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## 2016 overview



17%

Renewable energy

We use a mix of biomass, solar power and renewable energy certificates with guarantees of origin.

9%

Reduction in relative water consumption at our breweries since 2010

In 2016, our water efficiency improved to 3.2 hl/hl.

42,000 Number of employess

62,6 Net revenue DKKbn

DKKbn

**Operating profit** 

Jobs created by every 10 **Carlsberg Group employees** 

20

Partnerships with external organisations to promote responsible drinking

These included Night Owls, a Scandinavian volunteer group.





Zero

Accidents at over 50% of Group production sites

In 2016, more than half of our sites had an accident-free year.

## **CEO FOREWORD**

## Charting our course



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Our Dali brewery is putting clean, renewable energy technologies to work with the installation of over 8,000 solar panels.

Cees 't Hart, CEO, Carlsberg Group

Sustainability is a subject close to my heart. It is also central to the Carlsberg Group's purpose "to brew for a better today and tomorrow". In 2016, we embedded sustainability in our new Group strategy, SAIL'22, as part of our aim to create a winning culture throughout our business.

In the year since SAIL'22 was launched, I have witnessed many examples of the pioneering spirit this company was built upon. Our founder, J.C. Jacobsen, was committed to improving brewing and society, giving us the foundation for our purpose. Today, we build on his legacy through our sustainability activities and contribute to a better tomorrow wherever our brands are brewed and sold.

This year, as global initiatives such as the Paris Climate Accord and the UN's 17 Sustainable Development Goals gained traction, we were excited to initiate research-led relationships with expert organisations such as Business for Social Responsibility, the Carbon Trust and WWF. Together, we will hone our sustainability strategy and define new ambitious targets, to be announced later in the year.

Our materiality process highlighted the four priority areas with the greatest impact on our business and society. These are Energy & carbon, Water, Responsible drinking and Health & safety. I am pleased with the progress we have made against our 2016 targets in the first three areas. However, I cannot say the same about our Health & safety performance.

I was deeply saddened to learn of the deaths of one Carlsberg employee and four employees at minority joint ventures and contractors in 2016. Our ultimate ambition is to achieve a culture of zero accidents and we are determined to pursue this goal with renewed vigour in the coming months and years.

Reflecting on the past year, I am especially proud of the Cradle-to-Cradle® certification of the Kronenbourg 1664 bottle (page 18) and the solar power installation in Dali, China (page 17). We continued to promote responsible drinking, with targeted interventions at the heart of our approach. In connection with Global Beer Responsibility Day, I joined the Danish volunteer group Night Owls and was impressed by their dedication (page 33). We also launched a Group-wide training programme to initiate the cultural transformation needed to achieve SAIL'22.

We made investments in a range of sustainability programmes in 2016, and I look forward to seeing these come to fruition in 2017. They include developments in sustainable packaging and in technologies to reduce our use of water and increase our use of renewable energy. In the broader context, the Carlsberg Group continues to support the UN Global Compact and the implementation of its Ten Principles.

This report serves as our annual Communication on Progress and underlines our commitment to transparency.

The world promises to be quite a different place in 2022, the end year for our SAIL'22 strategy. Much can happen between now and then. However, I am confident that the course we have set puts us in a strong position to continue brewing probably the best beers in the world, and to make the Carlsberg Group an even more attractive company for shareholders, employees and society.

Cees 't Hart CEO, Carlsberg Group



## Sustainability and SAIL'22

With the introduction of our new corporate strategy, SAIL'22, 2016 was in many ways a year of transition, not least in the area of sustainability.

Our ultimate goal is to deliver long-term value, and this means making the Carlsberg Group an even more successful, professional and attractive brewer wherever we operate. Our SAIL'22 strategy focuses on how to achieve this long-term goal (see below).

Only by performing strongly in all these areas will we be able to deliver enhanced value for all our stakeholders.

## Create a winning culture

A winning culture is needed to underpin everything we do. It is about developing a team-based, high-performance approach combined with individual accountability. Our sustainability work falls within this main category and is entitled "Contribute to a better society". It encompasses our four sustainability priorities (page 6).

## Targets, old and new

Here we report on the commitments made for 2016 and the actions planned for 2017 to ensure progress towards our three-year targets. However, since we are striving "to brew for a better today and tomorrow", in future we will not settle for just three-year targets. Instead, we are restructuring and honing our approach to sustainability, refining our targets and conducting Group-wide training (page 10) with a longer-term perspective in mind. Our new sustainability targets will be announced later in 2017.



STRENGTHEN THE CORE

Leverage our strongholds **Excel in execution** Funding the Journey



**POSITION FOR GROWTH** 

Win in growing categories Target big cities Grow in Asia



**DELIVER VALUE** FOR SHAREHOLDERS

Organic growth in operating profit **ROIC** improvement Optimal capital allocation



**Team-based performance** Contribute to a better society Compass (applying our codes and policies)



## **STRATEGY**

# Contribute to a better society

The Carlsberg Group has a new, restructured approach to sustainability. Underpinning our licence to brew and operate, we regard this as essential to the successful implementation of the Group's strategy.

## Our new approach

In 2016, we carried out a materiality assessment with Business for Social Responsibility (BSR) to identify the most important sustain-

ability management topics, risks and impacts for our business. The four priority areas that emerged as most crucial for our business and stakeholders are Energy & carbon, Water, Responsible drinking and Health & safety.

Focusing on these four priorities, we aim to bring about positive change in all the areas touched by our business:

- Contributing to the containment of climate change
- · Ensuring people have access to water
- · Promoting a healthy lifestyle
- Improving workplace safety

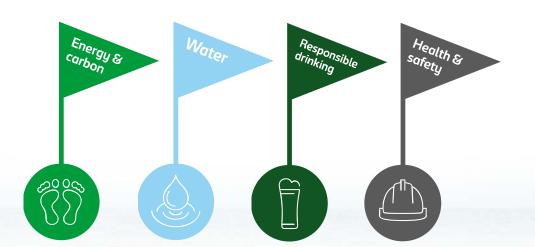
With the support and input of external partners, we are now developing specific targets for each priority to be launched in 2017.

Our determination to contribute harmonises with the global drive for prosperity with lower impact set out in the Paris Climate Accord and the UN's Sustainable Development Goals (SDGs).

We aspire to live up to these global developments. Our sustainability priorities will guide our business actions and how we approach the SDGs. We will contribute to their realisation wherever we have the knowledge and opportunity to do so.

Although new in many ways, Contribute to a better society also builds on the legacy of our founder, J.C. Jacobsen, in that it applies science to make brewing more sustainable.

We believe that business has a leading role to play in developing concepts such as the circular economy or closed-loop practices to drive positive change. To this end, we will continue to develop external partnerships that amplify our impact. Examples include the development of



## Four sustainability priorities

One of the priorities of SAIL'22 is Contribute to a better society, and within this lie our four sustainability priorities, shown here.



the Green Fiber Bottle (page 20) and industry initiatives on responsible drinking such as the Global Beer Responsibility Day (GBRD) on pages 31 and 32.

The Carlsberg Group's Executive Committee (ExCom) has overall responsibility for sustainability and for signing off our targets.

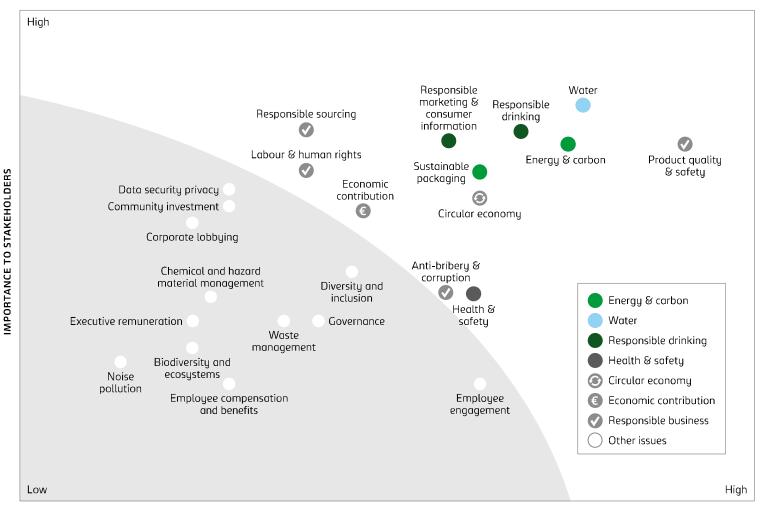
## **Materiality matrix**

The materiality assessment carried out by our Group sustainability team and BSR in 2016 led to the creation of a new materiality matrix, shown here. To create this, we began by listing a universe of relevant sustainability topics drawn from sources such as BSR's database, research into global trends and drivers, sector and sustainability reporting requirements, and investor rating agency criteria.

A joint working group rated the 24 key issues according to their impact on stakeholders and on the business. Rating decisions were also informed by the views of five external stakeholders, including customers, peers and civil society, and by colleagues from across the Group.

The resulting matrix was tested with our internal and external stakeholders and refined by BSR and the Carlsberg Group's sustainability team.

As a company, we want to focus on the areas that are key to our business success, and that our stakeholders deem most important. In this report, we therefore disclose progress on the topics in the upper, non-shaded area of the matrix. These are grouped under the following



## **INFLUENCE ON BUSINESS SUCCESS**



## **About this report**

## Reporting scope

In 2016, we closed/divested ten breweries and three malting plants in China, five sites in Malawi, two malting plants in Poland and one malting plant in Denmark. These are therefore excluded from this report. We acquired one brewery in Greece. This and our two malting plants in Russia are included in the scope of this report.

### Content

Our 2016 Sustainability Report reflects the outcome of our materiality assessment and focuses on the four priority areas identified. It provides updates on the commitments made for 2016 and the actions planned for 2017 to ensure progress towards our 2015-17 targets. We show progress against our 2016 commitments in the following way:



achieved





Not

## Methodology and assurance

This report contains Standard Disclosures from the Global Reporting Initiative (GRI) Sustainability Reporting Guidelines without meeting the "in accordance" criteria. We refer to its principles to ensure high standards and quality in terms of materiality, stakeholder inclusive-ness, sustainability context, completeness, balance, comparability, accuracy, timeliness, clarity and reliability (GRI table included on page 58). Our disclosure in this year's report has been developed with a view to reporting to the GRI Standards in 2017.

As in previous years, we commissioned KPMG to assure selected information at a limited level of assurance. This information is identified by the note "Within KPMG's assurance scope". KPMG's conclusions can be found in the independent assurance report on page 57.

headings: Energy & carbon, Water, Responsible drinking and Health & safety. The Circular economy, and the circular mindset that delivers it, underpin our approach to Energy & carbon and Water, as illustrated on page 11.

An additional four topics (marked with a tick on the matrix overleaf) are grouped together in

the Responsible business section of the report. These are: Labour & human rights, Antibribery & corruption, Responsible sourcing and Product quality & safety.

In a further article called Community engagement with purpose (page 47) we provide an update on community investment. This

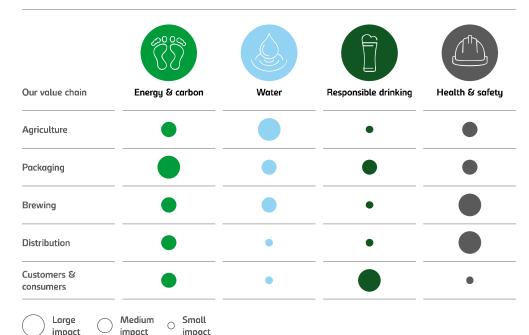
is not a priority topic in the materiality matrix but important because in 2016 the Carlsberg Group started to develop a new, globally coordinated approach that will be further developed in 2017.

Our separate Economic Contribution Report is available on the Carlsberg Group website.

## Impacts along the value chain

Having identified the four areas that are most important for our business and stakeholders, the Carlsberg Group's sustainability team drew on their own experience and available data to assess the extent of our impacts - large, medium or small – in each part of the value chain, as shown in the diagram below. This information is helping to shape our sustainability strategy and targets.

## Impacts along the value chain



## **STRATEGY**

# Thinking big about the global goals

Companies can use the Sustainable Development Goals (SDGs) in a variety of ways: from shaping their own sustainability programmes to understanding the contribution their business activities make. We want to demonstrate the private sector's central role as agents of change in overcoming these global challenges.

## Concrete actions, specific targets

Our four priority areas correlate most closely to SDGs 3, 6, 7 and 8, which means we can have the greatest influence on these Goals. As shown here, we focus our attention on the most relevant target for each SDG. Our activities will contribute to the SDG targets to double the global rate of energy efficiency by 2030, substantially increase water-use efficiency, strengthen the prevention and treatment of harmful use of alcohol, protect labour rights, and promote safe and secure working environments for all workers.

We also address two further goals – SDG 12, Responsible consumption and production, and SDG 17, Partnerships for the goals – through our activities to develop more sustainable packaging and build partnerships within the Carlsberg Circular Community (CCC). Read more on page 23. We are identifying ways in which Group activities covered in the Responsible business section of this report impact on SDGs 5, 9, 10 and 16.

Indirectly, Carlsberg influences the remaining SDGs through our impacts on society via business operations along the value chain.

We will elaborate on our contribution to achieving the SDGs when we launch our new sustainability targets later this year. At that time, we will make our intention to "think big about the global goals" even clearer.

## The Carlsberg Group and the SDGs

Work in our four priority areas will strengthen our business, build resilience in the value chain and make a major contribution to global challenges and the Sustainable Development Goals.

## The Carlsberg Group sustainability priority areas







Water



Responsible drinking



Health & safety

## Most material SDGs with selected targets



**7.3** By 2030, double the global rate of improvement in energy efficiency.



**6.4** By 2030, substantially increase water-use efficiency and ensure sustainable withdrawals and supply of freshwater to address water scarcity.



**3.5** Strengthen the prevention and treatment of substance abuse, including harmful use of alcohol.



**8.8** Protect labour rights and promote safe and secure working environments for all workers.

## Sustainable Development Goals that cut across our operations

**12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.





**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.

# Training for SAIL'22

To bring our ambitious new corporate strategy, SAIL'22, to life, we require new ways of working. Our answer is to build knowledge and understanding through a worldwide training programme. Designed to deliver nothing less than cultural transformation, the training strongly promotes the behaviours needed to create what we call a "winning culture".

## Three enablers for a winning culture

Our strategy is represented by a sailing boat. For any boat to reach its destination, the crew needs to work as one team – with purpose and integrity. The same applies to our company. We have chosen to focus on three enablers:

- 1. Foster team-based performance through alignment, accountability and action.
- 2. Contribute to a better society by driving our four sustainability priorities.
- Live by our Compass by applying our codes and policies.

## Integrating sustainability

Training around the second enabler focuses on the important role sustainability plays in society and provides insight into our four sustainability priorities. It includes casework, discussions and games that involve real-life scenarios. Since participants recognise these as relevant to their daily work, they actively engage with and experience the learning on a deep level.

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- The values underlying our behaviour are a very big part of why I go that extra mile for the company.
- Now we are talking the same language.
- Replacing I with we.

All 42,000 employees will be trained using the new condensed version of the programme by the end of 2017.

## Reaching the whole organisation

To begin with, ten train-the-trainer workshops were run in three locations – Copenhagen, St Petersburg and Hong Kong. The 200 participants then cascaded their learning via workshops for leaders in their own markets. Approximately 4,500 leaders were trained by

the end of 2016. In 2017, we are rolling out a shorter version of the training programme to all remaining 37,000+ Group employees. Obviously, deep change takes time and consistent work. This Group-wide training is proving an excellent way to inform and involve all employees and empower them to lead by example.



Circular mindset in the Carlsberg Group

Designing waste out of the system and using resources in continuous loops help minimise environmental impacts. To grow our business and further reduce impacts, we must do even more. In the Carlsberg Group, we call this "rethink" and place it at the core of our 4Rs approach, which includes the familiar 3Rs – reduce, reuse and recycle.

## **Rethink**

Challenge linear approaches to energy, packaging and water use. Channel waste into other products. Focus on biomaterials.

## Reduce

Minimise weight or change to less impactful packaging materials.

