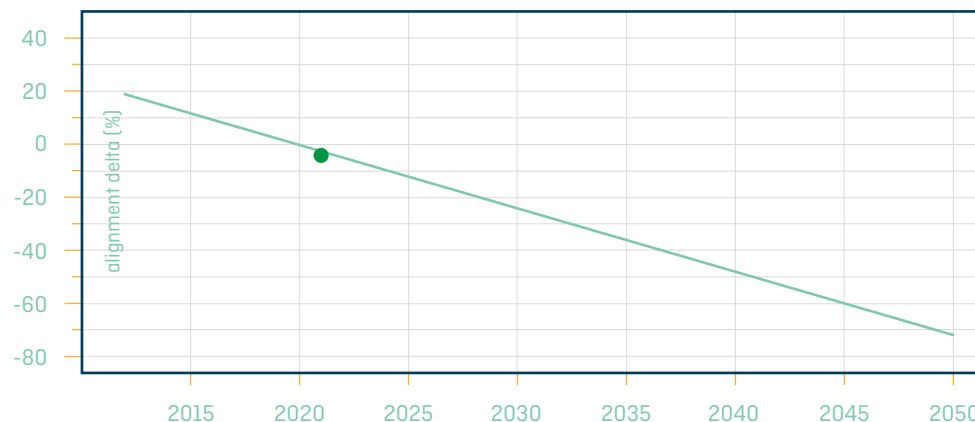


COFCO International is proud to have reached this first shipping emissions reporting goal together with other Sea Cargo Charter Signatories. We thank the Global Maritime Forum and all other Charter members for this accomplishment. Improved emissions reporting is a major milestone in the industry-wide decarbonization and at COFCO International, we remain committed to improving the carbon footprint of our sea freight operations and contributing to reducing shipping industry emissions.

Alessio La Rosa, Global Head of Freight



Annual activity climate alignment score: -3.2%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	-1.2%
35,000-59,999 dwt	-1.5%
60,000-99,999 dwt	-3.6%
100,000-199,999 dwt	10.7%
200,000-+ dwt	-15.4%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Excluded	Excluded	Excluded

Copenhagen Commercial Platform (CCP)



Signatory as of January 2022
Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

As a new Signatory to the Sea Cargo Charter, CCP is pleased to report our climate alignment score for the first time. The structured collection of emission data and transport work has provided CCP with increased insights into the carbon footprint of the fleet of bulk carriers we operate on behalf of shipowners.

We can confirm that the climate alignment score for a vessel is heavily influenced by the commercial operation of the vessel, such as instructed speed, laden/ballast ratio, and DWT utilization on laden voyages.

How does the Sea Cargo Charter influence your business activities and decision-making?

The climate alignment score obtained in 2021 provides CCP with the information and data, that enables us to facilitate discussion between shipowners and charterers on how to reduce the carbon footprint on ship and fleet levels. CCP will also urge shipowners and charterers to set common goals for climate alignment scores for 2022.

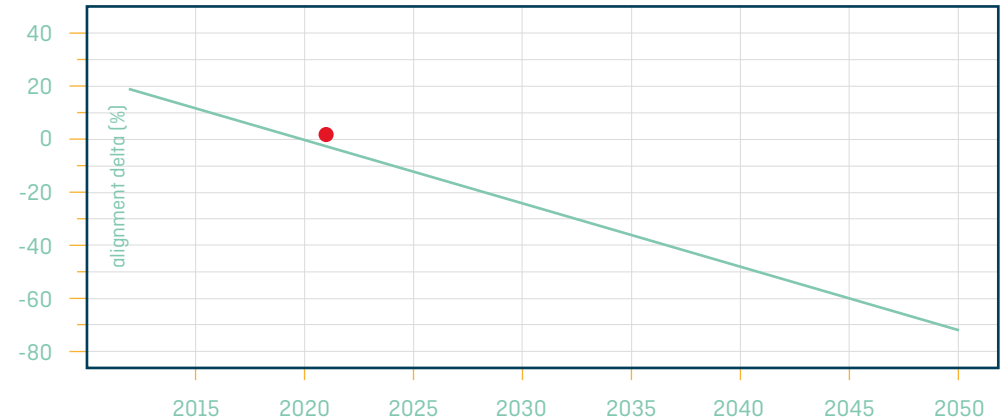


CCP is proud to be part of the Sea Cargo Charter and we view the initiative as an important contribution in the decarbonization of shipping. CCP is committed to transparently report the climate alignment score on behalf of our clients and we will assist shipowners and charterers in reducing the carbon footprint of their shipping operation.

Christian Bonfils, Global Head of Freight, Chief Executive Officer



Annual activity climate alignment score: 1.8%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	0.3%
100,000-199,999 dwt	8.3%
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Not Applicable	Not Applicable	Not Applicable

Diamond Bulk Carriers



Signatory as of March 2021
Reporting period: Q2, Q3, Q4 of 2021

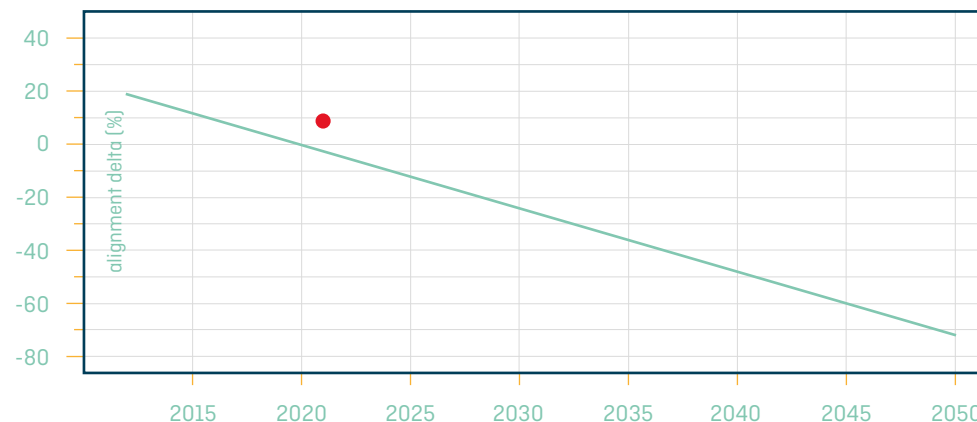
What are your key takeaways from your climate alignment score?

Together with the required emission trajectory, the climate alignment score not only works as a benchmark of your continuous efforts in chartering ships with better efficiency, but also assists you to develop a grand design on how to achieve the climate friendliness of cargo transportation towards 2050, which requires the concerted efforts among the parties across the shipping chain, including the owners, charterers, fuel suppliers, ports operators and the cargo owners.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter will provide us with the transparency we need in decarbonizing our own shipping activities, and give us the tool in engaging in the discussion with our various stakeholders including both inhouse and the third party cargo clients who wish to have visibility as well as to reduce the scope 3 emissions.

Annual activity climate alignment score: 9.8%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	65.2%
35,000-59,999 dwt	9.3%
60,000-99,999 dwt	9.3%
100,000-199,999 dwt	-7.0%
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



We are pleased to report our first year results of our climate alignment, an important step to bring the climate transparency to the shipping industry together with the like minded Signatories.

Kazunori Watanabe, Managing Director



Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Included	Excluded



Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

This first Sea Cargo Charter report is a significant milestone as it represents the first time Dow has been able to gather deep sea vessel emissions data on this scale and to this level of accuracy. Dow's maritime business is heavily reliant on the chemical tanker trade. While our current carrier base consists of top tier companies (many with public carbon neutral targets of their own), there is still much work to be done. With this first report in hand, it provides insight on our emissions as well as the trade areas where emissions are most prominent. We now have ability to focus and align resources to actively improve in areas with the biggest opportunities. Dow has opted to include vessels <5000 DWT in our report in an effort to transparently communicate our full deep sea vessel decarbonization challenge.

How does the Sea Cargo Charter influence your business activities and decision-making?

From the results of this first report, it is evident there is still significant work in front of us to drive necessary emission reductions. Dow's internal and Sea Cargo Charter commitments to emission reductions are driving ongoing efforts to explore, elevate, and partner with our suppliers on their sustainability road maps. Continued investments in digitization are positioning us to charter and operate more efficiently. The evolution of these efforts will translate into new procurement and business models that achieve emission reductions while supporting business growth. The Sea Cargo Charter is a key element to inform and support this business decision-making process.

