



SCIENCE BASED TARGET- SETTING IN THE MARITIME TRANSPORT SECTOR

2nd IN-DEPTH TRAINING WEBINAR

31 May 2023

PARTNER ORGANIZATIONS



United Nations
Global Compact



WORLD
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IN COLLABORATION WITH

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BUSINESS
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VIDEO-CONFERENCE GUIDELINES

- This is a **zoom webinar**. Your camera and microphone are automatically muted.
- Participants can **send questions via the Q&A button**.
- **Slides from this webinar will be shared** after this meeting.
- Please note that this webinar will be **recorded** for the benefit of those who cannot attend.



AGENDA

1. Housekeeping and agenda
2. Introduction to the SBTi Maritime Guidance
3. Modeling maritime transport science-based targets
4. Q&A
5. Closing

TODAY'S WEBINAR TEAM



FERNANDO
RANGEL VILLASANA
Head of Sector Development
SBTi



JEAN-MARC
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Principal Consultant
UMAS



ALAN LEWIS
Technical Director
SFC

INTRODUCTION TO THE SBTi

What is the Science Based Targets initiative?



SCIENCE
BASED
TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

The Science Based Targets initiative (SBTi) is a **global body** enabling businesses and financial institutions to set **ambitious emissions reductions** targets in line with **climate science**.

Founding Partners



United Nations
Global Compact



WORLD
RESOURCES
INSTITUTE



In collaboration with



TECHNICAL GUIDANCE AND TOOL



PARTNER ORGANIZATIONS



SCIENCE BASED TARGET SETTING FOR THE MARITIME TRANSPORT SECTOR

Version 1.0
November 2022



Sectoral Decarbonization Approach - Maritime Transport Tool

Version:

Please refer to: [Terms of use](#)
[Disclaimer](#)

Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Please select vessel type for transport activity

Section 2. Select vessel size category

Please refer to guidance document for details

Section 3. Enter emissions and activity data

Select a base year Any base year between 2018 and the current year is eligible

Select a target year Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year metric tonnes of CO₂-equivalent (MTCO₂e)

Activity in base year gross tonne nautical miles (GT.nm)

Expected activity in target year gross tonne nautical miles (GT.nm)

Section 4. Review target modelling results

Target modelling results - 1.5C



THE SBTi MARITIME GUIDANCE

THE CHALLENGE

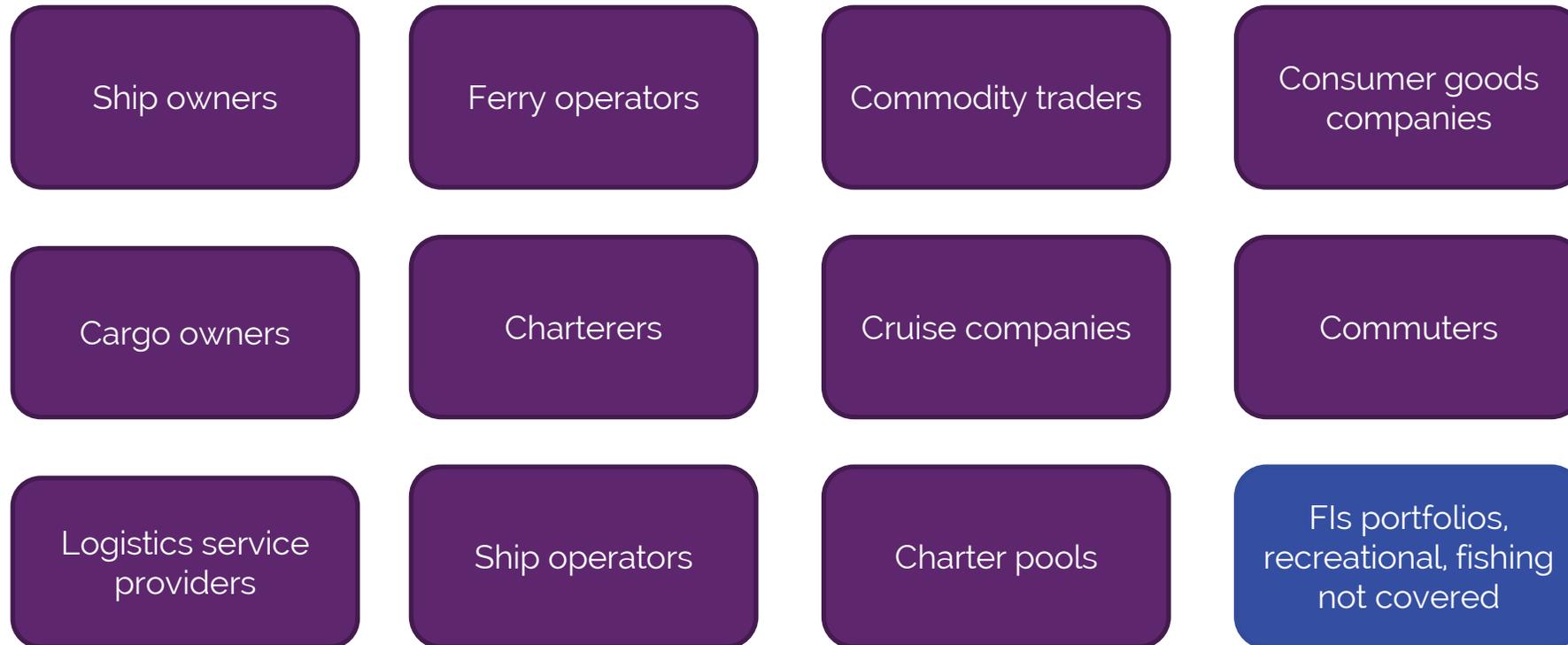
Decarbonizing a critical link of global trade

- 80% of global trade by volume is carried by sea.
- 3% of global GHG emissions (~1GT of CO₂e).
- Completely reliant on fossil fuels.
- Highly heterogeneous (cargo categories, vessel types, vessel sizes, routes).
- Long asset replacement cycles.



WHAT DOES MARITIME TRANSPORT GUIDANCE COVER?

All movement of goods and people on shipping vessels



A toolkit to **measure** carbon intensity of activity to **inform** decision-making around short-term **actions** towards a **long-term goal**.

FREQUENTLY ASKED QUESTIONS



Can the guidance be applied to ship builders?

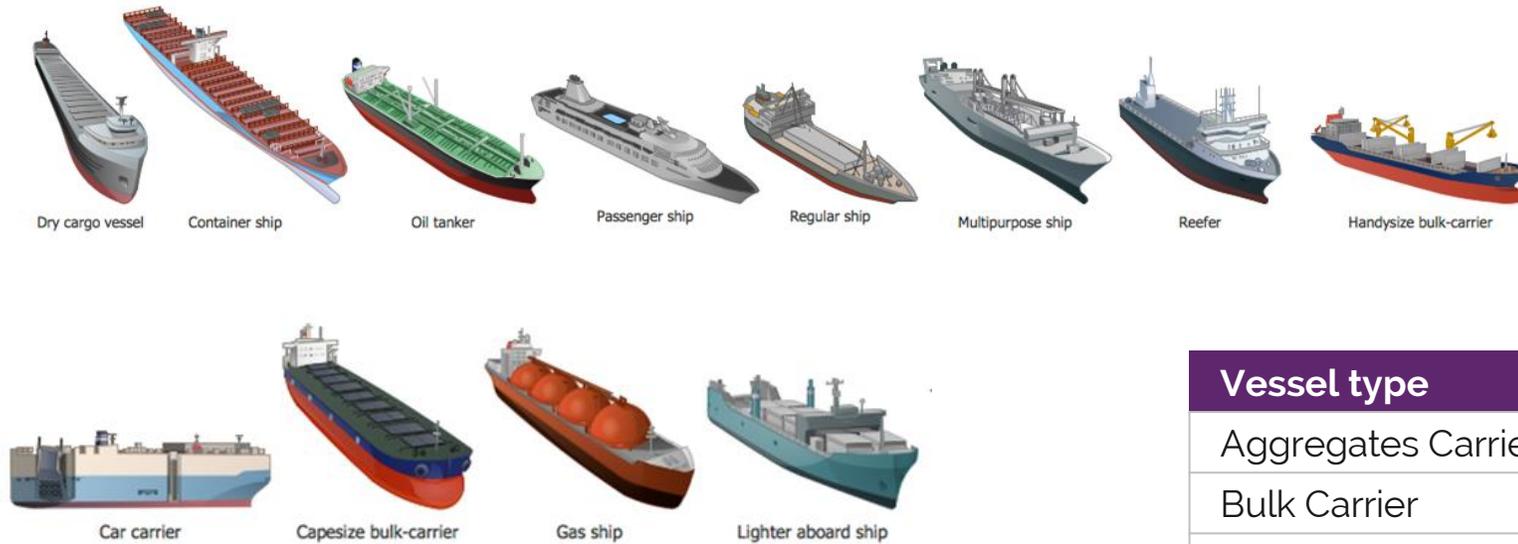
This guidance focuses on targets associated with providing and, or purchasing marine transportation activity. The guidance does not directly address targets associated with the manufacture of ships.



How does this guidance affect ports? How should ports set a target?

This guidance focuses on transportation activity by vessel, rather than the ports where vessels call. Ports can set targets following the [SBTi General Criteria](#). A port may also use this maritime transportation specific guidance to inform scope 3 targets related to transport activities in its facilities.

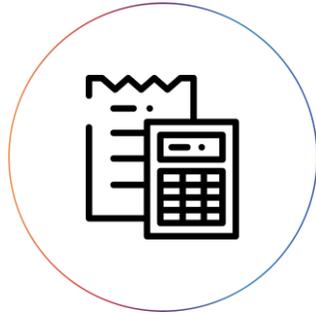
SHIP CATEGORIZATION



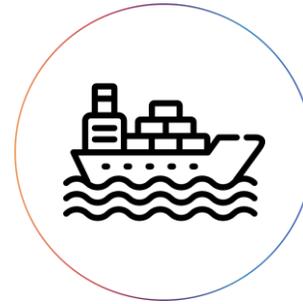
| Vessel type | SBTi vessel type |
|--------------------------------------|------------------|
| Aggregates Carrier | Bulk carrier |
| Bulk Carrier | Bulk carrier |
| Bulk Carrier (with Vehicle Decks) | Bulk carrier |
| General Cargo/Tanker | General Cargo |
| Heavy Load Carrier | General Cargo |
| Heavy Load Carrier, semi submersible | General Cargo |
| Livestock Carrier | General Cargo |

Comprehensive list provided in the [Technical Guidance](#) and [Tool](#) based on IMO4 categorization.