## Reuse

Promote reuse of e.g. packaging materials, by-products and water.

## Recycle

Encourage consumer recycling and increase the recycled content of packaging materials.



## Energy & carbon

39%

of our packaging is refillable

We focus on raising return rates and reducing breakages.









## Reduction in CO<sub>2</sub> emissions since 2010

We reduce our carbon footprint through efficient use of energy and by transitioning from coal to more renewable energy sources.





## 2015-2017 targets

## Impact reduction

5-10% reduction in relative energy use and CO<sub>2</sub> emissions compared with 2014.

## Circularity

17 partners in the Carlsberg Circular Community.

## Certifications

3 Cradle-to-Cradle® product certifications.

## **Consumer activities**

Annual consumer-facing sustainable packaging activity by all Group companies.

## **Returnable packaging**

Improve returnable packaging performance in production and in trade in markets where returnable packaging is part of the long-term packaging strategy.



## **ENERGY & CARBON**

# Understanding our carbon footprint

For any company to thrive in a low-carbon world, the starting points are a robust carbon strategy based on solid information and leadership from the top. In 2016, our carbon footprint laid the foundation for building our new carbon strategy and setting ambitious targets in 2017.

## Management approach

Our Executive Committee (ExCom) assumes ultimate responsibility for the Carlsberg Group's carbon strategy and performance, while the Group's Environmental Policy sets standards, provides guidelines on implementing them and lays out reporting requirements for all Group companies. To ensure informed decision-making, for instance, the policy stipulates that all new packaging must undergo a life cycle assessment or Cradle-to-Cradle® Certification. Oversight of packaging lies with the Carlsberg's Group's supply chain, which continuously strives to reduce packaging impacts.

Our approach to carbon management at breweries is threefold:

- Set global standards.
- Implement innovative solutions.
- · Drive local improvements.

Breweries look to the Group's Environmental Policy for guidance. In addition, our utilities management team works with local staff to develop tailored approaches to energy management and target-setting for all our sites. Our brewery managers are responsible for delivering improvements and meeting targets.

Discussions with external stakeholders provide valuable insights into environmental themes, including energy and climate change. We therefore communicate regularly with external stakeholders such as our peers at the Beverage Industry Environmental Roundtable (BIER).

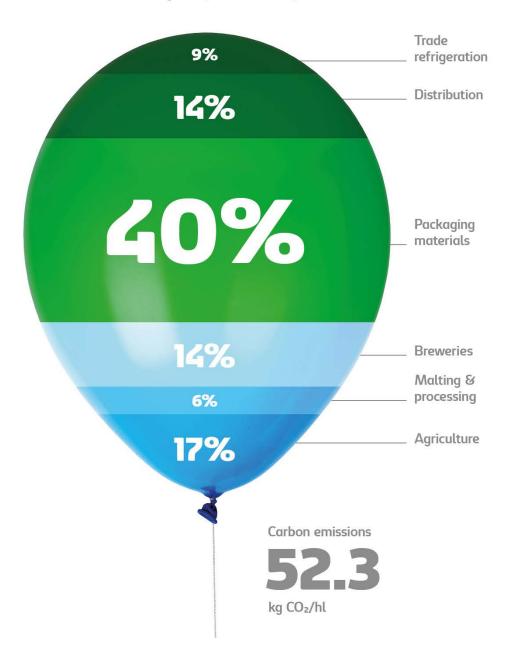
## Baseline carbon footprint

To ensure that our understanding of our carbon impact is both complete and up to date, in 2016 we worked with climate change experts from the Carbon Trust to develop a new baseline carbon footprint of our operations and value chain based on 2015 data.

The Carbon Trust acts as an independent partner to leading organisations around the world, helping them to contribute to a more



## The Carlsberg Group's carbon footprint

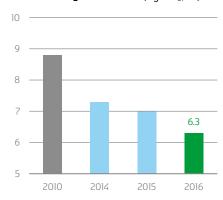


sustainable future through carbon reduction, resource efficiency and low-carbon technologies.

To compile the dataset for our baseline carbon footprint, we collected information on direct emissions from sources that we own or control (Scope 1) and indirect emissions from purchased electricity, heat and steam (Scope 2). We also collated figures about emissions resulting from our activities, although they are not controlled by us (Scope 3). The resulting footprint, illustrated on the left, differs slightly from the one we developed in 2009 for two key reasons: firstly, the methodology has evolved and, secondly, this time we took additional Scope 3 categories such as customer refrigeration into account.

Our baseline footprint shows that, at 40%, packaging materials make up the majority of our carbon footprint. Agriculture accounts for 17%, while distribution and breweries account for 14% each.

## Relative CO<sub>2</sub> emissions (kg CO<sub>2</sub>/hl)\*



<sup>\*</sup> Within KPMG's assurance scope.

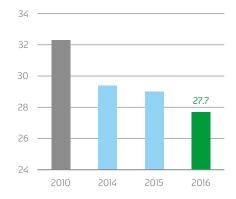
## Developing our roadmap

Group-wide, we are continuing to lower our impacts. One way we do this is by focusing on returnable packaging (page 21). Another is through the Carlsberg Circular Community (CCC), which employs radical innovation to rethink waste streams. Throughout our operations, we are also continuously reducing, reusing and recycling.

At all our sites, we are continuing to invest in technology to increase our efficiency and introducing renewable energy. The case story about our new PV system in Dali, China, on page 17 provides the details of one such project.

In 2017, we will undertake research and develop new targets for our own operations as well as activities along the value chain. For instance, we will continue to investigate the impact of different ingredient types in our beer to reduce the carbon footprint of agriculture. Leveraging our partnership experience, we also aim to increase cooperation with farmers and other value chain partners to catalyse improvements.

## Relative energy consumption (kWh/hl)\*



<sup>\*</sup> Within KPMG's assurance scope.

## Brewing with tomorrow in mind

Brewing makes up 14% of our carbon footprint. Across the Group, we are continuously striving to improve our energy efficiency. At site level, this involves deploying innovative technologies, such as renewable energy and heat recovery.

## Integrated utilities management

Managing energy well is the first step in using it more efficiently. This year, we succeeded in preparing our breweries in Russia, Finland and Bulgaria for ISO 50001 certification, which will bring our total of certified sites to four. Our work with ISO 50001 provides useful input for our integrated utilities management standard – coordinated approach to energy and water efficiency. We develop requirements, measure our performance against them and devise programmes for improvement. A Group-wide audit of the utilities management standard is planned for 2017 and 2018 to assess progress.

## **Efficiency**

With energy efficiency at 27.7 kWh/hl\* compared to 29 Kwh/hl in 2015, overall efficiency performance across the Group improved 4%

year on year and 14% versus 2010. Emissions fell to 6.3 kg CO<sub>2</sub>/hl\* from 7.0 kg CO<sub>2</sub>/hl in 2015, representing a reduction of 10% year on year and 28% versus 2010. Together with previous years' performance, these results contribute to our three-year target to 2017, which we are on track to achieve. Later this year, we will set new, ambitious long-term targets.

A number of factors account for our improved efficiency and reduced emissions in 2016. For example, in China and Russia we moved away from coal power to natural gas and cleaner district heating. As well as cutting our carbon footprint, this helped combat air pollution. In China, we shifted our brewing activity away from smaller, inefficient breweries to larger, more efficient ones such as Dali, Ningxia Xixia and Dazhulin.

Our refrigeration systems are being upgraded to industry best practice level at several breweries, which will reduce electricity consumption at these sites by more than 10%. These projects will be completed in 2017.

## Commitment to renewables

In India, we installed three rooftop solar systems with a combined peak capacity of over 0.2 MW to supply 10% of the site's total power

demand. In 2017, we will assess their performance and subsequently design a solar programme across India based on our findings. The case story on page 17 gives details of our rooftop installation at Dali, China.

To stimulate the market for renewable energy and contribute to SDG 13, we bought a total of

374, 810 MWh of renewable energy certificates with guarantees of origin, corresponding to the electricity consumption of every Carlsberg brewery in Western Europe.

In total, 8.3% of our thermal energy intake is from renewable sources, and 45% of our electricity is generated on site and from renewable

## WHAT WE SAID

## Certification

Pilot a new ISO 50001 energy management system (EnMS) in selected plants; certifications in 2016/-2017 as part of the Integrated Management System

## Integrated management

Implement a new revised standard for utilities management (including energy, water and wastewater) with coordinated action plans in key plants

### Efficiencu

Continue energy efficiency programmes across the Group

## Innovations

Continue the search for innovations in process, packaging and utility facilities with key suppliers

## WHAT WE DID

2016

ISO 50001 certification in Finland confirmed; other sites in Western and Eastern European countries prepared for certification in 2017



Utilities management standard finalised and sent for self-audits and planning



Ongoing: progress tracked monthly; best practices in energy efficiency shared



Innovations investigated: refrigeration (several sites), heat recovery (Finland)









<sup>\*</sup> Within KPMG's assurance scope.

**CASE STORY** 

## Recovering heat at Sinebrychoff

Thanks to a combination of sophisticated technology and innovative thinking, Sinebrychoff recovers energy from a surprising range of processes – from beer cooling systems to compressors and wastewater.

Investments in heat recovery are making a major impact on the energy efficiency ambitions of Sinebrychoff at our Kerava site in Finland. Heat from refrigerating beer, compressed air and from process wastewater is recovered and then used in production, and to keep buildings and offices warm during Finland's cold winters. The main energy recovery technology is heat pumps, which are used to extract energy and make it available for the purposes mentioned above.

The total amount of heat recovered annually is around 15,000 MWh, making a major contribution to reducing Sinebrychoff's energy consumption by 9% since 2005. The heat recovery project currently plays the



The total amount of heat recovered for use in buildings, offices and production processes is 15,000 MWh per year.

biggest part in Sinebrychoff's on-site energy efficiency agenda, and the energy savings achieved meet Finland's national 2005-2016 Energy Efficiency Agreement.

A further accomplishment is the site's certification to the ISO 50001 energy management system in 2016. Not content with the successes already under its belt, initiatives

are underway at Sinebrychoff to further improve energy and carbon emission performance. It has also decided to join Finland's 2017-2025 voluntary Energy Efficiency Agreement.

energy certificates. Renewable energy in the form of biogas, biomass and renewable electricity provides as much as 70% of the power needs of five sites in India and two in China.

The case story on the left gives details of our new heat recovery investment at Sinebrychoff in Finland.

## Reducing impacts from distribution

Distributing Carlsberg Group products using our own vehicles and those of suppliers accounts for 14% of our carbon footprint. Though small compared to our packaging impacts, we are working hard to drive down logistics emissions and costs by becoming more efficient.

## **Continuous improvement**

Training, better planning, measurement and control, switching to more efficient trucks and using rail transport where possible all contribute to a decrease in impacts.

In 2016, the route planning tool used in Western Europe was updated to make it more reliable, and a similar tool is currently being rolled out in Eastern Europe. We continued using the transportation management process in Russia, India and across Europe. Our Control Tower in Poland provides an overview of cross-border deliveries and helped increase our load factor (how full our trucks are) from 85% to 95% in 2016, saving the equivalent of 114 full truck-loads during the year.

## Centres of excellence

In 2016, we established three centres of excellence in route planning, transportation management and telematics. The purpose is to share best practice and encourage behavioural change. Additionally, all function heads in distribution were asked to hold one-to-one sessions with their drivers to discuss outputs from the telematics system.

## Improving technology

In 2016, to further leverage the advantages of low carbon and nitrogen oxide emissions, we increased our fleet of EURO 6 trucks by 51 vehicles. This brought the total number to 205. In Sweden, we continued to use three hydrogenated vegetable oil (HVO) trucks, two electric hybrid trucks and one truck that runs on compressed natural gas (CNG). In Switzerland, we continued to use one fully electric truck.

## **Looking forward**

Our activities to improve efficiency in brewing and distribution support our commitment to SDG 7.3: to double the global rate of energy efficiency by 2030. In the next few years, we intend to certify all our large European breweries to ISO 50001 as part of the utilities management standard.

In distribution, we will broaden our use of telematics and route planning, and further raise load factors.

As we develop our carbon strategy and targets during the year, we look forward to building new partnerships to promote a circular mindset, support SDG 17 and catalyse positive change.

**CASE STORY** 

## Dali taps into solar big time!

Giving us a glimpse of the energy supply of the future, the Dali brewery in China is using solar panels to meet around 20% of its electricity needs.

Completed in June 2016, the Dali brewery's rooftop installation provides renew-able energy to help mitigate the brewery's annual CO<sub>2</sub> emissions of more than 1,800 tonnes. Around 20% of Dali's electricity needs can now be met by a clean, cost-effective and infinitely renewable power source.

In a world where climate change can cause disruption to energy supply, the use of resilient and renewable technologies such as solar is a smart way to go. Every hour, the sun is estimated to transmit more energy to the earth's surface than the world's entire population uses in a year. And since the sun's energy is unlimited, it is also an extremely reliable energy source.



Dali brewery now has the largest rooftop installation in the Group, and is the fourth largest brewery installation in the world.

What is more, tapping into the sun's energy is becoming more economically viable as payback periods get shorter and we start to see real economies of scale.

More widespread use of clean energy sources such as solar will not only contribute to reduced CO<sub>2</sub> emissions but also to cleaner air and the reduction of pollution-related health issues.

## **Facts and figures**

- · Location: Dali brewery in Yunnan, China.
- Production: Tuborg, Dali Beer and Wind, Flower, Snow and Moon (WFSM) Beer.
- Consisting of 8,006 panels, this is our largest rooftop solar array and the world's fourth largest brewery installation

## First glass partnership

We are proud to announce that in 2016 we and our glass bottle partner O-I obtained Cradle-to-Cradle® Bronze Certification for the 25 cl Kronenbourg 1664 bottle, made in France.

In 2014, recognising that partnerships are absolutely necessary to achieve value chain circularity, we established the Carlsberg Circular Community (CCC). This involved teaming up with six major partners, including suppliers of cans, glass bottles and coatings, paperboard packaging and plastics. Together, we set out to address the need for greater resource efficiency, with the ultimate goal of eliminating waste. The CCC now has nine partners.

Our 2017 goal was to obtain Cradle-to-Cradle® Certification for three different types of packaging. In 2015, we achieved certification of the Rexam (now Ball Corporation) beverage can, which is used for our Somersby and Carlsberg brands. Now there is more good news with the certification of the 25 cl Kronenbourg 1664 bottle. This is especially significant since it is the first time global validation has been given to a glass beverage pack. And it makes

sense. The raw materials used in the manufacture of glass bottles are safe and abundant. Some bottles can be returned and reused, and, in the case of the 1664 bottle, the glass can also be recycled.

Drawing on the experience with O-I, we hope to obtain further certifications in the coming years. With the cooperation of our partners, we will continue to drive improvements across the supply chain. Besides innovating in manufacturing and container design, we are also looking to engage with consumers on glass recycling and to work with municipalities on developing glass collection infrastructure.

44

This success has reinforced our belief in the sustainable qualities of glass packaging.

Tim Neil, Director of Environment Health & Safety, O-I Europe



2016

# Developments in sustainable packaging

Packaging protects our products during transport and ensures they are in peak condition when our consumers receive them. At the same time, both our business and the environment benefit when we minimise packaging impacts. Our goal is therefore to find the sweet spot where optimal product protection and minimal resource use coincide.

Packaging currently accounts for approximately 40% of our carbon footprint and a significant proportion of our product costs. That means a CO<sub>2</sub> saving on packaging can often be translated into a cost saving – a win-win opportunity for the Group's bottom line and the environment.

## Circular mindset

The principles of the circular economy inform our approach to sustainable packaging. We apply the 4Rs model – reduce, reuse, recycle, rethink – with the emphasis on rethink. For example, whenever we develop a new packaging idea, we apply a circular mindset and use a life

cycle assessment (LCA) tool to calculate its environmental impact throughout the life of the package – from extracting resources, manufacture and use, all the way to recycling or reuse. We want to be sure that any new packaging is based on informed decisions that take into account both our business and the environment.

