



Carlsberg
Italia



SUSTAINABILITY
REPORT
2017

INTRODUCTION

A MESSAGE FROM THE CSR TEAM

We are glad to present our seventh Sustainability Report that, with this year's figures, represents the consolidation of sustainability in our way of working and in our company processes.

We continue to prove how sustainability strengthens our ability to improve our environmental, social and economic performance. Over the past several years, our commitment has been clear and sound. Our environmental impact has been an element that we have managed with determination and transparency. In fact, for example, we have always declared our goal of distributing 100% of our draught beers through *DraughtMaster™*, the revolutionary draught beer system with no CO₂ added and with PET kegs, which we introduced in 2011. This year we reached 94%. Also, thanks to *DraughtMaster™*, more than 11,000,000 kg of CO₂ were prevented from being released into the atmosphere, a figure equivalent to the amount absorbed by more than 440,000 trees, which would cover 1,500 football fields. We have achieved these results thanks to the contribution of energy and ideas by our stakeholders as well, to whom we regularly listen.

This year, in addition to the traditional focus groups with our staff, we directly met with a group of suppliers and a group of clients of the Ho.Re.Ca. channel, comparing our ideas about the evolution of our sustainability path constructively and firmly.

In this Sustainability Report, we will tell you about how the commitment of Carlsberg Italia's staff is transformed into social and environmental results and how they contributed to the Carlsberg Group's sustainability strategy, "Together Towards Zero", which aims to eliminate all greenhouse gases emissions, water waste, irresponsible drinking and work accidents by 2030.

We hope you enjoy reading.

Carlsberg Italia CSR Team



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CEO CARLSBERG GROUP'S INTRODUCTION

BREWING WITH PURPOSE



Sustainability is central to the Carlsberg Group's purpose of brewing for a better today and tomorrow. And it is more important now than ever. That is why in 2017 we launched a new sustainability programme, Together Towards ZERO, which raises our sights higher than ever before

The world needs strong, collective action in the face of complex sustainability challenges such as climate change, access to resources and public health concerns.

The UN's Sustainable Development Goals (SDGs) and the Paris Climate Agreement are helping to accelerate change, deepening the commitment of governments, civil society and businesses globally. They highlight how important it is for us to work together if we are to succeed in delivering change.

Together Towards ZERO is our contribution to this urgently needed change. It sets new industry standards for science-based and par-

tnership-driven sustainability. We believe our approach is not only good for the planet, but also for business and for society as a whole. It increases our efficiency, reduces risks and builds resilience in our supply chain, while resonating with our customers and consumers in an increasingly sustainability-conscious world.

Last year, we identified the four areas with the greatest relevance for our business and society: carbon & energy, water, responsible drinking and health & safety. Together Towards ZERO states our ambition within each of these areas: ZERO carbon footprint, ZERO water waste, ZERO irresponsible drinking and a ZERO accidents culture across our business. Under each ambition, we have set measurable targets for 2022 and 2030 respectively.

Why are we setting our sights so high? Because we feel that only bold targets will stimulate the kind of game-changing innovation the world needs. We cannot do the job alone and "together" is a key element of our approach. Just as they were in the development of our new programme, partnerships will be crucial for success in its future delivery. In 2017, we

joined the RE100, the We Mean Business coalition and the Climate Leaders initiative driven by the World Economic Forum. We also continued to support the world's largest sustainability partnership, 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.

But 2017 was not only about planning. We made concrete progress as well both incrementally and through more radical changes. For example, at our breweries we reduced our water consumption by 3% and our CO₂ emissions by 6% compared with 2016. Falkenberg brewery in Sweden now only uses carbon-neutral energy a milestone on the road towards our global 2030 target - and we reached over 70 million consumers with our responsible drinking campaigns. Within health & safety, we saw a significant reduction in the number of accidents. However, one person

was killed in an accident at the gates of one of our Indian breweries. This serves as a sad reminder of the need for constant vigilance as we strive towards a ZERO accidents culture. Our deepest sympathy goes to the family of the deceased person.

The world will undoubtedly see many changes between now and the culmination of Together Towards ZERO in 2030. However, we are determined to demonstrate the crucial role that business can play not only through job creation and economic contribution, but also in resolving global sustainability challenges, and we are keen to take a lead. We are confident that our high ambitions and long-term thinking will set the Group and the societies in which we operate on a path to success.

Cees 't Hart
CEO, Carlsberg Group



TOGETHER
TOWARDS
ZERO

CARLSBERG ITALIA 2017 IN BRIEF



OVER 11 MILION kilograms of CO₂ not released in the atmosphere thanks to **DraughtMaster™ +4%** (VS 2016)
100% RENEWABLE ENERGY
Since 2017 our energy has been 100% renewable.



-11,3% specific water consumption* (VS 2016)
(*water needed to produce one hectolitre (hl) of beer)



5.500 +120% (VS 2016) people involved in activities to raise awareness organized by the employees of *Carlsberg Italia* during Brewery open Day.



ZERO CAR ACCIDENTS resulting from campaigns to raise awareness for those who drive long distances in a company car



Ho.Re.Ca/On Trade
Hotel, Restaurants, Caffè
Carlsberg Ho.Re.Ca Srl

GD/DO Special Clients
OFF Trade Catering,
Organized and Duty Free
Cruise Ships, Exports

Carlsberg Italia S.p.A

The colours in the map show the territorial organization of Carlsberg Ho.Re.Ca Srl

258
NUMBER OF
EMPLOYEES



36,5
MILLION GLOBAL
GROSS VALUE IN
EUROS

36
BEERS IN
PORTFOLIO



1,4
MLN HL
OF PRODUCED
(+6% VS 2016)

INTRODUCTION FROM CEO OF CARLSBERG ITALIA

INNOVATION AND SUSTAINABILITY

In 2010, when we started to report to our partners, I could only imagine the path of our sustainability.

Looking back over seven years of reports, I clearly realized the meaning that we give to sustainability in Carlsberg Italia: concreteness and solidity. Our imprinting comes from J.C. Jacobsen who built his business in 1847 under the pillar of respect for people and the environment, a business he put under control of the Carlsberg Foundation in 1876.

Product quality and innovation are the basis of sustainability at Carlsberg Italia, which has allowed us to perceive the potential of the *DraughtMaster™* pushing us to make it become a standard for draught beer. In 2017, 94% of beer volumes we distribute in kegs is served from green PET kegs with an incredible sustainable profile measured with LCA analysis. Since 2011, around 50,000,000kg of CO₂ was prevented from being emitted into the atmosphere, a substantially higher saving than when using traditional methods. This quality and sustainability have contributed to the relaunch of Carlsberg Italia, becoming a stable of business culture, making us understand the role of the territory and respect for our partners.

Being sustainable is no longer a necessity, but rather a mission, even if it may seem that our efforts make no difference. The SDGs and the United Nation's 2030 agenda lead the way. SDG 6 (availability and sustainable management of water) is the most important one. The data seems disheartening: 2/3 of the planet is covered by water, of which 2.5% is fresh and 0.9% available to the world population. Carlsberg Italia, in 2017, consumed "only" 433,000 m³ (-11,3%vs2016)*. This is an insignificant quantity in the global context, but it is precisely these figures that convince us of the importance of acting regardless of the immediate advantage.

The company must have a sustainable approach towards the evolving environment, and evolve and renew with it and with the stakeholders throughout the process, integrating the value chains on the basis of shared values.

I am proud to be part of a Group that makes sustainability its standard, and proud of Carlsberg Italia's staff and partners, who, together with us, have approached sustainability and continue to go down this path. It is to all of them that I dedicate the seventh Sustainability Report.

Alberto Frausin
CEO, Carlsberg Italia



*specific water consumption



SCENARIO

THE COUNTY RESTARTS, BEER GROWS THANKS TO QUALITY AND SUSTAINABILITY

In 2017, the macroeconomic identikit pictures Italy running not as fast as its main partners. But at least it has started walking again: ISTAT calculated an increase of 1.4% in GDP, the highest amount of growth since 2010.

It is a “small recovery” dragged mainly by international factors. Last year – as the Institute affirms – our country exported goods totalling €448.1 billion, with a positive balance amounting to €47.5 billion. The food & beverage sector played a key role: according to Federalimentare, it beat all records both in turnover (€137 billion, +3.8% vs. 2016), and in export value (€31.9 billion, +6.3% vs. 2016 that raises to 41 with its agricultural component).

The internal factors are less dynamic, but positive nonetheless. ISTAT, once again, notices that consumption has risen by 1.5%: in view of 1.4% inflation, an increase of 2.2% of gross available revenue has increased by 0.8% purchasing power for families. This is also confirmed by Nielsen's consumer loyalty index, which, in the fourth quarter of 2017, reached 68 three points above the previous term and ten points above its 2016 equivalent.

In this scenario, what has happened in the beer sector? According to the Iri market analyst, in Italy in 2017, consumption has increased by 10.6% and now represents 6.3% in volume and 16.3% in beverage market value. It is quite a selective consumption: we drink less beer per capita when compared to other European countries, but we pay more attention to special beers, which have grown by 19.8%. Regarding this, the AssoBirra Report updated in November 2017 records that the number of artisanal breweries increased six-fold between 2008 and 2016, from 113 to 718 (updated in July 2017),

to which we add 225 brew pubs. Moreover, the update estimates that, in the first half of 2017, Italian beer production replicated the rising trend of 2016, when it overcame the threshold of 14.5 million hectolitres for the first time.

Furthermore, regarding environmental sustainability, the Italian beer sector is at the cutting edge in Europe. AssoBirra reports that in twenty years the sector has reduced about two thirds of water consumption in the production of beer and more than one quarter of energy consumed for each hectolitre of beer produced from 177 to 128MJ. An even bigger accomplishment is the reduction of CO₂ emissions (about -40%, equal to 62 thousand tons).

From 1990, even with the increase of volumes and the percentage of bottled beer, the quantity of glass has decreased by 20% (from 522 thousand to 404 thousand tons per year). Quality and sustainability are therefore keywords in a sector that increasingly meets the consumer's approval, representing an important social and economic contribution to the country at the same time, with around €7.8 billion of generated shared value, and in which Carlsberg Italia has had a leading role.



PURPOSE AND STRATEGY

BREWING FOR A BETTER TODAY AND TOMORROW

Our founders were driven by an ambition to brew for a better today and tomorrow. Over 170 years later, we continue to pursue the same purpose.

We continue to take a lead in sustainability because it is central to our purpose and because we sincerely believe it is the right thing to do – delivering tangible benefits for our business and for society as a whole.

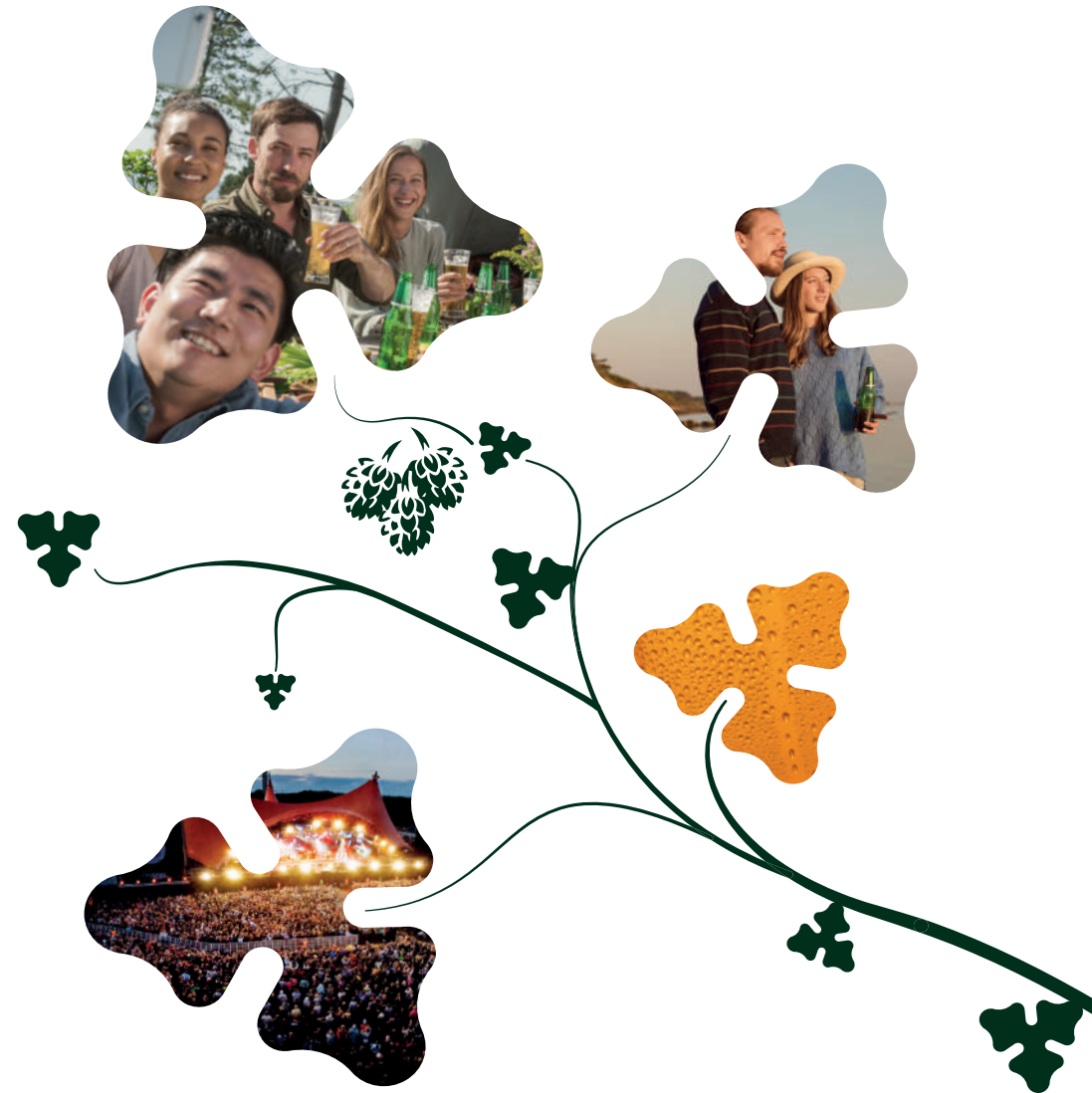
CORE ELEMENT OF OUR STRATEGY

Sustainability is embedded in our corporate strategy, SAIL'22, as part of our aim to create a winning culture throughout the Group. It is our ambition to contribute to a better society wherever our beers are brewed and sold. In 2017, we refined our sustainability priorities and refocused our long-term efforts.

FOCUSING ON THE AREAS THAT COUNT

In 2016, we carried out a materiality assessment with Business for Social Responsibility (BSR) to identify the most important sustainability management topics, risks and impacts for our business.

The findings from this assessment, along with global megatrends such as climate change and water scarcity, lie at the heart of our new sustainability programme, Together Towards ZERO (see page 11). Our material issues make sense given the nature of our business, which focuses on producing, distributing and selling beer, soft drinks and other beverages.



REPORT METHODOLOGY

The 2017 Carlsberg Italia Sustainability Report is the seventh reporting document since the company started the process in 2011. It is the main management and reporting tool in environmental, social and economic sustainability and a transparent means of communication and dialogue with stakeholders.

2017 Sustainability Report Area
Reporting area of activity:

- Frequency: yearly
- Reporting period:
- 1st January 2017 – 31st December 2017
- Previous Sustainability Report publication: July2017(year2016)
- Reference Guidelines: Global Reporting Initiative (GRI) and AA1000 for Stakeholder engagement
- Companies included in the reporting area of activity: Carlsberg Italia and Carlsberg Ho.Re. Ca. Srl (in the report, the terms “Carlsberg Italia” and “the Company” will refer to both unless otherwise specified)
- Limitations: none
- Significant changes during reporting period: none

METHODOLOGICAL NOTE

The 2017 Sustainability Report continues the improvement process for the development of sustainability in the company. In terms of answers to stakeholders' expectations, this document is in line with the previous edition. Starting from data present in Enablon, the reporting software for the sustainability of the Carlsberg Group, Carlsberg Italia's CSR team, composed by representatives of each company department, has collected data with the contribution of Aida Partners and carried out the appropriate checks. The drafting process has followed the guidelines defined by the Group and the writing procedure for the Sustainability report created by the CSR Team in October 2014.

KPIs are founded on the best information available, and the GRI G4 Guidelines and the relevant measurement provisions have been applied where possible. In terms of representing the information, the reporting has been aligned with the guidelines for the 2017 Carlsberg Group Sustainability Report, while maintaining a continuity line with the previous version to enable comparisons. In the reporting, processes and procedures are not described if their structure has not been significantly altered. Last, we decided to publish the data related to the last three years, in line with the

Carlsberg Group's provisions. The 2017 Sustainability Report shows Carlsberg Italia's path towards the adoption of sustainability as a management model based on dialogue and the involvement of stakeholders. It is in this context that the materiality analysis has been carried out. The Report is divided in three sections:

- The Introduction, which includes Carlsberg Italia and Carlsberg Group CEOs letters, the summary of the main data from 2017 and the scenario, as well as the new sustainability project “Together towards ZERO” and the SDGs.
- Challenges, which includes the four challenges for the new sustainability programme ZERO carbon footprint ZERO water waste, ZERO irresponsible drinking, ZERO accidents culture.
- Responsible business, which includes governance, people, beers, territory, stakeholder engagement and materiality analysis.

The 2017 Carlsberg Italia Sustainability Report can be found at and downloaded from the website

www.carlsbergitalia.it

For clarifications and additional information you can send an e-mail to info@carlsberg.it or carlsbergpervoi@carlsberg.it



IL NUOVO PROGRAMMA DI SOSTENIBILITÀ

TOGETHER TOWARDS ZERO

In 2017, we devised a new sustainability programme, Together Towards ZERO. This underlines our commitment to sustainable development.

The new programme consists of four major ambitions: ZERO carbon footprint, ZERO water waste, ZERO irresponsible drinking and a ZERO accidents culture. Each ambition is underpinned by individual and measurable targets for 2022 and 2030 respectively, as detailed in the corresponding sections of this report.

Together Towards ZERO was developed in partnership with leading global experts using a science-based approach. It is a highly ambitious programme tailored to the SDGs. It sets out to deliver emission reductions that align with the more ambitious goal of the Paris Agreement on climate change to keep the global temperature rise to 1.5°C by the end of this century.

The programme will help ensure that we reduce risks and strengthen our business, while also contributing to society. An example of the risks we face is a future increase in the cost of utilities such as water and energy. Meanwhile,

there are also opportunities, such as the falling price of renewable energy and increasing consumer interest in sustainable products. Furthermore, fewer accidents make Carlsberg a more attractive place to work, while taking a strong stance on responsible drinking shows that we are a responsible company.

