

2023



# Environmental Report

In accordance with the recommendations of the Task force on Climate-related Financial Disclosures (TCFD) and the Greenhouse Gas Protocol



**bulk**<sup>™</sup>



## Executive summary

The global infrastructure landscape demands solutions that are both sustainable, safe and resilience as environmental factors evolve.

Recognizing this, Bulk proactively leverages the Task Force on Climate-related Financial Disclosures (TCFD) framework. Through the climate analysis initiated in 2022, and continuous risk tracking, we gain a comprehensive understanding of climate-related opportunities and challenges.

This approach empowers Bulk's leadership to make strategic decisions that are both environmentally sound and financially sustainable. We are well-positioned to not only mitigate potential climate risks but also capitalize on emerging opportunities.





# Content

<b>Bulk Infrastructure: Sustainable Nordic infrastructure for the world</b>	<b>4</b>
Why we are committed to work on climate risk	5
Recommendations	5
TCFD content index	6
<b>Governance</b>	<b>7</b>
Board's oversight	7
Management's oversight	7
<b>Strategy</b>	<b>8</b>
Selected time horizons	8
Selected climate scenario	8
<b>Climate-related risks and opportunities</b>	<b>9</b>
Bulk Data Center	9
Bulk Fiber Networks	11
Bulk Industrial Real Estate	12
<b>Climate-related risks and opportunities influencing the strategy</b>	<b>14</b>
<b>Risk and opportunity management</b>	<b>15</b>
<b>Metrics and Targets</b>	<b>16</b>
<b>Greenhouse gas emissions</b>	<b>17</b>
Climate account	17
Key assumptions and limitations	17
<b>Bulk Data Centers</b>	<b>18</b>
Key Figures GHG Emissions Bulk Data Centers	18
Carbon Emissions for Data Centers	19
<b>Bulk Fiber Networks</b>	<b>20</b>
Key Figures GHG Emissions Bulk Fiber Networks	20
Carbon Emissions for Fiber Networks	21
<b>Bulk Industrial Real Estate</b>	<b>22</b>
Key Figures GHG Emissions Bulk Industrial Real Estate	22
Carbon Emissions for Fiber Industrial Real Estate	23



## Sustainable Nordic infrastructure for the world

Bulk Infrastructure Holding AS (Bulk) is a leading provider of sustainable digital infrastructure in the Nordics. We are an industrial investor, developer, and operator of industrial real estate, data centers, and fiber networks. Bulk believes in the value creation opportunity of enabling our digital society to be fully sustainable.

All of Bulk's business areas have an impact on the environment, on society and are confronted with governance issues. It is a fundamental part of the Bulk culture to accelerate the positive impact and reduce any potential negative effects. Therefore, we systematically work with these issues as an integrated part of our business and focus on a strong stakeholder dialog throughout our projects.

**Bulk Data Centers** is an industrial developer and operator of data centers and data center services across the Nordics. Bulk has a portfolio of assets, capabilities and partners to serve any data center customer requirement in a fast, secure, cost efficient and sustainable way. We operate scalable facilities, and we have access to strategically located land and renewable power. We can serve customers in dedicated hyperscale facilities and customers in need of server racks in a Colo environment. The data center industry constitutes mission-critical infrastructure for all parts of society, but is also power intensive. The industry has a responsibility to ensure that the infrastructure is powered by renewables and that the energy is used as efficiently as possible.

**Bulk Fiber Networks** owns and controls dark fiber infrastructure with the purpose of enabling the Nordics for large

scale data processing. Our over 10,000 kilometer of fiber infrastructure includes new-built subsea and terrestrial cable systems. We offer dark fiber, telehousing and cable landing facilities to carriers, large scale data center customers and others that want to produce bandwidth services on top of our infrastructure. A requirement for all suppliers selected by Bulk is that their operations are run sustainably. Bulk takes care to reduce the environmental impact when fiber routes are planned both subsea and on land. Surveys are done in advance to minimize impact on the seabed and minimize interfering with spawning grounds for fish and other sea animals.

**Bulk Industrial Real Estate** is a Nordic real estate developer and owner, specializing in industrial buildings, large modern warehouses, cross-dock terminals and logistics parks. We seek to be the preferred partner for our customers, offering prime locations, standardized, cost efficient and modular facilities, and sustainable solutions. All Bulk projects with a size above 5,000 sqm are from 2021 BREEAM-NOR (Building Research Establishment Environmental Assessment Method) certified and equipped with rooftop solar panels as part of our standard offering. Bulk has through 2023 increased the solar production capacity to a total of 4,6 MWp in 2023, contributing to a total production of 2,6 GWh of renewable energy through the year.

In 2023, Bulk generated revenues of NOK 464 million and had 89 employees. As a company, we are dedicated to delivering strong returns for our shareholders while also making a positive impact on society and the environment. We are continuously looking for new opportunities to grow and expand our business in the Nordics, and we strive to be a leading provider of sustainable digital infrastructure in the region.



## Why we are committed to work on climate risk

Bulk has set ambitious emission targets to combat climate change, including a goal to achieve net-zero emissions across all scopes (1, 2, and 3) by 2050. Additionally, we will reduce our scope 1 and 2 emissions by 50 per cent and decrease our emission intensity by 30 per cent for scope 3 by 2030.

As part of our commitment to mitigate climate related risks and respond to the financial markets' increasing demand for transparency, Bulk conducted a thorough analysis of climate-related risks in accordance with the guidelines set forth by the Task Force on Climate-related Financial Dis-

closures in 2022. The analysis has been assessed in 2023 to consider if there are any changes in the relevant risks.

We have sustainability and sustainable business at the core of our operations. Sustainability is not just a checkbox on our agenda – it is an integral part of our identity and a guiding principle in every decision we make. This analysis will provide insights to inform our decision making and mitigate potential risks.

We conducted a climate risk assessment in late 2022 and incorporated the identified risks and opportunities into our overall risk management strategy early in 2023. As a company, it is crucial for us to understand the impact of climate change on our operations in order to achieve our long-term goals.

## Recommendations

The Task Force on Climate-related Financial Disclosures (TCFD) developed the TCFD disclosure recommendations to facilitate standardized reporting structure for financially material climate-related risks and opportunities.

The TCFD recommendations are structured around four core elements of how organizations operate: governance, strategy, risk management, and metrics and targets. The framework separates into three main categories: risks related to the transition to a lower-carbon economy, risks related to the physical impacts of climate change, and climate related opportunities.

