

SUSTAINABILITY REPORT 2019



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METHODOLOGY, SCOPE AND ASSURANCE

This report covers the relevant and significant social, ethical and environmental issues for the financial year 1 January to 31 December 2019. It gives our stakeholders an overview of our performance in these areas, complementing our Annual Report, which primarily covers our financial performance.

The first section presents our strategy, along with details of Together Towards ZERO, our global sustainability programme. The second section describes performance against our four Together Towards ZERO ambitions, presenting selected case stories from across the Group. The third section provides additional information under the headings: Responsible business, Economic contribution, and Data and assurance.

This report serves as our annual communication on progress to the UN Global Compact and as the statutory statement on CSR in accordance with section 99a of the Danish Financial Statements Act.

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ABOUT THE CARLSBERG GROUP



40,000+ passionate people.

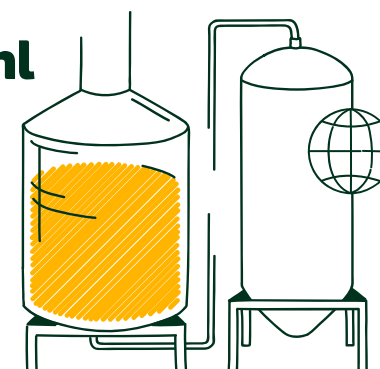


118 mhl

of quality beverages produced at...

82

sites covered in this report.



PARTNERING TOWARDS ZERO



“Nobody can solve the challenges the world faces alone. By working in partnerships, we are able to make faster progress and deliver change that would otherwise not be possible.”

Cees 't Hart,
CEO, Carlsberg Group

**TOGETHER
TOWARDS
ZERO** Carlsberg
Group

Our purpose is brewing for a better today and tomorrow. We brew and sell quality beers that are highly appreciated by our consumers every day and secure our commercial success. And we contribute to a better tomorrow by investing and innovating in our sustainability programme, Together Towards ZERO.

“Together” is a critical word. The success of our business is bound up with our partners, our consumers and the natural world on which we all depend. Nobody can solve the challenges the world faces alone. By working in partnerships, we are able to make faster progress and deliver change that would otherwise not be possible. A belief in the power of partnerships is deeply rooted in our business – stemming from our founder’s belief that bringing together bright minds is the most effective way to improve our business and society.

In 2019, the Carlsberg Group delivered a strong set of results, including healthy top-line growth,

strong margin improvement and strong cash flow. This success enables us to invest in the technology, innovation and efficiency needed to meet the targets of Together Towards ZERO at this critical time for the planet. At COP25 in Madrid, we signed the Business Ambition for 1.5°C Pledge, reconfirming our commitment to fighting climate change and pursuing science-based targets that align our business with the more ambitious level of the Paris Agreement.

We have made steady progress on our ambition of ZERO carbon. In 2019, we reduced relative emissions at our breweries by 13% and increased renewables to 56% of our total electricity use, while five of our sites are now carbon-neutral. We are making good progress with sustainable packaging innovations, including breakthrough technologies such as the Green Fibre Bottle, which reached the next stage of its development when we unveiled two research prototypes. We were delighted to welcome more leading companies and brands as partners in advancing paper bottle technology

and cutting the carbon impact of packaging.

We need to move faster to achieve our ambition of ZERO water waste and our target to halve water usage at our breweries by 2030. In 2019, we reduced relative consumption by 3% to 3.0 hl/hl. To go further, we need to invest in state-of-the-art water-recycling technology. We were pleased to announce that the Fredericia brewery in Denmark will be the first to virtually eliminate water waste, moving from 2.9 hl of water per hl of beer to just 1.4 hl/hl. This project has been made possible through a progressive public-private partnership and will provide learnings for our other breweries around the world.

On our ambition of ZERO irresponsible drinking, we sometimes hear cynicism. But this ambition is crucial for us – it sends a clear signal to consumers, encouraging responsible and moderate consumption. While we cannot ultimately control how people consume our products, we can market our brands responsibly and

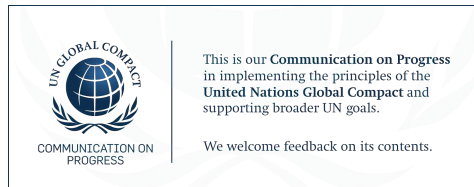
inform consumers better. We can also enable greater choice by increasing the availability and acceptability of alcohol-free brews. While we are already doing a lot ourselves, partnerships are probably even more important in this field than elsewhere.

Together with the industry, we have already taken action to ensure that our communications reach the right people at the right time and support sound judgements, including the industry-wide Digital Guiding Principles for responsible advertising and promotion on digital platforms. This year, along with the other CEOs in the International Alliance for Responsible Drinking, we reinforced our commitment in this area.

On our ambition of a ZERO accidents culture, I am pleased to report another significant reduction in our accident rate, down 15%. This demonstrates what can be achieved with hard work and relentless focus on health & safety. But there is still plenty to do. We are continuing to focus training and communication on the areas where it matters most, especially through our Life Saving Rules programme. More broadly, we miss no opportunity to ensure that health & safety remains top of mind with all our people.

Finally, we were pleased to find through our latest employee survey that over 90% of our employees believe they work for a socially and environmentally responsible company. Employees see what we really do every day, so their feedback is very important. We are on the right track, but there is much more to be done to achieve our ambitions and progress towards ZERO.

Cees 't Hart
CEO, Carlsberg Group



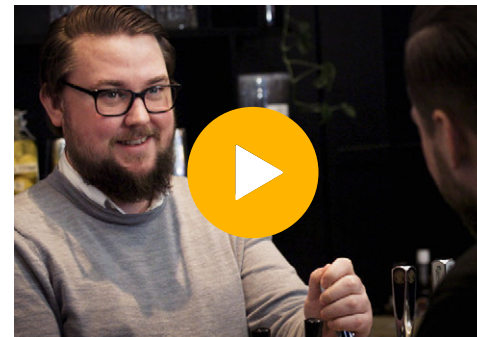
WATCH OUR PARTNERSHIPS IN ACTION



PARTNERING TO RETHINK PACKAGING



PARTNERING TO REDUCE WATER WASTE



PARTNERING TO GROW ALCOHOL-FREE BREWS

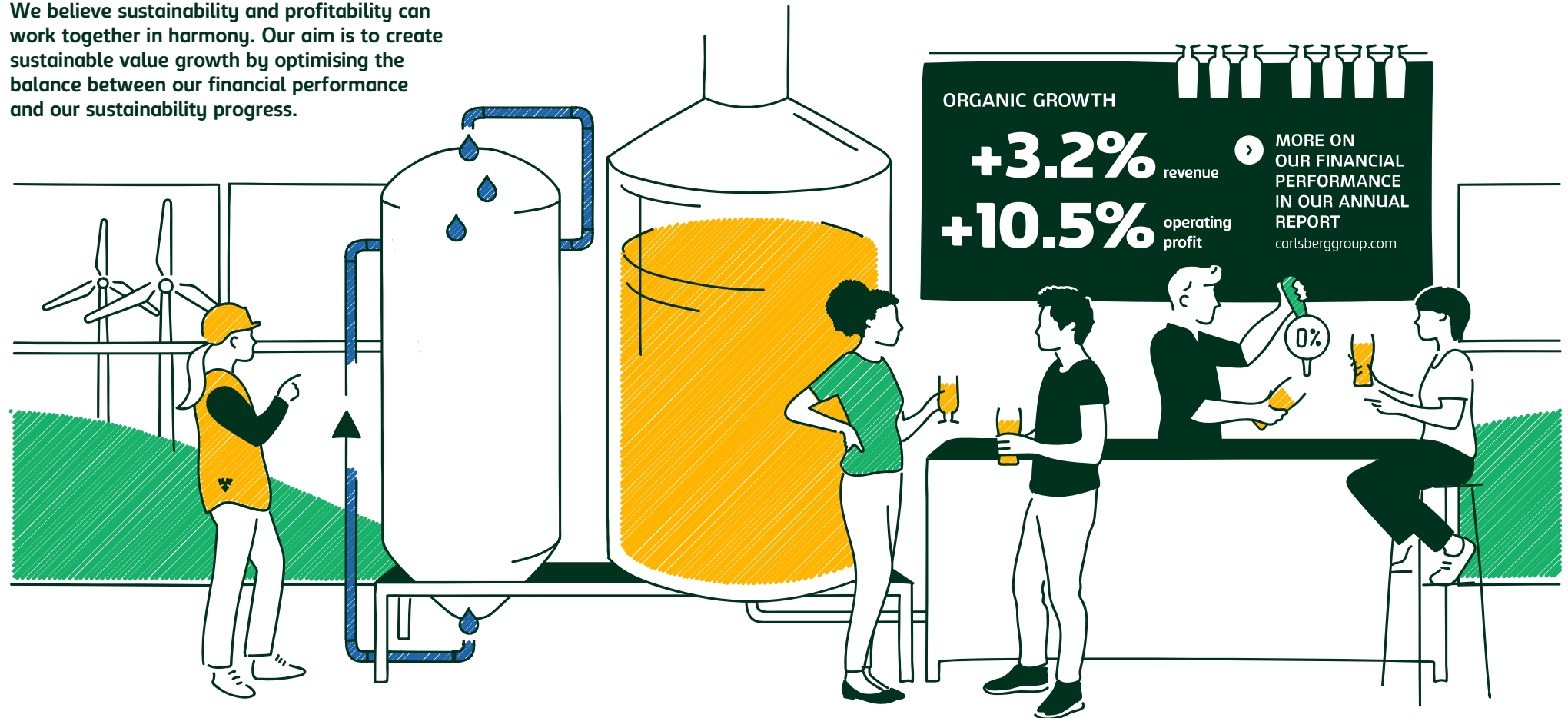


PARTNERING TO BUILD A SAFE WORKING ENVIRONMENT

▶ WATCH OUR PARTNERSHIPS IN ACTION
carlsberggroup.com/partnerships

SUCCESSFUL BUSINESS IS SUSTAINABLE BUSINESS

We believe sustainability and profitability can work together in harmony. Our aim is to create sustainable value growth by optimising the balance between our financial performance and our sustainability progress.



13%

reduction in relative carbon emissions.

3%

reduction in relative water consumption.

7%

global volume growth in alcohol-free brews.

15%

reduction in lost-time accident rate.

DKK 44bn

total tax contribution to governments in the countries in which we operate.

1.2m

jobs generated indirectly and induced in other sectors.

TOGETHER TOWARDS ZERO

Our purpose of brewing for a better today and tomorrow has guided our business for over 170 years. It means we are committed to brewing quality beers today while striving to combat global challenges for a better world tomorrow.

Our response to the global issues of climate change, water scarcity and public health is our sustainability programme, Together Towards

ZERO. It identifies four sustainability ambitions: ZERO carbon footprint, ZERO water waste, ZERO irresponsible drinking and a ZERO accidents culture. Strong and measurable targets for 2022 and 2030 underpin each ambition. This report is an update on progress during 2019.

MEETING GLOBAL CHALLENGES
In 2019, we have seen unprecedented global action calling on governments, businesses and

individuals to act on climate change. We have a key role to play and are determined to be part of the solution. We thus remain committed to the science-based targets we set in 2017, aligned to the more ambitious level of the Paris Agreement to limit global temperature rise to 1.5°C above pre-industrial levels.

Climate change will add pressure to already stressed water systems. Water is fundamental for healthy

ecosystems and supporting the growing human population. It is also a vital ingredient for brewing. We aim to eliminate water waste at our breweries, halving usage from 2015 to 2030 and partnering to safeguard shared water resources in high-risk areas.

Public health challenges continue to affect people around the world, including irresponsible drinking. We want to prevent the harmful consumption of our products, and

our focus is on enabling positive choice through alcohol-free brews, informing consumers and working with governments, communities and others to promote a better, more responsible drinking culture.

To focus on addressing global challenges, first we must ensure a healthy work environment for our people. Every person should go to work knowing they will get home safe, and we are dedicated to pursuing a ZERO accidents culture

OUR CORPORATE STRATEGY, SAIL'22



OUR PURPOSE

Some have to dig deep to find their purpose; for us it has always been there. We pursue perfection every day. We strive to brew better beers. Beers that stand at the heart of moments that bring people together. We do not settle for immediate gain when we can create a better tomorrow for all of us.



OUR AMBITION

It is our ambition to be a successful, professional and attractive company. Successful by delivering sustainable organic top- and bottom-line growth; professional by being the preferred supplier of our customers; and attractive by delivering value for shareholders, employees and society.



OUR PRIORITIES

The key priorities of SAIL'22 are grouped under the headings "Strengthen the core", "Position for growth" and "Create a winning culture". Delivering on these priorities will, in turn, enable us to deliver on our fourth priority, "Deliver value for our shareholders and society".

READ MORE ABOUT OUR STRATEGY IN OUR ANNUAL REPORT
carlsberggroup.com

for our colleagues across our breweries, field-based sales teams and offices.

PARTNERSHIPS FOR THE GOALS

The UN’s Sustainable Development Goals (SDGs) form a blueprint for a prosperous and sustainable world. We have aligned our ambitions and targets to the SDGs where we can have the greatest impact. SDG17, Partnerships for the Goals, is key, with “together” being the only way we will move towards ZERO.

See the SDGs and targets that Together Towards ZERO impacts to the right, with examples of specific actions taken on pages 41-44.

FOCUSING ON THE MOST IMPORTANT TOPICS

Together Towards ZERO was designed following an extensive stakeholder engagement process – spanning social, environmental and economic experts – and a thorough materiality assessment that we carried out in 2016 with Business for Social Responsibility. These actions helped us identify our most important sustainability management topics, risks and impacts, which you can see on page 45. The assessment represents an overview of the topics that have the biggest influence on society and our business, considering both risks and opportunities. We postponed a

TOGETHER TOWARDS THE SDGs



SPECIFIC SDG TARGETS

- 3.5** Strengthen the prevention and treatment of substance abuse, including harmful use of alcohol.
- 3.6** By 2020, halve the number of global deaths and injuries from road traffic accidents.
- 6.4** By 2030, substantially increase water-use efficiency and ensure sustainable withdrawals and supply of fresh water to address water scarcity.
- 6.5** By 2030, implement integrated water resources management at all levels.

- 7.2** By 2030, increase substantially the share of renewable energy in the global energy mix.
- 7.3** By 2030, double the global rate of improvement in energy efficiency.
- 8.8** Protect labour rights and promote safe and secure working environments for all workers.
- 12.2** By 2030, achieve the sustainable management and efficient use of natural resources.

- 12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
- 12.6** Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.
- 12.9** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.
- 13.3** Improve education, awareness-raising and capacity on climate change mitigation, adaptation, impact reduction and early warning.
- 17.16** Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships.
- 17.17** Encourage and promote effective public, public-private and civil society partnerships.

planned update to the assessment from 2019 to 2020, when we will refresh our materiality assessment to include updated input from initiatives such as the Task Force for Climate Related Financial Disclosures (TCFD) and the Intergovernmental Panel on Climate Change (IPCC).

BUILDING A RESILIENT BUSINESS

Our corporate strategy, SAIL'22, defines clear strategic priorities for strengthening our core business while positioning us for future growth. Together Towards ZERO is embedded as a key priority in SAIL'22, defining our intention to address global challenges while building resilience in our business.

Our business success enables investment in the latest technology and innovation to achieve our sustainability targets. In turn, this

enables us to keep growing into an even more successful business.

We have a long history of innovation and research, centred at the Carlsberg Research Laboratory in Copenhagen. Today, our Young Scientists Community, a group of postdoctoral researchers, is tasked specifically with developing and scouting for technologies to help us meet the carbon and water targets of Together Towards ZERO. In 2019, it explored solutions for cutting water waste from cleaning in breweries and upcycling wastewater, as well as opportunities for balancing and reducing energy requirements throughout the brewery.

STRONG GOVERNANCE AT EVERY LEVEL

Our clear global ambitions, frameworks and governance structures are embedded locally

across our markets. Our Executive Committee (ExCom) assumes ownership of Together Towards ZERO, overseen by the Supervisory Board and supported by relevant governance committees – such as the Integrity Committee, chaired by our CFO.

A network of subject-matter experts is responsible for achieving the relevant key performance indicators (KPIs), with supporting processes to facilitate regular reporting to senior management. This approach aims to empower the functions to be accountable for the implementation of our sustainability strategy.

ExCom receives an overview of progress on selected sustainability KPIs across the business on a quarterly basis. Many of these KPIs are built into daily routines at sites across our markets, ensuring that

DKK 689m

donated by the Carlsberg Foundations in 2019.

performance towards our overarching goals is checked daily. Furthermore, sustainability KPIs are included in our annual bonus scheme for both the CEO and the EVP, Integrated Supply Chain, and in 2020 will be extended to the CFO and others responsible for driving implementation of Together Towards ZERO.

THE CARLSBERG FOUNDATION

Our majority shareholder, the Carlsberg Foundation, has been supporting scientific research since it was founded by J.C. Jacobsen in 1876.

Together with the New Carlsberg Foundation, which supports art and cultural activities, and the Tuborg Foundation, which supports civil society activities, in 2019 the Carlsberg Foundation granted around DKK 689m. This is the highest amount ever, underlining that the better the Carlsberg Group performs financially, the more support the Foundations can give to society.

BUSINESS MODEL



Sourcing
high-quality raw materials



Brewing & bottling
quality beers in Western Europe, Eastern Europe and Asia



Distributing
our products from A to B via ships, trains & trucks



Customers
ranging from on-trade to off-trade, from big to small



Consumers
enjoying our beers and other beverages in more than 100 countries worldwide

TOGETHER TOWARDS ZERO



ZERO CARBON FOOTPRINT



PARTNERING TO RETHINK PACKAGING

We are innovating across our packaging portfolio to find better solutions, in the short and longer term, that reduce our beer-in-hand carbon footprint. With the Green Fibre Bottle project, we are working on developing the world's first 100% bio-based "paper" beer bottle made from sustainably sourced wood fibres. Starting in 2015 with a number of partners, the project has now matured into a formal partnership with the independent company Paboco.



WATCH OUR PARTNERSHIP IN ACTION

carlsberggroup.com/partnerships

“ Radical innovation like this is only possible when experts from across the value chain come together to find sustainable solutions.

Gittan Schiöld,
Interim CEO, Paboco

PAPER
BOTTLE
COMPANY
TM



ZERO CARBON FOOTPRINT

By 2030, we aim to eliminate carbon emissions at our breweries and cut our beer-in-hand carbon footprint by 30% compared with 2015. We can only achieve this by partnering with others.

We can already see the impacts of climate change. Continued warming will exacerbate land degradation, spells of hot, dry weather and intense rainfall.

Among other impacts, this will affect crop yields and reduce food security, causing volatile prices. That is why we have aligned our targets with the more ambitious 1.5°C level of the Paris Agreement.

