

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Klaveness Combination Carriers ASA (KCC) is a shipping company which owns and operates combination carriers within the deep-sea tanker and dry bulk segment. The combination carriers are unique vessels as they provide the transportation service of both a standard MR or LR1 product tanker and a standard panamax or kamsarmax dry bulk vessel. They are employed in trades where standard dry bulk and tanker vessels sail empty (sail in ballast) over long distances due to trade imbalances. KCC strives to solve inefficiencies by consecutively switching between dry and wet cargo shipments and most of the time KCC's combination carriers combine a tanker cargo in one direction and a dry bulk cargo on the return voyage with minimum ballast in-between.

Due to their superior efficiency, each of KCC's combination carriers do the transportation work and replace roughly ¼ tanker vessel and ¼ dry bulk vessel in KCC's combination trades reducing emissions throughout their operational life from construction at the shipyard, through daily operation to recycling. Emissions from daily operation and fuel oil combustion of standard tanker and dry bulk vessels represent more than 90% emissions in a life cycle perspective.

KCC was established in 2018 and the share is listed on Oslo Stock Exchange. Rederiaksjeselskapet Torvald Klaveness is the main shareholder and holds approx. 53.8 % of total shares. Torvald Klaveness has been an owner and operator of combination carriers since the early 1950s. Over this period the company has developed and refined vessel design, equipment, operational procedures and crew training to provide the customers with the most efficient and environmentally friendly, high-quality shipping services.

As per year end 2022, KCC had a fleet of 16 vessels in operation. KCC is the world leader in combination carriers, owning and operating eight CABU (caustic soda solution - bulk) and eight CLEANBU (clean petroleum product - bulk) combination carriers. KCC's combination carriers are employed in trade patterns with consecutive switching between dry and wet cargo shipments with minimum ballast between the laden voyages. The vessels ship tanker cargoes into dry bulk export hubs such as Australia and South America and ship dry bulk cargoes on the return leg. The efficient trading pattern and diversified market exposure of KCC's combination carriers results in:

- Higher asset utilization through having two laden legs, which gives a higher number of revenue days compared to standard vessels.
- Substantial fuel cost advantage with 30-40% lower fuel consumption per ton-mile transported cargo compared to standard dry bulk and tanker vessels in the same trades.
- Reduced emissions per transported ton of cargo, minimizing the environmental footprint of the fleet.
- Lower freight costs to our customers compared to the best alternative mode of transportation while at the same time giving our shareholders higher earnings over time and downside protection compared to standard shipping segments.

Profit for the year 2022 was USD 60.9 million, up from USD 22.6 million in 2021, driven mainly by stronger tanker markets and a full CLEANBU fleet in operation after delivery of three vessels during 2021. Net revenue from operation of vessels increased by 42% from USD 115.9 million in 2021 to USD 164.6 million in 2022. Average TCE earnings of 29,764 \$/day for the fleet in 2022 was up 42 % from 20,961 \$/day in 2021. The underlying markets have been extremely volatile during 2022 and KCC's TCE earnings for 2022 were driven by a strong dry bulk market in first half of 2022, weakening considerably in second half of 2022, and a substantial strengthening of the product tanker market since the spring of 2022.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1 2022

End date

December 31 2022

Indicate if you are providing emissions data for past reporting years

Yes

Select the number of past reporting years you will be providing Scope 1 emissions data for

1 year

Select the number of past reporting years you will be providing Scope 2 emissions data for

1 year

Select the number of past reporting years you will be providing Scope 3 emissions data for

1 year

C0.3

(C0.3) Select the countries/areas in which you operate.

Norway

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Financial control

C-T00.7/C-TS0.7

(C-T00.7/C-TS0.7) For which transport modes will you be providing data?

Marine

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	KCC
Yes, an ISIN code	NO0010833262 (share)
Yes, an ISIN code	NO0010874530 (bond)

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board Chair	<p>The highest responsibility for climate-related issues is with the Board Chair (Board of Directors). Climate-related risks and/or opportunities are on the agenda at every main Board of Directors meetings as part of the business review and strategy. Climate-related risks are assessed as an integral part of the Group's overall risk review which is discussed with the Audit Committee and the Board of Directors normally every quarter. The Board of Directors is updated on performance of the four environmental KPIs quarterly.</p> <p>The Board of Directors approved in 2019 the Company's first environmental policy and strategy for the period 2020-2050, which included targets and ambitions both short-term and long-term. This environmental strategy was reviewed, updated and approved by the Board of Director in 2022 and covers the period 2023-2050. Climate-related risks and opportunities with emphasis on decarbonization are as well main building blocks in the five-years business strategy plan for the period 2021-2025 both in relation to cargoes carried, customers served and decarbonization measures to be initiated including new zero-emission fuels and propulsion technologies. An example of a climate-related decision made by the Board Chair and Board of Directors is the updated environmental strategy for the period 2023-2050 approved by the Board in December 2022.</p>

C1.1b

(C1.1b) Provide further details on the board’s oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	<p>Reviewing and guiding annual budgets</p> <p>Overseeing major capital expenditures</p> <p>Overseeing and guiding employee incentives</p> <p>Reviewing and guiding strategy</p>	<Not Applicable>	<p>The Board of Directors:</p> <p>The CEO briefs the Board of Directors through "status report from the CEO" and "Financial Performance, Strategy updates" which are recurring items on the agenda for every BOD meeting. Examples of climate-related matters briefed by the CEO is:</p> <ul style="list-style-type: none"> - Reviews, discusses and approves the strategy and business plans including ESG topics and management of climate-related risks and opportunities - Reviews and oversees status on the four environmental KPIs on a quarterly basis - Status on investments in energy efficiency measures against mandate - Reviews, approves and monitors specific short-term goals and ambitions and long-term goals and ambitions and monitors implementation and performance of objectives including climate-related ambitions and targets - Approves and oversees major capital expenditures e.g. with respect to investment in energy efficiency measures and major plans of action - Approves and oversees the environmental policy and strategy - Approves the risk management policy <p>An example of a climate-related decision made by the Board Chair and the Board of Directors is the updated environmental strategy for the period 2023-2050 that was approved by the Board in December 2022.</p> <p>The Board decides the salary and compensation to the CEO, and the Board of Directors has prepared guidelines regarding remuneration to the Senior Executives which were approved by the Company's Annual General Meeting in April 2022 and April 2023. As an example, to deliver on the decarbonization targets is one of the performance criteria for the discretionary part of the annual variable cash salary of the CEO and CFO.</p> <p>The Audit Committee of the Board:</p> <p>The CFO briefs the Audit Committee through recurring agenda items like financial status report and internal control matters on an at least a quarterly basis. Examples of matters discussed in the Audit Committee are:</p> <ul style="list-style-type: none"> - Monitors and oversees the risk management policy and framework - Discusses the risk review, including climate-related risks - Together with the administration plan and follow up internal audits, including audit of environmental KPIs and other climate-related reporting. As an example, in 2022, internal audit of energy efficiency investments was performed by the administration and the CFO presented a summary to the Audit Committee in the scheduled Audit Committee meeting in May 2022.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1 Yes	<p>In appointing members to the Board of Directors, it is emphasized that the Board shall have the requisite competency to independently evaluate the cases presented by the executive management team as well as the Company's operations. It is also considered important that the Board can function well as a body of colleagues and that they meet the Company's need for expertise and diversity. Cost-effective decarbonization of shipping is the centerpiece of KCC's strategy for 2020-2025, hence Board members competence on climate-related issues is of high importance. Board member representatives of the majority owner, Torvald Klaveness, (Chair of the Board and one Board member) work with long-term strategic and short-term challenges related to climate-related issues for the shipping industry on a daily basis and the Torvald Klaveness Group has taken an active role in the transition to low carbon shipping.</p> <p>All Board members of KCC have access to the learning program Decarbonization by Klaveness Academy. This course provides overview of climate change, how shipping is contributing and why this industry is hard to decarbonize and it address key concepts in the energy transition and relevant fuel alternatives, as well as details related to different regulations, policies and framework agreements targeting to reduce greenhouse gas emissions from shipping, and how/when these will affect the industry. The program is mandatory for the Board member representatives of Torvald Klaveness.</p>	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Developing a climate transition plan
Implementing a climate transition plan
Integrating climate-related issues into the strategy

Coverage of responsibilities

<Not Applicable>

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

The management level responsibility for climate-related risks and opportunities lies with the CEO. The CEO is responsible for developing the strategy and sets targets for the Company, ensuring the strategy is anchored in the organization, including with the main service providers, and with the Board of Directors. As an example, the updated Environmental Strategy published in 2023 and approved by the Board of Directors in December 2022, and the five-year business strategy for 2021-2025 are both developed by and within the responsibility of the CEO. In addition, the responsibility of the CEO is to make sure that climate-related issues are considered in all decision making processes, both when interacting with customers, suppliers, and other stakeholders. For example, the CEO together with the chartering team and the commercial operations team plan how to improve the trading efficiency of the fleet and he co-operates closely with the technical and project teams to optimize voyage efficiency and decide on which technical solutions and prototypes to test and install to improve the fuel efficiency of the vessels. During 2020-2023, the CEO of KCC has as well initiated workshops with key customers to understand how they handle climate-related issues with focus on decarbonization, which again will impact KCC's business activities. The discussions with customers also include how KCC in co-operation with customers can improve carbon efficiency of KCC's services e.g. by reducing speed, increasing cargo intake and decrease waiting time in ports.

Position or committee

Chief Financial Officer (CFO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis

Coverage of responsibilities

<Not Applicable>

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Responsible for managing the Company's financial strategy and operations. Main responsibilities include risk review of frameworks, policies, and establishing mitigation plans, including for climate-related risks. Further the CFO has the responsibility for monitoring and assessing climate-related risks and opportunities. The CFO is responsible for the quarterly company-wide risk management assessment performed by management together with a broad range of employees and discussed with the audit committee and the Board of Directors. Environmental risks are incorporated in this risk management process. The CFO is as well responsible for external ESG-reporting.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	The Board has prepared a Remuneration Report for 2022 and Remuneration Guidelines which are published on the Company's homepage. The discretionary part of the bonus for the CEO and the CFO includes Company performance related to KCC's decarbonization target trajectory for the period including 2030 (Fleet EEOI and average CO2 emissions per vessel-year).

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Chief Executive Officer (CEO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Progress towards a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The Board determines the salary and other compensation to the CEO. The CEO's salary, long-term incentive program and bonus shall be determined on the basis of an evaluation with emphasis on the following factors: Progress towards and achievement of strategic business goals; overall profitability and sustainability of the Company; growth in shareholder value; and adherence to the Company's values and ethical standards.

Bonus is distributed on an annual basis and is divided into two: i) formula bonus based on return on equity of KCC on a consolidated basis for the relevant year ii) Discretionary element.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Bonus: The target decarbonization trajectory which is one of the performance criteria in the discretionary part of the bonus is in line with KCC's Environmental Strategy. For 2022, the bonus cap was reached under the formula bonus and no discretionary bonus was paid to the CEO.

Long-term incentive program: In the Board of Directors' view, a long-term incentive program forms an important part of the total compensation for Senior Executives. It allows the Company to retain and hire the talent it needs for further growth and is aligned with the shareholder interests of long-term growth in shareholder value. The existing option program was fully vested in 2022 and in June 2023 a new long-term incentive program (LTIP) was introduced consisting of two elements: i) A share purchase program where the CEO is offered to purchase shares at a discount of 20% to the market price, and with the possibility for optional loan financing of up to 50% of the purchase price if and to the extent resolved by the Board, and ii) A share option program with a strike price equal to market price at the time of grant. Participation in the option program is subject to purchase of shares under the share purchase program. The Board of Directors may offer up to such number of options equal to five times the number of shares purchased by the CEO. The ratio is determined by the Board of Directors in the respective reward. It is the intention to offer shares and share options as part of the LTIP on an annual basis. Both number of shares offered under the share purchase program and number of options granted under the share option program will be considered in light of the individual performance of the CEO and progress towards longer-term goals including decarbonization performance.

Entitled to incentive

Chief Financial Officer (CFO)

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary
Shares

Performance indicator(s)

Progress towards a climate-related target
Reduction in absolute emissions
Reduction in emissions intensity

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

The CEO determines the remuneration of executive employees including the CFO. The remuneration is based on a base salary, bonus and a long-term incentive program. However, the Board of Directors are involved in the grants under the long term incentive program and as well is responsible for the Remuneration Guidelines for senior executives approved by the General Meeting. Bonus is distributed on an annual basis and is divided into two: i) formula bonus based on return on equity of KCC on a consolidated basis for the relevant year ii) Discretionary element.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

Bonus: The target decarbonization trajectory which is one of the performance criteria in the discretionary part of the bonus is in line with KCC's Environmental Strategy. For 2022, the bonus cap was reached under the formula bonus and no discretionary bonus was paid to the CFO.

Long-term incentive program: In the Board of Directors' view, a long-term incentive program forms an important part of the total compensation for Senior Executives. It allows the Company to retain and hire the talent it needs for further growth and is aligned with the shareholder interests of long-term growth in shareholder value. The existing option program was fully vested in 2022 and in June 2023 a new long-term incentive program (LTIP) was introduced consisting of two elements: i) A share purchase program where the CFO is offered to purchase shares at a discount of 20% to the market price, and with the possibility for optional loan financing of up to 50% of the purchase price if and to the extent resolved by the Board, and ii) A share option program with a strike price equal to market price at the time of grant. Participation in the option program is subject to purchase of shares under the share purchase program. The Board of Directors may offer up to such number of options equal to five times the number of shares purchased by the CFO. The ratio is determined by the Board of Directors in the respective reward. It is the intention to offer shares and share options as part of the LTIP on an annual basis. Both number of shares offered under the share purchase program and number of options granted under the share option program will be considered in light of the individual performance of the CFO and progress towards longer-term goals including decarbonization performance.

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	10	
Long-term	10	30	

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

KCC has defined a substantive financial or strategic impact on its business using the following thresholds for impact on equity or cash and probability:

- Low: Probability < 3%, Impact < USD 3 million
- Medium: Probability 3-30%, Impact USD 3-15 million
- High: Probability > 30%, Impact > USD 15 million

This includes both direct and indirect risks affecting KCC and risk types considered include climate-related risks.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream
Downstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

KCC's process of identifying, assessing, and responding to climate related risks and opportunities is integrated into the overall multidisciplinary risk management process. The risk assessment is performed on a quarterly basis and the value chain is assessed both upstream and downstream in addition to direct effects on KCC's business activities. The aluminum industry is a good example of where KCC is dependent on the entire value chain as we transport caustic soda to the alumina refineries and alumina from the refineries to the aluminum smelters. In this value chain we assess for example how sourcing of caustic soda changes and how demand for the final product, aluminum, develops based on different types of risks, including climate-related risks.

When identifying and assessing climate-related risks as for other risk types, we have defined a substantive financial or strategic impact on our business using the thresholds for impact on equity or cash and probability (see C2.1b), over the next 12 months. In addition to the specific assessment for the rolling 12 months period, an assessment for the main risks from 12 months – 10 years is included at least annually. Impact and probability for the longer-term horizons are more uncertain, hence the assessment is less quantitative than the short-term assessment. The risk management process includes the following:

- i) Normally on a quarterly basis a cross-functional team (finance, commercial, operations, management) discusses the overall risk development with focus on main risks and new risks discovered, including assessing impact and probability for each risk and define potential mitigating actions for the main risks.
- ii) The management discusses main risks with the Audit Committee and the Board of Directors on a quarterly basis. A main risk is a risk already identified and well understood that could materially impact our financial, reputation, business model, or strategy.
- iii) When the combination of probability and impact is higher than what is accepted, mitigating actions are implemented either based on management decision or if relevant, after discussions with the Board of Directors.

Climate-related opportunities especially for a longer-term time horizon are also potentially identified and assessed. More information related to the risk management process has been provided in the TCFD report published in 2021 on KCC's website.

Example of a PHYSICAL RISK

Situation: Through the cross-functional team discussions extreme weather events such as floods and storms have been identified as one of the main physical climate-related risks for KCC both in the short- and medium-term.