# Core Elements of Recommended Climate Related Financial Disclosures



**Governance**  
The organization’s governance around climate-related risks and opportunities

**Strategy**  
The actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning

**Risk Management**  
The processes used by the organization to identify, assess, and manage climate-related risks

**Metrics and Targets**  
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

**Governance**  
The organization’s governance around climate-related risks and opportunities

**Strategy**  
The actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning

**Risk Management**  
The processes used by the organization to identify, assess, and manage climate-related risks

**Metrics and Targets**  
The metrics and targets used to assess and manage relevant climate-related risks and opportunities

## TCFD content index

The recommended disclosures in the TCFD framework are as follows:

Recommendations and Supporting Recommended Disclosures			
Governance	Strategy	Risk Management	Metrics and Targets
<p>Disclose the organization’s governance around climate-related risks and opportunities.</p>	<p>Disclose the actual and potential impacts of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning where such information is material.</p>	<p>Disclose how the organization identifies, assesses, and manages climate-related risks.</p>	<p>Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</p>
<p><b>Recommended Disclosures:</b></p> <ul style="list-style-type: none"> <li>a) Describe the board’s oversight of climate-related risks and opportunities</li> <li>b) Describe management’s role in assessing and managing climate-related risks and opportunities.</li> </ul>	<p><b>Recommended Disclosures:</b></p> <ul style="list-style-type: none"> <li>a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.</li> <li>b) Describe the impact of climate-related risks and opportunities on the organization’s businesses, strategy, and financial planning.</li> <li>c) Describe the resilience of the organization’s strategy, taking into consideration different climate-related scenarios including a 2 °C or lower scenario.</li> </ul>	<p><b>Recommended Disclosures:</b></p> <ul style="list-style-type: none"> <li>a) Disclose how the organization identifies, assesses, and manages climate-related risks.</li> <li>b) Describe the organization’s processes for managing climate-related risks</li> <li>c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization’s overall risk management.</li> </ul>	<p><b>Recommended Disclosures:</b></p> <ul style="list-style-type: none"> <li>a) Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.</li> <li>b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.</li> <li>c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.</li> </ul>

# Governance

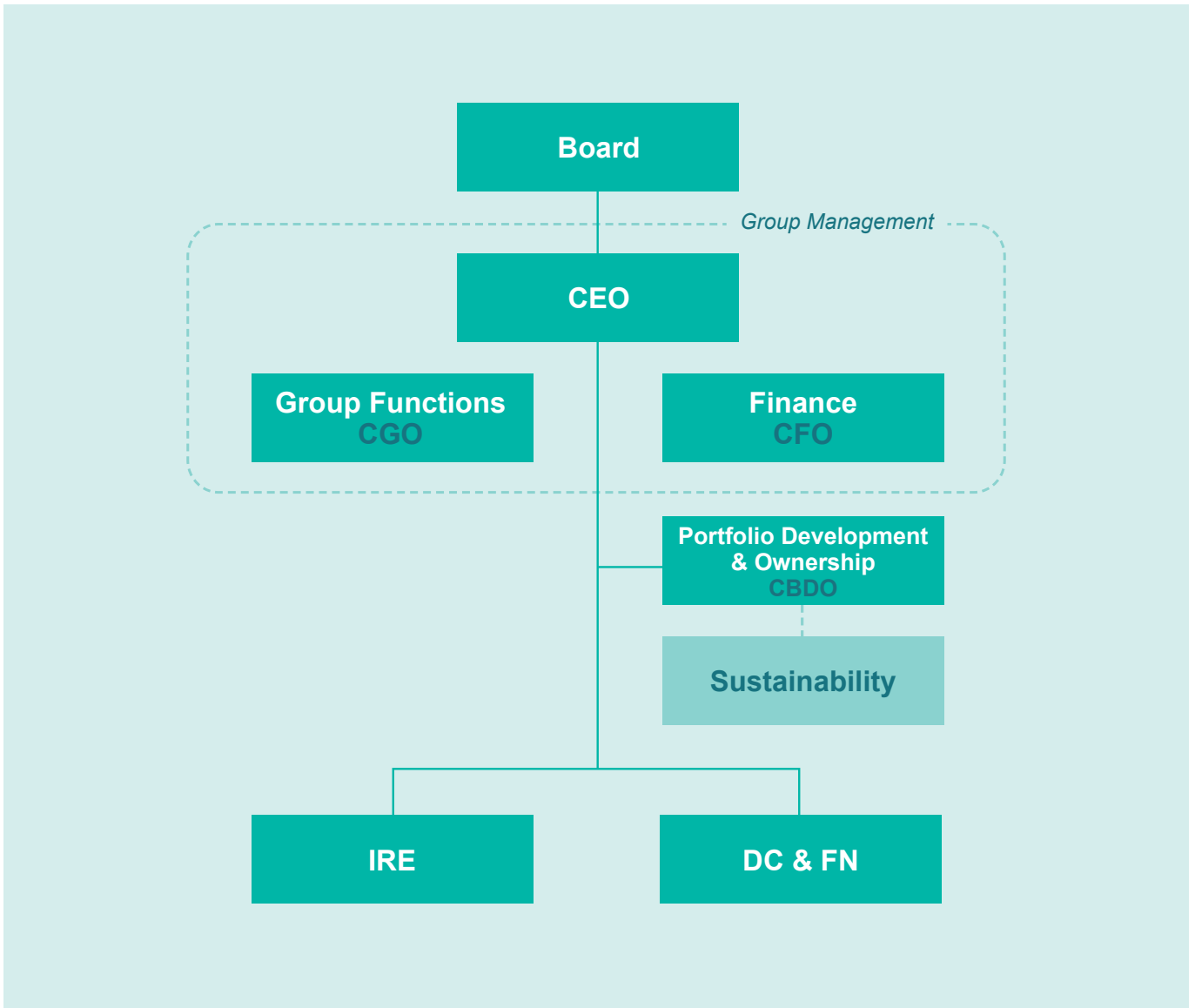
## Board's oversight

The board of directors conducts an annual review of major risks and considers climate-related risks during investment decisions, major capital expenditures and other major plans for action. Climate-related issues are also considered by the board when reviewing Bulk's strategy. In addition, major risks and mitigating measures are discussed by the board at the request of the board or the group management. The Chief Governance Officer (CGO) oversees these in-depth reviews of the selected risks.

## Management's oversight

The Executive Vice Presidents (EVP) in the three business units are responsible for identifying risks and opportunities, including climate-related risks and opportunities. In a bottom-

up process involving input from the employees, the Head of Sustainability and the Chief Governance Officer, risks, opportunities, and mitigating measures are discussed and integrated in Bulk's risk management system. Group management reviews these risks and opportunities through the Business Review process, which is conducted on a quarterly basis for each business unit. The Chief Governance Officer is responsible for overseeing these reviews. The group management identifies Bulk's major risks and opportunities based on the Business Review process for each business unit. Bulk's Data Centers and Industrial Real Estate businesses are ISO 9001 and 14001 certified and Bulk's Integrated Management System is used to soundly manage, secure and continuously improve all work processes that affect environmental risk and opportunity.





## Strategy

### Selected time horizons

Bulk considers short-, medium, and long-term time horizons to be relevant when assessing climate-related risks and opportunities.

Short-term:	Medium-term:	Long-term:
0-5 years	5-10 years	10+ years

Transitional risks, such as energy and land use regulations, are the short- and medium-term climate-related risks that are identified to have the greatest impact on Bulk. Location has been one of the key elements in our sustainability framework from the beginning, of which availability of renewable energy and further plans for development in the area are among the main decision criteria.

As climate changes and temperatures continue to rise, Bulk's assets may face increased challenges in maintaining optimal operational conditions. Extreme weather events such as downpours and storms can lead to power outages, flooding, and other disruptions to operations. In a long term-scenario, we need to adapt our strategies to account for these chang-

ing conditions, such as implementing more advanced cooling systems, increase the resilience of building infrastructure, and keep the focus on right locations as our key assessment in site development.