## **Product Environmental Footprint**

In 2016, we were involved in a pilot project, coordinated by the Brewers of Europe, to harmonise approaches to Product Environmental Footprint (PEF). Using LCA, we worked with partners including brewers, packaging organisations and academia to develop industry standards for measuring product impacts and test how these could be communicated to consumers. The objective is to provide input for European legislation about environmental impact at product level.

## The Green Fiber Bottle

Perhaps the best-known example of how we rethink our packaging is our breakthrough, biobased, low-carbon, Green Fiber Bottle. An early version was revealed to great interest in 2015. It continues to attract attention and spark discussion, as described in the case story on page 20.

## **Packaging innovation**

In 2016, we defined a packaging innovation initiative. Unfortunately, this was delayed by development challenges and a launch is now scheduled for 2017.

## Carlsberg Circular Community (CCC)

The Green Fiber Bottle development project is only possible thanks to the combined efforts of our partners in the CCC. Its members come from all parts of the packaging value chain, and together we pursue a circular, zero-waste economu.

## WHAT WE SAID

## Carlsberg Circular Community

Onboard 4 new partners in CCC

## Cradle-to-Cradle® Certification

Obtain 1 more Cradle-to-Cradle® Certification

## Consumer campaigns

Increase the number of companies conducting consumer-facing sustainable packaging campaigns

## Innovations

Launch 1 sustainable packaging innovation

## 1 new partner – BillerudKorsnäs – onboarded for Green Fiber Bottle development Certification obtained for the Kronenbourg 1664 glass bottle

 $14\ companies\ conducted\ campaigns,\ 4\ more\ than\ in\ 2016$ 

Projects defined in 2016 and will be launched in 2017



WHAT WE DID





**CASE STORY** 

## Green Fiber Bottle attracts new partner

Good news for the future of the revolutionary Green Fiber Bottle: we have a development and manufacturing partner on board to move this innovation towards commercial reality, while our consumer research is showing positive results.

The formation of the Carlsberg Circular Community (CCC) described on page 23, put rethinking packaging waste streams at the heart of our agenda and led to the development of the ground-breaking Green Fiber Bottle.

The CCC's next step was to explore the bottle's manufacturing potential. In 2016, we were delighted to welcome the Swedish packaging material solutions company BillerudKorsnäs to the CCC. They are an ideal partner for this development project, combining access to a responsibly sourced



Work is underway to move the Green Fiber Bottle from prototype to commercial production, thanks to our ninth CCC partner, BillerudKorsnäs.

supply of wood pulp with an innovative approach and a clear focus on sustainability. While the work to move from prototype to commercial production goes on, we are exploring consumer reactions to the Green Fiber Bottle. At conferences around the world, the feedback on its sustainability credentials has been overwhelmingly positive. Naturally, people have questions about the effect on product flavour and the

durability of the bottle. We are able to reassure them that the quality of our beer will be as high as ever and the pulp-based bottle will not "spontaneously degrade".

We know that packaging with excellent sustainability performance is essential for a healthy planet. The Carlsberg Group can play a role by offering several packaging options and guiding consumers with clear information about their relative impacts.

CCC representatives played a vital part in achieving our first two Cradle-to-Cradle® Certifications for Somersby and Carlsberg cans in 2015 and the Kronenbourg 1664 bottle in 2016, described on page 18. A further certification is anticipated in 2017.

In 2016, the CCC grew again as we onboarded one more partner, BillerudKorsnäs, which will be a key player when it comes to manufacturing the Green Fiber Bottle. This brings the total CCC membership to nine, lower than the goal of 12 we set ourselves for the year. Quality is more important than quantity, however, and given the CCC's success, we have decided to leverage our partnership experience and expand its remit. In 2017, rather than growing the CCC to 17, as set out in our three-year targets, we will include members who share our ambition to innovate along the value chain. In particular, we will focus on addressing carbon, water and responsible drinking challenges, as described on page 23.

## Less is more

Reducing the weight and thickness of packaging is the best way to both minimise impact on the environment and keep costs down. In 2016, we continued to roll out light-weighted caps and started to develop thinner pull-off caps across Europe. These will be introduced in Asia in 2017.

The year also saw progress on light-weighting aluminium cans, which make up 90% of can supply. In six countries, mainly in Western Europe, we worked with a manufacturing partner to achieve a 5% weight reduction in the can body and to gain 10% savings in the can end. In

both Eastern and Western Europe, we reduced the amount of resin used in our PET bottles and caps.

Several projects to reduce the weight of our glass bottles were carried out, mainly in Europe. In France, for example, we worked with our CCC partner O-I to reduce the amount of glass in two different types of bottle. We reduced the overall weight by more than 2,000 tonnes, thereby eliminating 1,500 tonnes of emissions from our carbon footprint. This is the equivalent of taking more than 800 cars off the road. In 2017, we will continue to work with suppliers to lower our CO<sub>2</sub> impact and reduce costs.

Taken individually, each improvement may appear small, but together they significantly reduce the carbon footprint of our products. We will continue our efforts to light-weight packaging in the future. Other stakeholders such as consumers also have a crucial role to play, for example by recycling more. More importantly, if they start demanding that waste be reduced, it will send signals right along the packaging value chain, from resource use to marketing and communications. This could kick-start the next wave of development.

## Returnable packaging

Managed well, returnable packaging, including bottles, kegs, crates and pallets, offers the best way forward on both economic and environmental grounds. It takes a lot of energy to make glass bottles, so using them several times via a returnable system reduces carbon emissions during their lifetime.

CASE STORY

## China keeps more bottles in the system

Well-managed returnable bottle systems are the most efficient packaging option, and in China a sharper focus on returnable packaging is paying dividends. A combination of involving stakeholders, addressing key performance issues and implementing better return processes is contributing to lower breakage rates at our own and customers' sites.

Our data collection and tracking system helps us find out which partners or customers are responsible for bottle losses or slow return times. We analyse the results to highlight the challenges that deter or prevent our stakeholders from returning bottles in a reusable state. These can range from deposit value in the value chain, distance between source and consumer, and control over the return process. We offer to support our customers as they learn to manage these issues.



The returnable packaging team looks at how bottles are stored at the Xichang Brewery in China and checks for likely breakage issues. Careful data collection helps identify solutions.

Understanding the value chain is one way to get more bottles returned; another is to keep breakage rates low. China has made great strides in both these areas. They have worked with customers and bottle collectors to ensure the bottles are treated with care in the return process, for example by transporting them in crates. And they have worked with suppliers to improve the quality of bottles to limit breakages.

Where bottles are returned in sacks, our plants in China have implemented two methods to reduce breakages: using bottle cages for storage, and standardising the packing process to ensure that each sack is filled with just one type of bottle.

Through its many efforts across the value chain, China is successfully leveraging the benefits of returnable packaging.

Returnable bottles are particularly widely used in Asia, while globally we refilled over 5.6 billion glass bottles in 2016. This figure was lower than in 2015 because, among other things, we closed/divested ten breweries in China that sold primarily refilled bottles. We also reduced the proportion of refillables in the packaging mix in Eastern Europe.

## Returnable packaging excellence

Our returnable packaging excellence programme ensures that we use refillable bottles efficiently. Its three key objectives are to reduce breakages, improve return rates and minimise market loss. To achieve these, our approach is to make more effective use of data and KPIs, estimate purchasing requirements with greater accuracy and improve performance management at every plant.

## 2017 COMMITMENTS

### Certification

ISO 50001 energy management system (EnMS) in Western and Eastern Europe; certifications in 2017 as part of the Integrated Management System

## Efficiency programmes

Continue energy efficiency programmes to deliver improvements across the Group

## Innovations

Continue the search for innovations in process, packaging and utility facilities with key suppliers

## **Expanding partners**

Expand the Carlsberg Circular Community (CCC) to include partners outside packaging

## Circularity

Obtain 1 more Cradle-to-Cradle® Certification

### Two-in-one!

Visitors to the 2016 Roskilde Music Festival in Denmark were invited to recycle their empty bottles and share a responsible drinking message at the same time.

The case story on page 21 gives further insight into how we are improving returnable bottle performance in China.

## Consumer recycling campaigns

In 2016, 14 companies in the Group carried out 16 campaigns\* to raise recycling awareness among consumers and promote higher collection rates. For example, three companies in China introduced incentives encouraging consumers to bring back refillable glass bottles. In Lithuania, we offered to clean up the shore of a lake to reward the people in the Utena lake district for returning over 10 million items. Engaging festival attendees on the issue of recycling continued in several countries, including Denmark, featured in the photo on the right.

## Looking ahead

In 2017, we will focus on developing innovative, sustainable packaging and revise our approach to recycling. This supports our contribution to SDG 12.5: to successfully reduce waste generation through prevention, reduction, recycling and reuse.

\* Within KPMG's assurance scope.



# Growing our community of innovators

Partnering through the Carlsberg Circular Community (CCC) gives us opportunities to innovate around packaging. Its success suggests that the same partnership model could be used to rethink some of the world's major challenges, including climate change and water efficiency.

Creating system change – for example along an entire value chain or redesigning waste flows – requires all the relevant players to be involved. That is why we are working collaboratively to develop the breakthrough Green Fiber Bottle with our new CCC partner, the packaging company BillerudKorsnäs (page 20).

Beyond producing a physical product, the advantages of bringing multiple stakeholders together to tackle difficult problems are that it:

- · Pools complementary resources.
- Draws on the specific skills and knowledge of partners.
- Allows risks to be shared.
- · Creates momentum and economies of scale.
- Brings positive reinforcement throughout the value chain.

We plan to leverage the CCC's unique position, experience and learning to deliver and scale solutions to complex sustainability challenges.

Partnership is key to all the SDGs, and the specific focus of SDG17\*, because successful collaboration is one of the essential mechanisms that must be mobilised to deliver all the goals. Consequently, we have put SDG 17\* at the heart of our approach.

One of our aims is to encourage our partners to pass on to their other customers the lessons they have learned through CCC partnership with us. In this way, the ripples of our efforts will reach a far broader audience than we in the Carlsberg Group can possibly hope to reach on our own.

## Carlsberg Circular Community members:

Arkema, Ball, BillerudKorsnäs, CP+B, EcoXpac, O-I, Petainer, rkw, WestRock

\* SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.



## Water

4

## Sites in India have advanced water recycling technology systems

In 2016, we also installed evaporators at these sites to remove salts from wastewater.



9%

## Reduction in relative water consumption since 2010

More efficient and closed-loop systems drive improvements.



2015-2017 targets

## Impact reduction

5-10% reduction in relative water consumption.



## Priority sites identified in water risk assessment with WWF

This research will inform our water strategy.



# Tackling the water challenge

As water scarcity becomes a pressing problem for more communities globally, we made it a priority to identify Carlsberg Group sites in water-scarce areas. Our research, carried out with WWF provides a springboard for deepening the Group's water stewardship commitment in 2017.

## Management approach

In the Carlsberg Group, we manage water as part of our integrated utilities management standard – a coordinated approach to energy and water efficiency.

Globally, the Group's Environmental Policy provides guidance, which includes requiring companies to assess exposure to water scarcity regularly at site level, as it is primarily a local issue.

To deliver against Group requirements in highrisk areas, industry-leading water efficiency technology has been employed for a number of years, and this will be rolled out more widely in the future (page 27).

Local knowledge is essential to good water stewardship, and it is primarily the responsibility of brewery leadership to manage permits for water extraction and discharge. When setting efficiency targets, however, brewery managers also draw on the knowledge and experience of our global utilities management team.

## Water risk assessment

To support our global water strategy and approach to water stewardship at breweries, in 2016 we partnered with WWF to carry out a new water risk assessment of all our sites. Thanks to over ten years' experience of working with corporates and water risk, WWF is well placed to help us reappraise our water strategy and targets.

In 2016, using WWF's Water Risk Filter tool, the Carlsberg Group's sites were assessed for physical risks such as water quantity (scarcity, flooding and droughts) and water quality (pollution). Regulatory and reputational risks were also considered. Our joint research will feed into our target-setting during the course of the year.



More information on WWF's Water Risk Filter methodology

www.waterriskfilter.ora





Location of the 15 priority sites identified by our water risk assessment

## 15 priority sites

Out of the 86 majority-owned sites assessed by WWF, 15 were identified as high risk and are therefore considered high priority. These are located in India, Nepal, China and Vietnam, as shown on the map. As well as focusing our water stewardship efforts on these priority sites, we may broaden our approach to include further facilities where local water risks are evident in 2017.

## Water in the value chain

Barley is a key commodity in terms of the Carlsberg Group's water footprint, but as most of the barley we buy is grown in rain-fed regions, where water is plentiful, this is not considered a risk to the Group or the communities in these areas. However, some of our barley, for instance in India, requires irrigation. Further

research is required to identify whether its impact is material.

## Working collaboratively

We understand that thinking beyond water efficiency at our own sites is essential for minimising water risks. In the water catchment areas where we operate, all stakeholders share responsibility for the social and environmental impact of water use and quality. For this reason, collaborating within watersheds to drive collective improvements is the best way to manage the water on which our high-priority sites depend.

Drawing on our Carlsberg Circular Community experience, we will work with WWF to explore the idea of partnering with stakeholders as part of our commitment to SDG 17. This includes

local industry, government, NGOs and peer brands.

## Water strategy

Our approach to managing on-site water risk and the mitigation measures already in place across the Group are described in the following pages.

In 2017, we will refresh our water strategy based on our research with WWF. We plan to set challenging targets to increase water efficiency and reduce water risk. In this way, we will also contribute to SDG 6.4 and by 2030 substantially increase water efficiency to address water scarcity. This will also mean ensuring sustainable withdrawals and securing supplies of freshwater.

## Local water stewardship

Water is a precious resource. We therefore use it efficiently wherever we operate, applying industry-leading technologies at the sites where water scarcity is a concern.

## Water efficiency

Four sites in India already have advanced water recycling technologies in place, and at least two more are developing these in 2017. Advanced water recycling enables up to 30% of water to be reused as service water, while the remainder is discharged safely to soil to irrigate land at our sites. There is zero liquid discharge beyond the brewery.

## **Reducing salt concentration**

When water is repeatedly recycled, the level of salts in closed-loop systems rises. To keep salt concentrations low, in 2016 we invested in evaporators at four sites in India. They turn salts into solid waste so they can be safely removed from the system.

## On track to achieve target

In 2016, our water efficiency improved to 3.2 hl/hl\* from 3.4 hl/hl in 2015 – a reduction of 6% over the year and 9% since 2010. We are on

track to achieve our three-year water efficiency target in 2017, and we will draw on our research and experience to develop new targets during the year.

In 2017, we will make detailed assessments at each of the 15 high-priority sites identified by WWF, taking into account evolving legislation and engaging with local communities. Our findings will form the basis of water efficiency projects going forward. In the meantime, our

challenge is to ensure continuous production of beer at these locations.

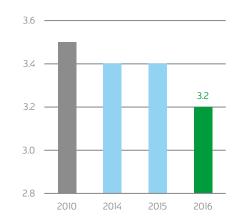
## Wastewater

Wastewater compliance is a subject of increasing interest to stakeholders and regulators, and it receives increasing management attention from the Carlsberg Group. Every six months, we report internally on the performance of our wastewater treatment plants, capital projects,

complaints, issues, and so forth. Based on this, we create a watch list of locations that may need support to improve their performance.

In addition to the wastewater management programmes in India described above, a further six projects are in preparation: one each in Poland, Italy and Ukraine, which will come on stream in 2017, and three in Russia, which will become operational in 2018.

## Relative water consumption (hl/hl)\*



\* Within KPMG's assurance scope.

## **WHAT WE SAID**

## Revised standard

Implement a new revised standard for utilities management (including energy, water and wastewater) with coordinated action plans in key plants

## Efficiency programmes

Continue energy and water efficiency programmes across the Group

### Wastewater

Enhance compliance assurance for wastewater disposal, including new and upgraded wastewater plants

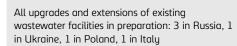
## Innovations

Continue the search for innovations in process, packaging and utility facilities with key suppliers



Ongoing: progress tracked monthly; best practices on water efficiency shared

for self-audits and planning



Water recycling investigated in India









## Working with local communities

This is an area where we intend to become more active in the coming months and years. As mentioned on page 26, as of 2017 we plan to collaborate with the organisations and local communities in shared water catchment areas. We will begin by focusing on those where water is most scarce. Look out for progress updates on our website and in next year's Sustainability Report.