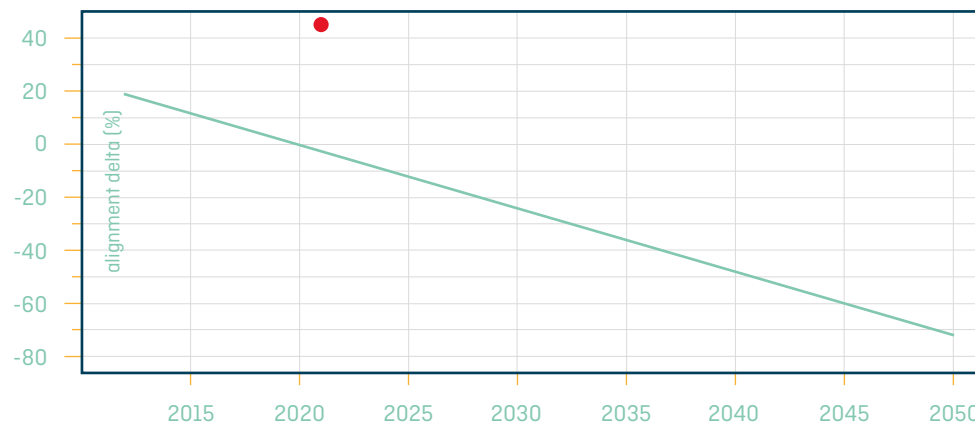


Dow is proud to be an inaugural Sea Cargo Charter Signatory and to have assisted the development of the parcel tanker data collection methodology. The parcel tanker methodology was completed in July of 2021, and with that in hand, Dow quickly pivoted to working with our carriers on data collection. Thanks to the diligent efforts of our Dow team and the good cooperation from our carriers, this report represents a significant milestone achievement on our journey to decarbonize. Dow looks forward to further utilization of this important data collection and reporting mechanism to drive carbon reductions across our chartering activities.

Lance Nunez, Global Marine and Terminal Director



Annual activity climate alignment score: 46.2%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	90.4%
5,000-9,999 dwt	129.5%
10,000-19,999 dwt	47.4%
20,000-39,999 dwt	31.3%
40,000-+ dwt	58.2%

Liquefied gas tanker	
0-49,999 dwt	64.2%
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

DS Norden

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

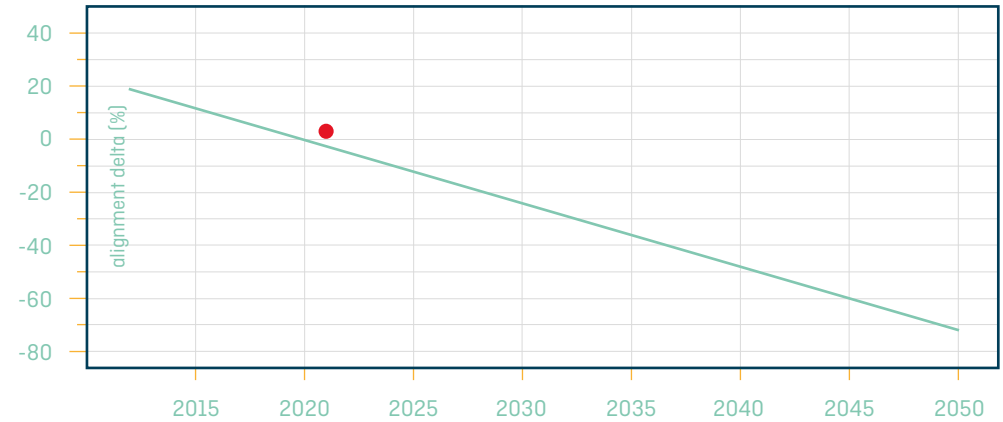
2021 being the first reporting year of the Sea Cargo Charter, Norden is for the first time able to compare our relative CO₂ emissions against a trajectory that will ensure alignment with the IMO reduction targets of 2050. Norden's alignment score was slightly above the trajectory indicating that further improvements in fuel efficiency and operational efficiency are needed to be aligned in 2022.

How does the Sea Cargo Charter influence your business activities and decision-making?

Norden is working on integrating the Sea Cargo Charter trajectories into the day-to-day decision-making. Being able to evaluate the climate impact of our business decisions is key to reaching our climate targets, which are a part of Norden's core strategy.

Creating transparency over CO₂ emissions and being aligned with our customers is an important first step in reducing emissions in shipping.

Annual activity climate alignment score: 2.5%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	10.7%
35,000-59,999 dwt	1.5%
60,000-99,999 dwt	-0.9%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	31.9%
40,000-+ dwt	21.8%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	-16.3%
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



The Sea Cargo Charter is an important step to promoting transparency across the industry when it comes to carbon emissions, establishing a common language and methodology to evaluate emissions.

Jan Rindbo, Chief Executive Officer

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Not Applicable	Included	Included



Eagle Bulk

Signatory as of November 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Improvement of environmental performance is an integral part of Eagle Bulk’s culture, and we are pleased to see these efforts reflected in our first Sea Cargo Charter climate alignment result. During 2021, our chartered-in fleet operations were almost 5% more efficient than the Sea Cargo Charter’s target climate alignment trajectory. The knowledge gained in measuring and reporting on our operations through Sea Cargo Charter in 2021 will support our continuous focus on improving efficiencies in our chartered-in operations in the future.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter is a welcome toolset that allows stakeholders across the shipping value chain to use the same language to understand climate alignment performance against a transparent benchmark. We have been encouraged by the dialogues this toolset has enabled us to have with our chartered-in vessel owners and other partners. The use of an EEOI metric (as opposed to an AER metric) by the Sea Cargo Charter to determine climate alignment is intuitive and has allowed Eagle Bulk to utilize efficiency improvement initiatives such as cargo intake optimization, optimal speed selection, and routing optimization to improve voyage efficiency and thereby climate alignment performance.

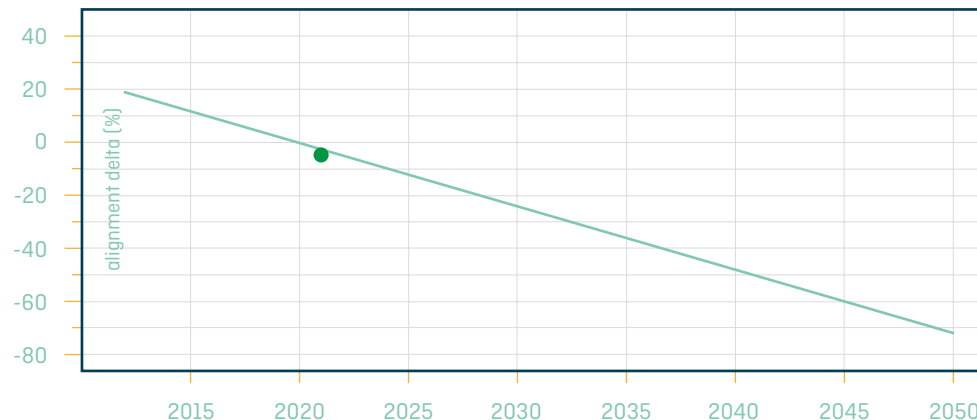


We are pleased to report our first annual Sea Cargo Charter climate alignment score. The satisfactory result is a welcome indication of our focus on decarbonization when selecting and operating chartered-in vessels. We look forward to leveraging what we have learned in compiling this first report as we continue to work to improve our performance.

Gary Vogel, Chief Executive Officer



Annual activity climate alignment score: -4.9%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	4.9%
60,000-99,999 dwt	-7.6%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Excluded

Enviva

Signatory as of April 2021
Reporting period: Q3, Q4 of 2021



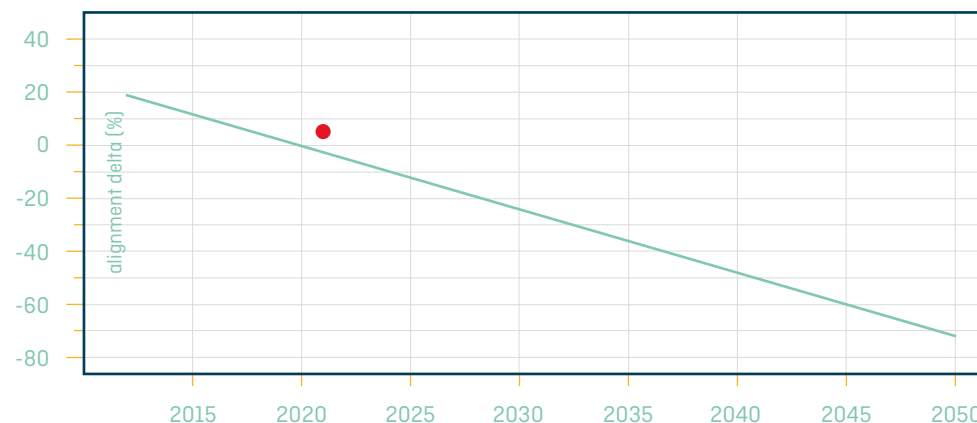
What are your key takeaways from your climate alignment score?