### Selected climate scenario

Uncertainty remains a challenge when it comes to predicting the future impacts of climate change, as different scenarios could play out depending on the rate of global warming and the effectiveness of mitigation and adaptation efforts. Bulk has developed plans to mitigate the risks. A strategic approach has been taken to manage the risks of climate change by analyzing two different climate scenarios, one with a 2°C temperature change and another with a 4°C temperature change<sup>1</sup>. This approach enables us to estimate the medium and long-term physical and transitional risks associated with climate change and develop plans to mitigate these risks.

Short- and medium-term climate-related risks that are expected to have the greatest impact on Bulk are primarily transitional in nature. On a long-term basis, the potential impacts of physical climate change, such as increased frequency of heavy precipitation and storms, may become more significant, depending on global warming trends.

<sup>1</sup> IPCC: RCP2.6 and RCP8.5

# Climate-related risks and opportunities



## Bulk Data Centers (BDC)

Climate-related opportunities			
Category	Description	Expected impact	Capitalising effort
Market	Increased market opportunities due to access to renewable energy	<p>The energy situation in Europe may result in stricter regulations on the data center industry, such as the temporary ban on hyperscale data centers in Amsterdam in 2022.</p> <p>Bulk is located in Norway and Denmark, where the power mix is dominated by renewable energy. This makes Bulk attractive to new customers due to an increasing demand for both carbon emission reduction actions and low renewable energy costs. Further, the risk that the Norwegian government will reduce the energy access for data centers, are assessed by management to be lower compared to other European countries due to access of energy, good regulations and a well-developed industry.</p>	The opportunity is capitalized by marketing strategy focused on making the Nordic qualities of a cool climate, secure societies and renewable energy available to data center customers from all over the world. BDC's strategic and scalable locations are specifically selected due to the access of renewable energy. In addition, there are plans to increase the capacity of renewable energy at these locations. As such, there is low risk of competition for energy with other industries at existing sites.
Reputation	Growing customer awareness	As global warming and climate extremes become more prevalent, customers are becoming increasingly concerned about the physical security of data centers and the carbon footprint of digital infrastructure.	Bulk must take a proactive approach to ensure that our facilities are equipped to handle the effects of climate change, while simultaneously taking a position as a leader in climate-smart digital infrastructure in the Nordics. In this way, Bulk can differentiate itself from its competitors and attract customers looking for sustainable, reliable and secure data storage and processing solutions.
Market	Operations located in locations with stable climate	With predictions of more extreme and frequent heatwaves and droughts in Central Europe, The Nordics is considered a favorable location for data centers in future scenarios. The climate is also expected to change in the Nordics, but relatively less to Central and Southern Europe.	This is a global strategic opportunity for Bulk, where our locations have less risk of extreme heat and low probability of water scarcity. Our data centers have closed-loop water systems, ensuring minimal water consumption.
Market	Green and sustainable financing	The efforts made by Bulk to increase the environmental performance of its assets will make green, sustainable and sustainability-linked financing available.	Bulk has established a competitive edge by issuing a green bond with Medium green shading by Cicero.
Technology	Advancing technologies	New legislation and stakeholders' expectations for sustainable solutions create an opportunity for Bulk to be a front runner that can contribute to finding new solutions.	Bulk has a strong focus on R&D, and climate-related risks and opportunities have impacted the focus areas. Feasibility studies have been undertaken to explore the use of heat from our data centers and to develop partnerships to find solutions for circular industry clusters.

Physical climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Acute	Severe downpours and pluvial floods	An increase in precipitation will generally increase the global risk of events such as floods and landslides. Therefore, it is crucial to have control over risks associated with asset placement.	<p>To mitigate these risks, Bulk conducts due diligence before investing in new sites. The locations are carefully selected based on avoiding areas exposed to flooding and soil erosion. In addition, drainage is established, and our assets are built to meet technical requirements proposed by the Planning and Building Acts in both Norway and Denmark.</p> <p>In 2023, the south of Norway encountered extreme weather conditions characterized by heavy downpours and strong winds. We are pleased to report that Bulk's precautionary measures proved effective, ensuring the uninterrupted operation of all data center facilities throughout the year.</p>
Acute	Landslides and sub-surface erosion	Slope instability can trigger soil erosion, with further risk of damaging data centers. Infrastructure, such as pipelines, located in the path of landslides can be subjected to significant damage.	To mitigate these risks, Bulk conducts due diligence before investing in new sites. Bulk considers the potential impact of slope instability when planning and designing our infrastructure and implements measures to mitigate the risks it poses. As such, no current Bulk data centers are exposed to the risk of landslides and surface erosion.
Acute	Wildfires	Wildfires are seen as a compound risk that can occur in connection with chronic risks such as drought, and/or seasonal extreme episodes like heatwaves. The smoke arising from the wildfire is the biggest risk factor in this regard.	<p>There are business continuity plans for each site, which include guidelines on how to handle a fire in the area around the data center. Data centers are further designed with redundant systems and backup power sources to minimize the impact of natural disasters such as wildfires.</p> <p>Additionally, Bulk cooperates with the local municipality and its emergency team in relation to fire regulation and in case of wildfire.</p>

Transitional climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Regulatory	Stricter land use regulations	As environmental concerns become a greater priority among national and international authorities, we are observing trends towards stricter regulations regarding land use. These regulations may focus on preserving biodiversity and protecting natural carbon sinks, which could limit the availability of land for development and increase the cost and time required for obtaining approvals for new projects.	The risk is addressed by extending the time and resources spent on project planning, including cooperation with local and national governments. External resources such as ecologists are involved in assessing locations and setting measures to reestablish biodiversity. BDC has substantial areas available at our data center campuses N01 Campus and DK01 as part of the long-term development strategy. As such, BDC can offer sites that are already regulated for data centers to potential customers for new construction projects.
Regulatory	Changes in climate-related regulations	New EU-regulations, such as the Carbon Border Adjustment Mechanism, may cause higher prices on materials and reduced access to key materials, such as steel. This could also lead to climate-friendly building materials, such as wood, becoming scarce and more expensive.	<p>BDC collaborates with the industry across Europe in the Climate Neutral Data Centre Pact and the Sustainable Digital Infrastructure Alliance to keep track of legislation and regulation related to sustainability in the EU. BDC is not critically dependent on one single material or supplier.</p> <p>Targets and measures to reduce GHG emissions from our operations and value chain are crucial to reduce the risk.</p>



## Bulk Fiber Networks (BFN)

Climate-related opportunities			
Risk category	Description	Expected impact	Capitalising efforts
Market	Increased market opportunities due to access to renewable energy	The growing demand for sustainable digital infrastructure necessitates increased fiber network capacity to areas with renewable energy.	The opportunity is capitalised by marketing strategy focusing on making the Nordic qualities of a cool climate, secure societies and renewable energy available to businesses all over the world.
Market	Green and sustainable financing	The efforts made by Bulk to increase the environmental performance of its assets will make green, sustainable and sustainability-linked financing available.	Bulk has established a competitive edge by issuing a green bond with Medium Green shading by Cicero.