Time horizon: Short-term and medium-term

Task: Extreme weather events such as floods, storms and heavy precipitation are increasing in certain areas and the probability of KCC's vessels or customer's production facilities or ports to be involved is assessed to be medium (3-30% probability). Such events might lead to trading inefficiencies such as waiting time, idling of vessels, damage to vessels or to temporary cuts in customers' production, whereof the latter likely will have the largest impact on KCC's business as it might take time to ramp up production after such events.

Action: Risk to be monitored through the risk assessment meetings and mitigation actions to be assessed if probability and/or impact increases.

Result: Based on experience with similar events and an estimated financial impact based on lost cargo volumes or idling of vessels, the financial impact is estimated to be medium (USD 3-15 million).

Example of a TRANSITIONAL OPPORTUNITY

Situation: The project team, commercial team and operations team have identified operational/trading efficiency and energy efficiency as a major transitional opportunity both in the short-, medium- and long-term. Low-/zero-emission fuels that vessels in the future will run on are likely to be substantially more costly than today's marine fuels. Efficient use of fuel will hence become increasingly important in the future. KCC has identified operational and energy efficiency as a transitional opportunity for existing vessels, but will also be a permanent opportunity for new vessels planned to run on zero-emission fuels as the combination of energy and operational efficiency will cut use of expensive future zero emission fuels substantially below alternative shipping solutions.

Time horizon: Short-, medium- and long-term

Task: Probability is assessed to be high (> 30%) as new fuels will be likely be more expensive.

Action: KCC has identified, assessed and the project team with assistance from crew and operations has started to implement several energy efficiency initiatives on board exiting vessels. The results of the initiatives are monitored and progress reported to management and the Board. Similarly, the chartering and operations teams are constantly working on improving trading and voyage efficiency to minimize ballast and waiting time in its trades. KPIs have been established to monitor progress for the trading/voyage efficiency initiatives.

Result: Impact of more efficient use of fuels is assessed to have a high impact (> USD 15 million) based on estimated fuel savings.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & Inclusion	Please explain
Current regulation	Relevant, always included	<p>Adherence to and impact of potential changes to current regulations related to climate-related issues are monitored, assessed and acted upon on a regular basis. Non-compliance with global IMO regulations or local regulation might among other things lead to detention of vessels and fines by port authorities. Current regulation mainly includes the International Maritime Organization's (IMO) MARPOL (prevention of pollution from ship) and regional regulations for example related to bio diversity.</p> <p>Example: In June 2021, IMO through MEPC 76 approved technical and operational measures to reduce absolute CO2 emissions and carbon intensity of international shipping. The adopted measures took effect in 2023 through amendments of several MARPOL Annex VI Regulations. The EEXI regulation sets a minimum requirement to the energy efficiency of the design of all vessels in line with the Phase 2 EEDI requirements applicable for newbuilds. The current EEXI Score of the CLEANBU vessels and CABU vessels built 2016-2017 design is considerably below (within) the EEXI requirements (approx. -8-13%) while the CABU vessels built 2001-2007 design currently scores marginally above the EEXI requirements. Hence, the eleven vessels built 2016-2021 fully comply with 2023 EEXI requirements, while the five oldest vessels will have to install a system for Engine Power Limitation which limits the vessels maximum speed somewhat to comply. The operational impact is however limited as the fleet rarely operate at maximum load on the main engine.</p>
Emerging regulation	Relevant, always included	<p>Several global and regional regulations for the shipping industry related to climate change generally and emissions specifically are drawn up and more is likely to come over the next years. KCC is monitoring this closely, assessing potential impact and mitigation actions. Currently, the EU Taxonomy is under implementation, while the incorporation of shipping into the EU Emission Trading System (ETS) was approved in 2022 with implementation from 2024. IMO has started its work on the longer term measures including a global carbon tax for shipping which was discussed at the MEPC-78 meeting in June 2022.</p> <p>Example: New policies and regulations within the financial sector as for example the EU Taxonomy might impact pricing and availability of capital as part of KCC's activities will not qualify as environmentally sustainable economic activities under the EU Taxonomy.</p>
Technology	Relevant, always included	<p>There is a lot of uncertainties related to future propulsion technology and fuels. New propulsion systems as e.g. fuel cells will possibly replace the traditional combustion engines and zero-emission fuels are not available for deep-sea shipping today, hence the choice of both are uncertain. Propulsion systems are a major part of the cost for new vessels, hence what to invest in and when to invest is of major relevance to all ship owners.</p> <p>Example: Early investment in new propulsion technology will be risky as the chosen technology and zero emission fuel might not be the winner in the long run. Waiting too long with investing in new vessels/new propulsion technology is also risky as this might negatively impact KCC's competitive advantage.</p>
Legal	Relevant, sometimes included	<p>Shipping is an industry where the effect of spills and other accidents can have large impacts on the environment. Hence, the risk of environmental claims, fines and legal proceedings are evaluated and monitored in KCC. However, this risk is currently quite constant and hence not included in every risk assessment.</p> <p>Example: KCC manages these risks together with the ship manager through being compliant on all legal matters, flag and class requirements including climate change and through ensuring that KCC and all assets are operated in accordance with local jurisdiction.</p>
Market	Relevant, always included	<p>KCC operates in an industry that today is heavily dependent on fossil fuels both in powering the engine of the vessels and through the cargos carried. This risk is hence one of the main longer-term risks.</p> <p>Example: Lower demand and shipment volumes for fossil fuels and changed customer policies with respect to minimum carbon emission requirements could reduce KCC's revenue stream and make operations more expensive.</p>
Reputation	Relevant, sometimes included	<p>The possible future stigmatization of shipping as an industry affects KCC and the risk of not delivering in line with or exceed set emission targets and other targets for improving KCC's environmental footprint can impact KCC's reputation. This can ultimately mean limited access to capital and impact negatively on customers/contracts and through this impact revenue. However, this risk is currently quite constant and hence not included in every risk assessment.</p>
Acute physical	Relevant, sometimes included	<p>Extreme weather events such as floods, storms and heavy precipitation might impact revenue negatively and increased costs as waiting time increases, vessel repairs and less efficient vessel trading due to:</p> <ul style="list-style-type: none"> - Idling of vessels due to bad weather - Damage to vessels - Temporary cut in customer 's production. <p>However, the impact of this risk is currently quite constant and hence the risk is not included in every risk assessment.</p>
Chronic physical	Relevant, sometimes included	<p>Lower food production in some areas due to climate-changes can change cargo volumes and trade patterns for transportation of grains etc. Approximately 11% of revenue came from grains, soya beans and vegoil in 2022 (2021: 11 %). The impact of this risk is currently considered to be quite constant and hence the risk is not included in every risk assessment.</p>

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Technology	Transitioning to lower emissions technology
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Primary potential financial impact

Decreased asset value or asset useful life leading to write-offs, asset impairment or early retirement of existing assets

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

For deep sea shipping there are uncertainties related to future propulsion technology as there presently are no available alternative propulsion technologies and zero-emission fuels are not globally available. Batteries are for example not possible to use for vessels sailing such large distances and ammonia and methanol is not available in large scale or in all regions.

Early investment in new propulsion technology will hence be risky as the chosen technology might not be the winner in the long run. However, when new propulsion technologies and fuels are available, this can potentially have substantial financial impact on KCC's operations. As new technology matures, it can lead to decreased vessel

asset value leading to write-offs of existing vessels running on fossil fuels or for new vessels if the wrong technology has been invested in.

The risks related to KCC's five oldest vessels built 2001-2007 which will be recycled in the period 2026-2032 is limited as the vessel values of these vessels have been depreciated over many years and lead time to building vessels with new propulsion systems are likely towards the end of their expected life (2026-2032). Hence the risk is to a larger extent linked to KCC's 11 vessels built 2016-2021 for which new propulsion technology and new fuels might lead to lower vessel values and impairment in the longer term (10 years +) when new fuels and technology mature (useful life of a combination carrier is expected to be 25 years).

Time horizon

Long-term

Likelihood

More likely than not

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

10000000

Potential financial impact figure – maximum (currency)

80000000

Explanation of financial impact figure

The financial impact can materialize through for example decreasing revenue due to less competitive fleet, higher exposure to CO2 taxation, lack of access to capital if existing fleet is out of favor or lower vessel values and early recycling of vessels resulting in write-downs. The latter of these potential results will likely have the largest financial impact and is the basis for the estimated financial impact range.

The CLEANBU fleet consisting of eight vessels are built 2019-2021 and are assumed to have a useful life of 25 years with an annual depreciation of approx USD 2.0 million per vessel. The financial impact range is based on one to eight of these vessels being outdated and hence recycled five years prior to expected life, when they are 20 years old, leading to write downs of approximately USD 10 million per vessel (USD 2 million per year x 5 years) and hence a financial impact range of USD 10-80 million. The financial impact is significant for the Company as profit for the year in 2022 was USD 61 million.

Cost of response to risk

78000000

Description of response and explanation of cost calculation

Situation: Currently there are no technology available for introduction of a zero emission vessel in deep sea shipping.

Task: Possible solutions include ammonia, methanol, LNG, LPG, biofuel and hydrogens but there is still high uncertainty around what will be the new zero-carbon fuel alternative for the future. This has to be solved for KCC to reach ambition of net-zero by 2050.

Action: KCC's timescale of implementation is an ambition to have its first zero-emission vessel in service within 2030. Hence, KCC ordered in June 2023 newbuilds with estimated delivery in 2026 that are prepared for a cost effective conversion to burning zero-emission fuels when such fuels become available. KCC's combination carrier fleet, built to efficiently switch between dry bulk and tanker trades, ensure minimum days without cargo onboard (ballast) and 30-40% lower fuel consumption and carbon emission per ton cargo transported compared to standard vessels in the same trades. This will likely improve the possibility for KCC's vessels to maintain competitiveness for a longer time than today's standard vessels during the transition phase with introduction of new fuels and stricter environmental regulations. To mitigate this risk KCC focuses on further improving the voyage and trading efficiency of the fleet. To further mitigate this risk, KCC is rolling out a large energy efficiency program on the entire fleet to improve the fuel-efficiency performance of existing vessels. This will further improve the competitiveness of the fleet. Investment in energy efficiency measures can potentially further extend the current fleets life expectancy and ease transition to more costly low/zero emission fuels. We also see several potential zero-emission fuels that can be used on KCC's existing vessels without the need of a large modification of the engine and tank systems (e-diesel, green methanol, biofuels etc) and KCC is testing out alternative fuels such as sustainable bio-fuel and has made two biofuel bunkerings in 2020 and 2021. No bio-fuel bunkerings was made in 2022 due to availability and price.

Result: To maintain a fleet of similar size/capacity, each existing vessel being recycled needs to be replaced by a new vessel. Cost of response of this risk is hence illustrated through the cost of a new vessel to replace an existing vessel, which is currently estimated to be around USD 78 million per CLEANBU vessel for a green ammonia fuel based vessel.

Comment

Additional note to timescale for implementation: Phasing in zero emission vessels and fuels are also crucial for the Company to deliver a 45 % improvement in carbon intensity (EEOI) compared to 2018 in line with KCC's ambition.

Identifier

Risk 2

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Market	Changing customer behavior
--------	----------------------------

Primary potential financial impact

Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Demand for fossil fuels and hence demand for transportation of fossil fuels will decrease over the next decades. New trade flows and changes in existing trade flows might

affect KCC's combination trading pattern and revenue. Such demand deterioration may as well negatively impact supply-demand balance in both the dry bulk and tanker markets resulting in more vessels competing for lower freight volumes or different types of cargo and freight rates might deteriorate and revenue decrease. When and to which extent is uncertain, but such a change in KCC's customers preferences for the transportation of fossil fuel can potentially have a substantial financial impact on KCC's revenue stream. In 2022 the transportation of fossil fuels represented 25% of KCC's total transported cargo. Therefore a reduction in demand for transportation of fossil fuels might have a substantial financial impact.

Time horizon

Long-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

7000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

The potential financial impact figure is based on the following assumptions:

- Lower demand for transportation of fossil fuels and hence increased competition for the available cargoes might as an example result in a loss of 50% of the transported volume of fossil fuels for the CLEANBU fleet
- To maintain a high degree of combination trading KCC has to combine wet and dry cargoes. This example is based on KCC not being able to secure alternative wet cargoes for the lost fossil fuel (clean petroleum product/CPP) volume, resulting in lower combination trading. 50% lower CPP volume implies approx. 40 %-points lower combination trading for the CLEANBU vessels
- Given market levels for 2022, a round-voyage with dry and wet cargo (combination trade) would give earnings of approx 33,500 \$/d on average. Earnings for a standard dry bulk vessel for same round voyage (cargo one way, empty/ballast back) would be approx 20,700 \$/d. Hence, combination trade would give approx 12,800 \$/d in higher earnings.
- Assuming that the vessels will trade 100% in dry bulk instead of in combination trading for the 40%-points lower combination trading, estimated negative impact on revenue is approx. USD 13 million per annum based on 2022 numbers (1,000 onhire days for the 8 CLEANBU vessels in 2022 multiplied by 12,800 \$/day in lower average TCE earnings given market rates in 2022 when trading as standard dry bulk vessel rather than in combination trade = 1,000*12,800 = USD 13 million in lower revenue). The impact figure is dependent on the volatile dry bulk and product tanker markets rates. Financial impact of USD 13 million constitutes approx 12 % of EBITDA for 2022 (USD 107 million).

Cost of response to risk

100000

Description of response and explanation of cost calculation

Situation: Demand for transportation of fossil fuels (Clean petroleum products) will decrease in the transition to a low-carbon economy

Task: In order to secure alternative wet cargoes to maintain high combination trading, KCC will adapt to the development to new cargo types (e.g., lithium, biofuels) and new trade patterns consistent with the timescale to become net zero in 2050 and be less dependent on transportation of fossil fuels.

Action: The Company targets to reduce its dependence on high intensive CO2-industries over time and to focus on low intensive CO2-industries such as biofuel or synthetic fuel industries and the growing lithium industry as well as industries that are in the transition to becoming low CO2 intensive, such as the aluminum/alumina industry, the steel industry and the petrochemical industry. KCC's strategy is among other things to increase transportation of caustic soda (CSS). CSS is already KCC's largest transported tanker (wet) cargo and KCC targets to increase further its market share with its traditional alumina industry customers and to build a position as the leading shipping company for transportation of caustic soda to the infant Australian lithium refinery industry which is likely to grow substantially over the coming years. KCC transports limited dry bulk fossil fuels (coal) in its combination trades to/from Australia and the Americas and targets to reduce this share further over the coming years by increasing further shipments of its non-fossil and easy to clean target dry bulk commodities like alumina, grains, salt, sugar, bauxite and iron ore.

Result: The existing vessels can continue to be used for such products and industries and hence no large investment is needed related to the vessels themselves. The cost of the response is related to market and trade flow research and establishing customer dialogues. The cost is estimated based on time spent by internal resources and/or external consultants, is currently in total approx. half an employee-year (USD 100k) per annum. This is likely to increase over the coming years.

Comment

Identifier

Risk 3

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Carbon pricing mechanisms
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Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

Global carbon taxes on deep sea shipping are likely to be introduced over the next years. KCC's vessels operate globally and will be impacted by such regulations. A global regime will most likely be based on actual CO2 emissions (like the EU ETS which will be implemented from 2024 to/from ports within EU/EFTA-countries), which would be

favorable for KCC, but could also be based on a carbon intensity indicator (proposed by some countries). This latter indicator may or may not be favorable, depending on the accuracy of such an indicator. The downside risk for KCC lays in the scenario where this taxation regime is based on a simple carbon intensity indicator based on the theoretical cargo intake of a vessels, not considering actual cargo transported. Mainly all standard dry bulk and tanker vessels sail empty 30-50% of the time, while KCC's vessels sail empty only 10-20% of the time. When sailing with cargo the vessel consumes more fuel and hence emit more. However, emissions per ton cargo transported is lower the less ballast (empty) the vessel sail. KCC is in simple terms, everything else equal, emitting more CO2 per sailed distance compared to the standard vessels, but less per transported ton. This is due to the KCC vessels higher utilization transporting substantially more cargo than standard vessels and sailing with cargo requires more energy than sailing empty. This means that in a carbon tax system based on theoretical cargo intake and not actual cargo intake, KCC would have to pay higher taxes (increased indirect (operating) costs) than a standard vessel owners even though the KCC vessel emit less than the standard vessels per transported ton cargo.