The change to a continuous baseline had a noticeable (detrimental) impact on the climate alignment score. What has also been very noticeable in what is a relatively small dataset is the impact of the inefficient voyages on the overall alignment score. In particular are those voyages which do not use the full cargo carrying capacity of the vessel and/or have a long ballast leg.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter allows Enviva to make progress towards managing our most substantial Scope 3 emission source, ocean shipping. With this partnership, Enviva can not only better understand our effect on GHG emissions from shipping, but can also allow better engagement with our shipping partners to enact changes to reduce GHG emissions from the hard-to-abate shipping sector.

Annual activity climate alignment score: 5.9%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	43.0%
35,000-59,999 dwt	-4.4%
60,000-99,999 dwt	3.3%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



This first reporting cycle of the Sea Cargo Charter will help Enviva to better understand its Scope 3 emissions and target efficiency opportunities in our supply chain, whilst remaining committed to be fully transparent in our emissions reporting.

Gordon Lugsdin, Senior Director, Chartering & Logistics

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Not Applicable	Included	Not Applicable	Not Applicable



Equinor

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Equinor’s total climate alignment score shows that we are well underway when it comes to Sea Cargo Charter’s current ambition. As is to be expected, some segments are performing better than others, due to trading patterns and vessel types. The scores give an indication of where additional emphasis on emissions reduction measures might be needed. Equinor supports a strengthened ambition of the Charter, aligning with the Paris Climate Accord ambition of keeping global temperatures rise at 1.5°C above pre-industrialised levels. We believe it’s important for the Charter to evolve and develop in reflection of relevant climate science.

How does the Sea Cargo Charter influence your business activities and decision-making?

Equinor’s seaborne transportation of crude, gas liquids, and LNG volumes involves more than 2500 voyages worldwide per year, and with around 100 ships in our tanker fleet, we are a significant charterer in the shipping market. As a producer and user of maritime fuel, Equinor has a good opportunity to help decarbonize shipping. We are working systematically on reducing our carbon intensity by developing new solutions contributing to substantial emission reductions and using alternative fuels in close collaboration with the industry. Our emissions data as reported through Sea Cargo Charter is an important foundation for the decision-making. The Sea Cargo Charter is promoting openness, accountability, and collaboration, and it is Equinor’s belief that a united industry is needed for the road ahead.

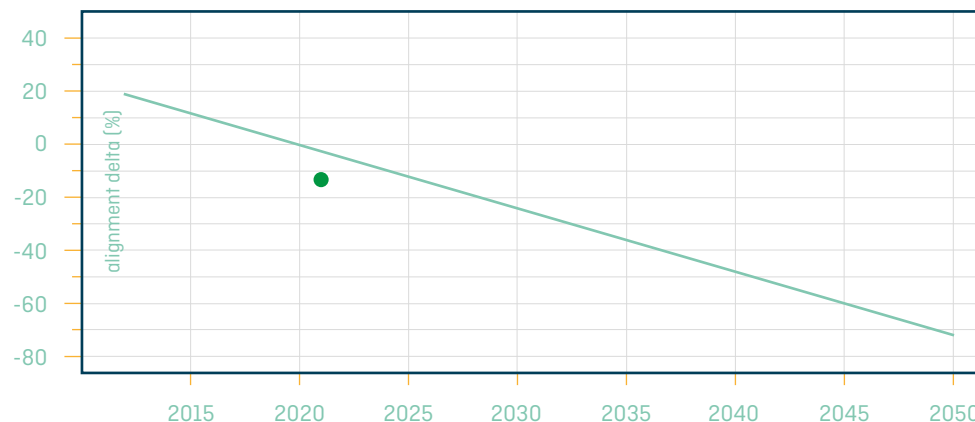


Sustainable shipping cannot be achieved by one player alone; we have to collaborate and be transparent to deliver on our maritime ambitions. By joining forces with influential and ambitious charterers in the Sea Cargo Charter, we aim to pull the industry in the right direction to make shipping more sustainable

Heidi Aakre, Vice President Shipping



Annual activity climate alignment score: -13.0%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	77.3%
10,000-19,999 dwt	41.9%
20,000-39,999 dwt	120.0%
40,000-+ dwt	1.9%

Liquefied gas tanker	
0-49,999 dwt	21.0%
50,000-99,999 dwt	17.4%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	91.5%
20,000-59,999 dwt	-0.8%
60,000-79,999 dwt	-21.2%
80,000-119,999 dwt	-34.6%
120,000-199,999 dwt	-4.4%
200,000-+ dwt	-35.5%

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Included	Not Applicable

Gunvor Group / Clearlake Shipping

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



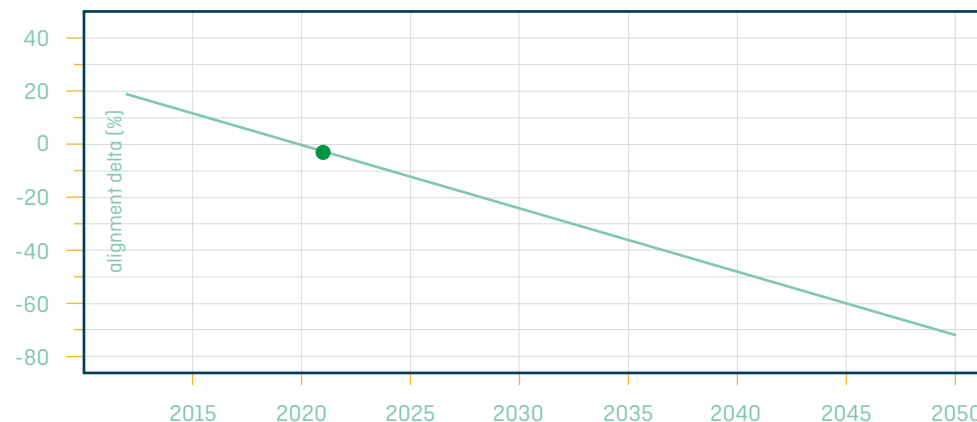
What are your key takeaways from your climate alignment score?

We find an excellent platform to work with industry players to achieve a common goal in climate alignment and have a transparent reporting methodology.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter guides us to assess better our present position and strategies for our fleet to align with IMO targets.

Annual activity climate alignment score: -1.3%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	-95.3%
5,000-9,999 dwt	28.1%
10,000-19,999 dwt	43.6%
20,000-39,999 dwt	29.8%
40,000-+ dwt	8.3%

Liquefied gas tanker	
0-49,999 dwt	-48.1%
50,000-99,999 dwt	20.9%
100,000-199,999 dwt	1.7%
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	5.6%
10,000-19,999 dwt	16.0%
20,000-59,999 dwt	-52.4%
60,000-79,999 dwt	26.2%
80,000-119,999 dwt	-31.1%
120,000-199,999 dwt	-39.1%
200,000-+ dwt	-22.3%

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



Gunvor Group is committed to reducing greenhouse gas emissions in all our shipping activities. It is enthusiastic about participating in the Sea Cargo Charter as a transparent and structured platform to achieve our goals simultaneously with our industry counterparts.

Andrew Hoare, Managing Director

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable



Holcim Trading

Signatory as of June 2021
Reporting period: Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

The reporting for 2021 shows that the average carbon intensity of our chartering activities is in line with IMO targets. This is a good starting point for our ambition to decarbonize our supply chain. Additional efforts will be required across the value chain to win the race for climate. On this journey, Holcim has set even more ambitious targets which have already been validated by the Science Based Targets initiative (SBTi) to achieve the net-zero across our entire value chain with near-term (2030) and long-term (2050) targets.

How does the Sea Cargo Charter influence your business activities and decision-making?

Carbon intensity and climate alignment measurement helps us to understand our shipping emissions, identify emission hotspots and qualify our third-party freight suppliers. Even though shipping accounts for only a small share of Holcim's overall emissions, we are committed to decarbonize our shipping segment. We implemented an industry-leading digital logistics platform, powered by artificial intelligence, allowing us to optimize routes & loads. We are gradually replacing traditional fuels with eco-friendly fuels, and generally working together with our freight suppliers to address our common emissions.

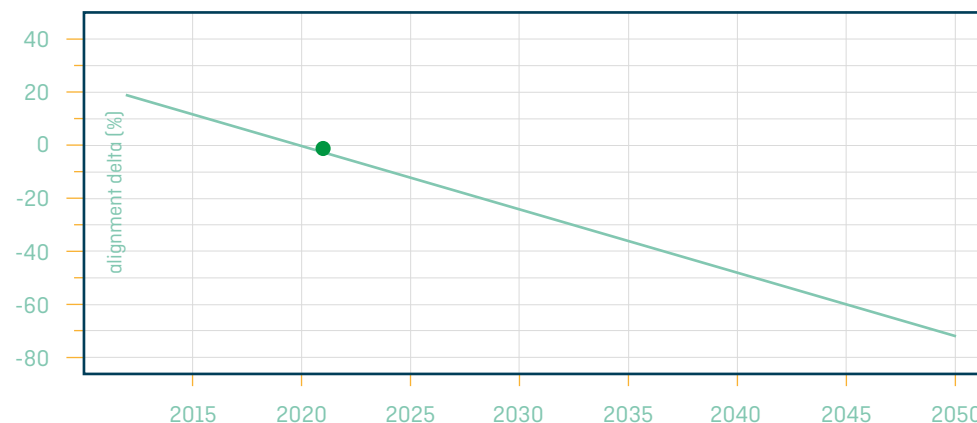


On our journey to net-zero at Holcim we are taking clear steps towards shipping decarbonization, from real emissions measurement to supply chain optimization and, in the end, carbon footprint reduction. It is urgent that all players across the value chain work together on this goal.