## **2017 COMMITMENTS**

## Efficiency programmes

Continue water efficiency programmes to deliver improvements across the Group

## Wastewater

Enhance compliance assurance for wastewater disposal, including new and upgraded wastewater plants, and zero liquid discharge (soil discharge after treatment and water recycling) projects in India

### Innovations

Continue the search for innovations in process, packaging and utility facilities with key suppliers

CASE STORY

## **Every drop counts**

Our Chinese operations are making great strides in reducing water usage through diligent housekeeping and careful monitoring. Their success demonstrates that improving water efficiency does not always require radical change.

In 2016, the amount of water used to brew one hectolitre (hl) of beer was reduced by more than 7% in our Chinese breweries. Around the country, 11 sites reduced their water use by more than 10%. Two stellar performers actually used less than 3 hl/hl: the Carlsberg Brewery Guangdong (Huizhou) and the Urumqi No. 2 Brewery.

## Five water-saving strategies

They say that many drops make an ocean and never is that more apt than when it comes to saving water. Across China, we closed some inefficient breweries and employed five key strategies to reduce water use at the remaining breweries.

 Cutting wasted water in packaging equipment by limiting bottle-rinsing water to the precise amount needed



Across China, 11 sites reduced their water use by more than 10% in 2016.

and maintaining equipment to avoid leaks.

- Improving production planning by bundling batches and raising line efficiency to minimise stoppages and idle water consumption.
- 3. Revising cleaning programmes to reduce unnecessary rinsing water. For example, shortening rinsing time without compromising on cleanliness.
- 4. Using recycled water from production to preclean returned bottles before they enter the regular bottle washer.
- 5. Reducing water in steam generation by returning more condensed water and improving boiler water quality.

In an effort to progressively reduce water use, we will continue to seek out, improve and share approaches such as these.

## Responsible drinking

20

Partnerships with external organisations to promote responsible drinking

These included volunteer organisations, industry bodies and private enterprises.





50 million

campaigns to discourage

People reached with

irresponsible drinking

at sports events such as UEFA EURO 2016™ and music festivals

around the world.

We engaged consumers in debate

## 25 million

People reached through our activities on Global Beer Responsibility Day

In September 2016, Carlsberg helped organise the second GBRD – a global collaborative effort to raise awareness.





## 2015-2017 targets

## Responsibility messages

All print communication above A4 and digital and TV commercials to carry responsible drinking messages.

## Responsibility programmes

All Group companies to implement at least one responsible drinking programme.

## Symbols on packaging

100% of consumer-facing primary packaging to carry responsible drinking information to discourage harmful drinking.

## **Consumer information**

80% of consumer-facing primary packaging in Western Europe to carry information on ingredients and nutritional values.

## Consumer outreach

Annually reach at least 20 million consumers through responsible drinking messaging and campaigns.

# Our approach to responsible drinking

In the Carlsberg Group, we want people around the world to enjoy our great beers. It is equally important to us that they do so responsibly.

## Management approach

Our Group strategy commits us to contributing to a better society (page 6). Among other things, that means looking at the impact of our products on communities and taking proactive steps to support consumers in making healthy, responsible choices. We do this in three ways:

- · Promoting moderate consumption.
- Campaigning to prevent underage drinking and drink driving.
- · Marketing our products responsibly.

## The SDGs set our direction

Our starting point is the Sustainable Development Goal on health\* and WHO's target to achieve a 10% relative reduction in the harmful use of alcohol by 2020. In our efforts to make a difference, we leverage all the tools at our disposal: our products, our advertising and our partnerships with the retailers who sell our products.

## Partnerships to tackle misuse

Alcohol misuse is a diffuse societal problem not limited to a single socioeconomic group, life phase or geographical area. This makes tackling it a complex task, and one that requires collaboration between all the relevant stakeholders. Our approach is therefore to consider all the situations in which beer is consumed and to identify relevant partners and work with them to find common solutions. Our partners are drawn from all walks of life, including consumer groups, NGOs, retailers, volunteer organisations, law enforcement agencies and other brewers.

A central element in our approach is to partner with experts when designing consumer-focused initiatives, such as the OK Drinkers campaign described on page 35. In this instance, we reviewed the latest research into behavioural science and the effects of alcohol together with external partners in order to devise a campaign that would deliver the maximum impact.

\* SDG 3.5: Strengthen the prevention and treatment of substance abuse, including harmful use of alcohol.



## RESPONSIBLE DRINKING

# Promoting moderate consumption

We believe in targeted interventions to reduce harmful drinking and continue to partner with stakeholders at all levels in the communities in which we operate.

Globally, we leverage the unique opportunity offered by our brands to communicate directly with consumers and collaborate with partners from the relevant sectors. At market level, our local Group companies implement initiatives to address the problems that are most prevalent in their own countries. One of our three-year targets to 2017 was for all Group companies to implement at least one responsible drinking programme. We are pleased to report that over 75% of our markets implemented programmes in 2016.

## Campaigns that get people talking

In 2016, we reached over 50 million people with our activities to discourage irresponsible drinking. We did this by taking advantage of specific occasions to engage consumers in debate. For example, in conjunction with the UEFA EURO 2016<sup>TM</sup> football tournament, we ran a campaign to get consumers to share their views of "what responsible drinking means".

This involved turning a vuvuzela (the horn popular with fans at football matches) into a type of breathalyser that would only make a noise if the user was below the binge-drinking limit.

Another campaign was our OK Drinkers films, consisting of five humorous animations broadcast during UEFA EURO 2016 ™ (page 35). Meanwhile, in Denmark we continued our Drink with Respect initiative at the Roskilde Music Festival. Fans were invited to recycle their cans and bottles in a special recycling bin, and at the same time label the bin with their own responsible drinking message (page 22). We also made efforts to raise consumer awareness of responsible drinking in Vietnam – through our presence at the Monsoon Music Festival in October.

One specific ambition we had for 2016 was to develop a bespoke responsible drinking programme for the flagship Carlsberg brand. A programme has been developed and is currently being fine-tuned in preparation for global implementation in 2017.

## Global Beer Responsibility Day

In September 2016, we ran the Global Beer Responsibility Day (GBRD) for the second time.

This is a worldwide collaborative effort between brewers, retailers, police authorities and NGOs, and its purpose is to promote responsible consumption of beer while addressing the issues around alcohol misuse.

The core purpose of GBRD is to reach as many consumers as possible, and to onboard new partners to help promote responsible drinking. In 2016, a total of 17 Carlsberg markets participated, and our combined activities reached

### WHAT WE SAID

## Annual GBRD

Majority of relevant Carlsberg markets to participate in Global Beer Responsibility Day (GBRD)

## Number of consumers reached (GBRD)

Reach 5 million consumers with our activities around GBRD

## Number of consumers reached (other)

Reach 15 million consumers with our activities to promote responsible drinking and discourage irresponsible drinking (in addition to GBRD)

## Progress, global commitments

Drive progress towards reaching the global commitments set by leading alcohol producers in 2013 to reduce harmful drinking

## Sports events

Promote responsible drinking around UEFA EURO  $2016^{\text{TM}}$ 

## WHAT WE DID

2016

17 markets participated, including the UK, Poland, Norway, Denmark, Sweden, Finland, Russia, China, Malaysia and Ukraine



Reached over 50 million people

Reached approx. 25 million people



Progress made towards reaching all our commitments, including the introduction of digital guidelines in our marketing policies and our efforts to prevent underage selling and drink driving



OK Drinkers in fan zones, consumer engagement through "responsible vuvuzela" activation









nearly 25 million people. We are particularly pleased that so many of these activities were carried out in partnership with over 20 organisations, including governments, NGOs and business partners.

Thanks to our successful participation in GBRD in 2016, we are on track to meet our three-year target to reach at least 20 million consumers through responsible drinking messaging and campaigns annually. We will continue participating in future and are raising our ambition to reach 30 million people in 2017. In all, we are aiming to reach 60 million consumers globally through our combined responsible drinking initiatives in 2017.

## Drinking and driving

The Carlsberg Group's stance on beer and driving is clear; they don't mix. Last year, in an effort to combat drink driving, we partnered with retailers and taxi companies in several countries. We offered to pay consumers' rides home, promoting the message: "Next time, remember to leave your car at home!" Similar initiatives are being introduced in Denmark, Poland, Bulgaria and Vietnam.

In Sweden, we ran a dedicated drink driving campaign with the restaurant chain Harry's. Celebrities became taxi drivers for the night and their conversations with passengers were filmed and widely shared on social media.

## Preventing underage drinking

Underage drinking is not acceptable under any circumstances. To help combat this problem, we committed to increasing our engagement with outlets where alcohol is sold in 2016. We continued to see progress being made through targeted initiatives, including educating sales people and placing visual materials in shops in China, Russia, Ukraine and Poland.

While our focus on preventing sales to minors remains unchanged, we want to play a more proactive role in future. This will include the education of minors on the risks of underage drinking, and informing influencers such as parents and teachers.

## Multi-stakeholder approach

One of the challenges we face as a beer producer is that in order to help combat underage consumption we must work with individuals and groups who are in direct contact with consumers. That is why we support grassroots organisations such as the Night Owls in Denmark (page 33) as they strive to create safer drinking environments for young people.

## Working together

While most of our responsible drinking activities take place at market level, we also believe that global collaboration is crucial to address the wider societal challenge. We are therefore working with companies that are part of the International Alliance for Responsible Drinking (IARD). This is a not-for-profit organisation dedicated to addressing the global public health issue of harmful drinking and promoting responsible drinking.



## Read more about IARD's commitments

www.producerscommitments.org/

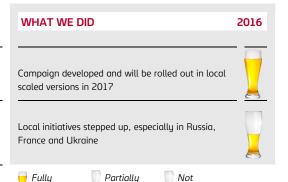
## WHAT WE SAID

### Branded campaian

Develop a Group-wide don't-drink-and-drive campaign for the Carlsberg brand

### Retailer collaboration

Increase the number of market-level collaborations with retail partners to specifically address underage consumption



achieved

achieved

achieved

## 2017 COMMITMENTS

### Number of consumers (GBRD)

Reach 30 million consumers during Global Beer Responsibility Day (GBRD)

## Number of consumers (other)

Reach 60 million consumers globally through our combined responsible drinking initiatives

# Having fun and staying safe

When it comes to responsible drinking, our vision is to have all our employees acting as ambassadors. To improve our chances of successfully communicating on this topic, we want to form partnerships with other individuals and organisations.

Partnerships with organisations that can support our efforts in high-risk areas are especially helpful. The Scandinavian volunteer group Night Owls is one such organisation, and we have been supporting them financially for many years.

The purpose of Night Owls is to help create a safer environment for young people out having fun, and to be on hand to support anyone whose fun night out has turned sour. The mainly parent-led organisation has 40 affiliates in around 160 Danish towns. Together, groups of parents walk the streets wearing distinctive luminous yellow jackets and help young people to enjoy themselves responsibly. Their approach is not to judge or police those they meet, but rather to provide a reassuring presence and offer support when needed.

Last year, in connection with the worldwide Global Beer Responsibility Day, Night Owls invited Carlsberg employees to join them and walk the streets of the capital city. A number of employees, including CEO Cees 't Hart and Board Chairman Flemming Besenbacher accepted the invitation, showing their personal commitment to SDG 17.17: Encourage and promote effective public, public-private and civil society partnerships.

On two separate occasions, volunteers spent the evening with Night Owls finding out more about their work and experiencing first hand the role they play on our cities' streets.

44

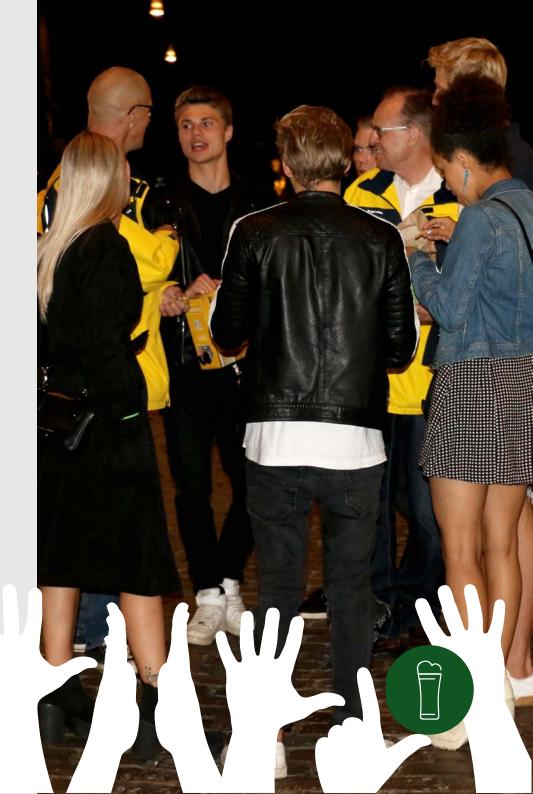
Engaging with grassroots partners is an excellent way to drive progress.

Cees 't Hart, CEO, Carlsberg Group

44

It's so important that we recognise and support the great value of cooperation between the private, voluntary and public sectors.

Kim Hassø, Night Owls leader



## RESPONSIBLE DRINKING

## Responsible marketing and consumer information

Our brands provide us with powerful and far-reaching channels to talk with consumers directly. It is therefore crucial that we communicate responsibly at all times, and that we diligently apply the relevant standards to our marketing materials.

## Policy revisions and updates, 2016

Our marketing and consumer information is guided by our Marketing Communication Policy, which reflects standards set by industry bodies. In 2016, we updated this policy in line with recent changes in industry standards. However, the launch of the policy was brought forward to 2017 to coincide with the release of a complete set of new Group policies. To support implementation and awareness across our organisation, updated e-learning is being made mandatory for all the relevant marketing managers. This will also be launched in 2017.

## Global campaigns and compliance

Some marketing campaigns are devised and run locally, while others are developed at Group level then adapted for local use. In all cases, they follow the global standards set out

in our policy and reflect our philosophy of moderation. One type of communication we expressly avoid is advertising designed specifically to appeal to people below the legal drinking age or intended for use in environments where young people are prevalent.

## Responsible marketing pact

With this in mind, the Carlsberg Group, in cooperation with other alcohol producers, has created a responsible marketing pact (RMP). Through this, we commit to only placing our advertisements in contexts where at least 70% of the audience is over the legal drinking age. The RMP is governed by the World Federation of Advertisers (WFA) and covers three pillars: social media, placement and appeal.

## Monitoring compliance

To monitor compliance, the WFA commissions independent national self-regulatory organisations (SROs) to carry out spot checks on campaigns run by alcohol producers. Should they or any other individual or organisation bring an issue to our attention, we conduct an immediate investigation. If it turns out that we are in breach of laws, industry regulations or our own Group policies, the campaign is immediately withdrawn.

Although our marketing staff are required to follow agreed procedures when producing communication materials, we occasionally have instances of non-compliance. Our central marketing function is informed of any complaints received, and in 2016 this amounted to four complaints, of which one was upheld and three withdrawn.

## Use of symbols

To further help consumers make informed choices, we are now making more information

about our products available, both on packaging and online. We have committed to putting symbols or text that discourage harmful drinking on 100% of our alcoholic beverages by the end of 2017. By the end of 2016, we had achieved 85% coverage.

To raise consumer awareness of the natural ingredients and nutritional value of beer, we have started including this type of information on all our beer brands globally. By the end of 2016,

## WHAT WE SAID

## Use of symbols

Increase the share of volume carrying responsible drinking guiding symbols

## Policy

Roll out updated Marketing Communication Policy to all markets

## E-learning

Implement and run new marketing communication training courses

### Product information

Introduce new consumer information on primary packaging and online



achieved

achieved

achieved

<sup>\*</sup> Within KPMG's assurance scope.

83% of our primary packaging carried ingredient information and 57% carried nutritional information. Our 2017 goal is to cover 80% of our entire volume in Western Europe by the end of 2017.