Physical climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Acute	Severe downpours and pluvial floods	An increase in precipitation will generally increase the global risk of events such as floods and landslides. Therefore, it is crucial to have control over risks associated with asset placement.	To mitigate risks, Bulk ensures due diligence before starting new projects. The locations are carefully selected based on avoiding areas exposed to flooding and soil erosion.  In 2023, the south of Norway encountered extreme weather conditions characterized by heavy downpours and strong winds. We are pleased to report that Bulk's precautionary measures proved effective, ensuring the uninterrupted operation of all telehousing facilities throughout the year.
Acute	Landslides and subsurface erosion	Slope instability can trigger soil erosion, with further risk of damaging telehousing. Landslides and erosion are events triggered by other physical risks such as inadequate surface drainage and heavy rainfall. Infrastructure such as pipelines located in the path of landslides can be subjected to significant damage.	To mitigate risks, Bulk ensures due diligence before starting new projects. Bulk considers the potential impact of slope instability when planning and designing our infrastructure and implements measures to mitigate the risks it poses.
Acute	Wildfires	Wildfires are seen as a compound risk that can occur in connection with chronic risks such as drought, and/or seasonal extreme episodes like heatwaves.	This risk for BFN is considered low due to safety measures such as underground cables, but it is still considered when assessing new projects.

Transitional climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Regulatory	Changes in climate-related regulations	Changes in regulations such as the EU ETS, may in a medium- and long-term horizon, increase costs for vessel fuel used in our supply chain.	BFN is planning projects to mitigate the risk in construction and operation. Targets and measures to reduce GHG emissions from our operations and value chain is crucial to reduce the risk.



## Bulk Industrial Real Estate (BIRE)

Climate-related opportunities			
Category	Description	Expected impact	Capitalising effort
Market	Standardised assets	The standardised Bulk module enables capacity to develop new and environmentally friendly solutions for the real estate portfolio at scale.	The Bulk module is a well-established brand in the market, which brings comfort to partners, customers and investors, which makes Bulk a preferred choice.
Regulatory	The majority of buildings are environmentally certified	BIRE has taken steps to be ahead of possibly stricter regulations and building codes. BIRE aims to BREEAM-certify all buildings over 5,000 sqm.	These factors will be an advantage facing stricter regulations and building codes due to environmental requirements. In upcoming tender processes, where environmental performance is weighed more than in current tenders, Bulk will have an advantage.
Market	Green and sustainable financing	The efforts made by Bulk to increase the environmental performance of its assets will make green, sustainable and sustainability-linked financing available.	Bulk has established a competitive edge by issuing a green bond with Medium Green shading by Cicero.
Technology	Front runner for new solutions	BIRE has highly energy efficient buildings. The rooftops of the warehouses we have built are ready for solar panels and make the buildings self-sufficient with energy.	<p>Bulk has a strong focus on R&amp;D, and climate-related risks and opportunities have impacted the focus areas. We are working on new technologies that could significantly reduce GHG emissions from the use of materials.</p> <p>In 2023, BIRE completed Bulk Wood, a project exploring more sustainable building concept for BIRE's warehouse- and logistics buildings. The Bulk Wood module is based on BIRE's standardized warehouse module, yet with specifications that give the finalized building up to 50 percent lower carbon footprint than an equivalent reference warehouse building. Bulk Wood replaces the steel support structure with glulam (glued laminated timber).</p>

Physical climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Acute	Severe downpours and puvial floods	An increase in precipitation will generally increase the global risk of events such as floods and landslides. Therefore, it is crucial to have control over risks associated with asset placement.	<p>To mitigate these risks, Bulk conducts due diligence before investing in new sites. The locations are carefully selected based on avoiding areas exposed to flooding and soil erosion. In addition, drainage is established, and our asset are built to meet technical requirements proposed by the Planning and Building Act in both Norway and Denmark.</p> <p>BREEAM certifications also provide a framework for ongoing monitoring and management of the building's environmental performance, which ensures that the building remains resilient over time. This is critical for Bulk as it means the buildings stay ahead of changing environmental regulations.</p> <p>In 2023, the south of Norway encountered extreme weather conditions characterized by heavy downpours and strong winds. We are pleased to report that Bulk's precautionary measures proved effective, ensuring the uninterrupted operation of all property facilities throughout the year.</p>

Physical climate risk continues on the next page. ▼

Physical climate risk <i>continued</i>			
Risk category	Description	Expected impact	Mitigation efforts
Acute	Landslides and subsurface erosion	Slope instability can trigger soil erosion, with further risk of damaging warehouses. Landslides and erosion are events triggered by other physical risks such as inadequate surface drainage and heavy rainfall.	To mitigate these risks, a due diligence is carried out for all new locations before investing. Bulk considers the potential impact of slope instability when planning and designing our infrastructure and implements measures to mitigate the risks it pose. As due diligence and national guidelines has changed over the years, Bulk portfolio includes some sites where the ground was considered less stable. For these sites Bulk has conducted significant improvements to ensure structural integrity.

Transitional climate risk			
Risk category	Description	Expected impact	Mitigation efforts
Regulatory	Stricter land use regulations	As environmental concerns become a greater priority among national and international authorities, we are observing trends towards stricter regulations regarding land use. These regulations may focus on preserving biodiversity and protecting natural carbon sinks, which could limit the availability of land for development and increase the cost and time required for obtaining approvals for new projects. This can increase the cost of the initial planning phase of each project.	The risk is addressed by extending the time and resources spent on project planning, including cooperation with local and national governments. External resources such as ecologists are involved in assessing locations and setting measures to re-establish biodiversity.  BIRE has a substantial landbank available as part of the long-term development strategy. As such, BIRE can offer a variety of locations that are already regulated for industry buildings to potential customers for new construction projects.
Regulatory	Changes in climate-related regulations	New EU-regulations such as the Carbon Border Adjustment Mechanism, may cause higher prices on materials and reduced access to key materials, such as steel. This could also lead to climate-friendly building materials, such as wood, becoming scarce and more expensive.	BREEAM certifications provide a framework for ongoing monitoring and management of the building's environmental performance, which ensures that the building remains resilient over time. This is critical for Bulk as it means the buildings stay ahead of changing environmental regulations.  Targets and measures to reduce GHG emissions from our operations and value chain are crucial to reduce the risk.



## Climate-related risks and opportunities influencing the strategy

The identified risks and opportunities will influence Bulk's business, strategy, and financial planning.

### Operations

The world is facing a growing demand for safe and resilient digital infrastructure and at the same time we are affected by the energy crisis in Europe. All over Europe, the energy transition from fossil to renewable energy as well as Russia's war against Ukraine, has resulted in higher energy prices. In the short- and medium-term there is a risk that this will lead to discussions on the prioritization of renewable energy use and tighter regulation of power intensive industries across Europe. Bulk will continue its strategic approach providing the market with digital infrastructure by scaling its solutions in locations near renewable power hubs, and plans to secure stable access to power in the future. Utilizing local energy avoids transmission loss. Changes in regulations on land-use may be implemented in the short- and medium-term, such as national regulations based on the global biodiversity framework, adopted at the UN Biodiversity Conference in 2022, and EU-regulations. This may be a risk for the company's project planning and may have an impact on access to plots of land. Mitigation measures are already in place, such as internal and external professionals on local regulations and biodiversity in the project planning teams. The risk will be mitigated through a continuous dialog with relevant local and national authorities.

