

SUSTAINABILITY REPORT 2018



CONTENTS

INTRODUCTION

SUSTAINABILITY FOR THE CSR TEAM.....3

Carlsberg Group CEO Introduction	5
Carlsberg Italy CEO Introduction.....	7
Sustainable Business.....	8
Together Towards ZERO	9

OUR AMBITIONS

 ZERO CARBON FOOTPRINT	14
 ZERO WATER WASTE	32
 ZERO IRRESPONSIBLE DRINKING.....	38
 ZERO ACCIDENTS CULTURE	44

➤ carlsbergitalia.it

➤ sostenibilitabycarlsberg.it

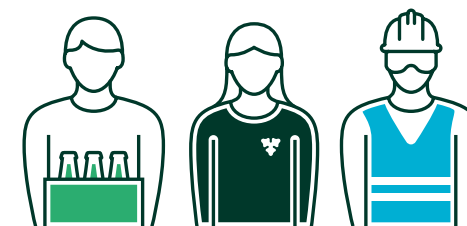
SUPPLEMENTARY

RESPONSIBLE BUSINESS.....52

ECONOMIC CONTRIBUTION TO SOCIETY.....64

Methodology Note.....	69
Performance Tables.....	70

CARLSBERG ITALY IN A NUTSHELL



254 EMPLOYEES



38 BEERS IN THE PORTFOLIO

1.3 MLN HL
OF BEER PRODUCED



SUSTAINABILITY FOR THE CSR TEAM OF CARLSBERG ITALY

Anna D'Apice

“ Within IT, sustainability is supported by the DIGITAL, zero paper and connected (remote connection with documents and files via internet connection) approaches”

Serena Savoca

“ The passion with which we tell our clients the stories of our beers and their pairing with food is the best vehicle to promote responsible consumption”

Lorenzo Colombo

“ Year 2018: 2,183 new sales points supplied with Modular 20. This means 426,000 PET kegs that have contributed to a reduction of CO₂ emissions equal to a forest of 142,000 trees”

Laudetta Galante

“ I have found that sustainability at Carlsberg Italy is a daily practice. I have become more attentive to our planet, more respectful of the resources, more alert in showing others, even outside the working environment, the importance of always being sustainable, starting from small things”

Lucia Croci

“ Being part of the CSR Team has been very important to develop an understanding of the essence of sustainability. Both professionally and personally, I've always tried to take simple, common sense actions, such as using less paper or switching off the lights when leaving a room. Discovering that sustainability is also a simple daily act has been very important because it gives meaning to the things we do or do not do and their impact. Moreover, it has been important to thoroughly understand the company's strategies and the effects of its innovation.”

Manuela Mantovani

“ 'ZERO accidents' is a priority that we should always keep in mind. The only way to raise awareness about this is to continuously listen to our people to make improvements and aim for a safe working environment. I am learning how to practice safety every day and I believe it is a journey that will never end!”

Simona Perdon

“ Sustainability is priceless, for everything else there's procurement”

2018 CSR Team is composed of:

Alessandra Zoni

Sales Administration & Credit Coordinator

Gualtiero Zilio

Customer Service Operator

Serena Savoca

Marketing Manager

Manuela Mantovani

Environmental & Safety Specialist - RSPP



Davide Pizzagalli

CSR Manager, Legal Affairs Manager

Viviana Sarateanetti

HR Business Partner - Sales

Lorenzo Colombo

Trade Marketing Manager On Trade & Sales Development Manager

Simona Perdon

Procurement Business Partner, Supply Manager

Maurizio De Cesare

A.T.C. Manager

Anna D'apice

Solution Expert

Stefano Landini

Junior Warehouse And Distribution Supervisor

Riccardo Taverna

Civil Economy and Sustainability Director AIDA Partners

Veronica Lorini

Trade Marketing Manager Off Trade

Lucia Croci

Country Accounting & Reporting Manager

Laudetta Galante

PA to Managing Director & Facility Coordinator

Leone Di Stefano

Junior Corporate Affairs Specialist

**Viviana Sarateanetti**

Sustainability is doing everything in our power to leave future generations an improved and better world than the one we have received ourselves, both through daily decisions of the individual and the brave actions made by companies and institutions"

Leone Di Stefano

It is fundamental to share our initiatives to be more sustainable. We wish to be source of inspiration in the world of beer production, developing our business circularity each year"