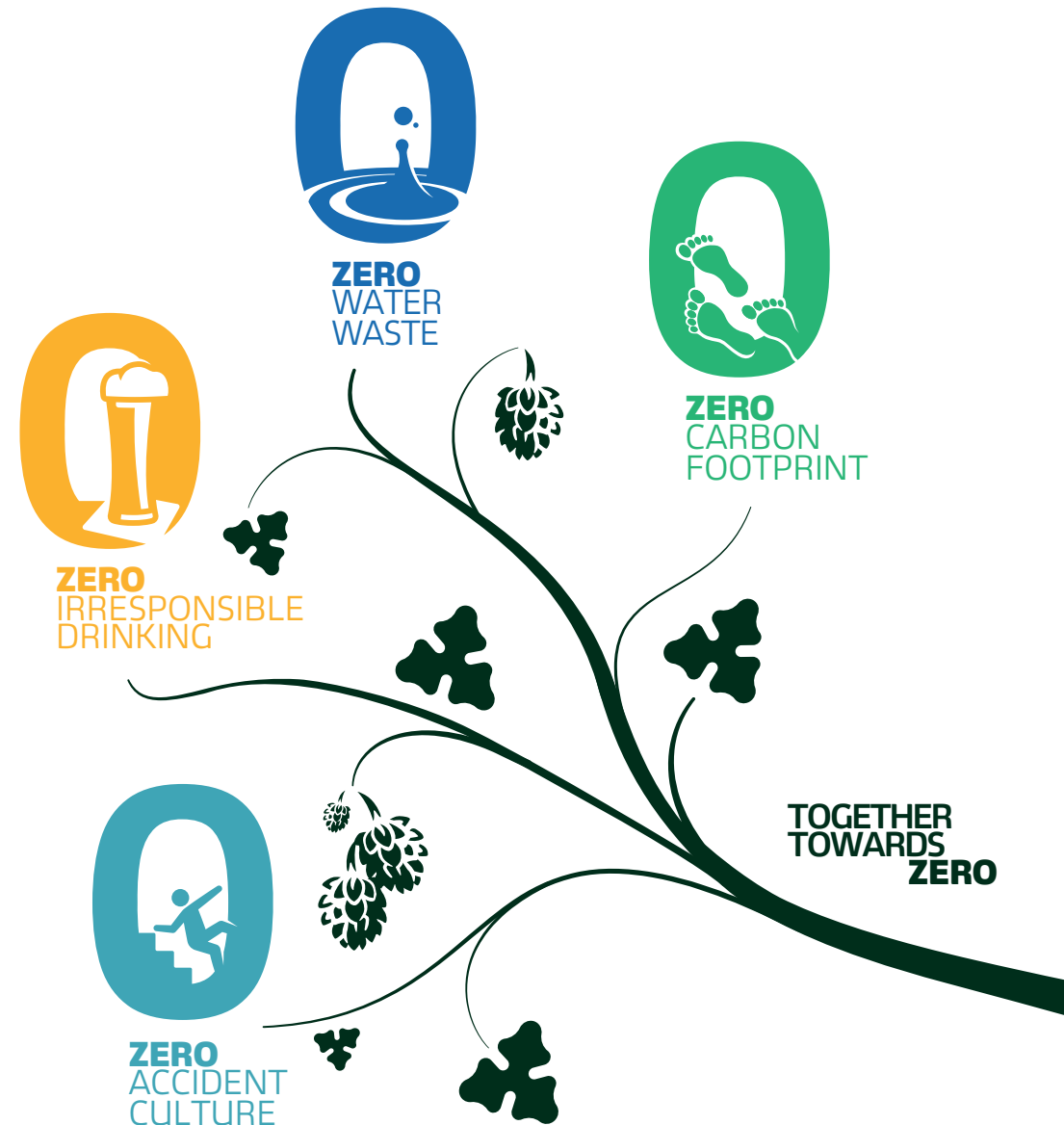
These examples show how our Together Towards ZERO investments can help make our business more resilient in the future, contributing to our success both short and long term.

Our wider value chain will also benefit. Through our ambitious targets, we hope to create a virtuous circle of improvements among our suppliers and business partners. We believe that setting challenging targets will increase the pace of innovation in related industries, stimulating creativity along the value chain and contributing to a more sustainable future.

Together, we can make it happen.

➤ **Watch and find out more about Together Towards ZERO**

<https://www.youtube.com/CarlsbergGroup>



NEW SUSTAINABILITY PROGRAMME

AMBITIONS AND TARGETS TOWARDS ZERO



**ZERO
CARBON
FOOTPRINT**

We will eliminate carbon emissions at our breweries by 2030 and be using 100% renewable electricity by 2022. Through the Carlsberg Circular Community, we are working with partners in our value chain to reduce beer-in-hand emissions by 30% by 2030



**ZERO
IRRESPONSIBLE
DRINKING**

We will offer 100% distribution of alcohol-free brews by 2022 to expand consumer choice. will also provide responsible drinking messaging as well as nutrition and ingredient information on our packaging and online, while forming partnerships to encourage responsible consumption.



**ZERO
WATER
WASTE**

We will cut water usage at our breweries by half by 2030, effectively eliminating water waste during the brewing process. We will also engage with partners to improve water management outside selected breweries in high-risk areas.



**ZERO
ACCIDENTS
CULTURE**

We will continue to target a year-on-year reduction in our accident rate in order to achieve our 2030 target of ZERO lost-time accidents.

NEW SUSTAINABILITY PROGRAMME

TOGETHER TOWARDS THE SDGs

The UN's Sustainable Development Goals (SDGs) are a call for governments, civil society, businesses and the general public to act to end poverty, fight inequality and tackle climate change

Being interconnected, all the goals are important, but we focus our efforts on those that are material to our business and where we can have the most positive effect. With the launch of Together Towards ZERO, we have added SDG 13 – Climate action – together with seven new targets since 2016.

Look out for the bottle-cap global goal icons throughout the report for updates on our progress

SUSTAINABLE DEVELOPMENT GOALS THAT CUT ACROSS OUR OPERATIONS



***12.2** By 2030, achieve the sustainable management and efficient use of natural resources.
12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.



***12.9** Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production.



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.

MOST MATERIAL SDGs AND TARGETS



***7.2** By 2030, increase substantially the share of renewable energy in the global energy mix.
7.3 By 2030, double the global rate of improvement in energy efficiency.



***13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.
***13.3** Improve education, awareness-raising and capacity on climate change mitigation, adaptation, impact reduction and early warning.



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



***6.5** By 2030, implement integrated water resources management at all levels.



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



***3.6** By 2020, halve the number of global deaths and injuries from road traffic accidents.



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



* New target.



ZERO
CARBON
FOOTPRINT



ZERO CARBON FOOTPRINT

2030 TARGETS

ZERO CARBON EMISSION AT OUR BREWERIES

30% REDUCTION IN BEER-IN-HAND CARBON FOOTPRINT

2022 TARGETS

50% REDUCTION IN CARBON EMISSIONS AT OUR BREWERIES

100% ELECTRICITY FROM RENEWABLE SOURCES AT OUR BREWERIES

ZERO COAL AT AOUR BREWERIES

15% REDUCTION IN BEER-IN-HAND CARBON FOOTPRINT

100% LOW-CLIMATE-IMPACT COOLING

30 PARTNERSHIP TO REDUCE SHARED CARBON FOOTPRINT



ZERO CARBON FOOTPRINT

INTRODUCING OUR AMBITION

Climate change is one of the most pressing issues of our time. Addressing it requires a transition to a low-carbon economy. As stated in the Paris Agreement on climate change, business has a key role to play.

Our ambition of ZERO carbon footprint aligns with the Paris Agreement’s more ambitious goal of limiting global warming to 1.5°

OUR TARGETS

Working with climate experts in the Carbon Trust – an independent not-for-profit organisation – we developed a baseline carbon footprint and a set of science-based carbon-reduction targets.

We want to achieve ZERO carbon emissions at our breweries by 2030. We recognise that this will be a huge challenge, only achievable with highly focused actions and innovation. In addition, we have set a target that extends beyond our own breweries to include the full value chain. We call this “beer-in-hand”, and we are aiming for a 30% reduction in emissions by 2030 against a 2015 baseline. To build momentum on the road towards ZERO carbon emissions, we have set intermediate targets for

2022. These include a 50% emission reduction, a switch to 100% renewable electricity and the elimination of coal as an energy source at our breweries. By 2022, we also aim to reduce our beer-in-hand carbon footprint by 15%, to have 100% low-impact cooling and to establish 30 partnerships with suppliers – all leading to a reduction of our shared carbon footprint.

SUPPORTING THE GLOBAL GOALS

A single individual, organisation or government cannot tackle climate change alone. It requires strong collective action. We want to set the standard and take the lead.

Our targets contribute to SDG 7: Affordable and clean energy. By increasing the share of renewable energy and improving the rate of energy efficiency, we specifically address targets 7.2 and 7.3. See pages 14 and 15 for examples. We contribute to SDG 12.9 by carrying out research to improve every element of our production process and by installing up-to-date technology at breweries around the world. By setting a tough, science-based target, we support SDG 13: Climate action, and in particular target 13.1, which is to strengthen resilience to climate change. What is more, we are committed to acting as agents of change, responding to SDG 13.3 to improve education, awareness and capacity on climate change mitigation and adaptation. To amplify impact,

we will cooperate with stakeholders in our value chain and with other industries. We are also always ready to develop, in collaboration with all stakeholders, our value chain and with industrial sectors close to us, projects aimed at the reduction of emissions.

OUR APPROACH TOWARDS ZERO

The Group Environmental Policy, updated in 2017, sets standards and guidelines to reduce levels of CO₂ and improve efficiency through a mix of global initiatives supervised by the Supply Chain Management and local managers. Carlsberg's Young Scientists community, recently launched, will collaborate in the development of solutions that will aim towards ZERO CO₂ emissions in our breweries. At the same time, our goal for "beer-in-hand" focuses on three main points: innovative partnerships, improved performances and influential leadership.

REFERENCE CO₂ EMISSIONS

In 2016, based on the Group's 2015 data, emissions of CO₂ were measured in all processes and it has emerged that 40% of our emissions comes from packing materials, 17% from agriculture and 14% from production factories. To these impact areas we can add 14% in distribution, 9% during commercial cooling, and 6% during the processes for malting and processing grain. As Carlsberg Italia, we have been committed, since 2010, to measuring CO₂ emissions with a strong scientific basis. For each format with which we distribute our products, we carried out an LCA (Life Cycle Assessment). Thanks to this we were the first beer producer in the world to gain the EPD (Environmental Product Declaration, www.environdec.com) certification. LCA (in the picture the LCA of PET kegs, the main format with which we contribute to the reduction of CO₂ emissions) enables us to understand the environmental impact of our

products through their whole life cycle. Thanks to this, throughout the years we have been able to spot the life cycle phases with a higher impact, and have subsequently aimed our improvements there, in addition to strengthening collaboration with our partners for more efficiency in their fields of competency.

CARLSBERG YOUNG SCIENTISTS COMMUNITY

The Carlsberg Young Scientists Community, coordinated by the Carlsberg Research Laboratory, will be supporting our journey towards ZERO, involving institutions, universities and suppliers in the development of innovative solutions, which are not available at the moment, to allow us to reach our target for 2030.

What are scientific targets

Our targets are based on the science of climate change. They have been calculated to reach a level of CO₂ reduction needed to keep well below 2°C, the average rise of global temperatures, compared to preindustrial levels.

Our goals are aligned with the ambitious target proposed by the Paris Agreement to limit the rise to 1.5°C

More information on the Science based Targets initiative can be found on: sciencebasedtargets.org

CO₂ EMISSIONS IN THE LIFECYCLE PHASES OF OUR PRODUCT



*2016 data

Source: IEFE elaboration on the LCA 2015 research

AIMING FOR 1.5°C

Our Together Towards ZERO targets are designed to reduce our emissions in line with what is required to achieve the Paris Agreement's more ambitious target of limiting the temperature increase to 1.5°C.

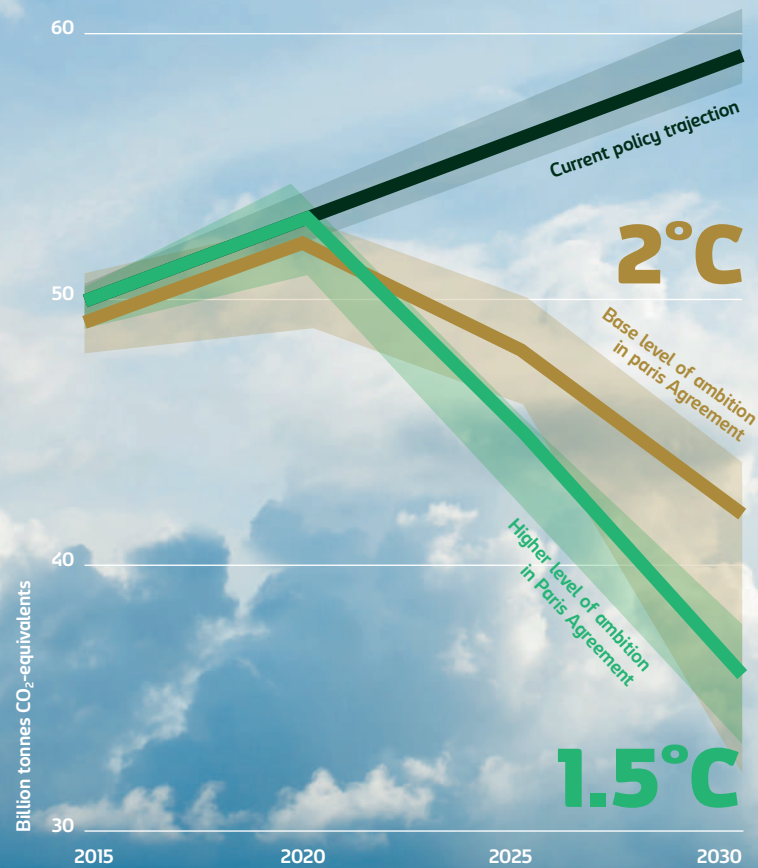
According to the latest UN projections, the current commitments described in the Nationally Determined Contributions (NDCs) in the Paris Agreement on climate change would result in global warming in excess of 3°C by the end of this century.

The Paris Agreement's goal is to keep the global temperature rise well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C.

With Together Towards ZERO, we want to show that it is possible for companies to deliver on the most ambitious trajectory while still driving business growth.

ANNUAL GLOBAL TOTAL GREENHOUSE GAS EMISSIONS

Source:
UN Environment Emission Gap Report 2017



ZERO CARBON FOOTPRINT

ELIMINATING EMISSIONS IN OUR BREWERIES

The operations carried out in our Brewery have an important environmental impact in terms of emissions. Since 2005, Carlsberg Italia has followed the ETS regime (Emission Trading Scheme), an international system that sets maximum quotas of total emissions and rewards successful companies, allowing them to “exchange” their saved emissions.

Carlsberg Italia, like the rest of the Group, has been involved in actions aimed at improving efficiency for years, particularly energy efficiency, collaborating with respected partners and implementing innovative technologies.

Our goals for 2022 and 2030 clearly outline the path on which we still need to travel, and the results reached up to now encourage us to continue in this direction.

OUR PERFORMANCE IN 2017

In 2017, total emissions in the factory decreased by 1.8% compared to 2016.

We reduced specific CO₂ emissions by 8.6%, reaching the value of 3.2 kg of CO₂/hl compared to 3.5 in 2016.

Total energy consumption has slightly increased compared to 2016 (0.4%). This is due to an increase in the production of hectolitres of beer, but from a specific consumption point of view, we recorded positive results. We reduced our specific consumption of natural gas by 7.6% and that of electricity by 1.2% compared to 2016.

EFFICIENCY PROGRAMMES

Our goal is to optimise production processes through precise efficiency programmes developed by sharing best practices with the Group and in the market.

More control and analysis of the data collected from the factories, optimisation of water-recycling towers for the bottle pasteuriser and the reduction of steel kegs have contributed to the reduction of specific consumption of natural gas. With regards to improvement in the specific consumption of electric energy, it has been lower than expected because we had to pushback the start of the treatment plant and because our cooling systems has not yet yielded the expected results in terms of reduc-

ing electricity consumption for cooling.

For 2018 we expect an improvement thanks to the reduction of energy consumption during the pasteurisation phase with the use of a Flash Pasteuriser.

COOLING SYSTEM

To cool beer we use cooling systems. These systems cause environmental problems. In the 80s, chlorofluorocarbons (CFCs) used in the tanks and radiators damaged the ozone layer. This is why in 1987, 200 countries signed the Montreal Protocol, committing to gradually eliminating CFCs. They have been substituted by hydrofluorocarbons (HFCs). While HFCs do not impact the ozone, we now know that they have a significant impact on global warming. One unit of HFC is significantly more damaging than one unit of CO₂. In 2016, the Montreal Protocol was updated by the Kigali amendment. HFCs will be gradually eliminated and substituted by alternatives such as low climatic impact hydrocarbons.

Collaborating with our supplier Celli, an Italian company, and a global reference point in planning and producing systems for drinks drafting and cooling systems we anticipated the times and only bought high energy-efficiency cooling systems with natural coolers.

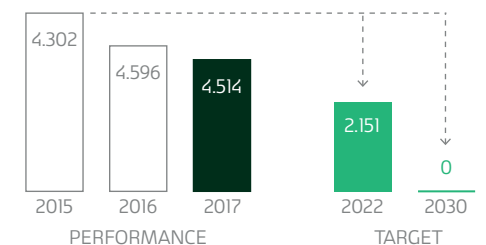
2022 TARGETS

**50%
REDUCTION IN
CARBON EMISSIONS
AT OUR BREWERIES**

2030 TARGETS

**ZERO
CARBON EMISSIONS
AT OUR BREWERIES**

TOTAL CO₂ EMISSION IN INDUNO OLONA FACTORY (t)



CERTIFICATIONS

Carlsberg Italia has been ISO 50001 certified since 2011. The ISO 50001 standard is globally recognised as the reference point in the optimisation of energy management because it produces relevant information for the integrated and efficient management of resources. In 2017, the audit of the Certification Body gave positive opinion regarding the renewal of the integrated management system certification.

100% RENEWABLE ENERGY

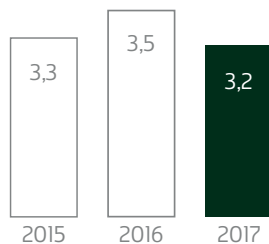
For a long time, we searched for innovative technological solutions that would enable us to produce beer, regardless of where our factory was located, using renewable sources of energy. Since last year we have participated as a Group in RE100, a coalition of businesses committed to increasing the request and supply of renewable energy and, thanks fine 2016, a partire dal 2017 la nostra energia è al 100%

rinnovabile. to the energy provision agreement signed at the end of 2016, starting from 2017, our energy will be 100% renewable.

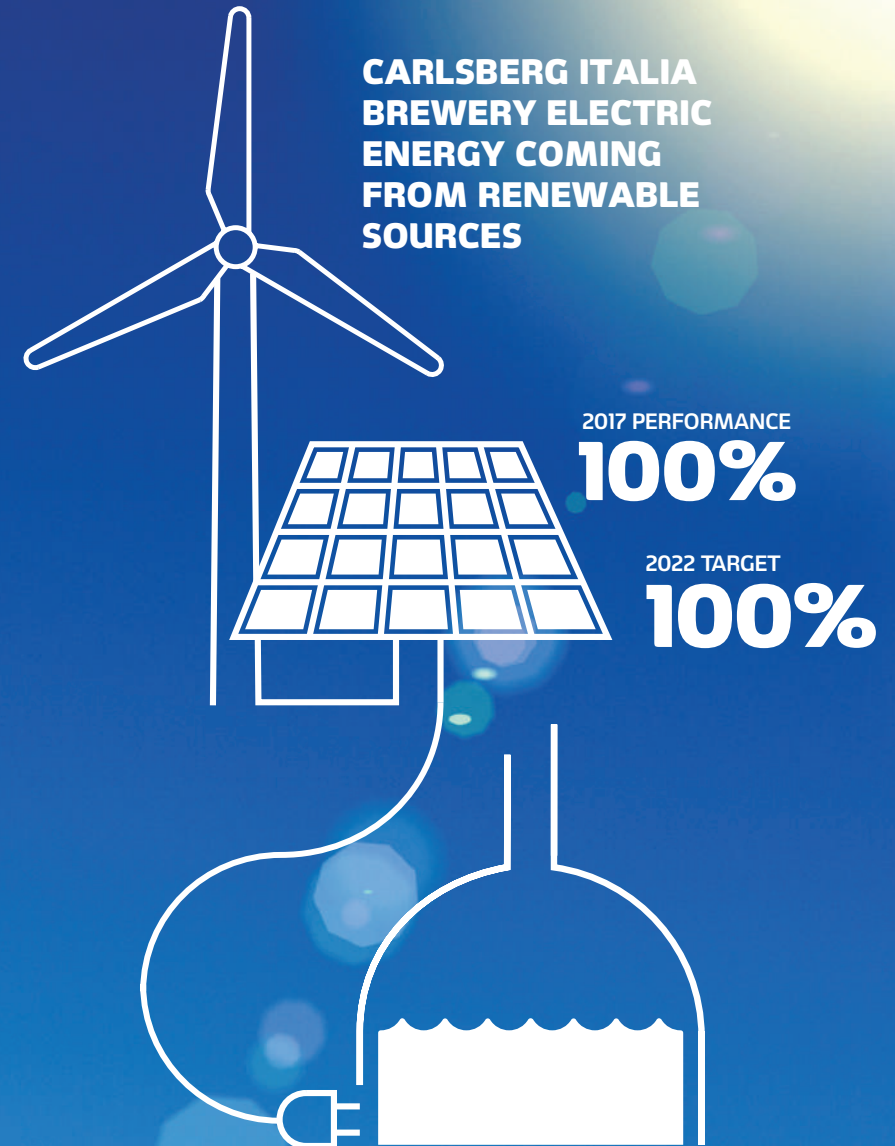
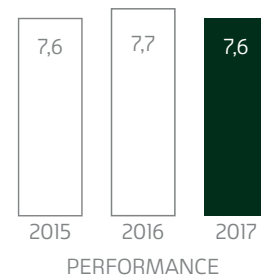
LOOKING AT 2018

During 2018, we will continue researching energy efficiency, monitoring and optimising processes, collaborating with the Group Leader to reduce emissions, implementing new structures to decrease heat and electric energy waste and involving our partners in the development of strategies and innovative technology suitable for reaching the targets fixed for 2022 and 2030.

CO₂ SPECIFIC EMISSIONS (kg CO₂/hl)



ELECTRICITY SPECIFIC CONSUMPTION (kWh/hl)



LIFE IRIS PROJECT

The LIFE IRIS project improves resilience to climate change.

Climate change has a strong impact on the beer industry, both in terms of the provision of materials and consumption.

To react to climate change, Carlsberg Italia - the only agri-food company participating - decided to take part in the four-year project LIFE IRIS (Improve Resilience of Industry Sector). Started in 2015 from the collaboration between companies, universities and Italian institutions with the goal of raising awareness of the changes between the operators of the financial and industrial world.

Through the project, which includes the definition and the implementation of a Plan of Adaptation to Climate Change, we would like to bring our contribution to the reduction of greenhouse gas emissions serra e gestire il rischio dei cambiamenti climatici nella nostra filiera

insieme ai nostri partner and manage the risk of climate change in our company together with our partners.

Thanks to the attentive Climate Risk Assessment carried out by the Life IRIS Project, our awareness of the influence that climate change has on our activities and our reputation has increased through the years.


This has led us, from 2017, to update our Plan of Adaptation to Climate Change, identifying a series of future activities derived from the results in the first phase of the project.

More details about the project on www.lifeiris.eu



* Cambiamento climatico: idee fresche per un tema caldo.



 LIFE/JACC/IT/000683

info@lifeiris.eu / www.lifeiris.eu



ZERO CARBON FOOTPRINT

PROJECT PROGRESSION OF THE PLAN OF ADAPTATION TO CLIMATE CHANGE

ACTION

Feasibility study for the substitution of the pasteuriser

“Open Air Job” Project: creation of open air working areas within the plant of Induno Olona.

Hydrogeological study to research the possible impacts of climate change on water supplies and the identification of possible adaptation measures to improve the company's resilience.

Study on the health and safeguarding of the plants in the park of the factory and identification of possible future maintenance interventions.

Suppliers' involvement measures following extreme events to ensure business continuity.

EFFECT

- Reduced energy consumption
- Reduced humidity and temperature
- Reduced risks for the workers' health and fewer minor absences

- Reduce the effect of rising temperature on the workers' health
- Prevent diseases connected to high temperatures in non-ventilated environments and to contamination of microclimates deriving from conditioning systems
- Workers' wellbeing

- Evaluate safety and continuity of water supply to the plants
- Identify measures and precautions to reduce possible damage from potential flash floods to a minimum, and the actions to carry out in case of drought

- Safeguard the soil regulation eco-system service, prevention of erosion and landslides, safeguard the hydrogeological system
- Avoid risks for people, means and structures' safety present within the factory due to trees or parts of them falling. The study will also be important for the Parco Regionale del Campo dei Fiori where the trees are.

- Direct and active involvement of the suppliers in the recovery plan
- Improve awareness in our suppliers with regards to interventions to be carried out urgently and efficiently in case of extreme events

STATE OF THE ART

Following the feasibility study for the substitution of the pasteuriser, we decided to start the production of a Flash Pasteuriser that will be implemented before Summer 2018.

Installation of wireless coverage in the plant and reception checks.

With the help of the Parent Company we acquired the necessary equipment and defined policies granting operability of the workers as well as guaranteeing the safety of company data.

The hydrogeological study enabled us to spot measures able to reduce damage caused by extreme events such as droughts and floods to a minimum. Intervention to tackle drought emergency:

- foresee water flow rate: implementing a continuous monitoring system of flow rate, temperature and conductivity, and analysis of rain data for the definition of the curve of sources depletion (by 2019)
- avoid a lack of water: evaluation of the practical possibility of a momentary connection to the public water mains in case of drought

Intervention to tackle flooding emergency:

- to improve the hydraulic section used for water discharge: remove all the obsolete tubes and the non-active ones in

The study has spotted some priority maintenance interventions on the trees that have been carried out in 2017 to make the park safe again.

In addition, it has also identified a series of interventions to be deferred by no more than 2 years depending on their urgency

Past experiences, like the last flood in 2009 (which forced the company to stop production for days), taught us how the quick intervention of all the stakeholders is fundamental for carrying out maintenance action aimed at reinstating the status quo in high safety conditions. For this, during the course of 2017, we have devised of a plan that entails the involvement of different types of suppliers: those directly involved in reinstatement activities, those who normally carry out their activity in the factory and those who have access to the factory, even

the plant (first months of 2018)

- to find the hydric alert level: position a stream gauge next to the dam upstream from the plant (first months of 2018)
- to stop debris and allow water flow: construct a weir upstream in the river bed (first months of 2018)

Moreover, the study has taken into consideration another fundamental aspect of the quality of the extracted waters, currently guaranteed by the lack of centres of potential danger, and the presence of Parco del Campo dei Fiori that, with its regulation, preserves the territory where the supply fountains are.

occasionally, and could be present and involved in case of extreme events. Within the end of 2018, a mapping of the more sensitive areas will be made, meetings and inspections will be organised with all suppliers, together with formative sessions aimed at those who work regularly in the factory, also involving the technical personnel.

ZERO CARBON FOOTPRINT

BEER-IN-HAND EMISSION REDUCTION

Eliminating emissions from our Brewery is not enough. We also want to reduce the impact of our products. For this, our priority is to constantly work at decreasing “beer-in-hand”, emissions which brings us to consider the whole life cycle of the products “from the cradle to the grave”.

As a Group, we believe it is fundamental to reach this goal based on three pillars: partnerships for innovation, performance improvement and influential leadership.

INNOVATIVE PARTNERSHIP

Transformational change cannot be achieved alone, which is why we put so much effort into developing partnerships. One such partnership is the Carlsberg Circular Community (CCC), established in 2014. Through the CCC, we are able to harness knowledge and expertise from around the world, providing a good example of our commitment to SDG 17: Partnerships for the goals, including multi-stakeholder, public-public-private sector and civil society partnerships (SDG targets 17.16 and 17.17). In 2017, one new partner joined the CCC – KHS, a supplier of brewing technology and equipment. This is in line with our ambition to expand the

community with partners in areas of our value chain other than packaging

Performance improvement

It is difficult to grant a continuous and progressive performance improvement. There are contingencies that we cannot directly control. Nonetheless, we believe that an increasingly more accurate planning procedure, constant monitoring, scientific measuring of the results and personnel training are the tools that will allow us to maintain a high performance and to intervene efficiently and in a timely manner, even when factors out of our control come into play.

Packaging impact

Packaging accounts for 40% of our carbon footprint. It therefore makes sense that packaging innovations and activities that extend the useful life of returnable bottles can make a significant difference. Such innovations also demonstrate our commitment to SDG 12: Responsible consumption and production. We focus especially on targets 12.2 and 12.5 to achieve the efficient use of natural resources and reduce waste generation through prevention, reduction, recycling and reuse.

Circular packaging partnerships

Our list of products sold in Cradle to Cradle® (C2C) certified packaging is growing.

The Cradle to Cradle Certified™ Product Standard was created to stimulate a continuous improvement process that assesses products according to five quality criteria: material health, material reutilization, renewable energy and carbon management, water stewardship and social fairness.

In 2015, our Carlsberg and Somersby cans in the UK received bronze certification together with Ball Corporation. In 2016, the Kronenbourg 1664 glass bottle in France was added to the list in cooperation with Owens-Illinois. And in 2017, in cooperation with supplier WestRock,



Since 2016, both as Group and as Carlsberg Italia, we have been involved in a pilot project, aimed at standardising the approaches to the PEF-Product Environmental Footprint.

The project, coordinated by The Brewers of Europe, bring together several partners, packaging suppliers, institutions, universities and other companies in the field with the goal of developing industrial standards based on the LCA to measure the impact of products.

In fact, Carlsberg Italia has been analysing all its packs since 2010 using the LCA and in 2011, it was the first beer producer in the world to receive certification from EPD-Environmental Product Declaration for its main products. The certification gets renewed each year and all the documentation is available at www.environdec.com.

we received our third C2C Bronze certification for our Kronenbourg 1664 cardboard boxes.

Our approach to packaging is based on a circular mind set: the 4R model – Reduce, Reuse, Recycle, Rethink. In 2017, the overall packaging volumes have increased by 8% because of increased production. At international level, especially when rethinking packaging, Carlsberg's approach is perfectly exemplified by the Green Fiber Bottle, the revolutionary eco-bottle – organic and with low environmental impact – that will be tested in 2018.

Innovation in the packaging market brought us, in 2011, to create DraughtMaster™, the revolutionary beer drafting system with no added CO₂.

Many of the sustainable innovations in packaging have been developed after evaluating their impact with LCA tools.

Thanks to LCA, we discovered, for example, the extraordinary sustainability of DraughtMaster™, which, with its PET kegs, represents today the reference format for draft beer. Compared to other packaging, DraughtMaster™ demonstrates a series of advantages in every step of the product's life cycle. It has a decisively lower impact when compared to steel kegs, but is also more sustainable compared to glass bottles in terms of product quality, environmental impact and urban cleanliness.

DRAUGHTMASTER™ DRAFTING REVOLUTION

Research of quality in beer and innovation culture brought us to DraughtMaster™, a drafting system unique in the beer industry.

with no added CO₂ that substitutes the traditional steel kegs for recyclable PET ones. The quality of the beer remains unaltered for 31 days from opening of the keg (as opposed to 5 days in steel kegs) thanks to its lack of CO₂.

Moreover, the environmental impact of the whole life cycle of PET kegs is lower. Thanks to LCA, we understood the incredible sustainability level of DraughtMaster™ compared to steel keg, aluminium cans and glass bottles.

25kg of CO₂ (as much as a tree would absorb in a year) are prevented from being released into the atmosphere every 60 litres of drafted beer (3 PET kegs). Thanks to this equivalence, we can calculate at any time our ability to reduce environmental impact. Today the PET keg is considered the reference format for the whole draught beer sector.

DraughtMaster™ wins the challenge of environmental impact against all other formats.

The advantages are consolidated with regards to steel kegs, as well as glass bottles. The PET keg shows its superiority for product quality, lower impact and urban cleanliness.

Today we continue to research, within the circular economy, solutions that will allow us to further reduce the product's environmental footprint: we are evaluating different design options to make recycling the keg easier, testing the possibility of grinding PET kegs and creating new raw materials from them, defining possible reuses as a productive input



60 litres of beer from PET kegs reduce the greenhouse effect as 1 tree in 1 year*

Formula to calculate the Trees Watch

*Compared to the same quantity of beer in steel kegs. Elaboration based on 2013 EPD data



ZERO CARBON FOOTPRINT

DRAUGHTMASTER™'S QUALITY

CLIENT SATISFACTION

We monitor the correct functionality of *DraughtMaster™* in real time.

This allows us to immediately intervene and minimize product waste, as well as the wrong perception of the quality of our beers.

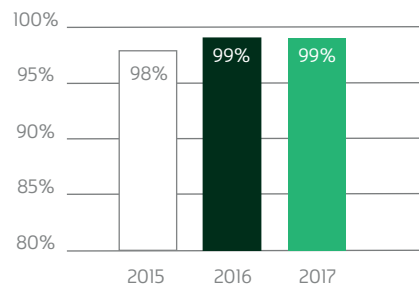
Courtesy Call is Carlsberg Italia's client service that monitors both the quality of the product and HO.RE.CA clients' satisfaction for the *DraughtMaster™* technology. .

In 2017 we carried out 387 phone calls: the service thus recorded a total of 3,246 calls. The positive evaluation of the product's quality is confirmed at 99%, the same level of the last 6 years.

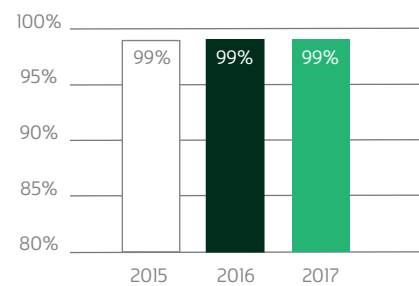
The technical service has confirmed the evaluation of 99% reached for the first time in 2015, while the system functionality has continued its rising trend by reaching 98%

DraughtMaster™ quality evaluation

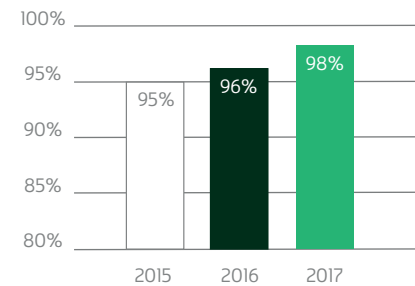
TECHNICAL SERVICE



SYSTEM FUNCTIONALITY



SYSTEM FUNCTIONALITY



DRAUGHTMASTER™ AND ITS ADVANTGES

CHARACTERISTICS

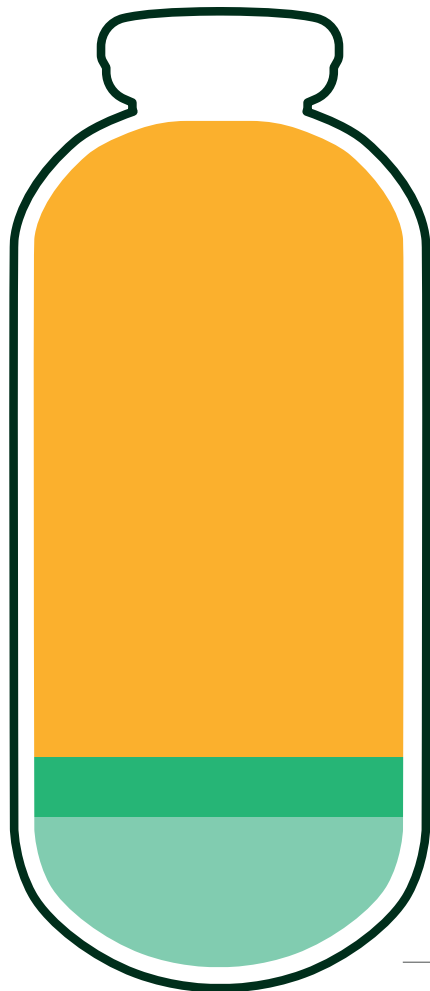
- Disposable PET keg, light and practical
- Drafted beer through compressed air
- 100% natural product with no added CO₂
- Reduced feeling of bloating thanks to the absence of added CO₂
- Fresh beer as just produced
- Perfect and firm foam
- Drastically lower environmental impact(LCA)
- Automatic cleaning
- Wide range of beers
- Keg duration:
 - open: 31 days
 - closed: 9 months

ADVANTAGES

- Beer with no added CO₂ does not bloat
- Higher loyalty
- Higher profitability
- Less bulky kegs and easier to stock
- No more needs of space for empty kegs and cylinders
- No risk of remaining without CO₂
- No need to manage saturation level
- Elimination of some sources causing infection of the impact
- No purchase of CO₂ cylinders
- No deposit of CO₂ on kegs and cylinders
- No beer waste (e.g. change of kegs, cleaning)
- No beer waste for spoiled product

ZERO CARBON FOOTPRINT

DRAUGHTMASTER™ EXCEEDS 90% IN 2017



KEG TOTAL AMOUNT 2017 ACT

1.503.657

HL TOTAL AMOUNT 2017 ACT

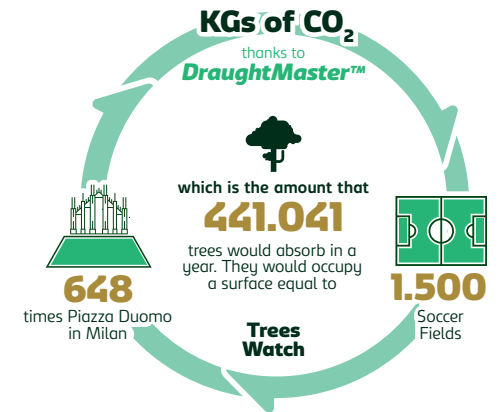
282.083

	KEGS 2017 ACT	HL 2017 ACT
75% MODULAR20	1.060.015	212.03
7% SELECT	186.486	18.649
18% FLEX	257.156	51.431

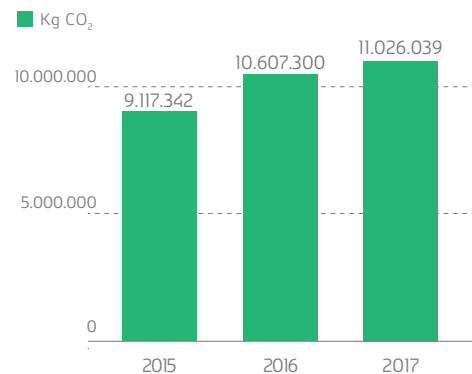
In Carlsberg Italia in 2017, PET kegs represented 94% of all beer distributed in kegs.

6 points more than 2016 - an important step towards the 100% coverage. In only 6 years *DraughtMaster™*'s quantity over total kegs has increased five-fold from 21% in 2011. This year, more than 11 million kg of CO₂ has not been emitted, 491% compared to 2011.

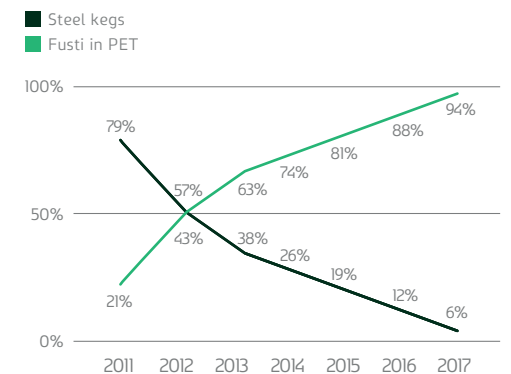
-11.026.039*



Kg CO₂ saved thanks to *Draughtmaster™*



HL of beer distributed by type of keg



ZERO CARBON FOOTPRINT

PET DEFEATS THE GLASS BOTTLE

Logistics data highlights the unmistakable importance of being the first ones believing in a revolutionary innovation: 100 litres

of beer in PET kegs weighs 106kg as opposed to 165kg of 33cl glass bottles.

Pet keg vs. Glass bottle

How much does it weight to transport 100 litres of beer



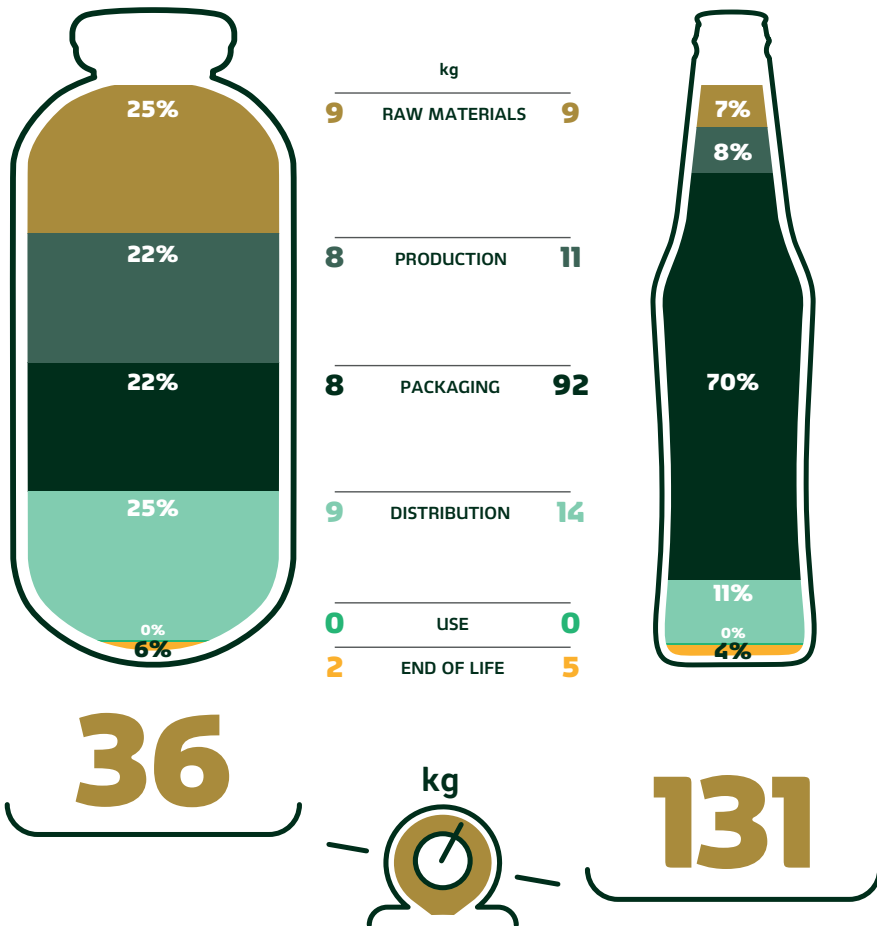
Source: IEFE calculation based on 2015 LCA analysys



ZERO CARBON FOOTPRINT

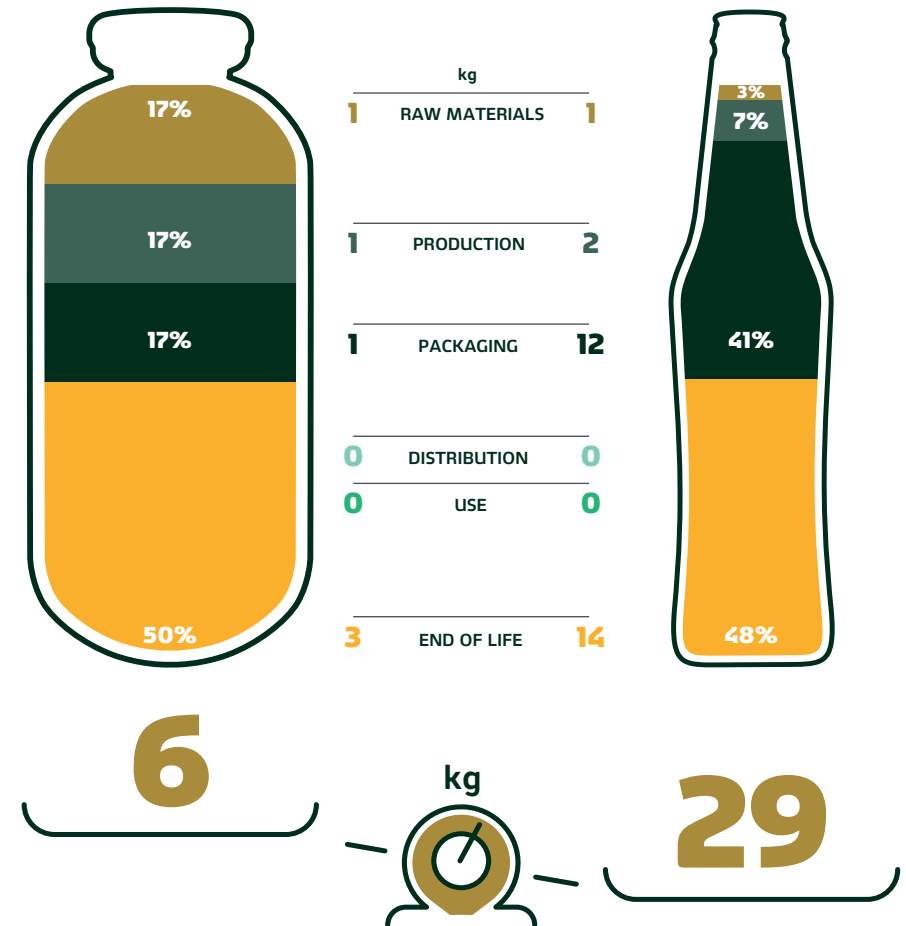
PET KEG VS GLASS BOTTLE

CO₂ Kg produced in each step of the beer life cycle
(Base = 100 litres of beer)



Source: IFFE calculation based on 2015 LCA analysis

Kg of waste produced in each step of the beer life cycle
(Base = 100 litres of beer)



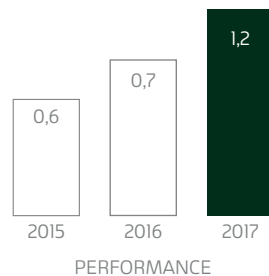
Source: IFFE calculation based on 2015 LCA analysis

WASTE MANAGEMENT

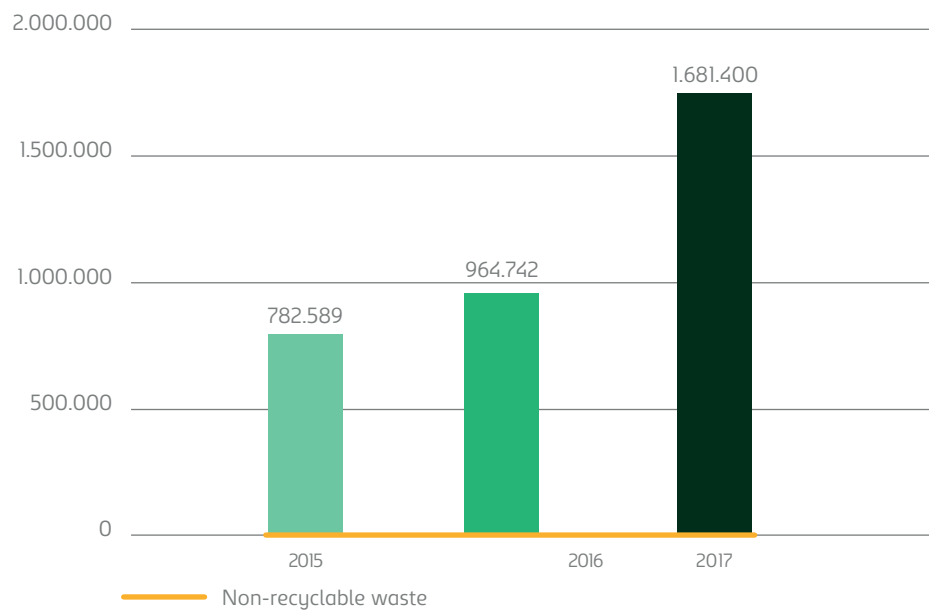
In 2017, the production of waste increased by 23.2%. Specific production of waste was 1.19 kg/hl of beer (0.73 in 2016). The increase, owing in part to the increase of the amount of beer produced, is mainly connected to muds produced by the operating of the industry treatment and the disposal of mixed packaging.

One of our future goals is to improve the separation of packaging materials. Even with the considerable increase in produced waste, we managed to recycle 100% of our waste.

WASTE SPECIFIC PRODUCTION (kg/hl)



QUANTITY OF RECYCLABLE AND NON-RECYCLABLE WASTE (kg)



ZERO CARBON FOOTPRINT A PARTICULAR FOCUS ON LOGISTICS

Our priority is to deliver our products to the consumer in the most optimal and efficient way.

Our product's distribution has an impact that we commit to manage by collaborating with partners who take care of our logistics. They have been chosen on their attention to sustainability. We ask our partners – Number 1, Geodis and Gruppo Beverete – solutions to reduce product transport emissions and we collaborate with them to carry out projects to constantly improve our performances.

In 2017 we continued to optimise the saturation of means of transport and the rationalisation of loads. We worked to efficiently plan routes and improve urban logistics through hybrid means in Milan and electric ones in Rome.

Moreover, through *Despatch Advise* (sending all information in the delivery note before delivery of the goods) we granted our clients the possibility of planning stocking spaces accordingly and making loading and

unloading practices faster. Using the project Syncro we increased efficiency in the production-delivery chain, thanks to a synchronisation process of order and deliveries to the Mass Market Retailers.

Last year, an audit on means of transport was carried out to check safety, reliability and to evaluate environmental impact. Safety devices have been installed on carriages and in warehouses to improve safety at work (anticollision system, blue light, spotme...).

In 2018, logistic partners that operate regularly in the factory will be involved in training activities connected to our Plan of Adaptation to Climate Change.

In the context of extensive use of green means, we are trying to develop a renovation plan of the transport fleet which entails the progressive inclusion of full electric means for the distribution in the last mile and LNG means in industrial distribution.



BEING LEADERS

As a Group, after the announcement of Together Towards ZERO, we joined other organisations to share knowledge and best practices, and we carried on our commitment in different fields.



PARTNER WANTED!

We cannot reach our goals by ourselves. If you have ideas, innovative suggestion projects, get in touch!

www.carlsbergitalia.it
info@carlsbergitalia.it



We Mean Business

A global non-profit coalition working with the world's most influential businesses to take action on climate change and catalyse business leadership to drive policy ambition and accelerate the transition to a low-carbon economy.

The RE100: A collaborative, global initiative uniting more than 120 influential businesses committed to 100% renewable electricity. Led by the Climate Group in partnership with CDP, the RE100 works to massively increase demand for – and delivery of – renewable energy.

Corporate Sourcing of Renewables: An initiative that aims to get more companies to commit

to powering their operations with renewables, and deploys tools and resources to enable more companies to do so. The initiative is driven by the Clean Energy Ministerial (CEM), which is a platform to advance international collaboration to accelerate the adoption of clean energy policies and practices worldwide.

Alliance of CEO Climate Leaders: An informal network, facilitated by the World Economic Forum, for leading CEOs committed to climate action. Collectively, they seek to maintain private-sector

The Brewers of Europe: We have continued our involvement with a pilot project coordinated by The Brewers of Europe to harmonise approaches to Product Environmental Footprint (PEF). The objective is to provide input for European legislation about environmental impact at product level.

We also actively engage with other businesses, NGOs and civil society, fostering discussions around the need for climate action through conferences, social media channels

and memberships in relevant organizations that promote climate action. We are confident that this will result in more companies joining the fight against climate change and stimulate growth in the market for climate-friendly solutions.



WHAT WE SAID 2016

Reduce energy and electricity consumption in the factory in Induno Olona

Reduce electricity consumption in the phase of cooling in the factory in Induno Olona

Retrieve gas that develops in the purifier

Reduce and retrieve CO₂ in the production phase

WHAT WE DID 2017

Continuous monitoring of consumption and weekly implementation of correction and improvement intervention (added insulation, seal change, immediate maintenance intervention in case of energy loss)



Efficient installation of screw compressor
Electronic management of ammonia levels, improved compressor sequence and temperature profiles.



Starting purifier system in September 2017.
Verification of amount of produced biogas for retrieving implant sizing.



Continuous monitoring of the system to ensure retrieving efficiency



ACTIONS TOWARDS ZERO 2018

Energetic efficiency programs

Constantly monitoring consumes and improving our energy efficiency. Installation of Flash pasteurizer bottle Line

Innovation

Continuous research of innovation in processes, packaging and services.

Suppliers' involvement

Activate action with the main suppliers to reduce emissions

Consumer's awareness

Increase communication and involvement of the consumers on the environmental topics and in particular on the impact of climate change



WITH NUMBER 1 FOR SUSTAINABLE LOGISTICS

In 2017, Carlsberg Italia and Number 1, Italy's leading logistics operator in the field of dry groceries, chosen for its warehousing and distribution activities in the country, signed the new contract for logistics services.

What does the new contract signed with Carlsberg Italia mean for Number 1?

This renewal signs the partnership between Carlsberg and Number 1, two companies that believe in sustainability and concretely commit to a path able to unite business and respect for the environment. The renewal of the contract entails an approach that does not make us a pure commodity element, but a partner with whom Carlsberg can share and bring forward policies aimed at the continuous improvement and development of best practices for innovation and sustainability.

What are sustainability projects developed with Carlsberg?

New technologies definitely include those

applied to carriages for transport in warehouses introduced in the factory in Induno Olona and in Number 1 hub in Settala (MI), in which all Carlsberg deliveries in Italy are managed as well as product stocking. To explain it in more depth, they are three innovative solutions that unite worker's safety, respect for the environment and cost reduction.

Blue Light: a signalling system installed on forklifts that, through a blue light cast on the ground, warns of the arrival of the machine. A device designed to ensure workers' safety, especially when architectural structures, furniture or shelves obstruct the visibility of moving machines.

SpotMe: a technology that, thanks to infrared detectors sensitive to direction, enable the identification of the presence of forklifts and operators at crossings, signalling potential collision dangers in time using a flashing LED. The system prevents accidents, allows to reduce costs for damaged goods, maintenance or fixing of the machines and energy consumption.

I-Site: an innovative instrument that allows the optimisation of the management of the fleet used for transport. A device positioned on the carts sends UTS data to a server that transmits them to operators who can access them via computer, tablet or smartphone.

Each operator, through smart access cards connected to his badge, can only access the machines assigned to him and, thanks to the available information, can automat-

ically block the machine in case of any crashes. The device allows us to exclude the use of the machine by operators who do not possess the prerequisites needed. But we don't stop there...

Out of the main warehouses, Carlsberg products move into other Number 1 stocking hubs. Attention to green logistics led us to build and prepare these structures in a sustainable way: LED lighting made more efficient by movement detectors that regulate light intensity, photovoltaic panels that cover most of the energy needs, the application of remote warehouse management system, presence of charging stations for electric machines.

To give a concrete example, Triveneto's hub, launched in July 2017, was built following these guidelines.

For several years Carlsberg has been part of our distribution project Syncro, through which we align the delivery dates requested to the weekly receiving agendas of about fifty Distribution Centres (Ce.Di) of MMR: this way economic advantages deriving from direct flows are added, thanks to the optimisation of means saturation, to undoubted environmental benefits with the reduction of CO₂ emissions.

What projects do you have for the future?

In 2017 we made an important investment in green logistics connected to transportation: €10 million that will allow us, by 2019, to renew our fleet, composed of 130 vehicles at the moment, with Euro6 and second-generation LNG vehicles. With Carlsberg we have already planned the use of means powered by Liquefied Natural Gas to cover part of the refuelling routes between Induno Olona (VA) and the main Number 1 storage warehouse in Settala (MI): in addition to saving fuel, we will reduce CO₂ emissions by about 15%.

CEO, Number 1

Gianpaolo Calanchi



Supply Chain Innovation

G. Calanchi





ZERO
WATER
WASTE





2030 TARGETS

50% REDUCTION OF WATER CONSUMPTION IN BREWERY

2022 TARGETS

25% REDUCTION OF WATER CONSUMPTION IN BREWERY



ZERO WATER WASTE

INTRODUCING OUR AMBITION

Our business is dependent on the availability of clean water. No water, no beer.

We must therefore treat water with the utmost respect. Our vision for a better tomorrow is a world in which zero water is wasted.

OUR TARGETS

Our targets include reducing water consumption at our breweries and the formation of partnerships to safeguard shared water resources in high-risk areas.

Our top-line target is to halve water usage at our breweries by 2030, with an intermediate target of 25% by 2022. Since water usage for our baseline year (2015) was 3.4 hl/hl, this means we are aiming for 1.7 hl/hl by 2030 – an industry-leading position.

The brewing process requires a greater volume of water than the volume of beer produced – partly due to evaporation and wet by-products, and partly because we need water to clean our equipment. Water will always be essential, but by cutting our usage in half we will make sure that none is wasted.

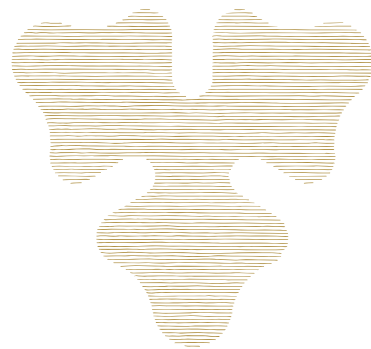
However, to have real impact we can do more. We will also help safeguard shared water resources in the areas around our breweries.

This means participating in community water partnerships that secure long-term water availability. We therefore intend to engage with partners who are willing to work with us in pursuit of this goal in the years leading up to 2022 and 2030.

We are particularly focusing on areas classified as high risk with regard to water scarcity. In 2016, with the support of experts from WWF and their Water Risk Filter tool, we identified 15 high-risk breweries, and we are now pushing hard to reduce our water use at these locations. See page 26 for more information.

OUR APPROACH TOWARDS ZERO

Globally, our Environmental Policy and accompanying operational manual, updated in 2017 as part of a Group-wide refresh, provide our breweries with guidance on water management. Water stewardship is primarily the responsibility of the leadership team at each individual brewery, particularly when it comes to managing permits for water extraction and discharge. To achieve our 2022 and 2030 targets, our local leaders will be supported by experts from our global utilities management team. Together, they will work to implement and refine our ZERO water waste roadmap, beginning with the sites identified as high risk. This roadmap includes the continued roll-out of existing wastewater recycling technology around the world. It will also include the search for new wastewater recycling technologies, since the cleaning of equipment is the area where most waste occurs during brewing. We will continue to measure and report on progress. The recently formed Carlsberg Young Scientists Community will also be involved in addressing the water challenge. Working alongside internal and external experts, the Community will develop solutions to achieve ZERO water waste at our breweries and beyond.



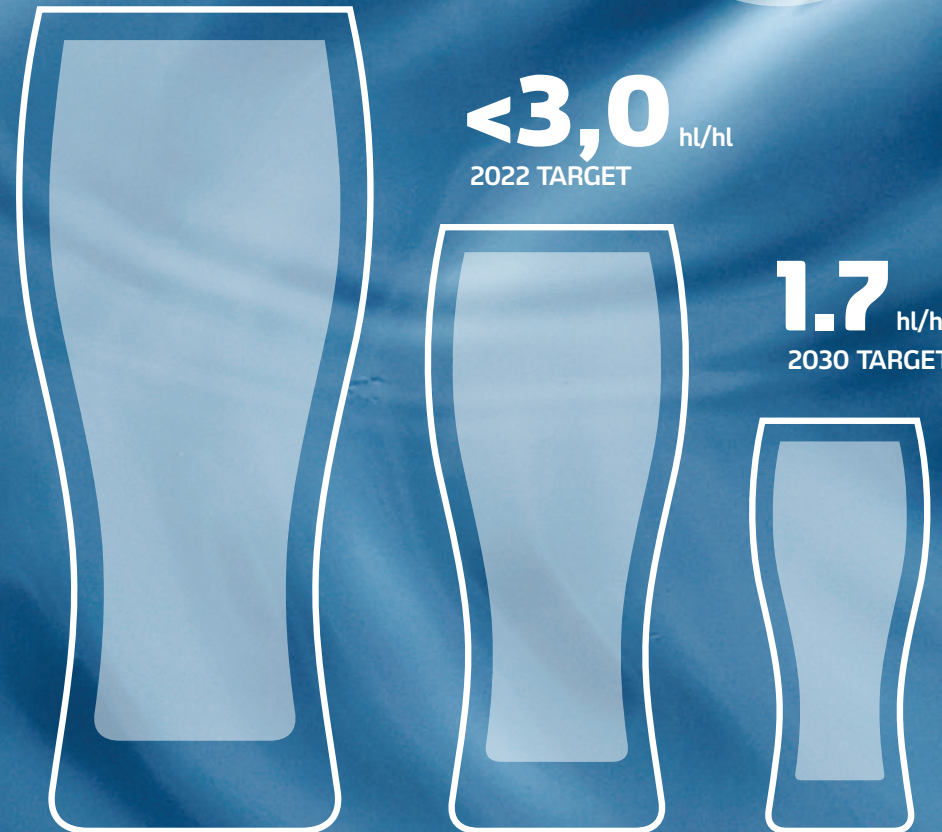
SPECIFIC WATER CONSUMPTION IN BREWERY

4,3 hl/hl
2015 BASELINE

3.1 hl/hl
2017 PERFORMANCE

<3,0 hl/hl
2022 TARGET

1.7 hl/hl
2030 TARGET



ZERO WATER WASTE

REDUCE WATER WASTE

The responsible management of water resources is essential in our activity and half of all water consumption in our Brewery has a great impact on the safeguarding of this shared good.

The ambitious goals we give ourselves offer us a clear and long-term direction. We have already made the first steps towards better water efficiency and we try to improve even more by applying innovative technologies to face the global problem of a lack of water. In fact, lack of water is one of our global challenges and a priority in Carlsberg Group. For these reasons, for years we have been taking care of it with an increasingly

more responsible usage: we limit consumption as much as possible, increase reuse and prevent waste. Practically, we continuously innovate our processes, intensify our monitoring of consumption and quality, and stock warm water in the production process to reuse it for washing.

OUR 2017 PERFORMANCE

In 2017, specific water consumption, or the amount of water needed to produce one hectolitre of beer, decreased from 3.5 hl/hl in 2016 to 3.1 hl/hl, perfectly in line with the result achieved as a Group. Our water efficiency has therefore improved by 11.3% compared to last year.

This represents an excellent performance marker compared to the whole sector. With the water we saved in 2017, we could have filled 11 Olympic swimming pools, a total of 5.6% less than 2016.

2022 TARGET

25% REDUCTION OF WATER CONSUMPTION IN BREWERY

2030 TARGET

50% REDUCTION OF WATER CONSUMPTION IN BREWERY

WHAT WE SAID


2016


Reduce water consumption in the factory in Induno Olona

Construct the purifier by 2017

WHAT WE DID

2017

We further reduced the specific consumption of water: 3.1 hl/hl. Our water efficiency has improved by 11.3%. We saved 5.8% of water overall. 

We adapted and restarted the old purifier, and, starting from November, we return highly purified water directly to the environment 

ACTIONS TOWARDS ZERO

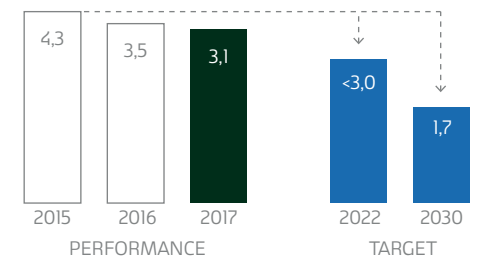
2018

Process monitoring
Constant monitoring and installation of new water meters on specific areas

Innovation
Installing of a new Falsh Pasteuriser that will allow us to further reduce water consumption in the Brewery



SPECIFIC WATER CONSUMPTION (hl/hl)



2017 MAIN ACTIVITIES

Monitoring and making processes more efficient

To evaluate the importance of the results achieved and steadily improve our performances, we need to be aware of and attentive to the situation of our water network. The network in our Brewery, which goes back to the beginning of the 1900s, although it has been partially renovated with the factory expansion, still presents parts of tubing dating back to fifty-sixty years ago. Moreover, the network is more complex because of its geographical position (buildings are enclosed in a valley with the Olona river flowing underneath), the relocation of departments and the nature of the production process.

To reduce our water consumption, we should therefore constantly monitor the water infrastructure: weekly controls allowed us to spot leaks and malfunctioning more quickly, continuing to improve our performances in this area compared to 2016.

Until now, 22 physical counters have been installed, whose data is being read on the spot and transcribed weekly. A further 16 counters need to be added to these, whose data arrives directly at the monitoring servers. Data is analysed and consumption per area plotted; moreover, summary charts to immediately visualise irregular consumption are sent to department managers and positioned on boards so that everyone can be aware of it. Constant monitoring allows us to immediately recognise possible anomalies and resolve them. In the last year, for example, we discovered the excessive use of water in the engine room in a timely manner and sought efficient solutions to reduce consumptions. In particular, we intensified controls on a valve connected to the cooling towers,

which, thanks to weekly checks and regulations, allowed us to perform constant water cycle within the tower and avoided discharge and continuous water reintegration.

In 2017, the increased monitoring frequency, operators' attention, together with correct technical solutions allowed us to quickly intervene, making the management of water in the plant more efficient



Managing discharge

In 2017, maintenance operations and the modification to restart the old purifier that had not been used since 2006 have been concluded. Starting from the month of November, water drains directly into the river, allowing us to give high-quality water back to the environment as close as possible to the one taken from it.

Moreover, we implemented the reuse of outgoing water from the purifier for the cleaning of the cloths in the belt press, thus avoiding the use of clean water from the network.

Protecting local water sources

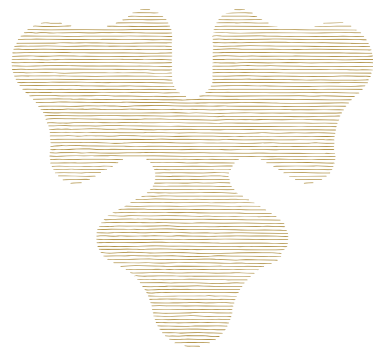
The Olona river flows underneath the central part of the Brewery, right in front of our historical brewhouse. It's an essential part of our environment, even if hidden. Each month we inspect its river bed and, period-

ically, we maintain the upstream dam removing debris to prevent environmental emergencies. This way we contribute to safeguarding the territory and our community, in addition to our business.

LOOKING AT 2018

For 2018 we plan to continue in this direction, increasing control and verification of water meters and making data even more precise. We expect to install new counters that will enable us to have direct consumption data of other areas of the factory (Gatehouse and Sales Point).

The installation of the new Flash Pasteuriser will be essential, and we envisage that it will reduce water consumption by 4-5% of the total amount.



WATER CYCLE IN BREWERY



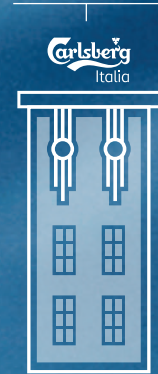
MULINI GRASSI FOUNTAIN
144 m³/h flowrate



INCOMING WATER (m³)
433.000
FONTANA DEGLI AMMALATI
36 m³/h flowrate

29%
OF USED WATER:

- To produce beer
- To refill cooling towers will water
- Evaporates while boiling the wort



WASH MACHINERY AND PLANT



Cooperative Purifier
january-october



PURIFIER
CARLSBERG ITALIA
november-december

71%
OUTGOING WATER

OLONA RIVER
WATER RETURNED
TO THE ENVIRONMENT

11x
OLYMPIC SWIMMING POOLS



ZERO
IRRESPONSIBLE
DRINKING





ZERO IRRESPONSIBLE DRINKING

2030 TARGETS

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

2022 TARGETS

100% AVAILABILITY OF
ALCOHOL-FREE
BREWS (AF8)

100% RESPONSIBLE DRINKING
MESSAGING THROUGH
PACKAGING AND BRAND
ACTIVATIONS

100% OF OUR MARKETS RUN
PARTNERSHIPS TO
SUPPORT RESPONSIBLE
CONSUMPTION



ZERO IRRESPONSIBLE DRINKING

INTRODUCING OUR AMBITION

Our beers are often at the heart of social occasions, just as they have been for centuries. That is what we want. But we also want them to be enjoyed responsibly.

In most situations, people enjoy our products in moderation and as part of a balanced lifestyle. This is the way they are intended. However, in some cases our beers are not consumed responsibly and cause harm to individuals and to society. This is not acceptable, which is why we have set an ambition of a society with ZERO irresponsible drinking. Whilst challenging, we believe that by working together across business, government and civil society we can start moving society in the right direction and ultimately make a big difference.

OUR TARGETS

Our targets in this area reflect where we think the best opportunities lie for us to make an effective contribution.

Beers provide a quality low-alcohol choice in many different situations. Yet on some occasions, consumers are looking for options that do not contain alcohol. Today, we already offer many quality alcohol-free brews that

serve as great alternatives for people who are driving, pregnant or, for other reasons, do not wish to drink alcohol. To provide more choice on these occasions, we have set a target of 100% distribution of alcohol-free brews by 2022 – meaning that wherever our beers containing alcohol are found, there will always be an alcohol-free option as well.

To further help consumers make smart choices, we are placing responsible drinking messages and nutritional information about our products on 100% of our packaging and online.

We are also embedding responsible drinking messages in all our marketing communications all in an effort to engage with consumers and build an even healthier beer culture.

In cases where we see irresponsible behaviour, we will collaborate with relevant stakeholders to make targeted interventions. Our goal is for every market in the Carlsberg Group to have established at least one key responsible drinking partnership by 2022.

SUPPORTING THE GLOBAL GOALS

With our efforts to minimise the misuse of alcohol, we support Sustainable Development Goal 3, specifically target 3.5 to strengthen the prevention of harmful use of alcohol and target 3.6 to halve the number of deaths and injuries from road traffic accidents – the latter through our "don't drink and drive" campaigns.

OUR APPROACH TOWARDS ZERO

Our Marketing Communication Policy (MCP), updated in 2017, sets the framework for responsible communication across our business – including marketing, digital and social media channels and product packaging.

Specifically, our MCP sets standards to limit the access to and appeal of alcohol marketing to minors. This includes strict standards on

where we place our advertisements and which themes we avoid to prevent appealing to young people.

A new Group Responsible Drinking Policy was introduced this year to set global standards on drinking at the workplace.

In 2017, we sought advice from a group of health and behavioural experts from fields such as biology, sociology, anthropology and psychology to help strengthen the design and effectiveness of our responsible drinking initiatives. The purpose is to direct our responsible drinking efforts towards the right national goals and to give advice on the effectiveness of different actions.

The advisory group evaluates existing empirical evidence on the effectiveness of responsible drinking interventions and translates this

into recommendations for specific initiatives at market level.

Our approach consists of three ways in which we can support consumers and society in reducing the harmful use of alcohol:

1. ENABLE

To help our consumers make responsible drinking decisions, we aim to include responsible drinking symbols, as well as nutritional and ingredient information, on all our consumer-facing packaging and online.

2. INFORM

Per aiutare i nostri consumatori ad assumere decisioni responsabili rispetto al consumo di alcolici inseriamo, sia sul packaging dei nostri prodotti che online, i simboli del bere

responsabile, le informazioni nutrizionali e l'elenco degli ingredienti.

3. ENCOURAGE

Communicating through our brands, we seek to engage consumers in the responsible drinking debate. This could be through partnerships with customers and sponsors to encourage smarter drinking choices, for example. Where direct engagement is impossible, we collaborate with organisations that have the access and credibility to carry our message.



ENABLE

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

INFORM

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

ENCOURAGE

Encourage consumers to make positive drinking choices through dialogue and engagement

ZERO IRRESPONSIBLE DRINKING

PREVENTING DRINK DRIVING AND UNDERAGE DRINKING

Preventing drink driving and underage drinking requires a 360° approach. Mainly through the ways we present and communicate our products.

DraughtMaster™, for example, a project started to make our consumers appreciate high quality beer, with an approach based on respect for ourselves, environment and for society, was not finalized to exaggeratedly increase product consumption.

Birrificio Angelo Poretti's brand initiatives suggest one beer per meal with good food and communicate a moderate consumption of our products.

In addition, the decision to print on the labels of our products the symbol "Don't Drink & Drive" through which we raise consumers' awareness on the risks of driving under the effect of alcohol.

We prevent underage drinking of alcoholics with careful national communications. Through

Carlsberg Group we communicate to the young people through their most preferred media, collaborating with market associations, other brewers and points of sales.

To achieve ZERO Irresponsible consumption target, Carlsberg Group is committed in favouring the availability of non-alcoholic beers (AFB, Alcohol Free Beers). In 2017 Carlsberg Group delivers 26 kinds of non-alcoholic beers. An amount that will grow in 2018.



**SEI SICURO
DI SAPERE QUALI SONO
GLI EFFETTI
DELL'ALCOL ALLA GUIDA?**



**PROVA GLI OCCHIALI 3D
E SCOPRI I RISCHI
CHE CORRI SE GUIDI
DOPO AVER BEVUTO**

O BEVI O GUIDI

BEVIRESPONSABILE.IT



BIRRIFICIOANGELOPORETTI
WWW.BIRRIFICIOPORETTI.IT



Birra Ufficiale - Official Beer Partner

BEER GOGGLE

During the year we open our Brewery to the public: the visitors are accompanied by volunteer employees to discover the history, the architecture and the products of our Company.

These are important moments for us where we come into direct contact with consumers and we can clearly communicate our very important message: our beers must be consumed responsibly. To make the message effective and to make the consumers reflect on the consequences of alcohol abuse, at the end of the guided tours of the Brewery we have proposed we involve them in simple and appreciated activities.

Outside Villa Magnani we have set up an area in which the visitors can experience the effects of alcohol abuse. Wearing a visor (Beer Goggle Mask) that simulates the effect of intoxication, visitors are invited to slalom through skittles and at the end throw a ball in a basket. In this way the effects of alcohol abuse are made tangible.

In 2017, 5,500 visitors (almost double compared to 2016) were sensitized during the Open Days and 55 employees have been ambassadors, both of the quality of our beers, and of the importance of a

responsible consumption for everybody's well being.

On the Global Beer Responsibility Day (GBRD), held for the 3rd time in the month of September 2017, we carried out the same activities in our headquarters in Lainate involving the whole staff, which then shared the videos of their experience through the internal social channels. Global Beer Responsibility Day (GBRD) is a global commitment involving brewers, retailers, clubs, institutions and NGOs. The goal is to promote responsible consumption of beer.

In 2017, Carlsberg Group involved globally 54 million people, well above the expectations.



ZERO IRRESPONSIBLE DRINKING

CREATING DIALOGUE AROUND BINGE DRINKING

Drinking excessive amounts of alcohol in a short period of time is not good for the individual or for those around them.

In Carlsberg Group, we leverage the power of our popular brands to speak directly with consumers about binge drinking, and to encourage moderate, responsible consumption of our products.

OUR PERFORMANCE IN 2017

In 2017, across our markets, we implemented 34 campaigns aimed at reducing binge drinking and encouraging moderate consumption. Music festivals and sporting events provide an ideal platform to get people talking about responsible drinking, and in 2017 we maximised the opportunities to raise awareness and nudge consumers towards smarter drinking choices.

At the 2017 Roskilde Festival, the biggest music festival in Northern Europe, our Tuborg brand drew on research showing that loud music makes people drink faster. Tuborg staff handed out special ear plugs – Tuborg Beer Plugs.

This stimulated valuable conversations about responsible drinking. Our anti-binge-drinking activities reached over 5 million people, while our combined responsible drinking initiatives in 2017 reached over 70 million consumers globally, exceeding our commitment of 60 million.

When it is not possible to reach the consumers directly, we are committed to creating partnerships with non-governmental associations or market associations. The Drinkaware project Crew is an example. It is created in collaboration with the Drinkaware Trust, a charity operating in the United Kingdom, which provides the presence of trained personnel in bars to avoid antisocial behavior between young people aged 18-24.

Tuborg Beer Plugs

The Tuborg Beer Plugs were named for the Euro Best Design award.

▶ **Watch the Tuborg Beer Plugs in action:**
<https://carlsberggroup.com/sustainability/action-stowards-zero/>

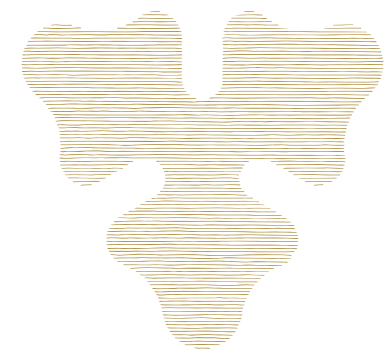


PARIS CONCEPT BAR

How do you encourage responsible drinking without spoiling the consumers' fun? La Moderne, a new concept bar in France, has some bright ideas about this.

Supported by social organisation Groupe SOS and sponsored by Kronenbourg, La Moderne offers a whole series of smart ways to help consumers keep their drinking at a reasonable level. For a start, the drinks menu includes a wide range of alcohol-free drinks (including our beers) alongside traditional options.

Secondly, consumers are encouraged to alternate between alcoholic and alcohol-free beverages, and discounts are offered on this combination during happy hours. What is more, every alcoholic beverage comes with a light snack free of charge.



ZERO IRRESPONSIBLE DRINKING

ENCOURAGING RESPONSIBLE CONSUMPTION

Our brands offer us powerful and far-reaching opportunities for communicating with consumers. We want to leverage their potential responsibly, encouraging moderation and avoiding appealing to those below the legal drinking age.

To ensure that this is the case, we are implementing responsible marketing policies and providing information about our products – both on our packaging and online.

RESPONSIBLE COMMUNICATION

We continue to drive strict self-regulatory practices across our business in an effort to embed the Group’s responsible drinking philosophy in all our marketing activities.

2017 saw the launch of a revised global Marketing Communication Policy that reflects new industry standards in digital marketing. The new policy expands on earlier codes of practice through, for example, age-gating mechanisms, responsible drinking messages and community guidelines on user-generated content (UGC). In 2018, we will implement a self-auditing process to drive global compliance with the new policy.

In 2017, our marketing managers were required to complete an e-learning module on the new

policy, and by the year’s end the completion rate was 100%, meeting our 2017 commitment in full.

We regularly monitor our advertisements to ensure they only appear in contexts where at least 70% of the audience can reasonably be expected to be above the legal drinking age. An independent audit in selected countries in 2017 showed 100% compliance with this principle.

At market level, we support the establishment of independent self-regulating bodies, which exist in over 75% of our markets and allow individuals and organisations to flag up inappropriate alcohol advertisements. If the self-regulator upholds a complaint, we take actions to remove the advertisement.

CONSUMER INFORMATION

At the end of 2017, we were just short of our commitment to include ingredient and nutritional information on 80% of our packaging across Western Europe. A small number of packaging updates were postponed to early 2018, by when we will reach our original target. During 2017, this


WHAT WE SAID 2016


Information to consumers
Implement Carlsberg Groups guidelines relative to information to consumers about ingredients, responsible drinking, etc


Responsible drinking messages
Confirm the printing of www.beviresponsabile.it on all our ATL communications material and on packaging

Responsible drinking activities
Participate to the Global Beer Responsibility Day 2017 involving employees, partners and consumers. Include the Responsible Drinking activities in every Open Day at the Brewery.

WHAT WE DID 2017

Aligned the packaging to the Group’s guidelines 

Responsible drinking messages are online and on packaging 

On the Brewery’s Open Day our employees sensitized 5,500 people and on the Global Beer Responsibility Day activities were organized in Lainate headquarters. 

ACTION TOWARDS ZERO 2018

Employees sensitization
Alcohol lock Carlsberg Italia new fleet will be equipped with this instrument, that doesn’t allow starting the car if the driver is not sober.

Consumer sensitization
Devolve a part of the income of the Brewery’s shop to those associations who work on responsible drinking.

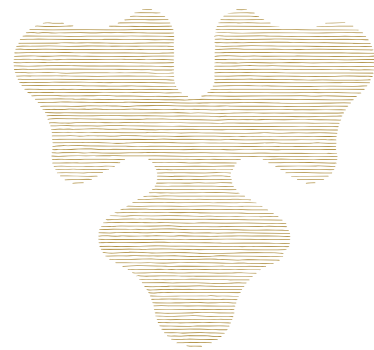
ACI campaign “O BEVI O GUIDI”

Deliver alcohol test kits as a gift on Open Days.



information was made available for all our beer brands across different online platforms. In 2017, we reached our target of placing a responsible drinking symbol on all our product packaging globally. This was an extensive exercise that involved changing tens of thousands of packaging designs and provides another example of how we can leverage consumer touch-points to discourage harmful drinking.

Looking ahead, we have now set a target to make ingredient and nutritional information available on 100% of our packaging and online across all our regions by 2022.



LOCKOUT STATION

Carlsberg Italia | ZERO INCIDENTI



ZERO
ACCIDENTS
CULTURE



**ZERO
ACCIDENTS
CULTURE**

2030 TARGETS

ZERO ACCIDENTS

2022 TARGETS

**REDUCING THE
ACCIDENTS RATE
YEAR AFTER YEAR**



ZERO ACCIDENTS CULTURE

INTRODUCING OUR AMBITION

We are determined to protect the welfare of our employees by pre-empting the potential risks of our operations to provide a safe working environment.

Essential to a safe working environment is a ZERO accidents culture. This mentality is fundamental to the way we run our business. Ultimately, we believe that all accidents are preventable.

OUR TARGETS

We pursue a reduction in the number of accidents year on year, with the ambition to reach ZERO lost-time accidents by 2030.

SUPPORTING THE GLOBAL GOALS

Our commitment to reach ZERO lost-time accidents contributes to SDG 8, Decent work and economic growth. In particular we focus on target 8.8 – promoting safe and secure working environments for all workers. Examples can be found throughout this section and in our case story "Stop and think: making time for safety" on page 41.

OUR APPROACH TOWARDS ZERO

Our Health and Safety (H&S) Policy defines how we manage health & safety performance across our business in order to prevent occupational injuries, illnesses and industrial accidents, and to protect people in the communities in which we operate. We also engage actively with external partners and contractors to raise awareness of the health & safety issues in our value chain.

A ZERO accidents culture requires strong and credible leadership. Managers at all levels are expected to lead by example and motivate their staff to participate in H&S initiatives. They are both responsible and accountable for managing workplace health & safety.

All employees are expected to take personal responsibility and engage in H&S activities, as well as looking out for their colleagues. We have systems in place for employees to log any observations, suggestions and near misses.

ZERO ACCIDENTS CULTURE

TOWARDS A ZERO ACCIDENTS CULTURE

A real and lasting change can only occur when there is a ZERO accident culture that is already integrated across all levels.

ENGAGING ALL EMPLOYEES

One of our first commitments is to constantly improve our Health and Safety standards, engaging our employees even more at all levels, starting from the managers.

To do this, awareness and real commitment are needed, besides the skills acquired through an efficient training program. In 2017, we offered our employees and collaborators, both at our Brewery and headquarters in Lainate, several training opportunities, from general to specific ones, the latter based on risk levels, from training about current regulations, to courses able to offer practical tools to use on a daily basis, such as safe driving courses addressed to the sales network too.

This comprehensive approach allows us to raise awareness in the majority of people working for our company. This year, a total of 493 people have taken part in health and safety courses. Furthermore, training is supported by actions aimed at promoting a different approach at all levels. Throughout the year,

our managers have met various times to define how to implement the directions from Carlsberg Group, discuss any necessary interventions following reports, audits and accidents and update all employees on health and safety activities.

PROCEDURES TO REPORT AND MANAGE POSSIBLE RISKS

It takes time to change behaviour. It is vital that daily reminders and campaigns aimed at raising awareness and attention are supported by suitable procedures and systems that enable employees to report real or possible risks. In 2017, we have continued drawing attention to the spreading of the Near Miss procedure, created by the whole Group, to lower the risks of accidents through reports of near miss risks. As well as this procedure, which, since 2016, has involved our offices in addition to our Brewery, we formed the Red Tag initiative in the same year, a tag that employees must place in a visible way wherever a risk is found.

For greater attention, a tag is also placed on the department board and, every day, in Induno Olona, during the department meeting, which lasts 4 minutes, all collaborators also discuss Near Miss accidents. Audits are important as well and, every year, their management, the number of topics tackled and, therefore, their duration, is reviewed.



LOST-TIME ACCIDENT RATE

2016 PERFORMANCE

2,9

2017 PERFORMANCE

1,7

DEVOTE TIME TO SAFETY "SAFE DRIVING"

For its Zero-Accident culture, Carlsberg Italia has chosen a comprehensive approach based on competency, awareness, risk identification and control.

The initiatives proposed are not limited to solely engaging the employees of the factory in Induno Olona, but they are also directed towards our offices in Lainate and the sales network.

Specifically, in 2017, we once again proposed our "Safe Driving" course, which saw the participation of 66 employees that are used to driving long distances to come to work every day.

The project, which includes a day on a track with practical tests and simulations in small groups after some theory is explained, involved Aci Vallunga as a partner.

What is driving us to work in this way is the important goal achieved this year: zero injuries from car accidents.



Starting from 2018, in order to stimulate and engage managers of all departments even more, a dedicated training procedure about the collection and recording of reports of possible unsafe behavior and/or conditions will take place. They will have to be divided based on importance and urgency, paying greater attention.

MANAGEMENT SYSTEMS AND POLICY

The Health and Safety policy, updated for the Group in 2017, will be implemented starting from 2018. Among the main goals of Zero accidents, specific requirements for the notification and assessment of risks were established, as well as the planning and the participation of the employees in the creation of a safe workplace. The new policy will include "Carlsberg Life-saving Rules", which defines how to behave in case of high risk activities in a clear and concise manner.

Our Integrated Management System leads us to consider the impacts on the wellbeing of our employees when dealing with quality and the environment as well.

ZERO ACCIDENTS CULTURE

TOWARDS A SAFER WORKPLACE

It is thanks to the commitment of our employees, efficient communication to report and manage possible risks, and safety policies and programs, that we can aim to achieve our Zero accidents goal. The 2017 results confirm that a health and safety oriented mindset is increasingly spreading across our company.

OUR 2017 PERFORMANCES

The frequency of accidents and severity rates have decreased remarkably compared to previous years, which confirms that we are on the right track to create a widespread culture of health and safety at work

DECREASE THE ACCIDENT RATE

In 2017, the accident rate was 1.7 (against 2.9 in 2016), with a severity rate of 33.4 (against 589.5 in 2016). Surprising results that show our efforts to prevent and reduce accidents and improve our employee's health really pay off. Specifically, the total amount of accidents decreased by more than 42%, with 4 cases recorded in the production department.

2022 TARGETS

REDUCE THE ACCIDENT RATE YEAR AFTER YEAR

WHAT WE SAID 2016

Engagement of all our employees

Improve Health and Safety standards, engaging our employees even more

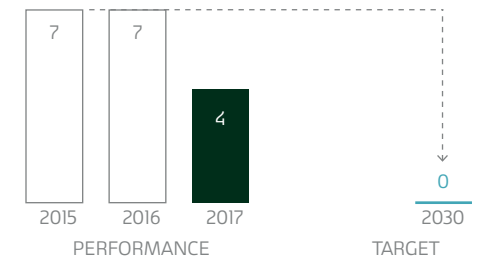
Procedures to report and manage possible risks

Extend the use of the Red Tag to our offices in Lainate as well


2030 TARGETS


ZERO ACCIDENTS

ACCIDENTS



WHAT WE DID 2017

Training at all levels, starting from managers, that engaged employees at our office in Lainate, at our factory, and salespeople too 

The Red Tag was not implemented in Lainate because, after a careful evaluation, we considered that procedure was not relevant for our offices 

Discussions about Near Miss accidents during daily meetings of our department

Regular safety audits

ACTIONS TOWARDS ZERO 2018

Engagement of all employees

Carry on communication and training activities at all levels

Procedures to report and manage possible risks

Improve collection and recording procedures for the reporting of possible dangerous situations or behavior thanks to the support of all our managers

Management policy and systems

Implement the new Health and Safety policy and "Carlsberg's Lifesaving Rules"



Particularly remarkable was the achievement of a Zero car accidents result, showing that the initiatives that we have carried out to make those employees driving to work aware of health and safety issues have given the expected results.

The significant decrease in the severity rate is important, considering that the overall amount of days of absence from work due to accidents have been 79 (-94%).

ACCIDENTS AND CONTROL MEASURES

In 2017, we recorded a smaller amount of accidents compared to the previous year. This will not stop us anyway. We are always looking for proper measures that will prevent us from putting our employee’s health and safety at risk at work.

This is why we are always trying to identify possible risks beforehand and prevent accidents as well.

Thanks to our Near Miss procedure, implemented at our Brewery in Induno Olona, there

were 107 reports of near-miss accidents. Reports have involved both our factory and offices, also including the external areas and the purifier. The highest attention was paid to the bottling and manufacturing departments.

Reports about facilities and possible breakdowns were the most relevant.

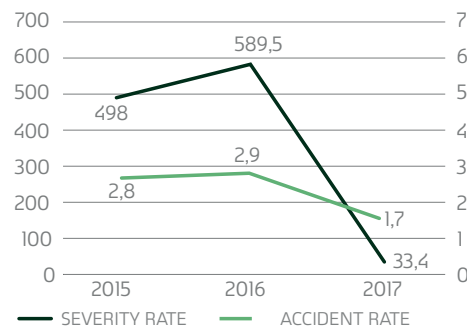
Throughout the year, we monitor safety inside the factory through specific audits. In 2017, a total of 18 were performed. Besides our Man-

ufacturing (1), Brewery (3), Maintenance (1) and Packaging (11) departments, from this year, audits were also carried out in Logistics (2). Furthermore, we monitor the types of accidents and we try to identify their causes in order to plan improvements and, as a Group, work to identify the main risks and new safety measures shared by our production plants across the world.

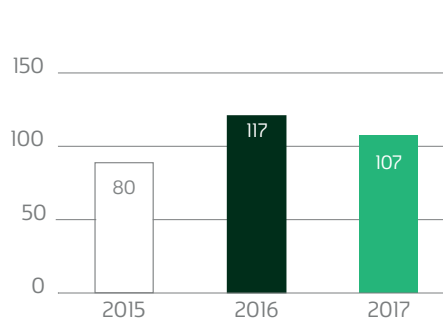
LOOKING AHEAD TO 2018

For the future, we want to make sure that all our employees consider health and safety as a priority by promoting proper communication and training. Furthermore, we want to constantly improve our performance by reducing the exposure of our employees to risks, adjusting our procedures and management systems. From this perspective, the implementation of a new Health and Safety policy and of “Carlsberg Lifesaving Rules” will be vital.

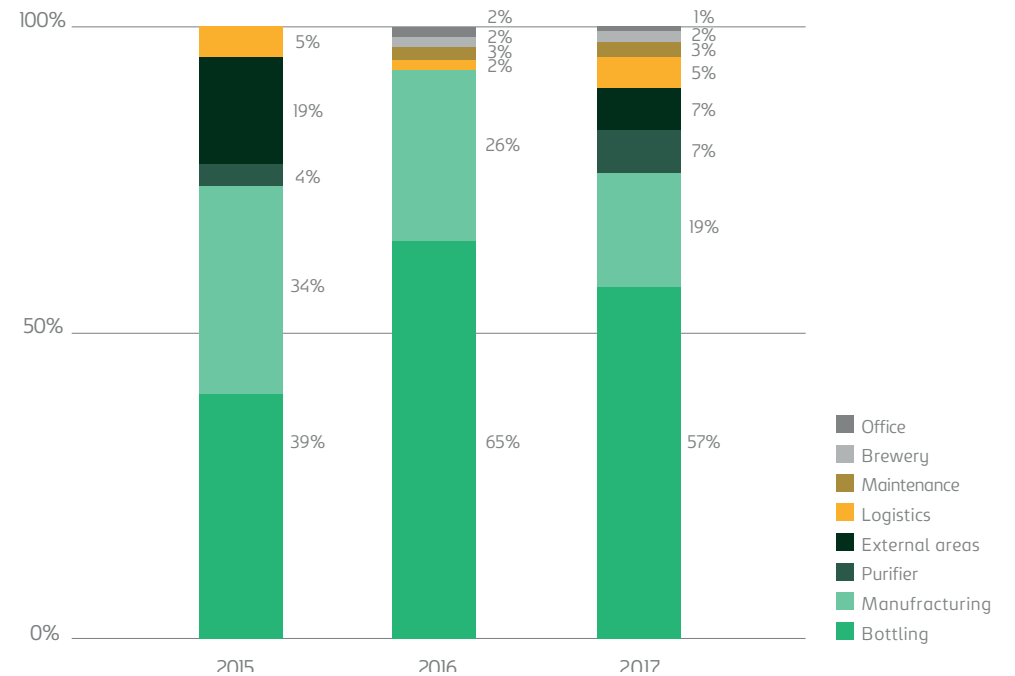
ACCIDENTS AND SEVERITY



NEAR MISS ACCIDENTS TREND



NEAR MISS % PER DEPARTMENT





PIRETTI
VARESE

BIRRA PIRETTI
VARESE

Birra Spluga

**RESPONSIBLE
BUSINESS**

RESPONSIBLE BUSINESS

LIVE BY OUR COMPASS

We are aware of the responsibility we hold in running our business.

This is why we have built an organisation that meets the needs of the market in a transparent and ethical way, made of skilled and motivated people, which produces quality beers that respect the environment and the territory.

CORPORATE GOVERNANCE

Ethics and transparency are the pillars of our management model: clear protocols and procedures with which we implement our strategy.

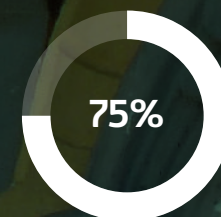
Carlsberg Italia was structured to meet the needs of the market and the way in which Carlsberg Group is organised.

Carlsberg Group owns 100% of Carlsberg Italia and is controlled by a Foundation, whose statute sets that it holds the majority of votes of the Board and at least 30% of the share capital. Carlsberg Group directs and coordinates the activities of Carlsberg Italia through the Shareholder's Meeting and the Board of Directors, which is composed of 5 members appointed by Carlsberg Group.

The Chairman of the Board does not have ex-

ecutive functions. The CEO is part of the Board and represents Carlsberg Italia according to the powers received. Alberto Frausin has been the CEO since 2007. Andrea Negro, the Sales Director, is a member of the Board. In this Sustainability Report we refer to the governance of Carlsberg Italia S.p.A.

CARLSBERG FOUNDATION

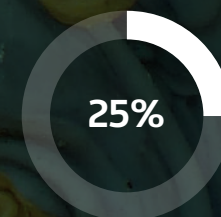


OF VOTES

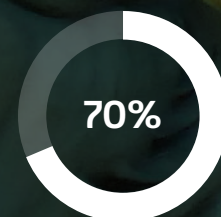


OF CAPITAL

PUBLIC FLOAT ON FINANCIAL MARKETS



OF VOTES



OF CAPITAL

Carlsberg A/S
100%

Listed on Nasdaq and OMX Copenhagen

Carlsberg Breweries A/S

Not listed

CODES AND CERTIFICATIONS

At Carlsberg Italia we adopt the organizational model established by the Legislative Decree 231/2001, the ethical code for relationships with suppliers and licensees and the ethical code of conduct, which includes:

1. corruption
2. facilitation payments
3. gratuities
4. meals and entertainment
5. donations
6. conflict of interests
7. confidential information
8. rules on competition and fraud

The Integrated Management System certifications brings together ISO 9001 (quality management) for the office in Lainate and the Brewery in Induno Olona, ISO 14001 (environmental management) and OHSAS 18001 (occupational health and safety). Furthermore, we hold ISO 50001 (energy management) accreditation for our brewery in Induno Olona. In 2017, we carried out the “Meet Cody” e-learning course, an online training course to explain the ethical code to all our employees.

SUSTAINABILITY GOVERNANCE

Sustainability is integrated into our management model, for which we adopt management instruments and processes, such as the Sustainability Report and meetings with our stakeholders (Accountability AA1000 guidelines).

The coordinating body is the CSR Team, made up of 14 people representing all business functions. To manage sustainability of our products and processes, we adopt the Life Cycle Assessment (LCA), the scientific

tool that assesses the environmental impact in the various phases of the life cycle.

IMPROVEMENTS IN 2017

During the year, we have verified and re-researched proper and efficient mechanisms to prevent crime, as per Legislative Decree 231/01 and subsequent amendments and additions.

We have also implemented protocols and procedures aiming to prevent environmental crimes that may occur in our factories.

Furthermore, the following areas were reviewed and updated:

- donations to third parties;
- management of gifts (active and passive);
- organisation of sponsorship activities and contests.

All employees were trained through e-learning and on-site courses on the principle of the 3 “A”, as defined by Carlsberg Group, which stands for Accountability, Alignment and Action, and that inspires all people working at Carlsberg.



RESPONSIBLE BUSINESS

CARLSBERG FOUNDATION

Sharing with communities. J.C. Jacobsen believed that society played an important role in supporting the Carlsberg Group's business and that, therefore, what the company had successfully achieved should be shared with people.

Ambitious goals to be achieved together with its own community, producing such a quality beer to honor the company. These are the pillars of Carlsberg Foundation.

CARLSBERG FOUNDATION IN ITALY

Carlsberg Foundation allocated 1.5 million euros to a multi-year research and archeological excavation project in the Forum of Caesar in Rome. This research project started in Autumn 2017, from a collaboration between the Danish Institute in Rome and the Sovrintendenza Capitolina ai Beni Culturali

The archeological excavations will take place in the north-eastern part of the Fori Imperiali, the first imperial market to be built, an important source of knowledge about the Roman Empire. The excavation data will help acquire more information about the Fori Imperiali, which lay

at the center of Rome, in the street that bears the same name, between Piazza Venezia and the Coliseum, and to gather more information about the space and architectural relationships among the majestic squares that date back to the time of the emperors Caesar, Traiano, Augustus and Nerva.

Using the latest technology in science and archaeology, the new excavations at the Fori Imperiali will be useful for learning more about the other buildings that had been previously studied.

A consistent team of Danish researchers will be involved in the project under the scientific direction of Jan Kindberg Jacobsen. The scientific project is linked to UrbNet – Urban Network Evolution of Aarhus University, a research initiative funded by the Danish National Research Foundation, run by Rubina Raja.



CARLSBERG FOUNDATION

- One of the oldest business Foundations (1876)
- Was set up to manage the Carlsberg Brewery and support Danish scientific research in Natural Science, Mathematics, Philosophy and Human Science
- Is the founder of the Museum of Natural History in Copenhagen
- Is Carlsberg's controlling shareholder. It owns at least 51% of the votes in the Board and 30% of the share capital
- Makes sure that the business is focused on Research, Innovation and high-quality beer (Carlsberg Research Center)
- Gives its own contribution to society by supporting science, education, arts and culture

RESPONSIBLE BUSINESS

OUR PEOPLE

Carlsberg Italia gives value to people by enhancing the skills of its employees and offering opportunities for professional growth mainly through performance analysis and training led by its Human Resources team.

As it belongs to a large Group, Carlsberg Italia integrates international initiatives with local projects, so that they can be accessible and valuable to us, in the belief that people and their development can make the difference.

To adjust to the rapidly-changing market and its own internal structure, the Human Resources department decided to reorganize its structure into a Business Partner model, in order to provide to all departments a more specific support, through a dedicated manager.

TOOLS AND PROCESSES OF THE AREA

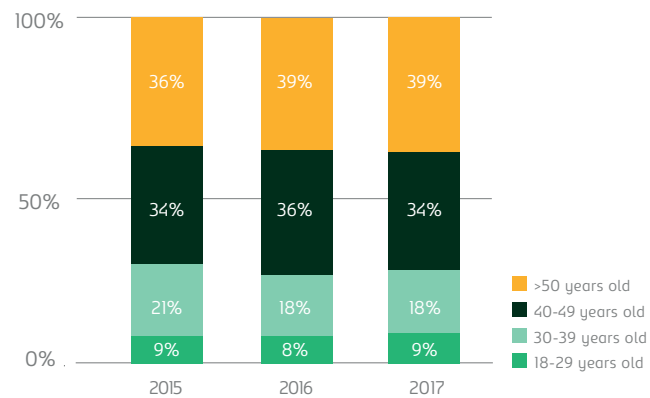
- **People@carlsberg:** HR platform implemented in 2017, based on the cloud and shared within the Group, mainly directed at the management of the performance and training proposed by Carlsberg Group.
- **My Voice:** survey on the business environment promoted in all countries. The results are shared through team meetings and interdepartmental focus groups, that identify the improvements in every area.
- **Sailing Together e Site meeting:** meetings between managers and operational teams to share performance results and strategies.
- **Carlsberg Breakfast e Hoppy Hour:** informal meetings held on a regular basis during which the employees are updated on the company's news.



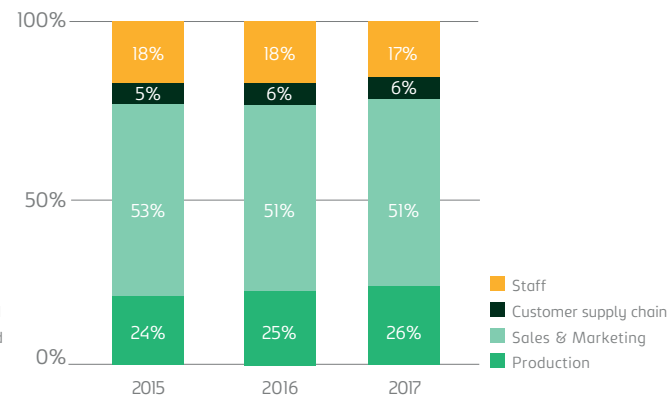
PEOPLE OF CARLSBERG ITALIA

- 258 employees: 78 women (30%) and 180 men (70%)
- 27%: employees younger than 40
- 51%: people employed in Sales&Marketing
- 1 employee out of 4 produces beer (Production department)
- 95% employees with a permanent contract
- Human Resources Turnover: 19 dismissals and 18 hires
- Gender Equal Opportunities: balanced turnover
 - dismissals: 3 women, 16 men
 - hires: 7 women, 11 men
- Male/female pay gap index: decreased among directors, executives and employees

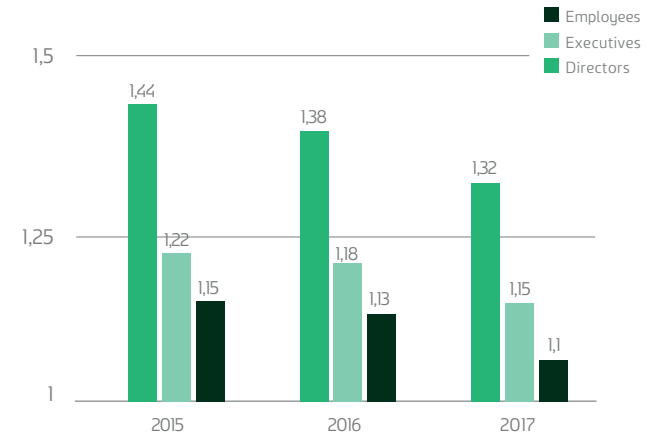
EMPLOYEES BY AGE GROUP (%)



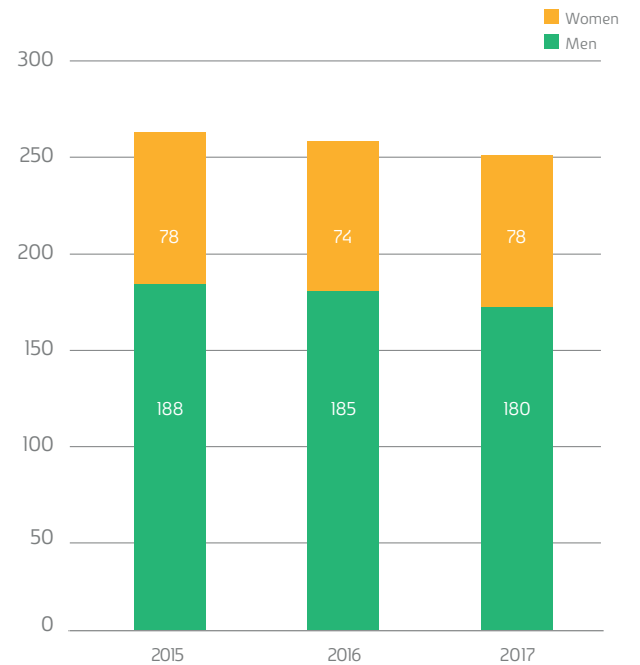
EMPLOYEES BY FUNCTION (%)



PAY GAP INDEX (MEN/WOMEN)



EMPLOYEES BY GENDER



RESPONSIBLE BUSINESS

OUR BEERS

At our Induno Olona Brewery, we produce the following brands: Carlsberg, Tuborg, Birrificio Angelo Poretti, and Kronenbourg 1664. We also commercialise Carlsberg Group’s brands: Grimbergen, Feldschlösschen, Jacobsen. We distribute the Brooklyn and Tucher brands, as well as the “Il Bardo” wines. The beers distributed in PET kegs are kegged in Induno Olona, except for Brooklyn.

CARLSBERG

It has been “probably the best beer in the world!” for 170 years. Together with **Carlsberg Elephant** and **Carlsberg Special Brew**, it is a symbol of Denmark’s best brewing tradition

GRIMBERGEN

Grimbergen Double Ambrée, **Grimbergen Blonde**, **Grimbergen Blanche** and **Grimbergen Triple** are Belgian high-fermentation beers, still produced according to the 9th-century process and characteristics

KRONENBOURG 1664

the French excellency in the beer world

BROOKLYN

Brooklyn Brewery is one of New York’s main attractions: its beers are very popular in the United States, but they are also well-known all over the world



TUBORG

Well-known for its “pull off cap”, Tuborg is a beer for the young, the perfect companion for parties with friends and times of

JACOBSEN

In 2005, in Copenhagen, a new brewery was built where the first Carlsberg brewery used to stand. The brewery was named after J.C. Jacobsen (a real tribute to the founder) and it only produces Danish craft beer.

FELDSCHLÖSSCHEN NON-ALCOHOLIC

Guarantees the pleasure of drinking a good beer, even without alcohol

TUCHER

Tucher’s beer recipes refer to the 1516 Purity Edict

RESPONSIBLE BUSINESS

OUR BEERS

Birrificio Angelo Poretti's beers are inspired, in terms of recipes, by raw materials and production methods, by the values of the founder's human and entrepreneurial experience and by his heirs' experiences. A love for quality, the art of production, the search for innovation and respect for the brewing tradition are the symbol of Birrificio Angelo Poretti's beer flavour.

THE ORIGINALS

The family of beers it all started with.

The beers with a familiar and traditional flavour

HARMONIES OF FLAVOURS

The perfect harmony between food and beer.

The beers which create a perfect flavour harmony when accompanied by dishes with the same aromatic nuances

BOLLICINE

Special beers for special moments

Beers with a fine and elegant perlage, thanks to the yeasts used to produce sparkling wines



4 LUPPOLI LAGER BIO

Exclusively produced with organic barley malt and four different types of hops coming from organic farms

LE STAGIONALI
A 7 Luppoli for every season

Different tastes to match each season and time of the year. Four special recipes devised to perfectly accompany every season.

BEYOND BORDERS
Beers from all over the world

Taste experiences beyond our borders. Beers inspired by other countries' brewing traditions for a never-ending discovery

ANGELO'S
Le Riserve del Birrificio

Pale Ale and Brown Ale

RESPONSIBLE BUSINESS

STAKEHOLDER ENGAGEMENT

The engagement of the stakeholders is deeply rooted in the culture of Carlsberg Italia

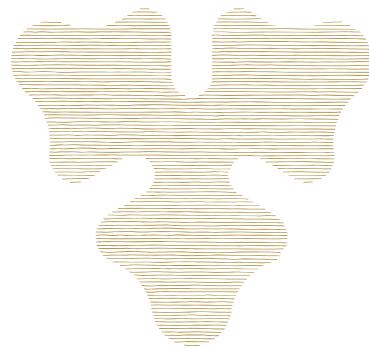
Yet in 1961, the workers of the Birrificio were involved in the improvement of the plant through a questionnaire. 50 years later, the improvement of the early issues of *Draught-Master™* were carried out in the same way, engaging every partner taking part in the project.

The Sustainability Report is a chance for Carlsberg Italia to exchange views with its main partners.

For this year's edition, 3 focus groups have been conducted, where employees, customers and suppliers were met. It was a chance to exchange views on the path that the group has taken towards sustainability. From this, the most relevant aspects for the stakeholders involved emerged, which also confirmed that the path taken by Carlsberg Italia is strategic and shared.

To stakeholders, sustainability is mainly related to the protection of environmental resources, without forgetting the social dimension.

Customers and suppliers recognize Carlsberg Italia's excellence, both for the quality of its products and the attention it pays to sustainability and innovation



STAKEHOLDERS MAP



RESPONSIBLE BUSINESS

TERRITORY

We are aware that our territories, with which we exchange resources and wealth, contribute to our success. This is why our corporate citizenship leads us to acknowledge our responsibility towards the territories we rely on and are committed to enhancing them.

OUR OPEN DAYS

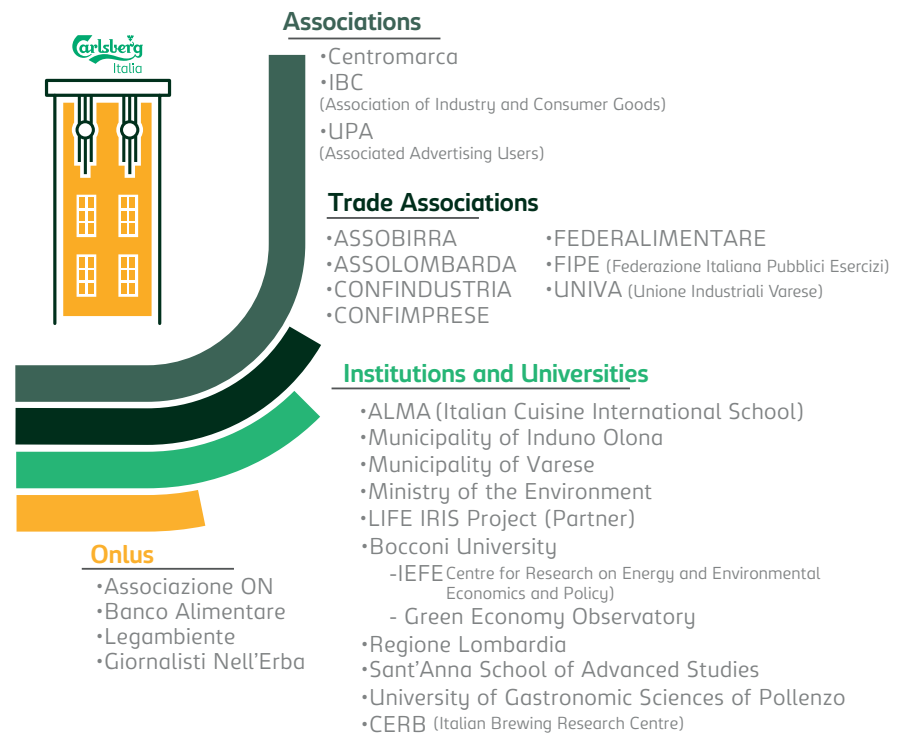
Following Angelo Poretti's tradition, we still open the doors of our Brewery to the public. This year, 5,500 people visited our Brewery. 55 employees volunteered, and, thanks to them, we confirmed our Open Days, which have become a tradition: 4 events that, every time the season changes, celebrate the arrival of the seasonal beer of Birrificio Angelo Poretti, allowing people to visit the brewery for free. Furthermore, to strengthen our bond with the community, every year we donate part of the proceeds of the Brewery Shop received on those days to non-profit organizations nominated and selected by our employees. The openings took place on: 25-26/3: "Primavera in Valganna" (Spring in Valganna), 17/6 "Porte Aperte... ai Luppoli" (Doors opened...to hops),

6/9: "Autunno in Valganna" (Autumn in Valganna), 3/12: "Natale coi Luppoli" (Christmas with Hops).

The non-profit organisations involved for the Open Days were A.S.Far.M., Fondazione Piatti, Fondazione Maria Letizia Verga and Associazione Famiglie SMA Onlus.



RELATIONS NETWORK



N.E.X.T. PROJECT

In 2017, we took part in N.E.X.T., a project for the integration of migrants through an integration and information project carried out in partnership with Number1.

Italy is committed to solving the immigration crisis that is affecting all Europe by opening Dedicated Assistance Centers. They provide food and shelter, even though data from this crisis does not always make it possible for migrants to receive the necessary training to start their path towards integration, such as a linguistic one.

Carlsberg Italia, Number1 and Caritas have launched an inclusion project for 57 migrants. The project aims to educate and help them to gain employment. 57 migrants seeking humanitarian protection (according to Ciac, Caritas, Sprar and Cas) coming from 15 different countries.

Carlsberg Italia and Number1 believe that sustainability is no longer a philosophy but a business strategy. For this reason, they decided to develop joint projects together with Caritas on the fourth goal of the United Nations' Agenda. The Sustainable Development Goal 4 states: "ensure quality, fair and inclusive education and promote lasting learning opportunities for everyone".

The project

Working on social inclusion for people in difficulty, recognizing their integration in Italian society as a value, in order to generate wealth and improve the perception citizens have about safety and quality of life. They can, in fact, directly or indirectly, benefit from the positive results of the project.

In 2017, Number1 worked to provide 57 migrants seeking humanitarian protection with a training project for access to employment in their new country or among its suppliers.

Carlsberg Italia has joined the N.E.X.T. project, which is part of this ambitious initiative, completely embracing its goals.

Classroom training courses

1. Italian course (110 hours)
2. Citizenship course (20 hours)
3. Job orientation (20 hours)
4. Work safety (40 hours)
5. Professional course on warehouse logistics (80 hours)
6. Internships, for participants who have successfully completed the course, regularly taking part in the training course, and passed the job interview.

Carlsberg Sponsorship

Carlsberg Italia S.p.A. decided to take part in the N.E.X.T. project by contributing to the following activities:

- Transfer of N.E.X.T. participants by shuttle
- Financial support to the costs deriving from training activities.

2017 was a trial year, which provided us with information later used to redesign training modules, looking ahead to 2018 with a view to rolling out a second year of the N.E.X.T. project. Training is vital to tackling the problem of immigration and to turn such an emergency into an opportunity for the whole Italian social and work environment.

THE LINKS WITH THE VOLUNTARY SECTOR

The voluntary sector is one of our "partners", through which we can act in the territory, one of the ways we contribute to a better society. Along with the non-profit organisations with whom we engage for our Open Days, we work with the following associations, such as:

- **Legambiente**, the major environmental non-profit organisation in Italy, who, for 4 years, has been choosing our beers served with *DraughtMaster™* for its summer parties, in particular for Festambiente.
- **Banco Alimentare**, to whom, throughout the year, we donate our warehouse products close to their expiry date.
- **Giornalisti Nell'Erba**, the biggest and youngest environmental editorial staff, with whom we have developed several projects, among which this Report.
- **L'Associazione ON** which provides education on environmental issues in the municipalities surrounding the Brewery.

Furthermore, especially through product donation, we try to support local communities on our territory that contribute to developing it.





ECONOMIC
CONTRIBUTION
TO SOCIETY

ECONOMIC CONTRIBUTION TO SOCIETY

PRODUCING BEER TO SUPPORT THE ECONOMY

Promoting sustainable economic growth is a priority shared worldwide. Carlsberg Group, on behalf of the international beer industry, with offices in more than 35 countries and exports to more than 100 countries, significantly contributes to the economy.

We generate employment, support economic growth and government revenue through excise duties and tax.

Thanks to our business, we help to achieve the 8.1 and 8.2 SDGs: support economic prosperity, innovation and productivity. Our success contributes to the achievement of the 8.5 SDG towards full employment, as the Carlsberg Group generates half a million jobs in the sectors related to it.



ECONOMIC CONTRIBUTION TO SOCIETY

GENERATING EMPLOYMENT

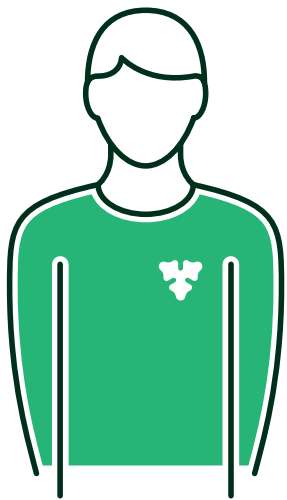
In 2017, Carlsberg Italia's team, with its 258 staff, generated 7,544 jobs in the sectors related to ours.

The food and service sector in Italy is particularly fragmented, which is why a job in Carlsberg Italia is able to generate 24 jobs.

CREATING JOBS

One Carlsberg Group employee creates an additional 12 jobs in adjacent sectors.

Total employment generated by the Carlsberg Group is 497,000 jobs.



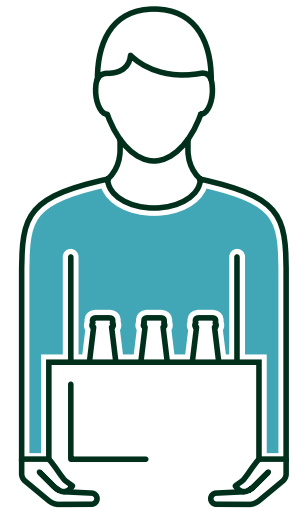
1 JOBS CARLSBERG ITALIA GENERATES...



24 JOBS IN HOSPITALITY



2 JOBS AMONG SUPPLIERS, FARMER INCLUDED



3 JOBS IN DISTRIBUTION

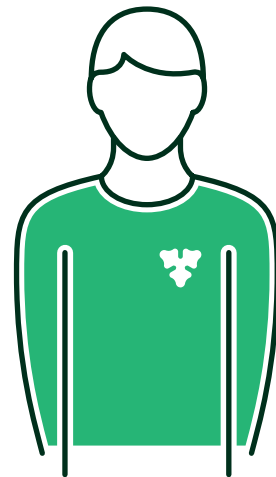
ECONOMIC CONTRIBUTION TO SOCIETY

GENERATING VALUE THROUGH THE VALUE CHAIN

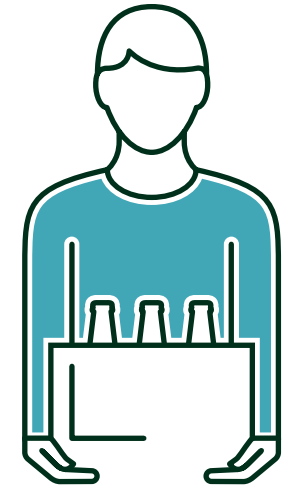
Our beers can be sold to consumers all over Italy thanks to our suppliers, distributors, production department and logistics

This business adds value to the final product. The added value is given by the difference between the cost of the goods purchased and service required and the market value of the final products.

The added value enables us to pay our employees, tax and investors. Carlsberg Italia's added value, calculated using an established methodology, amounted to €2,138,000 in 2017.



16%
CARLSBERG



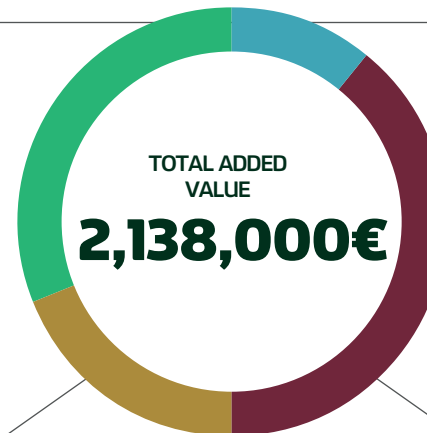
8%
DISTRIBUTION



11%
SUPPLIERS,
INCLUDING
FARMERS



65%
HOSPITALITY



ECONOMIC CONTRIBUTION TO SOCIETY

ECONOMIC DIMENSION

CARLSBERG ITALIA S.P.A.

The 2017 financial year was characterized by a recovering economy that positively affected the beer market as well. A particularly hot and dry season helped the growth of the market both in the Moderno and Horeca channel (namely +8% and +5%).

This growth was mainly due to the strengthening of the segment of special beers and partially to consumption linked to both a season with little rain and, at the same time, a drop in the sales of other drinks (such as fruit juice and soft drinks), due to the high amount of sugar that has always been used to produce them.

Carlsberg Italia S.p.A. closed the 2017 financial year with a profit of €2,971,890, a significant improvement compared to 2016 (+€2,508,996), mainly due to:

- the sales growth in the Large Retail sector of the Tuborg and Birrificio Angelo Poretti brands

In the last year, several investments were made, in particular:

- renovation of the production plant in Induno Olona and the introduction of a wastewater disposal plant, thanks to which water can be entirely disposed in the plant;

- the purchase of *DraughtMaster™* draught beer system, of production and bottling plants;
- The purchase of new facilities and components for the stand at Fico Eataly World.

CARLSBERG HORECA S.R.L.

The 2017 financial year closed with a revenue of €1,397,538, which was in line the previous year.

The trend of the operating margin is largely to be attributed to the choice by the company to act in a strategic way to strengthen the growth of Carlsberg Italia's products, acting on two main levers of development:

- the brand Birrificio Angelo Poretti;
- *Draught Master™* technology

MAIN RISKS CONNECTED TO THE BUSINESS OF CARLSBERG ITALIA

Liquidity risk: the company is self-financing, the money is made available by the Parent Company and the subsidiaries in the Group's cash pooling system and, furthermore, it relies on local credit lines with major banks.

Credit risk: in the financial year 2017, the company has still relied on suitable measures to progressively and efficiently reduce the risk deriving from credit exposure. The credit risk is properly

covered against direct write downs, allocated to face loans, which, on 31 December, were of dubious collectability.

The risk is mitigated by the choice, based on careful and detailed financial analysis, made by counterparts that are considered the most solvent by the market and the absence of credits deriving from one or few clients.

Risk of fluctuation of exchange rates: the company does not have an exchange risk because of the scarceness of items in foreign currencies.

Risks connected to the general economic situation: the economic and financial situation, the assets and liabilities of the company are influenced by the trend of the main macroeconomic trends.

In 2017, the growth of the GNP led to a slight recovery of food consumption (about+1%), the number of clubs selling drinks has increased, particularly in urban areas. Furthermore, consumers trust is slightly increasing, even though it cannot be seen to be growing systematically.

The financial year 2017, therefore, was favoured by a positive market, mainly due to structural growth factors (special beer consumption higher than 10% compared to the previous year), partially due to economic trends, such as a season with few rainy days.

Risks linked to the relationship with the employees: we keep on having positive relations with our employees, with no risks to be reported.

Risks linked to the environmental policy: the company, for the business carried out, is subject to environmental risks, which is why it is always committed to mitigate such risks paying particular attention to safety, environmental pollution audits, waste and waste water disposal. The company has never been accused of environmental crime and has never been sanctioned for it.

TOTAL GROSS VALUE ADDED

The total gross added value (Carlsberg Italia SpA and Carlsberg Horeca Srl) in 2017 amounted to €36,514,175 (+9%). This is mainly the result of a growth in the production value by 5% compared to 2016 (€ 275,371,629). The value added generated has been further distributed, 65% of which was used for our employees' remuneration. It is notable that the community remuneration, remarkably grown back in 2016, recorded a growth of 6% (€ 258,974) even this year.

The added value table provides an overlook on the wealth generated by the company, where it can be found both Carlsberg Italia's production and Commercialization and Carlsberg Horeca's distribution.

Thanks to the analysis on the creation and distribution of the added value, calculated by averaging data from the two companies, what stands out is Carlsberg's contribution to the social-economic system with which it interacts. The added value, calculated as the difference between production value and intermediate costs, sets the shares to be distributed to the stakeholders: Employees and Collaborators Public Administration, Backers, Shareholders, Business System and Communities.

PRODUCT AGGREGATED ADDED VALUE

	2016	%	2017	%
Revenue from sales	230,987,935		238,854,288	
Changes in inventories	702,127		807,472	
Other revenue	31,480,775		35,709,869	
Production value	263,170,837	100%	275,371,629	100%
Expenses for materials	147,054,702		151,106,603	
Expenses for services	75,096,476		78,432,361	
Expenses for assets leased to third parties	4,911,980		5,009,566	
Changes in the inventory of raw, ancillary and consumable materials and goods	344,367		505,443	
Provisions for liabilities	1,643,151		2,385,183	
Other provisions	237,4081		723,157	
Other operating expenses	100,063		54,081	
Intermediate consumption	229,388,147	87%	238,216,394	87%
Gross added value from operations	33,782,690	13%	37,155,235	13%
Ancillary items	62,676		189,926	
Extraordinary items	-419,747		-830,986	
Overall Gross AV	33,425,619	13%	36,514,175	13%

AGGREGATED ADDED VALUE DISTRIBUTED

	2016	%	2017	%
Shareholders Remuneration	0		0	
Employees Remuneration	23,409,231	70%	23,839,571	65%
Employees	19,130,844		20,207,840	
Non-employees	4,278,387		3,631,731	
PA Remuneration	735,160	2%	1,007,807	3%
Indirect taxation	698,655		569,575	
Direct taxation	36,505		438,232	
Debt Capital Remuneration	854,196	3%	1,101,623	3%
Interests and other financial charges	854,196		1,101,623	
Company remuneration	8,182,002	24%	10,306,200	28%
Intangible fixed assets amortization	103,048		115,967	
Tangible fixed assets amortization	6,181,688		5,820,805	
Operating result	1,897,266		4,369,428	
Collective remuneration	245,030	0,7%	258,974	0,7%
Total AV distributed	33,425,619	100%	36,514,175	100%

PERFORMANCE TABLES

BEER QUALITY

	2013	2014	2015	2016	2017
Production					
Volume of beer (hl)	1,065,535	1,201,119	1,296,943	1,327,933	1,411,801
Subdivision of beer distributed in kegs					
Steel kegs	38%	26%	19%	12%	6%
PET kegs	63%	74%	81%	88%	94%
DraughtMaster™ Quality					
Technical service	98%	98%	99%	99%	99%
Product quality	99%	99%	99%	99%	99%
Plants functionality	91%	94%	95%	96%	98%

ENVIRONMENT AND RESOURCES

	2013	2014	2015	2016	2017
Total consumption of raw materials (tons)	16,628	18,738	20,136	21,211	23,033
Barley and wheat malt	11,546	12,903	13,728	14,293	15,417
Barley	2,087	2,411	2,422	3,598	3,827
Hop	23	25	31	33	37
Glucose extract	2,972	3,399	3,955	3,287	3,744
Others (raw materials used for specialities)					8
Specific consumption of raw materials (kg/hl)	15,6	15,6	15,5	15,5	16,3
Barley and wheat malt+ barley + hops	12,8	12,8	12,5	13,5	13,7
Glucose extract	2,8	2,8	3,0	2,5	2,7
Total consumption of water (m³)	480,493	509,065	558,310	459,827	432,974
Water used for production (m³)	223,730	206,372	215,957	117,707	124,270
Water returned to the environment (m³)	256,763	302,693	342,353	342,120	308,704
Water specific consumption (hl/hl)	4,5	4,2	4,3	3,5	3,1

ENVIRONMENT AND RESOURCES

	2013	2014	2015	2016	2017
Total energy consumption (MWh)	27,183	29,638	31,215	32,995	33,134
Thermal energy	19,034	20,678	21,393	22,723	22,347
Electricity	8,149	8,960	9,821	10,266	10,786
Natural Gas Specific Consumption (KWh/hl)	17,9	17,2	16,5	17,1	15,8
Electricity Specific Consumption (KWh/hl)	7,7	7,5	7,6	7,7	7,6
CO ₂ Direct Emissions	3,6	3,5	3,3	3,5	3,2
Packaging materials (kg)	37,500,382	42,117,424	49,812,688	50,432,205	54,483,302
Glass	34,116,936	38,222,766	44,643,786	44,643,786	49,576,288
Paper/Cardboard	2,215,082	2,554,400	3,703,770	3,249,035	3,351,075
Aluminium	383,746	434,209	308,453	363,590	384,431
Steel	176,767	206,255	233,873	195,946	232,237
PET Plastic	229,122	306,858	367,952	400,902	421,191
Plastic	378,729	392,936	554,855	494,922	518,080
Beer produced per Packaging Type (%)					
Glass (33/66 cl)	66%	64%	66%	67%	72%
Steel kegs	9%	5%	5%	3%	1%
Cans	8%	10%	6%	6%	6%
<i>DraughtMaster™</i> Kegs	17%	17%	23%	24%	22%
Total Waste Produced (Kg)	770,206	693,454	782,589	964,742	1,683,240
Waste destined for recovery	766,306	693,454	782,589	964,742	1,683,240
Waste not destined to recovery	3,900	0	0	0	0
Waste destined for recovery %	99,5%	100,0%	100,0%	100,0%	100,0%
Paper/Cardboard	229,720	225,060	243,220	277,180	277,180
Glass	238,760	202,730	282,640	198,230	275,090
Plastic	101,220	124,640	128,610	122,240	163,050
Wood	100,120	66,500	57,840	74,540	97,160
Iron	24,300	9,500	14,780	16,790	23,240
Aluminium	7,740	5,520	4,500	5,040	11,300
Mixed packaging	60,240	54,500	44,840	48,880	100,020
Waste oil	1,000	620	1,000	720	1,700
Mud				212,980	702,420
Others (toner, inorganic and organic substances)	7,106	4,384	5,159	8,142	4,400
Waste Specific Production (kg/hl)	0,7	0,6	0,6	0,7	1,19

PEOPLE AND PROCEDURES

	2013	2014	2015	2016	2017
Employees by gender (nr.)					
Male	207	189	188	185	180
Female	91	77	78	74	78
Employees by qualification (nr.)					
Directors	6	7	7	7	7
Executives	39	36	34	35	34
Employees	206	176	178	170	171
Workers	47	47	47	47	46
Employees by age group (%)					
18 - 29 years old	10%	8%	9%	8%	9%
30 - 39 years old	22%	26%	21%	18%	18%
40 - 49 years old	34%	33%	34%	36%	34%
>50 years old	34%	33%	36%	39%	39%
Employees by function (%)					
Production	22%	25%	24%	25%	26%
Sales&Marketing	55%	53%	53%	51%	51%
Customer supply chain	5%	5%	5%	6%	6%
Staff	18%	17%	18%	18%	17%
Employees by gender and office (nr.)					
Lainate Female	65	57	58	55	62
Lainate Male	107	90	92	89	84
Induno Olona Female	8	7	7	7	6
Induno Olona Male	68	68	66	68	68
National territory Female	18	13	13	12	10
National territory Male	32	31	30	28	28
Employees by type of contract (%)					
With an permanent contract	91%	91%	97%	98%	95%
With a temporary contract	9%	9%	3%	2%	5%
Gender Pay Gap Index (male/female)					
Directors	1,03	1,34	1,44	1,38	1,32
Executives	1,21	1,22	1,22	1,18	1,15
Employees	1,17	1,15	1,15	1,13	1,1
Standard Salary for New Employees and Minimum Local Salary Ratio	0,91	0,85	0,89	0,93	0,88

STANDARD SALARY FOR NEW EMPLOYEES AND MINIMUM LOCAL SALARY RATIO

	2013	2014	2015	2016	2017
Staff turnover by age and gender (nr.)					
18 - 29 years old Female	0	0	1	5	0
18 - 29 years old Male	6	3	1	0	2
30 - 39 years old Female	6	3	4	1	1
30 - 39 years old Male	8	2	5	6	5
40 - 49 years old Female	3	6	0	0	1
40 - 49 years old Male	11	6	2	2	2
>50 years old Female	3	7	1	1	1
>50 years old Male	6	16	2	2	7
Total of Female	12	16	6	7	3
Total of Male	31	27	10	10	16

Staff turnover by geographical area (nr.)

Geographical area (Lainate unit)					
Residents in the province of Varese	5	5	1	1	2
Residents in the province of Milan	18	11	3	6	2
Residents in the province of Como	2	2	0	0	0
Residents in the province of Monza Brianza	0	0	1	0	1
Residents in other provinces	13	22	7	3	7
Geographical area (Induno Olona unit)					
Residents in the province of Varese	0	2	3	2	4
Residents in the province of Milan	1	0	0	0	0
Residents in the province of Como	0	0	0	0	0
Residents in the province of Monza Brianza	0	0	0	0	0
Residents in other provinces	0	0	0	0	1
Geographical area (National Territory unit)					
Residents in the province of Varese	0	0	0	0	0
Residents in the province of Milan	0	0	0	0	0
Residents in the province of Como	0	0	0	0	0
Residents in the province of Monza Brianza	0	0	0	0	0
Residents in other provinces	4	1	1	5	2

PEOPLE AND PROCEDURES

	2013	2014	2015	2016	2017
Evolution of training hours pro capita (nr.)					
By qualification					
Directors	109,0	40,9	59,3	25,4	33,6
Executives	36,7	32,0	38,8	29,8	33,9
Employees	21,5	23,9	24,7	18,4	27,6
Workers	32,3	32,2	17,2	19,8	9,0
Agents	13,1	17,1	32,0	11,1	7,8
Dealers	60	0,0	0,0	0,0	0,0
Collaborators	4,0	2,0	0,0	0,0	0,0
Interns	13,5	4,0	8,0	9,0	12,8
By function					
Production	26,4	31,7	21,8	23,2	14,3
Sales&Marketing	17,5	25,3	27,5	16,8	25,4
Customer supply chain	12,8	35,4	21,0	16,2	38,3
Staff	18,7	44,4	29,4	17,2	16,0
Industrial relations (nr.)					
Hours by Trade Union Activity	404,0	323,0	242,5	304,0	266,0
Employees involved in Trade Union Activities	11	10	7	7	8
Hours of Strike	142,0	400,0	0,0	255,0	320,0
Employees involved in strikes	36	50	0	65	73
Hours of absence	26	23	34	40	38
Overtime hours	24	24	33	27	26
Average of INPS leave pro capita (nr.)					
	10	6	7	4	2
Total of accidents by function (nr.)					
Production	2	2	3	3	4
Sales&Marketing	4	1	3	3	0
Customer supply chain	0	0	0	0	0
Staff	1	1	1	1	0
Accidents	7	4	7	7	4
Road accidents	5	1	4	3	0

	2013	2014	2015	2016	2017
Total Near Miss trend by department (nr.)	82	77	80	117	107
Production	26	21	27	31	20
Bottling	30	39	31	76	61
Brewery	9	4	4	2	2
Logistics	5	5	3	2	5
Maintenance	12	8	15	4	3
Offices	-	-	-	2	1
Purifier	-	-	-	-	8
External areas	-	-	-	-	7
Reports by category (nr.)					
Breakage	-	-	13	21	27
Facilities condition	-	-	13	38	30
Behaviour	-	-	10	16	15
Planning	-	-	15	17	10
Behaviour of external companies	-	-	2	3	2
Alarm devices or equipment protection	-	-	4	2	2
Other causes	-	-	4	2	2
Missing/inadequate procedures	-	-	11	4	5
Facilities maintenance	-	-	3	5	11
Equipment malfunction	-	-	3	9	3
Personal protective equipment	-	-	2	0	0

ECONOMIC PERFORMANCE

PRODUCT AGGREGATED ADDED VALUE (€)	2013	2014	2015	2016	2017
Sales revenue	245,551,259	224,063,249	232,028,403	230,987,935	238,854,288
Changes in inventories	-1,432,159	-3,217,701	969,730	702,127	807,472
Other revenue	30,972,457	30,740,363	30,290,708	31,480,775	35,709,869
Production value	275,091,557	251,585,911	263,288,841	263,170,837	275,371,629
Expenses for materials	157,267,441	140,916,238	148,454,511	147,054,702	151,106,603
Expenses for services	76,643,005	79,229,246	79,923,376	75,096,476	78,432,361
Expenses for assets leased to third parties	6,764,634	6,010,675	5,436,563	4,911,980	5,009,566
Changes in inventory of raw, ancillary and consumable materials and goods	516,884	214,103	-636,061	344,367	505,443
Provisions for liabilities	3,714,034	1,642,633	3,034,364	1,643,151	2,385,183
Other provisions	818,085	320,000	80,072	237,408	723,157
Other operating expenses	476,014	230,455	283,484	100,063	54,081
Intermediate consumptions	246,200,097	228,563,350	236,576,309	229,388,147	238,216,394
Gross AV for operations	28,891,460	23,022,561	26,712,532	33,782,690	37,155,235
Ancillary items	734,020	639,738	257,646	62,676	189,926
Extraordinary items	-272,397	-225,833	-408,705	-419,747	-830,986
Overall gross AV	29,353,083	23,436,466	26,561,473	33,425,619	36,514,175
AGGREGATED ADDED VALUE DISTRIBUTED	2013	2014	2015	2016	2017
Employees remuneration	0	0	0	0	0
Employees remuneration	24,176,820	23,831,679	23,779,678	23,409,231	23,839,571
Employees	19,628,951	19,524,117	18,982,750	19,130,844	20,207,840
Non-employees	4,547,869	4,307,562	4,796,928	4,278,387	3,631,731
PA remuneration	834,682	456,543	690,761	735,160	1,007,807
Indirect taxation	484,647	548,155	875,873	698,655	569,575
Direct taxation	350,035	-91,612	-185,112	36,505	438,232
Debt capital remuneration	836,430	714,228	690,079	854,196	1,101,623
Interests and other financial charges	836,430	714,228	690,079	854,196	1,101,623
Company remuneration	3,369,433	-1,640,222	1,321,131	8,182,002	10,306,200
Intangible fixed assets amortization	256,093	255,736	160,731	103,048	115,967
Tangible fixed assets amortization	8,601,632	8,793,843	8,764,611	6,181,688	5,820,805
Operating result	-5,488,292	-10,689,801	-7,604,211	1,897,266	4,369,428
Community remuneration	135,718	74,238	79,824	245,030	258,974
Total AV distributed	29,353,083	23,436,466	26,561,473	33,425,619	36,514,175

*In order to have a homogeneous comparison with data from the last two financial years, in 2013, some items on the balance sheet were reclassified, adjusting them to the new accounting principles published in the course of 2014 by the Italian Standard Setter (OIC-Organismo Italiano di Contabilità)

AGGREGATED ADDED VALUE DISTRIBUTED (%)

	2013	2014	2015	2016	2017
Stakeholders remuneration	0,00%	0,00%	0,00%	0,00%	0,00%
Employees remuneration	82,40%	101,70%	89,50%	70,00%	65,30%
PA Remuneration	2,80%	2,00%	2,60%	2,20%	2,80%
Debt capital remuneration	2,80%	3,00%	2,60%	2,60%	3,00%
Company remuneration	11,50%	-7,00%	5,00%	24,50%	28,20%
Collective remuneration	0,50%	0,30%	0,30%	0,70%	0,70%

*In order to have a homogeneous comparison with data from the last two financial years, in 2013, some items on the balance sheet were reclassified, adjusting them to the new accounting principles published in the course of 2014 by the Italian Standard Setter (OIC - Organismo Italiano di Contabilità)

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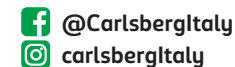
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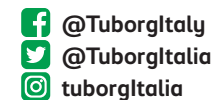
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