### Mitigation activities

Short- and medium-term climate-related risks and opportunities that are expected to have the greatest impact on Bulk are primarily transitional in nature. We observe a shift in political regulations regarding climate changes. The increasing regulations at both the national and EU levels may have an impact on our operations. While these regulations are welcomed as a clear set of guidelines for our industry, they also present compliance risks and opportunities.

On a long-term basis, the potential impacts of physical climate change, such as increased frequency of heavy precipitation and storms, may become more significant, depending on global warming trends. Bulk will monitor developments and implement measures along the way to minimize risk. On a short- and medium-term, mitigating measures are implemented in Bulk's procedures for project planning and operation.

These identified risks will be included in the ongoing process for developing sustainability targets and initiatives for the three business units. New measures to mitigate the identified risks will be assessed and implemented. With 2022 as a baseline year for most of our emission activities, emission targets and actions will be implemented in order to support Bulk's plan to reduce greenhouse gas emissions. Due to lack of emissions data from suppliers, we will establish a baseline for our data center technical equipment once we have sufficient information.



## Risk and opportunity management

Climate-related risks and opportunities are integrated into Bulk’s overall risk management, with responsibility resting with the board of directors. The group management has the operating responsibility for managing risks and opportunities

### Business Governance

Strategic

Monitoring and Control

Risk and Opportunity

Information Security

Emergency and Business Continuity

Change Management

Risks, opportunities, and mitigating actions are registered on project-level, on business unit-level and on group-level. They are also registered to Bulk’s different strategic areas. The process is described in our Integrated Management System, based on ISO 9001.

Risk and Opportunity management is an ongoing process. In project planning, climate-related risks are identified and assessed for project sites, building materials and building techniques. Mitigating measures are considered, often in cooperation with professionals such as an ecologist. The rele-

vant municipality is consulted in order to assess climate-related risks, in addition to nature-related risks. Regulatory requirements related to climate change, biodiversity and land-use are integrated in the risk assessments.

Risks are assessed according to probability and impact, and major risks are presented to the board and managed by the group management. Group management reviews risks and opportunities through the Business Review process, which is conducted on a quarterly basis for each business unit.



## Metrics and Targets

Bulk plans to conduct a double materiality analysis in the fall of 2024, aligning with the Corporate Sustainability Reporting Directive (CSRD) set to take effect in Norway that year.

Following the EU criteria for defining group size, which in turn determines the scope for CSRD, Bulk will issue its first CSRD report in 2026, covering the reporting year 2025. This assessment will serve as the foundation for our ongoing efforts in addressing climate-related issues.

### Emission targets

Bulk has set a net-zero target by 2050 across its scopes 1, 2 and 3 emissions. We will reduce our scopes 1 and 2 emissions by 50 per cent by 2030 and our emission intensity by 30 per cent for scope 3 by 2030. The combination of absolute and intensity targets has been chosen because we are a company in growth. Intensity targets enable a visible effect of climate actions, even when a company is expanding, by measuring emissions per unit, such as MNOK. The base line

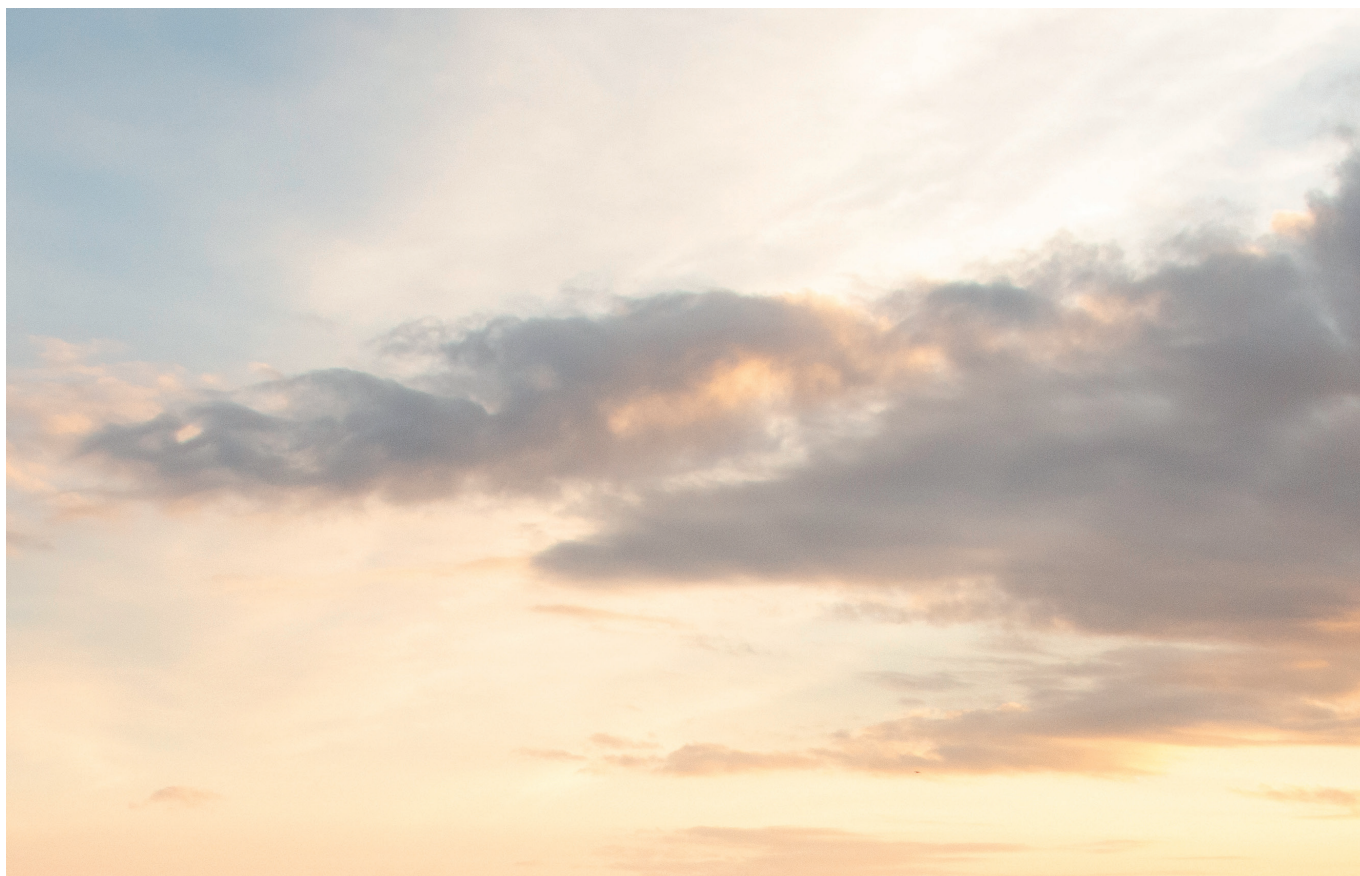
is 2022 for most of our emission activities. However, Data Centers are lacking emission data from the supplier for the technical equipment, hence spend-based estimates are still necessary. A baseline will be established when we have sufficient information.