Time horizon

Medium-term

Likelihood

Unlikely

Magnitude of impact

Low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

0

Potential financial impact figure – maximum (currency)

1800000

Explanation of financial impact figure

KCC's vessels are in average sailing empty approximately 30% less than standard vessels. Fuel consumed is about 25% higher per day sailing fully laden compared to sailing empty. This would indicate that KCC would be subject to abt 7.5% (30%x25%) higher CO2 taxation than the standard vessel if the CO2 taxation is linked to an inaccurate proxy like a carbon intensity indicator where cargo and transport work is not considered or assumed. Based on today's EUA pricing of approximately USD 81/mt CO2 (EUA price average 2022) and if we assume an average emission of 19,000 mts/year for the standard vessel, based on approximate figures for KCC's 2022 emissions, the estimated additional risk for KCC's fleet of 16 vessels is approx. USD 1.8 million per annum (2 % of EBITDA for 2022), assuming that KCC has to pay for the carbon tax beyond that of the average standard vessel. (7.5% of 19,000 mts CO2 x 16 vessels x USD 81 per mts CO2). It is likely that carbon tax for the average standard vessel will be factored into market freight and hence paid by the customer.

Cost of response to risk

0

Description of response and explanation of cost calculation

Situation: Global carbon taxes on deep sea shipping are likely to be introduced over the next years. KCC's vessels operate globally and will be impacted by such regulations.

Task: A global regime can be implemented in different ways, e.g. it can be based on actual CO2 emissions (like the EU ETS which will be implemented from 2024 to/from ports within EU/EFTA-countries) or be based on a carbon intensity indicator (proposed by some countries) based on either theoretical cargo intake of a vessels, or based on actual cargo transported.

Action: KCC is mitigating this risk through working closely with our stakeholders for example through the Norwegian Shipowners Association to promote strong and fair regulations that incentivize the industry to decarbonize.

KCC has during 2022 considerably speeded up the process of evaluating, testing and implementing new fuel saving initiatives and specific initiatives can be found on page 12-15 in the Sustainability Report for 2022. USD 8.1 million was committed and/or invested in such initiatives is 2022 (2021: USD 2.8 million) of which USD 6.3 million relates to installation of the air lubrication system and shaft generator for two vessels approved by the Board of Directors in March 2022. In addition, the Board has approved a general mandate to invest up to USD 2.5 million per year in energy efficiency improvement initiatives. KCC raised USD 25 million equity in November 2021 dedicated to such energy efficiency investments. Investments in energy efficiency measures will likely be considerably larger and raised equity will likely be supplemented by raising debt to fund a likely total investment for the existing fleet of USD 40-50 million in the period up to 2026.

Result: The regulation can be implemented in several different ways, each with different levels of impact for the Company. The cost of response for the outlined risk where the tax is based on an inaccurate carbon intensity indicator is for the current response set to 0. Nonetheless, this risk is mitigated through KCC's implementation of measures to improve the energy efficiency of the vessels, but these energy efficiency measures are being implemented independent of the above potential regulations. Such investments will be financed through lower fuel consumption, potentially with additional support of Governmental grants (like Enova, the Norwegian government enterprise promoting the transition to a low emission society) and possibly from customers.

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient modes of transport

Primary potential financial impact

Increased revenues resulting from increased demand for products and services

Company-specific description

There are large inefficiencies in deep-sea shipping. Standard dry bulk vessels sail empty 40-45% of the time and standard product tanker vessels trade empty around 30-40% of the time. KCC combines wet and dry cargoes and hence only ballast 10-20% of the time. Based on the efficient combination trading, the KCC fleet emits up to 40 % less greenhouse gases than standard dry bulk and tanker vessels for the same transport work, a competitive advantage for KCC. Carbon emissions are high on the agenda for many of KCC's customers. KCC evaluates this as an opportunity and targets to further improve its trading patterns and hence improve its trading efficiency to minimize ballasting and waiting time. Through these initiatives KCC will further strengthen its carbon efficiency advantage and its competitive advantage targeting to establish KCC as the preferred carrier for its customers in all its main trades. If successful, KCC expects this to be a "virtuous cycle" for the Company as it would increase demand for KCC's services which would increase the number of days spent in efficient combination trading and again lead to reduced emissions and increased number of earning days and result in KCC's service becoming even more competitive and attractive. If customers in the future in addition are willing to pay for the reduced emissions, the earnings improve further. KCC had in 2022 83% combination trading, 12% ballast and had 25% lower emissions per transport work compared to that of standard dry bulk and product tanker vessels in the same trades.

Time horizon

Short-term

Likelihood

Very likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

4600000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

By improving the combination trading from 83 % (2022 actual) to 90 %, the impact on revenue in 2022 is estimated to be approximately USD 4.6 million. In 2022, KCC had 5,518 on-hire days for the CABU and CLEANBU fleet. 7 %-points increase from 83 % to 90 % combination trading amounts to 386 days. Given a dry bulk market in 2022 of on average 19,300 \$/day (P4TC) and average earnings in combination pattern (dry leg + wet leg) estimated at approx. 31,400 \$/day, the difference in earnings per day between trading dry and combi is approximately 12,000 \$/day. The financial impact example is hence: 12,000 \$/day x 386 days = USD 4.6 million. The financial impact would change based on market levels. Financial impact of USD 4.6 million constitutes approximately 4 % of EBITDA for 2022.

Cost to realize opportunity

200000

Strategy to realize opportunity and explanation of cost calculation

Situation: There are large inefficiencies in deep-sea shipping. Standard dry bulk/tanker vessels sail empty 40-45%/30-40% of the time. KCC combines wet and dry cargoes and hence only ballast 10-20% of the time. Based on the efficient combination trading, the KCC fleet emits up to 40 % less greenhouse gases than standard dry bulk and tanker vessels for the same transport work, a competitive advantage for KCC.

Task: KCC evaluates this as an opportunity and targets to further improve its trading patterns and hence improve its trading efficiency to minimize ballasting and waiting time. By 2026, KCC aims at delivering a 30 % improvement in carbon intensity (EEOI) compared to 2018 through voyage, trading and energy efficiencies.

Action: KCC is taking several active steps to realize this opportunity. From May 2022, trading of the CABU fleet has been concentrated in trades to/from Australia after terminating its service between Brazil and US Gulf. The Australian CABU trades offer a more efficient trading pattern with ballast limited to around 10%. Furthermore, KCC has developed a framework for co-operation with its customers with respect to emission reductions (Sustainability-linked Contract of Affreightment). Co-operation with customers to maximize trading efficiency of each shipment is central in this framework and includes maximizing cargo intake, improve port turnaround, voyage execution and fleet planning and minimize waiting time.

KCC has in co-operation with one customer trialed a carbon pricing mechanism into freight contracts to incentivize efficiency. With this mechanism, freight will depend on KCC's actual emission performance of each voyage relative to an established baseline increasing freight if KCC overperforms the baseline and reducing freight if KCC underperforms. The increased focus on cutting carbon emissions in the shipping industry implies that emission reductions will going forward likely become an integrated part of customers chartering decisions and customers will seek the most cost-effective ways of cutting carbon emissions.

Result: The main cost of realizing this opportunity is to expand the number of CLEANBU trading patterns and customers and to optimize trading for the CABU vessels. The cost is limited as it is mainly based on work performed by existing employees and already an important scope of the work they perform. The estimated cost is based on internal work/allocation of 30% x 3 employees (USD 200k) per annum.

Comment

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other, please specify (New regulations)

Primary potential financial impact

Other, please specify (Increased revenue due to favourable effect of new regulations)

Company-specific description

KCC's combination carriers have a lower exposure to carbon taxes if these regulations, as expected, are designed to include positive effect of operational and trading efficiency (e.g. as the EU ETS) and not only being based on the technical measures/design of vessels. EU ETS for shipping, calculates CO2 emission from a voyage based on the fuel consumption of both the ballast and laden voyages. Due to KCC's superior efficiency, KCC's vessels have substantially lower time in ballast and transport more cargo than the competing standard dry bulk and tanker vessels of similar size, hence KCC's vessels have a much lower fuel consumption and CO2 emission per ton transported than standard vessels. This implies that KCC will need to buy and surrender substantially less EU emission allowances per mt transported than standard vessels, giving KCC an important competitive advantage in trades to and from EU. For example, in a round voyage with naphtha from Europe to Brazil and iron ore on the return leg to Europe the CLEANBUs have around 35% lower CO2 emissions than the sum of the CO2 emissions from the standard LR1 tanker and Kamsarmax bulk vessel doing the same transportation work. The standard vessel either ballast into Europe or have long ballast before loading the cargo to Europe, while the KCC combination carriers are laden both in and out of Europe. It is likely that carbon tax for the average standard vessel will be factored into market freight and hence paid by the customer and KCC are mainly priced as a standard vessel, hence KCC's earnings are positively impacted as actual carbon cost will be below the cost included in the hire.

Time horizon

Medium-term

Likelihood

Likely

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

22000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

In an example with a round voyage with naphtha from Europe to Brazil and iron ore on the return leg to Europe and assuming both shipments in and out of EU are taxed in line with the EU ETS (50% for voyages in and out of EU fully implemented in 2026), a KCC combination carrier would have USD 104,000 lower carbon tax per round voyage relative to the total for the LR1 tanker and the Kamsarmax bulker based on a cost of €81/USD 90 per metric ton (EUA price average 2022). Based on an example where KCC employs two of eight CLEANBU vessels in trades subject to carbon taxes, the impact on revenue would be USD 1.2 million per annum (USD 104k per voyage x 2 vessels x 6 voyages per year).

If carbon taxes are implemented on a global basis and 100% of emissions are charged (not 50% as in the example above), the effect on earnings is estimated to be USD 230,000 per round voyage based on the same trading pattern as above and based on the same price of €81/USD 90 per metric ton. In total the effect on revenue is estimated to be USD 22 million per annum (USD 230k per voyage x 16 vessels x 6 voyages per year). Financial impact of USD 22 million constitutes approximately 21 % of EBITDA for 2022.

Cost to realize opportunity

0

Strategy to realize opportunity and explanation of cost calculation

Situation: Global carbon taxes on deep sea shipping are likely to be introduced over the next years. KCC's vessels operate globally and will be impacted by such regulations.

Task: A global regime can be implemented in different ways, e.g. it can be based on actual CO2 emissions (like the EU ETS which will be implemented from 2024 to/from ports within EU/EFTA-countries) or be based on a carbon intensity indicator (proposed by some countries) based on either theoretical cargo intake of a vessels, or based on actual cargo transported. New regulations (in addition to customer support) are required for KCC to achieve the emission reduction targets for 2030 of Average CO2 emissions per vessel year of target of 12,500 and EEOI of 4.1.

Action: KCC is working closely with our stakeholders for example through the Sea Cargo Charter and through the Norwegian Shipowners Association to promote strong and fair regulations that incentivize the industry to decarbonize. To reduce carbon emissions on current fleet, KCC is currently working on harvesting untapped efficiency potential. In the period 2023-2026 our principal goal is to maximize the efficiency of our transport work and continue lowering our carbon intensity by scrutinizing efficiency improvements throughout our business. Our actions are to optimize trading efficiency, perfecting voyage efficiency and improve energy efficiency. An example of improving energy efficiency is the ongoing project of installation of shaft generator and air lubrication systems on two of the vessels which will reduce hull resistance and carbon emissions when installed in 2023. KCC has options and intention to install the shaft generator and the air lubrication system on additional nine vessels in 2024-2025, pending successful testing of the installation on the first two vessels.

Result: Based on KCC's business model the effect of a well structured carbon tax is positive without any further changes to the vessels or the business model. As such, the cost to realize this opportunity is set to zero, as the Company already is leading in its sector. However, KCC can utilize this opportunity further by improving the energy-, voyage-, and trading efficiency. The Company invests in a broad range of energy efficiency measures and works systematically to improve trading and operational efficiency, but these measures are being implemented independent of the above potential regulations.

Comment**Identifier**

Opp3

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Primary potential financial impact

Increased revenues through access to new and emerging markets

Company-specific description

In 2022 the transportation of fossil fuels represented 25% of KCC's total transported cargo. Demand for fossil fuels and hence demand for transportation of fossil fuels will decrease over the next decades. As fossil fuels are being phased out over time, there will likely be demand for transportation of new types of cargoes which is identified as an opportunity for KCC. One example is the increased exports of Australian mined spodumene rock used in the production of lithium hydroxide, a key cathode for batteries used e.g. in electric vehicles, to date mainly produced in China and Korea. Australia is now also establishing its own lithium refinery industry which will increase imports of caustic soda used in the process of refining spodumene to lithium hydroxide. The lithium refineries will likely be operational in the period 2023-2024, and additional refineries are likely to be established over the coming decade. The new Australian lithium refinery industry will increase demand for transportation in one of KCC's main trades as KCC is already the largest transporter of caustic soda into Australia, returning with dry bulk products. By securing part of this new caustic soda cargo volume into Australia, KCC can potentially employ more vessels in very efficient combination trading to/from Australia and hence further reduce dependency on wet fossil fuels and increase revenue.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

Yes, a single figure estimate

Potential financial impact figure (currency)

16000000

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Of total volumes transported by KCC in 2022, 25% were fossil fuels. As a rough calculation, assuming that 10 % points of this in the future will be substituted with non-fossil cargoes and that these 10 % points equals 10 % of revenue in 2022, the financial impact is estimated to be USD 16 million. Please be aware that revenue related to transportation of such commodities is highly volatile and that this is only an example of the potential effect. Financial impact of USD 16 million constitutes approximately 15 % of EBITDA for 2022.

Context: Transportation of hydrocarbons are important for both the tanker and bulk segments and the drop in expected energy demand from fossil fuels will have an impact on demand for transportation and could lead to decreased revenues due to reduced demand for KCC's services. KCC is less dependent on transportation of hydrocarbons than its competitors (around 25% of transported volume in 2022), and KCC's ambition is to increase transportation of non-fossil cargoes. Coal accounts for around 40-50% of the total cargo volume transported by panamax/kamsarmax dry bulk vessels while LR1 tankers are employed close to 100% in transportation of clean petroleum products to the petroleum and petrochemical industries.

Cost to realize opportunity

100000

Strategy to realize opportunity and explanation of cost calculation

Situation: As it is predicted that fossil fuel products will be phased out over time, the Company's transported volume of fossil fuel will likely follow.

Task: As fossil fuels are being phased out over time, KCC in the short- to medium term towards 2030 starts substituting transportation of fossil fuel with new cargo types that fit into a combination trade pattern of wet and dry cargoes to be valuable for KCC. This will mitigate the loss of revenue as fossil fuels are being phased out over time. In 2022, 25 % of total volumes transported were fossil fuels. In 2050, this volume is expected to be zero/limited.

Action: The cost to realize this opportunity is considered to be low for the Company, as no changes have to be made to the existing vessels in order to change from transporting clean petroleum products to non-fossil cargoes. The vessels are suited to transport many such other cargoes and priority number one will be to find new cargoes for the existing vessels. However, due to the uncertainty related to the demand for, production of and trade patterns for such new products, a research is made to identify future trade flows and the shift in demand.

In addition, KCC is constantly working to develop new combination carrier concepts. One major assumption in such projects is that new concepts will not be dependent on fossil fuels for their own propulsion or commodities transportation.