Berna Voigt, Head of Supply Chain



Annual activity climate alignment score: -0.1%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	3.2%
10,000-34,999 dwt	-9.5%
35,000-59,999 dwt	-1.4%
60,000-99,999 dwt	7.0%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

Klaveness Combination Carriers



Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

- 1) The Sea Cargo Charter format where our combination carriers (being both a tanker vessel and a bulk carrier) are reported vs. the baseline for bulk carriers is penalizing our score. IMO's CII-reporting has established a separate baseline for combination carriers being in between tankers and dry bulk carriers. We would recommend this change should also be made in the Sea Cargo Charter.
- 2) Our vessels are operating to a large extent in draft restricted ports with less than full cargo intake which is also penalizing the score.
- 3) In 2021, KCC had a less than perfect trading efficiency with a share of the vessels operating as either dry bulk or tanker vessels. We look likely to achieve substantial improvements in trading efficiency in 2022.
- 4) Ongoing energy efficiency investments in the fleet with several installations in 2H 2021 and more coming in the period 2022-2025 are expected to have a positive effect on our score in 2022 and onwards.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter and the principles behind are a central part of our company's strategy impacting every part of our business, everything from improving trading efficiency with target 85-90% of the fleet capacity in combi-trades and targetballast (as % of total on-hire days) limited to closer 10%. We are gradually replacing traditional fuels with eco-friendly fuels, and generally working together with our freight suppliers to address our common emissions.

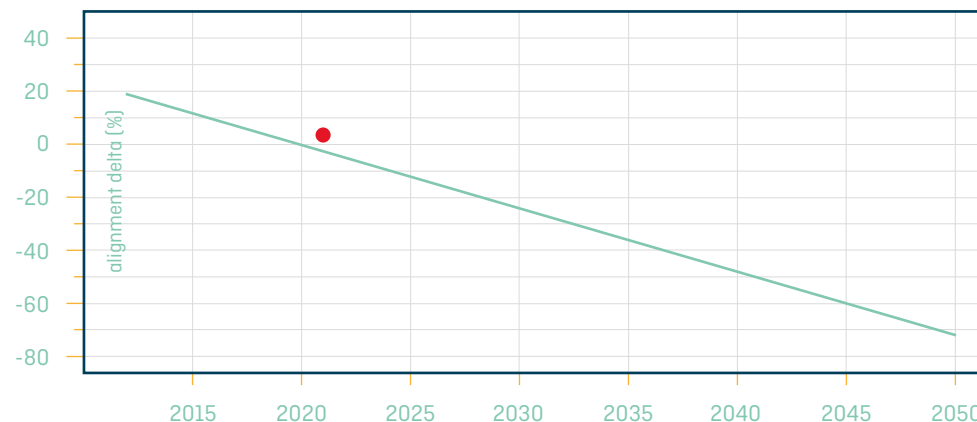


The first Sea Cargo Charter reporting since the establishment of the initiative in October 2020 is an important milestone for the shipping industry! The reporting reveals the need to work across all our business to deliver large cuts in carbon emission over the coming years through improvements in trading, operational and energy efficiency. Our participation in SCC is an important inspiration for us to reach our decarbonization targets.

Engbret Dahm, Chief Executive Officer



Annual activity climate alignment score: 3.3%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	3.3%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	1.2%
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Not Applicable	Included	Not Applicable	Included

Louis Dreyfus Company



Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

This alignment score exceeds our expectations. As LDC has been monitoring the carbon footprint of its shipping activities for 5 years now, we already have a sense of scale on this topic. This said, 2021 proved challenging with significantly different market dynamics compared to previous years. A high time charter and bunker environment has not been seen in the Dry Bulk segment in almost a decade, and this triggered the end of a lengthy slow steaming habit for the fleet. LDC noted that average speed increased by about 4% year on year, which has a sizeable impact on our carbon footprint and fleet efficiency. Similarly, the high congestion environment in 2021 proved challenging from both an operational and environmental standpoint. Improving efficiencies in ports and strengthening our control over vessel efficiency at sea will be two key elements in the decarbonization transition.

How does the Sea Cargo Charter influence your business activities and decision-making?

With this year's data in hand, LDC is in a position to move from an analysis stage to a decision-making stage in its decarbonization journey. In addition to developing several rules to govern our chartering activities, we have been working for some time on digital and physical solutions to improve vessel efficiency, and the Sea Cargo Charter is accelerating this process by helping strengthen the business case for these innovations.

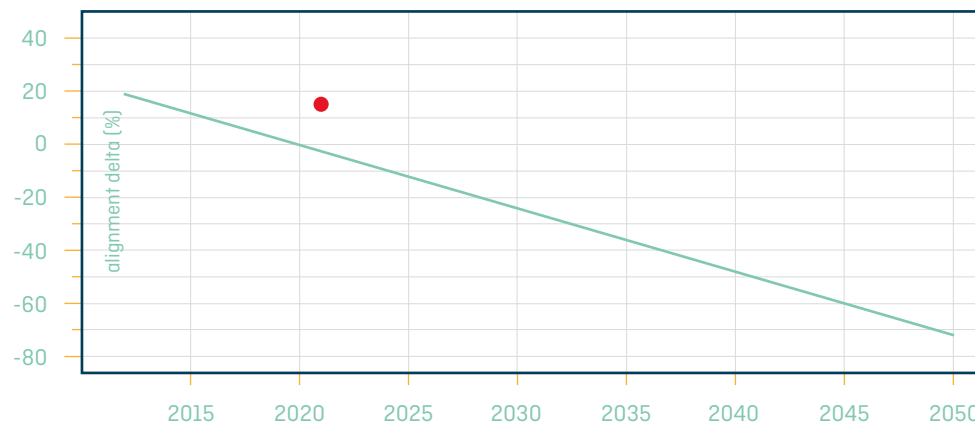


Decarbonization is a long journey which LDC has embarked on for several years now. While 2021 proved a challenging year, it also crystalized additional efforts needed from us as a shipping community to reach our goals, regardless of exogenous market factors.

Sebastien Landerretche, Global Head of Freight



Annual activity climate alignment score: 16.6%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	3.5%
10,000-34,999 dwt	17.5%
35,000-59,999 dwt	13.3%
60,000-99,999 dwt	20.2%
100,000-199,999 dwt	6.8%
200,000-+ dwt	8.9%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	45.9%
20,000-39,999 dwt	24.1%
40,000-+ dwt	20.7%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	-24.1%
10,000-19,999 dwt	N/A
20,000-59,999 dwt	14.4%
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Excluded	Not Applicable

Maersk Tankers



Signatory as of January 2021
Reporting period: Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

The reporting covers the last 3 quarters of 2021. We are operating in the product tanker space, having classified our vessels under Oil and Chemical basis IHS Stat code. Approximately 40% of the fleet is classified as Oil Tankers, 60% as Chemical. Under the Oil tanker category, our scores are well aligned, but are performing badly against Chemical targets. Though we see additional potential in the reported fleet, trajectories defined for Chemicals will have to be revisited.

How does the Sea Cargo Charter influence your business activities and decision-making?

Working with the Sea Cargo Charter has increased the transparency and made us structure our data basis which we now can [use to] both act, measure and report. We are now working towards clear KPIs within both operations, fuel optimisation and chartering. Furthermore, we have established a cross functional decarbonization group, focusing on preparing for changes and implement new solutions in our business.

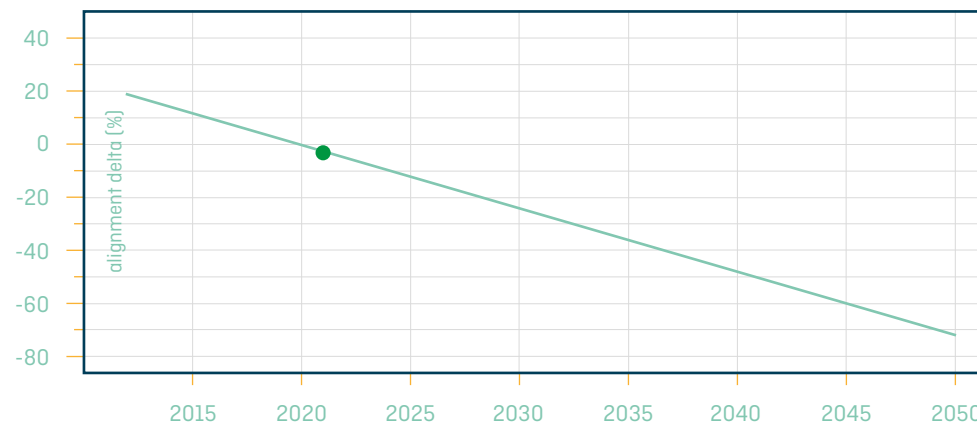


Being part of the Sea Cargo Charter continues to be of high value for us as commercial manager. Not only are we looking at how we as industry can create and share transparency, but also now seeing the positive impact of working with emissions in our daily work – internally as well as externally.