### Energy targets

Bulk was awarded Norway's first BREEAM-NOR certification for industrial buildings, where we achieved the level «very good». We aim to certify all properties over 5,000 sqm to be BREEAM-NOR, and ensure that such projects will be designed to meet energy classification standards of A or B.

The data center industry is energy intensive. By locating data centers in locations with cooler climate, Bulk reduces the energy needed. Bulk's data centers have a PUE (Power Usage Effectiveness) below industry average and target design PUE of 1.2 for new data centers.

Bulk is currently exploring various applications to reuse excess heat from its data center operations to nearby business.



## Greenhouse Gas Emissions

### Climate account

This section provides an overview of the organisation's greenhouse gas (GHG) emissions, which is an integrated part of the organisation's climate strategy. Carbon accounting is a fundamental tool in identifying tangible measures to reduce GHG emissions. The annual carbon accounting report enables the organisation to benchmark performance indicators and evaluate progress over time.

Bulk started to collect data on emissions and perform climate accounting in 2020, according to the Greenhouse Gas Protocol (GHG Protocol). 2022 was the first year where the climate account was published. We are continuously working to improve the quality of the data. The tables over the next pages outline the emissions for each business area in 2023, with 2022 as a comparison year.

### Key assumptions and limitations

Following the GHG Protocol, Bulk has defined its organizational boundaries for carbon accounting. This distinction separates activities we directly control from those we don't. Operational control is based on contract type and decision-making authority. Emissions from controlled activities are registered under scope 1 and 2, while those outside our control fall under Scope 3. Project-related emissions are accounted for upon completion.

Our accounting covers all scope 1 & 2 emissions and relevant Scope 3 categories: Purchased Goods & Services, Capital

Goods, Leased Assets (both Up and Downstream), Business Travel, and Waste. Although a substantial amount of raw (primary) data was used to estimate emissions, some data gaps meant there was a need to use spend-based tCO<sub>2</sub>e estimates based on expenditures (in MNOK). As such, Asplan Viak and Vista's «The carbon footprint of central government procurement»: Evaluating the GHG intensities of government procurement in Norway" (2015) was used to estimate kgCO<sub>2</sub>e per NOK of expenditures with categories of economic activities (eg. Electricity works in buildings), corresponding to Bulk's expenditures. This source and method were used to estimate emissions associated with activities across Purchased Goods and Services and Capital Goods in both years 2022-2023. Spend-based estimates are especially relevant within the Data Center segment due to a lack of emission data provided by suppliers for much of the technical equipment. The supply chain for essential technical components like chillers, generators, and mechanical installations is still in its nascent stage regarding emission data and environmental declarations. Given that approximately four-fifths of data center infrastructure consists of such technical equipment, the majority of emissions from our data center projects are derived using spend-based estimates. Another limitation is that flight data, received directly from Berg Hansen includes only CO<sub>2</sub> gases for 2022 and 2023.



# Greenhouse gas emissions

## Bulk Data Centers

Our location in the Nordics provides a significant advantage: access to renewable power and a stable grid. With nearly 100% of Norway's energy<sup>2</sup> sourced from renewables and extremely low outage frequency, our scope 1 and 2 emissions are inherently low.

However, the majority of our emissions footprint lies within our supply chain, reflected in Scope 3 emissions. While currently on par with the construction industry average, we recognize this area as crucial for future improvement. As we scale our solutions in the coming years, reducing the environmental impact of our Scope 3 emissions will be a key focus.

The table below outlines Bulk Data Center's emissions in 2022 and 2023. The increase in emissions is due to extended project activity at our N01 data center site, including associated infrastructure, reflected in our capital goods emissions. The

data center building itself is based on a Life cycle assessment (LCA), and as such, provides a fair view of the GHG emissions. However, the main part of the data center is the technical installations of which we are still heavily reliant on spend-based calculations.

Bulk's locations with high percentage of renewable energy, provides low location-based Scope 2. The GHG protocol reporting also requires a market-based approach, which includes Guarantees of Origin (GOs). In 2023, we updated our policy regarding GOs, where we previously managed GOs for the entire data center site we've transitioned to a customer-centric model. We no longer automatically purchase GOs on customers behalf but assist our customers in the process. As a result of this policy update, the market-based portion of Scope 2 emissions may increase.

## Key Figures GHG Emissions Bulk Data Centers

### Annual Location-based GHG Emissions

Category	Unit	2022	2023
<b>Scope 1 Stationary combustion</b>	<b>tCO2e</b>	<b>115.7</b>	<b>89.0</b>
<b>Scope 2 Electricity location-based</b>	<b>tCO2e</b>	<b>328.9</b>	<b>388.0</b>
<b>Scope 3</b>			
Waste	tCO2e	4.8	25.6
Capital goods	tCO2e	5,446.2	14,357.7
Business travel	tCO2e	24.1	47.9
Upstream leased assets	tCO2e	0.9	0.5
<b>Scope 3 emission</b>	<b>tCO2e</b>	<b>5,475.9</b>	<b>14,431.7</b>
<b>Total (Scope 1 + 2)</b>	<b>tCO2e</b>	<b>444.6</b>	<b>477.1</b>
<b>Total emissions (Scope 1 + 2 + 3)</b>	<b>tCO2e</b>	<b>5,920.5</b>	<b>14,908.8</b>

### Annual Market-Based GHG Emissions

Category	Unit	2022	2023
<b>Electricity Total (Scope 2) with Market-based calculations</b>	<b>tCO2e</b>	<b>-</b>	<b>6,619.8</b>
<b>Scope 1+2+3 Total with Market-based calculations</b>	<b>tCO2e</b>	<b>5,591.7</b>	<b>21,140.5</b>

<sup>2</sup> <https://www.iea.org/countries/norway>

## Carbon emissions for Data Center according to the Green House Gas Protocol



### Scope 1

Direct emissions from activities under the organizations' control, including fuel combustion.

The Data Center vehicles are fully electrical, hence the only emissions in scope 1 is from gensets on site. Due to the low risk of power outage, the emissions solely arise from monthly testing of gensets to ensure satisfactory functionality.

89 tCO<sub>2</sub>e



### Scope 2

Indirect emissions from the production of purchased electricity, heating or cooling.

According to the GHG protocol there are two ways to report scope 2:

1. Market-based, include the impacts of renewable energy procurement through Guarantees of Origin. Bulk purchases GOs for energy consumption upon customer demand.
2. Location-based, the physical approach tracking emissions that are generated by production of electricity locally where the company's operation is located. Emissions are calculated based on average emission factors<sup>1)</sup> for each country where Bulk operates.

Market-based 6,620 tCO<sub>2</sub>e  
Location-based 388 tCO<sub>2</sub>e



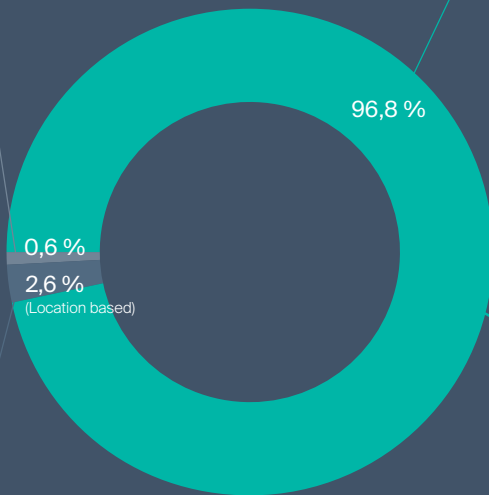
### Scope 3

All other indirect emissions that occur in the company's value chain.