Result: The cost to realize the strategy is hence per now mainly related to market and trade flow research and establishing customer dialogues. The cost is estimated based on time spent by internal resources and/or external consultants, currently in total approx. half an employee-year (USD 100k) per annum. This will likely increase going forward.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization’s strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

No, but our strategy has been influenced by climate-related risks and opportunities, and we are developing a climate transition plan within two years

Publicly available climate transition plan

<Not Applicable>

Mechanism by which feedback is collected from shareholders on your climate transition plan

<Not Applicable>

Description of feedback mechanism

<Not Applicable>

Frequency of feedback collection

<Not Applicable>

Attach any relevant documents which detail your climate transition plan (optional)

<Not Applicable>

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

KCC’s ambition is to be net-zero by 2050. This ambition was part of the Company’s first environmental policy and strategy published in January 2020 and was restated in the updated strategy published in March 2023. Priority has so far been to reduce emissions from existing vessels through energy efficiency measures on our fleet, improved voyage execution and improved trading efficiency. KCC has established emission reduction trajectories (carbon intensity/EEOI and CO2/vessel-year) until 2030 and has since 2020 worked systematically from Board level to daily operations towards these targets. In June 2023, the Company ordered three newbuilds with expected delivery in 2026. The newbuilds will be prepared for later conversion to burning zero-emission fuels and KCC’s ambition is to introduce the first zero-emission vessel within end of 2030. The Company aims at evaluating the potential for aligning to the Science Based Targets when developing a climate transition plan.

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative, but we plan to add quantitative in the next two years	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization’s use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices		
<table border="1"> <tr> <td>Transition scenarios</td> <td>IEA 450</td> </tr> </table>	Transition scenarios	IEA 450	Company-wide	<Not Applicable>	<p>The scenario analysis is a qualitative analysis based on the “Sustainable Development Scenario” in line with 2°C based on IEA World Energy Outlook 2020. To achieve the GHG emissions targets, the IEA ETP 2020 report describes that in a Sustainable Development Scenario, the initiatives will be a combination of energy efficiency and technology. Oil-based fuels will be replaced by low-carbon and bio-energy. In the short term, consumption of bio-fuels will be the main contributor to the reduction, while methanol, hydrogen and ammonia will be a greater contributor and enable sufficient GHG-emissions in the long term. This will impact the demand for transportation services and the pricing of such services. Regulations related to emissions from vessels and potentially carbon taxes will be introduced and new propulsion technologies will have to be developed. This will potentially impact several aspects of KCC’s business through among other things change in customer behaviour, asset values and CAPEX needs.</p> <p>This scenario analysis was presented in KCC’s TCFD Report for 2020 and considered to be somewhat relevant also in 2022.</p> <p>The scenario analysis was divided into three time horizons (short term until 2030, medium term 2030-2050 (IPCC AR5 and IEA WEO2020) and long term 2050-2100 (IPCC AR5 and IEA WEO2020). As the 2°C and 4°C- scenarios are mainly time periods from 2030 onwards, the risk level for the short term is more of a subjective assessment based on current knowledge. The risk level was assessed based on a combination of probability and default.</p>
Transition scenarios	IEA 450				
<table border="1"> <tr> <td>Physical climate scenarios</td> <td>Customized publicly available physical scenario</td> </tr> </table>	Physical climate scenarios	Customized publicly available physical scenario	Company-wide	3.1°C - 4°C	<p>The scenario analysis is a qualitative analysis based on IPCC AR5.</p> <p>The scenario analysis was divided into three time horizons (short term until 2030, medium term 2030-2050 (IPCC AR5 and IEA WEO2020) and long term 2050-2100 (IPCC AR5 and IEA WEO2020). As the 2°C and 4°C- scenarios are mainly time periods from 2030 onwards, the risk level for the short term is more of a subjective assessment based on current knowledge. The risk level was assessed based on a combination of probability and default.</p> <p>Scenario analysis for physical risks were based on the main trade routes with focus on South America, Australia, Far East and Middle East and cover both direct effects on KCC’s vessels and indirect effects through damages on customer’s infrastructure and plants. There is medium-high risk level with increased flood damages to infrastructure in short term (2030-2040) in US Gulf, Australia, South America and Middle East Gulf. The scenario analysis includes more extreme weather including floods, typhoons/monsoon, heavy precipitation and raising sea levels.</p>
Physical climate scenarios	Customized publicly available physical scenario				

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

If the shipping industry aligns with the Paris Agreement, how will this impact KCC's business directly and indirectly?

What are the main risks to KCC's business if the world continues towards a 4°C-world?

How is KCC's business impacted, e.g. permanent or temporary and in what time frame?

What is the potential financial and strategic impact on KCC (probability and impact) and how can KCC reduce the risk, avoid the risk or make it an opportunity?

Results of the climate-related scenario analysis with respect to the focal questions

KCC has identified that the main risks are transition risks and that physical risks likely will have more temporary impact as the vessels operate on a global basis and can be transferred to new trading areas if needed.

1. In the short term, the likely major impact will be from regulations. Both global regulators (IMO) and regional regulator (e.g. EU) are developing and implementing regulations related to vessel emissions which will likely impact vessel operations (IMO EEXI), costs (EU ETS) and potentially access to and/or pricing of funding (EU Taxonomy). The IMO EEXI regulations are not impacting KCC's 11 modern vessels built 2016-2021, and will have a very limited impact on the five oldest vessels built 2001-2007 as they will have to operate at a somewhat lower speed, but with limited to no practical impact on the operations. Shipping will be included in the the EU ETS from 2024 with a gradual implementation until 2026. KCC currently has limited trade to/from EU, but would have a competitive advantage as this system is based on actual emissions and KCC has compared to standard vessels lower emissions per transport work. KCC has not experienced reduced willingness to invest in or provide capital to the company due to the EU Taxonomy.

2. In the medium term, KCC has identified transition to lower emissions technology to be the main risk. The vessels are the revenue-generating items in the group and if demand for existing vessels decrease due to customer preferences for zero-emitting vessels, revenue will decrease and vessel values might deteriorate. The risk also relates to investment in new technology to replace existing vessels. It is still uncertain which low-carbon/zero-carbon fuels will be available for deep-sea shipping .

3. In the longer run, KCC has identified reduced demand for fossil fuels and hence transportation of fossil fuels as the main risk. While the CLEANBU vessels can trade in the same trades as the CABU vessels, the CLEANBU vessels are dependent on CPP to achieve an efficient combination trading pattern outside the transportation of caustic soda. Hence lower CPP volumes will impact revenue negatively and might result in lower vessel values and write-downs.

The updated environmental strategy published in March 2023 is based on the risks and opportunities identified and three key levers have been identified: 1) Improve the energy efficiency of the existing vessels with more than 15 ongoing initiatives in the period 2021-2024, 2) Optimize trading efficiency through among other things implementing a shadow carbon pricing in some chartering decisions and maximum speed targets with effect from 2023. A freight contract linking freight pricing to emissions was as well implemented in January 2023 with an ambition to include the mechanism in other freight contracts over the next years, 3) Perfect voyage efficiency. The strategy as well includes aiming at having the first zero-emission vessel in operation within end of 2030.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	<p>Situation: Risks and opportunities related to potential increased demand from customers for low carbon transportation, stricter regulations and transition to lower emission technology have impacted KCC's product and service strategy. Environmental targets and ambitions, both adaptation and mitigation, are duly incorporated in the overall strategy of the Company and are one of the main building blocks of the strategy.</p> <p>Task: To maintain and strengthen KCC's competitive advantage in relation to emission footprint, KCC has established trajectories for reduction in the fleet's carbon intensity (EEOI) and average CO2/vessel-year for the period including 2030.</p> <p>Action: To reach this strategic ambition, KCC has initiated a broad range of activities related to trading and voyage efficiency and implemented a large range of energy efficiency measures, the latter partly funded by an equity raise of USD 25 million in November 2021 specifically to fund these investments. KCC's ambition is to maintain the lead as the lowest carbon-emitting shipping service provider in dry bulk/ tanker shipping and provide the most cost-effective decarbonization, hence KCC has signed a letter of intent for three CABU newbuilds with expected delivery in 2026 and a total delivered cost of around USD 180 million. The vessels are prepared for later conversion to zero-emission fuels in line with KCC's strategy of having the first zero-emission vessel in operation within the end of 2030 and the vessels have an approx. 35% reduction in carbon footprint compared to the CABU vessel built 2001-2002 that they will replace.</p> <p>Result: The trajectories for EEOI and CO2 emissions per vessel-year for the period including 2030 were updated in the environmental strategy published in March 2023. The EEOI ambition is a reduction of 30% in 2026 compared to 2018 and 45% in 2030. KCC's targets based on 2018 figures substantially exceed IMO's 2030 targets based on 2008 figures. The Board has as well set a net-zero ambition for 2050.</p>
Supply chain and/or value chain	Yes	<p>Situation: KCC's customers have an increased focus on their scope 3 emissions as the entire value chain has to reduce its emissions.</p> <p>Task: For KCC this is both an opportunity and a risk and hence KCC's ambition is to continue providing its customers with the lowest emission way of transportation and going forward provide the most cost-effective emission reductions through a highly efficient combi-trading service, an energy efficient fleet and early and smart application of new fuels and energy saving solutions. In the longer-term, KCC shall as well build a leading position in growth trades for transportation of low carbon fuels and other non-fossil cargoes in dry/wet combination trades.</p> <p>Action: KCC has the last years initiated workshops with many customers to understand how they handle climate-related issues with focus on decarbonization, which again impact KCC's strategy and business activities. The discussions with customers also include how KCC in co-operation with customers can improve carbon efficiency of KCC's services e.g. by reducing speed, increasing cargo intake and decrease waiting time in ports. Another initiative discussed with customers over the last 1-2 years is sustainability-linked freight contracts.</p> <p>Result: The most substantial result in this area in 2022/2023 influenced by this risk/opportunity was the negotiation of a sustainability-linked freight agreement (COA). Freight paid under the COA is linked to the carbon dioxide emissions of KCC's vessels, relative to an agreed baseline. In the agreed mechanism, implemented from 2023, KCC will receive higher freight if actual carbon dioxide emissions are below the baseline and lower freight in the event of under-performance relative to the baseline. Additional freight paid through this agreement will be dedicated to investments in energy efficiency measures in KCC's fleet. KCC will work to implement this mechanism in other freight contracts going forward.</p>
Investment in R&D	Yes	<p>Situation: There is no available zero-emission technology available for deep-sea shipping and hence it is uncertain how KCC can reach its zero-emission operations ambition and reach its decarbonization targets both short-term and long-term.</p> <p>Task: To optimize current vessels and activities to reduce emissions for our fleet i.e. mitigating activities, KCC seeks broadly for new solutions and technological solutions, pilots and tests new features and invests in R&D.</p> <p>Action: The most substantial R&D-decisions that were influenced by climate-related risks and opportunities in 2022 were the roll-out of and investment approval of more than 15 energy efficiency measures, both small and large, in total amounting to USD 8.1 million. In 2023, KCC will continue to roll-out the initiatives with the major being retrofit of two vessels with air lubrication and shaft generator, an investment of approximately USD 7 million. KCC has received approx. USD 1.3 million in support from ENOVA (a Norwegian government enterprise responsible for promotion of environmentally friendly production and consumption of energy) for the initiative.</p> <p>Result: One of KCC's ambitions related to investments in R&D is to reduce the fuel consumption corrected for draft, weather and speed by 18% in 2026 compared to 2018. By the end of 2022, KCC had reduced fuel consumption based on the same parameters by 9.3% compared to 2018.</p>
Operations	Yes	<p>Situation: As for the other categories, products and services, supply chain and R&D, KCC's operational strategy is as well impacted by the path to a low-, zero-emission future.</p> <p>Task: KCC has established several ambitions covering this area such as increasing time spent in combination trade, reduce ballasting, maximize cargo intake, reduce time in port and avoid high-speed voyages.</p> <p>Action: Among the most substantial operational initiatives in 2022 impacted by the need to decarbonize, is training of crew to increase competency on board both through a computer-based course related to the vessel performance system and through new voyage procedures. Other initiatives included as part of this substantial decision were roll-out of a performance management system onboard all CABU vessels, hiring an operational energy efficiency manager and piloting a study combining vessel sensor data and weather hindcast. Another important initiatives is to avoid high speeds voyages: In 2023, KCC has implemented a "speed limit" of 12.5 knots and we work closely with customers to increase cargo intake and minimize time in port. KCC has as well in KCC will continue to build on the existing initiatives and test and implement additional initiatives in 2023 and the years thereafter.</p> <p>Result: KCC ambitions for 2026 is % of days in combination trades above 90% and ballast days in % of total days on-hire below 10%. In 2022, the two metrics were 83% and 12% respectively.</p>

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs Capital expenditures Access to capital	<p>Situation: KCC has in the Environmental strategy updated in March 2023 high short- and long-term ambitions to further reduce the carbon footprint of KCC's business and to play an active role in the transition to a low carbon shipping industry. The effect of decarbonization on cargoes carried, customers served and vessel technology and how to position the Company to benefit from the changes that are coming are some of the main building blocks in the overall strategy plan for 2021-2025 that was resolved in November 2020 and later amended when relevant.</p> <p>Task: Financial planning related to several elements is influenced by climate-related risks and opportunities including capex: investments in energy efficiency investments, direct costs: low/zero-emission fuel costs, revenues: sustainability-linked freight contracts and access to capital:sustainability-linked financing.</p> <p>Action: In 2021, KCC invested USD 2.8 million million and invested and committed USD 8.1 million during 2022, to be partly implemented in 2023.</p> <ul style="list-style-type: none"> - The implemented initiatives result in lower fuel consumption and hence higher earnings and/or direct cost, which the company includes in its financial planning. - KCC has in 2020-2022 raised bank debt through several sustainability-linked bank facilities. <p>Result:</p> <ul style="list-style-type: none"> - KCC has started to improve the emission-performance of the existing fleet through identifying, promoting and testing new technologies and solutions to improve energy efficiency. Initiatives will first be tested out on one or more vessels, and if successful, will be implemented on the whole fleet. The Board of Directors has given the management a general mandate to invest (capital expenditure) up to USD 2.5 million per year in energy efficiency initiatives in the period 2020-2023. - KCC as well believes that access to capital will be influenced by emissions performance in the medium- to long-term and has hence in 2023. KCC will continue to raise capital through similar structures to maintain access to capital and secure competitive pricing of capital in the future. A sustainability-linked financing framework was established in June 2023 with DNV as second-party opinion provider. The framework will be used for future sustainability-linked financing.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	No, but we plan to in the next two years	<Not Applicable>

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Intensity target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Int 1

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

Well-below 2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Other, please specify (Metric tons CO2e emitted per transported cargo weight in kg per nautical mile (EEOI))

Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

7.6

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.00001

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

7.6

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2030

Targeted reduction from base year (%)

45

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

4.18

% change anticipated in absolute Scope 1+2 emissions

45

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

6.9

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.00001

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

6.9

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

20.4678362573099

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

KCC aims at delivering a 45 % improvement in carbon intensity (EEOI) in 2030 compared to 2018 by starting to use alternative fuels while maintaining ambition for further efficiency improvements. The revised 2030 target is part of the updated environmental strategy approved by the Board of Directors and published in March 2023 .

EEOI (Energy Efficiency Operational Index) is defined by IMO and represents CO2 emitted per transported cargo per nautical mile for a period of time (both fuel consumption at sea and in port included). Prior to 2020, end date of a voyage is decisive for which period EEOI for a voyage is included. From 2020 and onwards, reporting system provider was changed so that we are able to calculate EEOI on a per day basis, allocated to the corresponding quarter.

Plan for achieving target, and progress made to the end of the reporting year

The underlying targets are among others:

- i) Achieve 90% of on-hire days for the fleet in combination trades,
- ii) Reduce ballast days on total on-hire days to below 10%, and
- iii) Improve absolute fuel consumption of the vessels through technical measures on the fleet

In the period 2027-2030 KCC's principal goal is to start transitioning to alternative fuels while maintaining ambition for further efficiency improvements. Backed by customer support and new and stricter regulations, KCC shall start using biofuels and other zero emission fuels in daily operation. Additional large efficiency improvements through fleet renewal and continued energy efficiency investments (continue investing in new cutting-edge technologies to improve energy efficiency of the current fleet).