Eva Birgitte Bisgaard, Chief Commercial Officer



Annual activity climate alignment score: -1.8%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	47.2%
20,000-39,999 dwt	27.9%
40,000-+ dwt	4.6%

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	-17.7%
60,000-79,999 dwt	-26.9%
80,000-119,999 dwt	-13.5%
120,000-199,999 dwt	-41.0%
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Not Applicable	Included	Not Applicable

Nova Marine Carriers



Founding Signatory as of October 2020

Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

We observed a trend suggesting easier for the bigger vessels than for the smaller ones to comply. Surprising results for us given we operate a modern fleet and we believe we are in line with the various trajectories under IMO targets. Also our ships are classified as general cargo (GC) but no such category for alignment trajectory exists for them (we have clubbed them under bulk carrier (BC)). GC ships differ a lot in how they operate compared to BCs, with frequent port stops sometimes long, shorter laden voyages etc. Comparing GC to a BC alignment trajectory would explain to a large extent our high delta value. Another noteworthy point, the Sea Cargo Charter EEOI standard ratio for laden to ballast is 5:1 while for NOVA fleet this works out to be about 2.6:1 (laden to ballast distance). Simply an outcome for our ship type/size and nature of trade but goes against NOVA when comparing to alignment trajectory.

How does the Sea Cargo Charter influence your business activities and decision-making?

It increases our awareness and sense of responsibility in making future (shipping-related) investment decisions.

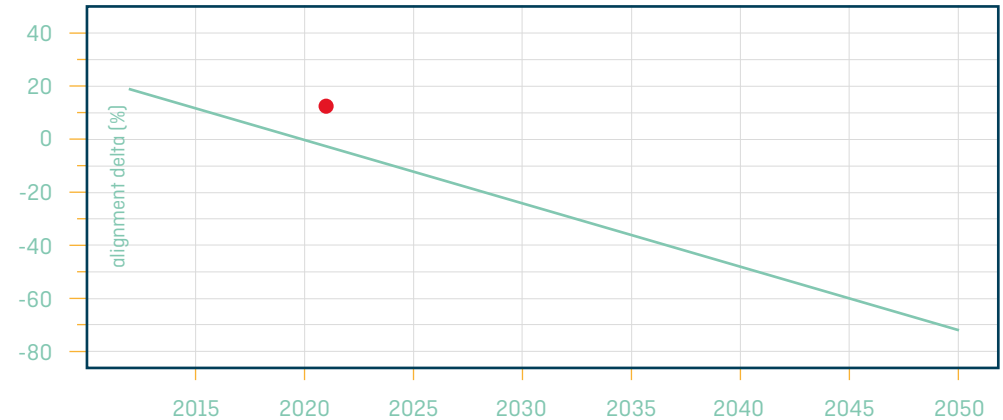


The future is ours, so let us make the right decisions.

Vincenzo Romeo, Chief Executive Officer



Annual activity climate alignment score: 12.6%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	22.3%
10,000-34,999 dwt	14.7%
35,000-59,999 dwt	3.2%
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Included	Included

NYK Bulkship Atlantic



Signatory as of July 2021
Reporting period: Q4 of 2021

What are your key takeaways from your climate alignment score?

We are pleased to report our first year's reporting which provides transparency to our climate activities. This figures also includes Light Bulk Carrier (LBC). Due to the vessel's nature that she loads light cargo and the calculation is based on using capacity and not weight, LBC vessel has a challenging EEOI figure. Nevertheless, having these vessels in calculation, we are happy that we have achieved the alignment delta. What is more important is that we take actions to improve the figure along the years, and we will surely continue to give our utmost efforts to do so.

How does the Sea Cargo Charter influence your business activities and decision-making?

As a Dry Bulk Ship Operator stationed in the Atlantic, the Sea Cargo Charter gives us an insight on how to move forward to meet our goals in reducing GHG emissions. The Sea Cargo Charter provides us the transparency of where we are and raises the environmental awareness to various parties in the shipping industry. We will continue to take steps not only by ourselves but together with our clients and concerned, to become the sustainable solution provider in the shipping industry.

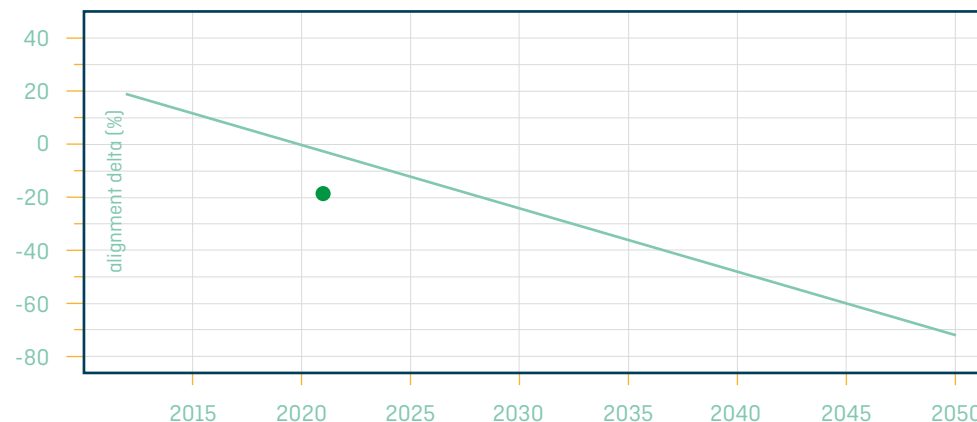


We are pleased to present our first result which is an important step to share and improve our GHG emissions goals. We are proud that we are having more concrete discussion on the climate internally and externally. We look forward to actively take part in the global climate issue together with the Sea Cargo Charter.

Keiji Fujita, Managing Director



Annual activity climate alignment score: -19.8%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	-19.8%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Not Applicable	Excluded	Excluded

Shell International Trading and Shipping Company

Founding Signatory as of October 2020

Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Transparency in how emissions are reported is a critical first step on the path to shipping decarbonization. Our score signals the importance of action to reduce emissions now and to deliver future pathways for zero-carbon shipping.

The data suggests that the efficiency of LNG carriers is above the trajectory and we will continue our strategy to identify areas for further improvement. However, our most efficient vessels with their projected CII A-rating remain above the trajectory, a measurement that should be aligned with this framework. We look forward to our continued collaboration with the Sea Cargo Charter to ensure the most consistent and robust reporting framework.

Disclaimer: The figures provided are for comparative purposes only. Shell does not make any representation or warranty regarding their accuracy, completeness and reliability and is not liable for any loss or damages arising out of, or in connection with their use.

How does the Sea Cargo Charter influence your business activities and decision-making?

Supported by insights from the data, we will harness these learnings to inform our strategy of where further progress is needed to advance the emissions performance of the fuels we use, the technology we deploy and the vessels we operate. Whether that is through our choice of LNG as fuel for newbuilds, renewing our LNG fleet with the most efficient vessels available and divestment of less efficient vessels, or introducing air lubrication and other energy efficient technologies to deliver more CII A-rated LNG carriers. This is alongside our continued commitment to the R&D of future fuels and enabling technologies that will deliver a decarbonized future for shipping. The Sea Cargo Charter has provided a strong mandate for the transparent self-reporting of shipping emissions, and we welcome the ongoing influence this will have on accelerating the decarbonisation efforts of the industry.