Scope 3 covers all parts of the value chain, upstream and downstream, and constitutes the majority of emissions for Bulk Data Centers. This scope includes several sub-categories, of which the relevant ones for Bulk's emissions will be outlined below.

Scope 3 tracking and reporting against this category of emissions is critical for net zero progress. We strive to improve the input from our supply chain and want to move from cost-based estimates to accurate numbers from our suppliers based on life cycle assessments.

14,432 tCO<sub>2</sub>e



- Capital goods
- Waste
- Business travel
- Upstream leased assets

#### Category 2 – Capital goods

Include embodied emissions, which is carbon emitted during the manufacture and transport of building materials and technical components building new capacity, as well as fuel consumption related to the preparation of land from subcontractors.

#### Category 5 – Waste

Include waste generated both from construction and operation of our datacentres.

#### Category 6 – Business travel

Transportation of employees for business-related activities during the reporting year

#### Category 8 – Upstream leased assets

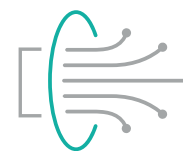
Operation of assets leased by the reporting company (lessee) in the reporting year and not included in scope 1 and scope 2

The carbon footprint analysis is based on the international standard: A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol).

According to the GHG Protocol Corporate Standard, Bulk has defined the organizational boundary as operational control.

Scope 3 has 15 categories, Bulk reports on the essentials for our business.

1. IEA (2023): <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2023>



# Greenhouse gas emissions

## Bulk Fiber Networks

Our location in the Nordics provides a significant advantage: access to renewable power and a stable grid. With nearly 100% of Norway's energy<sup>3</sup> sourced from renewables and extremely low outage frequency, our scope 1 and 2 emissions are inherently low.

The majority of our emissions stem from our supply chain during the construction of new fiber networks, reflected in Scope 3 emissions. As we scale our solutions in the coming years, minimizing the environmental impact of these emissions will be a key focus.

The table below details Bulk Fiber Networks' emissions in 2022 and 2023. The significant decrease is due to the completion of all telehousing projects in 2022, resulting in no construction activities in 2023. Therefore, 2023 emissions solely originate from operating existing fiber systems and telehousing.

### Key Figures GHG Emissions Bulk Fiber Networks

#### Annual Location-based GHG Emissions

Category	Unit	2022	2023
<b>Scope 1 Stationary combustion</b>	<b>tCO2e</b>	<b>2.4</b>	<b>3.4</b>
<b>Scope 2 Electricity location-based</b>	<b>tCO2e</b>	<b>3</b>	<b>10.9</b>
<b>Scope 3</b>			
Capital goods	tCO2e	977.1	-
Business travel	tCO2e	29.8	11.5
Upstream leased assets	tCO2e	0.1	0.4
<b>Scope 3 emission</b>	<b>tCO2e</b>	<b>1,007.0</b>	<b>11.9</b>
<b>Total (Scope 1 + 2)</b>	<b>tCO2e</b>	<b>5.4</b>	<b>14.3</b>
<b>Total emissions (Scope 1 + 2 + 3)</b>	<b>tCO2e</b>	<b>1,012.4</b>	<b>26.2</b>

#### Annual Market-Based GHG Emissions

Category	Unit	2022	2023
<b>Scope 2 Total with Market-based electricity calculations</b>	<b>tCO2e</b>	<b>-</b>	<b>-</b>
<b>Scope 1+2+3 Total with Market-based electricity calculations</b>	<b>tCO2e</b>	<b>1,009.4</b>	<b>15.3</b>

<sup>3</sup> <https://www.iea.org/countries/norway>

## Carbon emissions for Fiber Networks according to the Green House Gas Protocol



### Scope 1

Direct emissions from activities under the organizations' control, including fuel combustion.

Bulk Fiber Networks has gensets on each telehouse as back-up in case of power outage. A 100 per cent up-time was reported in 2023. The majority of emissions in scope 1 is stemming from testing of gensets, which is performed on a quarterly basis.

3.4 tCO<sub>2</sub>e



### Scope 2

Indirect emissions from the production of purchased electricity, heating or cooling.

According to the GHG protocol there are two ways to report scope 2:

1. Market-based, include the impacts of renewable energy procurement through Guarantees of Origin. Bulk purchases Guarantees of Origins from renewable energy from where we are located.
2. Location-based, the physical approach tracking emissions that are generated by production of electricity locally where the company's operation is located. Emissions are calculated based on average emission factors<sup>1)</sup> for each country where Bulk operates.

Market-based 0 tCO<sub>2</sub>e  
Location-based 10.9 tCO<sub>2</sub>e



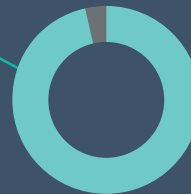
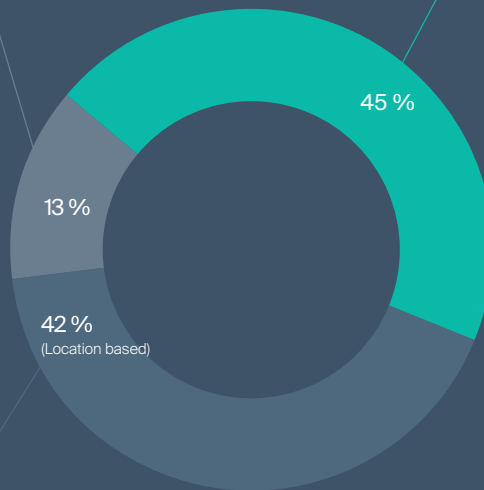
### Scope 3

All other indirect emissions that occur in the company's value chain.

Scope 3 covers all parts of the value chain, upstream and downstream, and constitutes the majority of emissions for Bulk Fiber Networks. This scope includes several sub-categories, of which the relevant ones for Bulk's emissions will be outlined below.

Tracking and reporting of this category of emissions is crucial for the net zero process. Bulk strives to improve the input from our supply chain and aim to make a shift from cost-based estimates to accurate numbers from our suppliers on life cycle assessment.

11.9 tCO<sub>2</sub>e



#### Category 2 – Capital goods

Include embodied emissions from materials, fuel combustion, equipment and activities from subcontractors' ship and machine park during the installation of fiber cables and construction of telehousing

#### Category 6 – Business travel

Employee travel for business-related affairs during the reporting year

#### Category 8 – Upstream leased assets

Operation of assets leased by the reporting company (lessee) in the reporting year and not included in scope 1 and scope 2, mainly related to headquarters

The carbon footprint analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). According to the GHG Protocol Corporate Standard, Bulk has defined the organizational boundary as operational control.