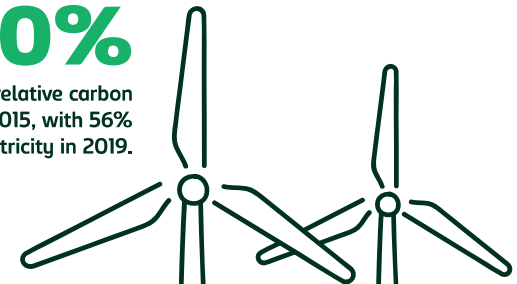
In order to continuously improve our climate governance, we report to the Carbon Disclosure Project (CDP) and were pleased to achieve a B rating in 2019.



See the specific SDG targets we are contributing towards – and examples of actions we are taking – on pages 41-44.

30%

reduction in relative carbon emissions since 2015, with 56% renewable electricity in 2019.



PACKAGING INNOVATIONS

continued development and roll-out of sustainable packaging innovations, including the plastic-reducing Snap Pack and shrink wrap made from recycled materials.

2030 TARGETS

ZERO
CARBON EMISSIONS AT OUR BREWERIES

30%
REDUCTION IN BEER-IN-HAND CARBON FOOTPRINT

2022 TARGETS

50%
REDUCTION IN CARBON EMISSIONS AT OUR BREWERIES

100%
ELECTRICITY FROM RENEWABLE SOURCES AT OUR BREWERIES

ZERO
COAL AT OUR BREWERIES

15%
REDUCTION IN BEER-IN-HAND CARBON FOOTPRINT

100%
LOW-CLIMATE-IMPACT COOLING

30
PARTNERSHIPS TO REDUCE SHARED FOOTPRINT



5

carbon-neutral sites across the Group.

ELIMINATING BREWERY EMISSIONS

2019 PERFORMANCE UPDATE

We reduced relative carbon emissions by 13%, from 5.6 kg CO₂/hl in 2018 to 4.9 kg CO₂/hl in 2019 (a 30% reduction since 2015, our baseline year).

We reduced our absolute emissions by 9%, from 704 kt in 2018 to 638 kt in 2019, through our energy efficiency programme, fuel conversions and an increased proportion of electricity from renewable sources (a 25% absolute reduction since 2015). The key levers to reduce carbon emissions at our breweries can be seen on the right of this page.

Energy efficiency improved by 2%, from 25.6 kWh/hl in 2018 to 25.1 kWh/hl in 2019. This was despite a reduced quality of barley crop during 2019, necessitating more energy in the brewing process.

We now have five carbon-neutral sites across the Group: the breweries in Falkenberg, Sweden, and Utena, Lithuania, and three water plants in Western Europe.

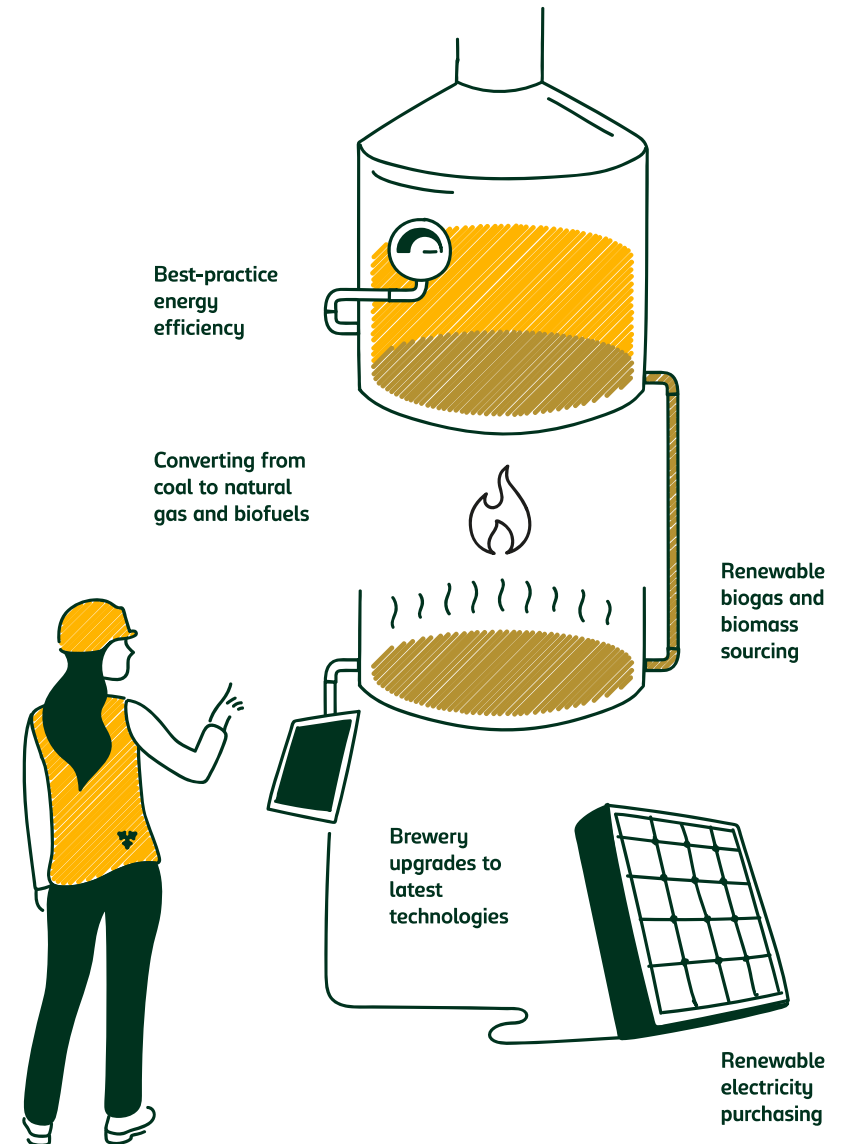
EFFICIENCY PROGRAMMES

We are aiming for world-class efficiency by improving every part of the brewing process. We share best practices across our breweries through the Carlsberg Operating Manual and invest in more efficient equipment wherever feasible.

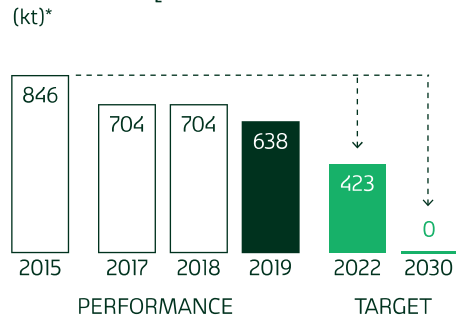
Equipment upgrades in 2019 included:

- Installing heat-recovery systems at our brewery in Estonia, thereby reducing heat consumption by 8% compared with 2018.
- Switching from tunnel pasteurisation to more efficient flash pasteurisation in Italy, thereby reducing specific heat consumption by 9% compared with 2018.
- Reducing beer filtration temperatures to cut electricity usage for cooling in Russia, with further modifications due in 2020.

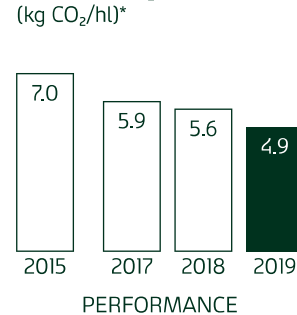
LEVERS TO REDUCE CARBON EMISSIONS



ABSOLUTE CO₂ EMISSIONS (kt)*



RELATIVE CO₂ EMISSIONS (kg CO₂/hl)*



* Within PwC's assurance scope.

* Within PwC's assurance scope.

- A range of heat-loss reduction improvements in Vietnam, thereby reducing heat consumption by 22%. A similar initiative in China reduced heat consumption by an average of 10% across our 24 breweries in that country and by 7% across our three sites in Laos.

ELIMINATING COAL

We aim to eliminate the use of coal at all our sites by 2022, as it is a carbon-intensive, polluting fuel. In 2019, we reduced coal usage by 11pp compared with 2018 (an 89% reduction by weight from our 2015 baseline). At the end of 2019, we replaced the last remaining coal-fired boilers in China in favour of less carbon-intensive natural gas, meaning that from 2020 we have eliminated the use of coal in China as a source of thermal heat.

In 2020, we will turn our attention to the last two coal-fuelled sites, working to convert a wastewater treatment plant in Poland from coal to natural gas, and a boiler at our Aurangabad brewery in India from coal to biomass. In total, we have eliminated the use of coal at ten breweries between 2017 and 2019.



YOUNG SCIENTISTS IN THE PURSUIT OF ZERO

Reaching ZERO will not be easy. And many of the viable solutions for eliminating carbon and water waste at our breweries do not yet exist.

Our Young Scientists Community – a group of postdoctoral researchers – was created to find these solutions from their base at the Carlsberg Research Laboratory in Copenhagen.

Their research includes:

- Building a digital twin of our St. Petersburg brewery to identify ways to maximise energy efficiency and assess the impact of new solutions.
- Assessing the viability of new sources of energy, using brewery by-products to generate green power and heat to fuel brewery processes.
- Identifying and testing improved methods and technologies for reusing water and chemicals after cleaning equipment.

RENEWABLE ENERGY

In 2019, 56% of our total electricity consumption came from renewable sources, a 10pp increase since 2018. Taken together, energy from renewable thermal and electricity sources, including biomass, biogas and solar, has grown to 24%, compared to 20% in 2018 and 15% in 2015.

In China, I-RECs (International Renewable Energy Credits) covered

52% of our electricity usage, contributing to the significant increase in renewables used across our operations during 2019.

In Western Europe, we have used 100% renewable electricity at all our sites for several years. In total, 425,291 MWh were sourced with renewable energy certificates across the Group in 2019, while we also use on-site solar installations at our

breweries in China, India, Lithuania and Switzerland.

In Norway, we converted our primary oil-fuelled boilers to run completely on renewable electricity, largely hydropower.

In 2020, we will continue to explore grid-connected power-purchase agreements for renewable electricity in more of our markets.

THERMAL ENERGY FROM BIOGAS AND BIOMASS

As of 2019, 29 breweries are fully or partially using renewable thermal energy. This is through either biogas extracted from our own wastewater, biomass, renewable district heating or biogas certificates. Many of our breweries use a mix of these.

In Switzerland, we increased the share of renewable fuels we generate from biomass, including the by-product of our alcohol-free beer production, to 62% in 2019, compared to 51% in 2018.

EMISSIONS THROUGHOUT THE LIFE CYCLE

Proportion of greenhouse gas emissions in each stage of the life cycle of our products.



An updated value-chain carbon-footprint analysis will be conducted during 2020.

REDUCING OUR BEER-IN-HAND EMISSIONS

To play our part in keeping global warming below 1.5°C, we must go beyond eliminating emissions from our direct operations. Around 86% of emissions associated with our business are outside our direct influence. Our target is a 30% reduction in our beer-in-hand carbon footprint by 2030. We can only achieve this by working with partners across our value chain, sharing our expertise and learning from theirs, and demonstrating leadership together.

We measure our progress through in-depth assessments of our beer-in-hand footprint every three years, and the next is due in 2020. While we are making good progress in many areas, we know there is far more to do. In some cases, achieving our target will require transformations in the way drinks are delivered. We will not be able to achieve this overnight, but we will continue to make progress by sharing ideas and expertise through cross-industry partnerships.

PACKAGING INNOVATIONS

Packaging accounts for around 40% of our value-chain carbon footprint. We are always looking for ways to minimise environmental impact without compromising on the quality of our beers. In 2019, we focused on improving efficiency and using materials from recycled sources. Examples include:

- Washed and refilled 5.3 billion returnable glass bottles – our most circular packaging type.
- Introduced Snap Pack – which replaces plastic shrink wrap or plastic rings on multipacks with an innovative glue solution, reducing plastic usage by up to 76% – to more markets.
- Continued the use and roll-out of Cradle to Cradle™ certified inks and paper labels on Carlsberg bottles. We use certified inks in 21 markets, and in 11 of those we also use certified paper labels. They are easier to recycle and made using renewable energy.

PRIMARY PACKAGING

Beer crowns > 


Aluminium cans > 


PET preforms > 

Paper labels > 

Glass bottles > 

SECONDARY PACKAGING

Corrugated cardboard for packaging > 

Solidboard (cardboard) for packaging > 

INGREDIENTS

Ingredients for beer and cider > 

REFRIGERATION

Fridges and coolers > 

Fridges and coolers > 

SUPPLIER PARTNERSHIPS TO REDUCE CARBON

In 2019, we formed specific partnerships with ten suppliers, with the aim of reducing our shared carbon footprint (shown above). They will disclose detailed carbon-related information about the products and services they supply so that we can work together to cut carbon emissions and reach our targets.

We will develop carbon-reducing roadmaps towards our 2022 and 2030 targets, with

commitments such as adopting approved science-based targets.

We are engaged in dialogue on carbon with many other suppliers, a number of which we expect to announce in the near future.

A total of 110 of our suppliers have committed to science-based targets, out of only 732 companies to have done so globally¹.

¹ Science Based Targets Initiative. sciencebasedtargets.org/companies-taking-action/. 2019.

- Use of shrink film containing 50-100% recycled plastic in Denmark, Norway and Sweden, and continued work with partners to test the inclusion of more and different types of recycled plastic in our shrink.
- Cutting the carbon impact of PET bottles in Norway and Sweden by introducing 100% recycled PET on 0.5 litre and 0.65 litre Imsdal water bottles, and reducing the weight of other PET bottles, saving 550 tonnes of virgin PET material.

Every year, hundreds of thousands of festival-goers enjoy our beer. We are working with organisers to switch from one-way plastic to reusable cups. In 2019, we achieved this in Denmark, France, Latvia, Norway, Portugal, Switzerland and other markets. This can be challenging, as festivals are often in rural areas without the infrastructure to wash cups on site. Read about how we overcame this at Roskilde Festival in Denmark on the right.

We are committed to making the most of the materials we use to make our packaging. We support efficient return systems with high collection rates, improved quality and recycling rates, and reuse of refillable glass bottles.

LOOKING TO THE FUTURE

In 2019, we unveiled two prototypes of the Green Fibre Bottle – the latest step in achieving our vision of creating the world's first “paper” beer bottle that is fully bio-based, biodegradable and recyclable. Three companies joined us in working towards this vision to reduce reliance on non-renewable resources.

LOW-CLIMATE-IMPACT REFRIGERANTS

Our consumers should be able to enjoy cold beers from fridges and on draught. Refrigeration comprises 9% of our carbon footprint, so we are transitioning to low-climate-impact refrigerants such as hydrocarbons, along with fridges that are energy-efficient and use LED lighting. In 2019, 93% of the fridges and beer coolers purchased met these standards, compared to 88% in 2018. Achieving 100% will be challenging due to legal and technical restrictions on refrigerants in some countries.



ROSKILDE FESTIVAL AND TUBORG PARTNERSHIP

In partnership with Roskilde Festival, in 2019 we delivered new sustainable solutions as well as exceptional beer experiences. We replaced over 1 million one-way plastic cups with sustainable cups that can be used up to 25 times, as well as undertaking collection and washing for reuse.

All our bars were powered by renewable electricity – symbolised by a Smartflower solar installation. With its petal-like panels, it rotates to track the sun, making it 40% more efficient than conventional systems. In 2020, we will continue our partnership by building a permanent solar installation together.

In 2019, we established supplier partnerships with refrigeration suppliers Frigoglass and Klimasan. These will help to enable the availability of low-impact cooling, and together we will explore the latest technologies and solutions available, helping us to reach our 2022 target and, in turn, reduce the energy consumption of our fridges when in-trade. Read more about our supplier partnerships on page 14.

LOGISTICS

Around 14% of our carbon footprint is from logistics. We are improving efficiency and transforming our network at every stage:

- Converting to electric forklifts in warehouses in China, Denmark and Finland.
- Delivering our shipments by rail where feasible, for instance in Denmark, France, Norway, Russia, Sweden, Switzerland and Ukraine.
- Improving route-planning software to reduce mileage and stops, thereby minimising fuel consumption.
- Maximising fill rates and efficiency in places such as the UK by outsourcing logistics to a shared user network.

We are investigating alternatives to diesel for our own fleets of delivery trucks. Using learnings from trialling an electric truck in Switzerland, we requested specific features from Renault Trucks to optimise sustainable beer delivery. We ordered 20 fully electric heavy-duty

trucks for 2020 and plan to use them at our Swiss brewery, Feldschlösschen, to service our 15 logistical sites.

We cannot achieve progress alone. Our expert partners are vital for finding solutions to reduce our

carbon footprint.

AGRICULTURE

The Carlsberg Research Laboratory is focused on improving the quality of our beers while reducing the environmental impact of our brewing. Our scientists are working

on identifying new climate-tolerant traits in barley in order to develop new robust, profitable and high-quality varieties that can be adapted to a broad geographical area and different climatic environments.

WHAT WE SAID 2018

Breweries

Implement actions from roadmaps to achieve carbon reductions, improve energy efficiency and continue efforts to phase out coal

Increase use of renewable heat and renewable electricity by utilising biogas from new wastewater plants, switching to biomass, generating more on-site renewable electricity and using market instruments

Explore new technologies in energy generation and usage


Beer-in-hand

Refine approach to reduce scope 3 carbon emissions, including carbon KPIs for suppliers and the incorporation of carbon footprint in the tender process


Engage with key suppliers to promote and support their carbon emission ambitions

WHAT WE DID 2019


Breweries


Achieved carbon reductions through energy efficiency programme, equipment upgrades and converting from coal to natural gas 

Increased electricity from renewables to 56%, driven by sourcing of 52% renewable power in China 

Researched and evaluated new technologies through Carlsberg Young Scientists Community and Supply Chain organisation, including the conversion of CO₂ from fermentation into electrofuels 

Beer-in-hand

Undertook analysis of most effective scope 3 carbon-reducing actions with selected suppliers and two pilot markets 

Agreed specific partnerships with ten suppliers in categories including packaging and refrigeration, focusing on carbon disclosure and carbon action 

ACTIONS 2020

Breweries

Phase out coal at our two remaining coal-fuelled sites

Increase use of renewable heat and electricity through sourcing of renewable power (I-RECs, PPA), generation of biogas and exploration of on-site solar projects

Upgrade equipment to improve heat recovery

Beer-in-hand

Update beer-in-hand carbon-footprint analysis using 2019 data

Support local market teams with tracking and reducing beer-in-hand carbon footprint and engaging with suppliers to reduce joint carbon footprint

Onboard new carbon-reducing supplier partnerships, with a focus on primary packaging





TOGETHER WE CAN

We have been brewing for more than 170 years. Cans have been around for half of this time and hold over 35 million hectolitres of the beverages we make each year. Over time, they have become lighter, and they are now made of infinitely recyclable materials, packed in different ways and recycled at higher rates than ever.

These developments are vital for cutting our beer-in-hand carbon footprint, of which packaging accounts for around 40%.

“We can only achieve our target of a 30% reduction in carbon emissions by 2030 by partnering with suppliers who share our values and ambitions – contributing expertise and learning from one another. That’s why we work with companies like Ball to develop many of our cans, a company that is keen to collaborate on cutting carbon through science-based targets,” says Johan Keerberg, VP, Group Procurement at the Carlsberg Group.