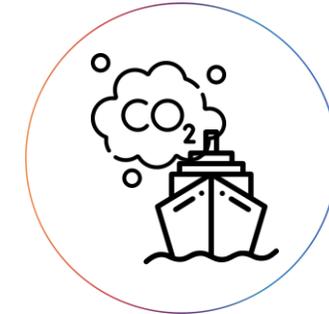
PATHWAY DESIGN



CARBON
BUDGET



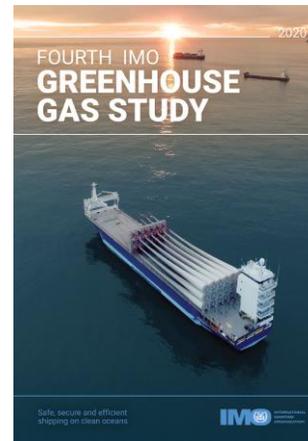
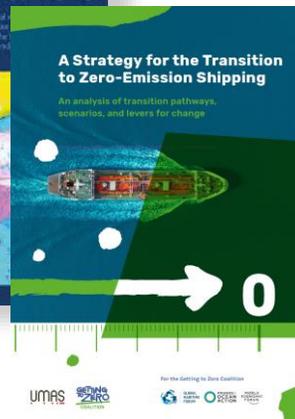
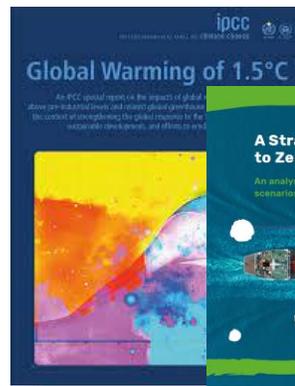
TRANSPORT
WORK DEMAND



CARBON INTENSITY

Well Below 2°C

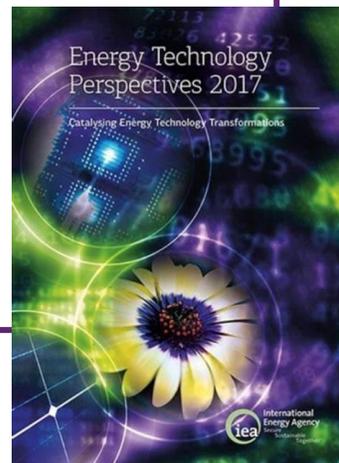
1.5°C



CARBON BUDGET ALLOCATION

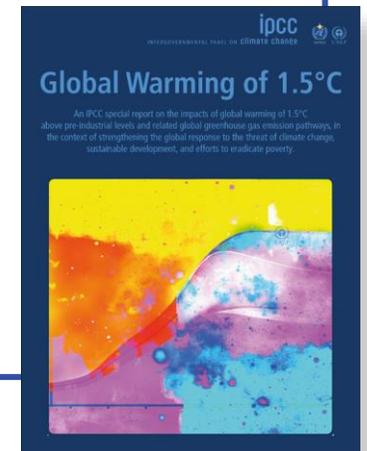
WB2°C

- Carbon budget projection from Energy Technology Perspectives 2017 published by the International Energy Agency.
- Well to wake provided at 5 year intervals.
- Linear interpolation.



1.5°C

- Establish carbon budget based on IMO4 and IPCC 1.5°C.
- Translate budget from TtW to WtW budget.
- Translate linear assumption to logistics (S-curve).



FREQUENTLY ASKED QUESTIONS



What is the emission boundary of the SBTi Maritime Transport Pathway?

The emissions pathway cover the full lifecycle of the energy source (i.e., Well-to-Wake) and are expressed as CO₂ equivalents, including the full global warming impact of all UNFCCC pollutants on a 100 year timeframe.



What carbon intensity metric is used?

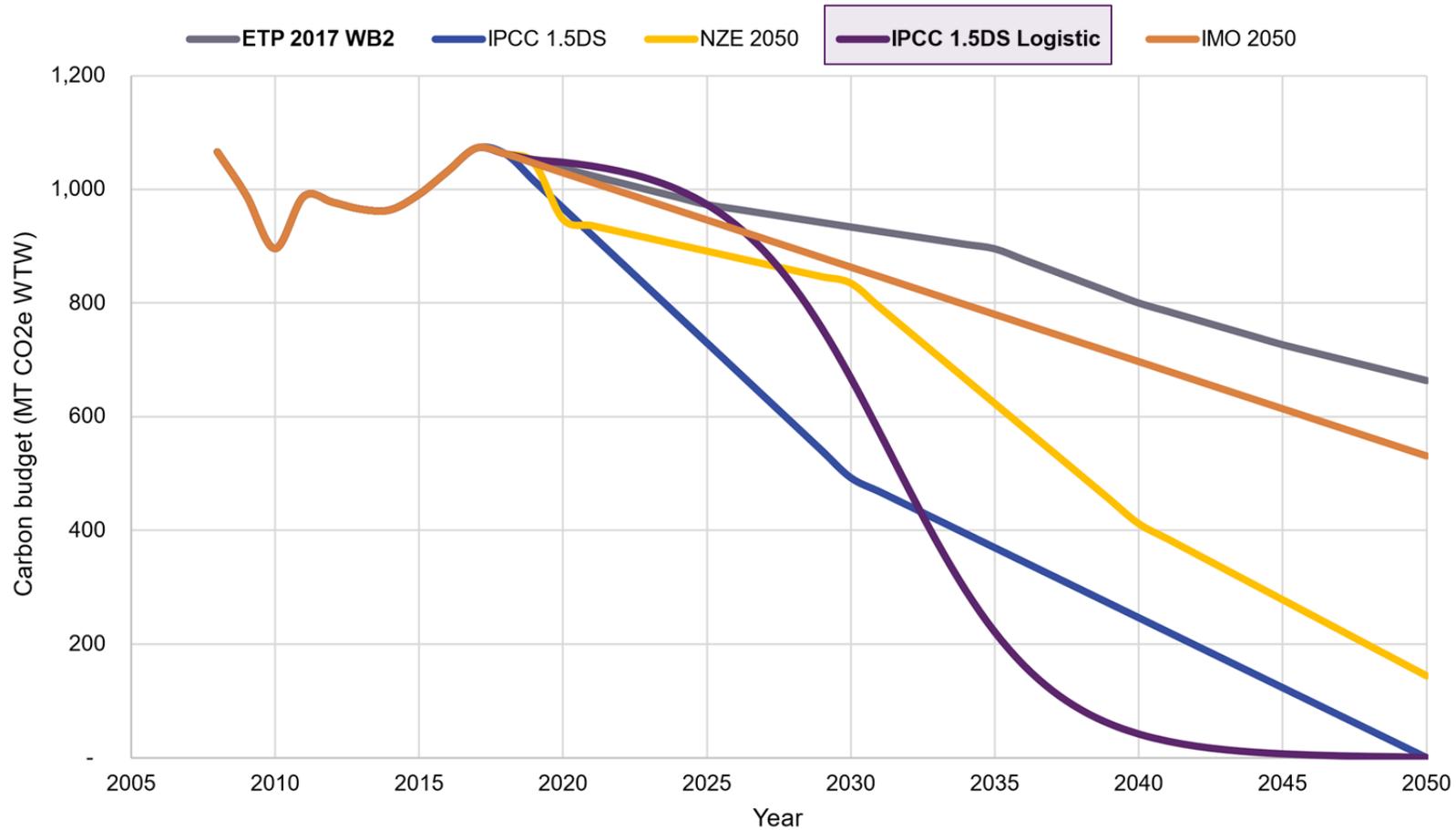
The Energy Efficiency Operational Indicator (EEOI).



Why does the tool still have well below 2°C ambition?

The SBTi minimum ambition level for scope 3 targets is well-below 2°C, so companies subcontracting maritime transport can still use these resources to set intensity targets.

CARBON BUDGET



- Well-to-Wake Emissions (Upstream + Operational).
- CO₂, N₂O, CH₄ (methane).
- IMO curve adapted to include WTT phase.

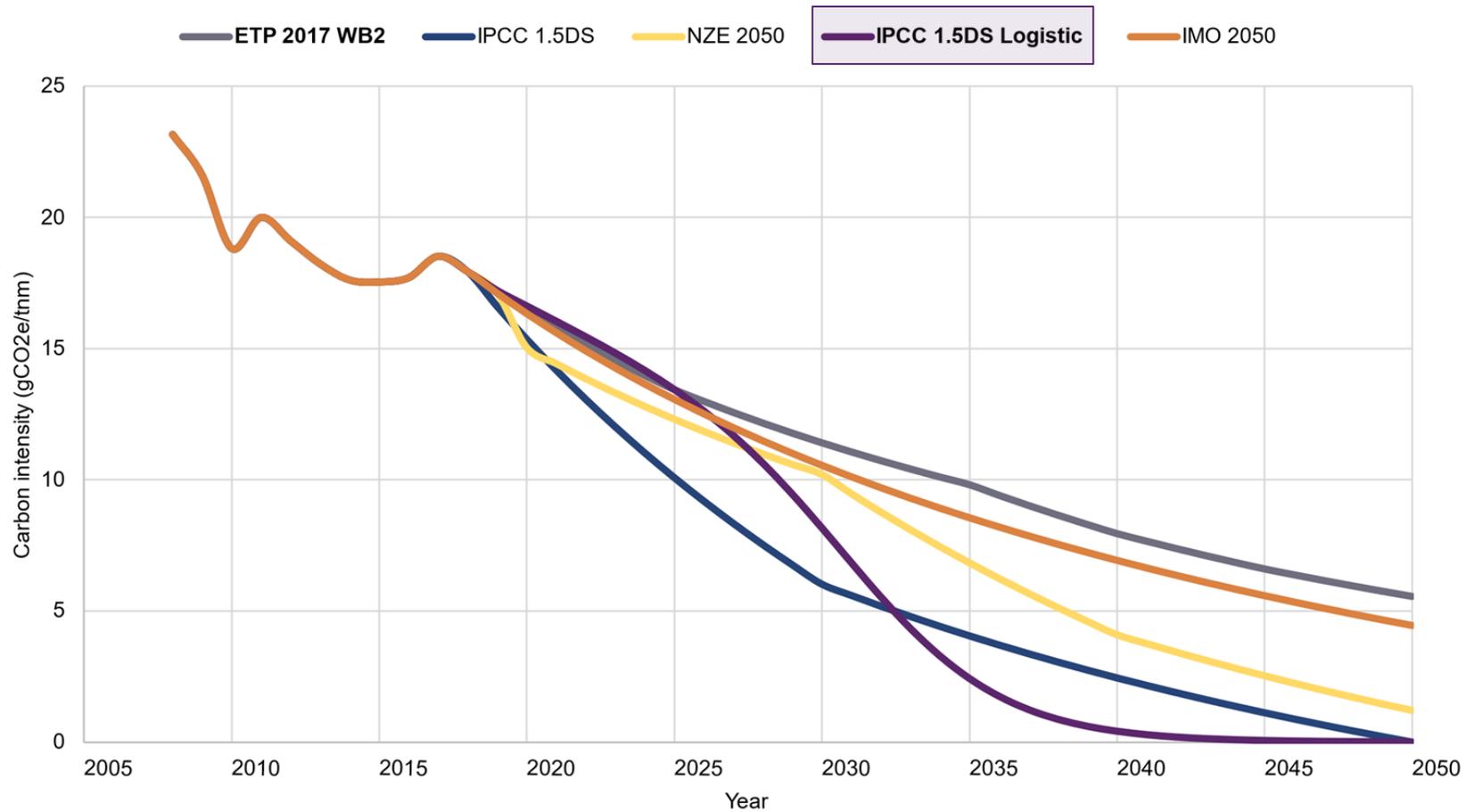
METRIC

$$\text{Carbon intensity: } \frac{\textit{Total emissions}}{\textit{Transport work}} = \frac{\textit{total emissions}}{\textit{disance sailed x cargo carried}} = \frac{\textit{gCO2eq}}{\textit{T.nm}}$$

$$\text{Freight vessels: carbon intensity} = \frac{\textit{gCO2eq}}{\textit{T.nm}}$$

$$\text{Passenger vessels: carbon intensity} = \frac{\textit{gCO2eq}}{\textit{GT.nm}}$$