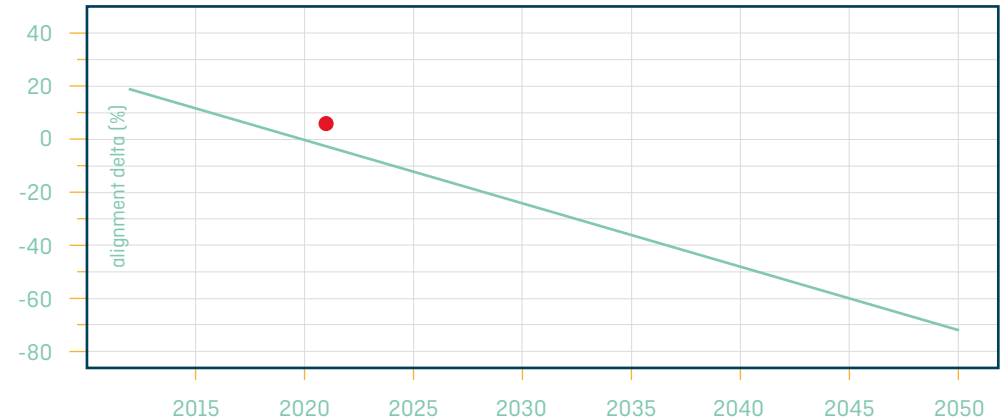


We are proud to be a Signatory of the Sea Cargo Charter and we welcome the opportunity to uphold the transparent reporting of emissions. The insights gathered are invaluable in guiding our strategy to further improve the efficiency of the fuels and technologies we use, and the vessels we operate.

Karrie Trauth, Senior Vice President Shipping & Maritime



Annual activity climate alignment score: 6.2%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	248.3%
10,000-19,999 dwt	77.1%
20,000-39,999 dwt	11.9%
40,000-+ dwt	6.1%

Liquefied gas tanker	
0-49,999 dwt	86.3%
50,000-99,999 dwt	-10.8%
100,000-199,999 dwt	44.8%
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	9.7%
10,000-19,999 dwt	37.4%
20,000-59,999 dwt	-14.5%
60,000-79,999 dwt	-25.6%
80,000-119,999 dwt	-18.6%
120,000-199,999 dwt	-4.5%
200,000-+ dwt	-22.3%

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

Partial submission - the following is excluded from reporting: parcel/space chartering for chemicals

Signal Maritime Services



Signatory as of May 2022

Reporting period: Q1, Q2, Q3, Q4 of 2021

What are your key takeaways from your climate alignment score?

It is evident that our approach towards optimizing various factors to achieve higher triangulation and optimal vessel employment really pays off in the sense that we are able to provide the best possible financial results and at the same time keep our total carbon footprint at the minimum possible levels.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter is a great opportunity for Signal Maritime Services and many other like-minded organizations with environmentally conscious attitude. Our decision-making in the commercial trading of vessels is driven to a large extent by the effort to achieve better utilization of our fleets. This has a direct positive impact on emissions. Being part of the Sea Cargo Charter practically increases the environmental consciousness for Signal's commercial team for such decision-making, embeds an implicit environmental target in every single vessel trade decision and motivates the team to work towards a better emission profile for the whole fleet.

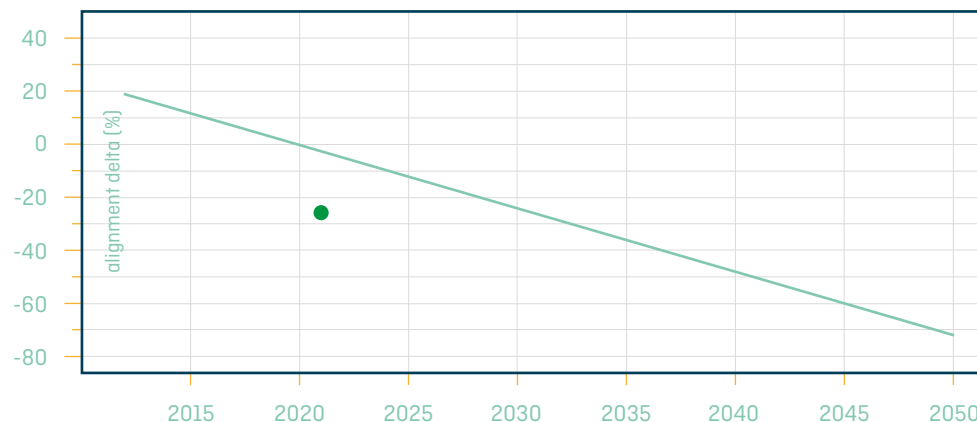


Our dedication towards decarbonization is supported by the fact that we are on the right path as Signal Maritime Services is reaching substantially lower fleet emissions in comparison to the current trajectories. It is of great importance to push further to achieve sustainable and long-lasting effects.

Panos Dimitracopoulos, Chief Executive Officer



Annual activity climate alignment score: -26.1%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	N/A
60,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	-43.0%
60,000-79,999 dwt	N/A
80,000-119,999 dwt	-22.8%
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Not Applicable	Not Applicable	Included	Not Applicable

Tata Steel



Signatory as of July 2021
Reporting period: Q4 of 2021

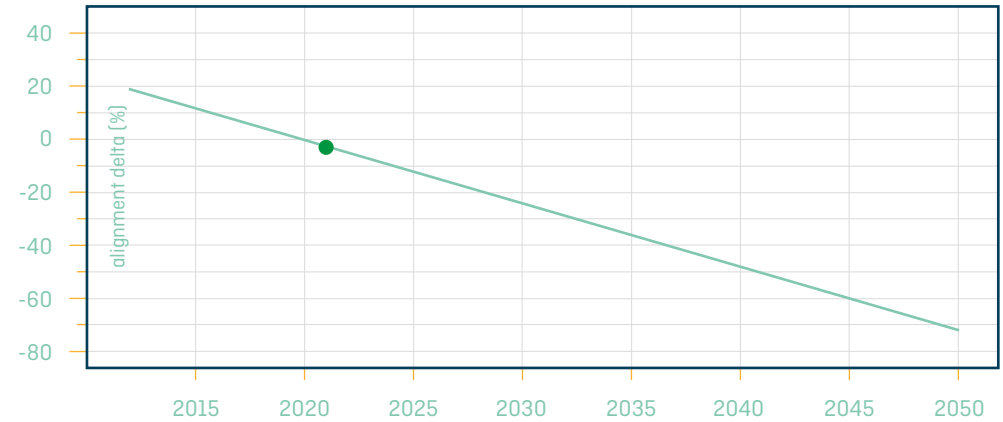
What are your key takeaways from your climate alignment score?

Bulk Carrier Categories 3 and 4 are having a positive Delta compared to our IMO targets. Going ahead, corrective actions will be taken to ensure compliance in these categories also.

How does the Sea Cargo Charter influence your business activities and decision-making?

This exercise helped us to understand our position as compared to our targets. In the coming quarters, our focus will be to comply to targets under all categories.

Annual activity climate alignment score: -2.1%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	-24.8%
35,000-59,999 dwt	18.7%
60,000-99,999 dwt	4.3%
100,000-199,999 dwt	-20.2%
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



Sustainability is a very integral part of Tata Steel ecosystem. This exercise helped us in benchmarking ourselves and also laid out a clear direction for us. Through our initiatives, we wish to comply with our requirements ahead of our timelines.

Som Sekhar Mishra, Head, Outbound Shipping & Shipping Operations



Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Not Applicable	Not Applicable

Torvald Klaveness (Klaveness Chartering)



Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021

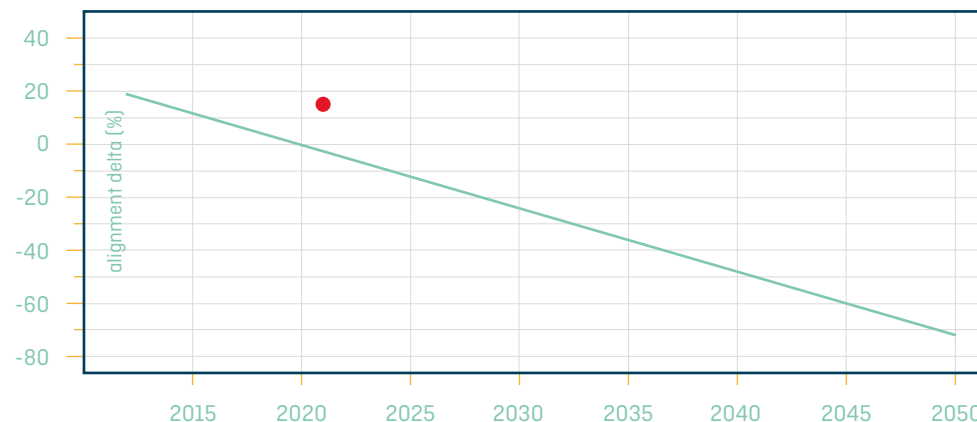
What are your key takeaways from your climate alignment score?

On a general note, the results from the Sea Cargo Charter climate alignment score are both surprising and thought-provoking. While we believe that the calculation methods for the alignment can be further improved, we are taking this as a positive first step in understanding the process and developing internal targets for reducing our emissions.

How does the Sea Cargo Charter influence your business activities and decision-making?

This will kick start our process of implementing concrete measures around execution of our various areas of trading, with a higher focus on better tonnage and shorter ballast. For specific trades such as Grain to Southeast Asia (with shorter laden legs) and short-hauls from Indonesia to the Philippines it looks to be a bigger challenge to reach the alignment target, but we will continue to work on improving alignment here nonetheless.