Snap Pack, for example, removes the need for plastic shrink wrap or plastic rings by holding cans together with small glue dots. We worked with a number of partners to develop this over three years. Once the technology existed, we needed the right suppliers to implement it in each market. That is where Ball came in, enabling us to roll it out in the UK. Our partnership extends globally.

“The carbon footprint of a standard 33 cl aluminium can is around 65% less than in the 1980s,” says Simone Cafferty, Director, Global Key Account Management at Ball. “That’s thanks to our continued focus on light

weighting to reduce the amount of aluminium used. And we’re not done yet.”

In 2019, we launched the lightweight 33 cl Star can across six markets, which will save over 1,000 tonnes of aluminium a year.

“While we have expertise in developing and improving aluminium cans, we need partners to qualify and roll out the technology. We’re delighted to work with Carlsberg, making use of their distribution and scale, and working together to cut our shared carbon footprint,” says Kathleen Pitre, Chief Commercial and Sustainability Officer at Ball.



ZERO WATER WASTE

“Public-private partnerships are extremely important because they bring everyone together around the table from the beginning of a project. In DRIP, partners from the industry have been connected with experts from universities and government agencies to solve the challenges in the sustainable reuse of water.

Lisbeth Truelstrup Hansen,
Professor, Microbial Food Safety and Environmental Hygiene,
Technical University of Denmark

PARTNERING TO ELIMINATE WATER WASTE

At our Fredericia brewery in Denmark, we are installing state-of-the-art total water-recycling technology that will allow us to safely reuse 90% of process water, taking our usage from 2.9 hl/hl to 1.4 hl/hl for brewing. This ambitious project is the result of a public-private partnership called DRIP, in which some of the thinkers and doers in water technology have agreed to try and push the boundaries of the possible.



WATCH OUR PARTNERSHIP IN ACTION

carlsberggroup.com/partnerships





We are committed to eliminating water waste from brewing through world-class efficiency, and to safeguarding shared water resources in high-risk areas.

latest technologies to maximise efficiency at our breweries and to increase the availability of fresh water for the local communities whose resources we share.

Water is essential to our products and for cleaning during brewing. But in a changing climate, drought will become more widespread, reducing the quality and availability of water. That is why we are investing in the

2030 TARGETS

50%
REDUCTION IN WATER USAGE AT OUR BREWERIES

PARTNER TO SAFEGUARD SHARED WATER RESOURCES IN HIGH-RISK AREAS

2022 TARGETS

25%
REDUCTION IN WATER USAGE AT OUR BREWERIES

EXPLORE GOING BELOW 2.0 HL/HL AT ALL HIGH-RISK BREWERIES

PARTNER TO SAFEGUARD SHARED WATER RESOURCES IN HIGH-RISK AREAS



See the specific SDG targets we are contributing towards – and examples of actions we are taking – on pages 41-44.

12%

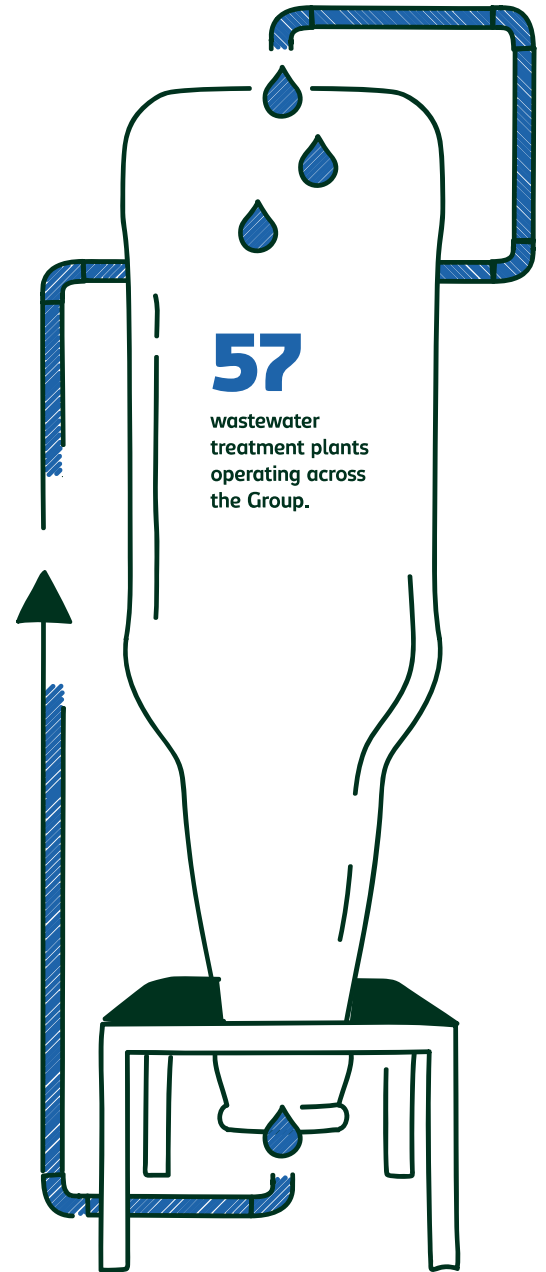
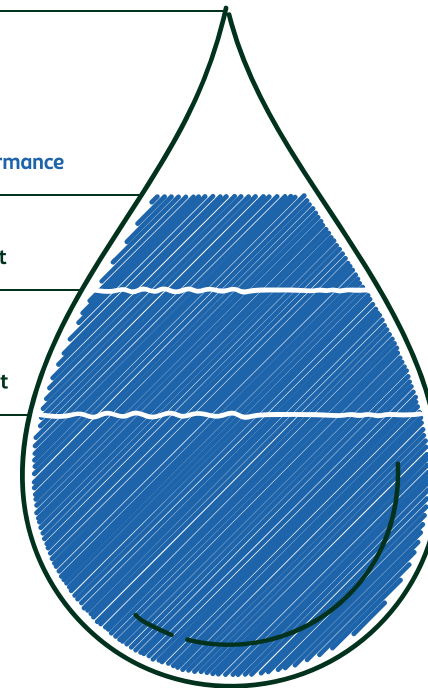
improvement in water efficiency since our 2015 baseline.

2015 baseline
3.4 hl/hl

2019 performance
3.0 hl/hl

2022 target
2.5 hl/hl

2030 target
1.7 hl/hl



ELIMINATING WATER WASTE

2019 PERFORMANCE UPDATE

Water efficiency improved by 3%, from 3.1 hl/hl in 2018 to 3.0 hl/hl in 2019 (a 12% improvement from our 2015 baseline).

While this represents a strong performance by industry standards, we need to move faster to achieve our 2022 and 2030 targets. Building on the hard work of our people to maximise efficiency, we are investing in the latest technology to transform how we work with water. In 2019, we announced an investment in a pilot wastewater treatment plant at Fredericia in Denmark, which will make it the first brewery to virtually eliminate water waste – moving to 1.4 hl/hl for brewing. We will use our experience to speed up progress across the Group. Read more on page 18.

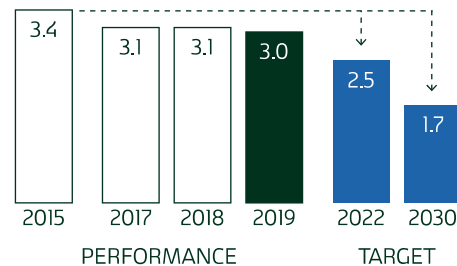
MAXIMISING EFFICIENCY

In 2019, we continued to implement our global operational standards for water. They reflect industry best practice and equip our sites to continually improve efficiency. Our ZERO water waste roadmaps outline the investments in equipment and technologies needed to cut our water consumption beyond what is possible through efficiency alone.

Actions in 2019 included:

- Optimising clean-in-place and rinsing operations to reduce unnecessary cleaning and reuse clean rinsing water in Bulgaria, China, France, Greece, Lithuania, Poland, Russia and Sweden.
- Maintaining bottle washers and tunnel pasteurisers, cutting water and heat consumption in Bulgaria, China, Finland, France, India, Laos, Poland, Russia and Sweden.
- Converting from wet to dry cleaning of packaging in France by using compressed air instead of water.
- Revising risk assessments for water-stressed areas, particularly Asia, to identify where to focus our efforts and investments.

RELATIVE WATER CONSUMPTION (hl/hl)*



* Within PwC's assurance scope.



NEW PARTNERSHIP WITH DESOLENATOR

In 2019, we entered a partnership with Desolenator – a venture specialising in low-cost sustainable desalination using solar energy. Desolenator has developed an integrated system that captures both electrical and “waste” heat from solar panels to enable 100% solar-powered purification of seawater,

covering complex contaminants such as arsenic. This will provide high-quality water for communities at the edge of the water crisis. We will announce details of our first installation in 2020.

TREATING WASTEWATER FOR REUSE

Treating and reusing wastewater in the brewing process by investing in technology is key to cutting water usage. Highlights in 2019 included:

- In India, water usage decreased by 9%, primarily as a result of increasing the usage of recycled water for cleaning at four of our breweries. A new water-recycling plant will open in Kolkata in 2020.
- In Russia, we invested in three new wastewater treatment plants to treat wastewater for discharge into communal water sources, in line with local legislative changes (operational in 2020).
- In Bulgaria, we began building a wastewater treatment plant at our Shumen brewery (operational in 2020).
- In Denmark, we announced investment in a wastewater treatment plant that will recycle 90% of process water and cut water usage for brewing from 2.9 hl/hl to 1.4 hl/hl while reducing carbon emissions by 10% (operational in 2021).

Wherever local legislation prevents wastewater recycling at our sites, it is challenging to make significant progress towards our 2022 and 2030

water consumption targets. We engage with local authorities in these areas to share our learnings and experience.

CARLSBERG YOUNG SCIENTISTS COMMUNITY

Further innovation and development are needed to achieve our 2030 target. Our Young Scientists Community is helping to address this by pursuing new technologies to help eliminate water waste at our breweries.

In 2019, the Community focused on reuse of water from cleaning

processes through a combination of technologies. For upcycling of brewery effluents, the Community is exploring the potential use of microalgae. This nutrient removal process accumulates algal biomass, which could be used for feed or food purposes. And by regenerating the used cleaning liquids, they can be reused again and again.

In 2020, the technologies will begin stress testing in a brewing environment. Read more about the Community's work on page 12.

PROTECTING SHARED WATER RESOURCES

While reducing water usage is important, we recognise that more needs to be done to protect water resources for local communities at sites identified as being at high risk of water scarcity.

PARTNERSHIP WITH WWF ON WATER RISK

Together with WWF, we are developing an effective strategy for safeguarding shared water resources.

We are updating the water risk assessment at all 82 of our sites around the world, analysing operational water risks at the breweries and assessing the impact on crops such as barley, rice and hops. Based on this, we will recommend best practice for water stewardship and action plans to reduce water impacts.

We also project our water risk exposure for 2030 by developing scenarios combining forecasts for climate and socioeconomic changes.

WHAT WE SAID 2018

Implement actions from roadmaps to achieve higher water efficiency and conservation

Explore new technologies for cutting-edge water reuse and recycling

Conduct projects in water-stressed areas to protect shared water resources and improve local water management

Ensure that wastewater discharge standards are up to date to ensure compliance globally

WHAT WE DID 2019

Reduced water usage through efficiency programme and extension of existing wastewater treatment facilities. 57 wastewater treatment facilities in operation across the Group



Best-in-class wastewater technology identified. Carlsberg Young Scientists Community explored next generation of water-recycling and reuse technologies



Extended and upgraded water-recycling plants, revised risk assessment for water-stressed areas with WWF and partnered with Desolenator



Three wastewater treatment plants built in Russia for discharge into communal water sources, and one upgraded in Nepal



ACTIONS 2020

Continue efficiency programme and conduct equipment upgrades

Build new wastewater treatment plants in Denmark and Bulgaria

Optimise existing wastewater treatment plants to enhance efficiency

Use results of water risk assessment to engage with local communities and specific water projects in high-risk areas



ZERO IRRESPONSIBLE DRINKING

“Alcohol-free beer is very important to me because I want everyone to feel included. Sometimes you want to go out and have a beer, but you don't want to get the 'buzz'.

Jonathan Mattsson,
co-owner, Copine

PARTNERING TO GROW ALCOHOL-FREE BEER

People are increasingly looking for great-tasting alcohol-free brews as a positive choice. Partnerships with restaurants and bars, such as the newly opened Copine restaurant in Stockholm, Sweden, increase availability of alcohol-free beer to consumers.



**WATCH OUR PARTNERSHIP
IN ACTION**

carlsberggroup.com/partnerships

ZERO IRRESPONSIBLE DRINKING

Our beers are at the heart of social occasions and we want them to be enjoyed responsibly.

Partnerships are key to our approach. We collaborate with governments, customers, other key stakeholders and industry partners to identify where irresponsible drinking takes place and to enable, inform, educate and encourage consumers to drink responsibly.

Drinking cultures are improving in many parts of the world. According to the World Health Organization, heavy episodic drinking decreased by 11% in Europe between 2010 and 2016, with positive trends in 29 out of 30 countries¹. And the International Alliance for Responsible Drinking reported a decline in drink-driving fatalities in 34 out of 36 countries². However, serious problems still exist.

2030 TARGET

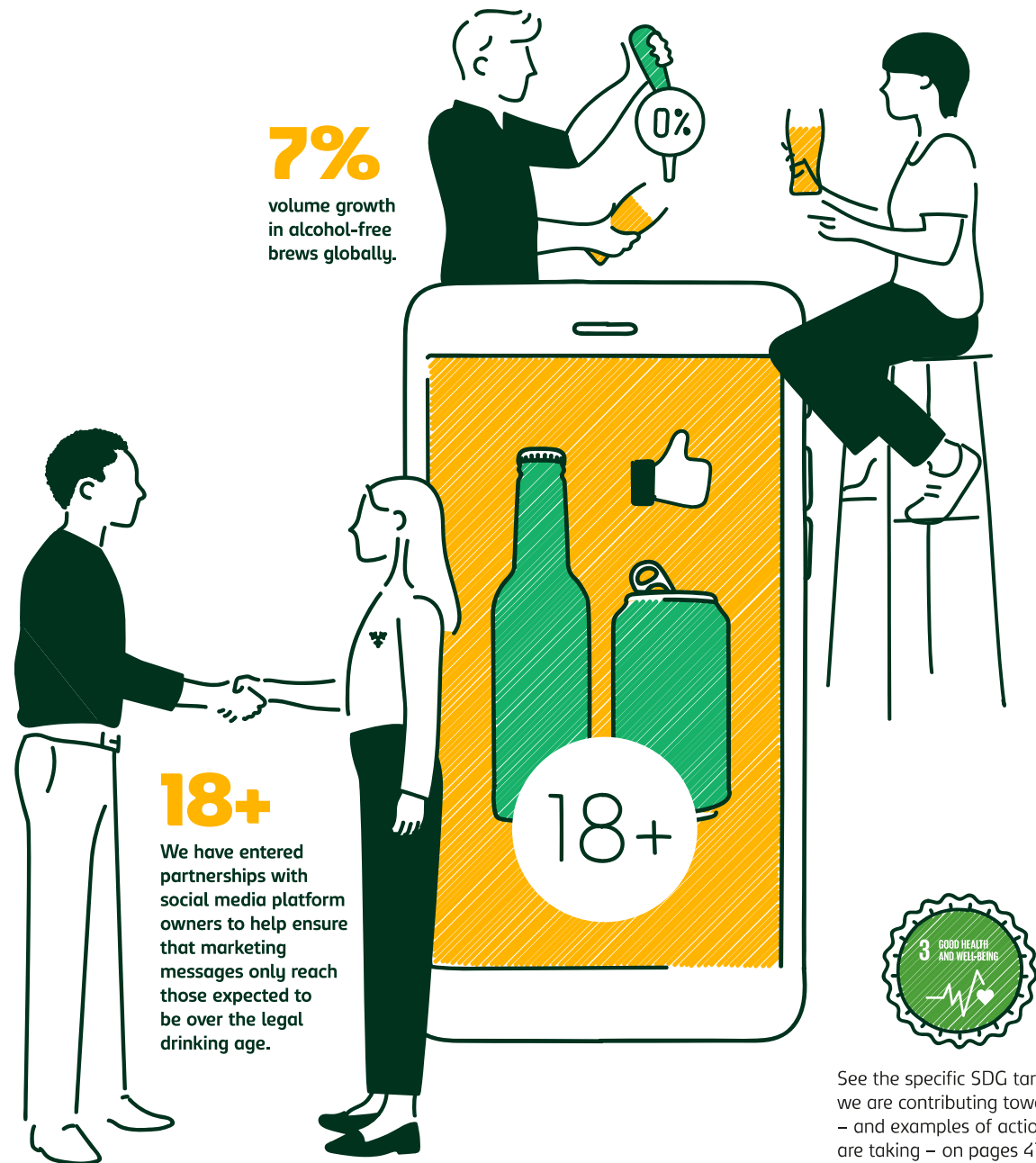
100%
OF OUR MARKETS IMPROVE ON RESPONSIBLE DRINKING YEAR ON YEAR

2022 TARGETS

100%
RESPONSIBLE DRINKING MESSAGING THROUGH PACKAGING AND BRAND ACTIVATIONS

100%
OF OUR MARKETS RUN PARTNERSHIPS TO SUPPORT RESPONSIBLE CONSUMPTION

100%
AVAILABILITY OF ALCOHOL-FREE BREWS (AFBs)



7%
volume growth in alcohol-free brews globally.

18+
We have entered partnerships with social media platform owners to help ensure that marketing messages only reach those expected to be over the legal drinking age.



See the specific SDG targets we are contributing towards – and examples of actions we are taking – on pages 41-44.

¹ World Health Organization. Status report on alcohol consumption, harm and policy responses in 30 European countries. 2019.
² International Alliance of Responsible Drinking. Trends report drink driving. 2019.

We need to continue to challenge ourselves on what more can be achieved, and we are developing partnerships in each market to tackle the most relevant issues at a local level, such as underage drinking or drink-driving. We are working with an advisory group of behavioural and societal experts to design effective programmes to stimulate change.

ENABLING

ALCOHOL-FREE BREWS (AFBs)

Beer is a low-alcohol beverage, but we are working to enable all consumers to be able to choose from a wider range of alcohol-free brews (AFBs) whenever they wish to enjoy these products. AFBs are growing in popularity, with three particularly strong trends driving consumer interest: a focus on health and well-being, a shift towards moderation, and recognition of the increasing high-quality range of AFBs on offer.

In 2019, volumes of our AFBs grew by 7%, with our brands now available in more than 60 markets.

Our portfolio of AFBs is growing, with over 30 variants available across the Group, including four added during 2019. We often offer an alcohol-free brew under our leading brand in each country. This includes Baltika 0 in Russia, 1664

Blanc Sans Alcool in France and Karhu alcohol-free in Finland, while in many markets Carlsberg's alcohol-free brew is available. In 2019, we introduced Brooklyn Special Effects, an alcohol-free hoppy lager, in Finland, Norway, Italy, Sweden and the UK. In 2020, we plan to take it to more countries.