KCC's carbon intensity (EEOI) for 2022 improved considerably from 2021 as the fleet EEOI decreased by 7 %, from 7.4 in 2021 to 6.9 in 2022 (a 9% reduction from the base year 2018). The target for 2022 set in early 2020 was an EEOI of 5.8 (25 % reduction from 2018). The EEOI performance ended above the target for 2022 mainly due to lower than targeted trading efficiency with longer ballasting, lower cargo intake and more waiting time than the ambitious targets were based on in early 2020. The EEOI trajectory was as well not sufficiently aligned with the trajectory for reduction in CO2 emissions per vessel-year.

Regarding the underlying targets for 2022, the KCC fleet achieved 83 % of on-hire days in combination trades in 2022 (2% points away from the target of 85%) and 12 % ballast days (achieved target of below 13.5 %). The technical performance of the fleet improved considerable in 2022 as well and ended about 9.3 % below the 2018 fleets baseline. The technical performance is a measure of how much fuel the vessels are consuming compared to a baseline consumption curve established at sea trial, adjusted for draft, weather effects and speed. The improved performance in 2022 can be attributed to four main factors; delivery of newbuilds, increased dry-docking frequency, continuation of fleet-wide installation of energy saving devices, and increased focus on reducing and preventing hull fouling.

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number

Int 2

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

Well-below 2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Other, please specify (Metric tons CO2e emitted per transported cargo weight in kg per nautical mile (EEOI))

Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

7.6

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.00001

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

7.6

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure

100

Target year

2050

Targeted reduction from base year (%)

100

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

0

% change anticipated in absolute Scope 1+2 emissions

100

% change anticipated in absolute Scope 3 emissions

0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

6.9

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

0.00001

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

6.9

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

9.21052631578946

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

KCC aims at exceeding IMO's 2050 target (70% reduction in intensity with 2008 as baseline year). The ultimate ambition is to reach zero-emission operations in 2050.

EEOI (Energy Efficiency Operational Index) is defined by IMO and represents CO2 emitted per transported cargo per nautical mile for a period of time (both fuel consumption at sea and in port included). Prior to 2020, end date of a voyage is decisive for which period EEOI for a voyage is included. From 2020 and onwards, reporting system provider was changed so that we are able to calculate EEOI on a per day basis, allocated to the corresponding quarter.

Plan for achieving target, and progress made to the end of the reporting year

The underlying targets are among others:

- i) Achieve 90% of on-hire days for the fleet in combination trades,
- ii) Reduce ballast days on total on-hire days to below 10%,
- iii) Improve absolute fuel consumption of the vessels, and
- iv) Gradually replacing the existing fleet with zero-emission vessels

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

Target reference number

Int 3

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Target ambition

Well-below 2°C aligned

Year target was set

2022

Target coverage

Company-wide

Scope(s)

Scope 1

Scope 2

Scope 2 accounting method

Location-based

Scope 3 category(ies)

<Not Applicable>

Intensity metric

Other, please specify (Average CO2 emissions per vessel-year)

Base year

2018

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

20800

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

0.00001

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

20800

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

100

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

100

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

<Not Applicable>

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure
<Not Applicable>

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure
<Not Applicable>

% of total base year emissions in all selected Scopes covered by this intensity figure
100

Target year
2030

Targeted reduction from base year (%)
40

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]
12480

% change anticipated in absolute Scope 1+2 emissions
40

% change anticipated in absolute Scope 3 emissions
0

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)
17900

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)
0.00001

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)
<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

<Not Applicable>

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

17900

Does this target cover any land-related emissions?

No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

34.8557692307692

Target status in reporting year

Underway

Please explain target coverage and identify any exclusions

KCC aims at reducing average CO2 emissions per vessel-year to 12,500 mt in 2030, a reduction of 40% vs. actual 2018.

Average CO2 emissions per vessel = Total CO2 emissions from Scope 1+2 in metric tons/vessel years. Vessel years = days available – off-hire days at yard. When new vessels are delivered to the fleet, the vessel years are calculated from the date the vessel is delivered.

Plan for achieving target, and progress made to the end of the reporting year

The targeted reduction in absolute CO2 emissions may be achieved by the following measures:

- Partly by improving the energy efficiency of the vessels
- Partly by installing energy saving devices on the vessels
- Partly through improving the voyage efficiency of the fleet
- Partly through burning fuels with lower carbon footprint

The average CO2 emissions per vessel year for the KCC fleet decreased to 17,900 tons CO2 in 2022 from 18,800 tons CO2 in 2021, a reduction of approximately 5 %, and a 14 % reduction from base year 2018. The main factors influencing this KPI are both related to the activity of the vessels in terms of sailed distance, speed, cargo weight carried and % time in ballast condition, as well as the technical performance of the vessels, but the most important factor is how many days the vessels are sailing at sea. This increased slightly in 2022 compared to 2021, which means that the decrease in absolute CO2 emissions per vessel year is mainly due to the improvements in technical performance as described under carbon intensity (EEOI).

List the emissions reduction initiatives which contributed most to achieving this target

<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Low 1

Year target was set

2022

Target coverage

Product level

Target type: energy carrier

Other, please specify (Ship fuel)

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Base year

2020

Consumption or production of selected energy carrier in base year (MWh)

64300

% share of low-carbon or renewable energy in base year

0.12

Target year

2030

% share of low-carbon or renewable energy in target year

15

% share of low-carbon or renewable energy in reporting year

0

% of target achieved relative to base year [auto-calculated]

-0.806451612903226

Target status in reporting year

Underway

Is this target part of an emissions target?

Indirectly, as zero-emission fuels are needed for KCC to reach its emission targets.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain target coverage and identify any exclusions

As part of 2030 ambition we target to start using biofuels and zero emission fuels in daily operation.

For the full fleet, KCC's ambition is that sustainable biofuels shall constitute a minimum 15 % of the fuel mix in 2030 and for zero-emission vessels in operation the ambition is that 50 % of the fuel used shall be zero-emission fuels in 2030.

Plan for achieving target, and progress made to the end of the reporting year

Fuel transition is dependent on new regulations and customer support. Large investments to enable newbuilds to burn new zero emission fuels and using substantially more expensive low or zero emission fuels require support from customers and stricter regulations. Furthermore, it requires substantial expansion of low and zero emission fuel production capacity and port bunkering facilities. Without regulatory and customer support, what KCC can achieve on its own will mainly be limited to effects of continued efficiency improvements in addition to fleet renewal. Without such support KCC will continue to burn mainly current carbon fuels on both existing vessels and newbuilds. This will reduce achievable emission reductions by 2030.

List the actions which contributed most to achieving this target

<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

NZ1

Target coverage

Company-wide

Absolute/intensity emission target(s) linked to this net-zero target

Int1

Int2

Int3

Target year for achieving net zero

2050

Is this a science-based target?

Yes, we consider this a science-based target, but we have not committed to seek validation of this target by the Science Based Targets initiative within the next two years

Please explain target coverage and identify any exclusions

KCC shall well exceed the IMO target of 50% reduction in total emissions in 2050 vs 2008, with an ambition to reach net zero operations within 2050 aligned with the Paris Agreement's long term goals.

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Unsure

Planned milestones and/or near-term investments for neutralization at target year

<Not Applicable>

Planned actions to mitigate emissions beyond your value chain (optional)

No planned actions per now.

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	7	0
To be implemented*	11	39230
Implementation commenced*	0	0
Implemented*	10	9624
Not to be implemented	2	0

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Other, please specify	Other, please specify (Reduced fuel consumption - Silicone based antifouling)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

238

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

75778

Investment required (unit currency – as specified in C0.4)

300000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Silicone based antifouling hull paint was applied on two vessels during their drydocking in 2022, and KCC will continue to apply this high performance paint on remaining vessels during the next three years at each vessel's 5-year drydocking. This initiative is expected to prevent the growth of biofouling on underwater hull, a process which may cause an increase of up to 25% in the fuel consumption for propulsion due to increased friction forces. The estimated annual CO2e savings is calculated based on a fuel savings of approx. 3.5% compared to conventional hull paint for the remaining days in operation for these two vessels.

Initiative category & Initiative type

Other, please specify	Other, please specify (Improved propeller efficiency - Becker Mewis Duct)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

2315

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

737151

Investment required (unit currency – as specified in C0.4)

735000

Payback period

<1 year

Estimated lifetime of the initiative

16-20 years

Comment

Becker Mewis ducts were installed on three vessels during their drydocking in 2022 and KCC will continue to roll out this energy saving device on all but one of the remaining vessels over the course of the next three years at each vessel's 5-year drydocking. The Becker Mewis Duct consists of two strong fixed elements mounted on the vessel: a duct positioned in front of the propeller along with an integrated fin system. The duct straightens and accelerates the hull wake into the propeller and also produces a net forward thrust. The fin system provides a pre-swirl to the ship wake which reduces losses in the propeller slipstream, resulting in an increase in propeller thrust at a given propulsive power. Both effects contribute to one another, and tank tests performed with vessel models of KCC's three sub fleets show fuel savings between 4.5% and 6%, depending on the type of vessel. As different sub fleets have shown a slightly different potential fuel savings, the estimated annual CO2e savings is calculated based on a weighted average of the modeled fuel savings for each fleet type, which was calculated to be 5.2%, taking date of installation into account.

Initiative category & Initiative type

Other, please specify	Other, please specify (Welding seam fearing of underwater hull)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

102

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

32476

Investment required (unit currency – as specified in C0.4)

130000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

Hempel's SeamFlow was applied on two vessels in 2022, and KCC plans to continue to apply this innovative solution on remaining vessels during the next three years at each vessel's 5-year drydocking together with the silicone based antifouling hull paint. This initiative aims to reduce the turbulent flow across the ships' side hull by rounding off the welding seams where steel plates are welded together, thus reducing the hydrodynamic resistance and consequently the fuel consumption for propulsion. Estimated annual CO2e savings are calculated based on an estimated fuel saving of 1.5% provided by manufacturer, adjusted for number of days after drydock.

Initiative category & Initiative type

Other, please specify	Other, please specify (Strategic Power Routing - Load optimization)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

1046

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

333092

Investment required (unit currency – as specified in C0.4)

7200

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

This voyage optimization initiative was piloted on four vessels in 2022. The SPR, or Strategic Power Routing, is used on a voyage basis, and only for voyages operated by KCC, so voyages on time charter cannot yet take advantage of this advanced routing option. SPR works by analyzing the engine speed and performance in order to advise the captain on which optimal RPM (rotations per minute) the engine needs to run at in order to avoid inefficient fluctuations in engine load. The estimated annual CO2e savings of 3% are based on historical data analysis provided by SPR service provider StormGeo, and with the assumption that half of all voyages performed by the four pilot vessels were performed using SPR, the final CO2e savings estimate is approx. 1.5%.

Initiative category & Initiative type

Other, please specify	Other, please specify (LeanMarine FuelOpt - Autopilot for steady load routing)
-----------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

68

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

21651

Investment required (unit currency – as specified in C0.4)

114222

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

LeanMarine FuelOpt were installed on two CABU vessels during the vessel's drydocking in 2022, with one more system to be installed in 2023. Equivalent systems are currently under evaluation for further roll-out. The FuelOpt is a hardware connected to the vessels propulsion system and acts as an autopilot to keep a steady engine load by inputting a specific RPM advised through StormGeo's Strategic Power Routing (SPR) service. By letting the autopilot constantly micro-adjust the engine load instead of adjusting manually from engine room, the estimated annual CO2e savings will be approx. 1% in addition to the SPR initiative.

Initiative category & Initiative type

Other, please specify	Other, please specify (Improving propeller efficiency - Propeller boss cap fins)
-----------------------	--

Estimated annual CO2e savings (metric tonnes CO2e)

102

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

32476

Investment required (unit currency – as specified in C0.4)

152000

Payback period

4-10 years

Estimated lifetime of the initiative

3-5 years

Comment

The EnergoProFin is only applicable for the oldest CABU vessels, and was installed on two vessels during their drydocking in 2022, with only one vessel remaining in 2023. The Wärtsilä EnergoProFin is an energy saving propeller cap with fins that rotate together with the propeller, and helps to reduce the energy losses arising from the flow phenomena around and behind the propeller boss, thereby increasing overall propulsion efficiency. The estimated annual CO2e savings is estimated to be approx. 1.5% for the remaining days in operation after installation on these two vessels.

Initiative category & Initiative type

Company policy or behavioral change	Other, please specify (Optimization of auxiliary engines and boilers onboard)
-------------------------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

1395

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

444122

Investment required (unit currency – as specified in C0.4)

16000

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

Analysis of the fuel consumption in auxiliary engines and boilers onboard KCC's vessels revealed a potential for optimization of their operation, and an initiative was introduced in 2022 to reduce the fuel consumption from these consumers. The estimated annual CO2e savings from this initiative is estimated to be approx. 1% based on the results from 2022.

Initiative category & Initiative type

Other, please specify	Other, please specify (Optimal weather routing (BVS) from StormGeo)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

3138

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

999276

Investment required (unit currency – as specified in C0.4)

21600

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

StormGeo's Bon Voyage System (BVS) is an optimized weather routing advisory service first piloted on four vessels in 2021 and subsequently rolled out to all vessels in KCC's fleet in 2022. The weather routing takes predicted winds, currents and waves into account to both avoid heavy weather that increases the fuel consumption used for propulsion as well as utilizing beneficial currents to reduce fuel consumption. Although difficult to calculate directly, the estimated annual CO2e savings from this initiative is estimated to be approx. 1.5% based on the results from 2022.

Initiative category & Initiative type

Other, please specify	Other, please specify (Trim Optimization)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

436

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

138788

Investment required (unit currency – as specified in C0.4)

7000

Payback period

<1 year

Estimated lifetime of the initiative

<1 year

Comment

Every vessel will have a certain trim which consumed the least fuel depending on vessel's speed and draft, and while the youngest fleet CLEANBU (with 8 vessels) has a trim optimization tool incorporated in the vessels' performance system, the oldest five CABUs do not. Therefore, KCC invested in Computational Fluid Dynamics (CFD) simulations to tabulate the optimal trim at all modes in 2021, and in 2022 the five oldest CABUs were instructed to follow the optimal trim tables at all times in order to improve the trim performance. CFD calculations showed that operating the vessels at optimal trim could improve the operational efficiency of the vessels, and thus estimated annual CO2e savings, by up to 1.5%, depending on how well the the vessels follow the optimal trim tables.

Initiative category & Initiative type

Other, please specify	Other, please specify (Shipshave ITCH)
-----------------------	---

Estimated annual CO2e savings (metric tonnes CO2e)

784

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 1

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

249819

Investment required (unit currency – as specified in C0.4)

165000

Payback period

<1 year

Estimated lifetime of the initiative

3-5 years

Comment

Although the Shipshave ITCH was delivered to four vessels in late 2021 and early 2022, the usage did not commence until 2022. Shipshave ITCH is a semiautonomous hull cleaning robot for in-transit cleaning of ship hulls to prevent the accumulation of biofouling that deteriorates the technical performance of the vessel. Although difficult to calculate directly, performance analysis of the vessels over time showed an estimated annual CO2e savings of between 1.5-5%, with the lowest estimate used to calculate total CO2e savings.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Dedicated budget for energy efficiency	The Board of Directors have given the Administration a general mandate of USD 2.5 million per annum for the years 2020-2022 for emission reduction initiatives. Initiatives exceeding this limit shall be presented to the Board for approval. In addition, in total USD 7 mill was approved in 2022 for implementation of two large projects on two ships in 2023. The Company has also raised USD 25 million dedicated to decarbonization efforts on the existing fleet.
Employee engagement	About monthly decarbonization presentations for waiting onsigners and decarbonization academy for onshore staff.
Compliance with regulatory requirements/standards	IMO introduced in 2023 new regulations related to both energy efficiency design as well as operational energy efficiency , and the measures implemented will help to further lower KCC's ratings and scores beyond the required scores to be in compliance.
Internal price on carbon	KCC is using an internal price on carbon when calculating payback time for decarbonization measures and energy efficiency technologies and when taking some chartering decisions.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

No

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

Name of organization(s) acquired, divested from, or merged with

<Not Applicable>

Details of structural change(s), including completion dates

<Not Applicable>

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1 2018

Base year end

December 31 2018

Base year emissions (metric tons CO2e)

183578

Comment

New vessels delivered in 2019, 2020 and 2021 and one vessel sold in 2021. No new vessels in 2022, but this was the first full year with the full fleet of newbuilds in operation. Fleet expansion in the period resulting in increased Scope 1 emissions in the period 2019-2022 compared to 2018.