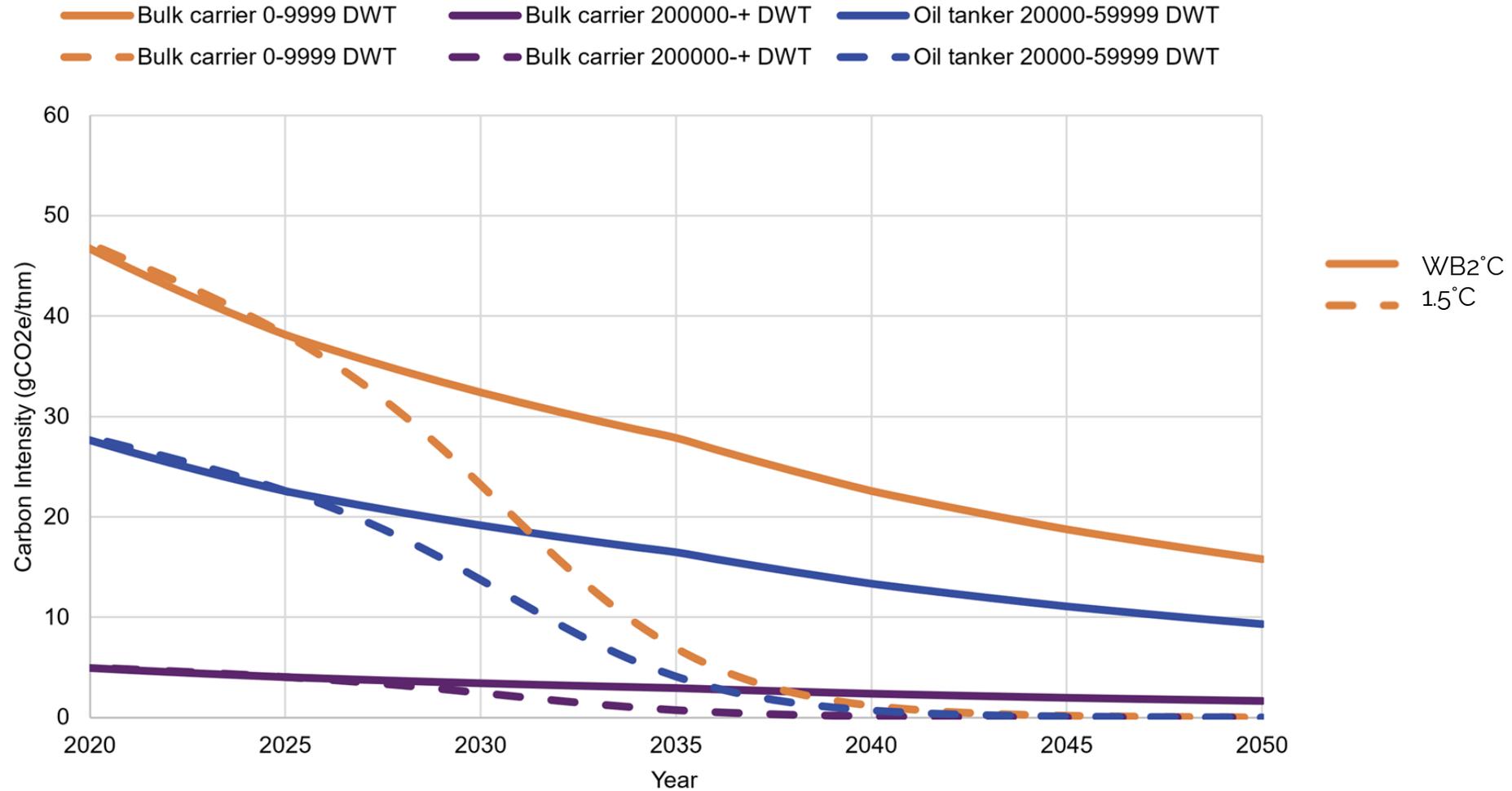
CARBON INTENSITY



- Metric: gCO₂ / transport work.

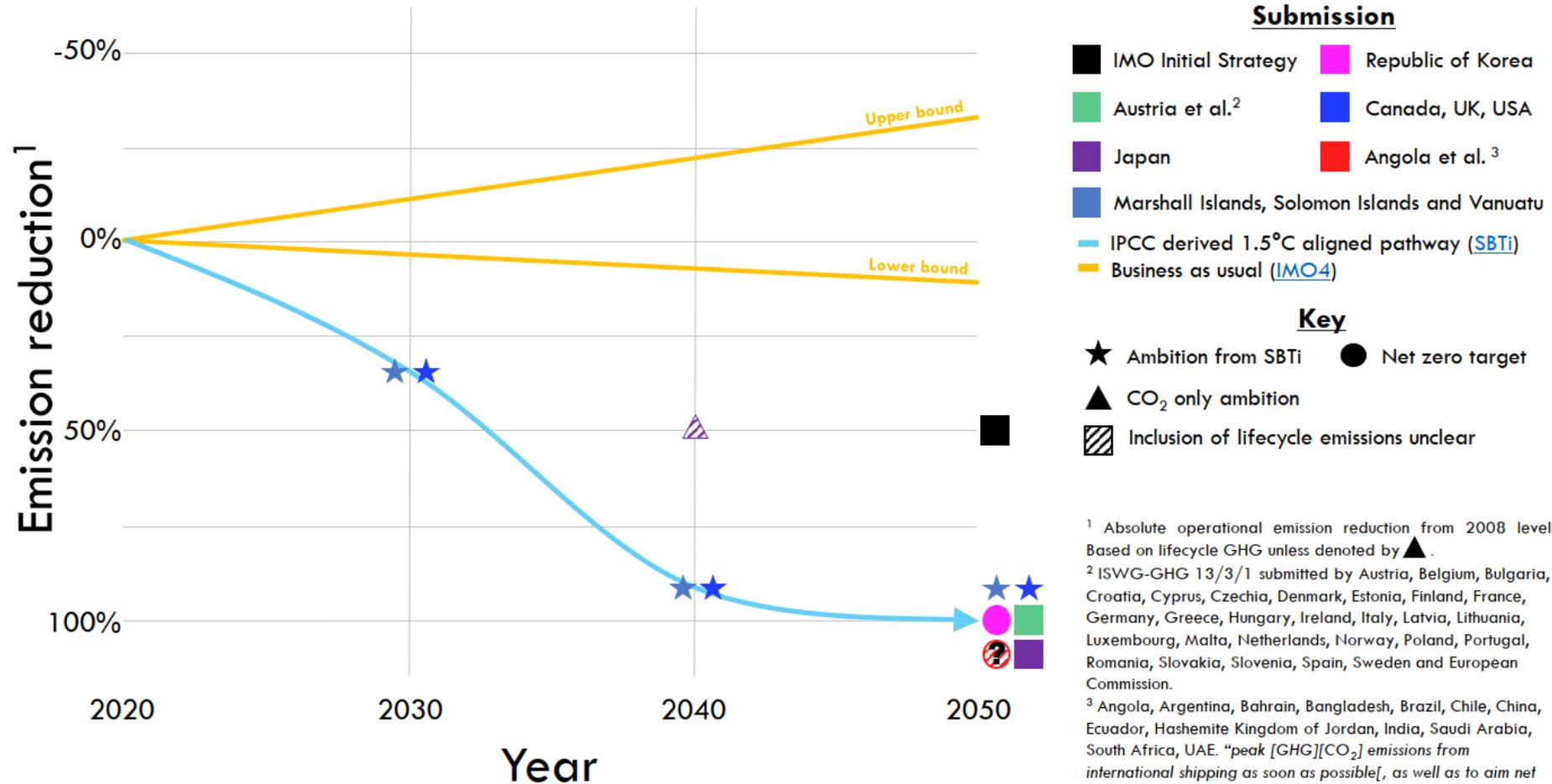
CATEGORY SPECIFIC TARGET

Comparing apples with apples



MOVING THE NEEDLE IN SHIPPING

Endorsement by nations at the IMO GHG strategy update ISWG 14



¹ Absolute operational emission reduction from 2008 levels. Based on lifecycle GHG unless denoted by ▲.

² ISWG-GHG 13/3/1 submitted by Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and European Commission.

³ Angola, Argentina, Bahrain, Bangladesh, Brazil, Chile, China, Ecuador, Hashemite Kingdom of Jordan, India, Saudi Arabia, South Africa, UAE. "peak [GHG][CO₂] emissions from international shipping as soon as possible[, as well as to aim net zero GHG emissions preferably around mid-century and before the end of this century.]" A choice of either GHG or CO₂ is offered and a timeline of preferably 2050 but if not then before 2100 is offered."



FREQUENTLY ASKED QUESTIONS



How do the SBTi targets align with the Poseidon Principles, Poseidon Principles for Marine Insurance, and Sea Cargo Charter?

All these initiatives share the long-term purpose of supporting net-zero transition, however the intended users, mode of operation and implementation is different. Both Poseidon Principles initiatives and Sea Cargo Charter focus on **disclosure of climate alignment of shipping portfolios** for various types of institutions. Aside from implementation differences with the SBTi the two major differences are:

1. The SBTi considers lifecycle GHG emissions (Well-to-Wake - WtW).
2. The SBTi aims to meet the Paris Agreement's 1.5°C target 2050.