Many supermarkets and convenience stores are increasingly creating dedicated alcohol-free areas in fridges and on shelves, displaying the diversity of beer styles available, raising awareness and prompting purchase, while in bars and restaurants we now offer AFBs on draught. Consumers who prefer their beer on tap can already enjoy our draught AFBs in Denmark, Norway, Sweden and the UK, and we will continue to roll out this option in 2020. Consumers are three times more likely to choose AFBs if they are on draught – and they are proving to be particularly popular on occasions such as working lunches or with a meal.

INFORMING

We are empowering consumers to make informed choices by providing information and ensuring that the messages reach the right people at the right time and place.

PACKAGING

Consumers have a right to know what is in their beer. Ingredients are listed on 90% of our packaging globally, while 65% contains nutritional information – which can also be found online. 99% of packaging also carries messages or icons advising consumers not to drink-drive and not to drink when underage or pregnant. We encourage all producers of alcohol to take the same approach.

MARKETING COMMUNICATIONS

Our global Marketing Communications Policy sets out strict global controls for advertising placement and content that meet or exceed local legal and regulatory requirements. These include never using people who are or look under 25 years of age in our advertising, preventing appeal to minors, never placing ads unless at least 70% of the audience is expected to be of legal drinking age, and never placing ads near areas that are likely to be frequented by minors, such as schools and zoos.

OUR APPROACH



Enable

Offer a wider set of alcohol-free choices that consumers can turn to on different drinking occasions.



Inform

Inform positive drinking choices by providing responsible drinking information on packaging and online.



Encourage

Encourage consumers to make positive drinking choices through dialogue and engagement.

On digital platforms, we work to help ensure that those under the legal drinking age do not see alcohol-related communications through our Digital Guiding Principles (DGPs), which set clear guidelines for online marketing and social media usage. To reinforce this commitment, in 2019 we and other member companies of the International Alliance for Responsible Drinking (IARD), together with Facebook (including Instagram), SnapChat and YouTube, publicly pledged to work together to improve age-screening and give users the choice to block marketing.

At the end of 2019, an internal audit showed that compliance for all five DGPs on our global channels was 87%. Recognising that there is more to do, we will continually monitor compliance with the DGPs and improve the safeguarding of data privacy. In 2020, we will continue working with partners to embed automatic age-screening wherever our alcohol brands advertise on digital channels, and we will introduce a new central tool to monitor compliance of local channels.

ENCOURAGING

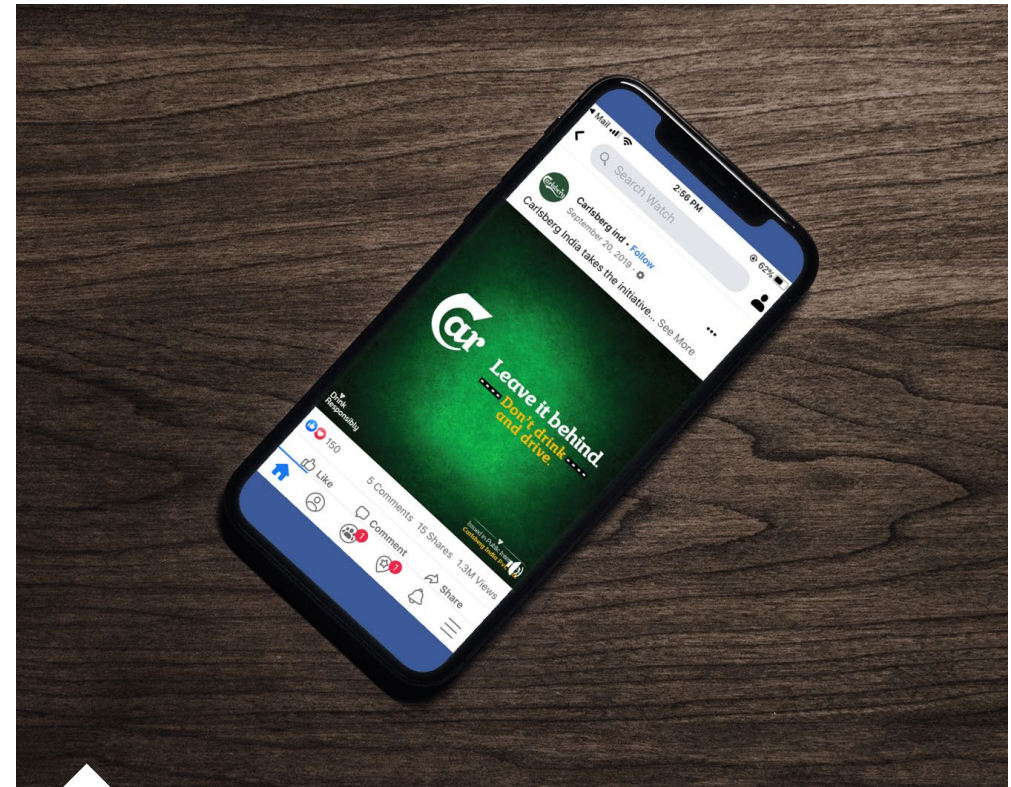
Irresponsible drinking is often the result of complex societal issues that vary from country to country, such as drink-driving or underage drinking. That is why we are working with local partners to develop locally relevant programmes that support dialogue and engagement with consumers to encourage responsible choices.

SUPPORTING A POSITIVE DRINKING CULTURE

We need to identify where we can have the most successful impact and which stakeholders to work with. With long-term learnings, these approaches can be replicated in other markets around the world.

Examples of this approach include:

- Carlsberg UK partners with the charity The Drinkaware Trust. Its Drink Free Days campaign targets middle-age drinkers, identified as being high-risk, encouraging them to take days off from drinking through the week. In 2019, there were over 500,000 unique visitors to the Drink Free Days landing page, and almost 20,000 people committed to taking drink-free days each week.



PREVENTING DRINK-DRIVING THROUGH OUR BRANDS

In 2019, many markets used the power of our brands to raise awareness of the dangers of drink-driving.

Carlsberg UK partnered with Drinkaware at Classic Ibiza concerts across the country, handing out 2,000 cans of San Miguel 0,0% to people driving their friends. At the annual Felschlösschen Oktoberfest in Switzerland,

discounted taxi vouchers helped people get home safely. In Germany, a joint campaign with the German Brewers Association reached over 1 million people, with messaging from brands including Astra, Holsten and Lübzer. In India, social media messaging encouraging people to “leave the car behind” reached over 3 million consumers.



GLOBAL BEER RESPONSIBILITY DAY

On 20 September 2019, we celebrated the fifth annual Global Beer Responsibility Day – an industry-wide global effort to promote the responsible consumption of beer – in markets around the world.

Campaigns focused on tackling drink-driving in India and Nepal, underage drinking in Belarus, China, Kazakhstan, Russia and Ukraine, and

binge drinking in Serbia. Our global activities reached 57 million people in 2019.

In Serbia, a campaign entitled “I know what I did last night” prompted dialogue with 6,000 young adults on a night out about the dangers of binge drinking and the value of good memories.

In Russia, Carlsberg employees visited 100,000 customers together with the Russian Brewers Union to help prevent underage sales.

A similar initiative in Ukraine engaged 20,000 customers with a corresponding media campaign targeting parents with advice from a leading psychologist on how to speak with children about alcohol and protect them.

- Carlsberg Azerbaijan partnered with UAFA (United Aid for Azerbaijan) to develop guidance and support for those dealing with alcohol abuse at home.
- In France, Kronenbourg SAS joined with other alcohol producers to create a not-for-profit organisation called Prévention & Modération with the aim of preventing harmful behaviours among the most vulnerable people, including young people and pregnant women. In 2019, the organisation financed a national campaign to raise awareness of the dangers of alcohol consumption during pregnancy (SAFTHON). More is planned for 2020.
- In Poland, Carlsberg Polska continued with its campaign “I think soberly – I think reasonably”, which aims to provoke people to make responsible decisions both when consuming alcohol and in everyday life. In 2019, a media campaign featuring local influencers targeted pregnant women, parents of young people, and drivers, reaching over 6 million people.

PILOTING INTERVENTIONS

Following advice from our panel of experts, we initiated a partnership between a local municipality in Denmark, the student association of a major Danish university and an external research body. The partnership project is researching which types of intervention are most effective at encouraging a more responsible drinking culture among university students and how behaviours are affected by the availability of alcohol-free brews and information about the consequences of irresponsible drinking.

Although most young people develop healthy drinking behaviours, it is important to focus on the whole target audience to reach those at risk of irresponsible drinking behaviours. Initiatives include:

- Asking students to decide to drink responsibly before they go out.
- Offering alcohol-free brews on draught in student bars for those who want to cycle home or simply consume in moderation.
- Nudging students to drink responsibly through text messages during consumption moments.

ALCOLOCKS

Alcolocks fitted in cars prevent people from driving if they are over the legal BAC limit. In Western Europe, 37% of our company cars are fitted with alcolocks (24% in 2018) and in Eastern Europe 31%. We will continue to implement this in 2020.



99% of packaging carries messages or icons advising consumers not to drink-drive and not to drink when underage or pregnant.

WHAT WE SAID 2018

Continue to implement and measure compliance with Digital Guiding Principles

Accelerate the formation of global and local partnerships for responsible drinking

Expand our global offering of alcohol-free brews (AFBs)

WHAT WE DID 2019

Continued to implement Digital Guiding Principles, with 87% compliance on global brands by end 2019. Developed central process for continuous monitoring

Strengthened partnerships with third-party experts through our responsible drinking advisory board. Activated 12 local partnerships during Global Beer Responsibility Day to raise awareness of responsible drinking in local contexts

Brought four new AFBs to market, with volume growth of 7% globally



Fully achieved
 Partially achieved
 Not achieved

ACTIONS 2020

Continue to implement and measure compliance of global brands with Digital Guiding Principles through new centralised process

Strengthen responsible drinking partnerships on a local level

Expand availability of AFBs by increasing volume and number of different brews



ZERO ACCIDENTS CULTURE

PARTNERING TO BUILD A SAFE WORKING ENVIRONMENT

Training is key to building a ZERO accidents culture and equipping our people with best-in-class practices to stay safe while at work. By combining the knowledge of our safety leaders with that of safety experts from partners such as 3M, we are building tailored training programmes specifically for our industry.



WATCH OUR PARTNERSHIP IN ACTION

carlsberggroup.com/partnerships

“By working in cooperation with experts from Carlsberg, we're able to share best practices from Carlsberg's global operation and make sure that our training exercises are constantly updated to replicate real-life working conditions as much as possible.

Florian Rappelsberger,
Transnational Account Manager,
3M Personal Safety Division

ZERO ACCIDENTS CULTURE

Safeguarding the health & safety of everyone working for Carlsberg is key to how we do business.

Keeping it top of mind takes committed leadership, personal engagement and strict adherence to safety routines.

We are making good progress, but there is no room for complacency.

2030 TARGET

ZERO LOST-TIME ACCIDENTS

2022 TARGET

REDUCTION IN ACCIDENT RATE YEAR ON YEAR



2,000

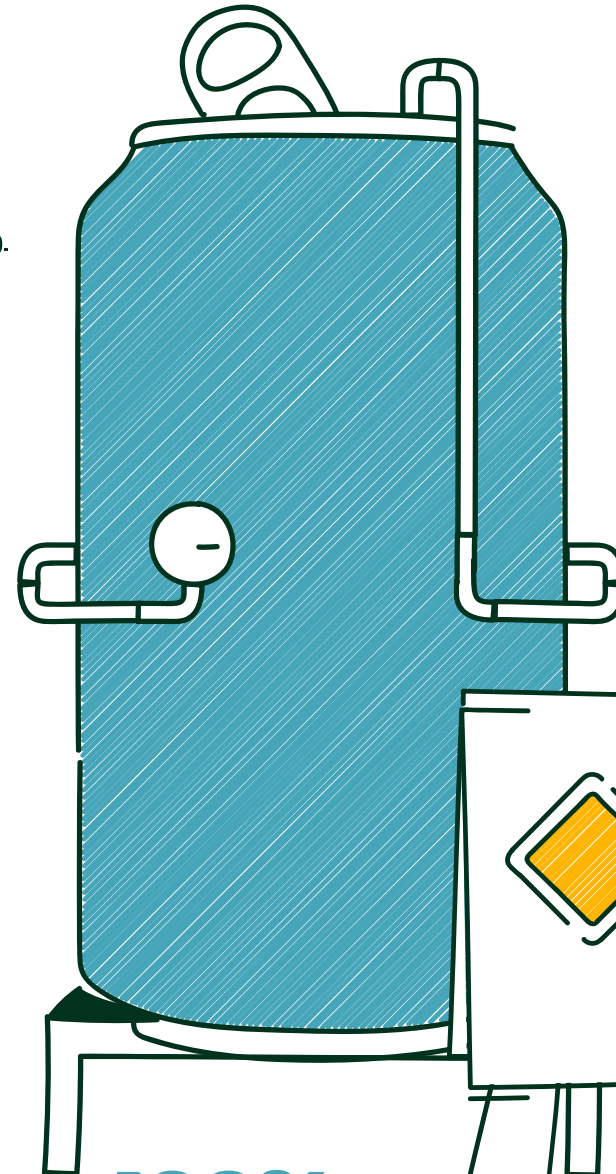
employees participated in practical two-wheeler safety training.

3.7

2019 lost-time accident rate (LTAR).

15% reduction since 2018.

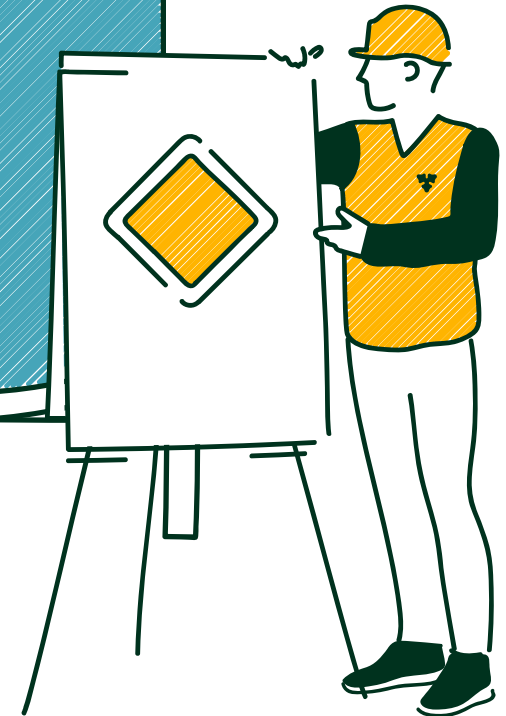
44% reduction since 2015.



See the specific SDG targets we are contributing towards – and examples of actions we are taking – on pages 41-44.

100%

of locations implemented communication packages for all five Life Saving Rules.



2019 PERFORMANCE UPDATE

We are pleased to report a strong improvement in our performance in 2019.

The Group lost-time accident rate (LTAR) fell from 4.3 in 2018 to 3.7 in 2019. Employee lost-time accidents (LTAs) fell from 169 in 2018 to 146 in 2019.

This performance demonstrates improved awareness and strict controls in the highest-risk areas, partly due to the implementation of our Live Saving Rules programme and increased awareness and engagement among our people. However, injuries among contractors have increased. We will continue to enhance controls over contractor services at our sites and improve management of temporary contract workers.

LIFE SAVING RULES

The Life Saving Rules have been embedded across our organisation with a company-wide training programme and communication packages at all sites for each of the five rules:

- #1. Always follow traffic rules (on site and on the road)
- #2. Always follow lock out/tag out procedures
- #3. Never remove, bypass or impair safeguards or interlocks

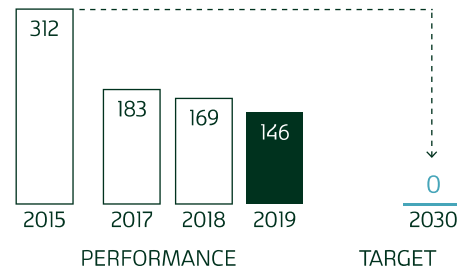
- #4. Always follow work at height procedures
- #5. Always follow confined space entry procedures.

Those most at risk received bespoke face-to-face training.

All locations undertake self-assessments of compliance with the Life Saving Rules that are independently validated. Average compliance rates have risen from under 80% in 2018 to approximately 90% in 2019.

The Life Saving Rules are our number one priority when it comes to health & safety. Nothing is more important to us than ensuring our people go home safe. In 2019, there were no work-related fatalities in the Group. This should always be the minimum expectation and zero fatalities will always be a non-negotiable top priority.

LOST-TIME ACCIDENTS*



* Within PwC's assurance scope.



TWO-WHEELER SAFE RIDING TRAINING

In Asia, where a significant number of employees ride scooters and motorcycles to visit city-based customers, we have deployed a practical safe riding programme for two-wheelers, training over 2,000 people.

Working together with professional driving schools, tutored classroom sessions are followed by instructor-led practice training on a circuit, covering safe riding practices such as riding posture, braking technique and slalom driving – enabling proactive anticipation of dangerous situations.

MORE TRAINING

Our training programmes include tailored solutions developed in partnership with industry experts.

Working with world-class workplace health & safety leaders, we developed training specific to our business and sites in areas such as working at height (Life Saving Rule #4) and working in confined spaces (Life Saving Rule #5). Read more on page 28.

We began to roll out our comprehensive driver training programme as part of our work to embed Life Saving Rule #1. It includes online lessons for all employees driving a company vehicle, followed by practical defensive driving training. Meanwhile, together with professional driving schools, we are training relevant staff in Asia in how to safely ride two-wheel vehicles needed for visiting city-based customers. Read more on page 30.

One year ahead of schedule, we have reached almost all our people leaders – a total of 5,500 – with our Safety Leadership training. The programme is enabling our people leaders to become effective role models in health & safety and to engage with their teams.

INCREASED REPORTING

To achieve a ZERO accidents culture, we rely on increased employee engagement and participation. An indicator of engagement is the number of observations and near misses reported. In 2019, there were 280,000 observations across the Group, a 60% increase since 2018, supported by simple reporting systems and digital solutions.

There was also a record of 115,000 safety walks, where people leaders

give their full attention to health & safety during a tour of our sites to obtain feedback on practices or barriers to further improvement.

CONTRACTOR MANAGEMENT

To address the risks faced by contractors providing services at Carlsberg sites, we launched a comprehensive contractor management programme. This will help to ensure adherence to our health & safety standards and our

Life Saving Rules, and to achieve a ZERO accidents culture.

The programme covers every stage of working with a contractor: pre-qualification, selection, induction, reviewing pre-work planning, evaluating, checking that work is carried out as agreed and feeding back, ensuring a continuous cycle of improvement.

To complete the comprehensive management of contract workers at

our sites, in 2020 we will establish a new programme to improve the management of temporary contract workers.

LOOKING FORWARD

In 2020, we will focus on increasing compliance with the Life Saving Rules, keeping health & safety top of mind with employees through engagement campaigns and ensuring consistent levels of safety for contractors, including temporary workers.

WHAT WE SAID 2018

Continue to roll out H&S leadership training and reach at least 65% of people managers

Continue to implement the Life Saving Rules by upgrading Group standards and ensuring compliance through self- and independent assessments

Introduce a new Safe Driving training programme for the sales organisation

Implement the new contractor management programme across the organisation

WHAT WE DID 2019

Trained over 5,800 people leaders (> 95%) through our H&S leadership programme

Introduced or revised standards for all Life Saving Rules, with validated monthly market assessments showing an average of 90% compliance

Launched online driver safety training programme in Western and Eastern Europe. Rolled out practical two-wheeler training programme in Asia

Developed and implemented contractor management standard in all markets, with compliance rates above 85%



Fully achieved Partially achieved Not achieved

ACTIONS 2020

Run communication campaign to strengthen employee engagement in the reporting of H&S near misses and observations

Increase compliance with Life Saving Rules standards to maintain at least 90% compliance rate globally

Continue roll-out of Carlsberg Safe Driving training programme to all company drivers through online training and reach at least 25% with practical in-person training

Continue implementation of the contractor management standard. Introduce new standard on temporary labour management

We are working to ensure that, in all areas of our business, we operate with a strong ethical approach.

➤ **FIND POLICIES
ON OUR WEBSITE**

[carlsberggroup.com/sustainability/
download/download-our-policies](https://carlsberggroup.com/sustainability/download/download-our-policies)

RESPONSIBLE
BUSINESS

RESPONSIBLE BUSINESS

LIVING BY OUR COMPASS

While commercial success and the achievement of targets are important, they should not be at the expense of conducting our business in an ethical way. Our dedicated programme, Live by our Compass, was launched in 2016 and forms part of our SAIL'22 strategy.

The Compass programme consists of the Code of Ethics and Group Policies, and sets out the expected standards of behaviour within the company and towards external business partners such as customers and suppliers. It aims to instil a culture of compliance across the organisation, emphasising the importance of integrity at all levels.

Our policies and accompanying manuals help guide behaviour in specific areas. They include:

LABOUR & HUMAN RIGHTS POLICY

This defines the labour & human rights standards to which all employees in the Carlsberg Group

are entitled, irrespective of the country in which they work.

DIVERSITY & INCLUSION POLICY

This helps ensure that all employees are valued and respected in an atmosphere of inclusion and equal opportunity, regardless of social identity.

ANTI-BRIBERY & CORRUPTION POLICY

This outlines and explains the prohibitions against bribery and corruption in all our operations, highlights the specific compliance requirements relating to these prohibitions, and reinforces our commitment to conducting business globally with the highest level of honesty and integrity.

RECORDS MANAGEMENT & PERSONAL DATA PROTECTION POLICY

This defines our commitment to establishing and maintaining records management practices and to ensuring that processing of personal data is compliant and meets our business needs as well as the legal

requirements deriving from relevant laws and regulations.

COMPETITION COMPLIANCE POLICY

This helps ensure compliance with applicable antitrust and competition laws wherever we operate.

During 2019, we had a particular focus on enhancing the competition law compliance programme. This work included detailed face-to-face training for employees in higher-risk teams, and a programme of on-site spot checks in selected markets, with input from external lawyers.

ENVIRONMENTAL POLICY

This prevents and controls potential risks to the environment, mitigating the impact of climate change, supported by our targets in Together Towards ZERO.

The measures and tools to implement the standards of behaviour detailed in our policies include annual risk assessments, a framework detailing compliance controls, training, regular communications and internal audits.

These reinforce the required behaviours and are continually enhanced. They are supported by a strong tone from our leadership team on the importance of compliance for our reputation and sustainable commercial success.

OUR APPROACH

We undertake annual risk assessments in each market to identify the relevant activities needed to control specific risks. These controls form a “control framework”. Control frameworks are in place for areas of law, including competition law, data protection, and anti-bribery and corruption. Markets are periodically required to report on their implementation of the relevant control frameworks.

TRAINING

In 2019, employees across the Group in higher-risk roles received face-to-face training on data protection, anti-bribery and corruption, and competition law. We also continued to enrol new joiners in e-learning on competition law and data protection. This will continue into 2020,

alongside the roll-out of a new anti-bribery and corruption e-learning course.

Training is essential for maintaining awareness of the importance and details of our policies and our compliance programme as a whole.

COMMUNICATION

Company-wide communications further maintain awareness around compliance and required behaviour. Engaging media such as video, posters, e-mails and “dilemma cards” encourage employees to consider their own responses to a series of ethical dilemmas.

Compliance was a separate agenda item on all senior management gatherings during 2019.

DATA PROTECTION

General Data Protection Regulation (GDPR) enforcement across the EU and EEA is increasing, leading to a far greater internal and public focus on data protection. Outside the EU and EEA, some countries are

adopting similarly comprehensive data protection legislation.

During 2019, we focused on key activities, including embedding our data protection rules throughout the organisation and introducing a new control framework for the main data protection risks at Carlsberg.

SPEAKING UP

We have made significant investments to strengthen our compliance focus, but it is never possible to guarantee that no wrongdoing occurs. Our people are strongly encouraged to report any suspected misconduct via our anonymous Speak Up system.

Employees can raise concerns about any alleged breaches of the Code of Ethics, from bribery, fraud, competition law issues and conflicts of interest to management behaviour. Speak Up is operated by a third party and provides employees globally with the opportunity to anonymously raise concerns 24 hours a day in their local language.



Investigation of the most serious allegations of misconduct is overseen by the Integrity Committee, which is chaired by the CFO and includes the General Counsel, SVP, Group HR, VP, Group Internal Audit and VP, Compliance.

In 2019, 168 alleged breaches of the Code of Ethics were reported through the system – up from the 95 reports received in 2018. The increase was due to increased awareness of the compliance programme and regular communications about Speak Up, which has led to greater transparency and usage. We review all reports received, and in 2019 we fully or partially upheld 48% of cases, resulting in sanctions being imposed on those involved.

RESPONDING TO INCIDENTS

When incidents occur, our policies and manuals guide our response.

As an example, in January 2019, a freight train loaded and operated by an external provider was involved in a fatal accident while carrying empty glass bottles back to Carlsberg's Danish brewery site. We cooperated with the official investigation, and in March 2019 a preliminary report from the Danish Accident Investigation Board identified strong wind and inadequate safety bolting by the external provider of the

freight train as the likely causes of the accident.

In August 2019, new material was presented involving allegations of facilitation payments and bribery in 2015-2016 at a local joint-venture brewery in India. A 2017-2018 internal investigation into the same issue had not been able to substantiate any wrongdoings. The original investigation was hampered by a lack of material, and the reporter wanted compensation in return for handing over alleged evidence. Based on limited new material received in September 2019, a new and expanded investigation has been initiated.

In total, we received 13 complaints at our sites in 2019 concerning, for example, odour or noise caused by the brewing process. We always engage in dialogue to resolve such complaints as quickly as possible.

LABOUR & HUMAN RIGHTS

We are committed to supporting a company culture based on a safe, healthy and empowering environment for our people in which everyone is treated in a fair and equal way. This is driven by our triple A behavioural framework (alignment, accountability and action), which defines how we should

work across the organisation, and integrated in all HR processes to make expected behaviours clear.

All Carlsberg leaders are trained to understand and apply the triple A framework in their leadership role to nurture and promote how we work together. All employees are assessed against the framework's behaviours as part of our annual performance review process.

IMPLEMENTING OUR POLICY

We have implemented our Labour & Human Rights policy through our e-learning module. During 2019, this focused on Western Europe following the focus on Eastern Europe and Asia in previous years. The module is mandatory for people managers and for employees at our central office.

DIVERSITY AND INCLUSION

Our new policy on diversity and inclusion outlines our commitment, our ambitions and our approach to making change. We recognise that diversity is found in any social identity such as gender, age, culture, ethnicity, physical abilities, political and religious beliefs, sexual orientation and other attributes. We strive to create and sustain an atmosphere that actively embraces diversity and fosters inclusion, ensuring that people are completely

at ease to be their true selves when they come to work at Carlsberg.

We are focused on creating a global mindset, building a diverse talent base, providing equal opportunities and ensuring that leadership is inclusive. This constitutes the basis for effective management, supporting both our business and our people. In 2019, we piloted cultural awareness training in our commercial function. Our focus in 2020 will be on rolling out unconscious-bias training.

LEADERSHIP ACADEMY

We run a number of training programmes across the Carlsberg Group, providing potential future leaders with the skills to progress to management positions. In 2019, participants comprised 34% women and represented 32 different countries. 43% of developmental short-term assignments were undertaken by women.

RESPONSIBLE SOURCING

We use thousands of suppliers and take measures to work only with those who share our belief in doing business the right way. Through our supplier relationship management practices, we select those who share

the high standards set out in our Supplier & Licensee Code of Conduct, working to ensure that it is understood and followed while identifying and understanding any issues and measuring their compliance.

We updated the Supplier & Licensee Code of Conduct in 2019 to take account of recent developments. Changes include new sections covering carbon emission management, water and waste management, data protection, competition and fair trade, human rights and conflicts of interest. Updates also clarify audit rights, take account of the Modern Slavery Act, and refer to climate change and water conservation in line with Together Towards ZERO. The Code applies to our suppliers' entire supply chain.

In 2019, we carried out 197 integrated quality audits, focusing on glass, malt and cans, to ensure that suppliers are complying with our Code and other relevant quality standards.

QUALITY & SAFETY OF OUR PRODUCTS

Brewing high-quality beers and beverages is core to everything we do. We implement the highest

standards every time, working to ensure our products are always high quality and safe when they reach consumers.

CONTINUOUSLY RAISING STANDARDS

To ensure that consumers can have total confidence in all our products, we constantly monitor our systems and supply chains. We are part of the Global Food Safety Initiative (GFSI), a scheme for continuous improvement in food safety throughout the supply chain. In Western and Eastern Europe, 100% of our sites are certified under GFSI-recognised schemes as achieving the highest standards of food safety. In Asia, 77% of our sites are certified, with a roadmap in place to reach 100% by 2021.

PARTNERING WITH OUR SUPPLY CHAINS

We monitor our suppliers and their materials to ensure they are safe. Using our Supplier Management Tool, in 2019 we worked with key suppliers of food and packaging, starting in Western Europe, to assess their vulnerability to risk and their transparency on food safety performance. In 2019, we trained three major packaging suppliers, and this will be extended to include other key suppliers in 2020. We will also

build on our learnings to develop the tool and roll it out more widely, aiming for global use with our most important suppliers.

RESPONDING TO QUALITY ISSUES

We are rigorous in identifying any quality issue at its root cause before any products leave our sites. As a result, it is very rare for a quality issue to arise after this stage, and we have detailed checks and controls

throughout production to ensure that our products are “right first time” – minimising the need for retrospective market actions. In 2019, we recalled three products. Two of the recalls were due to labelling issues and one to inadequate quality of PET bottles. In response, all related processes

have been reviewed and necessary control measures put in place to significantly reduce the risk of reoccurrence.

WHAT WE SAID 2018

Live by our Compass

Roll out the legal risk and control framework through awareness programmes, e-learning, face-to-face training and monitoring

Implement the updated Third Party Screening process and Gift, Entertainment and Donations Manual. Develop a 2019-2021 monitoring plan for anti-bribery & corruption

Labour & human rights

Revise labour & human rights e-learning and make it available and mandatory for all new managers to take through our HR system platform in selected markets

Implement supporting initiatives to ensure compliance with Labour & Human Rights Policy in selected areas

Conduct in-market audits in all selected markets to monitor effectiveness of Labour & Human Rights Policy implementation

WHAT WE DID 2019

Live by our Compass

New legal risk and control framework launched, supported by awareness programme, e-learning and face-to-face training. Risk assessment and reporting on control implementation completed by all markets

Updated the Third Party Screening procedure and Gift, Entertainment and Donations Manual launched. 2019-2021 monitoring plan for anti-bribery & corruption developed

Labour & human rights

Labour & human rights e-learning revised and made mandatory for all new managers in markets with supporting HR systems

Awareness campaigns developed and implemented in markets deemed higher-risk

Audits conducted in selected markets across Asia, Western Europe and Eastern Europe, including gap analyses and identification of mitigating actions



ACTIONS 2020

Live by our Compass

Introduce new anti-bribery & corruption e-learning course for white-collar employees

Implement upgraded risk and control framework and 2020 monitoring plan


Implement new governance, risk and compliance (GRC) tool for recording and assessing compliance controls

Labour & human rights

Continue in-market audits in selected higher-risk markets to monitor effectiveness of Labour & Human Rights Policy implementation

Develop initiatives to conduct value-chain risk assessments in line with the UN Guiding Principles



A photograph of three people sitting outdoors, smiling and holding green beer cans. On the left is a man with glasses and a beard, wearing a black long-sleeved shirt. In the center is a woman with dark hair, wearing a white blazer and a colorful patterned scarf. On the right is a woman with blonde hair and glasses, wearing a brown jacket. They are all holding green beer cans, with the woman in the center holding a can with the Carlsberg logo visible. The background is a blurred outdoor setting, possibly a beach or park.

Beer creates value and positively contributes to economies across the globe. With a presence in more than 100 countries, we make a significant economic contribution through the production, distribution and sale of our products.

▶ **LEARN MORE ON OUR WEBSITE**
carlsberggroup.com

ECONOMIC CONTRIBUTION

ECONOMIC CONTRIBUTION TO SOCIETY

CREATING JOBS THROUGHOUT THE VALUE CHAIN

40,000+ EMPLOYEES

In 2019, the Carlsberg Group directly employed more than 40,000 people in our majority-owned businesses around the world.

Many work at the breweries, which often provide vital employment in rural areas. We also employ highly skilled people in sales & marketing, finance, procurement, research & development, logistics and administrative functions.

CREATING JOBS IN OTHER SECTORS

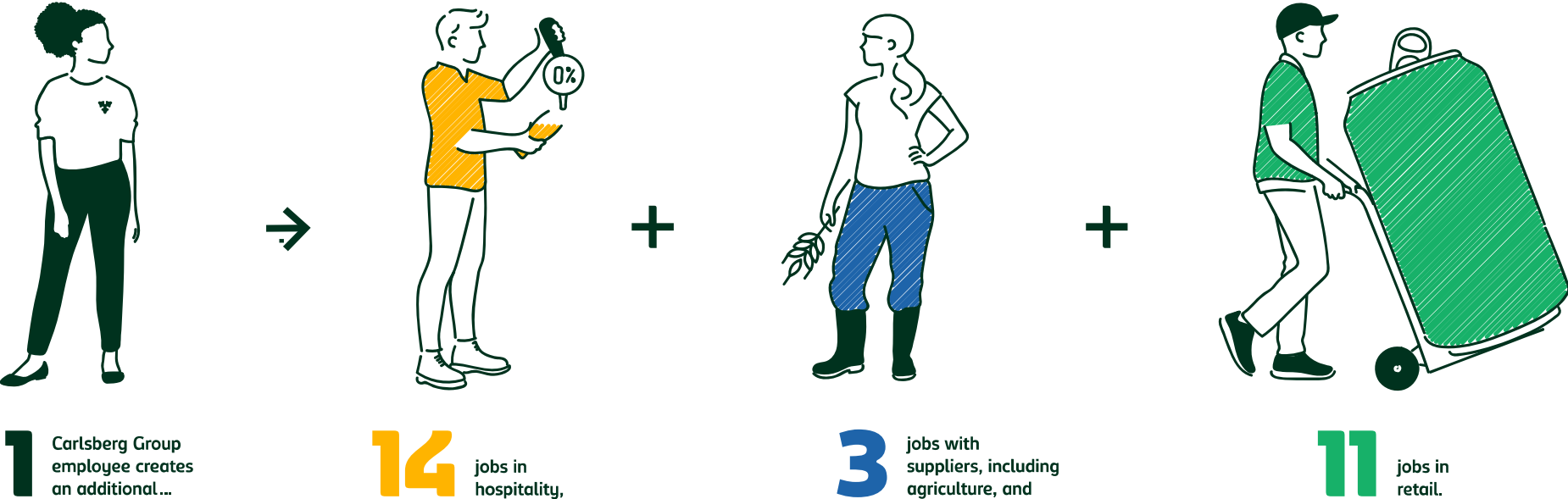
Our breweries generate a significant number of jobs via suppliers in the agricultural, packaging and logistics sectors, stimulating indirect employment.

The sale of our products contributes to linked employment – jobs created in the hospitality (bars, restaurants) and retail (grocery stores) sectors.

Taking all these activities into account, the research consultancy Europe Economics estimates that in 2019 we created total indirect and induced employment amounting to

approximately 1.2 million employees*, equivalent to more than 28 additional jobs created for every Carlsberg Group employee.

Through our operations around the world, we support the global economy by contributing to economic prosperity, increasing productivity and innovation.



* The total number of jobs generated by the Carlsberg Group in other sectors is significantly different from the 2018 report due to a change in methodology, which was made to maintain consistency with industry practice and data. Using the methodology from 2018, the total indirect and induced employment amounted to approximately 490,000 employees for 2019. For more information about the methodology, please refer to page 67.



Excise duties

AND



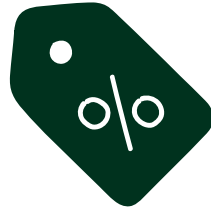
Corporate tax

AND



Personal income tax

AND



Other taxes & VAT

AND



Countries with Carlsberg operations

=

Carlsberg's total tax contribution (DKKbn)

44

ECONOMIC VALUE

Economic value generated is a combination of gross revenue, other income, financial income and income included in special items. Our contribution is distributed among our stakeholders through payments to suppliers for goods and services, wages to employees, financial expenses to those who provide capital and taxes paid to governments. The economic value retained is the profit we use to

finance dividends for our shareholders and support future business growth.

In 2019, economic value generated totalled DKK 96bn. Our total tax contribution, including both taxes borne and taxes collected, amounted to DKK 44bn.

TAXES BORNE

Taxes borne by the Carlsberg Group include direct taxes such as corporate income tax, social security taxes, environmental taxes and other taxes.

TOTAL TAX CONTRIBUTION

In addition to taxes borne, we also collect taxes on behalf of governments in the countries in which we operate. These include taxes paid on behalf of our employees, VAT and other relevant taxes, including excise duties. In 2019, our total tax contribution amounted to DKK 44bn.

TOTAL GOVERNMENT REVENUES GENERATED

Our products generate substantial revenues for governments, support public services and stimulate economic growth in the countries in which we operate. In addition to our total tax contribution mentioned above, government revenues are also generated in related sectors such as agriculture, retail and hospitality.

➤ [VIEW OUR TAX POLICY](https://carlsberggroup.com/media/34544/tax-policy_eng_sep-2019.pdf)
carlsberggroup.com/media/34544/tax-policy_eng_sep-2019.pdf

DETAILED OVERVIEW OF ECONOMIC VALUE GENERATED AND TOTAL TAX CONTRIBUTION

In 2019, the Carlsberg Group generated a total of DKK 96bn in economic value. Total taxes borne by Carlsberg, together with excise duties collected, represent 34% of our economic value generated.

Economic value generated (DKKbn)

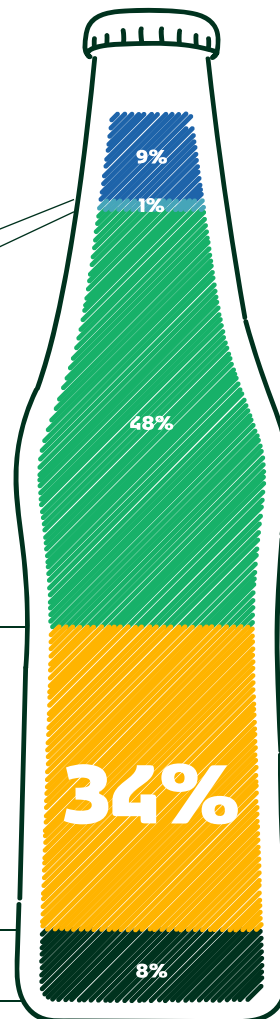
96

Employee wages DKK 9bn
Providers of capital DKK 1bn

Operating costs DKK 46bn

Taxes borne and excise duties collected DKK 33bn

Economic value retained DKK 7bn



Total tax contribution (DKKbn)

44

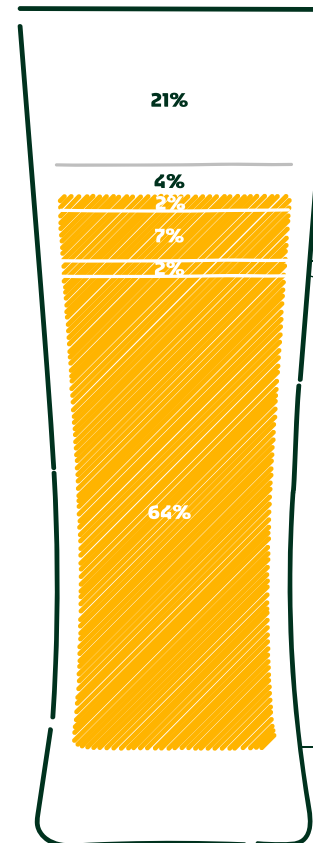
VAT DKK 9bn

Personal income taxes DKK 2bn

Social security taxes DKK 1bn

Corporate income tax DKK 3bn

Other taxes DKK 1bn









Excise duties DKK 28bn






* All numbers have been rounded.

SDG ACTIONS

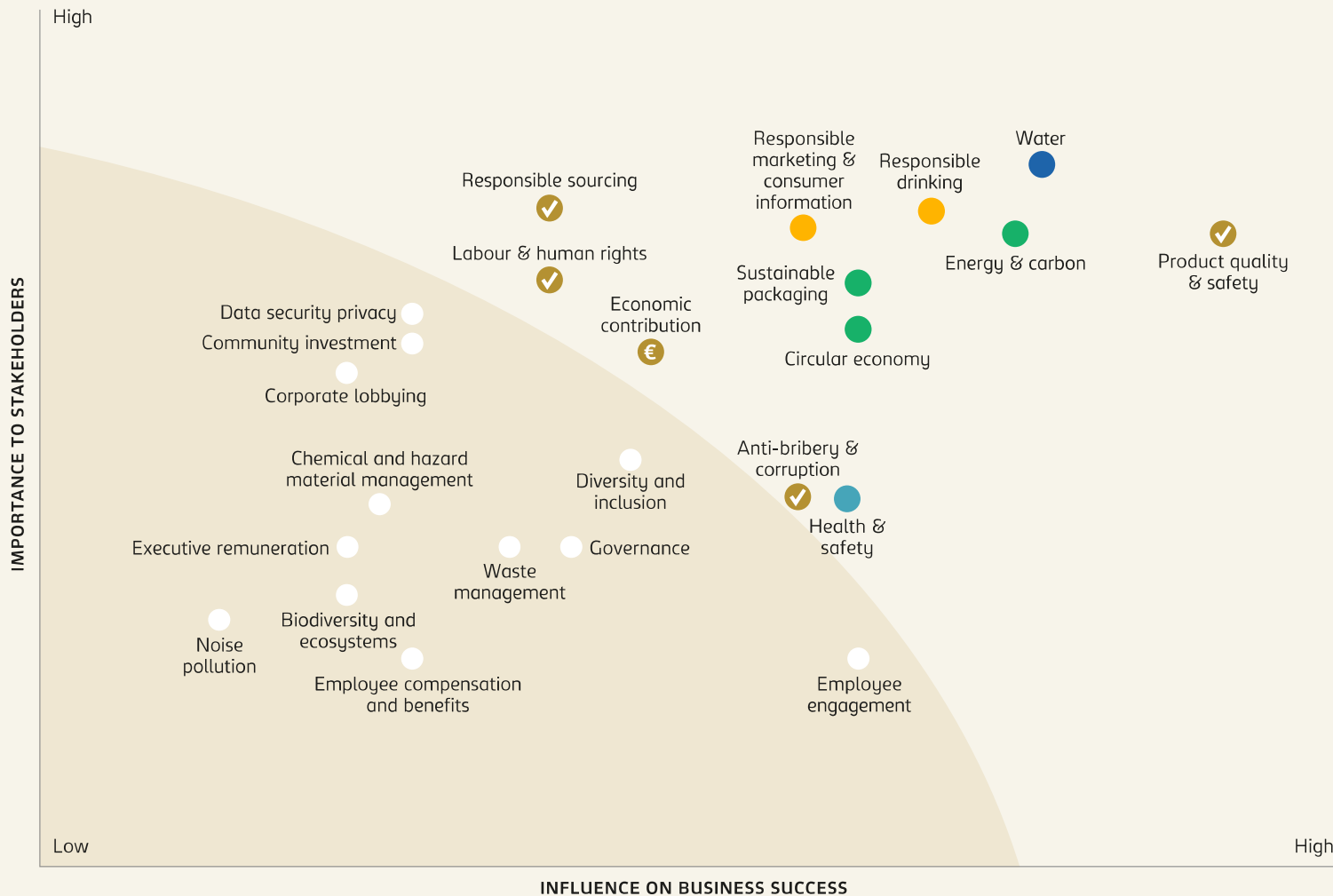
SDG	TARGETS	EXAMPLE ACTIONS	AMBITION	PAGE NO.
	<p>3.5 Strengthen the prevention and treatment of substance abuse, including harmful use of alcohol.</p> <p>3.6 By 2020, halve the number of global deaths and injuries from road traffic accidents.</p>	<p>Achieved 7% global volume growth in alcohol-free brews (AFBs).</p> <p>Made AFBs available on draught in Denmark, Germany, Norway, Sweden and the UK. Further roll-out in 2020.</p> <p>Reached 57 million people with responsible drinking campaigns on Global Beer Responsibility Day.</p> <p>Reinforced commitment to Digital Guiding Principles (DGPs) alongside member companies of the International Alliance of Responsible Drinking (IARD). Achieved 87% compliance on global brands.</p> <p>Equipped 37% and 31% of company cars in Western Europe and Eastern Europe respectively with alcolocks.</p>	 <p>ZERO IRRESPONSIBLE DRINKING</p>	<p>22-27</p>
	<p>6.4 By 2030, substantially increase water-use efficiency and ensure sustainable withdrawals and supply of fresh water to address water scarcity.</p> <p>6.5 By 2030, implement integrated water resources management at all levels.</p>	<p>Committed to invest in a total water-recycling plant to reuse 90% of process wastewater at Fredericia brewery, Denmark, which will take water efficiency from 2.9 hl/hl to 1.4 hl/hl for brewing.</p> <p>Reduced water usage in India by 9%, primarily by increasing the use of recycled water for cleaning at four of our breweries.</p> <p>Continued research and innovation for reusing water from cleaning processes and upcycling brewery effluents through Carlsberg Young Scientists Community.</p> <p>Initiated strategy with WWF to safeguard shared water resources, including update of water risk assessment at all 82 sites.</p>	 <p>ZERO WATER WASTE</p>	<p>18-21</p>

SDG	TARGETS	ACTIONS	AMBITION	PAGE NO.
	<p>7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.</p> <p>7.3 By 2030, double the global rate of improvement in energy efficiency.</p>	<p>Sourced 56% of electricity from renewable sources (2018: 46%) and increased total share of renewable energy to 24% (2018: 20%).</p> <p>Used 100% renewable electricity at all sites in Western Europe. 52% of electricity usage in China covered with I-RECs (International Renewable Energy Credits).</p> <p>Used renewable thermal energy (partially or fully) at 29 breweries through biogas extracted from our own wastewater, biomass, renewable district heating or biogas certificates.</p> <p>Assessed viability of new energy sources using brewery by-products through Carlsberg Young Scientists Community.</p> <p>Agreed to purchase 20 fully electric 26-tonne trucks in Switzerland to commence beer deliveries from 2020.</p>	 <p>ZERO CARBON FOOTPRINT</p>	<p>9-17</p>
	<p>8.8 Protect labour rights and promote safe and secure working environments for all workers.</p>	<p>Reduced lost-time accident rate to 3.7 (2018: 4.3).</p> <p>Reduced number of lost-time accidents to 146 (2018: 169).</p> <p>Reported observations and near misses increased by 60% compared with 2018.</p> <p>Trained over 5,800 people leaders in our H&S leadership programme, one year ahead of target.</p>	 <p>ZERO ACCIDENTS CULTURE</p>	<p>28-31</p>

SDG	TARGETS	ACTIONS	AMBITION	PAGE NO.
	<p>12.2 By 2030, achieve the sustainable management and efficient use of natural resources.</p> <p>12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.</p> <p>12.6 Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.</p> <p>12.9 Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.</p>	<p>Unveiled two new research prototypes of the Green Fibre Bottle (the world's first "paper" beer bottle), now containing beer.</p> <p>Replaced over 2 million one-way plastic cups with reusable cups in Denmark. Reusable cups also used at festivals in France, Latvia, Norway, Portugal and Switzerland.</p> <p>Washed and refilled 5.3 billion returnable glass bottles (2018: 5.3 billion).</p> <p>Introduced Snap Pack – which replaces plastic shrink wrap or plastic rings on multipacks with an innovative glue solution, reducing plastic usage by up to 76% – to more markets.</p> <p>Extended roll-out of Cradle to Cradle™ certified inks to 21 markets; these inks are easier to recycle and made using renewable energy.</p> <p>Introduced 100% recycled PET bottles for 0.5 litre and 0.65 litre Imsdal water in Norway and committed locally to increase share of RPET in e.g. Denmark and Sweden.</p>	 <p>ZERO CARBON FOOTPRINT</p>	9-17
	<p>13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.</p> <p>13.3 Improve education, awareness-raising and capacity on climate change mitigation, adaptation, impact reduction and early warning.</p>	<p>Signed Business Ambition for 1.5°C Pledge, emphasising commitment to science-based targets.</p> <p>Increased proportion of newly purchased fridges and beer coolers using low-climate-impact refrigerants, such as hydrocarbons, and LED lighting to 93% (2018: 88%).</p>	 <p>ZERO CARBON FOOTPRINT</p>	9-17

SDG	TARGETS	ACTIONS	AMBITION	PAGE NO.
	<p>17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships.</p>	<p>Agreed partnerships with ten suppliers to cut joint carbon footprint.</p>	 <p>ZERO CARBON FOOTPRINT</p>	<p>9-17</p>
	<p>17.17 Encourage and promote effective public, public-private and civil society partnerships.</p>	<p>Unveiled two new research prototypes of the Green Fibre Bottle (the world's first "paper" beer bottle), now containing beer. Three leading companies joined the project together with Paboco (the paper bottle company).</p>	 <p>ZERO WATER WASTE</p>	<p>18-21</p>
		<p>Invested in total water-recycling plant to reuse 90% of process wastewater at Fredericia brewery, Denmark, which will take water efficiency from 2.9 hl/hl to 1.4 hl/hl for brewing – a result of a public-private partnership with DRIP.</p>	 <p>ZERO IRRESPONSIBLE DRINKING</p>	<p>22-27</p>
		<p>Initiated strategy with WWF to safeguard shared water resources, including update of water risk assessment at all 82 sites.</p>	 <p>ZERO ACCIDENTS CULTURE</p>	<p>28-31</p>
		<p>Formed partnership with Desolenator to bring clean water to water-stressed areas.</p>		
		<p>Initiated a partnership between a local municipality in Denmark, the student association of a major Danish university and an external research body to research the most effective interventions to encourage a more responsible drinking culture.</p>		
	<p>Worked with local partners to reach 57 million people on Global Responsibility Day to encourage responsible drinking, addressing locally relevant issues.</p>			
	<p>Developed training programmes with world-class workplace health & safety leaders in areas including working at height and in confined spaces and safe driving.</p>			

MATERIALITY MATRIX



Together Towards ZERO was designed following an extensive stakeholder engagement process – spanning social, environmental and economic experts – and a thorough materiality assessment that we carried out in 2016 with Business for Social Responsibility. These actions helped us identify our most important sustainability management topics, risks and impacts, which you can see here. This helped inform the focus of Together Towards ZERO, launched in 2017.

- ZERO carbon footprint
- ZERO water waste
- ZERO irresponsible drinking
- ZERO accidents culture
- € Economic contribution
- ✓ Responsible business
- Other issues

DATA SUMMARY TABLE

ENERGY, CARBON AND WATER

	2015	2016	2017	2018	2019
General production figures					
Number of reporting sites	110	92	85	85	82
Beer production (million hl)	105.4	100.9	97.9	102.2	101.4
Soft drinks production (million hl)	13.9	14.3	14.2	15.6	16.1
Total production of beer and soft drinks (million hl) ¹	119.3	115.2	112.1	117.8	117.5
Malting (kt)	547.2	311.5	301.3	314.1	307.5
Environmental performance data (beer, soft drinks and malt production)					
Total thermal energy consumption (GWh)*	2,943	2,481	2,326	2,341	2,340
Total electricity consumption (GWh)*	988	914	869	885	870
Total CO ₂ emissions (from direct and indirect fuel consumption) (kt) ¹ (market-based)	945	768	698	701	626
Total CO ₂ emissions (from direct and indirect fuel consumption) (kt) (location-based)		883	802	801	766
Total SO ₂ emissions (tonnes)	1,695	815	731	509	446
Total NO _x emissions (tonnes)	1,562	1,163	1,075	1,027	1,419
Total water consumption (million m ³) ¹	41.2	37.7	35.6	37.5	35.9
Total wastewater discharged (million m ³)	26.6	24.2	23.0	23.8	23.3
Solid waste & by-products					
Incinerated (kt)	8.7	5.7	5.1	9.2	6.0
To sanitary landfill (kt)	68.6	56.9	68.6	60.9	82.5
Special waste (kt)	0.7	1.4	0.7	0.4	1.1
Recycled (kt)	189.2	225.5	222.0	162.6	172.9
Disposed of for land applications (kt)	165.9	127.4	117.4	125.1	115.2
Total solid waste (kt)	433.1	416.9	413.8	358.3	377.6
Brewer's grains and brewer's yeast utilised (kt)	1,348.9	1,265.0	1,236.0	1,372.8	1,501.3

¹ Within PwC's assurance scope (see PwC's Assurance Report, pages 68-69).

	2015	2016	2017	2018	2019
Relative figures for beer and soft drinks production					
Thermal energy (kWh/hl)*	21.2	20.0	19.3	18.3	18.0
Electricity (kWh/hl)*	7.8	7.7	7.6	7.3	7.1
Combined energy (thermal and electricity) (kWh/hl)*	29.0	27.7	26.9	25.6	25.1
CO ₂ emissions (kg CO ₂ /hl)*	7.0	6.3	5.9	5.6	4.9
Water (hl/hl)*	3.4	3.2	3.1	3.1	3.0
Relative figures for malt production					
Thermal energy (kWh/tonne)	692.2	489.3	457.9	436.4	430.7
Electricity (kWh/tonne)	84.1	73.2	67.1	65.6	64.7
Combined energy (thermal and electricity) (kWh/tonne)	776.3	562.5	525.0	501.9	495.4
CO ₂ emissions (tonnes CO ₂ /tonne)	0.18	0.13	0.12	0.11	0.11
Water (m ³ /tonne)	2.2	1.6	1.5	1.4	1.3
Other figures					
Complaints	33	36	32	9	13
Number of ISO 14001-certified sites	74	66	70	76	80
Number of ISO 50001-certified sites	3	4	18	20	20
Water source split					
Municipal water	48%	46%	48%	49%	52%
Own boreholes	42%	47%	46%	45%	42%
Surface water	10%	7%	6%	6%	6%
Wastewater destination					
Public sewer with wastewater treatment	67%	66%	66%	69%	73%
On-site treatment, followed by public sewer without wastewater treatment	3%	2%	2%	1%	0%
On-site treatment, followed by discharge to river/lake	28%	28%	28%	26%	24%
Other	2%	4%	4%	4%	3%
Thermal energy mix					
Natural gas	66.1%	71.9%	69.1%	72.9%	75.4%
Coal	15.6%	7.0%	5.9%	3.5%	1.8%
District heating	6.4%	7.1%	7.6%	7.4%	6.8%
Heavy fuel	2.8%	3.1%	3.6%	3.0%	3.0%
Renewable energy	6.9%	8.2%	9.8%	11.8%	12.3%
Light fuel	1.2%	1.4%	3.0%	1.4%	0.8%
Other	1.0%	1.3%	1.0%	0%	0%

* Within PwC's assurance scope (see PwC's Assurance Report, pages 68-69).

	2015	2016	2017	2018	2019
Total CO₂ emissions from refrigerants					
HFC-based refrigerants (kt CO ₂) [*]	14.9	9.8	6.8	2.9	12.3
Together Towards ZERO brewery target					
Scope 1 - Absolute CO ₂ emissions (excl. logistics) (kt CO ₂) ^{**}					436 [*]
Scope 2 - Absolute CO ₂ emissions. Market based. (kt CO ₂) ^{**}					202 [*]
Scope 1+2 - Absolute emissions (Together Towards ZERO 2015 baseline) (kt CO ₂)	846	777	704	704 [*]	638 [*]
Renewable electricity					
Percentage of electricity from renewable sources	41	43	45	46 [*]	56 [*]
Sites using coal					
Number of sites using coal	31	17	12	6 [*]	5 [*]
Packaging mix					
Cans	26.6%	27.4%	28.6%	29.9%	30.6%
RGB	33.7%	31.5%	29.8%	28%	29.2%
NRGB	9.2%	9.5%	11.6%	12.3%	11.9%
PET	23.0%	23.0%	20.8%	20.3%	19.8%
Kegs	6.4%	7.6%	7.8%	7.7%	6.8%
Bulk	1.0%	0.9%	1.2%	1.4%	1.4%
Other	0.1%	0.1%	0.2%	0.4%	0.4%

^{*} Within PwC's assurance scope (see PwC's Assurance Report, pages 68-69).

^{**} Indicator added for 2019.

HEALTH & SAFETY

	2015	2016	2017	2018	2019
Figures for Production***					
Number of lost-time accidents*	114	105	73	59	53
Lost-time accident rate*	6.2	7.0	5.1	4.5	4.1
Number of lost days*	1,911	1,281	1,219	1,393	2,247
Days lost rate*	104.5	85.6	85.6	105.4	172
Figures for Logistics**					
Number of lost-time accidents*	140	109	62	48	40
Lost-time accident rate*	15.5	13.8	8.2	7.5	6.3
Number of lost days*	2,511	1,619	1,128	1,393	1,473
Days lost rate*	277.2	205.1	149.5	218.0	233
Figures for Sales & Marketing**					
Number of lost-time accidents*	52	95	43	58	46
Lost-time accident rate*	3.3	6.2	2.5	3.5	2.7
Number of lost days*	565	2,787	961	1,545	1,623
Days lost rate*	36.2	183.0	56.3	94.1	97
Figures for Administration**					
Number of lost-time accidents*	6	2	5	4	7
Lost-time accident rate*	1.4	0.6	1.4	1.2	2.0
Number of lost days*	43	30	57	271	123
Days lost rate*	9.7	8.2	16.3	82.0	35
Figures for the Group**					
Number of lost-time accidents*	312	311	183	169	146
Lost-time accident rate*	6.6	7.4	4.3	4.3	3.7
Number of lost days*	5,030	5,717	3,365	4,602	5,466
Days lost rate*	106.2	136.9	79.4	117.0	138
Fatalities (Carlsberg Group employees on and off site, contractors and members of the public on site)	5	5	1	3	0
Number of lost-time accidents, contractors*				42	54
Number of lost-time accidents, members of the public*				0	0
Lost-time accidents – department split					
Percentage in Production	37	34	40	35	34
Percentage in Logistics	45	35	34	28	35
Percentage in Sales & Marketing and Administration	19	31	26	37	32

* Within PwC's assurance scope (see PwC's Assurance Report, pages 68-69).

*** Carlsberg Group employees.

RESPONSIBLE DRINKING AND MARKETING COMMUNICATION

	2015	2016	2017	2018	2019
Percentage of companies implementing responsible drinking initiatives	78	75	90	76	97****
Percentage of fermented produced volume carrying responsible drinking guiding symbols and/or equivalent text*	54	85	97	96	99
Percentage of total beer volume that lists nutritional information*				65	65
Percentage of total beer volume that lists ingredient information*				85	90
Number of responsible drinking campaigns	239	194	248	159	162

LIVE BY OUR COMPASS

	2015	2016	2017	2018	2019
Total number of employees trained in the Code of Ethics & Conduct		4,336	34,500	2,911	4,700
Number of incidents reported through our Speak Up system	87	55	53	95	168

* Within PwC's assurance scope (see PwC's Assurance Report, pages 68-69).

**** 34 out of 35 companies.

LABOUR & HUMAN RIGHTS

	2015	2016	2017	2018	2019
Total workforce (FTE*****)	47,464	42,062	41,430	40,837	41,248
Percentage of employees by employment contract					
Permanent employees	88	86	89	86	87
Temporary employees	12	14	11	14	13
Percentage of employees by employment type					
Full-time	98	93	93	94	91
Part-time	2	7	7	6	9
Percentage of employees by employment category					
Total presidents + top managers	1.5	1.5	1.4	1.8	1.9
Total managers	12.3	12.6	13.2	13.5	14
Total specialists	39.9	36.7	36.9	38.5	39
Total workers	46.3	49.2	48.5	46.2	46
Percentage of employees by gender					
Male	72	69	71	68	67
Female	28	31	29	32	33
Percentage of management level by gender					
Male	78	77	76	75	73
Female	22	23	24	25	27
Percentage of employees by age					
Younger than 18	0.19	0.11	0.13	0.02	0.03
19-29	22	23	25	23	19
30-39	33	33	35	35	38
40-49	29	27	25	26	26
50 or older	16	17	15	16	17

**** FTE data from Carlsberg Group Annual Report 2019.

	2015	2016	2017	2018	2019
Employee turnover					
Employee turnover percentage	19	21	24	19	17
Employee turnover percentage by age					
Younger than 18	-	-	-	-	-
19-29	32	31	31	36	35
30-39	33	34	38	35	37
40-49	20	20	18	16	15
50 or older	15	15	15	13	13
Employee turnover percentage by gender					
Male	71	69	63	70	73
Female	29	31	37	30	27
Hours of training per employee					
Average for the Group	15	15	15	16	18
Collective bargaining					
Percentage of employees covered by collective bargaining agreements	73	74	74	72	72
	2015	2016	2017	2018	2019
RESPONSIBLE SOURCING					
Number of integrated quality audits	171	182	154	166	197

REPORTING PROCESS AND SCOPE

REPORTING APPROACH AND CRITERIA

SCOPE OF THE SUSTAINABILITY REPORTING

This report covers the relevant and significant social, ethical and environmental issues for the financial year 1 January to 31 December 2019. It gives our stakeholders an overview of our performance in these areas, complementing our Annual Report, which primarily covers our financial and economic performance.

For many years, we have been using the standards of Global Reporting Initiative (GRI) as guidance for our sustainability work. For this 2019 report, the GRI G4 Sustainability Reporting Guidelines were applied in preparing the underlying data and framing our reporting principles; however, the Carlsberg Group no longer applies GRI-specific disclosures.

We receive recommendations on our sustainability activities and reporting from our assurance provider, PwC, while we ourselves routinely analyse

global megatrends, take part in industry initiatives and assess the activities of our competitors. This ensures that we fully understand the key issues and keep up to date.

The report focuses on the topics that we consider most important to our business and society. It is based on a range of inputs from our stakeholders, including, but not restricted to, the materiality assessment from 2016, water risk assessment work undertaken with WWF in 2019, the UN's Sustainable Development Goals (SDGs), carbon footprinting analyses undertaken with the Carbon Trust and guidance from the advisory group helping us with responsible drinking.

BOUNDARY SETTING

Entities included in this report's performance data include majority-owned subsidiaries, which are defined as companies that the Carlsberg Group directly or indirectly owns, in which it controls more than 50% of the voting rights or that it otherwise controls.

Joint ventures and companies over which the Carlsberg Group does not have the opportunity to exercise management control are not covered. However, we work with our partners routinely to ensure ongoing focus on sustainability issues. If a majority-owned entity is acquired during the financial year, it will be included in the following year's report.

COMMENTS ON BOUNDARY SETTING

The following sites have been closed/sold since 2018 and have therefore been excluded from the 2019 reporting:

CHINA:
CBC, Guoren Changde Brewery

VIETNAM:
Carlsberg Vietnam, SEAB

The following company has been added to the 2019 reporting scope:

POLAND:
Carlsberg Shared Services

The following companies have been renamed/restructured since 2018:

CHINA:
Carlsberg Hong Kong has been included in Carlsberg Brewery Hong Kong.

Carlsberg Procurement (Shenzhen) has been included in China National Office (HQ).

The following companies have been excluded from the 2019 reporting:

MYANMAR:
Myanmar Carlsberg (due to joint-venture status)

CAMBODIA:
Cambrew (will be included from 2020)

ENSURING DATA QUALITY

In gathering information about our sustainability performance, we applied the widely used principles of balance, clarity, accuracy, reliability, timeliness and comparability. Please find additional information on each of the topics below:

BALANCE

We are committed to communicating honestly and openly about our performance, both when it has improved and when it has not. Our aim is to provide our stakeholders with sufficient information about our company for them to form their own judgements concerning the Carlsberg Group's position and role in the societies in which we operate.

CLARITY

We strive to make our sustainability reporting accessible and easy to read for anyone, but we are always open to feedback about the way we communicate on our material issues.

ACCURACY AND RELIABILITY

Since 2009, our dedicated sustainability reporting system has helped us collect data from local sites and consolidate this at Group level. Every year, we have improved the indicator definitions for our performance indicators in order to help our entities report accurately and reliably.

However, it is a challenge to obtain a complete and fully aligned overview of all our data that, at the same time, takes into account local procedures for data gathering. For this reason, we are continuously working on improving data accuracy. Since 2009, we have been using an international provider of sustainability software solutions to systematise and collect our data. This gives us a higher degree of control over the data-gathering process, helps local companies compare data year-on-year, and enables instant consistency checks during the data-gathering phase. As well as the system, we use internal data management systems to collect information such as employee headcounts. An additional tool used to improve our sustainability data is the Carlsberg Operational Manual (COM), which sets out details regarding processes and best practices.

PwC has been appointed to provide independent assurance regarding selected economic, environmental and safety indicators. In each section of the report, we indicate which data has been assured. For further details, see pages 68-69.

TIMELINESS

Internally, we report our sustainability data with varying degrees of frequency, depending on the nature of the data. Where necessary, we revise the reporting frequency in order to strike the right balance between obtaining the correct data and observing appropriate time intervals for reporting on them. Annual data gathering and external reporting are aligned with financial data collection, following the calendar year.

COMPARABILITY

On pages 55-62, we have published the definitions we use for the key indicators in the report, which are also the data points on which PwC provides assurance.

We include three- or five-year data in all cases where a comparable three- or five-year data history is available.

DEFINITIONS

During the reporting process, we identified some differences in the interpretation of certain indicators at site level. However, we do not feel these differences significantly impact the validity of the reported data. Within the environmental data, any reference to “production site” or “site” refers to sites where the Carlsberg Group produces beer, soft drinks or malt, as well as combinations of these, and the water and energy consumption at these sites. The term “production site” does not include off-site consumption such as logistics and off-site administration. Definitions for environmental indicators and health & safety are available on pages 55-62.

TARGETS

We communicate through actions and targets:

- One-year short-term actions towards ZERO
- 2022 targets
- 2030 targets

These have been developed by each of the area owners in cooperation with Group Sustainability and may be adjusted following significant changes in the business, such as major acquisitions and divestments. As far as possible, we include such changes by applying scenario planning to our target-setting process.

INDICATOR DEFINITIONS

In the following, we explain the indicators we use to measure our sustainability performance. We define them and clarify their scope and any relevant assumptions we have made when collecting data globally.

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO CARBON FOOTPRINT		
Total production of beer and soft drinks	<p>Definition: Volume of fermented and non-fermented products produced.</p> <p>Production output that has passed through the production process on the company's own premises is included. Output is defined as approved packaged product to warehouse, plus volume of bulk beer and volume of bulk non-fermented products.</p> <p>Scope: Beer and soft drinks production sites as defined on page 54.</p>	Million hl
Total thermal energy consumption	<p>Definition: Total thermal energy consumption used for beer, soft drinks and malt production.</p> <p>Thermal energy originates from different energy sources such as light fuel oil, heavy fuel oil, natural gas, town gas, biogas from wastewater treatment plants, coal, biomass, district heating, grid electricity and biogas with renewable certificates (documented and traceable).</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Thermal energy sold to third parties, fuels for on-site logistics and fuels used for electricity production from on-site combined heat and power (CHP) plants are excluded from "Total thermal energy consumption". Losses from CHPs are included.</p>	GWh

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO CARBON FOOTPRINT		
Total electricity consumption	<p>Definition: Total electricity consumption for beer, soft drinks and malt production.</p> <p>Electricity originates from different sources such as renewable electricity generated on site (solar, wind), electricity bought with renewable certificates (e.g. Guarantees Of Origin, Renewable Energy Guarantees Origin - REGO), electricity from grid and electricity from on-site combined heat and power (CHP) plants.</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Electricity sold to third parties is excluded from "Total electricity consumption".</p>	GWh
Total CO ₂ emissions (from direct and indirect fuel consumption)	<p>Definition: Total fossil fuel carbon dioxide emissions (direct and indirect).</p> <p>Direct emissions are from the combustion of fuels for thermal energy and indirect emissions are from purchased electricity and district heating.</p> <p>CO₂ emission factors used for fossil fuels and electricity are in accordance with the 2006 Intergovernmental Panel on Climate Change Guidelines for National Greenhouse Gas Inventories and International Energy Agency statistics. Electricity grid emission factors from IEA are updated annually.</p> <p>Renewable energy types have an emission factor of 0 g CO₂/KWh.</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p> <p>Assumptions: CO₂ emissions related to sold thermal energy and electricity are not deducted from "Total CO₂ emissions".</p>	kt
Relative thermal energy consumption	<p>Definition: Thermal energy needed to produce 1 hectolitre of beer and soft drinks.</p> <p>"Total thermal energy consumption" / "Total production of beer and soft drinks"</p> <p>Scope: Beer and soft drinks production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Thermal energy used for malting or other extraordinary site activities is deducted from "Total thermal energy consumption".</p>	kWh/hl

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO CARBON FOOTPRINT		
Relative electricity consumption	<p>Definition: Electricity needed to produce 1 hectolitre of beer and soft drinks.</p> <p>“Total electricity consumption” / “Total production of beer and soft drinks”</p> <p>Scope: Beer and soft drinks production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Electricity used for malting or other extraordinary site activities is deducted from “Total electricity consumption”.</p>	kWh/hl
Relative CO ₂ emissions	<p>Definition: Fossil fuel carbon dioxide emissions (direct and indirect emissions) emitted from energy used to produce 1 hectolitre of beer and soft drinks.</p> <p>“Total CO₂ emissions (from direct and indirect fuel consumption)” / “Total production of beer and soft drinks”</p> <p>Scope: Beer and soft drinks production sites as defined on page 54.</p> <p>Assumptions: CO₂ emissions related to malting or other extraordinary site activities are deducted from “Total CO₂ emissions (from direct and indirect fuel consumption)”.</p>	kg CO ₂ /hl
Total CO ₂ emissions from refrigerants	<p>Definition: CO₂ equivalent emissions caused by refrigerant losses from on-site refrigerant systems.</p> <p>Emission factors for refrigerants are generic table values.</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p>	kt
Percentage of electricity from renewable sources	<p>Definition: Share of electricity from renewable sources.</p> <p>Renewable sources can be on-site renewable electricity generation or electricity supplied with Guarantees Of Origin, Renewable Energy Guarantees Origin or similar standards.</p> <p>RE100 requirements provide the guiding principles for how renewable electricity is reported.</p> <p>“Total renewable electricity intake” / “Total electricity intake”</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p> <p>Assumptions: Electricity generated from on-site combined heat and power (CHP) plants is not included in “Total electricity intake”.</p>	%

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO CARBON FOOTPRINT		
Number of sites using coal	<p>Definition: Number of breweries that used coal as the primary thermal energy source during the reporting period.</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p> <p>Assumptions: The brewery does not use coal on site to generate thermal energy.</p>	Number of sites
Scope 1+2 - Absolute CO ₂ emissions (Together Towards ZERO brewery target)	<p>Definition: Sum of "Total CO₂ emissions (from direct and indirect fuel consumption)" and "Total CO₂ emissions from refrigerants".</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p>	kt
Scope 1 - Absolute CO ₂ emissions (excl. logistics) (kt CO ₂)	<p>Definition: Sum of "Total CO₂ emissions (from direct fuel consumption)" and "Total CO₂ emissions from refrigerants".</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p>	kt
Scope 2 - Absolute CO ₂ emissions. Market based. (kt CO ₂)	<p>Definition: Sum of "Total CO₂ emissions (from indirect fuel consumption)".</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54.</p>	kt

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO WATER WASTE		
Total water consumption	<p>Definition: Total water consumption for beer, soft drinks and malt production.</p> <p>Water originates from water withdrawal from own boreholes, municipal water supply, surface water or other sources.</p> <p>Scope: Beer, soft drinks and malt production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Water intake to brewery sold to third parties is excluded from "Total water consumption".</p>	million m ³
Relative water consumption	<p>Definition: Water needed to produce 1 hectolitre of beer and soft drinks.</p> <p>"Total water consumption" / "Total production of beer and soft drinks"</p> <p>Scope: Beer and soft drinks production sites as defined on page 54. Consumption for non-production site activities is included.</p> <p>Assumptions: Water used for malting or other extraordinary site activities is deducted from "Total water consumption".</p>	hl/hl

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO IRRESPONSIBLE DRINKING		
Percentage of fermented produced volume carrying responsible drinking guiding symbols and/or equivalent text	<p>Definition: "Volume of packed fermented products that carry responsible drinking guiding symbols and/or equivalent text" / "Total packed fermented production volume x 100%".</p> <p>Scope: All majority-owned companies and production sites as defined on page 54, excluding companies without production and/or direct sales activities.</p> <p>Assumptions: Volume in kegs and bulk is excluded from "Total packed fermented production volume".</p>	%
Percentage of total beer volume that lists nutritional information	<p>Definition: "Volume of total beer volume that lists nutritional information (on primary packaging, excluding kegs and alcohol-free brews)" / "Total beer volume (excluding kegs and alcohol-free brews)".</p> <p>Nutritional declaration: nutrition declared on consumer-facing primary packaging. Minimum requirement is to present energy in linear form (e.g. "Energy: 190 kJ/46 kcal per 100 ml").</p> <p>Primary packaging: all consumer-facing primary packaging for beer products, excluding kegs. Does not include alcohol-free brews.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54, excluding companies without production and/or direct sales activities.</p>	%
Percentage of total beer volume that lists ingredient information	<p>Definition: "Volume of total beer volume that lists ingredient information (on primary packaging, excluding kegs and alcohol-free brews)" / "Total beer volume (excluding kegs and alcohol-free brews)".</p> <p>Ingredient declaration: ingredients presented on consumer-facing primary packaging in linear form (e.g. "Water, barley malt, hops").</p> <p>Primary packaging: all consumer-facing primary packaging for beer products, excluding kegs. Does not include alcohol-free brews.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54, excluding companies without production and/or direct sales activities.</p>	%

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO ACCIDENTS CULTURE		
Lost-time accidents (LTAs) in Production, Logistics, Sales & Marketing, Administration	<p>Definition: Any wound or damage to the body, resulting from a brief single event or exposure, causing lost time.</p> <p>Lost time occurs when the injured/ill person is medically considered unable to work. It includes time away from work for rest, recovery or treatment.</p> <p>“Accident” and “injury” are used interchangeably.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	LTA
Days lost (DL) in Production, Logistics, Sales & Marketing, Administration	<p>Definition: Calendar days, starting the day after the incident and ending the day before return to work, including weekends, holidays etc.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	DL
Full-time equivalents (FTEs) in Production, Logistics, Sales & Marketing, Administration	<p>Definition: Full-time equivalents (FTEs) is equal to the average number of employees on the payroll. Part-time employees are converted into FTEs proportionally.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	FTE
Lost-time accident rate (LTAR) in Production, Logistics, Sales & Marketing, Administration	<p>Definition: Number of lost-time accidents (LTAs) x 1,000 / Number of full-time equivalents (FTEs).</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	LTAR

INDICATOR NAME	INDICATOR DEFINITION	UNIT
ZERO ACCIDENTS CULTURE		
Days lost rate (DLR) in Production, Logistics, Sales & Marketing, Administration	<p>Definition: Number of days lost (DLs) x 1,000 / Number of full-time equivalents (FTEs).</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	DLR
Lost-time accidents (LTAs), contractors on Carlsberg site	<p>Definition: Any wound or damage to the body, resulting from a brief single event or exposure, causing lost time.</p> <p>Lost time occurs when the injured/ill person is medically considered unable to work. It includes time away from work for rest, recovery or treatment.</p> <p>Contractor: any individual who works for a service provider (or who is self-employed) and performs an outsourced activity for Carlsberg (including individuals who work for subcontractors).</p> <p>Carlsberg site: any site managed by Carlsberg, or where construction work is being carried out on our behalf, including greenfield and brownfield project sites.</p> <p>"Accident" and "injury" are used interchangeably.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	LTA
Lost-time accidents (LTAs), members of the public on Carlsberg site	<p>Definition: Any wound or damage to the body, resulting from a brief single event or exposure, causing lost time.</p> <p>Lost time occurs when the injured/ill person is medically considered unable to work. It includes time away from work for rest, recovery or treatment.</p> <p>Member of the public: any individual who does not correspond to the definitions of regular employee, temporary employee or contractor (e.g. visitors, delivery personnel, suppliers, consultants, students, family members).</p> <p>Carlsberg site: any site managed by Carlsberg, or where construction work is being carried out on our behalf, including greenfield and brownfield project sites.</p> <p>"Accident" and "injury" are used interchangeably.</p> <p>Scope: All majority-owned companies and production sites as defined on page 54.</p>	LTA

LIST OF REPORTING SITES

COUNTRY	COMPANY	SITES
WESTERN EUROPE		
Bulgaria	Carlsberg Bulgaria	Pirinsko, Shumensko
Croatia	Carlsberg Croatia	Koprivnica
Denmark	Carlsberg Danmark	Jacobsen Brewery, Saltum, Carlsberg Fredericia
	Carlsberg Breweries	No production sites
Estonia	Saku Õlletehase as	Saku
Finland	Sinebrychoff	Kerava
France	Kronenbourg	Kronenbourg Obernai
Germany	Carlsberg Deutschland	Holsten-Brauerei Hamburg AG, Mecklenburgische Brauerei Lütz
Greece	Olympic Brewery S.A.	Thessaloniki, Ritsona Brewery
Italy	Carlsberg Italia	Varese
Latvia	Aldaris	Aldaris Riga
Lithuania	Svyturys Utenos Alus	Utena
Norway	Ringnes	Farris, Gjelleråsen, Imsdal
Poland	Carlsberg Polska	Okocim Brewery Brzesko, Kasztelan Brewery, Szczecin Brewery
	Carlsberg Shared Services (CSS)	No production sites
Serbia	Carlsberg Srbija	Carlsberg Srbija - Celarevo
Sweden	Carlsberg Sverige	Falkenberg, Ramlösa Sverige
Switzerland	Feldschlösschen	Rhözüns, S Rheinfeld, Sion
	Carlsberg Supply Company	No production sites
UK	Carlsberg UK	Northampton

COUNTRY	COMPANY	SITES
EASTERN EUROPE		
Azerbaijan	Baku (Company)	Baku
Belarus	Alivaria	Alivaria
Kazakhstan	Carlsberg Kazakhstan	Carlsberg Kazakhstan (brewery site)
Russia	Baltika Breweries	Baltika Brewery St. Petersburg, Baltika Don Brewery Rostov-Na-Don, Baltika Khabarovsk, Baltika Novosibirsk, Baltika Samara, Baltika Tula Brewery Tula, Yarpivo Brewery Yaroslavl, Yarpivo Voronezh
	Carlsberg Eastern Europe (Grain Co)	Malt Plant Yaroslavl, Malt Plant Tula
Ukraine	Carlsberg Ukraine	Lvivska Brewery Lviv, Slavutich Zaporozhye, Slavutich Kiev
ASIA		
China	Xinjiang Group	Akesu Brewery, Urumqi No. 2 Brewery, Wusu Brewery, Yining Brewery, Korle Brewery
	CIB & TMH	Carlsberg Brewery Guangdong (Huizhou), Changzhou Tianmuhu Beer Co. Ltd, Anhui Tiandao Beer Co. Ltd
	Ningxia Group	Ningxia Xixia Jianiang Brewery
	Yunnan Group	Kunming Huashi Brewery Yunnan, Dali Beer Co. Ltd
	CBC	Mawangxiang Brewery, Dazhulin Brewery, Hechuan Brewery, Liangping Brewery, Wanzhou Brewery, Fuling Brewery, Panzhuhua Brewery, Xichang Brewery, Boke Brewery, Shizhu Brewery, Yibin Brewery, Guoren Lixian Brewery, Guoren Yongzhou Brewery
		China National Office (HQ)
	Carlsberg Brewery Hong Kong	No production sites
India	Carlsberg India	Kolkatta, Alwar, Aurangabad, Paonta Sahib, Hyderabad, Dharuhera, Mysuru Karnataka brewery
Laos	Lao Brewery	Pepsi Plant Vientiane, Lao Brewery Pakse, Lao Brewery Vientiane
Malaysia	Carlsberg Malaysia	Carlsberg Kuala Lumpur
Nepal	Gorkha Brewery	Gorkha Brewery
Singapore	Carlsberg Singapore	No production sites
Vietnam	Carlsberg Vietnam	Phu Bai

TAX CONTRIBUTION PRINCIPLES

BASIS OF PREPARATION GENERAL COMMENTS

This Basis of Preparation presents the scope and methodology of the collection and reporting of the data on tax payments used in the Economic Contribution section (“the Section”).

The Section aims to provide readers with an overview of the total tax contribution to society that the Carlsberg Group (excluding associates) has generated during the year. The total tax contribution is defined as taxes borne and taxes collected by the Carlsberg Group.

It is the responsibility of the management of the Carlsberg Group to ensure that appropriate procedures are in place to prepare reporting in line with this Basis of Preparation.

All data, unless otherwise stated, has been prepared for the year from 1 January 2019 to 31 December 2019.

Data is collected for consolidated entities in the Carlsberg Group.

Companies over which the Carlsberg Group exercises a significant influence, but does not consolidate, are considered to be associates. Data for associates is not part of the Carlsberg Group tax contribution.

Entities acquired or formed during the year are recognised in the Section from the date of acquisition or formation. Entities that are disposed of or wound up are recognised in the consolidated income statement up to the date of disposal or winding-up.

The data includes a degree of estimation, as tax per entity is not reported in detail if a type of tax is below DKK 100,000 per year. Instead, taxes below DKK 50,000 are not reported, and taxes above DKK 50,000 but below DKK 100,000 are reported as DKK 50,000. The data is reported by the entity in local currency in multiples of 1,000.

SCOPE OF REPORTING AND DEFINITION OF KEY TERMS

“Tax” in this Section means any amount of money required to be paid to, or collected and subsequently remitted to, a government.

Terms defined in the Carlsberg Group’s Annual Report 2019 are not described below.

Taxes borne and taxes collected are the taxes due in respect of an accounting period as defined in IFRS, as adopted by the EU.

KEY TERM DEFINITIONS

Economic value generated

Economic value generated comprises gross revenue, other income, financial income and income included in special items, and share of profit after tax in associates and joint ventures. Income recognised in other comprehensive income is not included.

Total tax contribution

Total tax contribution is the sum of borne and collected taxes paid to

governments for the period from 1 January to 31 December. Amounts are included as paid when cash is released from or received by the Carlsberg Group.

Operating costs

Include cost of sales, sales and distribution expenses, administrative expenses and other operating expenses, but exclude employee wages.

Employee wages

Include wages to employees, excluding social security costs.

Providers of capital

Include financial expenses recognised in the income statement, but exclude financial expenses recognised in other comprehensive income.

Economic value retained

Consolidated profit after tax.

Employee taxes

Include personal income taxes and social contribution for employees (collected).

Government

Any government body or nation, state, region or district.

SCOPE OF REPORTING 1. BORNE TAXES

These are the taxes that the Carlsberg Group is obliged to pay to a government on its own behalf, or taxes that the Group is obliged to pay to a third party and that cannot be recovered from a government.

Corporate income tax

Corporate income tax comprises any tax on the business calculated on the basis of its profits, income or capital gains. Typically, these taxes would be reflected in corporate income tax returns made to governments and tend to become payable, and are paid, either in the year the profits were made or up to one year later, depending on the local tax rules as to timing of payments.

Energy taxes (net, non-refundable)

Energy taxes comprise environmental taxes levied on the consumption of energy borne by

companies' own supply of energy. Such taxes may include taxes on the consumption of electricity, oil, gas or coal.

Environmental fees

Environmental fees comprise additional environmental taxes that may apply depending on company operations. Such taxes may include other taxes and duties on the supply of goods and services that are potentially harmful to the environment and have not been included in the energy taxes.

VAT (non-deductible)

Non-deductible VAT is the part of the input VAT that cannot be recovered, e.g. VAT on gifts or entertainment.

Real estate taxes

Real estate taxes comprise any property-related taxes, including property, land and estate tax (other than stamp duty, which is shown below). Typically, these taxes tend to become payable, and are paid, to governments throughout the year.

Withholding taxes on dividends, royalties, interest and professional fees

Withholding taxes comprise the final tax burden on payment of dividends, interest etc. after possible tax relief.

Transportation taxes

Transportation taxes comprise flight tax, petrol tax, registration duties and other taxes levied on the mobility of goods and employees.

Social contribution for employees

Social contribution for employees comprises the social security contributions levied on and borne by the employing company. Such contributions may include the employer's national insurance contributions, employment insurance tax, employees' provident fund, old-age, survivors' and disability insurance tax.

Stamp duties

Stamp duties comprise taxes that arise on transfers of assets or capital. Typically, these taxes would be reflected in stamp duty returns made to governments and tend to become payable, and are paid, to governments shortly after the capital or assets have been transferred.

Other taxes

This category comprises all paid taxes that are not included in the above categories.

2. TAXES COLLECTED, INCLUDING EXCISE DUTIES

These are taxes not finally borne by the Carlsberg Group, but for which the Group bears an administrative burden of collection. These taxes are, however, indirectly generated

from the Group's business activities and are therefore part of the Group's total tax contribution.

Excise duties (beer and soft drinks etc.)

Excise duties are indirect taxes on the consumption of alcoholic beverages etc.

Excise duties are generally imposed by the tax authorities and are collected by the Group on behalf of the authorities when the goods are transferred to the customers and are thereby ready for consumption.

Personal income taxes

These comprise employee taxes withheld from employee wages and paid to governments, i.e. tax collected and remitted to governments on behalf of employees.

Social contribution withheld by the company

These comprises social contributions payable by employees to social security, and private funded and unfunded schemes. Generally, the employment of staff requires the employing company to administer employees' social security contributions by deducting these from wages and salaries.

Withholding tax on dividend distributions made by Carlsberg A/S

This comprises taxes that are required to be withheld in advance on payments made to shareholders.

VAT/GST

VAT is a broadly based consumption tax assessed on the value added to goods and services. It applies more or less to all goods and services that are bought and sold for use or consumption.

VAT is assessed and collected at each point in the manufacturing-distribution-sales process of a good or supply of a service.

Like VAT, the Goods and Service Tax (GST) is a value-added tax assessed on most goods and services bought and sold for consumption.

ECONOMIC CONTRIBUTION METHODOLOGY

Estimates for this report on jobs created throughout the value chain were calculated by the research consultancy Europe Economics using an established methodology that is also used by the Brewers of Europe. Data has been collected from 29 Carlsberg companies across the world.

The variables collected included: employment (number of people in each market), production (in hectolitres), turnover, value added and personnel costs (in national currency), and taxes borne and collected by Carlsberg in each of the markets (excise duties, VAT, corporate, environmental, employee income, social contribution and other taxes, in national currency).

To calculate indirect effects (accounting for the Carlsberg Group's purchases upstream in the supply chain), Europe Economics also collected data on domestic purchases of goods and services in the areas of: agriculture; utilities; packaging and bottling; transportation and storage; equipment and other industrial activities; media, marketing and communication; and other goods and services. To calculate induced effects (downstream into the hospitality and retail sectors), Europe Economics collected data on prices and shares of Carlsberg Group sales in off- and on-trade markets. Both indirect and induced effects relate to the production and sales of beer.

Indirect effects

To calculate indirect employment, Europe Economics used ratios of turnover per person employed. For European countries, the ratios were sourced from Eurostat using NACE Rev. 2 sector classifications¹. For non-European countries, Europe Economics used ratios taken from the World Bank (available for three categories only: Agriculture, Industry and Services).

Induced effects

Calculation of the induced effects starts from a total consumption value in each of the on- and off-trade markets (hospitality and retail sales respectively). The value is calculated using the average consumption values (in hectolitres), the Carlsberg shares in each of the national markets and the relative prices of the final products sold therein. The market values are then converted to pre-tax values by removing the VAT².

To obtain figures for induced employment, Europe Economics used ratios of turnover per person employed. For European countries, Europe Economics used Eurostat data for the NACE Rev. 2 sectors of "Retail sale of beverages in specialised stores" and "Beverage serving activities". For non-European countries, Europe Economics used World Bank data for the sector "Services".

¹ The following associations were used: "A: Agriculture" and "H: Transportation and storage" ratios were used for the agriculture and transportation sectors respectively, whereas "C: Manufacturing" was used for the sectors of packaging and equipment. A combination of "D: Electricity, gas, steam and air conditioning supply" and "E: Water supply; sewerage, waste management and remediation activities" was used for the utilities sector and a combination of "L: Real estate activities", "N: Administrative and support service activities", and "M: Professional, scientific and technical activities, Media and marketing" was used for media and marketing. Finally, an average of the manufacturing and marketing sectors was used for the sector representing other goods and services.

² Excise duties are not removed, as the productivity ratios used from statistical sources contain such duties.

LIMITED ASSURANCE REPORT OF THE INDEPENDENT AUDITOR

The Carlsberg Group engaged us to provide limited assurance on the selected data described below and set out in the Carlsberg Group Sustainability Report for the period 1 January – 31 December 2019.

OUR CONCLUSION

Based on the procedures we performed and the evidence we obtained, nothing has come to our attention that causes us not to believe that data in scope for our limited assurance engagement are free of material misstatements and are prepared, in all material respects, in accordance with the accounting principles as stated in the sections “Reporting process and scope” (pages 53-54), “Indicator definitions” (pages 55-62), “List of reporting sites” (pages 63-64) and “Tax contribution principles” (pages 65-66) of the 2019 Carlsberg Group Sustainability Report.

This conclusion is to be read in the context of what we say in the remainder of our report.

WHAT WE ARE ASSURING

The scope of our work was limited to assurance on selected data for the period 1 January – 31 December 2019 in the section “Data summary table” (pages 46-52), namely:

- Energy, carbon and water: data on “Total production of beer and soft drinks”, “Relative figures from beer and soft drinks production”, “Total thermal energy consumption”, “Total electricity consumption”, “Scope 1 – Absolute CO₂ emissions (excl. logistics)”, “Scope 2 – Absolute CO₂ emissions. Market based”, “Total water consumption”, “HFC-based refrigerants”, “Percentage of electricity from renewable sources” and “Number of sites using coal” (pages 46-48);
- Responsible drinking and marketing communication: data on “Percentage of fermented produced volume carrying responsible drinking guiding symbols and/or equivalent text”, “Percentage of total beer volume that lists nutritional information” and “Percentage of total beer volume

that lists ingredient information” (page 50);

- Health & Safety: data on “Number of lost-time accidents”, “Lost-time accident rate”, “Number of lost days” and “Days lost rate” in the Carlsberg Group and “Number of lost-time accidents, contractors” and “Number of lost-time accidents, members of the public” (page 49);
- In the “Economic contribution” section, the following information: “Total tax contribution”, “Taxes borne” and “Excise duties paid” (pages 38-40).

We do not provide any assurance on the achievability of the Carlsberg Group’s objectives, targets and expectations.

PROFESSIONAL STANDARDS APPLIED AND LEVEL OF ASSURANCE

We performed a limited assurance engagement in accordance with the International Standard on Assurance Engagements 3000 (revised), “Assurance Engagements other than Audits and Reviews of Historical

Financial Information”. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks; consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

OUR INDEPENDENCE AND QUALITY CONTROL

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other ethical requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour. The firm applies the International Standard on Quality

Control 1 and accordingly maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. Our work was carried out by an independent multidisciplinary team with experience in sustainability reporting and assurance.

UNDERSTANDING REPORTING AND MEASUREMENT METHODOLOGIES

Data and information need to be read and understood together with the accounting principles (sections “Reporting process and scope”, “Indicator definitions”, “List of reporting sites” and “Tax contribution principles”), which Management is solely responsible for selecting and applying. The absence of a significant body of established practice on which to draw to evaluate and measure non-financial information allows for different, but acceptable, measurement techniques

and can affect comparability between entities and over time.

WORK PERFORMED

We are required to plan and perform our work in order to consider the risk of material misstatement of the data. In doing so and based on our professional judgement, we:

- Completed a media search to identify relevant risks and issues within the scope of the assurance engagement for Carlsberg during the reporting period;
- Reviewed the suitability of the reporting criteria;
- Evaluated the design and implementation of the systems, and processing and internal controls over the selected data in scope for our assurance engagement;
- Conducted interviews with relevant policy owners at corporate levels, who are responsible for collecting, consolidating and carrying out internal control procedures on the selected data in scope for our assurance engagement;
- Visited production sites in Azerbaijan, China and Serbia to obtain insight into local sustainability management, review data and assess the robustness of the sustainability data management systems;
- Conducted an analytical review of the selected data in scope for our assurance engagement submitted

- by all production sites for consolidation at corporate level;
- Evaluated relevant internal and external documentation, based on sampling, to determine whether the selected data in scope for our assurance engagement is supported by sufficient evidence;
- Reconciled selected tax information with the audited consolidated financial statements of Carlsberg A/S;
- Read other information included in the 2019 Carlsberg Group Sustainability Report in order to identify any material inconsistencies with the selected data in scope for our assurance engagement and our limited assurance report thereon.

MANAGEMENT'S RESPONSIBILITIES

Management of the Carlsberg Group is responsible for:

- Designing, implementing and maintaining internal control over information relevant to the preparation of data in the Carlsberg Group Sustainability Report that is free from material misstatement, whether due to fraud or error;
- Establishing objective accounting principles for preparing data;
- Measuring and reporting data in the Sustainability Report based on the accounting principles; and

- The content of the Carlsberg Group Sustainability Report for the period 1 January – 31 December 2019.

OUR RESPONSIBILITIES

We are responsible for:

- Planning and performing the engagement to obtain limited assurance about whether selected environmental, health & safety, social and economic contribution data in the 2019 Carlsberg Group Sustainability Report are free from material misstatement, and are prepared, in all material respects, in accordance with the accounting principles;
- Forming an independent conclusion, based on the procedures performed and the evidence obtained; and
- Reporting our conclusion to the stakeholders of the Carlsberg Group.

Copenhagen, 4 February 2020

PricewaterhouseCoopers

Statsautoriseret
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Editor: Carlsberg Group Corporate Affairs
Design & layout: Operate & SkabelonDesign
Copywriting & proofreading: Onestone & Borella projects