Information about responsible drinking, as well as ingredients and nutritional information, will be made available online for all our brands by the end of 2017. All these changes are being supported with training material. We will monitor progress half way through 2017 to check that implementation is proceeding as planned.



## Watch films from the OK Drinkers campaign in French

https://youtu.be/xVJDlXy2CJU

## **2017 COMMITMENTS**

### Product information

80% of consumer-facing primary packaging in Western Europe to carry information on ingredients and nutritional values

### Use of symbols

Globally, 100% of our consumer-facing primary packaging to carry responsible drinking information or text to discourage harmful drinking

### E-learning

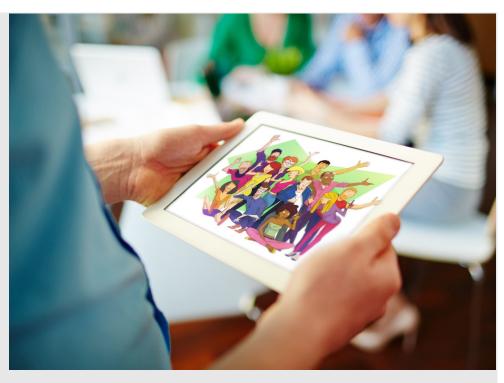
All relevant marketing managers to complete the new e-learning module on our Marketing Communication Policy **CASE STORY** 

## Have a break: stay fresh!

In 2016, the Kronenbourg Brewery launched a light-hearted campaign to encourage moderate consumption. Five films parodying stereotypical drunken behaviour were broadcast in the fan zones of the ten host cities during UEFA EURO 2016<sup>TM</sup>.

The OK Drinkers campaign consisted of short animated clips featuring recognisable figures such as Pukey Julie, I've-got-this Nick, I-know-how-to-fight Pete, Space-invader Steve, and My-round Tom. Targeting primarily 18-30 year olds, it highlighted the consequences – for ourselves and others – of overconsumption.

Instead of just saying "you should drink less", the films suggested that drinkers alternate alcoholic with non-alcoholic drinks, eat something in between drinks or lengthen the time between drinks. That is, if they didn't want to become Pukey Julie, My-round Tom or one of the other comic figures.



OK Drinkers was one of five campaigns to be nominated for the ESSEC Business School Grand Award for Responsible Consumption Industries, chosen from among 60 applicants. The awards ceremony was held at the French Ministry of Finance on 1 February 2017.

The campaign insights were developed in cooperation with a group of experts from various institutions and disciplines, including the French Research Centre for the Study and Monitoring of Living Standards, the department of endocrinology at the hospi-

tal Pitié Salpétrière in Paris and the Department of Social Psychology at the London School of Economics



Young people are primarily looking for social connection. Excessive consumption of alcohol often has the reverse effect.

Saadi Lalhou, Professor of Social Psychology,

## Health & safety



Topic Communication packages to support our zero accidents culture

Delivered to all Carlsberg Group production sites to highlight health & safety risks (see page 39).





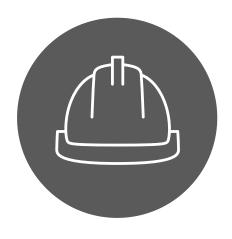
ERO



## **PPE**

Online catalogues now in use across Europe

Standardising the quality of personal protective equipment.



## New policies and procedures

Include Life Saving Rules, which directly forbid highrisk activities.

## **2015-2017 targets**

## LTAR

Reduce the Group lost-time accident rate by 40%.



#### **HEALTH & SAFETY**

## Towards a zero accidents culture

The protection and welfare of our employees and contractors is non-negotiable. However, our health & safety performance in 2016 fell below expectations, impressing upon us the need for a more rigorous approach.

#### Management approach

The Carlsberg Group's Executive Committee (ExCom) is responsible for policy approval and meeting the obligations to manage health & safety effectively. It is then the job of our Supply Chain management team to endorse the policy and drive its implementation. Leaders in the regions and local markets ensure that our policies and standards are followed, and that our employees know what is required of them.

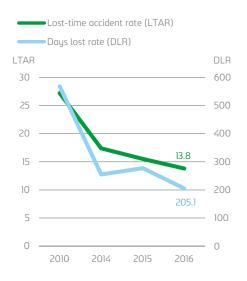
The Group EHS (Environment, Health & Safety) director takes overall responsibility for the EHS programme and management system, as well as our performance and direction. Governance is handled by the Group EHS Council, which ensures that the policies and standards we introduce reflect the Group's priorities.

#### Reporting incidents

If an incident occurs, the relevant country director completes an LTA report and distributes it within 24 hours to the regional executive vice presidents and vice presidents, the country managing directors, Group EHS and regional EHS. This report describes the event and lists immediate actions, then leads into a root cause analysis (RCA), which results in an action plan and concludes with lessons learned.

#### Logistics:

**Lost-time accident & days lost rates** (rate/1,000 employees)\*



<sup>\*</sup> Within KPMG's assurance scope.



After a root cause analysis, we make sure any important learnings are communicated across the Group and that all our markets carry out the relevant follow-up measures (page 40).

#### Visualising our destination

In 2016, we talked about achieving zero accidents, the ultimate objective of continuous improvement. We are still working towards this goal. What does a zero accidents culture look like? A sure sign is that all employees are observing the kind of safety procedures that minimise risks and prevent accidents occurring; for example, wearing personal protective equipment, respecting the separation of pedestrian and forklift pathways, and applying lockout/tagout during machinery interventions and maintenance. Additionally, employees look out for one another. If someone notices a colleague is at risk on the factory floor, they do

not hesitate to intervene and highlight the potential danger. Embedding these behaviours helps us play our part in SDG 8.8: Protect labour rights and promote safe and secure working environments for all workers.

#### Three steps to get there

Reaching our ultimate health & safety destination will require a concerted effort across the Group, and we are kick-starting that effort with a three-step awareness-raising programme.

#### 1. Leadership behaviour

A zero accidents culture requires decisive leadership. With information and motivation at its heart, our new health & safety leadership kickoff training programme will be completed by the Leadership Team in 2017, then rolled out to all other managers Group-wide. Through the training, managers will learn to understand,

recognise and positively reinforce the safe behaviour they need to see in the workplace.

They will also learn how to show care and concern for the people they work with.

#### 2. Better visibility of communication

Communicating our priorities and best practices openly and regularly is another key way to raise awareness. Specifically, we are keeping health & safety in focus through programmes such as Topic Communication, which addresses themes from traffic safety to cut prevention. Our markets regularly receive a range of targeted materials, including posters and reminder cards designed to highlight specific health & safety topics.

Further examples include harmonising health & safety markings and signage at all Carlsberg Group sites as well the vibrant Zero Accidents branding.

#### 3. Implementing procedures

Designed to ensure that major risks are identified and addressed, our Group policies and procedures map out how we work with health & safety.

As part of our overall Group-wide policy revision and relaunch, in 2017 a new Health & Safety Policy will be launched, including new Life Saving Rules designed to establish zero tolerance to high-risk activities. As an example, the lockout/tagout procedures are described on page 40. The new policy will also include the EHS Guiding Principles, which will help us build the health & safety culture to which we aspire.

#### Complementary initiatives

Two further awareness-raising initiatives due for implementation in 2017 are our Safety Walk/Safety Talk and Near Miss programmes. Safety Walk/Safety Talk looks at some of the softer leadership issues, giving managers a structured way to engage with employees and foster discussions about how to eliminate risks and improve working methods. The Near Miss programme encourages employees to report near misses, thus raising awareness of risks and preventing future accidents.

#### The importance of collaboration

While we recognise the need for every employee to take individual responsibility and act as a health & safety ambassador, collaboration also plays a vital role in building a culture of safety.

In 2016, our global EHS network continued to identify and spread best practices across the Group. We also engaged the cooperation of the European Works Council to help align the Life Saving Rules and support our behavioural transformation to ensure that employees prioritise safety all day every day.

#### WHAT WE SAID

#### Certification

Complete plan for Western Europe OHSAS 18001 certification by end of 2016

#### Assessments

Roll out formal SHAPE assessment programme

#### Training

Continue country and local implementation of EHS Leadership Training Programme

#### LTAR

Achieve a Group lost-time accident rate of 5.7









#### **HEALTH & SAFETY**

## Increasing safety at work

We want our employees and contractors to feel safe as they go about their daily business in the service of the Carlsberg Group. Unfortunately, despite improvements in recent years, we cannot yet say this is always the case.

#### 2016 summary

The first months of 2016 showed a solid improvement in our health & safety performance. Accident rates went down, particularly in the areas of cut prevention and forklift/pedestrian interaction. Unfortunately, our performance declined in the second half of the year as a result of accidents at four Carlsberg Group sites.

#### **Progress on 2016 targets**

Last year, we continued our efforts to achieve OHSAS 18001 certification in Western Europe. By the end of 2016, 15 markets were certified. Three markets were postponed and are now on track for certification in 2017 and 2018.

As planned, we continued to use SHAPE (Safety and Health Assessment Programme Excellence) as a key tool for enhancing awareness and generating continuous improvement. Training courses were held in China and Lithuania, and 25-30 internal assessors were accredited in the cross-assessment of each facility.

We continued to implement the EHS Leadership Training Programme at a local level in 2016, including a session in Asia for China's senior management. Dates have been set for training to be delivered in all regions in 2017, including for our Supply Chain headquarters and Executive Committee.

In Switzerland, Denmark, Finland, Sweden and Germany, our site safety coaching programme ensured that thorough accident analyses were

#### Highlighting risks

In 2016, four different Topic Communication packages were delivered at our production sites around the world, highlighting health & safety risk areas such as traffic, electrical safety, manual handling, chemicals and fire.



carried out. An improvement plan for each country was developed and is currently being implemented.

#### **Training**

Several markets took part in an Annual Safety Day in 2016. In China, 27 sites carried out a variety of safety-related activities such as competitions, inspections, first aid training, presentations and safety drills – all aimed at changing behaviour and strengthening awareness among employees.

Previously, we have referred to the ten EHS Guiding Principles. We are now formally making these a part of our Health & Safety Policy, which is due for launch in 2017.

#### Production: Lost-time accident & days lost rates (rate/1,000 employees)\*



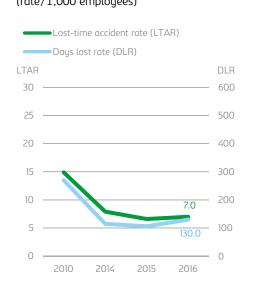
#### Lost-time accident rate (LTAR)

Achieving our Group LTAR target of 5.7 proved challenging. In fact, 2016 saw the rate increase to 7.0 by the end of the year, in spite of a decrease in the overall number of accidents. This was due to the fact that we closed certain breweries and restructured others where we had a very low level of accidents. The consequent reduction in the number of employees tipped the accident rate per 1,000 employees in the wrong direction.

#### Incidents and follow-up measures, 2016

We deeply regret the deaths of one Carlsberg employee and four employees at non-controlling joint venture partners and contractors in

### Carlsberg Group: Lost-time accident & days lost rates (rate/1,000 employees)



Serbia, Bulgaria, Portugal, the UK and Denmark in 2016. These were caused by traffic accidents, machine malfunctions and breaches of procedure.

In the immediate aftermath of these accidents, we urgently reviewed our health & safety procedures and implemented actions to improve performance across the Group. Several new measures were introduced, including more extensive use of lockout/tagout (LOTO) programmes. LOTO is a practice that ensures that potentially hazardous machinery and power sources are shut off before operators perform any maintenance or service work, and not restarted until it is safe to do so. During 2016, we completed a LOTO pilot, which we are now rolling out globally.

Other measures are under consideration. For example, we are now further scrutinising fork-lift traffic and pedestrian traffic patterns with a view to redesigning routing. Furthermore, as one traffic accident was caused by the unpredictable behaviour of a third party, we are also assessing the potential value of training in defensive driving.

#### Learning from experience

In an effort to improve, we first seek to understand exactly what happened whenever an incident or accident occurs. We conduct detailed root cause analyses, drawing on the knowledge of local employees and using experts from Group headquarters and third parties. Multiple sources help us extract the best possible learning in each case.

Having identified and examined all the root causes and contributing factors, we set about devising and implementing measures to minimise or eliminate future risks. In some cases, this can lead to a simple solution such as adding a safety guard to a machine; in others, the problem lies deeper, requiring us to address systemic failures. Once identified, members of the EHS network ensure that best practices are spread to all health & safety managers across the Carlsberg Group.

#### Looking ahead to 2017 and beyond

We are working towards our three-year target of a 40% reduction in the Group lost-time accident rate. To accelerate progress, we are stepping up our efforts this year and ensuring that health & safety issues are addressed more systematically.

We feel confident that this will yield results, but we are also aware of the challenges ahead. Having a robust improvement programme requires solid data. In an effort to improve the quality of our data, we are insisting on a more rigorous and diligent approach to accident reporting in 2017 and beyond. It is important to note that the likely result of better reporting is that, at least initially, accident figures will rise.

#### **2017 COMMITMENTS**

#### Leadership

Roll out health & safety leadership training

#### Communication

Roll out EHS Communication Plan globally

#### Procedures

Deploy new Health & Safety Policy Group-wide, including our EHS Guiding Principles

<sup>\*</sup> Within KPMG's assurance scope.

## Responsible business

New Code of Ethics & Conduct, presented by Cody the Elephant

In the new e-learning module, Cody faces challenging situations and participants help him to overcome them.



2,200

beer samples tested by our sensory panel in 2016

Experts test against common beer on- and off-flavours such as bitter, sweet, diacetyl (butterscotch) and sulphur.

#### About this section

Here we provide an update on several topics that fall outside our four priority areas but were assigned high importance in our 2016 materiality assessment: Labour & human rights, Anti-bribery & corruption, Responsible sourcing and Product quality & safety.

It also covers Community engagement, which is of special interest since we began to develop a new, globally coordinated approach last year.



### Triple A

Introduction of a new behavioural framework

Currently being rolled out to all employees and embedded in our leadership development and recruitment process.



### Labour & human rights

We are committed to conducting our business in a fair, responsible way with integrity and full respect for the law. Our overarching labour & human rights (LHR) objective is to provide a safe, healthy working environment in which all our employees can achieve their potential.

#### 2015-2017 TARGETS

#### Leadership

Anchor integrity in the organisation as one of the leadership competences

#### Diversity

Increase gender diversity in top and middle management across the Group

#### **UN Guiding Principles**

Understand and demonstrate continuous due diligence in accordance with the UN Guiding Principles on Business and Human Rights

#### E-Learnina

Roll out L&HR Policy e-learning module to HR and line managers across the Group as a pilot for other target groups

#### Updating and implementing our policy

The Group's Labour & Human Rights Policy was reviewed in 2016 for launch in 2017 and applies to all employees of all Carlsberg Group subsidiaries.

A central team of L&HR experts is responsible for formulating this policy, keeping it up to date and ensuring that local management has the necessary awareness, knowledge and tools to implement it in the markets in which we operate.

If any grievance comes to their attention – through the media, the Carlsberg Speak Up helpline, or any other channel – the central team and local managers work together to resolve it. Our global L&HR experts act primarily as advisors to local staff, suggesting how to best respond and making sure that any issues are satisfactorily resolved.

#### Issues and responses 2016

In 2016, we were informed of a grievance concerning the working hours of female beer promoters employed by the Cambrew Brewery in Cambodia. First raised in 2014, this issue was again brought to our attention by a Cambodian NGO in 2016. Cambrew is working with industry partners via the Beer Selling Industry

of Cambodia (BSIC) to address the issues of beer promoters in Cambodia. Together, we are aiming to set new industry standards and make concrete improvements on the ground.

#### Training and hiring

As of 2016, leadership competences have been replaced by triple A – alignment, accountability and action – which applies not only to leaders but to all Group employees.

This is part of the Carlsberg Group's approach to creating a team-based winning culture (page 5). We are also now using the Triple A

approach to assess new recruits at management level and ensure that we only hire people whose personal characteristics align with our desired culture.

L&HR is an integral part of Triple A. There is a clear alignment across the Carlsberg Group that we commit to respecting and acting in accordance with L&HR. In line with this commitment, we continued to train leaders in L&HR matters in 2016.

#### **WHAT WE SAID**

#### Leadership competences

Continue to anchor the leadership competences across the Carlsberg Group

#### Extend competences

Include leadership competences in onboarding programme for new hires at manager level

#### E-learning

Continue to roll out the L&HR Policy e-learning module in different markets

#### WHAT WE DID

2016

Leadership competences replaced by Triple A, a new behavioural framework with 15 attributes setting and driving criteria for the culture and behaviour of leaders and all employees



Triple A in process of being rolled out to all employees and will be embedded in leadership development, personal development and recruitment process



L&HR Policy e-learning module rolled out in 3 markets











#### E-learning

The e-learning module we developed and piloted in Denmark and India in 2015 proved to be an effective way of enhancing general understanding and will be rolled out to other markets during 2017.

#### **Gender diversity**

During 2016, we continued our efforts to increase gender diversity in top and middle management. This involved, for example, requiring recruitment firms to present at least one qualified female candidate when recruiting for management positions, as stipulated in our Group Recruitment Policy.

Nevertheless, reaching our goal of 40% women on the Carlsberg Group Supervisory Board by 2017 proved challenging. Given the substantial changes undergone by the Group over the last two years (including the development of a new corporate strategy), we felt it was important to prioritise continuity on the Supervisory Board. This meant that at the end of 2016 we had not yet met the 2017 target: 30% of members elected at the Annual General Meeting were women.

#### Training future leaders

A third of the participants in our annual leadership programme are women.

When recruiting for our high-potential leadership programme (LLP – Learning Leaders Programme) each year, we make a point of ensuring that a third of the participants are women. This was also the case in 2016.

See more facts and figures about Labour & human rights on page 55-56.

#### **2017 COMMITMENTS**

#### Triple A

Roll out our new behavioural framework, Triple A, to all employees to develop culture and assess/develop our people, aiming to reach all employees by end of Q1 2017

Apply to performance and potential, including interview guidelines for all candidates

Introduce Triple A to Development Centres and implement in People Management Tools, e.g. People Board, 360 feedback and onboarding programmes for new employees

#### Gender diversity

Implement initiatives to give priority to the underrepresented gender in top and middle manage-ment. Implement and track throughout 2017

#### Policy

Revise Labour & Human Rights Policy, continue policy training of managers and roll-out of LHR Policy

#### **RESPONSIBLE BUSINESS**

### Responsible sourcing

We see it as our responsibility to understand the sustainability issues within our supply chain and to ensure that the high standards we aspire to are mirrored and supported by our suppliers.

Covering four key topics, our Supplier and Licensee Code of Conduct clearly communicates the standards we expect from our suppliers and licensees when doing business with us. It is a key part of all our global supplier agreements.

#### 1. Labour & human rights

We set minimum standards on topics such as non-discrimination, harassment, working hours and rules for the avoidance of child labour. The Code sets out the standards that all employees can expect when working for our suppliers, irrespective of the country in which they work.

#### 2. Health & safety

The health and safety of all employees and contractors is paramount for the Carlsberg Group. We expect our suppliers and licensees to ensure a healthy and safe working environment, for example by providing personal protective equipment and the training staff need to perform their tasks safely.

#### 3. Environment

We expect our suppliers to proactively ensure compliance with the Code and all environmental legislation. Cooperation with suppliers and licensees is an integral part of our strategy.

#### 4. Business ethics

We expect suppliers and licensees to have policies in place for dealing with ethical dilemmas such as anti-corruption, confidentiality and the misuse of company assets.

Following our strategy review in 2016, we decided to continue using Sedex. This membership organisation is dedicated to driving improvements in ethical and responsible business practices in global supply chains.

#### **Quality audits**

Our regular supplier audits focus on key raw and packaging materials such as malt, glass bottles and cans. We pay particular attention to companies that operate in high-risk areas such as glass production. Should a serious issue come to light, we immediately suspend material deliveries. However, in the majority of cases it is possible to work closely with suppliers to help them achieve compliance and make lasting improvements.







### Live by our Compass

In 2016, we introduced Live by our Compass as part of SAIL'22. This reaffirms the Group's stance on business ethics and our understanding of integrity at personal, commercial and corporate level.

#### Code of Ethics & Conduct

At the core of Live by our Compass is a new Code of Ethics & Conduct (the Code). Based on

#### 2015-2017 TARGETS

#### **Policy training**

Train all employees on Code of Ethics & Conduct upon hire and subsequently every 3 years

#### Anti-corruption training

Train all employees in high-risk markets on anticorruption annually

#### Third-party screening

Embed third-party screening in contracting process and train relevant business units in all markets

#### Risk assessments

Conduct annual Compliance Risk Assessment across all markets

the results of a company survey, this simple, user-friendly booklet guides employees on the ethical issues they may encounter at work. A session on the new Code is included in our new Behaviour training (page 10).

The Code is also being supported by an ongoing revision of underlying policies and detailed manuals to be launched this year.

As of 2017, we no longer have a specific Business Ethics Policy. The topics previously covered by this policy are now covered by the Code or other policy documents such as the Competition Compliance Policy, the Trade Sanction Screening Policy and the Anti-bribery & Corruption Policy.

#### Performance in 2016

During the year, we revised our Compliance Strategy and introduced new procedures for assessing risks around ethical issues. In future, our performance in this area will form part of the annual risk assessment process.

#### Third-party screening

Third-party screening procedures were introduced in all markets and are now part of the Group's standard procurement process.

#### **Anti-corruption training**

Anti-corruption training is now an integral part of the Behaviour training mentioned above and will also be included in our onboarding procedure for new employees. One challenge we faced in 2016, however, was conducting the

on-site monitoring of high-risk markets mentioned in our 2016 commitments, mainly due to time and budget constraints. Instead, we are now offering tailor-made face-to-face training to these markets on request.

#### WHAT WE SAID

#### Ethics & conduct and anti-corruption

Issue and roll out Code of Ethics & Conduct and Anti-Corruption Standard in all markets

#### Training

Roll out e-learning training on Code of Ethics & Conduct and Anti-Corruption Standard in all markets

#### Third-party screening

Carry out third-party screening in all markets

#### Monitoring

Carry out ongoing monitoring of local market compliance with third-party screening

#### Anti-corruption training

Conduct face-to-face anti-corruption training of high-risk employees and on-site monitoring in all high-risk markets

#### WHAT WE DID

2016

Code of Ethics & Conduct designed and rolled out; further implementation in 2017. Issuing and roll-out of an Anti-bribery & Corruption Policy is foreseen in the overall implementation plan for all policies designed under Live by our Compass



E-learning module for all employees covering both topics available in 24 languages as of January 2017



Third-party screening procedure implemented and carried out in all markets



Monitoring survey carried out across all markets in Q3 2016 and repeated in Q4



Compass game provided in Nordics, Vietnam, India, China, Russia and Malaysia; also incorporated in overall behaviour training offered in all markets



Fully achieved





#### Speak Up helpline

In 2016, we launched a new version of the Carlsberg Speak Up helpline, which provides employees with an alternative and more secure way of reporting matters of concern. In 2016, 55 incidents were reported, 32 fewer than in 2015. This is because in 2015 Carlsberg Malawi opened its own whistleblower system with a reward scheme. This led to 35 cases being reported in Malawi alone, making 2015 an exceptional year. To encourage use of the new Speak Up helpline, we will be promoting it globally in 2017.

Group Compliance reviewed all the cases reported in 2016 and investigated the key issues, where appropriate with the help of external resources. Other matters were handed over to the relevant local HR department or to local legal counsels, auditors or external counsels. Developments were reported to Group Compliance.

#### **2017 COMMITMENTS**

#### **Policies**

Plan launch and implementation of all (approx. 35) new and revised Group policies developed during 2016 and 2017

#### Trainina

Support central functions and local markets to make training in Code of Ethics & Conduct and new policies available to approx. 42,000 Carlsberg Group employees worldwide

#### Communication

Support central functions and local markets in informing all relevant stakeholders about the new and revised Group policies

**CASE STORY** 

## Cody brings the Code to life

Designing a programme or initiative is one thing. Actually implementing it and getting people to take it to heart is another, especially if you are looking at an audience of over 42,000 employees with widely varying skills and backgrounds.

#### Code of Ethics & Conduct

To help bring the Code of Ethics & Conduct to all our people and embed it deep in the organisation, we spent 2016 developing training materials with Cody the Elephant as the main character and symbol. All the material is now ready for global roll-out in 2017.

Illustrated case stories cover 14 subjects, from compliance with laws and company policies, through responsible drinking, political activities and donations. Each case finds Cody facing a challenging situation. By helping him resolve the issue, participants learn what the Carlsberg Group considers the right thing to do.



By the end of each case, participants will know what it means to Live by our Compass. They will also understand how not following the Code can damage our brands and reputation and even have negative effects on their personal situation.

Samantha Boel, Chief Compliance Officer of the Carlsberg Group, says: "We want everyone to understand the importance of behaving and acting in accordance with our Compass. And to feel motivated to be part of one overarching global Carlsberg Group

culture based on the principles of the Code."



Cody the Elephant may be a light-hearted figure, but he carries a very serious and important message

Samantha Boel, Chief Compliance Officer, Carlsberg Group

## Community engagement with purpose

As anticipated in last year's report, 2016 saw the beginning of a transition for our community engagement work. We reviewed our approach to align it with our new corporate strategy and stakeholders' expectations.

#### Working towards a better tomorrow

While we continued with local community engagement activities around the world, the bulk of our efforts during 2016 were channelled into creating a unified global platform for community engagement. The new platform is based on and driven by our Purpose: "To brew for a better today and tomorrow". Our contribution to a better tomorrow is to make brewing more sustainable and to fund science around the

world to find better solutions to climate change and water scarcity.

#### Local initiatives in 2016

Below are a few examples from 2016 show-casing the diversity of our local community engagement initiatives.

Carlsberg Italia held four open weekends at its brewery, offering visitors tours, tasting sessions and education on responsible drinking. The money raised from beer sales was donated to local charities.

Carlsberg Sverige sponsored Nattvandring (Night Walking), an organisation that works to develop and promote night patrols throughout the country. Their goal is similar to that of Night Owls described on page 33: to protect young people on their own terms.

Partiallu

achieved

Not

achieved

During the summer of 2016, our Finnish company Sinebrychoff hired two people to work as rangers at the Sinebrychoff Park in the heart of Helsinki. They kept the park tidy and actively engaged with visitors to make the park more enjoyable.

#### **2017 COMMITMENTS**

#### Focused approach

With a view to making brewing more sustainable, a new, more focused approach to community engagement will be launched during the year

# WHAT WE DID Align with corporate strategy Revise our community engagement strategy and align it with the outcomes of SAIL'22 Sustainability commitments refreshed with raised ambitions, which also covers our community engagement commitments Despite no longer having a Community Engagement Policy, engagement continued with both local and global communities

achieved



#### **RESPONSIBLE BUSINESS**

## Product quality & safety

Our company is ultimately judged by the quality of the beers and other beverages we deliver. Supplying safe, high-quality products that our consumers like to drink is always therefore our top priority.

#### Getting it right, every time

Each product we deliver has a unique recipe, which gives it a distinctive taste, appearance and consistency. Through our supply chain quality work, we ensure that recipes always meet the precise specifications defined for each product, and we monitor quality closely throughout production.

#### Policies and standards

In 2016, we updated our Quality and Food Safety Policy, which sets out the Group's commitment to producing high-quality products that meet internationally recognised standards and our consumers' quality expectations. It applies to all Carlsberg Group employees and sites.

In addition to this, the beer and other beverages we produce and supply must meet our

own internal quality requirements, as defined in the Carlsberg Operational Manual (COM). The Group's quality and food safety management systems are also aligned with ISO 9001 and ISO 22000 principles and requirements.

#### Monitoring on-shelf quality (OSQ)

Since 2010, we have been routinely testing products through our global OSQ programme. Samples of bottles and cans are picked up from store shelves in over 40 markets and shipped to a trained tasting panel, which evaluates each sample for flavour and overall taste. Our Leadership Team closely tracks the results from this programme.

#### Responding to quality issues

If a quality issue does arise, we follow documented procedures to manage and minimise its effects. Our responses vary depending on the potential impact on customers and consumers. If consumer safety is a concern, we recall products from the market.

#### Probably the best job in the world

Experts on our central sensory panel test around 2,200 beer samples annually. If we include tastings carried out by our 80 local sensory panels, the Group total is approximately 100,000.

In 2016, we recalled one product in Norway. This was due to a production fault, as a result of which cleaning solution found its way into some kegs of beer during filling. The filling/cleaning process has since been changed to prevent this happening again. Less serious quality issues are dealt with through limited withdrawals from customer inventories. In

2016, we carried out 22 product withdrawals globally.

Thanks to our efficient internal processes, the overwhelming majority of quality issues are addressed long before the products reach our consumers.



#### **SECTION 1:**

## Data summary table

	2012	2013	2014	2015	2016
ENERGY & CARBON, AND WATER					
General production figures					
Number of reporting sites	76	75	101	110	92
Beer production (million hl)	100.7	100.3	107.0	105.4	100.9
Soft drinks production (million hl)	12.2	13.0	13.6	13.9	14.3
Beer and soft drinks production (million hl)*	112.9	113.3	120.6	119.3	115.2
Malting (kt)	467	459.9	492.0	547.2	311.5
Environmental performance data (beer, soft drinks and malt production)					
Total thermal energy (GWh)*	2,808	2,671	2,970	2,943	2,481
Total electricity (GWh)*	966	954	1.012	988	914
Total CO <sub>2</sub> emissions (kt)* (marketbased)	882	849	982	945	768
Total CO₂ emissions (kt) (location-based)					883
Total SO₂ emissions (tonnes)	1,44	1,249	1,651	1,695	815
Total NO <sub>x</sub> emissions (tonnes)	1,483	1,387	1,586	1,562	1.163
Total water consumption (million m³)*	38.7	38.7	42.1	41.2	37.7
Total wastewater discharged (million m³)	25.2	24.4	27.2	26.6	24.2
Total organic load (COD) before treatment (kt)	73.6	74.8	75.5	78.8	79.9
Solid waste & by-products					
Incinerated (kt)	7.1	7.3	9.3	8.7	5.7
To sanitary landfill (kt)	45.1	73.4	64.6	68.6	56.9
Special waste (kt)	0.32	0.4	0.7	0.7	1.4
Recycled (kt)	147.5	141.3	164.8	189.2	225.5
Disposed of for land applications (kt)	244.5	174.1	173.7	165.9	127.4
Other (kt)	8.3	6.2	21.0	-	-
Total solid waste (kt)	452.8	403	434.1	433.1	416.9
Brewer's grains and brewer's yeast (kt)	1,317	1,379	1,409.0	1,348.9	1,265.0

<sup>\*</sup> Within KPMG's assurance scope (see KPMG's Assurance Report, p. 57).

	2012	2013	2014	2015	2016
Relative figures for beer and soft drinks production					
Thermal energy (kWh/hl)*	21.0	20	21.4	21.2	20.0
Electricity (kWh/hl)*	8.1	8.0	8.0	7.8	7.7
Combined energy (thermal and electricity) (kWh/hl)*	29.1	28.0	29.4	29.0	27.7
CO₂ emissions (kg CO₂/hl)*	6.7	6.6	7.3	7.0	6.3
Water (hl/hl)*	3.3	3.3	3.4	3.4	3.2
Relative figures for malt production					
Thermal energy (kWh/tonne)	712.1	703.9	694.1	692.2	489.3
Electricity (kWh/tonne)	97.2	94.4	87.1	84.1	73.2
Combined energy (thermal and electricity) (kWh/tonne)	809.3	798.3	781.1	776.3	562.5
CO <sub>2</sub> emissions (tonnes CO <sub>2</sub> /tonne)	0.22	0.20	0.19	0.18	0.13
Water (m³/tonne)	2.1	2.0	2.3	2.2	1.6
Other figures					
Complaints	42	38	93	33	36
Number of ISO 14001-certified sites	60	60	69	74	66
Number of ISO 50001-certified sites	N/A	<u> </u>	<u> </u>	3	4
Water source split					
Municipal water	51%	50%	49%	48%	46%
Own boreholes	43%	43%	43%	42%	47%
Surface water	6%	7%	8%	10%	7%
Wastewater destination					
Public sewer with wastewater treatment	68%	68%	66%	67%	66%
Public sewer without wastewater treatment	3%	4%	3%	3%	2%
On-site treatment, followed by discharge to river/lake	28%	27%	30%	28%	28%
Other		1%	1%	2%	4%
Thermal energy mix					
Natural gas	69.7%	71.8%	68.0%	66.1%	71.9%
Coal	12.3%	11.0%	14.9%	15.6%	7.0%
District heating	7.9%	7.2%	6.8%	6.4%	7.1%
Heavy fuel	4.7%	4.4%	3.4%	2.8%	3.1%
Renewable energy	3.5%	3.7%	5.2%	6.9%	8,2%
Light fuel	1.2%	1.2%	1.1%	1.2%	1,4%
Other	0.6%	0.7%	0.6%	1.0%	1.3%

<sup>\*</sup> Within KPMG's assurance scope (see KPMG's Assurance Report, p. 57).

	2012	2013	2014	2015	2016
CO₂ emissions from refrigerants					
HFC-based refrigerants (kt CO <sub>2</sub> )*	N/A	11.3	12.9	14.9	9.8
Sustainable packaging					
Percentage of companies carrying out consumer-facing sustainable packaging campaigns	N/A	26	28	24	341
Number of consumer-facing sustainable packaging campaigns*	N/A	N/A	45	22	16
Packaging mix					
Cans	24.8%	26.7%	26.1%	26.6%	27.4%
RGB	29.2%	29.1%	33.7%	33.7%	31.5%
NRGB	8.2%	8.1%	8.2%	9.2%	9.5%
R-PET	2.2%	1.5%	1.0%	0.0%	0.0%
PET	26.3%	25.7%	22.5%	23.0%	23.0%
Kegs	7.4%	7.1%	6.6%	6.4%	7.6%
Bulk	1.4%	1.2%	1.3%	1.0%	0.9%
Other	0.5%	0.6%	0.4%	0.1%	0.1%

<sup>\*</sup> Within KPMG's assurance scope (see KPMG's Assurance Report, p. 57).

<sup>&</sup>lt;sup>1</sup> 14 out of 41 companies.

	2012	2013	2014	2015	2016
HEALTH & SAFETY					
Figures for Production					
Number of lost-time accidents*	171	145	156	114	105
Lost-time accident rate*	11.4	10.3	9.1	62	7.0
Number of lost days*	2,306	2,010	2,207	1,911	1.281
Days lost rate*	153	142	129	105	86
Figures for Logistics					
Number of lost-time accidents*	148	136	150	140	109
Lost-time accident rate*	19.0	16.7	17.4	15.5	13.8
Number of lost days*	2,457	2,087	2,201	2,511	1.619
Days lost rate*	316	256	255	277	205
Figures for Sales & Marketing					
Number of lost-time accidents	43	39	40	52	78
Lost-time accident rate	4.1	3.6	2.8	3.3	5.1
Number of lost days	635	666	613	565	2,500
Days lost rate	61.0	62.0	43.2	36.2	164.1
Figures for Administration					
Number of lost-time accidents	5	6	6	6	2
Lost-time accident rate	1.3	1.7	1.3	1.4	0.5
Number of lost days	91	67	97	43	30
Days lost rate	23.0	19.5	21.3	9.7	8.2
Figures for the Group					
Number of lost-time accidents	367	326	352	312	294
Lost-time accident rate	9.9	8.7	7.9	6.6	7.0
Number of lost days	5,489	4,830	5,118	5,030	5,430
Days lost rate	147	129	115	106	130
Fatalities (Carlsberg Group employees, contractors and non-controlling joint ventures)	110	410	6 <sup>1a</sup>	5 <sup>1a</sup>	5
Lost-time accidents – department split					
Percentage in Production	47	44	44	37	36
Percentage in Logistics	40	42	43	45	37
Percentage in Sales & Marketing and Administration	13	14	13	19	27

<sup>\*</sup> Within KPMG's assurance scope (see KPMG's Assurance Report, p. 57).

<sup>&</sup>lt;sup>1a</sup> Restated.

	2012	2013	2014	2015	2016
COMMUNITY ENGAGEMENT				·	
Total cash and in-kind donations (DKKm)	38	47	35	38	33
Number of cause-related marketing partnerships	16	34	31	18	13
Percentage of companies investing in community engagement initiatives	85	85	82	80	812
Number of community engagement activities	1,731	1,599	987	816	588
Distribution of activities					
Environment	23%	22%	17%	21%	15%
Sports	15%	14%	16%	12%	12%
Responsible drinking	11%	12%	12%	14%	8%
Research and science					1%
Culture	25%	28%	21%	22%	6%
Support of vulnerable groups/education	11%	11%	12%	12%	9%
Health and care	8%	6%	8%	6%	4%
Natural disaster relief	3%	3%	5%	4%	1%
Other	4%	4%	9%	9%	44%
Number of employees involved in community engagement activities	4,146	7,432	9,232	6,395	5,618
Number of hours spent	20,612	22,220	15,902	25,796	26,033
Number of underage reached through local education and sales restrictions campaigns addressing underage drinking	N/A	N/A	176,000	7,579,008	42,679,000

<sup>&</sup>lt;sup>2</sup> 34 out of 42 companies.

	2012	2013	2014	2015	2016
MARKETING COMMUNICATION					
Percentage of companies with a procedure in place to track consumer complaints	97	97	98	95	98³
Number of reported incidents of non-compliance with Marketing Communication Policy	5	4	6	4	4
Number of sales, marketing and innovation employees trained through the marketing communication e-learning module	251	251	490	N/A	N/A
Percentage of companies that have a "moderation" line on all branded communication in all digital marketing and TVCs and in all print					
communication above A4	N/A	N/A	56	65	664
	2012	2013	2014	2015	2016
RESPONSIBLE DRINKING	<u></u>				
Percentage of companies implementing responsible drinking initiatives	78	69	62	78	75⁵
Percentage of fermented produced volume carrying responsible drinking guiding symbols and/or equivalent text*	N/A	73	67	54	85
Responsible drinking campaigns	N/A	N/A	115	239	194
Percentage of companies in markets with self-regulatory bodies	N/A	N/A	N/A	73	78 <sup>6</sup>
	2012	2013	2014	2015	2016
LIVE BY OUR COMPASS					
Total number of employees trained in the Business Ethics Policy	3,795	5,798	5,674	6,835	NA
Total number of employees trained in the Code of Ethics & Conduct					4,336
Percentage of companies that have implemented third-party screening procedures	35	60	68	84	84
Number of incidents reported through our incident management systems	26	26	30	87	55

<sup>\*</sup> Within KPMG's assurance scope (see KPMG's Assurance Report, p. 57).

<sup>&</sup>lt;sup>3</sup> 39 out of 40 companies.

<sup>4 25</sup> out of 40 companies.

<sup>&</sup>lt;sup>5</sup> 30 out of 40 companies.

<sup>&</sup>lt;sup>6</sup> 31 out of 40 companies.

	2012	2013	2014	2015	2016
LABOUR & HUMAN RIGHTS					
Total workforce (FTE**)	42	38,705	46,832	47,464	42,062
Percentage of employees by employment contract					
Permanent employees	93	90	82	88	86
Temporary employees	7	10	18	12	14
Percentage of employees by employment type					
Full-time	93	92	94	98	93
<u>Part-time</u>	7.	8	6	2	7
Percentage of employees by employment category					
Total presidents + top managers	2	2	2.1	1.5	1.5
Total managers	11	11	11.5	12.3	12.6
Total specialists	39	40	40.9	39.9	36.7
Total workers	48	47	45.5	46.3	49.2
Percentage of employees by gender					
Male	73	74	72	72	69
Female	27	26	28	28	31
Percentage of management level by gender					
Male	77	76	76	78	77
Female	23	24	24	22	23
Percentage of employees by age					
Younger than 18	0.03	0.03	0.02	0.19	0.11
19-29	23	23	23	22	23
30-39	35	34	34	33	33
40-49	26	26	27	29	27
50 or older	16	17	16	16	17

<sup>\*\*</sup> FTE data from Carlsberg Group Annual Report 2016.

	2012	2013	2014	2015	2016
Employee turnover					
Employee turnover percentage	14	15	15	19	21
Employee turnover percentage by age					
Younger than 18	-	-	-	-	-
19-29	41	37	36	32	31
30-39	32	31	31	33	34
40-49	15	19	18	20	20
50 or older	12	13	15	15	15
Employee turnover percentage by gender					
Male	71	70	72	71	69
Female	29	30	28	29	31
Hours of training per employee					
Average for the Group	13	33	15	15	15
Collective bargaining					
Percentage of employees covered by collective bargaining agreements	71	71	71	73	74
Policy implementation status					
Percentage of labour & human rights procedures and processes implemented as average for the Group	93	95	94	92	92
	2012	2013	2014	2015	2016
RESPONSIBLE SOURCING  Number of integrated quality quality	121	142	101	171	182
Number of integrated quality audits	121	142	101	1/1	102

## Assurance report of the independent auditor

### To the readers of the 2016 Carlsberg Group Sustainability Report

We were engaged by the Executive Board of Carlsberg A/S (hereafter 'Carlsberg'), based in Copenhagen, Denmark, to provide assurance on selected environmental, health & safety and social information in the Carlsberg Group the Sustainability Report 2016 (Further: The Report). The Executive Board is responsible for preparing The Report, including identification of material issues. Our responsibility is to issue an assurance report, based on the engagement outlined below.

#### Scope and limitations

Our engagement was designed to obtain limited assurance on whether the following information is presented, in all materials respects, in accordance with the reporting criteria:

- In the section 'Energy & Carbon': data on 'energy consumption', 'CO2 emissions', and related explanations (pp 13-15 and pp 49-50) and 'HFCs' data presented in the Data summary table (pp 51)
- In section 'Water': data on 'water consumption' (pp 27 and pp 49-50)
- In section 'Responsible drinking': data on 'percentage of fermented produced volume carrying responsible drinking guiding symbols and/or equivalent text' and 'Number of consumer facing sustainable packaging campaigns' (pp 34 and 54; pp 22 and 51)

 In section 'Health & Safety': data on 'losttime accident rate' in Logistics and Production respectively, and 'days lost rate' in Logistics and Production respectively (pp 37, pp 40 and pp 52)

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

Procedures performed to obtain limited level of assurance are aimed at determining the plausibility of information and are less extensive than those for a reasonable level of assurance.

#### Reporting criteria and assurance standard

The reporting criteria are specified in section 4, Reporting process and scope, section 5, Definitions, and section 6, List of reporting sites. It is important to view the assured information in the context of these criteria. We believe that these criteria are suitable in view of the purpose of our assurance engagement.

We have performed our review on the Report, in accordance with the Dutch law, International Standard for Assurance Engagements ISAE 3000 Assurance Engagement other than Audits or Review of Historical Financial Information, issued by the International Auditing and Assurance Standards Board. This Standard requires,

amongst other things, that the assurance team possesses the specific knowledge, skills and professional competences needed to provide assurance on sustainability information.

We are independent of Carlsberg A/S in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence) and other relevant independence regulations in the Netherlands. Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics).

#### Work performed

Our procedures included the following:

- A risk analysis, including a media search to identify relevant risk and issues within the scope of the assurance engagement for Carlsberg during the reporting period,
- Reviewing the suitability of the reporting criteria.
- Evaluating the design and implementation of the systems, and processing and control of the selected information,
- Interviews with relevant policy owners at corporate levels, who are responsible for collecting, consolidating and carrying out internal control procedures on the selected information,

- Visits to three production sites in Switzerland, India and Belarus to obtain insight into local sustainability management, review data and assess the robustness of the sustainability data management systems,
- An analytical review of the data for the selected indicators within the assurance scope submitted by all production sites for consolidation at corporate level,
- Evaluating relevant internal and external documentation, based on sampling, to determine whether the selected information is supported by sufficient evidence.

#### Conclusion

Based on the procedures performed, nothing has come to our attention to indicate that the selected information as described under Scope and limitations above is not presented, in all material respects, in accordance with the reporting criteria.

Amsterdam, Copenhagen,
24 February 2017 24 February 2017
KPMG Sustainability, KPMG Statsautoriseret
Part of KPMG Advisory N.V. Revisionspartnerselskab

Wim Bartels Henrik O. Larsen
Partner State Authorised Public

Accountant

#### **SECTION 3**

## Global Reporting Initiative table

The following table contains Standard Disclosures from the GRI G4 Sustainability Reporting Guidelines without meeting the "in accordance" criteria. The framework provides organisations with principles and indicators to measure and report their economic, environmental and social performance.

To increase the transparency of the table and to make it easier to understand, we indicate whether our level of disclosure covers the GRI requirements fully or partially. We have applied the GRI since 2009.

In addition, every profile or performance indicator we apply is linked to a specific section of either our Annual Report 2016 (AR), our company website (www.carlsberggroup.com), our Economic Contribution Report 2016 (ECS) or the Sustainability Report 2016 (SR).

In total, we report on 69 indicators. In order to simplify the table, we have included only the

indicators for which we provide either full or partial data.

The GRI G4 Guidelines encourage disaggregation of information where feasible, but acknowledge that the level of disaggregation may vary by indicator. In this report we have provided data primarily at Group level, with some regional and local data.

#### **GENERAL STANDARD DISCLOSURES: GRI PROFILE**

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
STRATEGY AND ANALYSIS				
G4-1	Statement from the CEO and Board of Directors	SR 4	•	
ORGANIZATIONAL PROFILE				
G4-3	Name of the organization	SR 1	•	
G4-4	Primary brands, products and services	https://carlsberggroup.com/beers- you-love/	•	
G4-5	Location of headquarters	Copenhagen	•	
G4-6	Countries in which operations are located	https://carlsberggroup.com/who-we- are/about-the-carlsberg- group/global-presence/	•	
G4-7	Nature of ownership and legal form	AR 52	•	
G4-8	Markets served	https://carlsberggroup.com/who-we- are/about-the-carlsberg-group/glo- bal-presence/, AR 6, 17-22	•	

#### GENERAL STANDARD DISCLOSURES: GRI PROFILE

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
ORGANIZATIONAL PROFILE		<del>-</del>		
G4-9	Scale of the organization	AR 4-8	•	
		SR 3		
G4-10	Workforce breakdown (contract, type, gender)	SR 55		
G4-11	Coverage of collective bargaining agreements	SR 56	•	
G4-12	Description of supply chain	SR 8, 14 AR 27-28 https://carlsberggroup.com/who-we-are/about-the-carlsberg-	•	
C / 12		group/carlsberg-supply-chain-csc/		
G4-13	Significant changes during the reporting period	SR 64		
G4-14	Addressing the precautionary approach or principle	SR 6-9 AR 33-35	•	
G4-15	External charters, principles, or other initiatives endorsed	SR 4, 42, 44	•	
G4-16	Memberships of associations	SR 7, 13, 23, 32, 44 AIM-PROGRESS, Beverage Industry Environmental Roundtable (BIER), Business for Social Responsibility (BSR), International Alli- ance for Responsible Drinking (IARD), Suppliers Ethical Data Exchange (Sedex), The Brewers of Europe (BOE) World Federation of Advertisers (WFA) Local brewers associations		
INDENTIFIED MATERIAL ASPECTS AND BOUNDARIES				
G4-17	Report coverage of the entities in the consolidated financial statements	AR 120-122	•	
G4-18	Process for defining the report content and the aspect boundaries	SR 6-9	)	
G4-19	Material aspects identified	SR 6-9	•	
G4-20	Aspect boundary within the organization	SR 6-9	•	
G4-21	Aspect boundary outside the organization	SR 6-9	•	
G4-22	The effect of restatements of information provided in previous reports	SR 52	•	
G4-23	Significant changes in the scope and aspect boundaries from previous reports	SR 64	•	

#### GENERAL STANDARD DISCLOSURES: GRI PROFILE

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
STAKEHOLDER ENGAGEMENT		<del>-</del>	-	
G4-24	List of stakeholder groups engaged	SR 6, 7, 13, 18, 23, 25, 32, 33	•	
G4-25	Identification and selection of stakeholders	SR 6-9	•	
G4-26	Approaches to stakeholder engagement	SR 6-9, 34	•	
G4-27	Response to key topics and concerns raised	SR 19, 34, 42	•	
		Local community stakeholders raised		
		concerns in Cambodia, Lao, Malawi		
		(divested) and Nepal. Carlsberg Group		
		responded to each in full.		_
REPORT PROFILE				
G4-28	Reporting period	The report covers the 2016 calendar	•	
		year		
G4-29	Date of most recent previous report	Carlsberg Group Sustainability Report	•	
		2015 published on 24 February 2015		
G4-30	Reporting cycle	Annual	•	
G4-31	Contact point for questions	csr@carlsberg.com	•	
G4-32	"In Accordance" option, the GRI content index and external assurance	Use GRI 4 guidelines without meeting	•	
		the "in accordance" criteria		
G4-33	Policy and current practice regarding external assurance	SR 8, 57		
GOVERNANCE				
G4-34	Governance structure	AR 33-41	•	
G4-38	Composition of the highest governance body and committees	AR 33-41, 48-50	•	
G4-39	Is the chair of the highest governance body also an executive officer	No	•	
G4-40	Nomination and selection process	AR 37-39		
G4-48	Highest committee or position that reviews the sustainability report	Supervisory Board	•	
G4-51	Remuneration policies for the highest governance body	AR 42-47		
ETHICS AND INTEGRITY				
G4-56	Values, principles, standards, code of conduct and code of ethics	SR 45-46	•	
G4-58	Internal and external mechanisms for seeking advice on ethical and lawful	SR 45-46	•	
	behavior	AR 31, 41		

#### SPECIFIC STANDARD DISCLOSURES: MANAGEMENT APPROACH AND PERFORMANCE INDICATORS

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
GENERIC DISCLOSURES ON MANAGEMENT APPROACH			_	_
G4-DMA	Disclosures on Management Approach	SR 13, 25, 30, 37		
ECONOMIC				
Economic Performance				
G4-EC1	Direct economic value generated and distributed	ECS 7	<u> </u>	
G4-EC2	Financial implications and other risks and opportunities for the organization's	SR 4-9, 13, 27	•	7
	activities due to climate change			
ndirect Economic Impacts				
G4-EC7	Development and impact of infrastructure investment and services supported	SR 47, 53	•	
		ECS 5-11		
ENVIRONMENTAL				
Energy				
G4-EN3	Energy consumption within the organization	SR 12-22, 49-50		8
G4-EN6	Reduction of energy consumption	SR 12-22		8-9
G4-EN7	Reductions in energy requirements of products and services	SR 12-22		8-9
Water				
G4-EN8	Total water withdrawal by source	SR 24-28, 50	<u> </u>	8
Emissions				
G4-EN15	Direct greenhouse gas (GHG) emissions (Scope 1)	SR 12-22, 49-51		8
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (Scope 2)	SR 12-22, 49-51		8
G4-EN19	Reduction of greenhouse gas (GHG) emissions	SR 12-22, 49-51		7-9
G4-EN21	NO <sub>x</sub> , SO <sub>x</sub> , and other significant air emissions	SR 49		8
Effluents and Waste				
G4-EN22	Total water discharge by quality and destination	SR 49-50		8
G4-EN23	Total weight of waste by type and disposal method	SR 49	•	8
Products and Services				
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	SR 11-22, 51	•	7-9
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	SR 11, 15-16, 18-22, 51	)	8-9

#### SPECIFIC STANDARD DISCLOSURES: MANAGEMENT APPROACH AND PERFORMANCE INDICATORS

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
ENVIRONMENTAL				
Supplier Environmental Assessment				
G4-EN32	Percentages of new suppliers that were screened using environmental criteria	SR 44, 56		
LABOR PRACTICE AND DECENT WORK				
Employment				
G4-LA1	Total number and rates of new employee hires and employee turnover by age	SR 55-56	•	6
	group, gender and region			
Occupational Health and Safety				
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absen-	SR 36-40, 52	•	1
	teeism, and total number of work-related fatalities by region and gender			
Training and Education				
G4-LA9	Average hours of training per year per employee by gender, and by employee	SR 56	•	1
	category			
Diversity and Equal Opportunity				
G4-LA12	Composition of governance bodies and breakdown of employees per employee	SR 42-43, 55	•	6
	category according to gender, age group, minority group membership and other	AR 37-38, 48-51		
	indicators of diversity			
Supplier Assessment for Labor Practices				
G4-LA14	Percentage of new suppliers that were screened using labour practices criteria	SR 44	•	1-6
HUMAN RIGHTS				
Investment				
G4-HR1	Total number and percentage of significant investment agreements and con-	SR 44	•	1-2
	tracts that include human rights clauses or that underwent human rights screen-			
	ing			
Assessment				
G4-HR9	Total number and percentage of operations that have been subject to human	SR 42	•	1-6
	rights reviews or impact assessments			

#### SPECIFIC STANDARD DISCLOSURES: MANAGEMENT APPROACH AND PERFORMANCE INDICATORS

PROFILE	DESCRIPTION	LOCATION AND COMMENTS	LEVEL OF REPORTING	UNGC PRINCIPLE
SOCIETY				
Local Communities				
G4-S01	Percentage of operations with implemented local community engagement, im-	SR 47, 53	•	
	pact assessments, and development programs			
Anti-Corruption				
G4-S04	Communication and training on anti-corruption policies and procedures	SR 45-46, 54		10
PRODUCT RESPONSIBILITY				
Customer Health and Safety				
G4-PR1	Percentage of significant product and service categories for which health and	SR 37-40, 48	•	
	safety impacts are assessed for improvement			
Product and Service Labeling				
G4-PR3	Type of product and service information required by the organization's proce-	SR 29-35, 54	•	
	dures for product and service information and labelling and percentage of signif-			
	icant product and service categories subject to such information requirements			
Marketing Communications				
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary	SR 29-35,54	•	
	codes concerning marketing communications, including advertising, promotion,			
	and sponsorship, by type of outcomes			

## Reporting process and scope

#### Reporting approach and criteria

#### Scope of the sustainability reporting

This report contains Standard Disclosures from the GRI Sustainability Reporting G4 Guidelines without meeting the "in accordance" criteria. Our disclosure in this year's report has been developed with a view to reporting to the GRI Standards in 2017.

In this document, we cover the relevant and significant social, ethical and environmental issues for the financial year1 January to 31 December 2016. Our GRI table includes references to our Annual Report and Economic Contribution Report, which cover our financial and economic performance. This information gives our stakeholders an overview of our social, environmental and economic performance.

We receive recommendations on our sustainability activities and reporting from our assurance provider, KPMG, and we also continuously analyse competitors' and industry initiatives in order to keep ourselves up to date.

#### **Boundary setting**

Entities included in the 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 as a matter of course to ensure an ongoing focus on sustainability issues. If a majority-owned entity is acquired during the financial year, that entity will be included in the following year's report.

#### Comments on boundary setting

The following company changed its name:

#### Greece:

• Mythos Brewery to Olympic Brewery S.A.

The following sites have been closed/sold since 2015 and have therefore been excluded from 2016 reporting:

#### China:

- Xinjiang Group: Kashi Brewery and Qitai Malting Plant
- Chongqing Brewery Co.: Yongchuan Brewery, Qianjiang Brewery, Gansu Jinshan Malting Plant
- Chongqing Jianiang Beer Co., Ltd: Liuzhou Breweru and Liupanshui Breweru

 Chongqing Beer Group Assets Management Co., Ltd: Hanshan Co., Ltd, Xuancheng Guquan Beer Co., Ltd, Huzhou Co., Ltd, Daliangshan Brewery, Jiuhuashan Brewery, Jiangsu Jinshan Beer Material Co., Ltd

#### Malawi:

 Carlsberg Malawi: Carlsberg Malawi Brewery Ltd. (CMBL), SOBO Lilongwe, SOBO Mzuzu, Malawi Distillery Ltd., SOBO Blantyre

#### Denmark:

· Danish Malting Group (1 site)

#### Poland:

• Danish Malting Group-Poland (2 sites)

The following companies have been added since 2015 and are therefore included in the 2016 reporting:

#### Greece:

· Olympic Brewery S.A.: Ritsona brewery

#### Russia

 Carlsberg Eastern Europe Grain Co: Malt Plant Yaroslavl and Malt Plant Tula The following sites were closed or sold in 2016 and are partly included in the reporting scope for 2016:

#### Vietnam:

 Carlsberg Vietnam: Vung Tau (production data included for O1 2016, site sold in 2016)

#### China:

- Chongqing Beer Group Assets Management Co., Ltd: Bozhou Brewery (production data included for Q1 & Q2 2016, site closed 2016)
- Chongqing Beer Group Assets Management Co., Ltd: Yancheng Co., Ltd (production data included for Q1 - Q3 2016, site closed end 2016)

#### Norway:

 E.C. Dahls Trondheim Ringnes: production data included for Q1 2016, site sold in 2016

#### **Ensuring data quality**

In gathering information about our sustainability performance, we have 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 be able to make their own judgements concerning the Carlsberg Group's position and role in the societies in which we do business.

#### Clarity

We strive to make our sustainability reporting accessible and easy to read, but 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 since 2009, we have improved the definitions of and accounting principles 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. We are using an international provider of sustainability software solutions to systematise and collect our data. We have used the system since 2009, and it 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. Besides the system, we use additional

internal data management systems to collect information such as employee headcounts.

KPMG has been appointed to provide independent assurance regarding selected economic, environmental and safety indicators. In each section of the report, we indicate which data have been assured. For further details, see p. 57.

#### 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 it. Annual data gathering and external reporting are aligned with financial data collection, following the calendar year.

#### Comparability

In the GRI table (section 3, pp. 58-63), we have listed whether our reporting is fully or partially in line with the GRI indicator definitions.

We include three- or five-year data, as recommended by GRI, 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 that 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 in section 5, p. 66.

#### **Targets**

We communicate two different kinds of plans and targets:

- One-year short-term commitments
- · Three-year targets and objectives

These have been developed by each of the function owners of the sustainability themes and may be adjusted following significant changes in the business, such as major acquisitions and divestments, but only if these changes are made before the target date. As far as possible, we include such changes by applying scenario planning to our target-setting process.

#### **SECTION 5**

### **Definitions**

INDICATOR NAME	INDICATOR DEFINITION	UNIT
Total thermal energy consumption	Total thermal energy consumption for beer, soft drinks and malt production	GWh
Total electricity consumption	Total electricity consumption for beer, soft drinks and malt production	GWh
Total water consumption	Total water consumption for beer, soft drinks and malt production	m <sup>3</sup>
Total production of beer and soft drinks	Total fermented and non-fermented products produced	hl
Total CO₂ emissions	Total fossil carbon dioxide emissions <sup>1</sup> (direct and indirect) emitted from the energy used for beer, soft drinks and malt production	kt CO <sub>2</sub>
Specific thermal energy consumption	Thermal energy needed to produce one hectolitre of beer and soft drinks	kWh/hl
Specific electricity consumption	Electricity needed to produce one hectolitre of beer and soft drinks	kWh/hl
Specific water consumption	Water needed to produce one hectolitre of beer and soft drinks	hl/hl
Specific CO₂ emissions	Fossil carbon dioxide emissions (direct and indirect emissions) emitted from the energy used to produce one hectolitre of beer and soft drinks	kg CO₂/hl
CO <sub>2</sub> emissions from refrigerants	Impact from refrigerants refilled or recharged in any system at a brewery or malting site. Expressed in CO2-equivalents	kt CO <sub>2</sub>
Lost-time accidents (LTA) in Production and Logistics	Occupational accidents that result in employees being unable to perform the full range of their normal duties for at least one day,	Number (LTA)
	excluding the day of the accident	
Lost-time accident rate (LTAR) in Production and Logistics	Number of LTAs x 1,000 / number of FTEs	Rate (LTAR)
Days lost (DL) in Production and Logistics	Days absent from work (excluding the day of the accident) due to lost-time accidents	Number (DL)
Days lost rate (DLR) in Production and Logistics	Number of DLs x 1,000 / number of FTEs	Rate (DLR)
Full-time equivalents (FTEs) in Production and Logistics	Number of employees on payroll, where part-time workers are converted into FTEs by an equivalent proportion and one person counts as	Number (FTEs)
	maximum 1 FTE	
Number of consumer-facing sustainable packaging campaigns	Campaigns towards consumers with the purpose of reducing the environmental impact of packaging by, for example, encouraging correct disposal	Number
	of used packaging through recycling messages	
Percentage of fermented produced volume carrying responsible	Volume of packed fermented products that carry responsible drinking guiding symbols and/or equivalent text divided by total packed fermented	Percentage
drinking guiding symbols and/or equivalent text	production volume x 100%	

<sup>&</sup>lt;sup>1</sup> CO2 emission factors used for fossil fuels and electricity are in accordance with the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and IEA statistics: CO2 Emissions from Fuel Combustion (2015 Edition).

## 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 Lübz	
Greece	Olympic Brewery S.A.	Thessaloniki	
		Ritsona Brewery	
Italy	Carlsberg Italia	Varese	
Latvia	Aldaris	Aldaris Riga	
Lithuania	Svyturys Utenos Alys	Utena, Klaipeda	
Norway	Ringnes	E.C. Dahls Trondheim, Farris, Gjelleråsen, Imsdal	
Poland	Carlsberg Polska	Okocim Brewery Brzesko, Kasztelan Brewery, Szczecin Brewery	
Serbia	Carlsberg Srbija	Carlsberg Srbija - Celarevo	
Sweden	Carlsberg Sverige	Falkenberg, Ramlösa Sverige	
Switzerland	Feldschlösschen	Rhäzüns, S Rheinfeld, Sion	
	Carlsberg Supply Company	No production sites	
UK	Carlsberg UK	Northampton	

COUNTRY	COMPANY	SITES
EASTERN EUROPE		
Azerbaijan	Baku (Company)	Baku Brewery
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
Uzbekistan	Carlsberg Uzbekistan	Tashkent
ASIA		
China	Xinjiang Group	Akesu Brewery, Urumqi No. 2 Brewery, Wusu Brewery, Yining Brewery, Korle Brewery
	Carlsberg Brewery Guangdong	Carlsberg Brewery Guangdong (Huizhou)
	Ningxia Group	Ningxia Xixia Jianiang Brewery
	Yunnan Group	Kunming Huashi Brewery Yunnan, Dali Beer Co. Ltd
	Chongqing Brewery Group	Mawangxiang Brewery, Dazhulin Brewery, Hechuan Brewery, Liangping Brewery, Wanzhou Brewery,
		Fuling Brewery
	Chongqing Jianiang Beer Co., Ltd.	Panzhihua Brewery, Xichang Brewery, Boke Brewery, Shizhu Brewery, Yibin Brewery
	Chongqing Brewery Guoren Co., Ltd.	Guoren Lixian Brewery, Guoren Changde Brewery, Guoren Yongzhou Brewery
	Carlsberg Beer Enterprise Management (Chongqing)	Changzhou Tianmuhu Beer Co. Ltd, Lujiang Co. Ltd, Yancheng Co. Ltd, Anhui Tiandao Beer Co. Ltd,
	Company Limited, Chongqing ("Eastern Assets")	Bozhou Brewery
	Carlsberg Hong Kong	Not a production site
	Carlsberg Brewery Hong Kong	Not a production site
India	Carlsberg India	Kolkatta, Alwar, Aurangabad, Paonta Sahib, Hyderabad, Dharuhera, Bihar
Laos	Lao Brewery	Pepsi Plant Vientiane, Lao Brewery Pakse, Lao Brewery Vientiane
Malaysia	Carlsberg Malaysia	Carlsberg Kuala Lumpur
Myanmar	Myanmar Carlsberg	Bago Brewery
Nepal	Gorkha Brewery	Gorkha Brewery
Singapore	Carlsberg Singapore	Not a production site
Vietnam	Carlsberg Vietnam	Phu Bai, SEAB Hanoi, Vung Tau

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