Scope 3 has 15 categories, Bulk reports on the essentials for our business

1. IEA (2023): <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2023>



# Greenhouse gas emissions

## Bulk Industrial Real Estate

Our location in the Nordics provides a significant advantage: access to renewable power with nearly 100% of Norway's energy<sup>4</sup> sourced from renewables. Our scope 1 and 2 emissions are inherently low.

While Scope 3 emissions from our supply chain form the majority of our environmental footprint, our performance already compares favorably within the construction industry. Notably, the Bulk module boasts a low Scope 3 profile. We actively collaborate with our suppliers to identify even more sustainable materials for buildings and construction practices.

As we scale our solutions in the coming years, further reducing our Scope 3 impact will be a key focus area. This commit-

ment will ensure we maintain our leadership in sustainable construction. The table below outlines Bulk Industrial Real Estate's emissions in 2022 and 2023. The decrease in emissions is due to less activity in developed property. Three projects were finalized in 2022, while we finalized two projects in 2023. Bulk Wood was one of the projects in 2023. The Bulk Wood module is based on BIRE's standardized warehouse module, yet with specifications that give the finalized building up to 50 percent lower carbon footprint than an equivalent reference warehouse building. Bulk Wood replaces the steel support structure with glulam (glued laminated timber).

## Key Figures GHG Emissions Bulk Industrial Real Estate

### Annual Location-based GHG Emissions

Category	Unit	2022	2023
<b>Scope 1 Biodiesel, HVO</b>	<b>tCO<sub>2</sub>e</b>	<b>0.3</b>	<b>0.1</b>
<b>Scope 2 Electricity location-based</b>	<b>tCO<sub>2</sub>e</b>	<b>0.3</b>	<b>0.6</b>
<b>Scope 3</b>			
Purchased goods and services	tCO <sub>2</sub> e	35.2	484.4
Capital goods	tCO <sub>2</sub> e	15,131.9	3,014.6
Waste	tCO <sub>2</sub> e	77.7	16.0
Downstream leased assets	tCO <sub>2</sub> e	1,118.0	393.6
Business travel	tCO <sub>2</sub> e	4.0	7.2
Upstream leased assets	tCO <sub>2</sub> e	0.3	0.2
<b>Scope 3 emission</b>	<b>tCO<sub>2</sub>e</b>	<b>16,367.0</b>	<b>3,916.0</b>
<b>Total (Scope 1 + 2)</b>	<b>tCO<sub>2</sub>e</b>	<b>0.7</b>	<b>0.7</b>
<b>Total emissions (Scope 1 + 2 + 3)</b>	<b>tCO<sub>2</sub>e</b>	<b>16,367.7</b>	<b>3,916.7</b>

### Annual Market-Based GHG Emissions

Category	Unit	2022	2023
<b>Electricity Total (Scope 2) with Market-based calculations</b>	<b>tCO<sub>2</sub>e</b>	<b>-</b>	<b>-</b>
<b>Scope 1+2+3 Total with Market-based calculations</b>	<b>tCO<sub>2</sub>e</b>	<b>16,367.7</b>	<b>3,916.1</b>

<sup>4</sup> <https://www.iea.org/countries/norway>

## Carbon emissions for Industrial Real Estate according to the Green House Gas Protocol



### Scope 1

Direct emissions from activities under the organizations' control, including fuel combustion.

Bulk has a fully electric vehicle park, with the exception of one vehicle on certified HVO in Bulk Industrial Real Estate, which is related to operations on one of the real estate locations.

0.1 tCO<sub>2</sub>e



### Scope 2

Indirect emissions from the production of purchased electricity, heating or cooling.

According to the GHG protocol there are two ways to report scope 2:

1. Market-based, include the impacts of renewable energy procurement through Guarantees of Origin. Bulk purchases Guarantees of Origins from renewable energy from where we are located.
2. Location-based, the physical approach tracking emissions that are generated by production of electricity locally where the company's operation is located. Emissions are calculated based on average emission factors<sup>1)</sup> for each country where Bulk operates.

Market-based 0 tCO<sub>2</sub>e  
Location-based 0.6 tCO<sub>2</sub>e



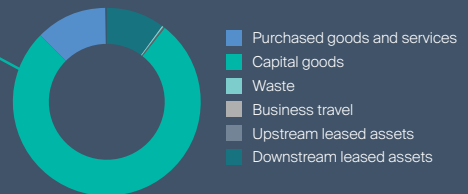
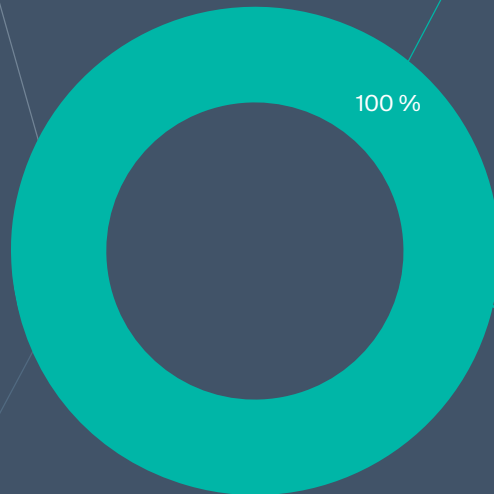
### Scope 3

All other indirect emissions that occur in the company's value chain.

Scope 3 covers all parts of the value chain, upstream and downstream, and constitutes the majority of emissions for Bulk Industrial Real Estate. This scope includes several sub-categories, of which the relevant ones for Bulk's emissions will be outlined below.

Scope 3 represents the majority of Bulks' emissions and tracking and reporting against this category of emissions is critical for net zero progress. We BREEAM-NOR certify our buildings and a life cycle assessment (LCA) is included in the certification process. The assessment is based on Environmental Product Declarations (EPDs), which is provided by our suppliers.

3.916 tCO<sub>2</sub>e



#### Category 1 - Purchased goods and services

Embodied emissions from purchased goods and services related to operation of our buildings

#### Category 2 - Capital goods

Embodied emissions from materials, fuel combustion, equipment and activities from subcontractors during construction of Bulk's industrial buildings

#### Category 5 - Waste

Include waste generated both from construction and operation of our real estate.

#### Category 6 - Business travel

Employee travel for business-related affairs during the reporting year

#### Category 8 - Upstream leased assets

Operation of assets leased by the reporting company (lessee) in the reporting year and not included in scope 1 and scope 2, mainly headquarters

#### Category 13 Downstream leased assets

Operation of assets owned by the reporting company (lessor) and leased to other entities in the reporting year, not included in scope 1 and scope 2 - reported by lessor

The carbon footprint analysis is based on the international standard; A Corporate Accounting and Reporting Standard, developed by the Greenhouse Gas Protocol Initiative (GHG Protocol). According to the GHG Protocol Corporate Standard, Bulk has defined the organizational boundary as operational control.

Scope 3 has 15 categories, Bulk reports on the essentials for our business

1. IEA (2023): <https://www.iea.org/data-and-statistics/data-product/emissions-factors-2023>



Bulk is racing to bring  
sustainable infrastructure  
to a global audience



Bulk Infrastructure Holding AS  
Karenslyst Allé 53  
0279 Oslo, Norway  
Phone: +47 47 80 70 00  
[bulkinfrastructure.com](http://bulkinfrastructure.com)