Annual activity climate alignment score: 15.8%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	N/A
35,000-59,999 dwt	-11.3%
60,000-99,999 dwt	16.3%
100,000-199,999 dwt	10.2%
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	N/A
40,000-+ dwt	N/A

Liquefied gas tanker	
0-49,999 dwt	N/A
50,000-99,999 dwt	N/A
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	N/A
60,000-79,999 dwt	N/A
80,000-119,999 dwt	N/A
120,000-199,999 dwt	N/A
200,000-+ dwt	N/A

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.



With this first reporting round, Klaveness Chartering, the Sea Cargo Charter and the shipping industry have embarked on a vital journey of improvement with decarbonization. In Klaveness Dry Bulk, we will set specific targets for each of our trading areas to improve alignment. We will also contribute to further refining the calculation methods for the alignment score to ensure that these are commonly accepted by, and motivating for, those responsible for execution.

Michael Jørgensen, Senior Vice President, Head of Klaveness Dry Bulk



Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Not Applicable	Excluded	Not Applicable

TotalEnergies

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

Collecting accurate CO₂ data out of every voyage has really been a step-up for the shipping industry. We successfully rose to the challenge and are happy to report that we have achieved data collection for more than 95% of our voyages.

Still, the Sea Cargo Charter methodology could be refined. In particular, there are inconsistencies in the reference values for the smaller vessels, the chemical tankers and the LNG carriers. It makes it difficult to draw conclusions out of the category results. In 2021 our portfolio climate alignment score was 4.5% below the benchmark. It exceeds the IMO ambition and strengthens our strategy to reduce the emissions generated by the transportation of our products to our customers.

How does the Sea Cargo Charter influence your business activities and decision-making?

The CO₂ footprint of shipping activity is the result of combined technical and operational aspects. The Sea Cargo Charter methodology and framework enable us to move away from a theoretical approach to an actual emission viewpoint. This initiative is becoming a key tool for our Chartering activities both for the long term and the day-to-day decisions. Since we joined the Sea Cargo Charter, we committed on 15 newbuilt LNG carriers equipped with the latest technologies along with six new dual fuel tankers. This modern time-chartered fleet will drive further improvement of our climate alignment score.

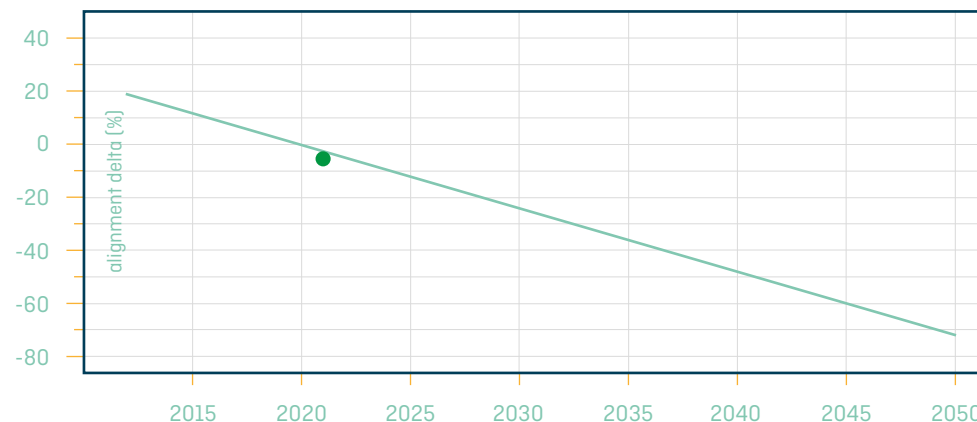


Since its foundation, the Sea Cargo Charter initiative has been a great tool to mobilize all teams involved in shipping across TotalEnergies. This first reporting is very encouraging and has already sparked many educated reflexions and triggered concrete actions on how to further improve the sustainability of our Shipping activity.

Jerome Cousin, Senior Vice President Shipping



Annual activity climate alignment score: -4.5%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	N/A
10,000-34,999 dwt	21.1%
35,000-59,999 dwt	-15.1%
60,000-99,999 dwt	-28.6%
100,000-199,999 dwt	N/A
200,000-+ dwt	N/A
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-39,999 dwt	31.4%
40,000-+ dwt	2.1%

Liquefied gas tanker	
0-49,999 dwt	29.1%
50,000-99,999 dwt	-10.6%
100,000-199,999 dwt	52.4%
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	N/A
10,000-19,999 dwt	N/A
20,000-59,999 dwt	-17.3%
60,000-79,999 dwt	-24.0%
80,000-119,999 dwt	-29.6%
120,000-199,999 dwt	-23.5%
200,000-+ dwt	-28.3%

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Included	Included

Partial submission - the following is excluded from reporting: vessels under 20,000 dwt

Trafigura

Founding Signatory as of October 2020
Reporting period: Q1, Q2, Q3, Q4 of 2021



What are your key takeaways from your climate alignment score?

We are pleased to see that the continued focus on efficiency across the full scope of Trafigura shipping activity have resulted in a strong overall alignment score. We will need to keep increasing our efforts as the trajectory ambitions of the Sea Cargo Charter will make it increasingly difficult for vessels, especially in the dry bulk sector, to achieve their required intensity. It is also clear that there are still reporting challenges to be tackled as a group with chemical tanker classification for vessels on oil business remaining an issue. The collaborative nature of the Sea Cargo Charter group provides the ideal platform to find solutions to challenges like these in a standardized manner.

How does the Sea Cargo Charter influence your business activities and decision-making?

The Sea Cargo Charter is a vital tool for us to understand the efficiency of the different parts of our business in a way that is consistent with other key shipping counterparts. This allows us to focus our efforts on key performance areas across the fleet and make informed decisions based on real data. It also allows us to broadly benchmark our performance vs the industry which is vital in identifying problem areas and encouraging industry collaboration.

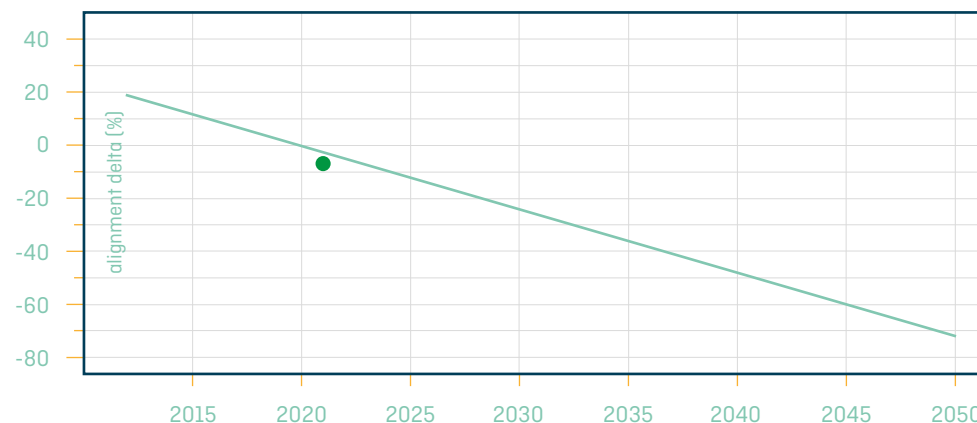


We need global standardized systems to ensure we all understand what is being reported. The Sea Cargo Charter initiative is a way to the establishment of an equal and level playing field in reporting and analyzing emissions data for the shipping industry. Decarbonization is a key part of Trafigura's shipping strategy and this standardized platform gives us the confidence in our own data needed to make the necessary changes in the way we operate to both achieve emissions targets and to drive forward the transition to sustainable shipping.

Rasmus Bach Nielsen, Global Head Fuel Decarbonisation



Annual activity climate alignment score: -7.5%



Vessel category climate alignment

Bulk carrier	
0-9,999 dwt	21.9%
10,000-34,999 dwt	10.9%
35,000-59,999 dwt	0.4%
60,000-99,999 dwt	6.6%
100,000-199,999 dwt	18.6%
200,000-+ dwt	-40.9%
Chemical tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	391.4%
10,000-19,999 dwt	94.3%
20,000-39,999 dwt	49.7%
40,000-+ dwt	14.1%

Liquefied gas tanker	
0-49,999 dwt	11.6%
50,000-99,999 dwt	-11.4%
100,000-199,999 dwt	52.0%
200,000-+ dwt	N/A
Oil tanker	
0-4,999 dwt	N/A
5,000-9,999 dwt	29.1%
10,000-19,999 dwt	-26.5%
20,000-59,999 dwt	-2.6%
60,000-79,999 dwt	-22.2%
80,000-119,999 dwt	-19.5%
120,000-199,999 dwt	-31.0%
200,000-+ dwt	-27.0%

Liquefied gas carriers and chemical tankers' alignment is subject to some methodological uncertainty as explained in section 4 of this report.