Scope 2 (location-based)

Base year start

January 1 2018

Base year end

December 31 2018

Base year emissions (metric tons CO2e)

0.7

Comment

Electricity purchased in office building

Scope 2 (market-based)

Base year start

January 1 2020

Base year end

December 31 2020

Base year emissions (metric tons CO2e)

5.4

Comment

Electricity purchased in office building

Scope 3 category 1: Purchased goods and services

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

1193

Comment

The scope is wide ranging from spare parts, new equipment and maintenance, to food, clothes and personal protective equipment (PPE) for the ships' crew. KCC does not have a direct overview of CO2 emissions related to purchased goods and services. However, CO2 emissions from purchased goods and services in KCC in the base year 2021 were estimated using spend-based emission factors provided by CEMAsys. The sum in USD for 13 different purchasing categories were mapped with 10 different spend-based emission factors, covering 85% of the sum invoiced, and the remaining 15% were covered through a general ship-specific emission factor.

Scope 3 category 2: Capital goods

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

135200

Comment

Emissions related to the steel used for building new vessels and reparations and upgrading of existing vessels during drydocking. Conversion factors from steel to CO2e provided by CEMASys and sourced from Ecoinvent 3.8.

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

68000

Comment

Emissions related to the production, refining and transportation of fossil fuels consumed by the vessels. Conversion factors from mt fuel to Well-to-tank CO2e provided by CEMASys and sourced from DEFRA 2021.

Scope 3 category 4: Upstream transportation and distribution

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

520

Comment

The CO2 footprint of the transportation of goods purchased in the base year 2021 was calculated using distance-based emission factors. The weight of all shipments and deliveries was mapped, as well as the distance transported, and emission factors were collected from US EPA Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019, April 1st 2021.

Scope 3 category 5: Waste generated in operations

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

53

Comment

Emissions related to the disposal, recycling and incineration of various types of garbage onboard ships and in office. Emission factors converting different categories of waste to equivalent CO2 emissions were collected from Ecoinvent 3.8 and DEFRA 2021.

Scope 3 category 6: Business travel

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

2.2

Comment

Although the CO2 emissions from business travel for the ten KCC employees are considered immaterial and hence not relevant, but is still reported. In the base year 2021, KCC had 2 domestic flights, 2 continental flights and 3 intercontinental flights. This amounts to 2.2 mt CO2e, well below the threshold for relevancy at 0.1% of total GHG emissions. Emission numbers provided by travel agency Berg-Hansen's web portal "Business Insight", calculated using a distance-based method.

Scope 3 category 7: Employee commuting

Base year start

January 1 2021

Base year end

December 31 2021

Base year emissions (metric tons CO2e)

0.8

Comment

Although the CO2 emissions from employee commuting for the ten KCC employees are considered immaterial and hence not relevant, but is still reported. GHG-emissions related to commuting have been calculated by estimation of commuting methods and distance per employee, converted to CO2e using factors provided by CEMASys and sourced from Ecoinvent 3.8 and DEFRA 2021.

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not operate leased assets, and this category has been evaluated to be not relevant.

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not sell products, only transportation services, and CO2 emissions related to the transportation of goods are reported in Category 1, and this category has been evaluated to be not relevant.

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not sell products, only transportation services, and this category has been evaluated to be not relevant.

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not sell products, only transportation services, and this category has been evaluated to be not relevant.

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not sell products, only transportation services, hence no emissions from "End of life treatment of sold products", and this category has been evaluated to be not relevant.

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not operate leased assets, and this category has been evaluated to be not relevant.

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not have franchises or have operations in a franchise model, and this category has been evaluated to be not relevant.

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC owns no interests in other companies than subsidiaries already included on 100 % basis as part of the consolidation approach in Greenhouse Gas Accounting Report 2021 and 2022, therefore KCC does not consider this category as relevant.

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not consider any other upstream category, except those already disclosed above, as relevant.

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

0

Comment

KCC does not consider any other downstream category as relevant.

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

Defra Environmental Reporting Guidelines: Including streamlined energy and carbon reporting guidance, 2019

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

Other, please specify (Fourth IMO Greenhouse Gas Study 2020, page 83)

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

282752

Start date

January 1 2022

End date

December 31 2022

Comment

Scope 1 includes all direct GHG emission sources. Nearly 100 % of Scope 1 emissions come from the combustion of fossil fuels on KCC's vessels. After delivery of three vessels and the sale of one vessel in 2021, KCC has approximately 0.3 vessel-years in 2022 compared to 2021.

Past year 1

Gross global Scope 1 emissions (metric tons CO2e)

302657

Start date

January 1 2021

End date

December 31 2021

Comment

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Scope 2 emissions for the Company are immaterial when comparing with Scope 1 emissions. Scope 2 emissions for KCC in the year 2022 include only indirect CO2 emissions related to purchased electricity for the leased office building in Oslo, as no district heating/cooling is in use in the office building. The electricity emission factors used are based on national gross electricity production mixes from the International Energy Agency's statistics (IEA Stat). Emission factors per fuel type are based on assumptions in the IEA methodological framework.

As the power supplier for the leased office building of KCC does not have any Guarantees of Origin (GoOs) or Renewable Energy Certificates (RECs), we have chosen to report Scope 2 emissions according to the location-based method, which reflects the average emission intensity of the grids on which energy consumption occurs. This is based on statistical emissions information and electricity output aggregated and averaged within a defined geographic boundary and during a defined time period. Within this boundary, the different energy producers utilize a mix of energy resources, where the use of fossil fuels (coal, oil, and gas) results in direct GHG emissions. These emissions are reflected in the location-based Nordic mix emission factor.

In addition, KCC has also reported Scope 2 emissions according to the market-based method. This emission factor is based on the remaining electricity production after all GoOs and RECs for renewable energy are sold. This is called a residual mix, which is normally substantially higher than the location-based factor. As an example, the market-based Norwegian residual mix factor is approximately 7 times higher than the location-based Nordic mix factor. The reason for this high factor is due to Norway's large export of GoOs/RECs to foreign consumers. In a market perspective, this implies that Norwegian hydropower is largely substituted with an electricity mix including fossil fuels.

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

0.8

Scope 2, market-based (if applicable)

6.1

Start date

January 1 2022

End date

December 31 2022

Comment

Past year 1

Scope 2, location-based

0.6

Scope 2, market-based (if applicable)

4.6

Start date

January 1 2021

End date

December 31 2021

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

2646

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

The scope is wide ranging from spare parts, new equipment and maintenance, to food, clothes and personal protective equipment (PPE) for the ships' crew. KCC does not have a direct overview of CO2 emissions related to purchased goods and services. However, CO2 emissions from purchased goods and services in KCC in 2022 was estimated using spend-based emission factors provided by CEMASys. The sum in USD for 6 different purchasing categories were mapped with category-specific spend-based emission factors.

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1323

Emissions calculation methodology

Average product method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions related to the steel used for reparations and upgrading of existing vessels during drydocking. Conversion factors from mt steel to CO2e provided by CEMASys and sourced from Ecoinvent 3.8.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

63506

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions related to the production, refining and transportation of fossil fuels consumed by the vessels. Conversion factors from mt fuel to Well-to-tank CO2e provided by CEMASys and sourced from DEFRA 2022.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

204

Emissions calculation methodology

Supplier-specific method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

The CO2 footprint of the transportation of goods purchased in 2022 was provided in the annual carbon report from Marinetrans, the forwarding and logistics company used for KCC vessels.

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

95

Emissions calculation methodology

Waste-type-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Emissions related to the disposal, recycling and incineration of various types of garbage onboard ships and in office. Conversion factors from mt waste to CO2e provided by CEMASys and sourced from Ecoinvent 3.8 and DEFRA 2022.

Business travel**Evaluation status**

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

20

Emissions calculation methodology

Supplier-specific method
Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

GHG emissions related to business travel sourced from Berg-Hansen, the travel agency used by KCC for all air travels.

Employee commuting**Evaluation status**

Not relevant, calculated

Emissions in reporting year (metric tons CO2e)

0.5

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners**Please explain**

Although the CO2 emissions from employee commuting for the ten KCC employees are considered immaterial and hence not relevant, but is still reported. GHG-emissions related to commuting have been calculated by estimation of commuting methods and distance per employee, converted to CO2e using factors provided by CEMAsys and sourced from Ecoinvent 3.8 and DEFRA 2022.

Upstream leased assets**Evaluation status**

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not operate leased assets, and this category has been evaluated to be not relevant.

Downstream transportation and distribution**Evaluation status**

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not sell products, only transportation services, and CO2 emissions related to the upstream transportation of goods are reported in Category 1, and this category has been evaluated to be not relevant.

Processing of sold products**Evaluation status**

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not sell products, only transportation services, and this category has been evaluated to be not relevant

Use of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not sell products, only transportation services, and this category has been evaluated to be not relevant

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not sell products, only transportation services, hence no emissions from "End of life treatment of sold products", and this category has been evaluated to be not relevant.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not operate leased assets, and this category has been evaluated to be not relevant.

Franchises

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not have franchises or have operations in a franchise model, and this category has been evaluated to be not relevant.

Investments

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO₂e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC has not made investments in other companies other than subsidiaries already included on 100 % basis as part of the consolidation approach in Greenhouse Gas Accounting Report 2022, therefore KCC does not consider this category as relevant.

Other (upstream)

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not consider any other upstream category, except those already disclosed above, as relevant.

Other (downstream)

Evaluation status

Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners

<Not Applicable>

Please explain

KCC does not consider any other downstream category as relevant.

C6.5a

(C6.5a) Disclose or restate your Scope 3 emissions data for previous years.

Past year 1

Start date

January 1 2021

End date

December 31 2021

Scope 3: Purchased goods and services (metric tons CO2e)

1193

Scope 3: Capital goods (metric tons CO2e)

135213

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

67963

Scope 3: Upstream transportation and distribution (metric tons CO2e)

521

Scope 3: Waste generated in operations (metric tons CO2e)

53

Scope 3: Business travel (metric tons CO2e)

2.2

Scope 3: Employee commuting (metric tons CO2e)

0.8

Scope 3: Upstream leased assets (metric tons CO2e)

0

Scope 3: Downstream transportation and distribution (metric tons CO2e)

0

Scope 3: Processing of sold products (metric tons CO2e)

0

Scope 3: Use of sold products (metric tons CO2e)

0

Scope 3: End of life treatment of sold products (metric tons CO2e)

0

Scope 3: Downstream leased assets (metric tons CO2e)

0

Scope 3: Franchises (metric tons CO2e)

0

Scope 3: Investments (metric tons CO2e)

0

Scope 3: Other (upstream) (metric tons CO2e)

0

Scope 3: Other (downstream) (metric tons CO2e)

0

Comment

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	0	No biofuel burned in 2022.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.0010847

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

282753

Metric denominator

unit total revenue

Metric denominator: Unit total

260674000

Scope 2 figure used

Location-based

% change from previous year

28

Direction of change

Decreased

Reason(s) for change

Other emissions reduction activities

Change in revenue

Please explain

After delivery of the last three CLEANBU newbuilds and the sale of the CABU vessel Banasol in 2021, KCC had approximately 0.3 less vessel years in 2022 compared to 2021, resulting in total scope 1 emissions decreasing slightly Y-o-Y. Positive effects on scope 1 emissions came as well from more efficient vessel operation and energy saving devices installed on dry-docked vessels. Scope 1 emissions hence decreased by 7 % from 2021 to 2022.

Total revenue from the vessels increased by 32 % from 2021 to 2022 on the back of stronger underlying markets and hence higher TCE earnings for the fleet.

C-TS6.15

(C-TS6.15) What are your primary intensity (activity-based) metrics that are appropriate to your emissions from transport activities in Scope 1, 2, and 3?

Marine

Scopes used for calculation of intensities

Report Scope 1 + 2

Intensity figure

6.9

Metric numerator: emissions in metric tons CO2e

282753

Metric denominator: unit

t.mile

Metric denominator: unit total

40377907196

% change from previous year

-6.8

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.

EEOI for 2022 improved from 7.4 in 2021 to 6.9 in 2022, which is mainly the result of implementation of energy efficiency measures across our fleet and enhanced focus on operational efficiency.

ALL

Scopes used for calculation of intensities

Report Scope 1 + 2 + 3 (category 4)

Intensity figure

7

Metric numerator: emissions in metric tons CO2e

282956

Metric denominator: unit

t.mile

Metric denominator: unit total

40377907196

% change from previous year

-6.3

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.

As the EEOI for 2022 improved from 7.4 in 2021 to 6.9 in 2022, also the EEOI including Scope 3 category 4 has improved correspondingly, as the CO2 emissions from this category of Scope 3 emissions is very low compared to the Scope 2 emissions, accounting for only 0.07% of the total emissions.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	282732.22	Other, please specify (IMO Fourth Greenhouse Gas Study 2020)
CH4	4.6	Other, please specify (IMO Fourth Greenhouse Gas Study 2020)
N2O	15	Other, please specify (IMO Fourth Greenhouse Gas Study 2020)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Norway <i>As the majority of Scope 1 emissions come from KCC's fleet sailing all over the globe, only Scope 1 emissions from office building can be directly attributed to a geographical area.</i>	0.002
Other, please specify (Global. CO2 Emissions from vessels are not broken down into geographical region as majority of emissions occur on open seas / international waters.)	282751.8

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
CABU I fleet (5 vessels built 2001-2007)	86861
CABU II fleet (3 vessels built 2016-2017)	51310
CLEANBU fleet (8 vessels built 2019-2021)	144581
Headquarters	0.002

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	282752	<Not Applicable>	Nearly 100% of Scope 1 emissions come from combustion of fossil fuels on KCC's vessels.

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Norway	0.8	6.1

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By facility

C7.6b

(C7.6b) Break down your total gross global Scope 2 emissions by business facility.

Facility	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Headquarter Oslo, Norway	0.8	6.1

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization's total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	0	0	No electricity purchased for transport services activities, but in the future this might become an option in the near future as the development of shore power in ports becomes commercialized.