Davide Pizzagalli

The Sustainability Report is an extremely important asset for Carlsberg Italy. Coordinating its creation is a challenge that we face every year with an amazing team"

Stefano Landini

Delivering the product quickly and efficiently is the goal of Carlsberg Italy's logistics department, which is increasingly focused on customer service and on being an example and accelerator in the territory of a new sustainable distribution model"

Gualtiero Zilio

My sensitivity towards environmental sustainability has increased during recent years also thanks to the opportunities that Carlsberg Italy has offered through the participation in the Sustainability Report and the approach of the company and individual colleagues. Together with other functions, nowadays we push clients to make larger orders less frequently: there are not only economic savings but also environmental"

Riccardo Taverna

The 2018 Sustainability Report was the eighth report by Carlsberg Italy. An exciting journey, never ordinary, that has helped us grow professionally by working closely with a team that has improved significantly through the years. We are proud of having contributed to the creation of a path rich in ideas and innovations for the community and stakeholders, and with respect to sustainability and protection of the environment"



PROGRESS TOWARDS ZERO

Businesses have an increasingly important role to play in securing a sustainable future. That is why we are working hard to improve the financial and strategic health of our business and deliver on our ambitious sustainability programme, Together Towards ZERO.

2018 was a good year for the Carlsberg Group. We delivered a strong set of results, accelerating top-line growth, improving margins, delivering a strong cash flow and reducing debt even further. Taken together with the progress detailed in this report, I believe this demonstrates that we are living our purpose of brewing for a better today and tomorrow, proving that successful business is sustainable business.

As I look back at 2018 and forward to 2019, I am keenly aware of our responsibility to act. Scientists warn us that the world is at a tipping point. The planet is getting warmer and water resources are becoming scarcer. Tackling climate change is therefore critical for achieving a sustainable future. This is the reason why we have set our emission reduction targets in line

with the more ambitious 1.5°C level of the Paris Agreement.

The latest agreement reached in Katowice, Poland, during COP24 was a good step in the right direction. However, business leadership is also much needed to prevent irreparable damage, so I was pleased to co-sign a letter from the Alliance of CEO Climate Leaders calling for an ambitious climate deal.

At Carlsberg, we have embedded Together Towards ZERO in our corporate strategy, SAIL'22, guiding decisions top down and bottom up. Meanwhile, our commitment to the UN Global Compact and Sustainable Development Goals remains the global context for our local actions. Across the world, we are proud to support the local communities in which we operate.

Although 2018 was largely a year of progress, unfortunately this was not true for all our focus areas. Despite reducing our lost-time accident rate by 35% since our baseline year of 2015, I am far from satisfied with our health & safety record. Keeping people safe must always be our number one priority, and yet we suffered three fatalities during the year. I am deeply saddened by this loss of life and extend my sincerest sympathies to the families involved. These

tragedies underline the need for day-to-day vigilance to create a ZERO accidents culture.

In 2018, we improved energy efficiency and reduced relative carbon emissions across our operations by 5%, giving a total relative carbon reduction since 2015 of 20%.

Coal is the most carbon-intensive source of energy, and we are making progress on our commitment to phase it out by 2022, having already reduced our usage by 78% over three years. We will continue converting our remaining coal-fuelled sites in China, India and Poland.

We also made strides in reducing carbon in our wider value chain, including sustainable packaging innovations such as our plastic-reducing Snap Pack. Such innovations enable direct engagement with customers and consumers on sustainability, while delivering less plastic waste and lower carbon emissions.

As for water, we maintained our relative water consumption of 3.1 hl/hl. While we have reduced our usage by 9% since our baseline year, we still have a long way to go to achieve our 2030 target of halving our global usage.

Consumers want to make informed choices, and we are proud to tell them what is in our beers. In Western Europe, 86% of our packaging now provides information on ingredients and nutritional values, while 96% globally now carries responsible drinking icons or text to discourage irresponsible drinking. I am also pleased to see the continued growth of alcohol-free brews, giving consumers more choice.

Our sustainability roadmap up to 2022 is well planned and our 2018 performance shows that, while we continue to make progress, significant challenges remain for reaching our 2030 targets. Solving these will mean innovating effectively, working with partners and preparing for a rapidly changing world.

We have always believed in the power of science, and our Young Scientists Community is developing pioneering solutions to help us deliver on our ambitious targets.

