C.C.JENSEN A/S

ESG REPORT 2022

Table of contents

Foreword from the CEO
Sustainability is business critical

Welcome to C.C.JENSEN A/S' ESG Report 2022.

Ever since our owner, Carl Aage Jensen, realised in 2008 that the greenhouse effect was a real problem and C.C.JENSEN had to take responsibility for its own carbon emissions, we have reduced emissions from our production and offices in Svendborg.

Between 2008 and 2021, we reduced carbon emissions in production and our offices in Denmark by around 80%. We have taken considerable steps to reduce energy consumption and convert our energy supply to less carbon-intensive sources; and have implemented energy-reducing solutions while always prioritising the quality of our service and product.

Continued efforts to reduce carbon emissions are a cornerstone for the company. Consequently, we have decided that all future reporting of carbon emissions shall be based on the internationally recognised principles of the Greenhouse Gas Protocol (GHG Protocol). The work to implement the principles in the protocol has begun, but will be a continuous process over the years to come. They will be implemented through an internal steering group which is closely anchored in Group management.

As a company, we wish to contribute towards reducing our carbon footprint by developing BRIGHT IDEAS and making them available to the rest of the world. Offering our customers CLEAN OIL is the goal of all initiatives and development programs in the company.

The calculations carried out in accordance with the GHG protocol have now led to new findings. In particular, the greenhouse gas emissions and thus the carbon footprint of C.C.JENSEN's products in operation requires future action. Although this report only covers C.C.JENSEN A/S (Denmark), the production and use of our products can be considered as included, as all our production is currently based in Denmark.

We wish to be a key player for our customers in meeting their high ambitions to reduce their environmental impact. Future employees should also see us as an ambitious company striving to reduce the environmental impact of its own products and services.

Our employees and our culture are the company's core competencies. The continuous technological development and implementation of high quality depend on us having highly skilled employees who also thrive in both their work and life. Our employees – from Chile to India – are what make us stand out as a company. I would like to thank each and every one of you for your part in our sustainability journey.

Our main focus in the coming years will be to create the best solutions for a more sustainable value chain, including further carbon reductions. C.C.JENSEN will also work actively with customers to promote more sustainable solutions for the benefit of the global environment.

Another major goal is to fulfil our ambition of including all subsidiaries in the next report for 2023.

Next year, we will continue to map C.C.JENSEN's scope 3 emissions in depth. We recognise that our responsibility extends beyond simply the production and sales chain. Around 85% of C.C.JENSEN's total carbon emissions come from products that are in use, primarily energy (electricity) for electric motors and preheaters.

Our vision continues to be what has always constituted the core quality of our technology: To keep the customer's oil verifiably clean and ensure that the functional properties of the oil are maintained. This extends the life of the oil and equipment for the benefit of the manufacturer, owner and the environment.

Stig Due
CEO

About this report

The 2022 ESG report only covers C.C.JENSEN A/S. Subsidiaries and local C.C.JENSEN offices worldwide are not included in this report. In the report, we describe how we want to involve subsidiaries and the Group level in future reporting.

Reporting is done on two main levels:

Company level:
ESG reporting/GHG protocol methodology

Product level:
LCA methodology

An indispensable principle for reporting is that all data and methods must be valid and auditable. The methods used are those that result in the most valid results, taking into account materiality (priority of activity-based methods over cost-based ones, if material).

The rationale behind our approach and methodology is that data and results must enable us to prioritise the right actions and steps for a more sustainable business development. More importantly, we present our data and methodology to show and explain both results and challenges to our stakeholders, customers, employees and society.

Link between this report and previous CO2 reporting:

From 2008 to 2021, C.C.JENSEN published an annual CO2 report. The accounting principles used in the old report were different from those in this report. Therefore, the figures cannot be directly compared.

About C.C.JENSEN

C.C.JENSEN is a family-owned international company founded in 1953 and based in Denmark. What makes us unique is our combination of tradition, innovation and technical expertise.

The company began producing lube oil filters for marine engines more than 70 years ago and has since expanded its core business to sell oil filtration solutions for a wide range of applications in the wind, marine, mining, energy and industrial markets. A number of maritime activities have also been added to the portfolio.

From the very beginning, the close links with the maritime industry have made C.C.JENSEN's core business an internationally oriented enterprise, whose products are available through a global network of 16 subsidiaries and more than 100 distributors.

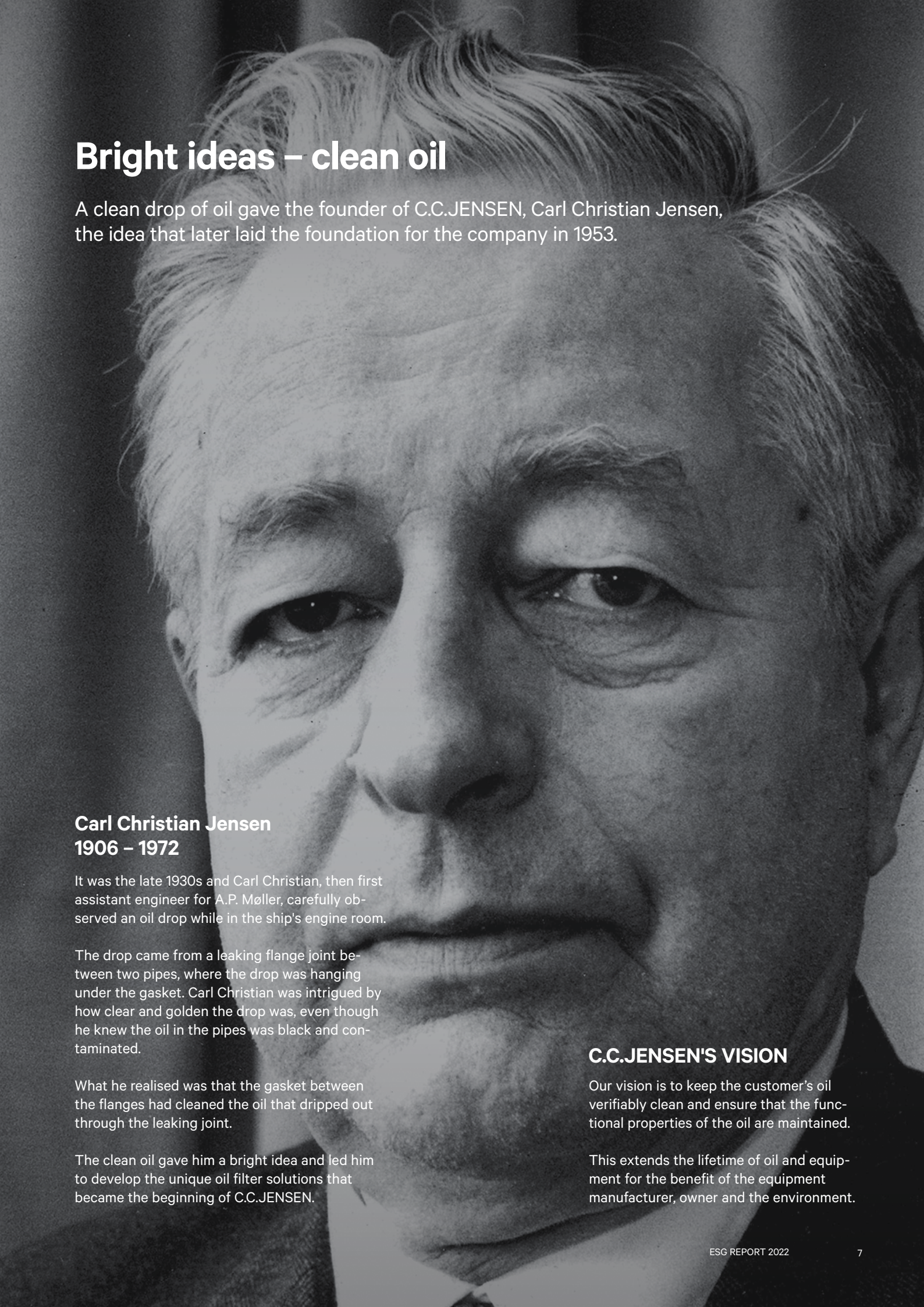
In their daily contact with C.C.JENSEN or our agents, our customers experience our deep commitment to providing the best possible service. Our employees do their utmost to deliver the right solution – every time.

It is C.C.JENSEN's mission to reduce carbon emissions to help the global environment. We have been working with our carbon reduction project since 2008. In connection with this, we have reduced the company's carbon emissions annually, for example with the installation of wind turbines and solar cells, but also by using wood pellets as an energy source in production.

Carl Aage Jensen, owner of C.C.JENSEN, and son of founder Carl Christian Jensen.

Bright ideas – clean oil

A clean drop of oil gave the founder of C.C.JENSEN, Carl Christian Jensen, the idea that later laid the foundation for the company in 1953.



Carl Christian Jensen 1906 – 1972

It was the late 1930s and Carl Christian, then first assistant engineer for A.P. Møller, carefully observed an oil drop while in the ship's engine room.

The drop came from a leaking flange joint between two pipes, where the drop was hanging under the gasket. Carl Christian was intrigued by how clear and golden the drop was, even though he knew the oil in the pipes was black and contaminated.

What he realised was that the gasket between the flanges had cleaned the oil that dripped out through the leaking joint.

The clean oil gave him a bright idea and led him to develop the unique oil filter solutions that became the beginning of C.C.JENSEN.

C.C.JENSEN'S VISION

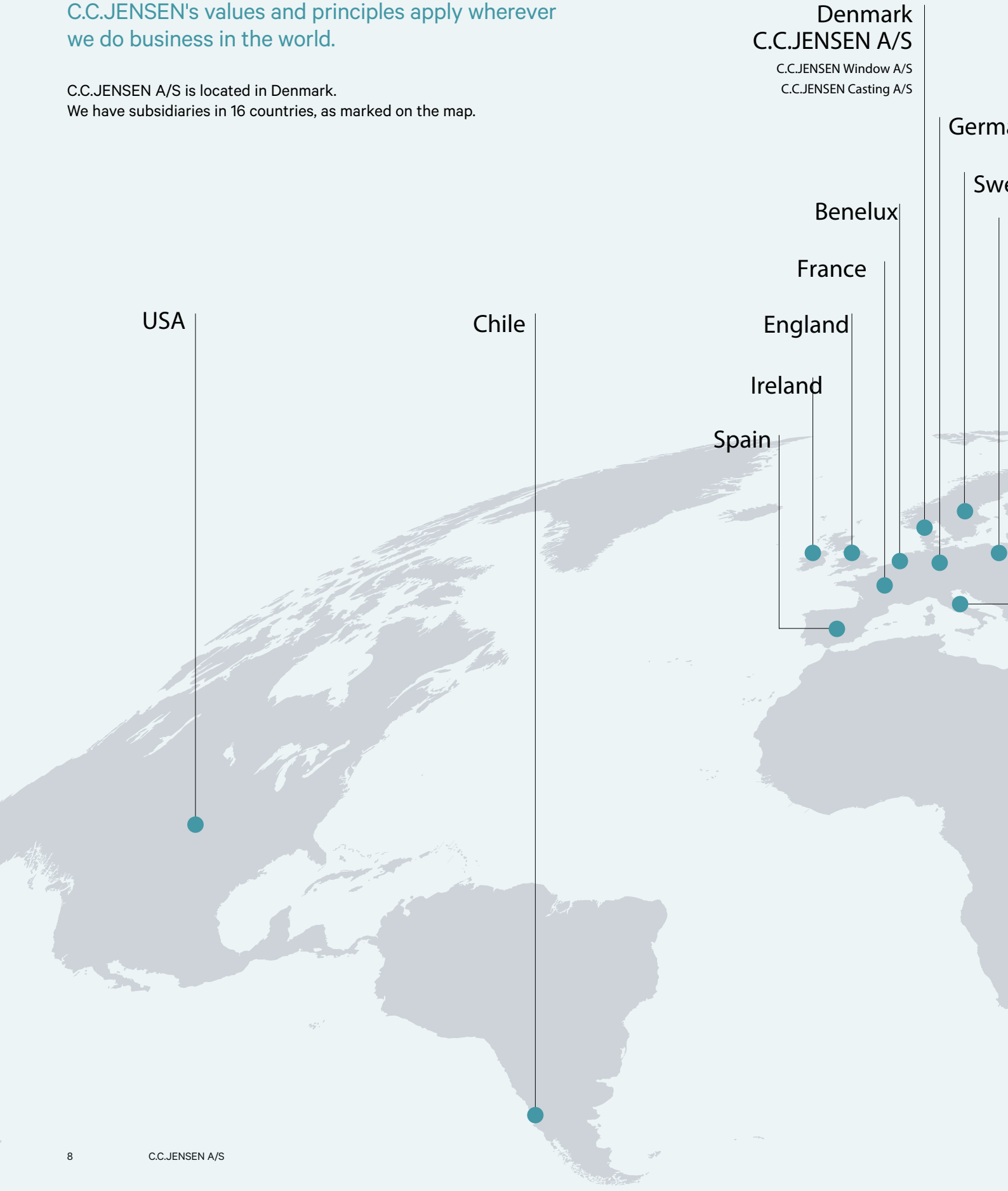
Our vision is to keep the customer's oil verifiably clean and ensure that the functional properties of the oil are maintained.

This extends the lifetime of oil and equipment for the benefit of the equipment manufacturer, owner and the environment.

C.C.JENSEN globally

C.C.JENSEN's values and principles apply wherever we do business in the world.

C.C.JENSEN A/S is located in Denmark.
We have subsidiaries in 16 countries, as marked on the map.




any
eden
Poland
Italy
Greece
United Arab Emirates
India
China
Singapore

Products

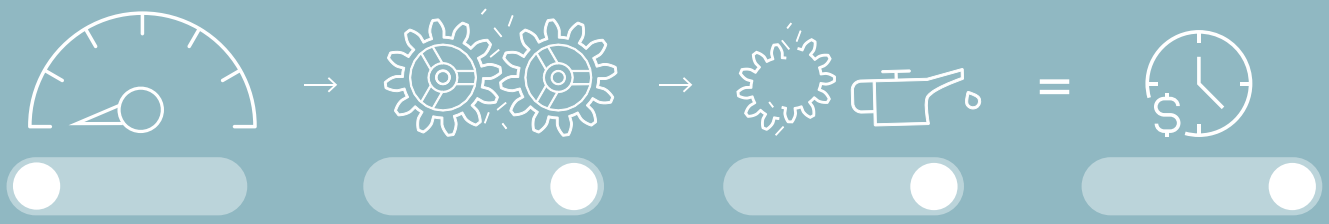
CJC® Offline Oil Filtration Solutions

We design and manufacture CJC® Offline Oil Filters and CJC® Online Condition Monitoring solutions for all types of production systems in the industrial, marine, mining, energy and wind segments. Our oil filtration systems are designed to reduce oil and energy consumption through oil cleaning. Our oil filters ensure that the oil is proven clean and dry in production equipment, whether it contains 10 litres or 200,000 litres of oil or even more. Our systems provide continuous oil filtration 24/7/365 and are not system-critical, meaning that you do not need to shut down machinery when replacing CJC® Filter Inserts.