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Decreased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	863	Increased	0.3	KCC bunkered and burned a total of 1070 mt 30% sustainable biofuel blend in 2021, but did not use any biofuel in 2022. This decrease in use of biofuel increased emissions from fossil fuels, as the emission factor for biofuel is much lower than for fuel oil. Also, net specific energy for the two fuels were taken into account.
Other emissions reduction activities	9623	Decreased	3.5	KCC has developed a model to calculate the increase in energy efficiency and thus reduction in CO2e from all measures and technologies implemented in KCC's fleet. The model accounts for both technical and operational measures, and every measure has an estimated fuel savings percentage based on either model tank tests, CFD analysis, claims by manufacturer or calculated results from historical performance analysis from e.g. pilot trials. The total fuel savings percentage is then calculated using multiplicative methods, not additive, in order to apply the concept of diminishing returns. Also, the effect of installed technologies is calculated from the date of installation, implying that the expected effect of a technology with e.g. 4% fuel savings potential installed on October 1st will only have a 1% effect when annualized. Please see C4.3b for a full list of emission reduction activities implemented in 2022.
Divestment	17623	Decreased	6.2	With one vessel sold in 2021, the total emissions from the trading KCC fleet was decreased by about 16188 CO2e from 2021 to 2022, using the actual emissions from vessel Banasol in 2021.
Acquisitions	10568	Increased	3.7	With three additional deliveries of vessels Baiacu, Balzani and Bass in 2021, 2022 was the first year these three vessels operated for a full year, increasing the total emissions from these three vessels from 37,550 mt CO2e in 2021 to 47,934 mt CO2e in 2022, a difference of 10,569 mt CO2e.
Mergers	0	No change	0	
Change in output	0	No change	0	
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	2646	Decreased	0.9	Total time spent in ballast condition in 2022 was down by 4.8% compared to 2021, and the average speed in ballast condition decreased by 1.2 knots in 2022 from 2021. As the vessels consume approx. 20% less fuel when sailing in ballast condition compared to laden condition (Avg. Draft 12 m), and approx. 25% less fuel when speed is decreased by 1.2 knots, the CO2 emissions from sailing in ballast decreased with 16475 mt CO2 in 2022. However, the average speed sailing in laden condition increased by 0.1 knots from 2021 to 2022, which results in 2% increased CO2 emissions, or 3338 mt CO2, which brings the total decrease in CO2 emissions from change in physical operating conditions to 13137 mt CO2. Still, in order to account for the improvements in performance mentioned in "Other emissions reduction activities", we need to correct for the vessels' technical performance, which improved by 5.3% in 2022 compared to 2021. This accounts for approx. 10724 mt CO2e, thus the resulting reduction in CO2 emissions due to change in physical operating conditions from change in speed and ballast% ends at 2646 mt CO2e.
Unidentified	1443	Decreased	0.5	Estimating the effect of all energy efficiency measures is a complex exercise which requires many assumptions that are difficult to validate using the current data formats with inherent uncertainty. The predicted fuel savings for almost all implemented energy efficiency measures have been estimated set to conservative values, and we expect some of these to have slightly higher energy saving results than estimated. Other factors that are contributing to better performance are related to both the general increased awareness on vessel performance, which leads to increased frequency of hull and propeller cleaning, as well as increased vessel drydocking frequency in order to install various energy saving devices, which has the positive side effect of improved performance out of drydock also for vessels that have not received a new layer of anti-fouling coating, but only repairs and touchups. Furthermore, minor changes in a wide range of operational parameters not accounted for under "Change in physical operating conditions" may influence the CO2 emissions in both directions, but is too complex to calculate even with multi-variable analysis.
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 30% but less than or equal to 35%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	0	1016567	1016567
Consumption of purchased or acquired electricity	<Not Applicable>	30.5	0	30.5
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Total energy consumption	<Not Applicable>	30.5	1016567	1016597

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

LHV

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other biomass

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Coal**Heating value**

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment**Oil****Heating value**

LHV

Total fuel MWh consumed by the organization

1016567

MWh fuel consumed for self-generation of electricity

175943

MWh fuel consumed for self-generation of heat

59998.25

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Electricity produced onboard in three auxiliary engines (MWh 175 943), heat produced onboard in one oil-fired boiler (MWh 59 998). The remaining of the total energy use of MWh 1 016 567 comes from consumption of fuel oil in main engines for propulsion.

Gas**Heating value**

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

0

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

Total fuel

Heating value

LHV

Total fuel MWh consumed by the organization

1016567

MWh fuel consumed for self-generation of electricity

175943

MWh fuel consumed for self-generation of heat

59998.25

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration

<Not Applicable>

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption

Norway

Sourcing method

Default delivered electricity from the grid (e.g. standard product offering by an energy supplier), supported by energy attribute certificates

Energy carrier

Electricity

Low-carbon technology type

Hydropower (capacity unknown)

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)

30.5

Tracking instrument used

Contract

Country/area of origin (generation) of the low-carbon energy or energy attribute

Norway

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

<Not Applicable>

Comment

Scope 2 figures refers to electricity consumed by leased office building for KCC employees in Oslo office.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Norway

Consumption of purchased electricity (MWh)

30.5

Consumption of self-generated electricity (MWh)

0

Is this electricity consumption excluded from your RE100 commitment?

<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

30.5

C-TS8.5

(C-TS8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Activity

Marine

Metric figure

0.6875

Metric numerator

Other, please specify (Number of ships achieved minimum EEXI)

Metric denominator

Other, please specify (Total number of ships in the fleet)

Metric numerator: Unit total

11

Metric denominator: Unit total

16

% change from last year

4

Please explain

This energy efficiency metric shows KCC's EEXI attainment ratio, which serves as an indicator of the overall technical design efficiency of the fleet. EEXI attainment ratio is the proportion of ships in KCC's fleet that achieved minimum EEXI, and this changed slightly from 2021 as one older vessel was sold. As this becomes an international requirement from IMO in 2023, we expect all vessels to reach their required EEXI, as the remaining older vessels in CABU I fleet have been fitted with energy saving device and engine power limitation to reach the required EEXI of 2023.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

Description

Other, please specify (Spills to the environment)

Metric value

0

Metric numerator

number of incidents

Metric denominator (intensity metric only)

% change from previous year

0

Direction of change

No change

Please explain

KCC had no spills to the environment in 2022 or 2021.

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.**Activity**

Marine

Metric

Fleet adoption

Technology

Other, please specify (Delivery of new vessels)

Metric figure

6.9

Metric unit

Other, please specify (EEOI)

Explanation

EEOI (Energy Efficiency Operational Index) is defined by IMO and represents CO2 emitted per transported cargo per nautical mile for a period of time (both fuel consumption at sea and in port included) was 6.9 in 2022, down from 7.6 in 2018 (base year). KCC took delivery of three CLEANBU newbuilds in 2021, two CLEANBU newbuilds in 2020 and three in 2019. These vessels are more fuel efficient than the existing fleet and will contribute positively towards reaching KCC's 2026 and 2030 emission targets.

In end June 2023, KCC signed a newbuilding contract for purchase of three CABU III newbuildings. The CABU III vessels which will through optimized design and energy efficiency measures achieve 35 % lower carbon footprint than CABU I (KCC's 5 vessels built in 2001-2007) hat they will replace and 50-60 % lower carbon footprint than average standard dry bulk and product tanker vessels. The three CABU III vessels are scheduled for delivery in 2026 and will contribute to KCC's 2030 targets of a 45 % decrease in the fleet's carbon intensity (EEOI) compared to 2018 performance.

Activity

Marine

Metric

Other, please specify (Vessel performance)

Technology

Other, please specify (Efficient combi-trading)

Metric figure

6.9

Metric unit

Other, please specify (EEOI)

Explanation

EEOI (Energy Efficiency Operational Index) is defined by IMO and represents CO2 emitted per transported cargo per nautical mile for a period of time (both fuel consumption at sea and in port included) was 6.9 in 2022 and 7.4 in 2021, down from 7.6 in 2018 (base year). % of days in main combination trades ended at 83% for the fleet in 2022, increased from 68% in 2021. High utilization of vessels through a high degree of combination trading is one of the key elements in the strategy to reaching KCC's emission targets.

Activity

Marine

Metric

Other, please specify

Technology

Other, please specify (Vessel performance - technical initiatives for increased energy efficiency)

Metric figure

17900

Metric unit

Other, please specify (Average Co2 emissions per vessel)

Explanation

The actual CO2 emissions of the KCC fleet are expressed as an average of all the vessels' emissions divided by vessel-years, excluding only the time the vessel is laying still in drydock. The average CO2 emissions per vessel-year for the KCC fleet decreased to 17,900 tons CO2 in 2022 from 18,800 tons CO2 in 2021, a reduction of approximately 5%, and a 14 % reduction from base year (2018). The main factors influencing this KPI are both related to the activity of the vessels in terms of sailed distance, speed, cargo weight carried and % time in ballast condition, as well as the technical performance of the vessels. The technical performance of the fleet improved considerably in 2022 as well and ended about 9.3 % below the 2018 fleets baseline. The technical performance is a measure of how much fuel the vessels are consuming compared to a baseline consumption curve established at sea trial, adjusted for draft, weather effects and speed. The improved performance can be attributed to four main factors; delivery of newbuilds, increased dry-docking frequency, continuation of fleet-wide installation of energy saving devices, and increased focus on reducing and preventing hull fouling. In 2022, KCC invested and/or committed in total USD 8.1 million in energy efficiency measures in its fleet. Investments and initiatives made in 2022 and that will be further rolled-out in 2023 are described in the ESG Performance report for 2022, page 15 (available at KCC's homepage: www.combinationcarriers.com).

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Activity

Marine

Technology area

Other, please specify (Technical energy efficiency initiatives on existing vessels)

Stage of development in the reporting year

Full/commercial-scale demonstration

Average % of total R&D investment over the last 3 years

80

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

2100000

Average % of total R&D investment planned over the next 5 years

90

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

KCC is determined to substantially improve further our carbon efficiency advantage by delivering large reductions in our carbon footprint over the coming years. KCC targets to reduce the fuel consumption (corrected for draft, weather and speed) in 2026 by 18 % compared to 2018 performance. KCC invest in its vessels to reduce hull resistance, improve propeller and hull effectiveness and optimize the vessels' energy utilization and evaluate alternative energy generation.

In 2022, KCC invested and committed in total USD 8.1 million in energy efficiency measures in its fleet (Of which USD 2.1 million relates to investments in 2022, remaining 2023 investments/commitments), of which USD 6.3 million relates to contract concluded for installation of air lubrication systems and retrofit shaft generator on two vessels that will be installed in 2023. The air lubrication system will reduce the frictional resistance by creating a carpet of bubbles coating the full flat bottom of the vessels. KCC has options and intention to roll this out to the entire CLEANBU and CABU II fleet (in total 11 vessels) pending successful testing of the installation on the first two vessels.

To fund this energy efficiency program, KCC successfully raised USD 25 million in equity in November 2021. In parallel with costly and complex measures as the installation of the air lubrication system and shaft generator approved by the Board of Directors for two vessels in March 2022, the Board has given management a mandate to invest up to USD 2.5 million per year in energy efficiency improvement initiatives. Investments in energy efficiency measures will likely be considerable larger and raised equity will likely be supplemented by raising debt to fund a likely total investment for the existing fleet of USD 40-50 million in the period up to 2026.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

KCC Signed CDP letter from EY_June 2023.pdf

EY assurance report_06.03.2023.pdf

Page/ section reference

1-4

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

KCC Signed CDP letter from EY_June 2023.pdf

EY assurance report_06.03.2023.pdf

Page/ section reference

1-4

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

- Scope 3: Purchased goods and services
- Scope 3: Capital goods
- Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
- Scope 3: Upstream transportation and distribution
- Scope 3: Waste generated in operations

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

- KCC Signed CDP letter from EY_June 2023.pdf
- EY assurance report_06.03.2023.pdf

Page/section reference

1-4

Relevant standard

ISAE3000

Proportion of reported emissions verified (%)

100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C4. Targets and performance	Year on year emissions intensity figure	ISAE 3000	EEOI (Energy Efficiency Operational Index) is defined by IMO and represents grams CO2 emitted per transported ton cargo per nautical mile for a period of time (both fuel consumption at sea and in port included). KCC's ambition is improved carbon intensity by 30 % within 2026 and 45 % within 2030 compared to its actual 2018 performance. EEOI performance is reported on a quarterly basis and verified by EY on an annual basis. EY assurance report_06.03.2023.pdf
C4. Targets and performance	Year on year emissions intensity figure	ISAE 3000	KCC aims at reducing average Co2 emissions per vessel-year by 19 % in 2026 to 16,900 mt vs actual 2018, and 50 % reduction in total emissions in 2030 vs 2018. Performance is reported on a quarterly basis and verified by EY on an annual basis. EY assurance report_06.03.2023.pdf
C5. Emissions performance	Emissions reduction activities	ISAE 3000	Ballast days in % of onhire days is a KPI that reflect how much the vessels sails empty with no cargo onboard. Performance is reported on a quarterly basis and verified by EY on an annual basis. EY assurance report_06.03.2023.pdf
C5. Emissions performance	Emissions reduction activities	ISAE 3000	% in combination trade is a KPI that reflect how much of fleet capacity that is employed in dry bulk - tanker combination trades where cargoes are combined with limited ballast in between discharge and load ports. Performance is reported on a quarterly basis and verified by EY on an annual basis. EY assurance report_06.03.2023.pdf

KCC Signed CDP letter from EY_June 2023.pdf
EY assurance report_06.03.2023.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

No, but we anticipate being regulated in the next three years

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

Situation: KCC is closely following the upcoming EU emission trading system (ETS) and its implications as well as potential carbon pricing schemes in other parts of the world. The proposal is for a gradual inclusion of shipping into EU's ETS in the period from 2024 to 2026. After the gradual inclusion, shipowners will from 2027 for the emissions reported for 2026 surrender emission allowances for 50% of the reported CO₂ emission for voyages in and out of EU and 100% of the emission for voyages within EU.

Task: In the short and medium term, carbon taxes or emission trading schemes in shipping are believed to mainly be an opportunity for KCC with its solutions having 30-40% lower CO₂ emissions per ton transported compared to standard vessels in its main trades due to substantially lower ballast. Hence, KCC's combination carriers will have a lower exposure to new carbon taxes than its competitors, the standard vessels. A large part of standard vessel either ballast into Europe or have long ballast before loading the cargo to Europe, while the KCC combination carriers usually are laden both in and out of Europe.

Action: KCC's strategy sets decarbonization targets which requires improvements in trading efficiency, technical performance and voyage execution including further reductions in time in ballast (trading empty). KCC believes that these initiatives will further strengthen KCC's competitive advantage in relation to carbon taxes and trading schemes. KCC works closely with other stakeholders to promote strong and fair regulations that incentivize the industry to decarbonize.

Result: Over a longer time-horizon, the financial implications for KCC of such regulations are uncertain and might impact revenue, cost and asset values, both positively through for example carbon pricing and negatively through for example investments in new vessels or retrofit of existing vessels. In an example with a round voyage with naphtha from Europe to Brazil and iron ore on the return leg to Europe and assuming both shipments in and out of EU are taxed in line with the EU ETS (50% for voyages in and out of EU fully implemented 2026), a KCC combination carrier would have USD 104,000 lower carbon tax relative to the total for the LR1 tanker and the Kamsarmax bulker based on a cost of €81 per metric ton (EUA price average 2022). Measured in TCE-earnings per day for the CLEANBU vessels, the carbon tax difference implies around 1,800 \$/d higher earnings on voyage basis. Based on an example where KCC employs two of eight CLEANBU vessels in trades subject to carbon taxes and assuming the same price of €81 per metric ton, the impact on revenue in 2022 would be USD 1.3 million. If carbon taxes are implemented on a global basis with payment for 100% of emissions, the effect on earnings will be 3,800 \$/d which for all 16 vessels would equate to approximately USD 22 million per year.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Alignment with the price of allowances under an Emissions Trading Scheme

Objective(s) for implementing this internal carbon price

- Change internal behavior
- Drive energy efficiency
- Drive low-carbon investment
- Identify and seize low-carbon opportunities
- Stress test investments

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

KCC uses the EU Allowance (EUA) price as its internal carbon shadow price. The price is quoted and change daily and prices are determined by the supply and demand of allowances as a fixed number of allowances are put on the market each year. KCC expects the price to increase over time as more industries are included in the scheme and the number of allowances is reduced each year.

A Reuters survey of seven analysts showed in April 2023 that EU Allowances are expected to average 86.17 euros a tonne in 2023 and 96.19 euros in 2024, an increase of 6% and 19% compared to the average price of 80.92 euros a tonne in 2022 respectively .

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

85.3

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

85.3

Business decision-making processes this internal carbon price is applied to

- Capital expenditure
- Operations
- Risk management
- Opportunity management
- Value chain engagement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify (Mandatory to use carbon price in chartering decisions (operations) when deciding whether to ballast long distance or accept lower earnings but less ballast and hence reduce the carbon emissions per transport work .)

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

Operations/value chain management: KCC has in 2023 implemented mandatory shadow carbon pricing in chartering decisions globally when there is a risk for increased ballasting (sailing empty) to optimize earnings. In the voyage calculations with the longest ballast KCC adds a carbon cost equal to the EU ETS EUA price for the additional carbon emissions. Adding a carbon cost into the voyage calculations might impact the chartering decision in favor of lower carbon emissions/reduce the carbon intensity of the voyage and result in changed internal behavior, drive energy efficiency and , contribute to KCC getting closer to its carbon intensity(EEOI) target trajectory.