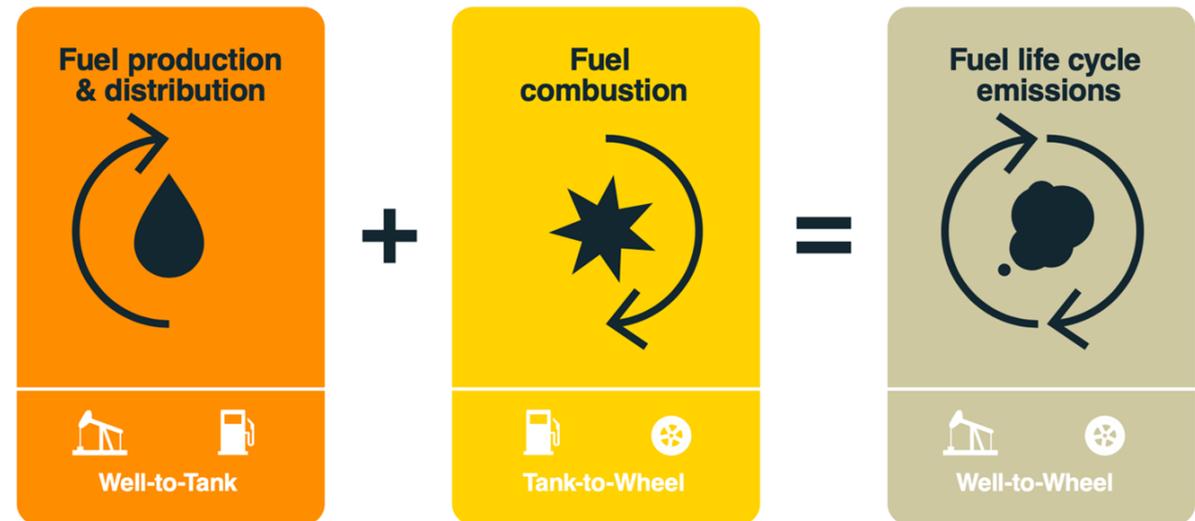
EMISSIONS BOUNDARY

All targets must cover **Well-to-Wake (WTW) emissions** (in metric tonnes of CO₂ equivalent (CO₂e))

WTW emissions are emissions generated across the life cycle of a fuel, from both upstream and operational activities.

They include both **Well-to-Tank (WTT)** emissions, generated in the fuel's production and distribution, and **Tank-to-Wake (TTW)** emissions, generated in the combustion of the fuel.

The Fuel Life Cycle



© Smart Freight Centre 2019

FREQUENTLY ASKED QUESTIONS



What standards (or set of emission factors) should be utilized when calculating Well-to-Tank and Tank-to-Wake?

Well-to-Wake emission factors for a variety of marine fuels are available in the GLEC Framework. These values will be updated later in 2023 in a new version of the GLEC Framework, which will follow the approach for calculating emission factors set out in Annex J of ISO 14083.



How are carbon removals factored-in?

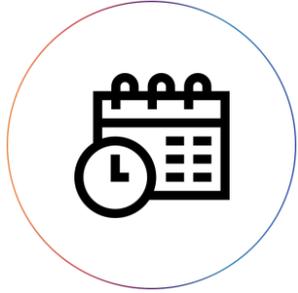
Carbon removals such as Carbon Capture and Storage (CCS) would be accounted for through the emission factor associated with the fuel in question. Carbon removals through offsets are not accepted by the SBTi.

TARGET COVERAGE

| Type of shipping related emissions | | WTW base year GHG emissions | Base year activity data* |
|--|-----------|-----------------------------|--------------------------|
| Vessel owners / operators | Passenger | Scope 1 Scope 3 | GT nautical mile |
| | Freight | Scope 1 Scope 3 | tonne-nautical mile |
| Cargo shippers / Logistics Service Providers | Passenger | Scope 3 category 6 or 7 | GT nautical mile |
| | Freight | Scope 3 category 4 or 9 | tonne-nautical mile |

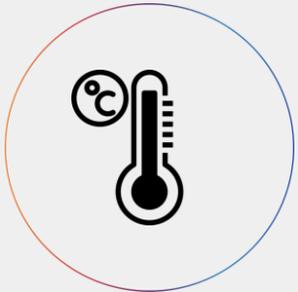
* Except cruises

SECTOR SPECIFIC REQUIREMENTS*



TARGET YEAR
ELIGIBILITY

- For all companies, near-term target year must be **no earlier than 2030**.



TARGET
AMBITION

- Vessel owners or operators must also submit **long-term science-based targets** (net-zero targets) along with their near-term target submission.
- For maritime transport emissions, a long-term science-based target means reducing emissions to a residual level **in line with 1.5°C** scenarios by no later than 2040.

* In addition to the SBTi [general](#) and [Net-Zero](#) criteria.

LIMITATIONS ON FOSSIL FUEL ACTIVITIES

- The SBTi [Fossil Fuel Policy](#) affects the extent to which companies engaging in fossil fuel businesses can commit to climate aligned targets.
- Currently the SBTi is unable to accept commitments or validate targets from companies in the oil and gas or fossil fuels sectors.
- Users of the [SBTi Maritime Tool](#) with activities related to transportation or extraction of fossil fuel products are advised to **review the current status of this policy** as well as the latest version of the [SBTi Criteria](#).





MODELING TARGETS

EXCEL TOOL TO SUPPORT TARGET SETTING FOR THE MARITIME SECTOR

Calculates science-based targets for different vessel types and sizes following the SDA (convergence approach)



Sectoral Decarbonization Approach - Maritime Transport Tool

DRAFT Version for Public Consultation
Mar-2021

Section 1. Select type of vessel used for transport activity

Please select vessel type for transport activity

Section 2. Select vessel size category

Please refer to guidance document for details

Section 3. Enter emissions and activity data

Select a base year: Any base year between 2018 and the current year is eligible
Select a target year: Targets must cover a minimum of 5 years and a maximum of 15 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year: metric tonnes of CO₂ equivalent (tCO₂e)
Activity in base year: tonnes nautical mile (t.nm)
Expected activity in target year: tonnes nautical mile (t.nm)

Section 4. Review target modelling results

Target modelling results - 1.5C [Go to WB2C scenario results](#)

| | Base year | Target year | % Reduction |
|---------------|-----------|-------------|-------------|
| Intro | 1.5C | WB2C | |
| Tool | | | |
| SBTaggregator | | | |

One interface for calculating SBTs for all maritime transport categories and one additional (non target setting) feature are included:

SBT tool

Vessel operators can model emission reduction targets for freight and passenger maritime transport activities. Shippers and Logistics Service Providers can also use this tool to model emission reduction targets for scope 3 category 4/9 emissions.

SBT aggregator

Additional feature to help companies combine targets across multiple maritime transport categories into a single metric.

FREQUENTLY ASKED QUESTIONS



Does the requirement to have a long-term target for vessel owners and operators mean that they must use the net-zero form and cannot use the near-term one?

Both near- and long-term target submission forms need to be prepared and submitted simultaneously.



Can the SBTi Maritime Transport Tool be used for near- and long-term target calculations?

Yes, it can. This is dependent on the target year: 2040 for long-term targets, no earlier than 2030 for near-term targets.



Do companies need to set separate targets for each vessel category/size?

Yes, and users can generate combined targets per vessel category over multiple vessel size categories with the optional SBTi Aggregator Tab of the tool.

CONTAINER SHIPPER: DEFAULT



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

Please refer to: [Terms of use](#)
[Disclaimer](#)

Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Container Please select vessel type for transport activity

Required Input
Results

Section 2. Select vessel size category

Default Please refer to guidance document for details

Option for use when you don't know the vessel size

Section 3. Enter emissions and activity data

Select a base year **2021** Any base year between 2018 and the current year is eligible

Select a target year **2033** Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year **1,750,000** metric tonnes of CO2 equivalent (tCO2e)

Activity in base year **168,898,488,121** tonne-nautical mile (t.nm)

Expected activity in target year **236,457,883,369** tonne-nautical mile (t.nm)

When don't know breakdown: total emissions across whole portfolio

Based on 40% growth projection over 12 years

TRANSPORT ACTIVITY

- Transport activity: measure of the amount of transport conducted.
 - Calculated by multiplying the amount of goods or number of people by the distance traveled.
- For the purpose of calculating the EEOI, as defined by IMO, this is the actual distance*.
 - This may need to be converted when generating a corporate inventory.
- Amount of goods is quantified in metric tonnes.
- In the [SBTi Maritime Tool](#), distance is quantified in **nautical miles**.



CALCULATION OF TRANSPORT ACTIVITY

- 20,000 tonnes loaded at Tilbury & transported 1,800 nm to Barcelona.
- 5,000 tonnes unloaded at Barcelona and remaining 15,000 tonnes transported 1,150 nm to Piraeus.
- Total tonne nm = $20,000 \times 1,800 + 15,000 \times 1,150 = 53,250,000$
- Always break each journey down into constituent parts for the most accurate results.

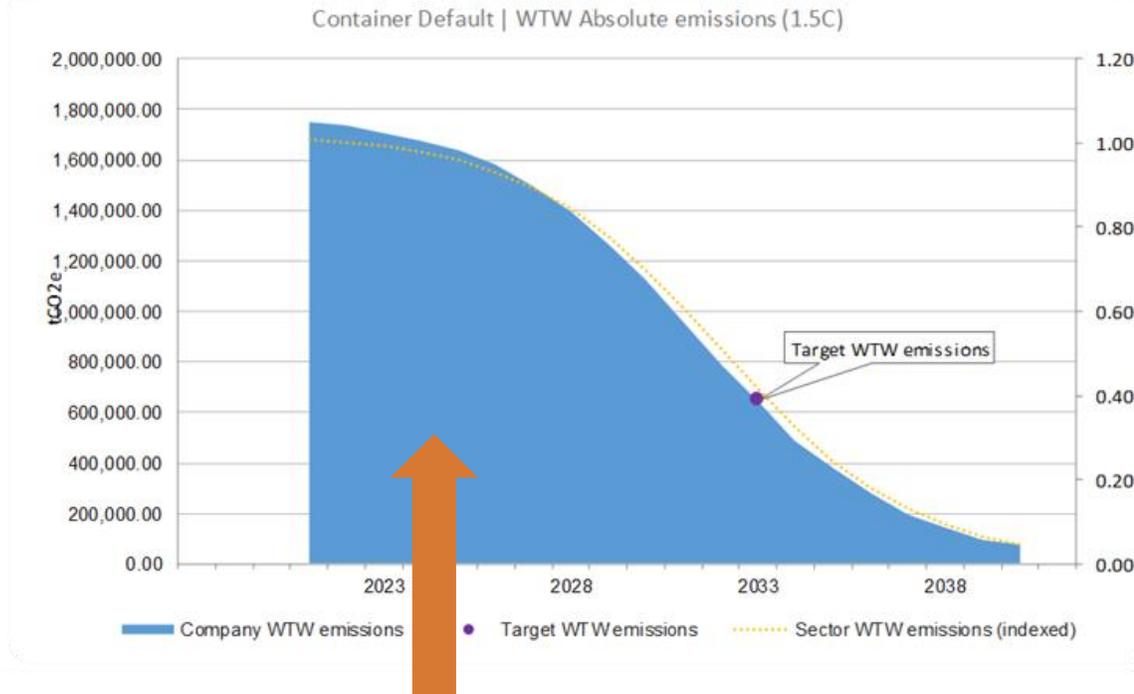


CONTAINER SHIPPER: DEFAULT

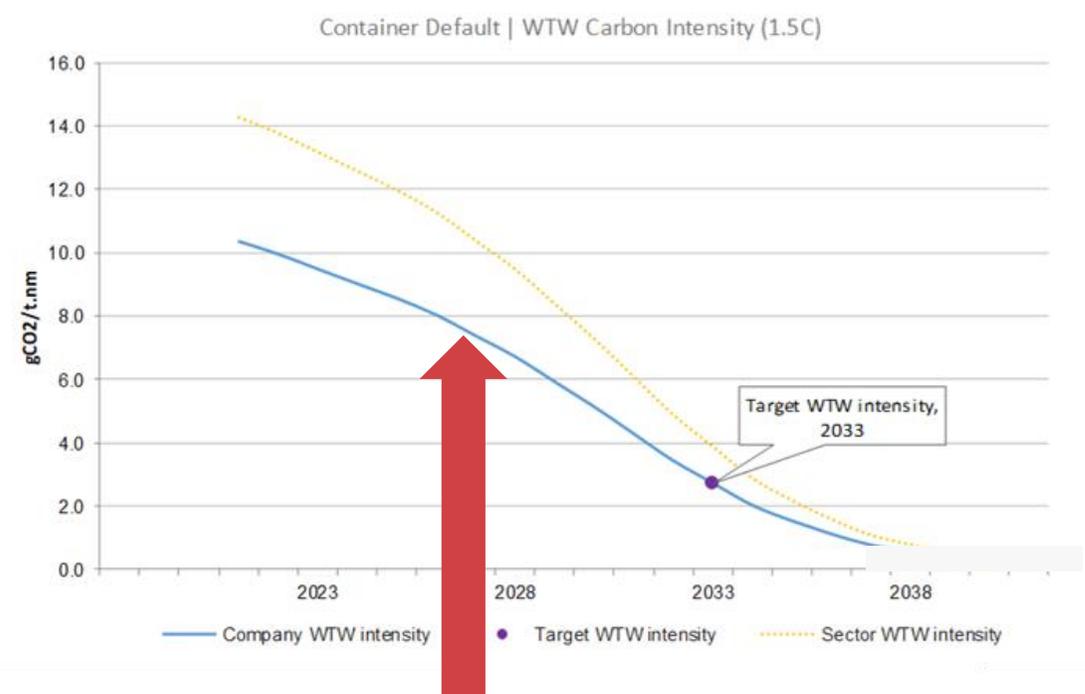
Section 4. Review target modelling results

Target modelling results - 1.5C

| | Base year 2021 | Target year 2033 | % Reduction 2021 - 2033 |
|---|-------------------|---------------------|----------------------------|
| Container Default WTW emissions tCO ₂ e | 1,750,000 | 643,348 | 63.2% |
| Container Default WTW carbon intensity gCO ₂ /t.nm | 10.36 | 2.72 | 73.7% |



Total emissions respect company share of total GHG budget



Company S curve less steep than industry average as **have a better-than-average starting point**

CONTAINER OPERATOR: CATEGORIES



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

Please refer to: [Terms of use](#)
[Disclaimer](#)

Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Container

Please select vessel type for transport activity

Required Input

Results

Section 2. Select vessel size category

(TEU) 8,000 - 11,999

Please refer to guidance document for details

Vessel operator will probably have a range of vessel sizes and should have the input data for each vessel category

Section 3. Enter emissions and activity data

Select a base year Any base year between 2018 and the current year is eligible

Select a target year Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year metric tonnes of CO2 equivalent (tCO2e)

Activity in base year tonne-nautical mile (t.nm)

Expected activity in target year tonne-nautical mile (t.nm)

CONTAINER OPERATOR: CATEGORIES



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

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[Disclaimer](#)

Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Container *Please select vessel type for transport activity*

Required Input
Results

Section 2. Select vessel size category

(TEU) >20,000 *Please refer to guidance document for details*

Just showing two size categories for the purposes of illustration

Section 3. Enter emissions and activity data

Select a base year 2021 *Any base year between 2018 and the current year is eligible*

Select a target year 2033 *Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation*

Well-to-Wake (WTW) emissions in base year 760,259 *metric tonnes of CO2 equivalent (tCO2e)*

Activity in base year 86,393,088,553 *tonne-nautical mile (t.nm)*

Expected activity in target year 120,950,323,974 *tonne-nautical mile (t.nm)*

CONTAINER OPERATOR: CATEGORIES



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

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OPTIONAL - Target aggregation sheet

Step 1: List the vessel type, size, base year emissions (WTW), activity, and target year activity in columns D, E, G, H and J for each different vessel type or size category for which targets are to be calculated.

Step 2: Calculate the targets for each different vessel type or size category using the "Tool" tab.

Step 3: Input the results calculated in step 2 into columns L through T of the SBTaggregator tab. The aggregated results and prorated reduction target are shown in at the bottom of row of this table.

Please note that only intensity targets with the same activity denominatos (i.e., unit) can be aggregated.

Emissions and activity data (as entered in tool interface)

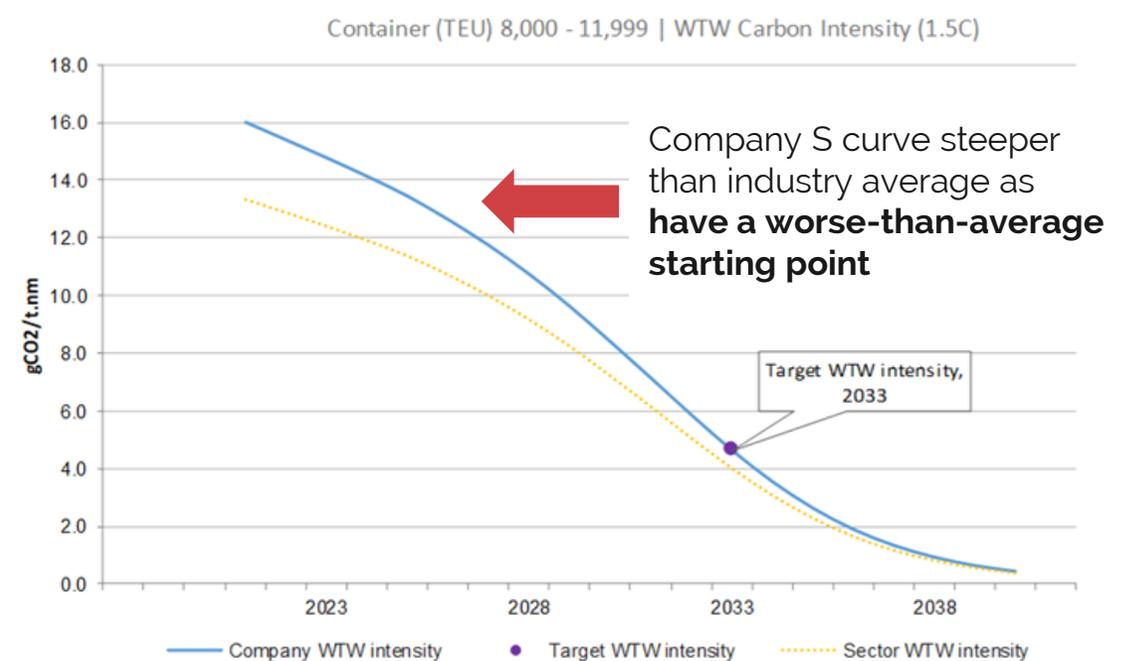
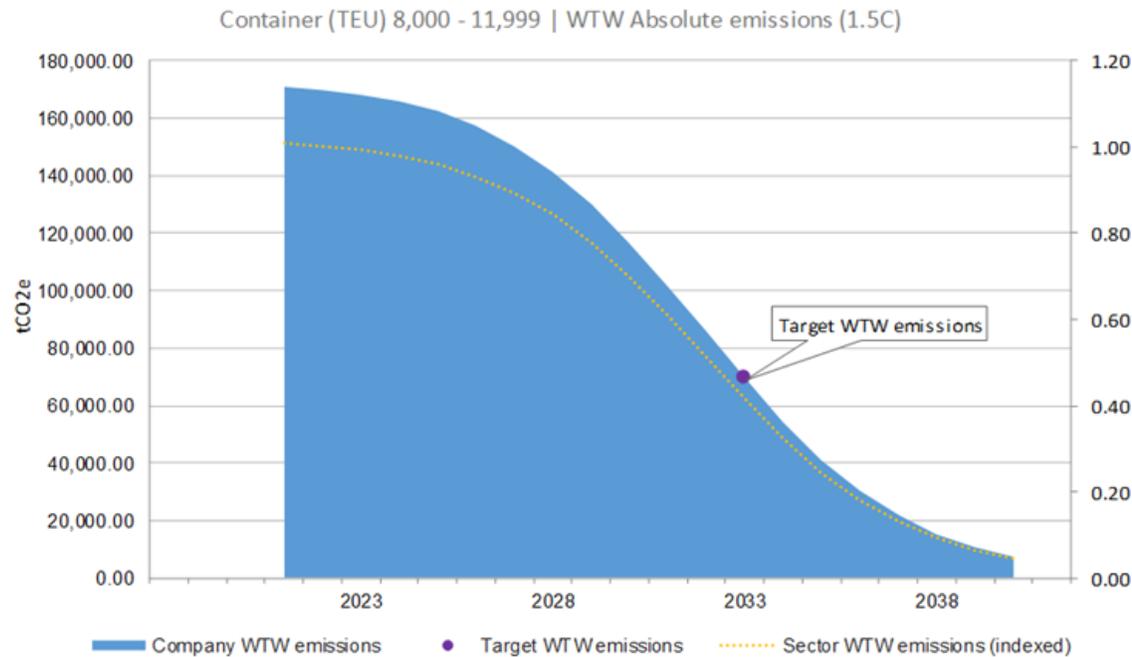
| | Vessel type | Vessel size | Base year | | Target year | |
|-------------------------|-------------|-----------------------|------------------------------------|--------------------------|--|--------------------------|
| | | | WTW emissions (tCO ₂ e) | Activity (t.nm or GT.nm) | WTW carbon intensity (gCO ₂ e/t.nm or gCO ₂ e/GT.nm) | Activity (t.nm or GT.nm) |
| 1 | Container | (TEU) >20,000 | 760,259 | 86,393,088,553 | 8.80 | 120,950,323,974 |
| 2 | Container | (TEU) 14,500 - 19,999 | 449,028 | 45,356,371,490 | 9.90 | 63,498,920,086 |
| 3 | Container | (TEU) 12,000 - 14,499 | 369,654 | 26,457,883,369 | 13.97 | 37,041,036,717 |
| 4 | Container | (TEU) 8,000 - 11,999 | 171,058 | 10,691,144,708 | 16.00 | 14,967,602,592 |
| 5 | | | | | | |
| 20 | | | | | | |
| Combined results | | | 1,750,000 | 168,898,488,121 | 10.4 | 236,457,883,369 |

CONTAINER OPERATOR: CATEGORIES

Section 4. Review target modelling results

Target modelling results - 1.5C

| | | | Base year 2021 | Target year 2033 | % Reduction 2021 - 2033 |
|--------------------------------|----------------------|-----------|-------------------|---------------------|----------------------------|
| Container (TEU) 8,000 - 11,999 | WTW emissions | tCO2e | 171,058 | 69,406 | 59.4% |
| Container (TEU) 8,000 - 11,999 | WTW carbon intensity | gCO2/t.nm | 16.00 | 4.64 | 71.0% |

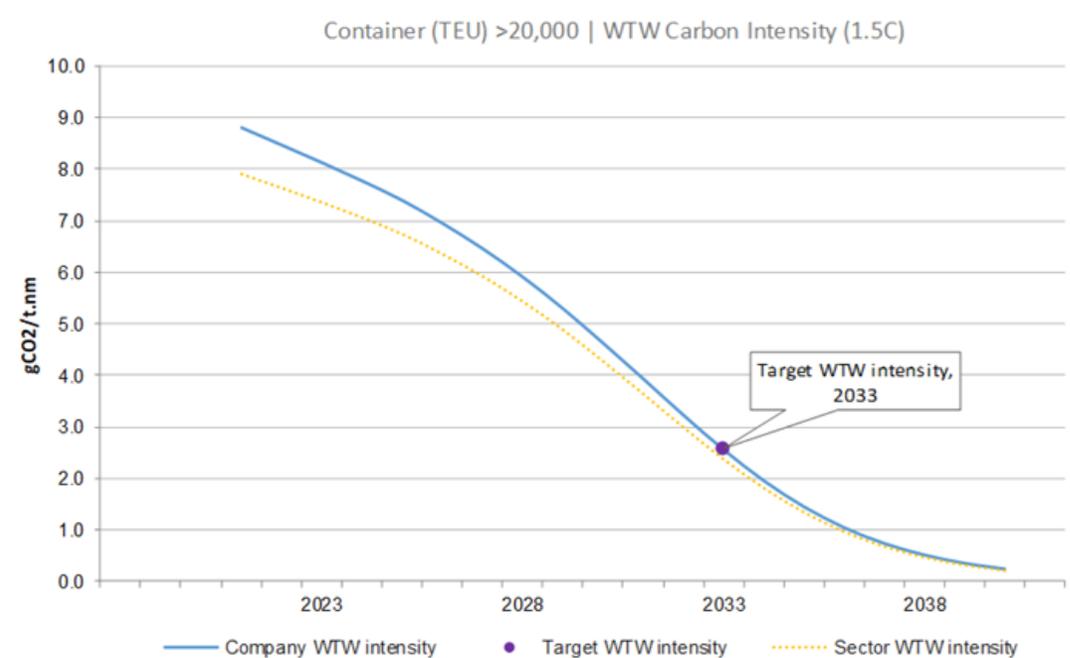
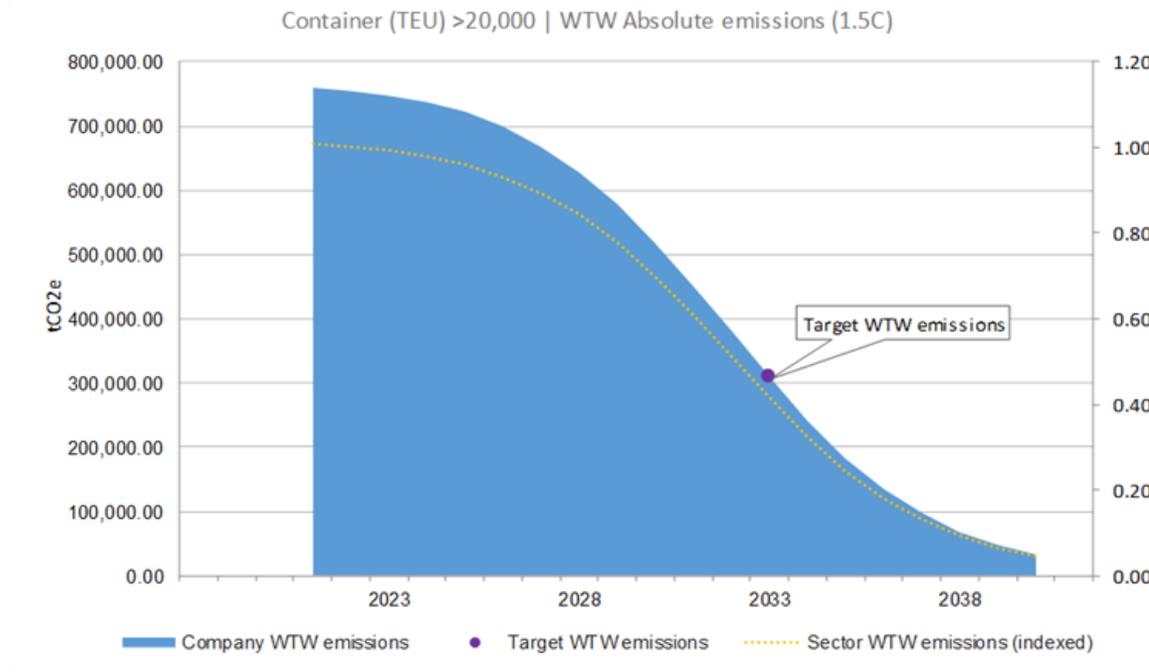


CONTAINER OPERATOR: CATEGORIES

Section 4. Review target modelling results

Target modelling results - 1.5C

| | | | Base year 2021 | Target year 2033 | % Reduction 2021 - 2033 |
|-------------------------|----------------------|------------------------|-------------------|---------------------|----------------------------|
| Container (TEU) >20,000 | WTW emissions | tCO ₂ e | 760,259 | 308,470 | 59.4% |
| Container (TEU) >20,000 | WTW carbon intensity | gCO ₂ /t.nm | 8.80 | 2.55 | 71.0% |



CONTAINER OPERATOR: CATEGORIES



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OPTIONAL - Target aggregation sheet

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Step 2: Calculate the targets for each different vessel type or size category using the "Tool" tab.

Step 3: Input the results calculated in step 2 into columns L through T of the SBTaggregator tab. The aggregated results and prorated reduction target are shown in at the bottom of row of this table.

Please note that only intensity targets with the same activity denominatos (i.e., unit) can be aggregated.

| Emissions and activity data (as entered in tool interface) | | | | | | Target modelling results - 1.5C | | | | |
|--|-------------|-----------------------|--------------------------|--|--------------------------|---------------------------------|----------------|--|-------------|--------------|
| Vessel type | Vessel size | Base year | | | Target year | | Target year | | Target year | |
| | | WTW emissions (tCO2e) | Activity (t.nm or GT.nm) | WTW carbon intensity (gCO2e/t.nm or gCO2e/GT.nm) | Activity (t.nm or GT.nm) | WTW emissions (tCO2e) | % reduction | WTW carbon intensity (gCO2e/t.nm or gCO2e/GT.nm) | % reduction | |
| 1 | Container | (TEU) >20,000 | 760,259 | 86,393,088,553 | 8.80 | 120,950,323,974 | 308,470 | 59.4% | 2.55 | 71% |
| 2 | Container | (TEU) 14,500 - 19,999 | 449,028 | 45,356,371,490 | 9.90 | 63,498,920,086 | 182,190 | 59.4% | 2.87 | 71% |
| 3 | Container | (TEU) 12,000 - 14,499 | 369,654 | 26,457,883,369 | 13.97 | 37,041,036,717 | 149,985 | 59.4% | 4.05 | 71% |
| 4 | Container | (TEU) 8,000 - 11,999 | 171,058 | 10,691,144,708 | 16.00 | 14,967,602,592 | 69,406 | 59.4% | 4.64 | 71% |
| 5 | | | | | | | | | | |
| 20 | | | | | | | | | | |
| Combined results | | | 1,750,000 | 168,898,488,121 | 10.4 | 236,457,883,369 | 710,051 | 59.4% | 3.00 | 71.0% |

CHEMICAL TANKER



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

Please refer to: [Terms of use](#)
[Disclaimer](#)

Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Chemical Tanker Please select vessel type for transport activity

| |
|----------------|
| Required Input |
| Results |

Section 2. Select vessel size category

(DWT) 20,000 - 39,999 Please refer to guidance document for details

Again, just one vessel size category

Section 3. Enter emissions and activity data

Select a base year **2022** Any base year between 2018 and the current year is eligible
Select a target year **2030** Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year **200,000** metric tonnes of CO2 equivalent (tCO2e)
Activity in base year **8,639,308,855** tonne-nautical mile (t.nm)
Expected activity in target year **8,639,308,855** tonne-nautical mile (t.nm)

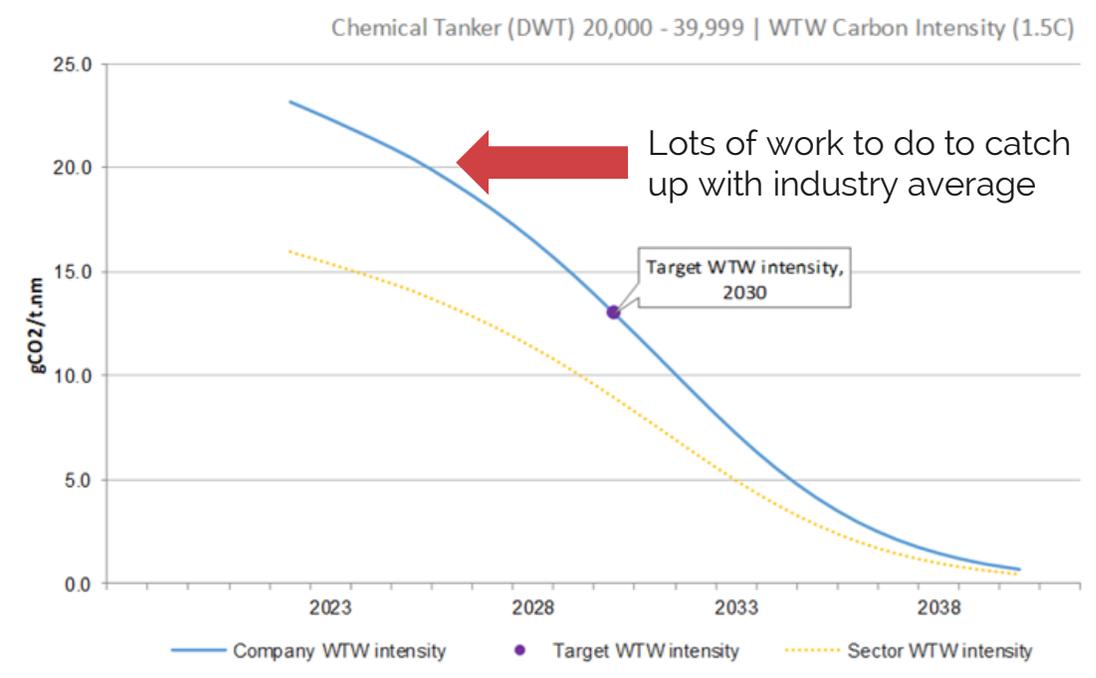
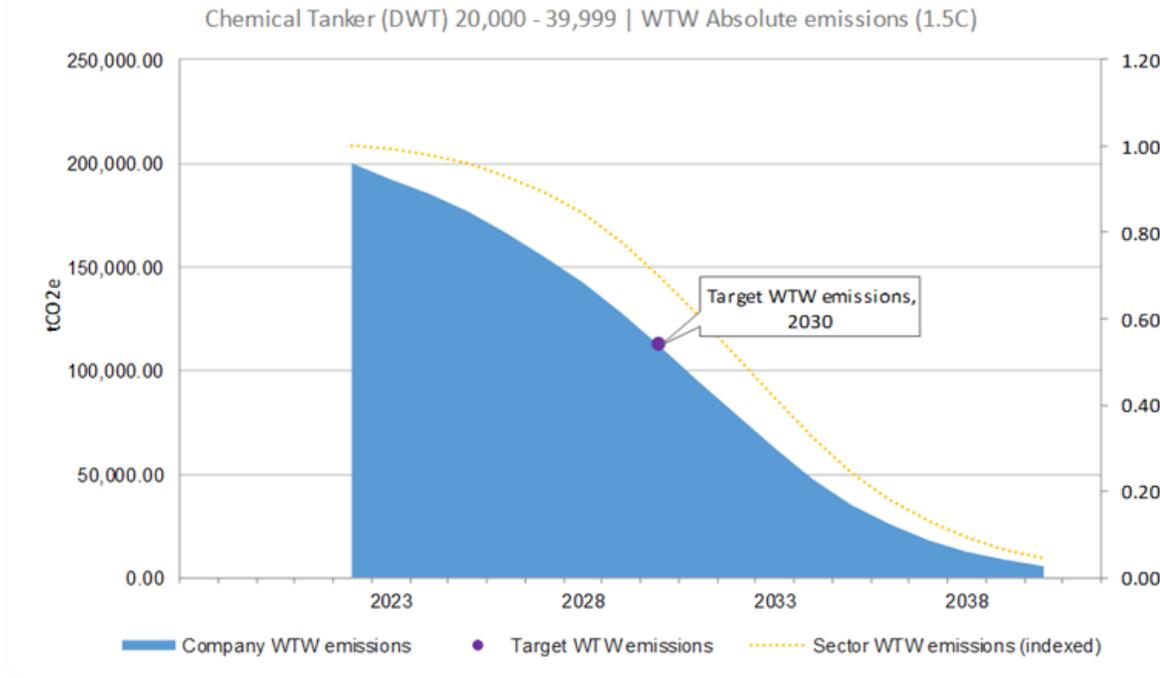
Based on no growth over 12 years

CHEMICAL TANKER

Section 4. Review target modelling results

Target modelling results - 1.5C

| | | | Base year 2022 | Target year 2030 | % Reduction 2022 - 2030 |
|---------------------------------------|----------------------|------------------------|-------------------|---------------------|----------------------------|
| Chemical Tanker (DWT) 20,000 - 39,999 | WTW emissions | tCO ₂ e | 200,000 | 112,055 | 44.0% |
| Chemical Tanker (DWT) 20,000 - 39,999 | WTW carbon intensity | gCO ₂ /t.nm | 23.15 | 12.97 | 44.0% |



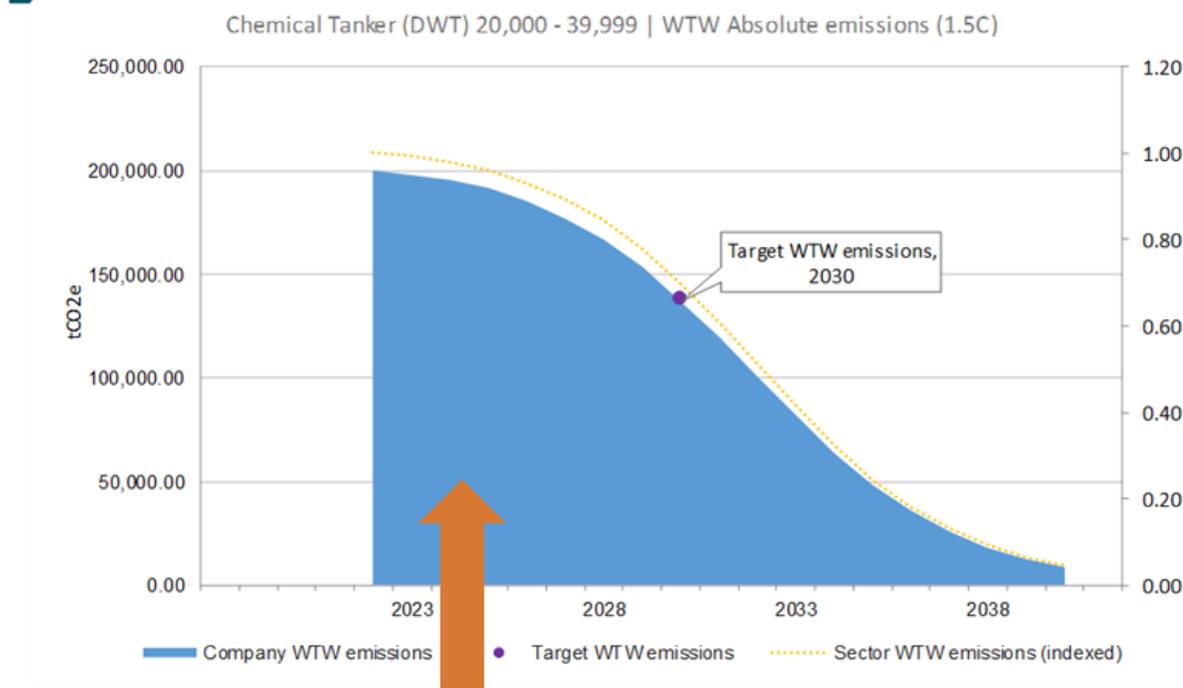
CHEMICAL TANKER: HIGH GROWTH

Change to 40% growth example

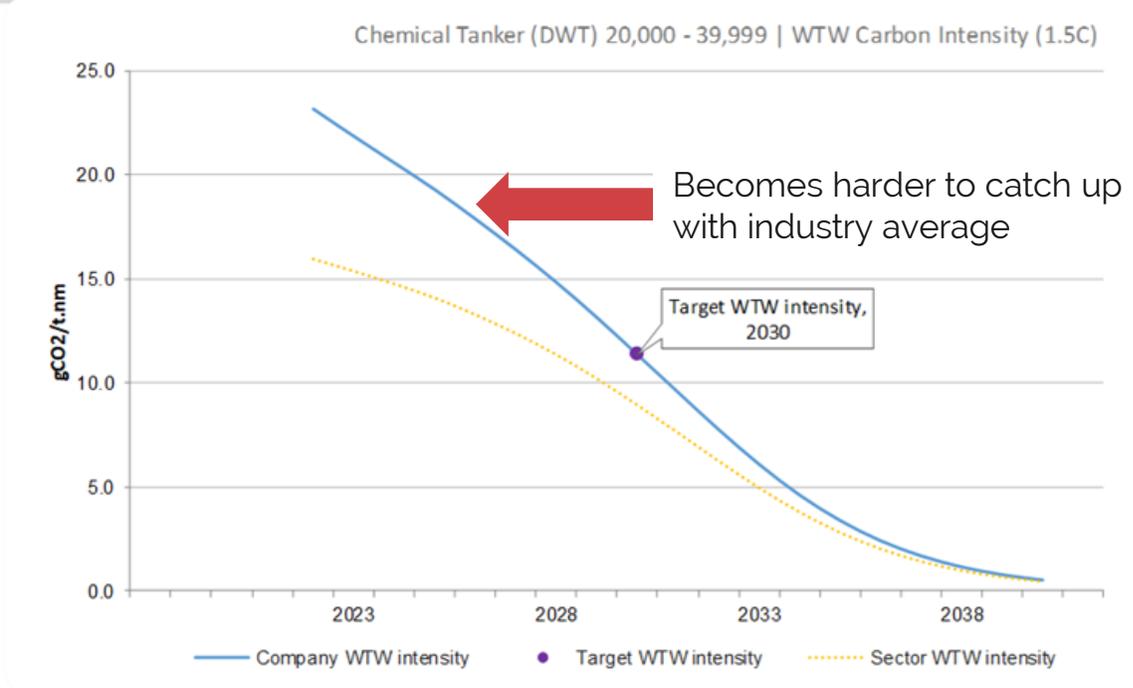
Section 4. Review target modelling results

Target modelling results - 1.5C

| | Base year 2022 | Target year 2030 | % Reduction 2022 - 2030 |
|---|-------------------|---------------------|----------------------------|
| Chemical Tanker (DWT) 20,000 - 39,999 WTW emissions tCO ₂ e | 200,000 | 137,317 | 31.3% |
| Chemical Tanker (DWT) 20,000 - 39,999 WTW carbon intensity gCO ₂ /t.nm | 23.15 | 11.35 | 51.0% |



Fills the company share of GHG budget



Becomes harder to catch up with industry average

FERRY OPERATOR



Sectoral Decarbonization Approach - Maritime Transport Tool

Version: Version 1.0

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Contact: info@sciencebasedtargets.org

Section 1. Select type of vessel used for transport activity

Ferry Passenger Only

Please select vessel type for transport activity

Required Input

Results

Section 2. Select vessel size category

(GT) 1,000 - 1,999

Please refer to guidance document for details

Section 3. Enter emissions and activity data

Select a base year Any base year between 2018 and the current year is eligible

Select a target year Near-term targets must cover a maximum of 10 years from the date the target is submitted to the SBTi for validation

Well-to-Wake (WTW) emissions in base year metric tonnes of CO2 equivalent (tCO2e)

Activity in base year gross tonne nautical miles (GT.nm)

Expected activity in target year

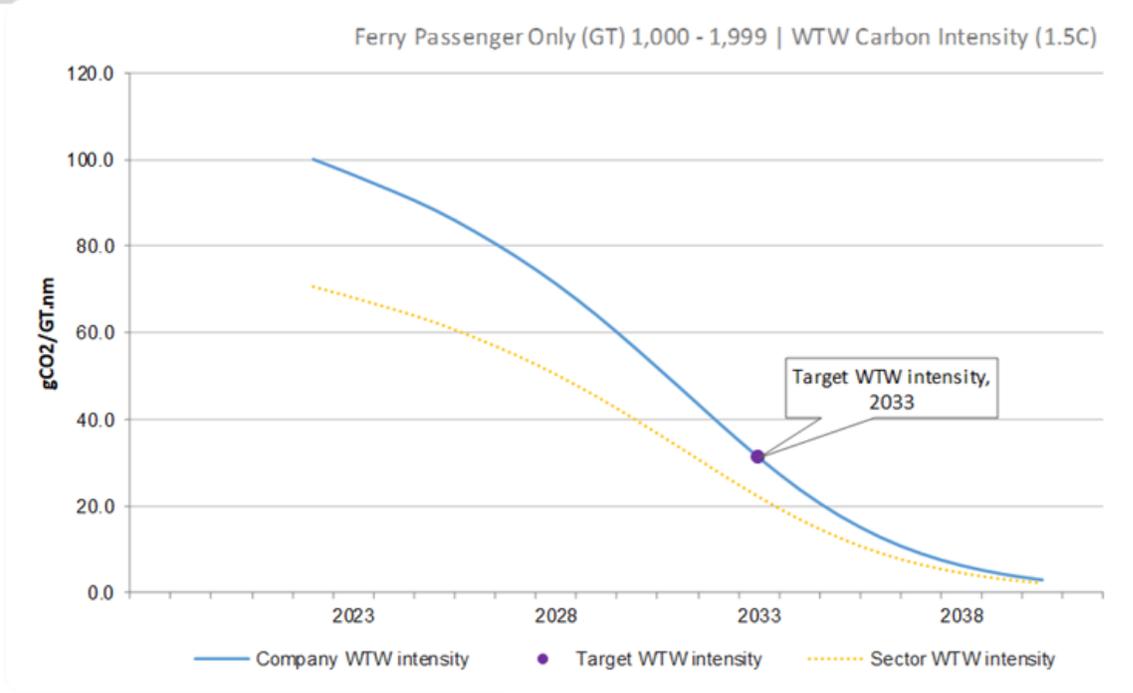
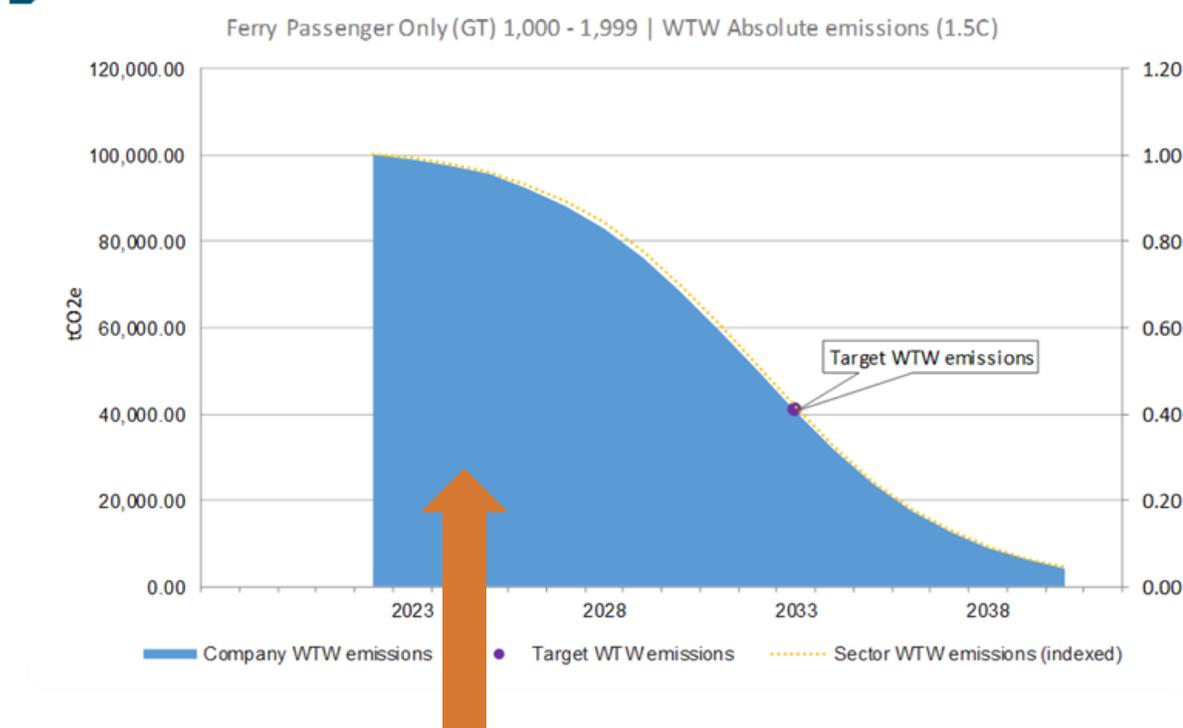
Based on 30% growth
over 12 years

FERRY OPERATOR

Section 4. Review target modelling results

Target modelling results - 1.5C

| | | Base year 2022 | Target year 2033 | % Reduction 2022 - 2033 |
|---|---------------------------------|-------------------|---------------------|----------------------------|
| Ferry Passenger Only (GT) 1,000 - 1,999 | WTW emissions tCO2e | 100,000 | 40,519 | 59.5% |
| Ferry Passenger Only (GT) 1,000 - 1,999 | WTW carbon intensity gCO2/GT.nm | 100.00 | 31.17 | 68.8% |



Company share of GHG budget already constrained

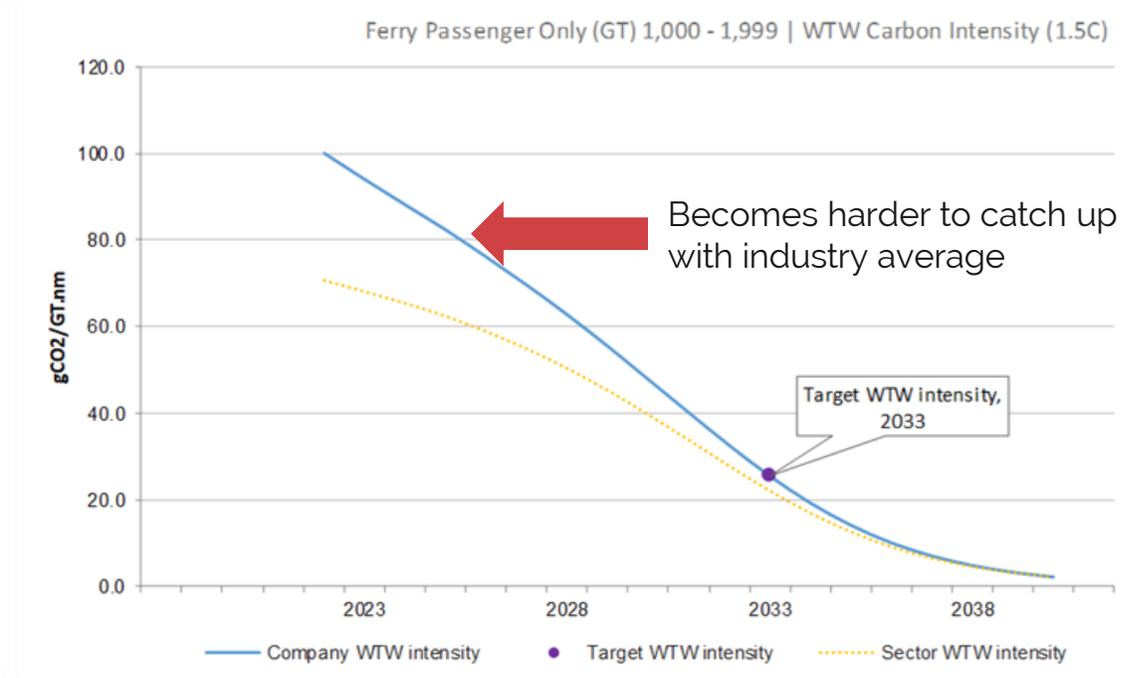
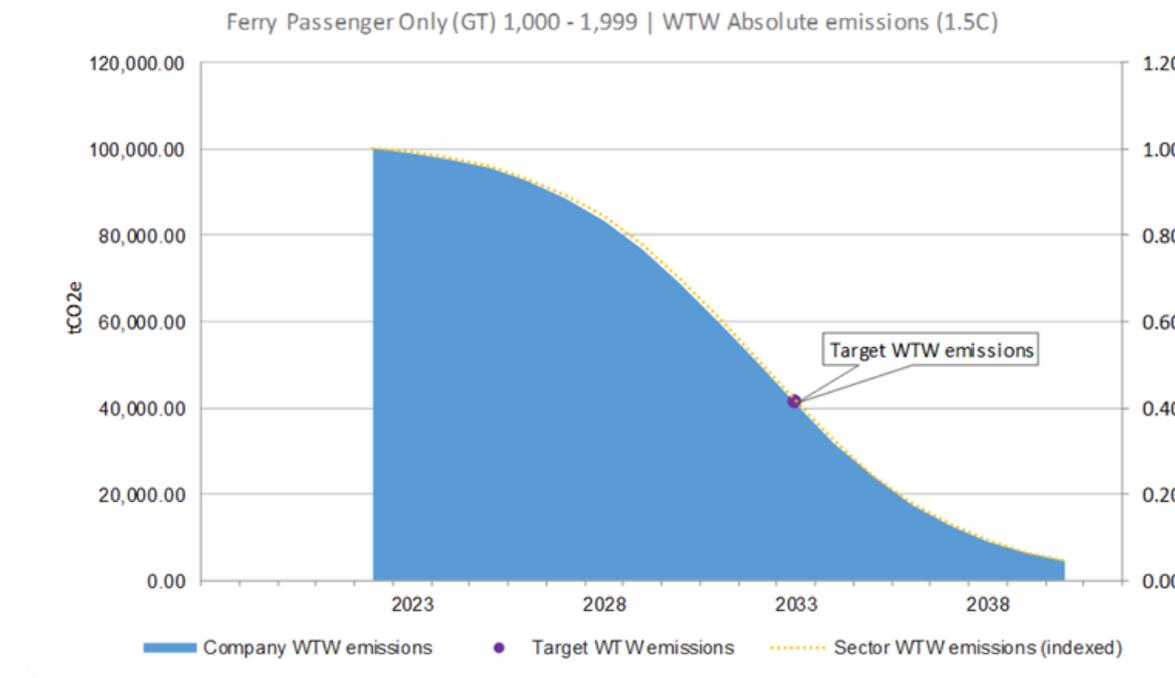
FERRY OPERATOR

Change to 40% growth example

Section 4. Review target modelling results

Target modelling results - 1.5C

| | Base year 2022 | Target year 2033 | % Reduction 2022 - 2033 |
|--|-------------------|---------------------|----------------------------|
| Ferry Passenger Only (GT) 1,000 - 1,999 WTW emissions tCO ₂ e | 100,000 | 40,830 | 59.2% |
| Ferry Passenger Only (GT) 1,000 - 1,999 WTW carbon intensity gCO ₂ /GT.nm | 100.00 | 25.52 | 74.5% |



TARGET FORMULATION

Targets may be expressed either as absolute emissions (tonnes CO₂e) or on an intensity basis (e.g., gCO₂e per tonne nautical mile).

Vessel Operator commits to reduce Well-to-Wake GHG emissions 69% per tonne nautical mile from ferry operations by 2033 from a 2021 base year.

- SBTi Bioenergy footnote may be applicable.
- Target recalculation is needed in the event of changes to the company structure or its operations. (e.g. mergers & acquisitions, updates to growth projections, base year data/assumptions).



FREQUENTLY ASKED QUESTIONS



Will carbon insetting programs, such as book and claim, be a viable pathway for cargo owners to meet their targets? What is the SBTi's stance on mass balancing approaches for emission reductions?

Use of book and claim instruments is a topic that requires further research and clarification from GHG accounting standards.

The SBTi is following up and participating in multiple discussion groups working on this topic.

The SBTi acknowledges that book and claim instruments are still being defined in the market, however, it is beyond the scope of this guidance to endorse or recommend specific frameworks that are not formally recognized by the Greenhouse Gas Protocol (GHGP).



Q&A SESSION



CLOSING

THE TIME TO ACT IS NOW!

- We are urgently calling on **all companies to set science-based** net-zero targets.
- Join [our mailing list](#) to receive updates.
- Should you have any questions, contact us at info@sciencebasedtargets.org.
- The new guidance and materials, as well as the recording of this webinar can be found on the [SBTi maritime webpage](#).