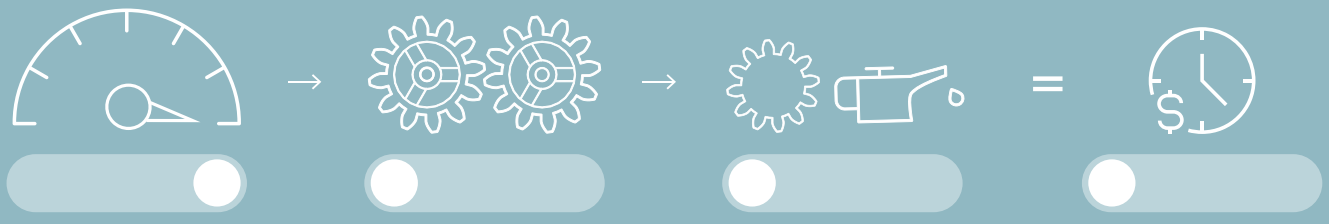
Reduce machine downtime with clean oil

CJC® Oil Filters continuously remove particles, water, acid and oil degradation products from all kinds of oils. This ensures that gears, hydraulic systems and injection systems in engines are subject to reduced wear, operate efficiently and with fewer breakdowns. Further more, it extends the oil's lifetime – this creates value, both financial and in terms of sustainability.

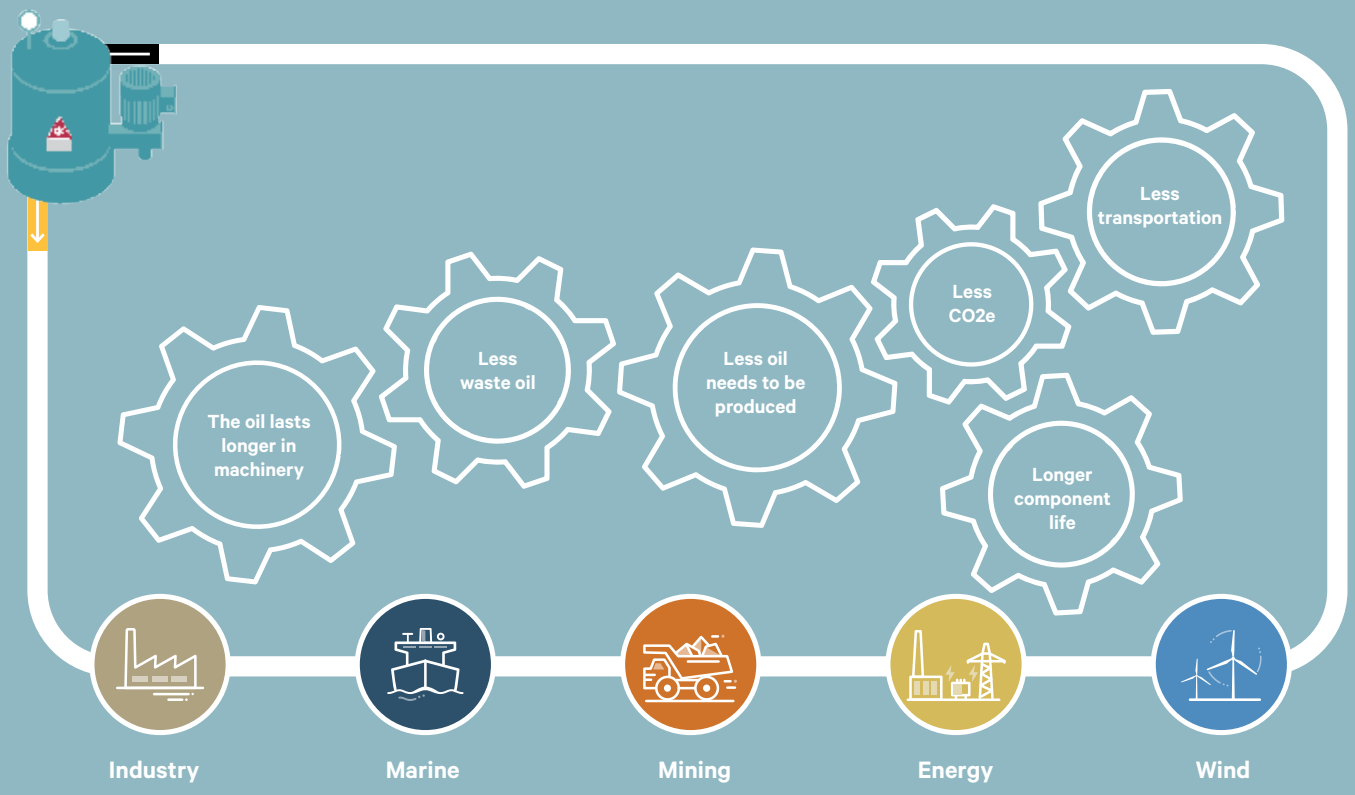
Without effecient oil filtration



With CJC® Offline Oil Filtration



CJC® Oil Filters reduce CO2e when installed in:



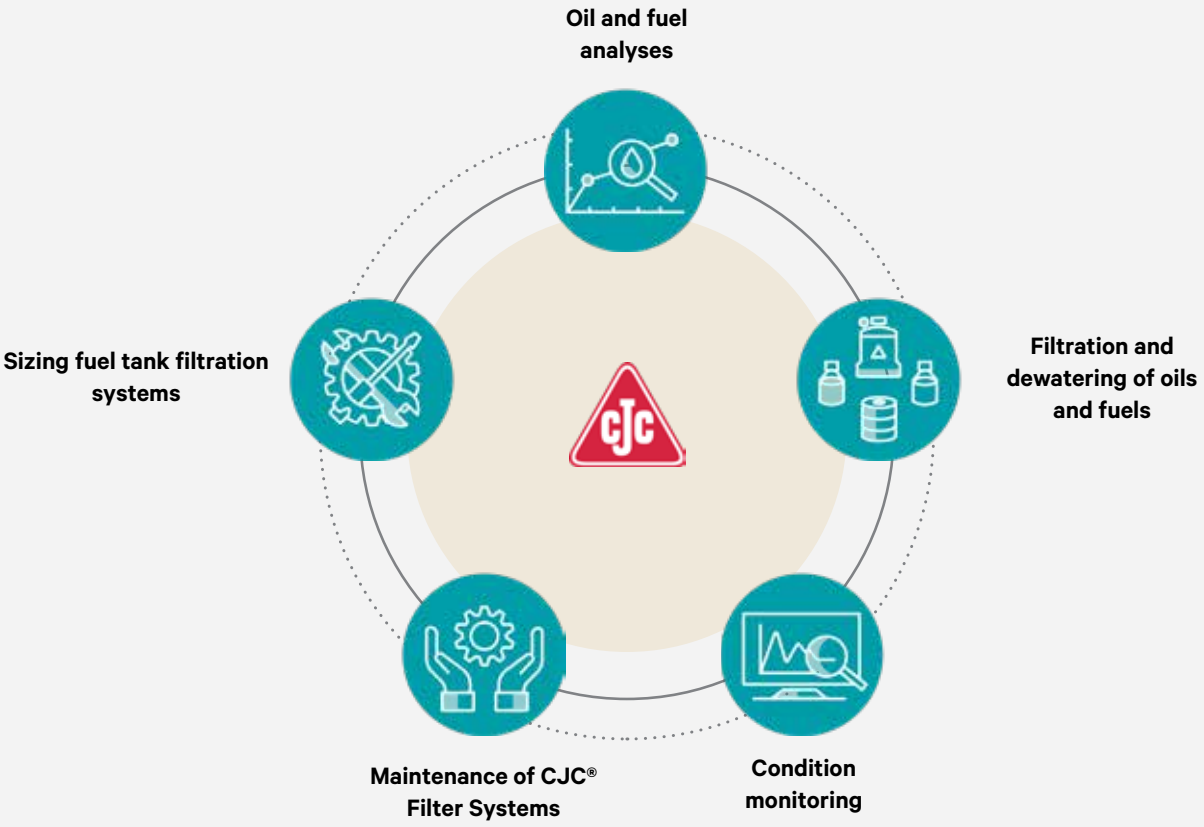
Service

C.C.JENSEN's service team offers technical expertise, from remote to on-site support. We offer a wide range of services – from service contracts, rental, installation and commissioning to sensor calibration, oil sampling and our on-site service teams.

Our service offerings are designed to ensure the customer's systems have the best possible operational performance, the lowest oil consumption and extended equipment lifetime.

When properly maintained and serviced, CJC® Oil Filters will continuously remove particles, water, acid and oil degradation products from the oil, resulting in reduced wear on components in many different machine types. Our goal is to ensure that the customer's CJC® Oil Filters perform perfectly for many years with a constant level of clean and dry oil, and we offer numerous types of service to achieve this, from supplying filter inserts to service contracts and major oil cleaning projects.

Circle of Service



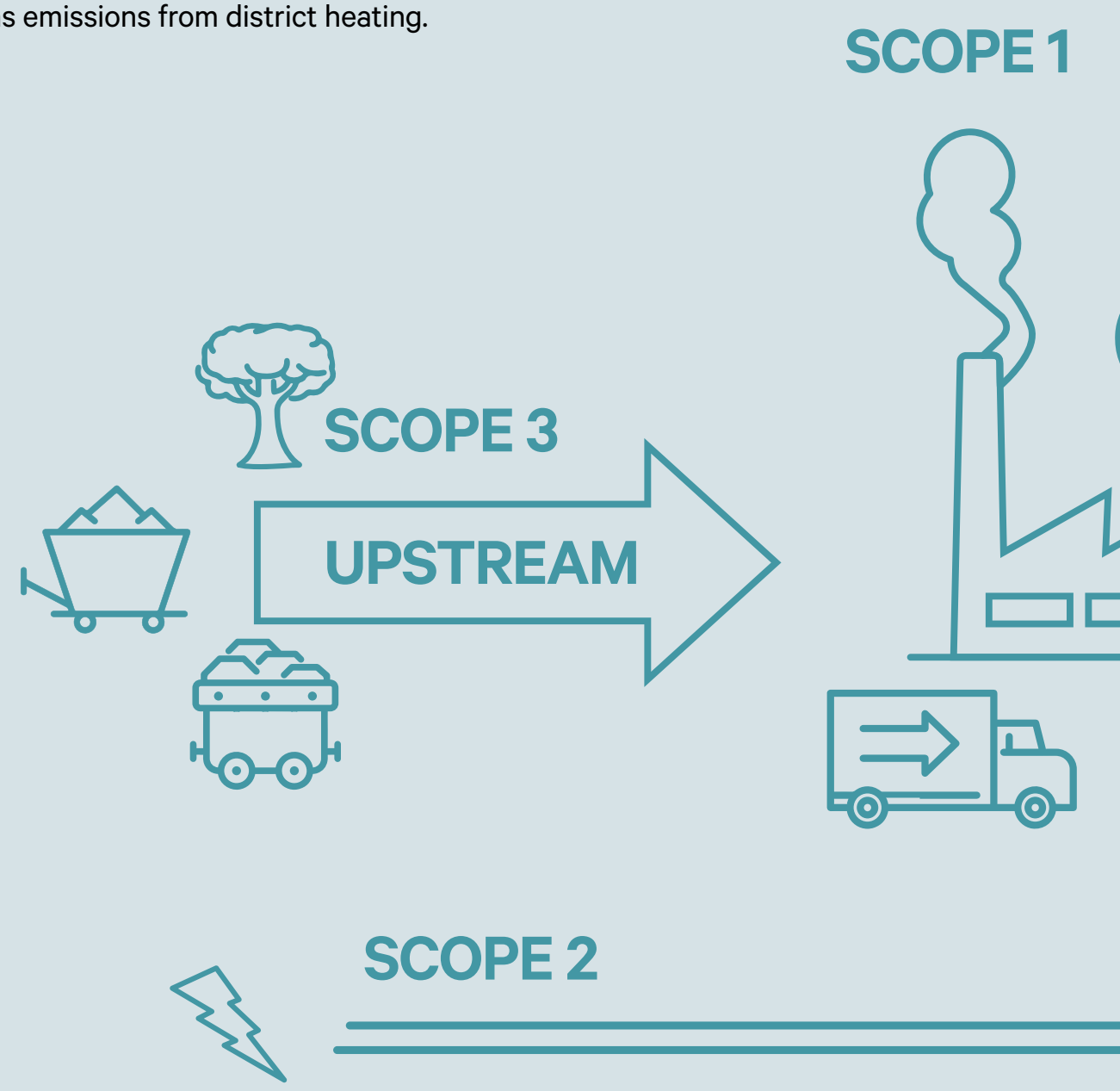
The company's value chain
C.C.JENSEN A/S

SCOPE 1

The direct emissions from owned or operated assets, such as heating buildings or process heating with natural gas.

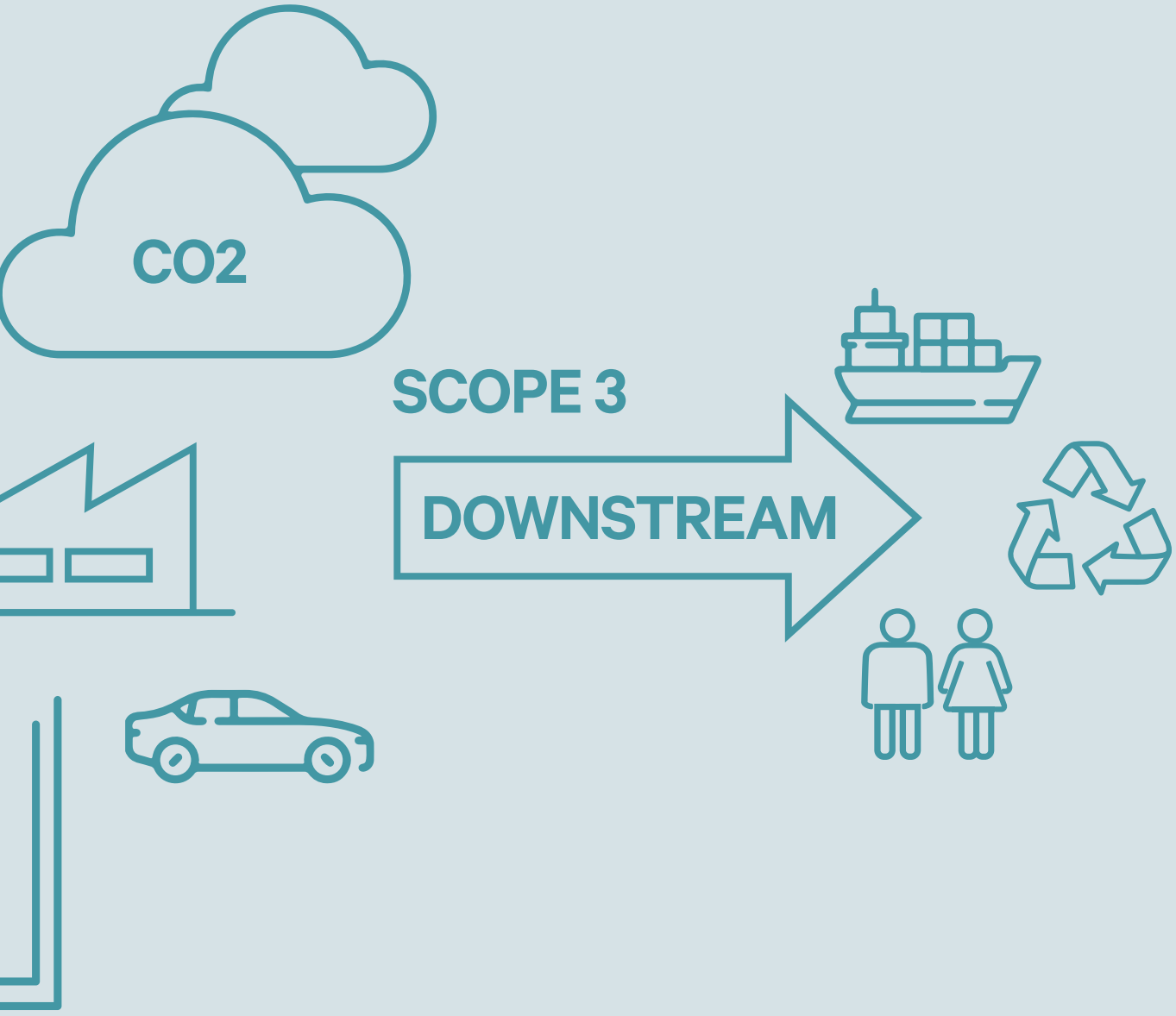
SCOPE 2

Indirect emissions from purchased energy and heat to our own sites, such as emissions from district heating.



SCOPE 3

The indirect emissions from any other possible source (purchased components and services, capital goods, sales freight, purchase freight, business travel, employee commuting, waste from operations, other fuel and energy-related activities, use of products and end-of-life treatment).



C.C.JENSEN's wind turbines

C.C.JENSEN bought and erected its first wind turbine in 2000 and today owns two identical turbines. The second wind turbine was acquired in 2016. Both are located near Gudme on South Funen.

The turbines (type NEG Micon 900 kW) produced approx. 2.75 GWh in 2022, which is comparable to the total electricity consumption of 3.15 GWh for production and plants at C.C.JENSEN A/S over the same 12-month period. In addition to producing electricity, the wind turbines are used as a test platform for CJC™ Filtration and Sensor Technology, where different filtration setups and sensor developments are tested and documented during real operation.

Key events
C.C.JENSEN's sustainable development

1949
Carl Christian Jensen invented and produced the first filter

1953
C.C.JENSEN A/S was founded

1972
Carl Aage Jensen takes over ownership of C.C.JENSEN

2016
Offers energy consultant visits to employees' private homes

2021
Update of C.C.JENSEN's marketing material on CO2

2021
Implementation of car charging stations for staff at our head office

2021
Implementation of major energy-efficiency projects at plants (12 heat pumps and 13 windows)

2021
Owner Carl Aage Jensen gathers several private investors to build a new maritime business park at the harbour in Svendborg

2021
Conversion from IE to IE3 electric motors on our filters, which reduces energy consumption

2022
Conversion of natural gas to district heating

2022
Support for the major local community event, DGI 'landsstævne' (national sports festival)

2022
Replacement of windows/ skylights in production

2000
C.C.JENSEN purchases and erects its first wind turbine

2007
We receive ISO 9001 certification

2008
Senior management opts to adjust to a more sustainable form of business management

2009
Publishes the first CO2 report

2010–2021
Annual publication of CO2 reports

2010
Initiator and partner of the non-profit climate organisation GO2Green, which works to reduce energy consumption and create green jobs locally on South Funen

2021
Expansion of the company's production facilities, implementation of heat pumps in the drying process

2022
Establishment of an internal sustainability reporting team

2022
All new C.C.JENSEN company cars are now fully electric

2022
Replacement of fluorescent tubes with LEDs at several locations in production and at the plant

2022
Replacing more windows and doors for energy efficiency

2022
Continuous replacement of ventilation systems with more efficient heat recovery systems and demand-controlled ventilation capacity

ESG roadmap 2025

The work to reduce scope 1 and 2 is today integrated into the organisation. For scope 3, in 2022 we are in the phase of an initial assessment of scope and sources. Further development of the strategy for scope 3 has a very high priority. We must continue to work on prioritising the various focus areas, but it is immediately clear that operating our products accounts for a very significant segment of C.C.JENSEN's scope 3 emissions.

This is also why we have a strong focus on the energy consumption of our products. We need to identify the biggest sources based on a collection of relevant data and lay out a plan for how we can create more energy-friendly designs in line with our customers' needs.

Before 2022

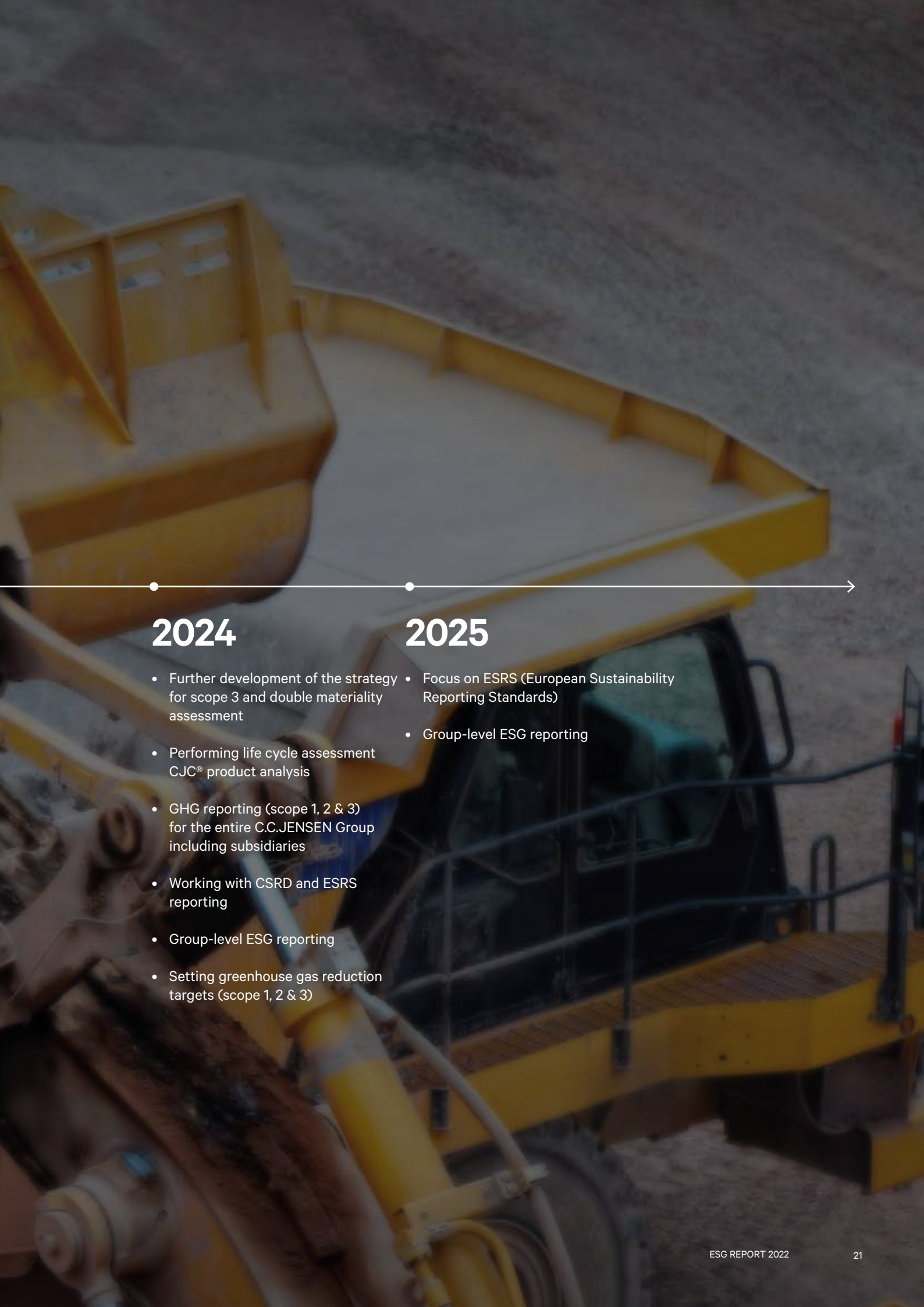
- Reporting of carbon emissions scope 1 & 2
- Implementation of major energy efficiency projects, including the installation of solar panels, heat pumps and new windows
- Implementation of car charging stations for staff
- Publication of annual CO2 reports
- Ongoing commitment to local culture and communities, maritime and sustainable business
- Going forward, all company cars must be electric
- Conversion from IE to IE3 electric motors on our filtration solutions

2022

- Publication of annual CO2 report
- Implementation of heat pumps in the drying process
- Reporting of carbon emissions scope 1, 2 & 3 according to GHG protocol
- Ongoing commitment to local culture and communities, maritime and sustainable business

2023

- Energy efficiency adjustments are continuously implemented
- Implementation of major energy efficiency projects, including the conversion of natural gas to district heating
- GHG reporting (scope 1, 2 & 3) C.C.JENSEN A/S
- Publication of the first ESG report (2022) for C.C.JENSEN A/S (excluding subsidiaries)
- Ongoing commitment to local culture and communities, maritime and sustainable business



2024

- Further development of the strategy for scope 3 and double materiality assessment
- Performing life cycle assessment CJC® product analysis
- GHG reporting (scope 1, 2 & 3) for the entire C.C.JENSEN Group including subsidiaries
- Working with CSRD and ESRS reporting
- Group-level ESG reporting
- Setting greenhouse gas reduction targets (scope 1, 2 & 3)

2025

- Focus on ESRS (European Sustainability Reporting Standards)
- Group-level ESG reporting

Highlights

Vision

To keep the customer's oil documented clean and ensure that the functional properties of the oil are maintained. This extends the lifetime of oil and equipment for the benefit of the equipment manufacturer, the owner and the environment.

Environmental

C.C.JENSEN has assessed that the most significant risks of a negative impact on the climate are related to energy consumption, and thus carbon emissions from C.C.JENSEN, both directly and indirectly.

Social

C.C.JENSEN A/S' most significant impact on society relates to the procurement of raw materials and components, including social and working conditions at suppliers together with environmental and climate-related impacts. Furthermore, the social and working conditions of C.C.JENSEN A/S' own employees are an important area.

DKK 374 million
(EUR 50 million)

C.C.JENSEN A/S annual turnover in 2022

86%

Export share

1,044

Total tCO2e scope 1–2

100,337

Total tCO2e scope 3

4.9

tCO2e (scope 1+2) per employee

2.8

tCO2e per DKK million of turnover (scope 1+2)

3,149

Total electricity consumption in MWh

100%

Percentage of renewable electricity

212

Number of employees (FTE) in A/S

18%

Share of female employees

approx. 13 years

Average length of service

6.08*

LTIF

*Accident frequency calculated according to the methodology used by the Confederation of Danish Employers, DA: LTI/Number of hours worked x 1 mill.

The entire C.C.JENSEN ***Group****, including subsidiaries, had an annual turnover of DKK 524 million (EUR 70.4 million) and a total of 291 employees in 2022.*

Environmental

Strategy
A continuous and increased effort for a climate-responsible company

Since 2008, C.C.JENSEN A/S has worked effectively to reduce carbon emissions, and we have seen good results in reducing CO2e in our own production and plants. However, significant effort is needed going forward as we focus on the energy consumption of our products in the operating situation at the customer's premises.

C.C.JENSEN wishes to limit negative impacts on the environment and climate as much as possible. Our core business skills lie in maintaining oils in order to generate the least possible waste oil. This will help reduce CO2e for the benefit of our customers and society. Since 2008, we have been working effectively to reduce C.C.JENSEN's own carbon emissions, and we have seen good results in reducing CO2e in production and plants.

In 2022, we continued to invest in renewable energy and over the year, we achieved a reduction in relative carbon emissions in relation to revenue. Continued efforts to reduce carbon emissions are a cornerstone for the company. It has therefore been decided that future reporting of carbon emissions must be based on the internationally recognised principles in 'The Greenhouse Gas Protocol'. The work to implement the principles in the protocol has begun but will be a continuous process over the years to come. They will be implemented through an internal steering group closely anchored in Group management.

C.C.JENSEN's overall categories of actions for an environmentally sustainable company are:

1) Energy savings in production and buildings
2) Conversion of fossil energy sources
3) Energy optimisation of own products and other hotspots in scope 3

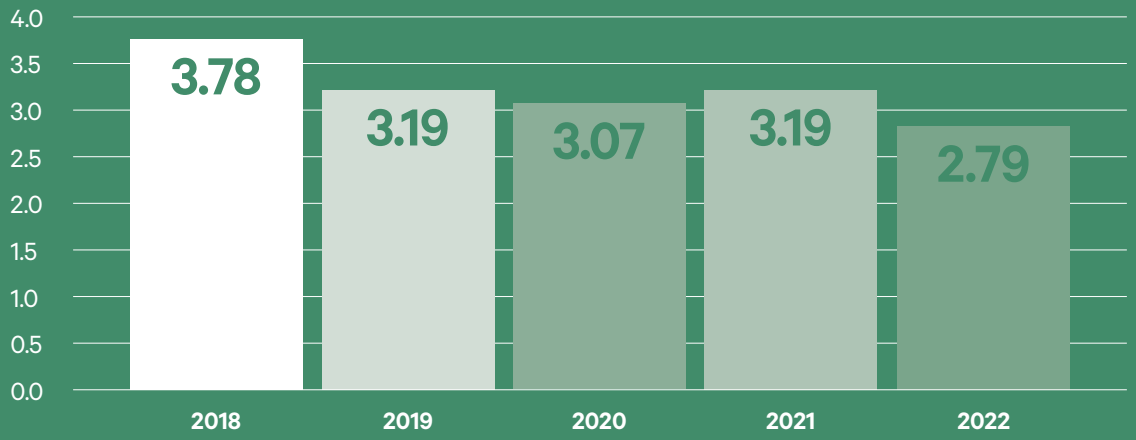
The start of the sustainable transition

Efforts to reduce our carbon footprint began in 2008, when the owner of C.C.JENSEN, Carl Aage Jensen, realised that the link between an increased concentration of CO2 in the atmosphere and global warming was a real problem. He then made the strategic decision that C.C.JENSEN should play an active role in addressing this.

The reason for this commitment is based on the value the company brings to the market – extending the life of oils and machinery, thereby creating value for OEM, owner and environment. This led to the logical conclusion that C.C.JENSEN should start working to reduce CO2e in its own production facilities. This has resulted in a large number of projects, improvements and investments over the past 14 years.

C.C.JENSEN has assessed that the most significant risks of negative impact on the climate are related to energy consumption and thus carbon emissions from C.C.JENSEN, both directly and indirectly.

tCO2e (scope 1+2)/million turnover



Scope 1+2
Energy efficiency

At C.C.JENSEN, we have been working with CO2e reductions internally since 2008. Over the ensuing period, we have gained important knowledge and experience together with relevant sustainability competences. The reduction work in scope 1 and 2 is currently integrated into the organisation. Several different projects are underway to convert heat from natural gas to district heating. We are also working on the continuous replacement of our ventilation systems with more efficient heat recovery systems and demand-controlled ventilation capacity.

Energy efficiency projects 2008–2021

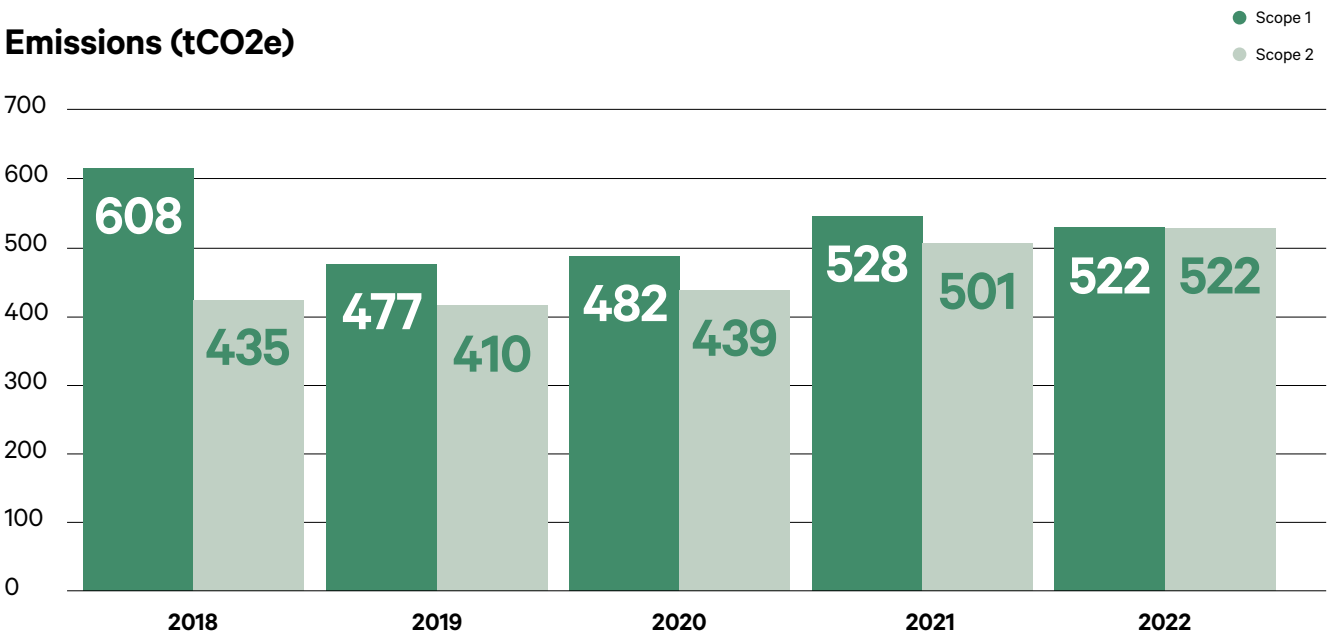
The focus in 2008–2021 was on our energy sources and energy consumption, where we had both the insight and the possibility to implement major changes ourselves. In C.C.JENSEN's CO2 report for 2021, the key message was that carbon emissions were reduced by 5.9% when emissions from passenger transport and CO2e-neutral electricity generation from wind turbines and solar panels were excluded. The reduction in 2021 was primarily due to reduced consumption of natural gas, which is a major source of carbon emissions.

In 2021, electricity consumption, wood pellets and district heating consumption all increased. That year, production volumes increased again, and if we calculate the total consumption in kWh, we can see that we managed to increase the company's energy efficiency, which shows how much energy we use in the production of one kilo of filter insert. With the calculation methods used in the period 2008–2021, this figure was reduced to index 52 in relation to the starting year 2008.

Energy efficiency projects 2022

We implemented several major energy efficiency projects in 2022, including the conversion of natural gas to district heating. We have implemented better and more energy-efficient lighting solutions and replaced old doors and windows in many buildings. The biggest technical improvement project at the end of 2021 concerned the area where we use the most energy. Here, we converted parts of the drying process from steam to heat pumps when we expanded the company's production facilities.

Emissions (tCO2e)



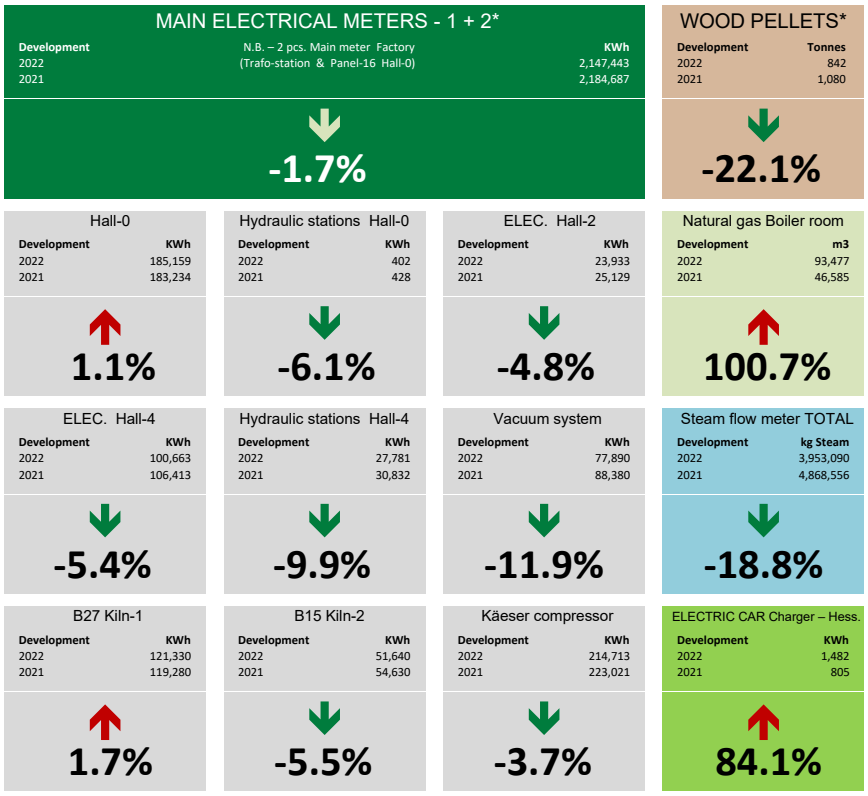
Most significant energy-efficiency projects 2022

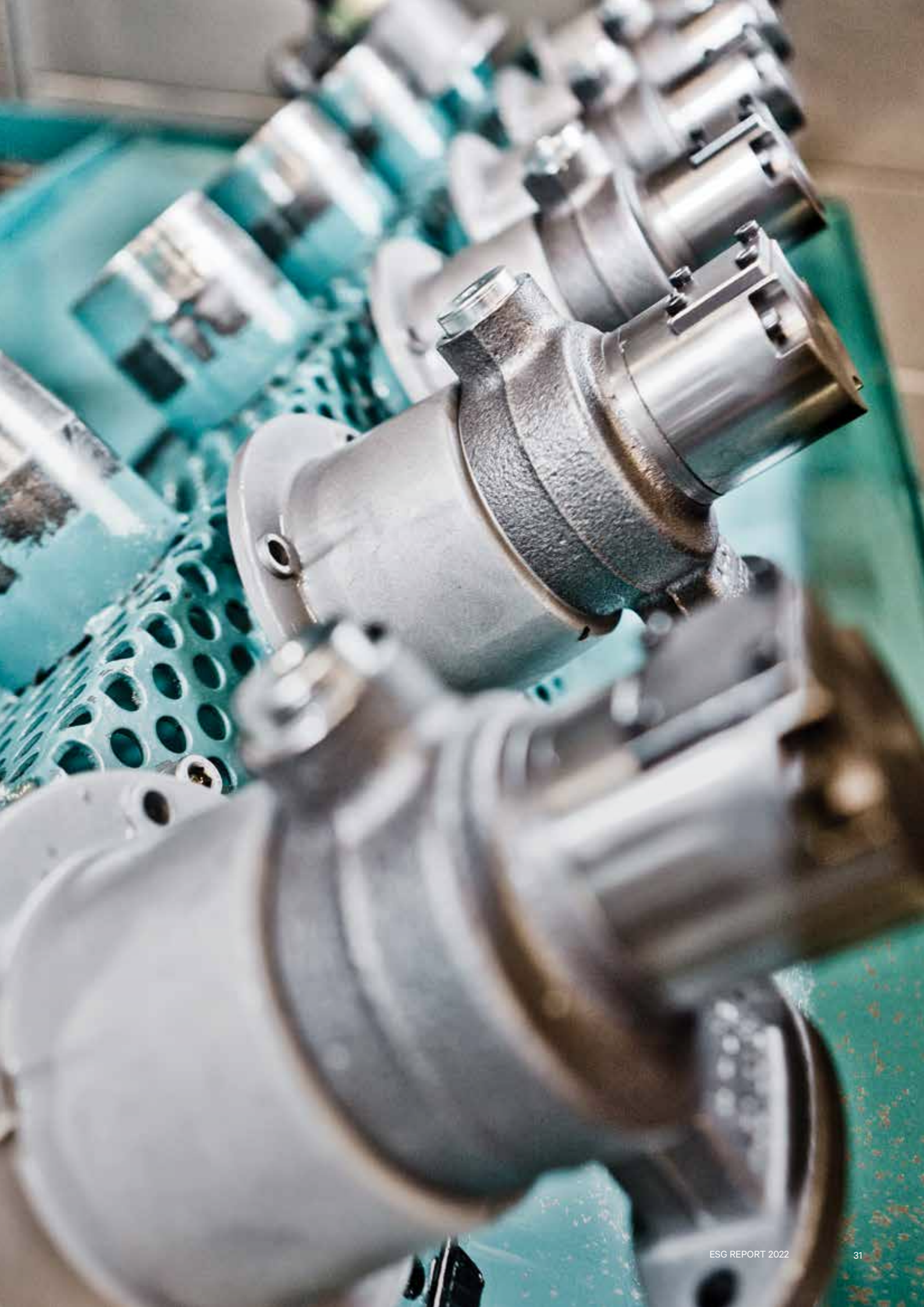
Conversion of natural gas to district heating
Replacement of windows/skylights in production
Replacement of fluorescent tubes with LEDs at several locations in production and at the plant
Replacing more windows and doors for energy efficiency
Replacement of ventilation systems with more efficient heat recovery systems and demand-controlled ventilation capacity

Scope 1+2
Energy monitoring

We monitor C.C.JENSEN's energy consumption for all buildings and production plants on a monthly basis. (See monitoring summary below) Energy consumption from production equipment and buildings is communicated to the person responsible for each area. This allows measures to be taken if necessary.

Energy figures
December 2022





Scope 1+2
Energy sources

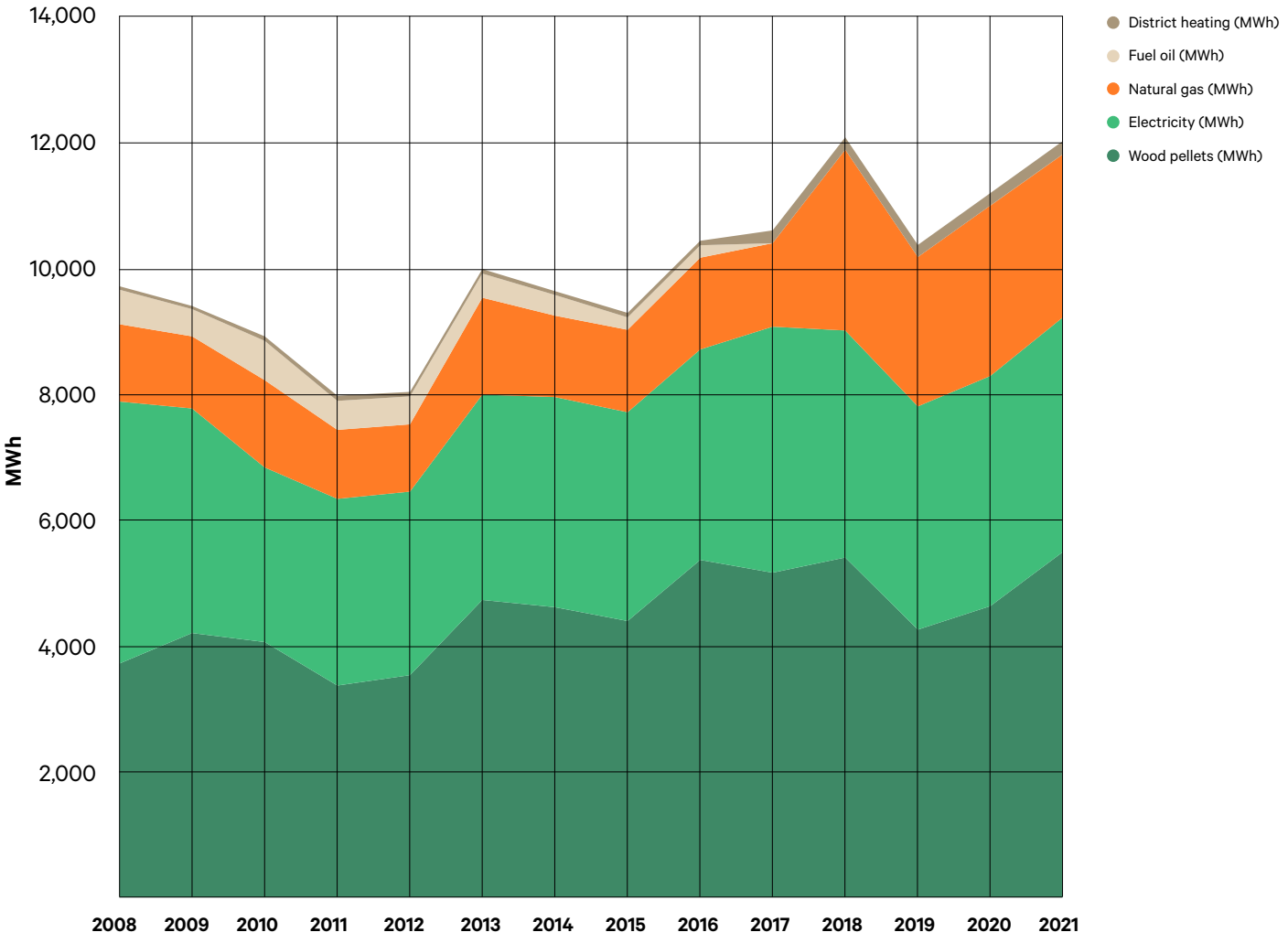
In 2022, C.C.JENSEN A/S had a total energy consumption of 9,965 MWh. Of this, natural gas accounts for approx. 22%, which is assessed as the most problematic energy source in terms of CO2 emissions. See the distribution between energy sources (in scope 1 and 2) in Figure 2.

Historical mapping of energy sources

Figure 1 shows the historical development from 2008–2021. The two subsidiaries C.C.JENSEN Casting A/S and C.C.JENSEN Window A/S are included in these historical figures. What can be seen is the development whereby fuel oil has been replaced by natural gas, which going forward will be replaced by district heating and heat pumps. The purpose of these substitutions has been to reduce greenhouse gas emissions.

Figure 1

Energy sources C.C.JENSEN (incl. C.C.JENSEN Casting A/S and C.C.JENSEN Window A/S)



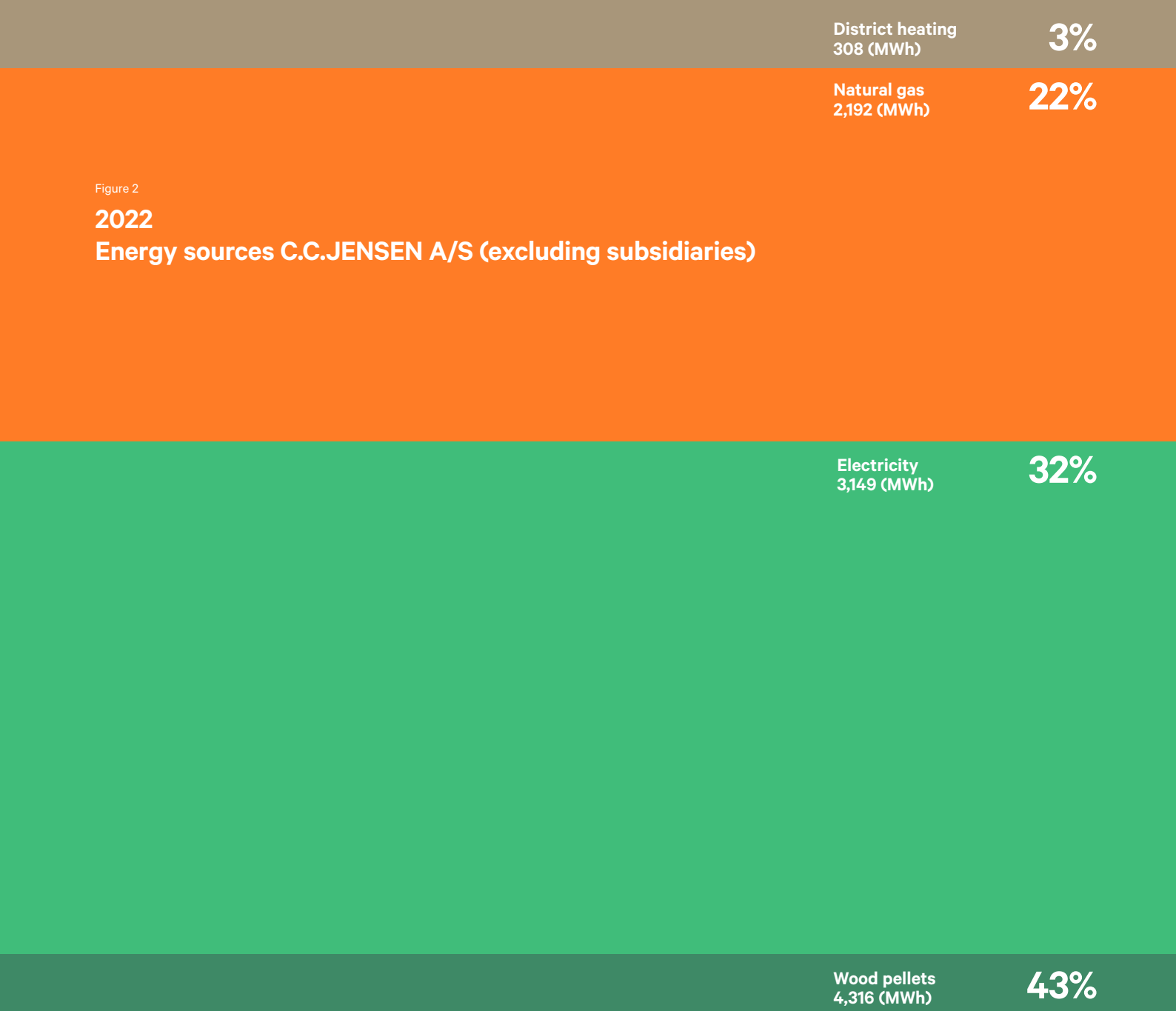


Figure 2

2022
Energy sources C.C.JENSEN A/S (excluding subsidiaries)

Scope 3
Introduction

Assessment and inclusion of scope 3

In relation to scope 3, we have only recently made the overall assessment.

An important project is to create the necessary master data on CJC® products and components to calculate emissions in accordance with the GHG protocol. In 2022, we further qualified the process of calculating greenhouse gas emissions and implemented calculations specifically for scope 3. These include greenhouse gas emissions from the company's supply chain as well as from our products in operation. These calculation methods will be extended to cover the entire C.C.JENSEN Group including subsidiaries and will be finalised in the 2023 financial statements.

Targets for future greenhouse gas reductions will be set in 2024.

We must work on prioritising the various focus areas, but it is immediately clear that operating our products accounts for a very significant segment of the company's scope 3 emissions. Nevertheless, we need to conduct a thorough life cycle assessment of all relevant C.C.JENSEN products to assess and identify areas with the greatest potential to make CJC® products more sustainable. We will thus be placing particular focus on the energy consumption of our products going forward. We need to draw up a strategy to reduce the energy consumption of those products where it is highest.

Internal training and education in scope 3

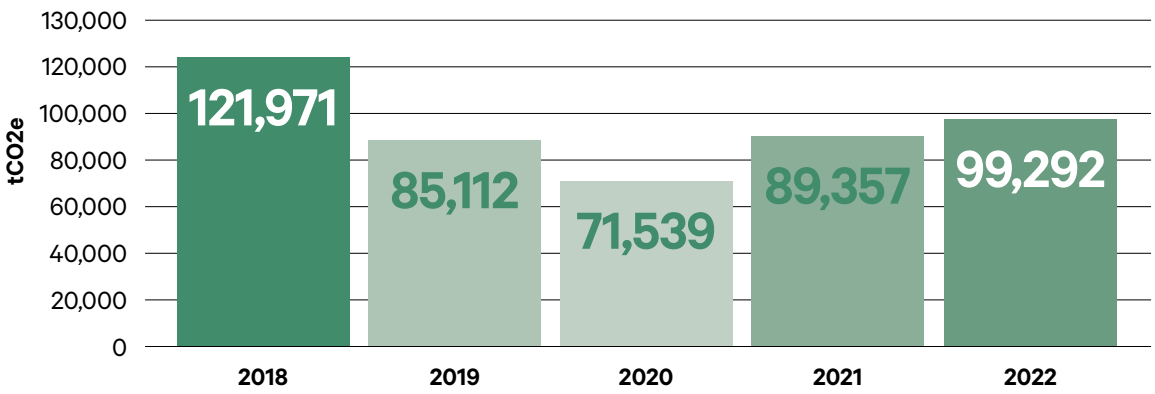
C.C.JENSEN currently has a solid skill set within scope 1 and scope 2 carbon reduction, as this is where our focus has been up to now. Scope 3 activities will therefore be the main area for future training and education of our employees. Scope 3 activities will involve most of the departments in the company, as they cover both upstream and downstream activities.

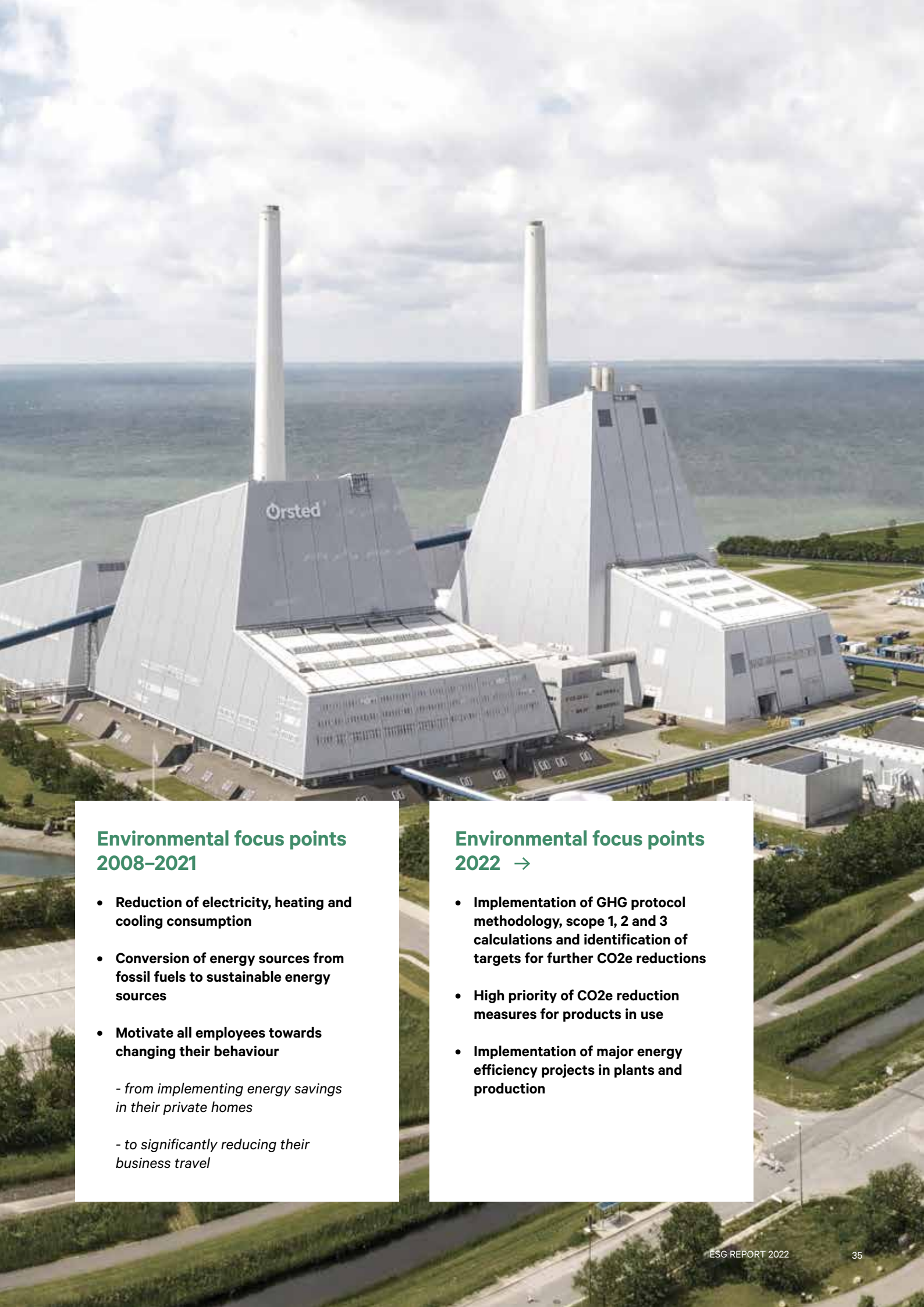
In the company's upstream activities, we need to develop procurement strategies and close partnerships with our suppliers. In our downstream activities, we need to continue to work closely with customers and create clear communication related to their environmental benefits when they buy and use our products.

Technology and product development are essential, which is why the Engineering Department is also an important internal player in scope 3 activities, as it works with product requirements and defines the performance and function of the products. It is thus heavily involved in both upstream and downstream activities. New sustainability efforts will mean a push towards more creative engineering in regard to ecodesign and circularity.

Finally, Production and other internal departments will be affected, as new sustainability initiatives will create the need for adapted production facilities to implement updated product design and material handling.

Scope 3





Environmental focus points 2008–2021

- **Reduction of electricity, heating and cooling consumption**
- **Conversion of energy sources from fossil fuels to sustainable energy sources**
- **Motivate all employees towards changing their behaviour**

  - from implementing energy savings in their private homes

  - to significantly reducing their business travel

Environmental focus points 2022 →

- **Implementation of GHG protocol methodology, scope 1, 2 and 3 calculations and identification of targets for further CO2e reductions**
- **High priority of CO2e reduction measures for products in use**
- **Implementation of major energy efficiency projects in plants and production**

Scope 3
Energy reduction

Case: Replacement of electric motors from IE to IE3

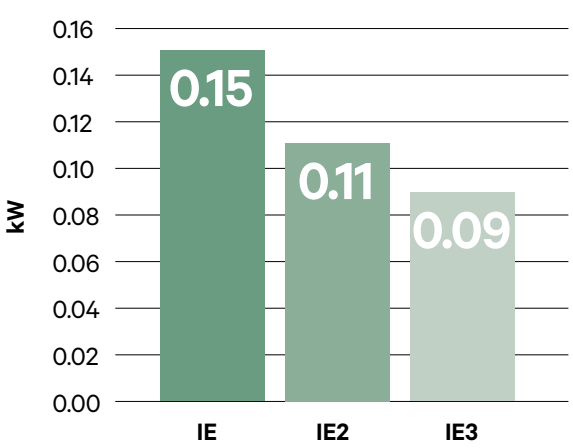
As can be seen from the GHG report, electricity consumption from our products accounts for a large proportion of the total scope 3. In 2020, a major project was therefore launched to analyse how we could reduce this footprint.

The project group examined rules, legislation and market opportunities during the course of the project. Going forward, we were faced with the need to use IEC2 motors in CJC® products, as the International Electrotechnical Commission (IEC) had determined that motors in the range 0.12-0.75 kW should be at least class IE2 from 1 July 2021. However, we decided to go beyond the legislation and implemented IEC3 motors to ensure the most energy-efficient motors possible.

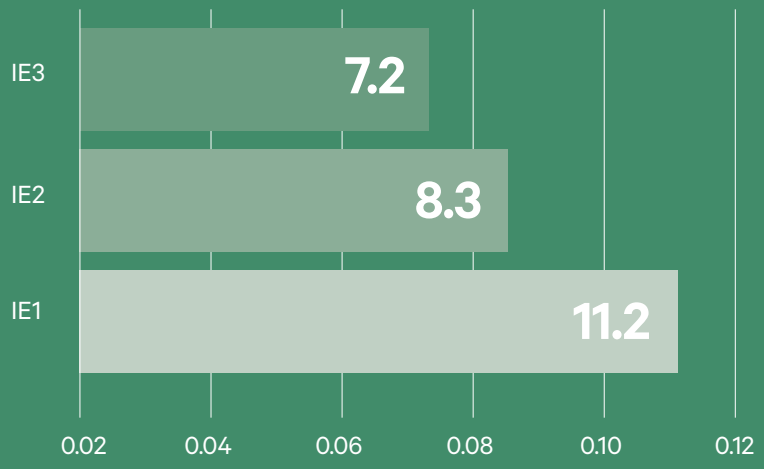
Replacement of electric motors from IE to IE3

A large proportion of the electric motors installed in CJC® products are in the range 0.12-0.75 kW, and although the individual motor has a low power consumption, the large number of motors results in a high total energy consumption. As can be seen from the figure 'Motor 0.18 kW power consumption', there is quite a big difference in power consumption and thus energy consumption for these small motors.

Motor: 0.18 kW
Power consumption at 25% load



Annual total energy consumption (GWh/year)



The figure 'Power consumption corresponding to products sold' shows the difference between the three motor types with a power consumption corresponding to products sold in 2022.

Energy consumption corresponding to products sold

Type of motor	Annual power consumption GWh/year	Reduction in power consumption GWh/year	Power consumption – index
IE	11.2	0	100
IE2	8.3	3.0	74
IE3	7.2	4.0	64

In other words, an annual saving of approx. 1 GWh by choosing IE3 instead of IE2, or a total of approx. 20 GWh over the expected service life of our products of 20 years.

In connection with the GHG report, the annual consumption is multiplied by the service life when calculating 'Use of Products' in scope 3

The total energy procurement for C.C.JENSEN A/S was approx. 10 GWh in 2022, where electricity accounted for approx. 3.1 GWh. In other words, over one year, IE3 small motors delivered to the customer in 2022 still consumed more than twice the amount of electricity that we purchased for C.C.JENSEN A/S that same year.

Conclusion

In 2022 – even after the transition to IE3 motors – these motors still account for 50% of the total power consumption of the products sold. When installed in typical operation on a CJC® Filter, these IE3 motors are 36% more efficient than IE motors. If IE2 motors had been chosen, the efficiency improvement would have only been 26%. This shows that the voluntary upgrade to a more energy-efficient motor than required by law is a very significant step. This is despite the fact that there is still great potential for efficiency improvements in this area.

Hydraulic power

The pumps on the small filters are atypical, as they have a relatively high friction at cold start compared to the pumps on C.C.JENSEN's larger filters. When the pump is in normal operation, the hydraulic power (flow x pressure drop) is around 7W for a PV18 pump (120 l/h) with a 0.18 kW IE3 motor, which consumes 90W at this operating condition.

This is a low efficiency, but the classic alternatives are worse. For example, a bypass solution from a hydraulic system – i.e. a system where the pressure is throttled down from 200 bar to 2 bar – has a power loss of around 660W. In other words, a bypass solution will use around seven times more energy than an offline pump solution.

Scope 3
Energy reduction

Case: Replacement of electric motors from IE to IE3
Example – GHG/CO2e footprint on an HDU 27/27 PV filter

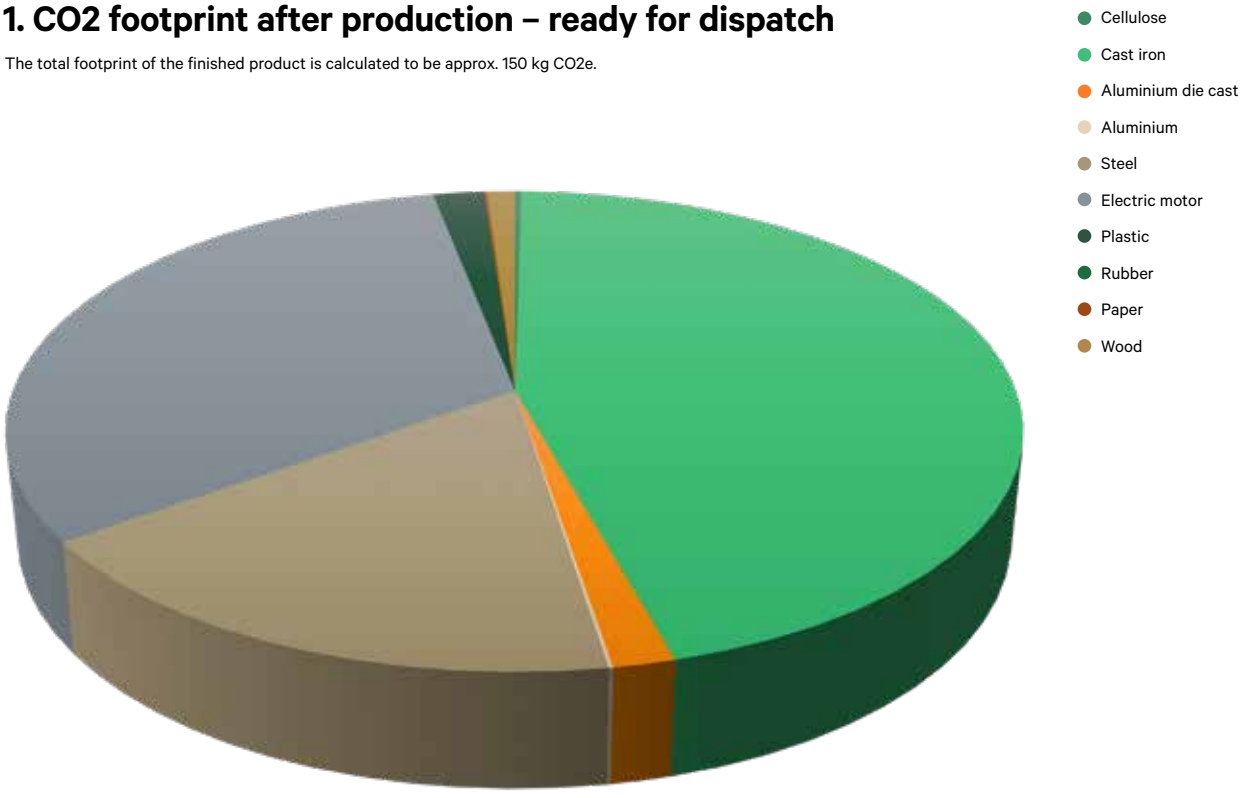
We have used a simplified version of the LCA methodology to estimate the GHG footprint of a typical CJC® Filter. We have used the same values for CO2e emissions as we used in the GHG report for 2022. The filter is supplied with electricity from the European grid, has had its insert changed annually and has had the electric motor replaced every 5 years (which is the theoretical service life of the electric motor, although experience shows that the electric motors last longer).

The basic LCA only includes materials and electricity consumed and is therefore not exhaustive.

Over a 20-year lifespan, emissions from electricity thus account for 90% of the total CO2e emissions for the product. This is even if the calculation has been made for an IE3 motor.
This reconciles nicely with the GHG report, which shows that approx. 85% of the total emissions come from electricity consumption from CJC® products in operation.

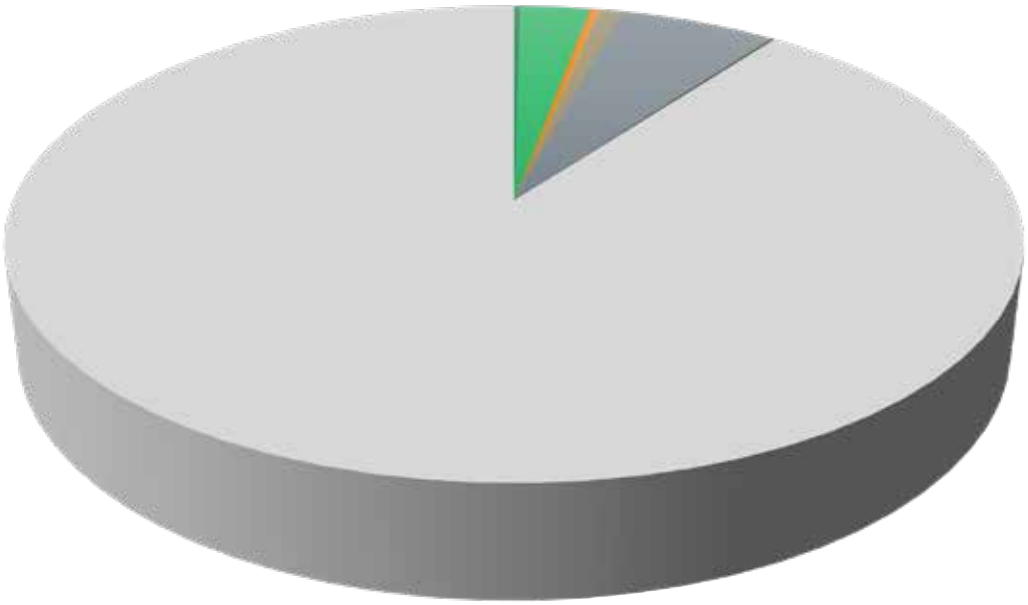
1. CO2 footprint after production – ready for dispatch

The total footprint of the finished product is calculated to be approx. 150 kg CO2e.



2. CO2 footprint after 20 years of operation – including electricity consumption

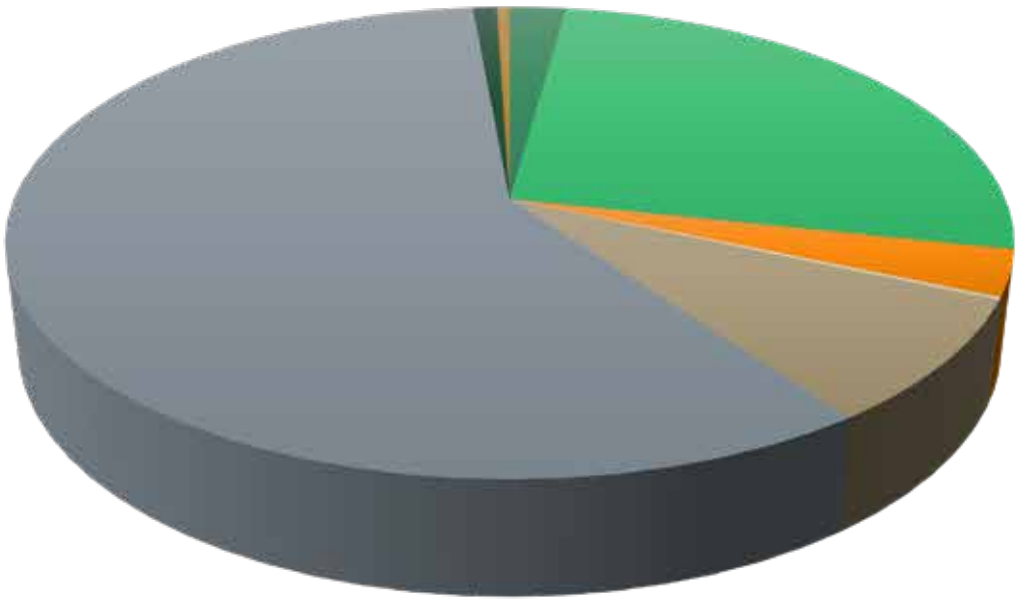
The total footprint after 20 years of operation, including emissions from electricity for the operation of the pump, is calculated to be approx. 3,200 kg CO2e.



- Cellulose
- Cast iron
- Aluminium die cast
- Aluminium
- Steel
- Electric motor
- Plastic
- Rubber
- Paper
- Wood
- Electricity

3. CO2 footprint after 20 years of operation – excluding electricity consumption

The total footprint after 20 years of operation, excluding emissions from electricity consumption, is calculated to be approx. 330 kg CO2e.



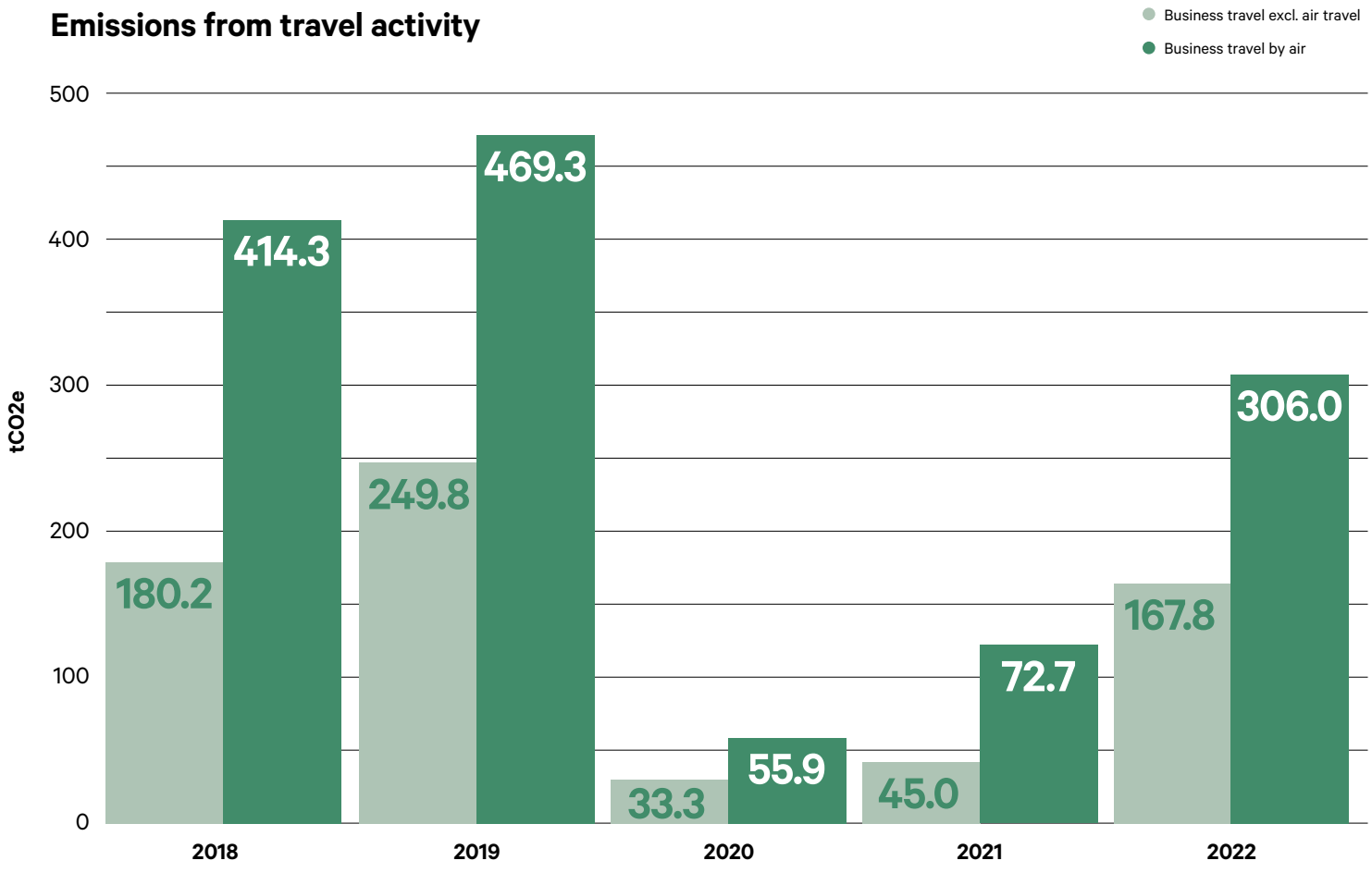
- Cellulose
- Cast iron
- Aluminium die cast
- Aluminium
- Steel
- Electric motors
- Plastic
- Rubber
- Paper
- Wood

Scope 3
Travel activity

Emissions from passenger transport have increased compared to the pandemic years 2020 and 2021. However, overall travel activity has decreased compared to the years before COVID.

In 2021, C.C.JENSEN implemented a policy that all company cars must be electric.

Emissions from travel activity



Scope 3

Customer Case – Filtration of engine lubrication oil

- CO2e reductions
- Reduction of environmental impact
- No sludge production
- Improved working environment

A leading Danish shipping and logistics company actively participates in solving tomorrow's energy challenges. This is done by rethinking how to keep the engine lubrication oil clean and functional at a significantly lower energy requirement.

Previously, the company used a high-energy centrifugal separator to maintain its engine lubrication oil. For a centrifugal separator to remove contaminants from the oil, the oil temperature must be around 95°C, which means that additional preheating is required and thus more fuel is consumed, creating more CO2e.

By replacing the centrifugal separators and retrofitting with a CJC® Engine Lube Oil Filter, the company has been able to lower the environmental footprint while maintaining the purity of the engine's lube oil, satisfying both OEMs and oil laboratories.

Estimated reductions on a typical ship

Reduction in lubrication oil consumption

30%

≈ 7 t lubrication oil

↓

Reduction in fuel consumption

98%

≈ 65 h MDO

↓

Reduced amount of sludge

65%

≈ 32 t sludge

↓

Reduction in CO2e emissions

98%

≈ 202 tCO2e

↓

Due to savings demonstrated on several ships, the company has decided to replace all centrifugal separators with CJC®, providing an estimated annual CO2e savings across the fleet of up to +6,600 tCO2e.

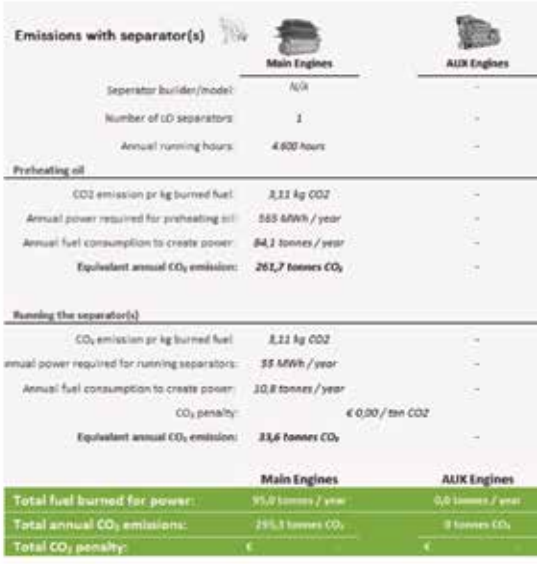
Scope 3
How do we use this in the market now?

This is an example of our calculation tool for C.C.JENSEN's customers in the marine segment.

The tool shows a reduction of energy consumption and waste by switching to CJC® Offline Filtration. This allows the customer to calculate, among other things, the economic benefit of replacing a centrifuge with a CJC® Offline Filter when the engine oil is cleaned on a ship. Another result of this tool is to calculate the savings on CO2e due to less energy consumption from the use of our solution together with a reduction of waste in the form of sludge.

The tool has been made transparent so that customers can enter the values of their actual systems themselves. The calculation methods are also visible and can be validated by the customer. With this approach, we hope that the customer will be able to evaluate CJC® Offline Filtration against alternative technologies.

ROI (return-of-investment) tool – CO2e reduction



Status
2022 targets and future targets

Since 2008, we have focused in particular on reducing the company's carbon emissions from our production and plants in Denmark.

→ Energy conversions – ongoing

Most of the activities so far have been about the conversion from fossil fuels to electricity or district heating. We look forward to expanding C.C.JENSEN's production capacity for filter inserts. So as not to increase the use of biomass, we are gradually converting the drying process to heat pumps. This technology shift also improves thermal efficiency. Future work will consist of optimising energy efficiency and reducing greenhouse gas emissions.

We will use the baseline created using the GHG reporting to prioritise our resources. We expect our scope 3 emissions to dominate the total amount of emissions, which is why most of our resources will be put into scope 3 emissions of our components and the operation of CJC® products.

There is no doubt that the type and consumption of energy in C.C.JENSEN's filter insert production will be a major focus in the future. Furthermore, the source of electrical energy will be a focus point, as we expect an increase in electricity consumption going forward.

→ Heat recovery

We are gradually implementing heat recovery in most of our ventilation systems. Heat recovery is where heat is exchanged between the extracted air and fresh air from outside.

Next year, in 2023, we will install heat recovery plants in our production and test centre.

→ Making the right choices

We believe that biomass is a limited resource, which is why we strive to reduce the consumption of biomass as an energy source. This is done either by electrifying heating processes or by using district heating, if this is available and feasible.

We currently use wood pellets to make steam for heating processes in production. In connection with the expansion of production capacity, we have decided to use electricity instead in order to avoid burning additional biomass. This is despite the fact that continuing to use wood pellets would actually result in a lower CO2e total for C.C.JENSEN calculated according to the GHG protocol.

→ Environment and resources

Water is an important resource and it is important for C.C.JENSEN to reduce the amount of waste water in production. That's why we clean and reuse as much water as possible. We strive to reduce the consumption of mains water in relevant productions through the collection of rainwater.

In 2022, the relative share of water consumption in production in relation to the volume produced remained on a par with previous years. Going forward, we will continue to work on reducing carbon emissions and water consumption.

Documentation, data and communication

→ Sustainability documentation

A future task will be to prepare environmental documentation and training material for customers. This information must also comply with future legislation on the prevention of greenwashing.

Preparing this environmental documentation is a huge task, but it is an essential one if we are to create maximum value from C.C.JENSEN's investment in sustainability. To succeed, we will map a clear understanding of customer needs.

→ Communication and competitive differentiation

It is important for us to be able to communicate factually the status and progress of sustainability topics to customers, authorities, employees and society. We wish to be a key player for our customers in meeting their high ambitions to reduce their environmental impact. Future employees should also see C.C.JENSEN as an ambitious company striving to reduce the environmental impact of its products and services.

→ Master data

The company's existing master data has been created to meet the needs of procurement, pricing and production planning. We are now adding a new dimension to the data, which is environmental parameters.

Some questions must therefore be answered, for example; to what extent should environmental data be included in the existing system? And how does our existing system support this?

→ Suppliers

C.C.JENSEN has started sustainability initiatives in relation to purchased materials and components and wishes to increase its efforts in the future.

Moving forward, C.C.JENSEN will increase its procurement efforts based on conclusions from the ESG report and LCA studies. We will explore more environmental partnerships with suppliers to address topics such as recycled materials, sustainable material extraction and the energy efficiency of components.

Emissions 2022

As can be seen from the accounts, the **use of products** is the most significant contributor overall. Of the total of approx. 100,000 tCO2e, use of products in scope 3 accounts for just over 85%. This is primarily due to the electricity consumption of the products. Electricity consumption is partly from the filters' pumps and partly from the preheating of oil. The emissions are calculated over the products' full expected lifetime, corresponding to 20 years. Due to a lack of data, the current product configuration has been used for all the years – i.e. the change to IE3 motors mentioned in the IE3 electric motor case has been included in all years, which underestimates emissions by 25–30% in 2018–2021.

In 2022, the energy consumption of our products is estimated to be just over 14 GWh. These products have been installed geographically across most of the world. The GHG footprint that the products contribute to in the accounting therefore depends on the individual country's emission factor for electricity, as well as the emissions created via transport to the end customer. This also means that the variations from year to year will be affected by deliveries of high-capacity plants to countries that have a high emission factor for their electricity grids.

The second highest contribution comes from **purchased goods and services**, which, with 7,500 tCO2e, account for just over 7% of the total emissions. These emissions originate primarily from purchased components for the manufacture of filter units.

The third largest contribution is **capital goods**, which originate from investments in buildings and machinery and have primarily arisen in connection with the expansion of production capacity. At 4,100 tCO2e, this accounts for just over 4% of the total emissions.

CO2e emissions for C.C.JENSEN A/S GHG Tally

Scope	Category
1	Scope 1
2	Scope 2 (location-based)
	Scope 1+2 total
3	Purchased goods and services
3	Capital goods
3	Sales freight
3	Purchase freight
3	Business travel
3	Employee commuting
3	Waste generated in operations
3	Fuel and energy-related activities not covered by scope 1 or scope 2
3	Use of products
3	End-of-life treatment
	Scope 3 total
	Scope 1, 2, 3 total

2018	2019	2020	2021	2022	Share of total 2022
tCO2e	tCO2e	tCO2e	tCO2e	tCO2e	%
608	477	482	528	522	0.5%
435	410	439	501	522	0.5%
1,043	**887**	**921**	**1,029**	**1,044**	**1.0%**
6,253	6,009	6,316	6,679	7,554	7.5%
1,032	516	527	1,781	4,149	4.1%
916	866	563	617	885	0.9%
181	177	176	188	171	0.2%
594	719	89	118	474	0.5%
315	291	276	310	291	0.3%
4	4	6	6	8	0.0%
44	42	36	39	37	0.0%
112,606	76,460	63,525	79,592	85,695	85.4%
26	27	26	28	29	0.0%
121,971	**85,112**	**71,539**	**89,357**	**99,292**	**99.0%**
123,014	**85,999**	**72,460**	**90,387**	**100,337**	**100.0%**

Social

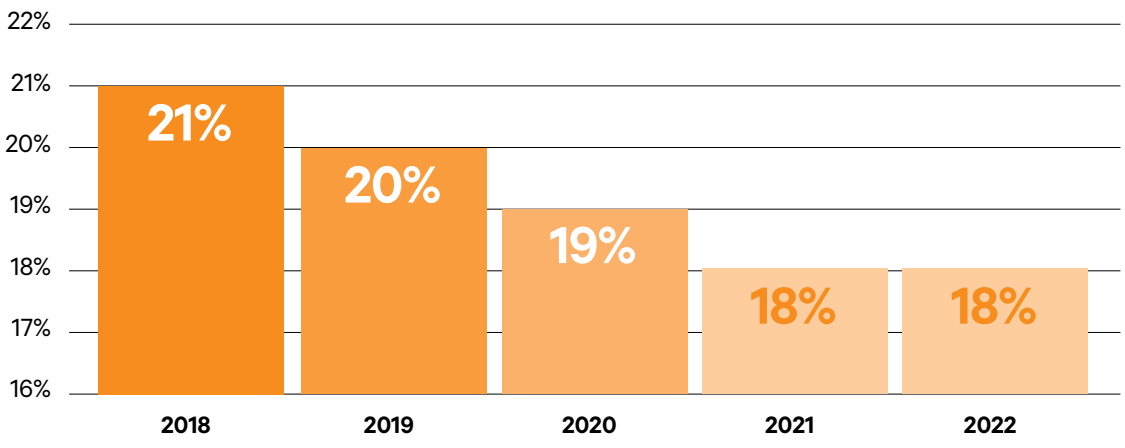
Summary

2022

- Number of employees: total 212 (FTE) in A/S
- Percentage of female employees: 18%
- Average length of employment: approx. 13 years
- Pension 15% (salaried employees)

	2018	2019	2020	2021	2022
Full-time employees	207	203	199	205	212
Gender diversity (proportion of females)	21%	20%	19%	18%	18%
Gender diversity for other management levels	84%	80%	86%	85%	85%
Gender pay gap (men/women)	1.25	1.05	1.16	1.18	1.31
Employee turnover rate	14.5%	13.1%	7.1%	4.0%	3.8%
Sickness absences	3.0%	3.8%	3.0%	2.9%	4.5%
Seniority 12.38	12.38	13.39	13.37	13.11	12.73

Proportion of females – employees



Senior employee scheme

At C.C.JENSEN, we offer a senior employee scheme for our employees who are about to retire in the near future. Many employees feel that this is a good way to leave the labour market at a more gradual pace.

This scheme also benefits the company, as it allows us to retain our experienced and skilled employees and benefit from their valuable knowledge and extensive experience.

Education and training

C.C.JENSEN places great importance on creating good working conditions and ensuring the development of its employees.

We believe that the essential value of a company is created by its employees. C.C.JENSEN's most significant societal risks related to social and employee conditions are thus assessed to be a shortage of well-trained employees.

We believe in lifelong learning, which means that education is a big part of our employees' lives and does not end just because you have finished school.

The company aims to have the best trained personnel in the oil filtration industry.
To achieve this, we offer our employees internal training and development opportunities.

In 2022, we held 136 full training days with 35 employees attending. C.C.JENSEN continues to future-proof the knowledge of its employees through further training and education.

Our goal is to have the most knowledgeable personnel in oil filtration. To achieve this, we offer our employees introduction courses.

Introduction courses

- Basic product and application courses
- Advanced application-specific courses
- Advanced oil and analysis-specific courses
- Tailored courses for specific groups of employees or customers
- Annual appraisal interviews to evaluate individual performance and potential
- Access to 'CJC Filter Knowledge', one of the best knowledge-sharing databases in the industry

At C.C.JENSEN we believe in 'Clean Oil – Bright Ideas' and we know that some of these bright ideas will come from YOU!

Rewarding good ideas

At C.C.JENSEN, the best 'good ideas' are selected twice a year. This applies in the following areas:

- Production technology
- Health and safety
- Energy and CO2e

All employees, both salaried and hourly-paid, are encouraged to come up with good ideas to promote and improve production, health and safety.

Employees and employee culture

Through more than 70 years of growth into a global organisation, today C.C.JENSEN has its own unique employee culture – the CCJ culture. This culture is based on collaboration across the global organisation, the willingness to share knowledge, trust in each other, inclusion, social events, team building and, of course, traditions.

We believe that our employees are a key asset for the company and will continue to ensure high performance and motivation by creating the right challenges and ensuring a fair work-life balance.

We support the local community through sponsorships and by investing in activities that support local businesses. This is done with the aim of ensuring that we have a good local recruitment basis and a strong reputation within local industries and educational institutions. Again, this ensures that we have access to the necessary knowledge and skilled employees.

In the interviews in this section, you will meet three of our dedicated employees who share their own personal journeys into or within C.C.JENSEN. Jasmin, whose professional life has changed, Morten, who focuses on his good colleagues, and Thomas, who is motivated by the independent working conditions in the company.

Jasmin Osther
Industrial Technician Trainee,
Service Department C.C.JENSEN

"Previously a hairdresser for 17 years, now working as an industrial technician trainee specialising in programming CNC cutting machines. The change to technician seemed to be the right decision and I am very proud to work with CCJ. We work closely together and the jargon is great with a lot of fun. In regard to the working environment, safety is paramount, including the use of protective equipment, lifting cranes etc. What's more, CCJ offers its employees a good pension, massage sessions, psychological support, dyslexia support and so on. I am very happy about my job change."

Morten Ulrich
Skilled worker,
Filter Unit Production C.C.JENSEN

"After around 38 years in the company, I am still inspired, not only by the camaraderie but also by the growth of the business, as we are now one of the largest companies in the town. With this growth comes the development of new oil filter technologies, which both inspire me and mean that my job is never just routine. Another thing I find inspiring is the green aspect of the technologies we deliver to our customers. Since 1953, we have supplied clean oil to production systems worldwide, which is now fully in line with the prevailing need and focus on environmental issues. These are the factors that make it so satisfying for me to work here."

Thomas Jensen
Skilled worker,
Filter Unit Production C.C.JENSEN

"What I particularly like is the variety in my job as a skilled worker, where I work with special orders. Also the collaboration with my colleagues, as it often requires more hands, and we are fantastic when we work together like this. The independent working conditions create enthusiasm and foster a high level of activity. When you work in an international company, cross-border and cross-departmental dialogue is not only necessary but also very exciting. When you have engineering trainees, new machining ideas often come up, which is sometimes useful and can actually be extremely inspiring."

Gender diversity in management

Board of Directors

The Board of Directors is composed of four members elected by the Annual General Meeting, all of whom are currently men. If there are new elections among the members of the Board of Directors elected by the Annual General Meeting before the end of 2023, we will ask shareholders to consider that both men and women should be nominated for the Board of Directors and point out that legislation requires a target figure. The target figure is set at one woman on the Board of Directors in 2025. There were no new elections in the 2022 financial year, which is why the target figure has not yet been reached.

Other management

The current management consists of a total of 26 people at all levels, of whom female managers make up 15%. The corresponding figures for last year were at the same level. Other management consists of managers with personnel responsibility. The company believes that diversity among employees, including gender equality, contributes positively to the working environment and strengthens the company's performance and competitiveness.

Our policy is to ensure an increase in the proportion of the under-represented gender in the company's management. At C.C.JENSEN, women are the under-represented gender. The purpose is to ensure that all employees, regardless of gender, have equal opportunities to focus on improving their qualifications and management experience. At C.C.JENSEN, we work to increase the number of female managers at the company's other management levels by ensuring that all those with management talent have equal opportunities for employee interviews, management development and professional mentoring.

We actively encourage both genders to apply generally for vacancies, as we ensure a working climate that allows both genders to work here. While we would like to see positions filled by women, it is the applicant's qualifications that ultimately determine who is the best fit.

Health and safety

The working environment organisation

An internal working environment organisation has been established in accordance with the rules of the Working Environment Act for cooperation on health and safety. The working environment groups administer the workplace assessments, which are continuously updated in connection with the quarterly departmental reviews at the working environment group meetings.

All employees must participate in the working environment tasks and have a duty to contribute to ensuring proper working conditions in terms of health and safety. This means, among other things, that prescribed safety measures and safety equipment must function as intended and be used in accordance with applicable regulations.

Health and safety

Enabling and ensuring physical as well as mental well-being for all employees is of great importance at C.C.JENSEN. All employees must feel safe at the workplace, and if an employee needs assistance, help must be available within a short time.

In addition to the statutory occupational health requirements, we offer all employees special insurance through a favourable scheme upon their employment. This includes health insurance, dental insurance and critical illness insurance.

All employees have automatic access to a permanently affiliated psychotherapist. The working environment organisation and management at C.C.JENSEN have adopted several internal rules concerning health and safety. These are described in the 'Employee Guidelines on Safety, Environment and Working Environment at C.C.JENSEN' and must be followed by all employees. Reference is also made to C.C.JENSEN's Code of Conduct and Quality Management System.

Fire and first aid corps

C.C.JENSEN has its own internal first aid and fire corps covering all C.C.JENSEN A/S departments. All employees in the corps are updated on first aid, including the use of defibrillators and fire extinguishing once a year by an experienced external instructor. All departments have an overview of who is in the corps in the relevant department. Defibrillators are located in all departments.

The corps consists of representatives from all departments and all shifts in departments where work is carried out in multiple shifts, so that all departments are covered.

Human rights

C.C.JENSEN recognises its social responsibility not only towards its own employees, but also towards the employees of its suppliers. We support and respect internationally recognised human rights as formulated in the UN Declaration of Human Rights and the core conventions of the International Labour Organization (ILO).

C.C.JENSEN's main risks of human rights violations are found in our supply chain, especially in relation to conflict minerals. To minimise the risks related to conflict minerals, we have established a policy in this area and initiated a due diligence process to ensure that the raw materials are extracted legally and ethically.

Due diligence efforts must also create transparency and peace of mind for C.C.JENSEN's customers. In addition, we also operate with a Code of Conduct, which all suppliers are asked to sign and comply with.

C.C.JENSEN did not identify any human rights violations in the company's value chain in 2022. Going forward, we will continue to work on the issue of conflict minerals through due diligence processes and do not expect to identify breaches of this.

Local investments
Support for the local marine industry in Svendborg

C.C.JENSEN's owner Carl Aage Jensen wants to invest in his local area, which he is proud of. He wants to help secure maritime industry and knowledge and has therefore invested in Svendborg Maritime Business Park. He has gathered several private investors, who together have helped to establish the new business park at Svendborg Harbour.

The business park houses companies with maritime affiliations and entrepreneurs. The premises are also in close cooperation with the neighbouring building, SIMAC, which trains the most skilled navigators and engineers in Denmark. The plan is for the business park to live in symbiosis with the educational institution.

"We want to participate in global life."

Carl Aage Jensen
Owner, C.C.JENSEN

C.C.JENSEN is one of the sponsors of Svendborg Maritime Business Park, SME

The offices at Svendborg Maritime Business Park. Photo: CW- Arkitekter

Governance

Anti-corruption, whistleblower scheme and data ethics

C.C.JENSEN has a fundamental policy that the company and its suppliers must, as a minimum, comply with applicable laws and regulations in the countries in which the companies operate, as well as follow recognised standards within the industry. The Group also wishes to operate a responsible business with respect for its employees, society and the environment. We regard suppliers as our expanded business and therefore require them to comply with C.C.JENSEN's ethical and sustainable standards, as described in our Code of Conduct.

Anti-corruption

C.C.JENSEN does not tolerate any form of corruption or bribery.

Bribery must not be offered, promised, given, accepted, tolerated, required or deliberately exploited. Reference is also made to C.C.JENSEN's Code of Conduct and Quality Management System.

As C.C.JENSEN works across borders and cultures, there is a risk that our employees, as well as those of our suppliers, are exposed to situations involving corruption and bribery. C.C.JENSEN encourages all employees who may suspect unethical business conduct in the form of bribery or corruption to contact their manager, HR or QHSE manager. No cases of corruption were reported in 2022.

Going forward, C.C.JENSEN will continue to inform newcomers as well as current employees in process management about corruption and bribery.

Data privacy policy

The company collects, generates and uses a large amount of data in its day-to-day operations and delivery of services to our customers and stakeholders in general. Examples of this data can be customer, supplier, employee, contract and product data.

The company works continuously to process and store data in compliance with all ethical and legal rules. It ensures that this is implemented in the internal guidelines and policies and is part of the internal control environment. This includes full compliance with local and international data protection guidelines, including the EU General Data Protection Regulation (GDPR).

Data protection is essential for our work with stakeholder data, so that reliable and secure storage and use of data is always ensured. To support this, ongoing work is being done on cyber security and data security, just as data ethics and security are an important parameter when collaborative relationships are to be established.

The company's work with data ethics is anchored in the company's executive board, which is responsible for implementing the policy in day-to-day operations.

Whistleblower scheme in 2023

Next year, C.C.JENSEN will establish a whistleblower scheme (for all 100% owned companies), which will be implemented in Q4. In the 2023 ESG report, we will elaborate on this topic after the actual launch of the scheme.

Conflict minerals

The Conflict Minerals Regulation requires reporting of the content of minerals originating from countries with problematic labour protections.

We conduct a due diligence on the origin of tin, tantalum, tungsten or gold (3TG materials) in our supply chain and encourage suppliers to source 3TGs responsibly through smelters and refineries that have been confirmed DRC conflict-free.

We require our suppliers to establish their own due diligence program to ensure conflict-free supply chains.

We are committed to helping our customers track these minerals to ease their disclosure obligations under the Dodd-Frank Wall Street Reform and the Consumer Protection Act.

An external partner helps us to obtain the information at supplier or item number level directly from our suppliers, and these must then be reported to our customers at company level.

	2018	2019	2020	2021	2022
Gender diversity on the Board of Directors	100%	100%	100%	100%	100%
Participation in board meetings	100%	97%	91%	97%	94%
Salary difference between the CEO and employees' average salary	5.30	5.46	5.53	5.37	5.45

Partners

In addition to the internal green projects at C.C.JENSEN, we are the initiator and partner of the GO2Green climate initiative, which works to reduce energy consumption and create green jobs in the South Funen region.

Accounting principles and practices

ESG reporting

It is C.C.JENSEN's mission to help reduce carbon emissions to help the global environment. The Group is not obliged to present a green report, but has been running a carbon reduction project since 2008.

From 2008 to 2021 C.C.JENSEN published annual CO2 reports. The accounting principles used in the old report were different from those in this report. Therefore, the figures cannot be directly compared.

The company's annual energy consumption is converted to the year's carbon emissions using the conversion factors specified for the year:

- Electricity: The Danish Energy Agency's environmental declarations
- Natural gas: Conversion factors from GOV.UK
- District heating: Environmental declaration from the district heating supplier

The current report is for C.C.JENSEN A/S only. An initial ESG report will be made for FY 2023 for the entire C.C.JENSEN Group. This report will not follow the recently adopted ESRS standards, but will use standards from FSR - Danish Auditors.

Legislation

Going forward, ESG reporting is regulated by the EU's Corporate Sustainability Reporting Directive (CSRD) and European Sustainability Reporting Standards (ESRS). The purpose of these standards is to enable civil society, consumers and other stakeholders to evaluate companies' sustainability performance as part of the EU Green Deal.

As C.C.JENSEN's turnover exceeds EUR 40 million, we must report according to this directive in 2026 for the financial year 2025.

CSRD reporting extends the scope of disclosure requirements, including topics such as biodiversity, resource consumption, treatment of C.C.JENSEN's and suppliers' workforces, business conduct and more.

The ESG report 2022 for C.C.JENSEN A/S is
published by C.C.JENSEN, December 2023

C.C.JENSEN A/S
Løvholmen 13
5700 Svendborg, Denmark

Tel: +45 6321 2014
Email: ccjensen@cjc.dk
www.cjc.dk

C.C.JENSEN