Capital expenditures: KCC has a substantial investment program in energy efficiency measures with more than 15 ongoing initiatives. By adding a carbon price in investment calculations, the investments in energy efficiency initiatives are stress-tested, its drives low-carbon investments and drive energy efficiency. Such investments can provide KCC with a competitive advantage carrying cargo from/to areas with regional carbon prices and globally when/if carbon prices are introduced globally. Many of the investments are paying off in the form of additional fuel savings without carbon taxes, however the investments will make KCC more resilient in the future when carbon pricing will be introduced in a larger scale to reach decarbonization targets.

Opportunity management/risk management: Regional and potential global carbon pricing are included in KCC's general risk and opportunity management processes and in relation to specific risk process in relation to e.g. investment decisions and hence supports all the objectives for implementing internal carbon pricing.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

- Yes, our suppliers
- Yes, our customers/clients
- Yes, other partners in the value chain

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement

Information collection (understanding supplier behavior)

Details of engagement

Other, please specify (Know Your Counterparty Procedures)

% of suppliers by number

100

% total procurement spend (direct and indirect)

100

% of supplier-related Scope 3 emissions as reported in C6.5

100

Rationale for the coverage of your engagement

KCC has a strong commitment to our values and ethical standards, as communicated in our Code of Conduct. All suppliers and other counterparties are asked to adhere to KCC's Counterparty Code of Conduct (CCoC). Adherence is partly secured through the Know Your Counterparty Procedures (KYC Procedures). As part of the KYC Procedures, KCC performs a business ethics check. This control includes an adverse media check related to, among other things, ESG-issues such as spills to the environment and for ship owners, their practice related to scrapping of vessels/beaching.

Impact of engagement, including measures of success

The impact of the engagement is that KCC through the KYC Procedures to a degree secures that the counterparties, including suppliers, adhere to KCC's standards. Success is measured through findings and how KCC acts upon findings. If the KYC procedures reveal any issues that are not aligned with our Counterparty Code of Conduct, KCC in some instances reach out to the potential supplier/counterparty and in some instances the counterparty has changed their policy or in other instances explained how they are working to solve e.g. a situation with spills to the environment. In other instances, KCC has decided to withstand business relations. An example of a positive outcome is that a counterparty (a major shipowning group) with suspected history of beaching vessels non-compliant with the Hong Kong convention, declared a recycling policy compliant with the convention.

Comment

Type of engagement

Innovation & collaboration (changing markets)

Details of engagement

Run a campaign to encourage innovation to reduce climate impacts on products and services

% of suppliers by number

0

% total procurement spend (direct and indirect)

0

% of supplier-related Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

KCC supported by Klaveness Ship Management, KCC's ship manager, has an ambition of being an innovator and early adaptor of energy efficiency measures. KCC has been outspoken on its willingness to try out new solutions and work closely with suppliers of energy efficiency solutions to improve the practical application and efficiency of these solutions. This position has attracted interest from start-ups and other companies with new solutions and ideas. We are, however, not able to quantify % of suppliers, spend and emissions as this is collaboration on a case by case basis. During 2021 and 2022, KCC worked closely with three suppliers of energy efficiency measures to improve the solution to better fit with dry bulk/tanker vessels. These suppliers can replicate this to other customers.

Impact of engagement, including measures of success

Success is measured through the improved design and efficiency of the solution of and that this solution hopefully can be replicated on other dry bulk/tanker vessels in the global fleet of standard vessels.

Comment

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Collaboration & innovation	Run a campaign to encourage innovation to reduce climate change impacts
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% of customers by number

40

% of customer - related Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

During 2022, KCC continued to perform workshops with customers informing about the development and likely impact of concluded and possible new environmental regulations in shipping and to understand how these customers handle climate-related issues with focus on decarbonization, which again will impact KCC's business activities. The discussions with customers also include how KCC in co-operation with customers can improve carbon efficiency of KCC's services and the customer's scope 3 emissions e.g., by reducing speed, increasing cargo intake and decrease waiting time in ports. The customers have been selected due to their focus on scope 3 emissions and/or being companies KCC has worked closely with or intend to work closely with over time. The intention over time is to include mechanisms into all freight contracts to strengthen co-operation and to incentivize KCC to further reduce emissions from its fleet.

Impact of engagement, including measures of success

Situation: Intended impact of the engagement is reduced emissions from the KCC fleet and hence the customer's scope 3 emissions.

Task: Threshold of success is 1) 100% of customers reporting their scope 3 emissions and the most important success factor is 2) Over time the implementation of the sustainability-linked contract of affreightment (COA) solution into all contracts where freight paid is linked to carbon emissions from KCC's fleet.

Action: In early 2023 a customer and KCC agreed to include a carbon pricing mechanism in their existing contract of affreightment with effect from 1 January 2023. Freight paid under the COA is dependent on KCC's emission performance relative to an agreed baseline and additional freight paid by the customer through this agreement will be dedicated to investments in energy efficiency measures in KCC's fleet.

Result: KCC measures each customer agreeing to a sustainability-linked freight contract to be a success as this is very early phase and no other similar contracts existing in deep-sea tank and dry bulk shipping as far as we know. Over the next years, KCC's ambition is to implement sustainability-linked freight pricing into all contracts of affreightment. We have not yet seen the effect of this pricing element as it was introduced 1 January 2023.

C12.1d

(C12.1d) Give details of your climate-related engagement strategy with other partners in the value chain.

Situation: Access to and pricing of capital going forward will be impacted by how sustainable our assets and our business model is in the future.

Task: It is hence important to actively engage with banks, shareholders, bond investors and financial regulators.

Action: KCC reports on the Poseidon Principles to the banks, discusses the implications of the EU taxonomy with investors, through one-to-one meetings educate the financial stakeholders on KCC's sustainability issues and discuss alternative incentive structures. KCC's sustainability performance/KPIs are disclosed on a quarterly basis and main KPIs are subject to an annual external limited audit.

Result: KCC's bond loan has an undertaking related to sustainability reporting and all bank facilities are sustainability-linked from June 2023 in which the credit margin is adjusted, up or down, based on KCC's sustainability performance, as defined by the company's ability to meet its goal of reducing CO2 emissions per ton of transported cargo per nautical mile (EEOI) and reducing absolute CO2 emissions per vessel-year.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

Yes, suppliers have to meet climate-related requirements, but they are not included in our supplier contracts

C12.2a

(C12.2a) Provide details of the climate-related requirements that suppliers have to meet as part of your organization's purchasing process and the compliance mechanisms in place.

Climate-related requirement

Other, please specify (Waste reduction and circularity, spills and emissions)

Description of this climate related requirement

The requirements are not systematic, but for some categories the purchasing team has high attention on specific issues. For provisions, there is high attention on singleuse plastic and for other high risk categories such as chemical supplies we use large suppliers that have high standards on ESG-related issues.

% suppliers by procurement spend that have to comply with this climate-related requirement

0

% suppliers by procurement spend in compliance with this climate-related requirement

0

Mechanisms for monitoring compliance with this climate-related requirement

Other, please specify (Research made by the purchasing team on a case by case basis)

Response to supplier non-compliance with this climate-related requirement

Other, please specify (Retain, suspend and/or engage decided on a case by case basis.)

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Yes, we fund organizations or individuals whose activities could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

KCC as part of the Torvald Klaveness group has signed the "Call to action for shipping decarbonization" by the Getting to zero coalition. See attached.

Call-to-Action-for-Shipping-Decarbonization.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

KCC engages with the Getting to Zero Coalition that are aligned with KCC's ambitions. The Company is also engaged in CLIMMS (aiming to develop a robust understanding of the actual and complete climate impacts associated with different mitigation options for the global maritime fleet) and Smart Maritime (aiming to find out how we can improve energy efficiency and reduce emissions from the maritime sector) to support the zero-emission ambition of KCC. The engagement activities are subject to CEO approval to make sure that the different engagements are aligned with the strategy.

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers

IMO's new Carbon Intensity (CII) Regulations

Category of policy, law, or regulation that may impact the climate

Climate change mitigation

Focus area of policy, law, or regulation that may impact the climate

Climate-related reporting

Climate-related targets

Climate transition plans

Emissions – CO2

Policy, law, or regulation geographic coverage

Global

Country/area/region the policy, law, or regulation applies to

<Not Applicable>

Your organization's position on the policy, law, or regulation

Support with major exceptions

Description of engagement with policy makers

IMO's Short Term Measures approved in June 2021 for implementation in January 2023 include the so-called Carbon Intensity Indicator (CII) regulations setting minimum requirements to the operational efficiency of vessels. KCC pointed out already in 2020 directly to the Norwegian Ministry of Climate and Environment and through the Norwegian Shipowners Association a major weakness in this regulation being linked to the IMO's choice of using the AER-metric as the basis for its CII regulation, a metric which measures the static design capacity of a vessel (the deadweight, DWT) and not actual transport work. KCC and many others have argued that IMO should rather use the EEOI-metric measuring the actual cargo transported by each vessel/the actual transport work. KCC together with Klaveness Ship Management (KSM) prepared in co-operation with the Norwegian Ministry of Climate and Environment a proposal to IMO to reduce the negative effects of the use of the AER-metric through introduction of an adjustment factor for vessels with a higher utilization than the average vessel within each vessel class to eliminate the negative effect on the CII-score of higher fuel emission due to transporting a higher cargo quantity. The proposal was not approved by IMO during the MEPC meeting in June 2022. KCC also pointed out to the Norwegian Ministry of Climate and Environment that IMO's proposed baseline for combination carriers (like KCC's CABU and CLEANBU vessels) was incorrectly calculated as IMO based their proposal on few and inconsistent vessel observations. As a result, IMO's proposed CII-baseline for combination carriers was stricter than for standard dry bulk vessels despite the combination carriers being both tankers and dry bulk vessels. KCC/KSM prepared in co-operation with the Norwegian Ministry of Climate and Environment a proposal to IMO during the autumn of 2021 for an adjusted baseline applicable for combination carriers which correctly takes into account the nature of these vessels and their differences compared to standard tankers and dry bulk vessels. This proposal was approved by IMO during the MEPC meeting in June 2022 and is now included into the final CII regulation.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation

N/A

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?

<Not Applicable>

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association

Other, please specify (Norwegian Ship Owners Association)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

Under the umbrella of the Norwegian Shipowners' Association (NSA), Norwegian shipping companies have taken action by adopting four ambitious goals laid out in a climate strategy. The goals state that members will cut their greenhouse gas emissions by 50% per transported unit by 2030, compared to 2008. From 2030, Norwegian Shipowners' Association members will only order vessels with zero emission technology. From 2050, the Norwegian fleet will be climate neutral. The strategy also entails an international ban from 2050 on fuel types that are not climate neutral.

KCC/Klaveness participates in several NSA committees and through these influences the position of the association: The Climate and Environment Panel focus on EU and IMO policies that are being evaluated and for discussion, and how these are considered from various representative owners perspective. Deep Sea Group (particularly focused on safety at sea, and reducing the environmental impact of shipping through technological innovations and appropriate international regulations). Reference Group for Ship Recycling (advocating responsible recycling of ships both in relation to safety, work conditions and environmental impact). Capital and Tax Committee and the Reference group for ESG issues (ESG regulations and reporting).

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

55000

Describe the aim of your organization's funding

Membership fee based on a given formula developed by the association.

Promoting Norwegian ship owner's/KCC's interests towards Norwegian and international regulators. Information sharing and discussion partner.

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

Trade association

Other, please specify (Getting to Zero Coalition)

Is your organization's position on climate change policy consistent with theirs?

Consistent

Has your organization attempted to influence their position in the reporting year?

Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position

KCC is through Torvald Klaveness, the majority owner of KCC, a member of the Getting to Zero Coalition.

The Getting to Zero Coalition is a partnership between the Global Maritime Forum and the World Economic Forum. It brings together decision-makers from across the shipping value chain with key stakeholders from the energy sector as well as from governments and IGOs. Its aim is to accelerate maritime shipping's decarbonization with the development and deployment of commercially viable deep sea zero emission vessels by 2030 towards full decarbonization by 2050.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

0

Describe the aim of your organization's funding

<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?

No, we have not evaluated

C12.3c

(C12.3c) Provide details of the funding you provided to other organizations or individuals in the reporting year whose activities could influence policy, law, or regulation that may impact the climate.

Type of organization or individual

University or other educational institution

State the organization or individual to which you provided funding

The Company is together with its ship manager, Klavness Ship Management (KSM), engaged in CLIMMS (aiming to develop a robust understanding of the actual and complete climate impacts associated with different mitigation options for the global maritime fleet) and Smart Maritime (aiming to find out how we can improve energy efficiency and reduce emissions from the maritime sector). The active participation in CLIMMS is through KCC and KSM based on personnel resources funded by KCC.

Funding figure your organization provided to this organization or individual in the reporting year (currency as selected in C0.4)

10000

Describe the aim of this funding and how it could influence policy, law or regulation that may impact the climate

Participation in the CLIMMS project aims at understanding how the maritime sector can achieve the IMO's climate goals of halving emissions from the maritime sector by 2050, towards the 2 degree goal in the Paris Agreement. The project will contribute to strengthening the knowledge base for the formulation of policies and instruments through well-documented analyzes of the consortium's own proposals for solutions.

Through the participation in Smart Maritime KCC aims at increasing knowledge about energy efficiency through innovative use, improvement and combination of technologies made by the research projects in Smart Maritime. Smart Maritime actively contributes to international policy debate in e.g. IMO and EU and has been particularly active in proposing carbon factors for the various potential fuels for Well to Wake etc.

Have you evaluated whether this funding is aligned with the goals of the Paris Agreement?

No, we have not evaluated

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Publication

In mainstream reports

Status

Complete

Attach the document

ESG+Performance+Report+2022.pdf

Page/Section reference

Page 3-18, page 27-28, page 31.33

Content elements

- Governance
- Strategy
- Risks & opportunities
- Emissions figures
- Emission targets
- Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Other, please specify (Sea Cargo Charter,)	KCC is a signatory to the Sea Cargo Charter (SCC), where we openly disclose the cargo volumes and related transport work performed, together with our emissions. We are also working with customers and other industry partners to become members and openly disclose their emissions from deep sea transport.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, both board-level oversight and executive management-level responsibility	<p>Biodiversity is in focus both directly from executive management-level as well as indirectly from board-level oversight.</p> <p>Directly through specific measures, such as early implementation of ballast water treatment systems which ensure no spread of potentially invasive species from one geographical region to another, as well as the focus on choosing anti-fouling hull coating paint with minimal biocides.</p> <p>Indirectly through the company's ambitious decarbonization strategy, as climate change is accelerating the rate of biodiversity loss through extreme temperatures, changing weather patterns and ocean warming and acidification.</p> <p>Other implemented measures intended to increase the vessel performance and thus reduce GHG emissions have positive direct impacts on biodiversity as well, such as using hull cleaning robots capable of removing and capturing biofouling in port, and utilizing semi-autonomous cleaning brushes while the vessels are sailing on deep ocean, where biological residue cleaned from the hull sinks to the ocean floor and adds to deep-water marine snow.</p>	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have endorsed initiatives only	<Not Applicable>	SDG

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Yes

Value chain stage(s) covered

Direct operations

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

Other, please specify (IMO Guidelines)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

GUIDELINES FOR THE REDUCTION OF UNDERWATER NOISE FROM COMMERCIAL SHIPPING TO ADDRESS ADVERSE IMPACTS ON MARINE LIFE
 2011 GUIDELINES FOR THE CONTROL AND MANAGEMENT OF SHIPS' BIOFOULING TO MINIMIZE THE TRANSFER OF INVASIVE AQUATIC SPECIES
 International Convention for the Control and Management of Ships' Ballast Water and Sediments (BWM)

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

No, but we plan to within the next two years

Value chain stage(s) covered

<Not Applicable>

Portfolio activity

<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity

<Not Applicable>

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?

Not assessed

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water protection Education & awareness

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	Pressure indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Impacts on biodiversity	ESG+Performance+Report+2022.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	CFO	Chief Financial Officer (CFO)

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms