



# Environment and climate



# ENVIRONMENT AND CLIMATE



We focus on minimising our negative impact on both the global climate and our local environment. This must be done through targeted efforts in energy conservation and responsible consumption of the resources used.

Production of beer and soft drinks as well as malt-based ingredients requires large amounts

of water and energy. Control of supply chain and purchasing procedures has a major impact on the environment, climate and society. Through a responsible supply chain, we must reduce the negative impact. Going forward, there will be a focus on reducing our environmental footprint throughout the value chain (scope 1, 2 and 3 GHG Protocol).

We carry out continuous analysis of our value chain with a focus on reducing CO<sub>2</sub> emissions, energy consumption and water consumption. We work systematically to reduce our use of resources in production and introduce sustainable solutions for our packaging.

## We will achieve our goals by:

- working to identify and reduce risks to the environment on an ongoing basis
- continuously improving our environmental standards
- implementing guidelines for standardised energy management across Harboe
- communicating our zero tolerance towards unnecessary exploitation of the environment and resources

## Our efforts can be divided into three main areas:



### Reduction of CO<sub>2</sub> emissions

Since the 2019/20 financial year, our total CO<sub>2</sub> emissions have decreased by 12%

[Click here and read more on page 17](#)



### Water and wastewater

Reduction of water consumption and wastewater discharge through optimal utilisation of water

[Click here and read more on page 19](#)



### Circular economy

All the products we consume affect the climate and the environment when they are produced and subsequently destroyed

[Click here and read more on page 20](#)





## Reduction of CO<sub>2</sub> emissions

### Energy consumption and CO<sub>2</sub> emissions in production

At Harboe, we continuously work to reduce our CO<sub>2</sub> emissions. Our total CO<sub>2</sub> footprint is decreasing, and this proves that our approach to LEAN production and our operational model is working as intended. Since the 2019/20 financial year, our total CO<sub>2</sub> emissions have decreased by 12%.

Our brewery in Dargun is already ISO 50001 certified. In Skælskør, work has been done in the 2021/22 financial year to launch several activities related to energy management. An energy management team has been set up, which must work to continuously identify and implement activities that will reduce energy consumption. In addition, meters have been installed in production, which through real-time monitoring will make it possible to optimise the use of gas and electricity.

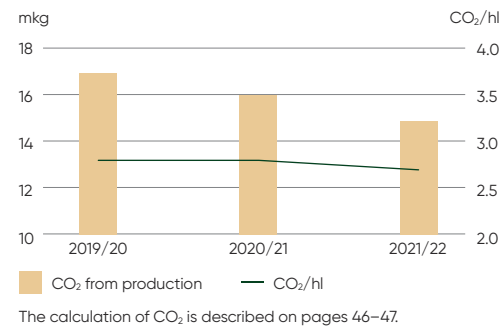
CO<sub>2</sub> emissions per produced hectolitre of product have been reduced by 4% and now stand at 2.7 kg CO<sub>2</sub> per hectolitre of product, among other things due to ongoing changes in our product mix of soft drinks, beer and malt-based ingredients.

### CO<sub>2</sub> emissions in the value chain

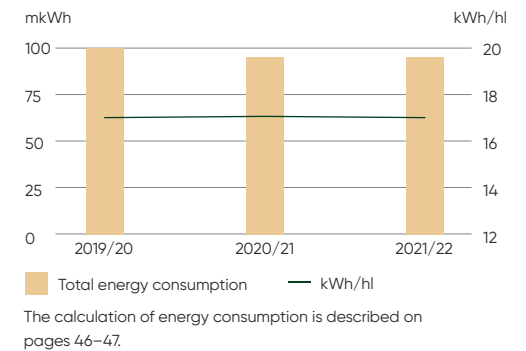
CO<sub>2</sub> emissions from production originate primarily from processes and transport in the form of cold, heat, steam and electricity and fuel. During fermentation, CO<sub>2</sub> is produced, which we reuse at both breweries when brewing beer.

We continuously work to improve our reporting of CO<sub>2</sub> emissions. In addition, we will use the net-zero standard from Science Based Targets as guidance for how, in the 2022/23 financial year, we can set targets and define a timeframe for becoming CO<sub>2</sub> neutral. In the 2022/23 financial year, we must also work on reporting scope 3 emissions according to the GHG Protocol for our primary raw materials and packaging.

### CO<sub>2</sub> emissions



### Energy consumption



## Responsible value chain

We work continuously to reduce our environmental footprint and improve our resource utilisation. Procurement of raw materials and materials is always done with a focus on quality, economy and sustainable solutions.

In the 2021/22 financial year, work has been structured with several optimisation projects, where focus has been on reducing overall resource consumption, including minimising loss of yield during production and changing process methods and materials so that fewer resources and less material per produced unit are used.

Work on optimisation projects will continue in the 2022/23 financial year. This is expected to enable the introduction of more sustainable solutions, where focus will be on using local suppliers and raw materials as well as raw materials that are produced according to sustainable principles, wherever possible.

When developing new products, focus is on the impact of the raw materials on food safety as well as their impact on the environment.

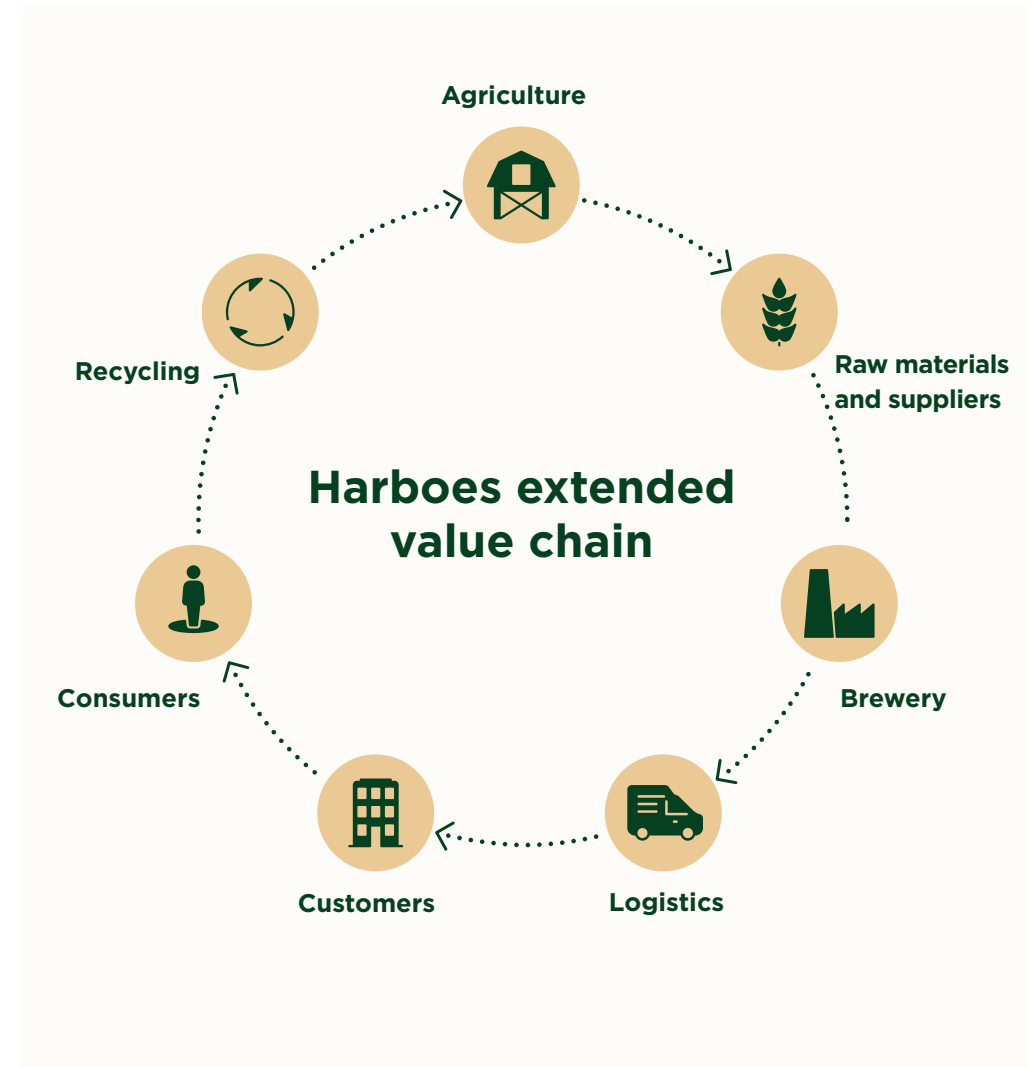
We focus on waste throughout our entire value

chain, and a large amount of our residual products are either processed and refined by the company or sold to external companies, where they are included in other processes.

Analyses have been made from similar industries, and based on these we know that the biggest footprint does not come from our own production but from the rest of our value chain (scope 3 GHG Protocol). And this year, it has been decided to launch the Sustainable Procurement project, where the total environmental footprint in our value chain must be calculated with a focus on our primary raw materials and other materials as well as transport. We will do this in collaboration with our suppliers.



We deliver good and honest products to consumers



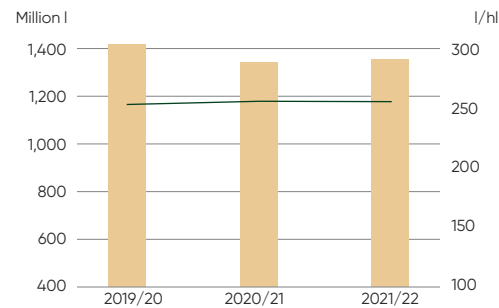


## Water and Wastewater

Production of beer and soft drinks as well as malt extract requires large amounts of water. Harboe continuously works to reduce the amount of water used to produce one hectolitre of finished product. In the 2021/22 financial year, the water consumption for the production of one hectolitre of product remained largely unchanged from the 2019/20 financial year, which is our baseline. Our goal to reduce consumption has not been successful, but with the new water plant in Skælskør and a future measuring concept, a reduction in the total amount of water is expected, as quality and water use will be optimised.

The supply of water comes both from our own water resources and from the municipal waterworks for both of our breweries. None of our production sites are located in water-stressed areas, but with an increased focus on pesticides and other substances that seep into the groundwater, there is a constant focus on water resources and on investments that ensure efficient use, including recycling of water in production.

### Water consumption



■ Total water consumption — water consumption l/hl

The calculation of water consumption is described on pages 46–47.

During the pandemic, our product mix has changed, and the proportion of beer relative to soft drinks has increased. This has had an impact on the development in water consumption. In the production of beer, considerably more water is used per produced hectolitre than for soft drink production. Nevertheless, there has been no increase in the proportion of water used per produced hectolitre of product in the 2021/22 financial year.

We are working towards reducing the amount of wastewater we produce. This reduction must

come through optimal utilisation of our water consumption and optimal utilisation of our raw materials. This must also be done through a focus on cleaning in production, production planning and technological solutions.

The brewery in Skælskør has its own wastewater treatment plant with a large capacity, while the brewery in Dargun discharges to a municipal sewage treatment plant. At both locations, we have collection reservoirs so that the discharge can be adapted to capacity at any given time.





All residual materials from production are sorted and, if possible, recycled in other processes. In the brewing process, yeast slurry and mash are produced as residual streams, and these are used for animal feed and biogas production, respectively. We focus on ensuring that all residual streams are either reused, recycled or used for the production of energy.

Analyses have been carried out for similar industries, which show that the production of packaging contributes the largest environmental footprint in a similar value chain. When new products are launched, it is constantly examined whether it is possible to increase the proportion of recycled materials that meet our packaging policy.

We want to ensure that our packaging complies with the requirements and expectations our stakeholders have in regards of food safety, quality, and sustainability and complies with applicable legislation.



## Circular Economy / Packaging

All the products we consume impact the climate and the environment when they are produced and subsequently destroyed. In a linear economy, we extract resources from the earth, produce, distribute, consume and throw away. In a circular economy, the resources stay in a cycle – there is no waste. Our goal is to recycle all fractions such as cardboard, plastic, glass and metal from production.



In Denmark, Eunomia has just named Dansk Retursystem as Europe's best for plastic bottle depositing. In Denmark, 96% of all plastic bottles sold with a deposit are returned, and this is the highest plastic return percentage in Europe.

### We will achieve this by:

- following customer needs and trends
- making optimal use of our packaging materials (reducing waste)
- increasing the proportion of recycled material in packaging materials
- supporting an effective return system and improving the quality for recycling returnable packaging such as glass bottles



New rules on extended producer responsibility for packaging and clean-up responsibility for single-use plastics are to enter into force by 2025 at the latest. The increased focus on packaging and its impact on the environment means that there are ongoing dialogues with customers about how we can solve this problem together.

Our products are produced and sold in different types of packaging such as glass- and plastic bottles, aluminium cans, kegs (plastic), plastic containers, plastic bottles, metal drums, foils and cartons.

Aluminium cans are the primary form of packaging and are distributed worldwide, while plastic bottles are predominantly sold in countries with well-established deposit and return systems. In countries where there are no return systems for single-use packaging, as a manufacturer we depend on the individual countries' willingness to establish an infrastructure that enables responsible collection and recycling.

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In 2022, the original trays for products under the Harboe brand will be replaced with trays made of 100% recycled material with black, water-based print.

### New trays in 100% recycled material

In addition, the foil used for the 6 pack will be replaced with foil containing 50% recycled material.





## Environment and climate

### Results for 2021/2022

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- An energymangement team was established in Skælskør with the primary purpose of creating systems and processes that will continuously reduce resource and energy consumption
- Installation of measuring equipment for measuring consumption of water, electricity and gas in Skælskør
- Establishing a new water supply in Skælskør in order to ensure the quality of the water supply
- Installment of a new air conditioning system in the brewery in Dargun to reduce overall energy consumption
- Modernisation of lighting in Dargun to reduce overall energy consumption
- Introduce solution with recycled material in both cardboard trays and foils

### Planned activities for 2022/2023

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#### Reduction of CO<sub>2</sub> emissions and energy consumption

- Establish a framework for analysis of water consumption in Skælskør (step 1)
- Replacement of oil heating boiler in Dargun with more environmentally friendly heating source
- System for calculating scope 3 emissions, cf. GHG Protocol
- Launch of a process for determining targets to become CO<sub>2</sub> neutral, cf. the Net-Zero Standard from Science Based Targets

#### Sustainable packaging

- Continuously increase the proportion of recycled or recyclable materials in packaging