Segment 1 Only time charterer & final time charterer	Segment 2 Voyage charterer	Segment 3 Intermediate time charterer & bareboat charterer	Segment 4 Owned vessels
Included	Included	Included	Not Applicable



Key terms

AER - The Annual Efficiency Ratio which is a carbon intensity metric used for IMO DCS and utilized by the Poseidon Principles.

Carbon intensity - The representation of the total operational emissions generated to satisfy a supply of transport work (grams of CO₂ per tonne-nautical mile [gCO₂ / tnm]). The Sea Cargo Charter uses the EEOI metric for this calculation.

Charterers - The party who buys freight services from a (disponent) owner under time or voyage charters.

Climate alignment - The degree to which voyage carbon intensity of a vessel type is in line with a decarbonization trajectory that meets the IMO ambition of reducing total annual GHG emissions by at least 50% by 2050 based on 2008 levels.

Continuous baselines - In order to avoid bias against vessels due to their position within a vessel category due to their size which could make alignment more challenging, continuous baselines are introduced in the Sea Cargo Charter. This implies that the required intensity is directly related to the size of the vessel through a power law relationship similar to what is currently in place for the Energy Efficiency Design Index (EEDI). Thus, each vessel type has an annual continuous baseline that defines required carbon intensity which are defined in Appendix 4 of the Sea Cargo Charter Technical Guidance.

Decarbonization trajectory - A representation of how many grams of CO₂ a single voyage can emit to move one tonne of goods one nautical mile (gCO₂/tnm) over a time horizon. It is produced by the Secretariat based on agreed and clearly-stated assumptions to be aligned with the IMO's Initial Strategy absolute emission reduction ambition of at least 50% by 2050 on 2008 levels. The method used for establishing the decarbonization trajectory up to 2050 is derived from emission and transport work data from the Fourth IMO GHG Study.

EEOI - The Energy Efficiency Operational Indicator was developed by the IMO in order to allow shipowners to measure the fuel efficiency of a ship in operation. The equation is available on page 17 of this report. EEOI is the carbon intensity metric used by the Sea Cargo Charter.

GHG - Greenhouse Gas.

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

Partial submission - Companies can apply for partial submissions, meaning they would exclude certain activities from their reporting. Partial submissions are approved by the Secretariat and reviewed annually. If a partial submission applies for a Signatory, it is stated so on their individual page of this report.

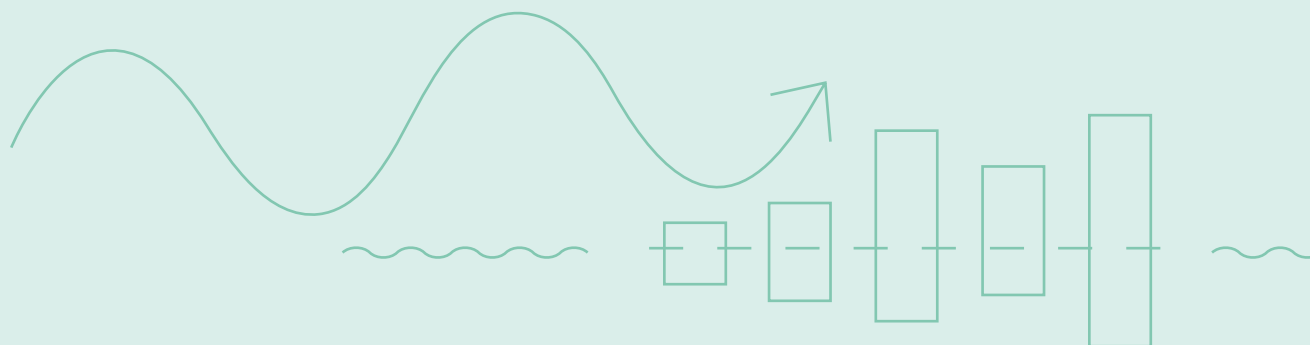
Signatory - A charterer that has sent a formal document to the Sea Cargo Charter Secretariat, has had that declaration accepted, and has had that declaration announced.

Technical Guidance - The fundamental document of the Sea Cargo Charter describing the principles and the methodology, accessible on the Sea Cargo Charter website.

Time charter - A contract for the hire of a named vessel from a (disponent) owner, for a specified period of time for the charterer's purposes subject to agreed restrictions. When on time charter, the (disponent) owner is responsible for the vessel's running expenses; the (disponent) owner operates the vessel technically, and the charterer directs the ship's commercial operations. Charterers pay a daily rate for a fixed time period and all voyage costs including bunker.

Vessel type and size (vessel categories) - Carbon intensities vary as a function of ship type and size, as well as a ship's technical and operational specification. To enable the carbon intensity of ships to be compared to a peer group of ships of a similar type and size, a classification system is applied. The classification system is taken from the Fourth IMO GHG Study, to enable consistency with the IMO's process. Under the Sea Cargo Charter, Signatories are required to report, among other, their vessel category climate alignments, which categories are defined by vessel type and size.

Voyage charter - A contract for the transportation of a stated quantity by a stated type of cargo on a named vessel between named ports against an agreed price. On voyage charters, the charterer pays a transactional rate based on the amount of cargo transported and the route. The (disponent) owner bears both the operational costs and voyage costs. In this case, charterers do not have access to the actual fuel consumption during the voyage and, in the case of vessels carrying multiple cargos, the proportion of cargo each charterer has on board is unknown. Contracts of affreightment and parcelling fall under voyage charters operated under the same cost regime.

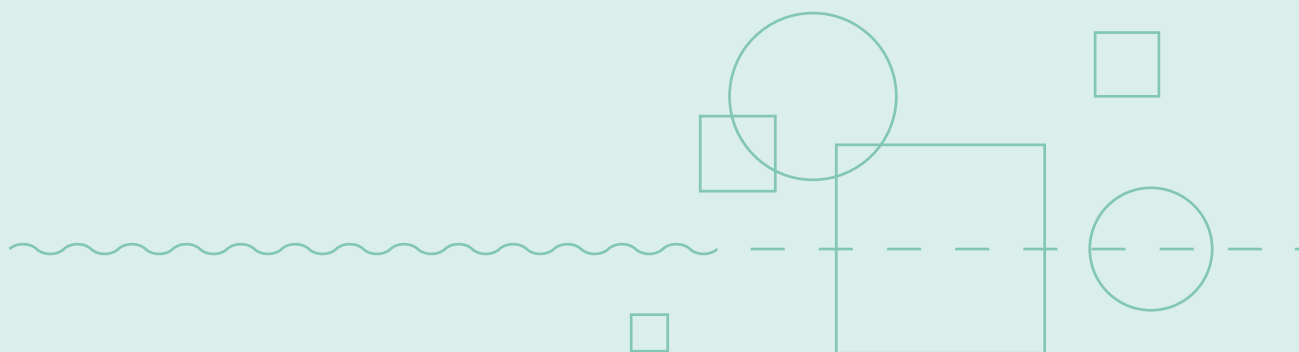


References

Faber, J., Hanayama, S., Zhang, S., Pereda, P., Comer, B., Hauerhof, E., Schim van der Loeff, W., Smith, T., Zhang, Y., Kosaka, H., Adachi, M., Bonello, J.-M., Galbraith, C., Gong, Z., Hirata, K., Hummels, D., Kleijn, A., Lee, D.S., Liu, Y., Lucchesi, A., Mao, X., Muraoka, E., Osipova, L., Qian, H., Rutherford, D., Suárez de la Fuente, S., Yuan, H., Velandia Perico, C., Wu, L., Sun, D., Yoo, D.-H., & Xing, H. (2020) "Fourth IMO GHG Study 2020". MEPC 75/7/15. International Maritime Organization, London, UK. Available [here](#).

"The Sea Cargo Charter Technical Guidance". 29 March 2022. Available [here](#).

"Resolution MEPC.1/Circ.684, 2009 – Guidelines For Voluntary Use Of The Ship EEOI". Available [here](#).



Acknowledgements

The Annual Disclosure Report was developed by the Secretariat and Advisory to the Sea Cargo Charter. Special thanks to all the **Signatories**, the **Steering Committee**, and the **Technical Committee** who, through a continuous review process of the methodology, ensure that the Sea Cargo Charter remains practical, effective. and ambitious.

Secretariat

Global Maritime Forum

Johannah Christensen, Chief Executive Officer

Louise Dobler, Programme Manager, Decarbonization

Anna Jilkova, Project Coordinator

Tina Maver, Communications Manager

Advisory

University College London/UMAS

Jean-Marc Bonello, Principal Consultant, UMAS

Smart Freight Center

Alan Lewis, Technical Director

Layout by **Housatonic.eu**



Sea Cargo Charter

Amaliegade 33 B, 3rd floor
1256 Copenhagen K
Denmark

www.seacargocharter.org
info@seacargocharter.org

© Sea Cargo Charter