Our contribution to science and society has been further strengthened by our main shareholder, the Carlsberg Foundation, which granted more than DKK 500m for scientific, cultural and societal activities in 2018. Ultimately, the better our financial performance, the more support the Carlsberg Foundation can provide. In this respect, I am pleased that, as a consequence of our strong financial performance in 2018, the Supervisory Board is recommending a further increase in dividends and a share buy-back programme, returning DKK 7.2bn to our shareholders.

In short, the strength of our financial results, together with the continued progress against our sustainability ambitions, is testament to growing both a successful and a sustainable business.

Cees 't Hart
CEO, Carlsberg Group



A YEAR OF CONSOLIDATION

For eight years our approach has made Carlsberg Italy a reference point in the union between product quality, innovation and sustainability, which has created remarkable performances in the environmental and social fields. In this context, 2018 has been a year of consolidation. Looking back, we could see the efficiency of our goal of continuous improvement to reduce our impact on the environment. This year our performance remained stable. Nonetheless, value creation has continued: in a market that overall has increased by about 1%, our result has increased by more than 10%.

For companies today, the need to be sustainable is a fact of life. And the network, the collaboration with the elements of the production chain is the way to implement the value and the sustainable actions that can make a difference. In our consolidation year, the push towards sustainability has been constant especially with our partners.

Our commercial value, which translates to thousands of kilometers every year, made us focus especially on sustainable mobility. We started to convert our vehicle fleet. Of the 130 vehicles, 25 old diesel vehicles have been substituted with hybrid vehicles. The goal is to complete the conversion in the next few years. Moreover, we introduced company carpooling, acquiring 3 electric cars.

In the logistics department we progressively substituted diesel forklifts with electric ones. The relative CO₂ emissions decreased by 67%. Lastly, we continued to improve our urban logistics with a plan that, with our partners, provides for the progressive introduction of full electric transportation for last mile distribution and LNG (Liquefied Natural Gas) transport.

The relationship with the territory continued to evolve. Last year, the Carlsberg Foundation funded and started a multi-year project of archaeological excavations at Forum of Caesar in Rome thanks to the allocation of €1.5 million. In 2018, it saw the completion of archaeological research in Francavilla Marittima (Cosenza) with the opening of the exhibition “Francavilla Marittima: a recontextualised heritage”.

Carlsberg Italy plays an important role in sustainability thanks to its intense desire to involve partners and all stakeholders and especially due to its focus on employees.

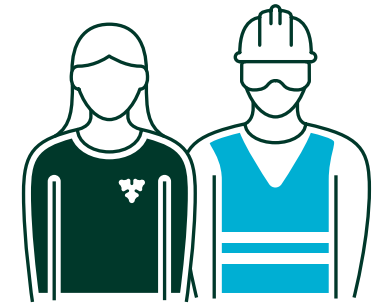
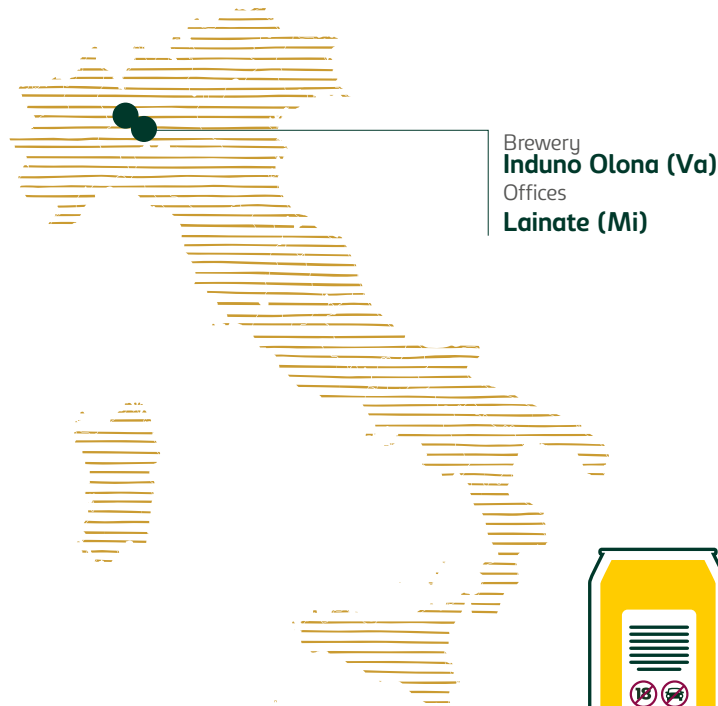
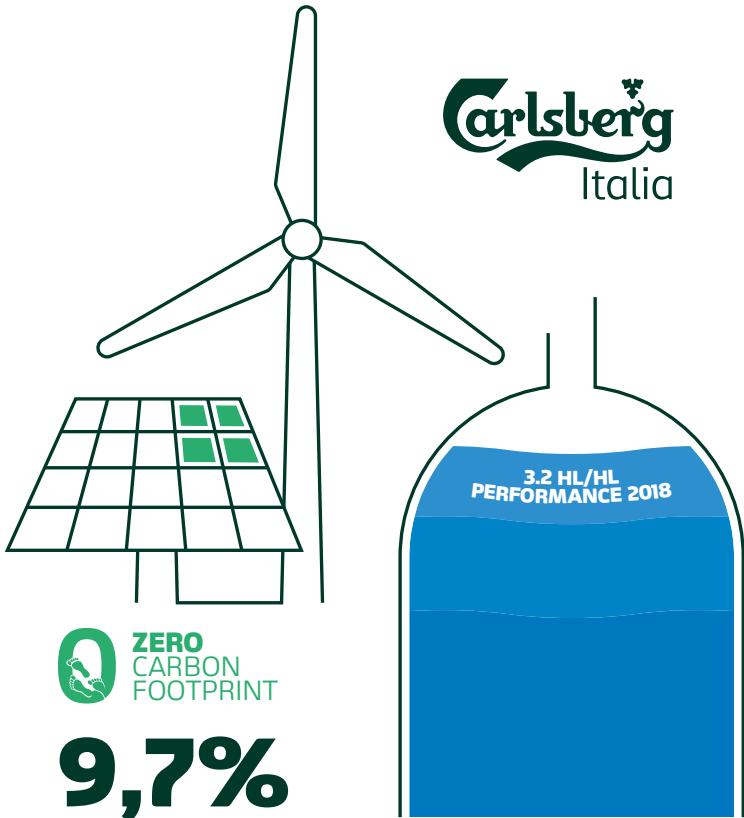
Through this Sustainability Report I wish to thank everyone for their participation which is helping us to contribute to a better world.

Alberto Frausin
CEO, Carlsberg Italy



SUCCESSFUL BUSINESS IS A SUSTAINABLE BUSINESS

We believe a healthy business takes care to ensure that profitability and sustainability exist in harmony. Sustainability is therefore embedded in our corporate strategy, SAIL'22. This aims to create sustainable value growth in optimising the balance between volumes, margins, profit and cash. Here, you can see our strong financial performance and our sustainability progress achieved in 2018.



ZERO ACCIDENTS CULTURE

79%

of employees involved in the training on Life Saving Rules

ZERO IRRESPONSIBLE DRINKING

TOGETHER TOWARDS ZERO

Never before have the global issues of climate change, water scarcity and public health been so pressing. Building on our purpose of brewing for a better today and tomorrow, our response is our sustainability programme, Together Towards ZERO.

Our four sustainability ambitions are: ZERO carbon footprint, ZERO water waste, ZERO irresponsible drinking and a ZERO accidents culture. Each ambition is underpinned by clear, measurable targets for 2022 and 2030. This report updates you on our progress.



OUR PURPOSE

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

CREATING A MORE RESILIENT BUSINESS

Resilience comes through embedding sustainability in our corporate strategy for the entire Group, SAIL'22. Our ambitions continue to drive our actions: reducing risks and improving efficiency while working in harmony with local communities and the environment.

We are building on our strong scientific foundation and heritage of developing groundbreaking innovations that benefit our brewing and wider society.

PARTNERING TO DELIVER OUR PROGRAMME

We know we cannot achieve our ambitions by working in isolation. Our programme was devised with the support of experts using a science-based approach, and we are collaborating with experts to deliver it. What is more, we regularly engage with our stakeholders, listening to how they think we can improve. Together, we can make faster progress towards ZERO.

GLOBAL CHALLENGES

2018 saw record-high temperatures in many parts of the world, and the latest reports from the Intergovernmental Panel on Climate Change (IPCC) are alarming. It is clear that we must take faster action if we are to realise the aims of the Paris Agreement and limit the significant and dangerous changes predicted by leading climate scientists if we do not. That is why our targets align with the Paris Agreement's more ambitious aim of limiting global temperature increase to 1.5°C by the end of this century.

At the same time, water, which is fundamental to a growing human population and keep ecosystems thriving, is becoming scarce. It hardly needs stating, but, to put it bluntly, no water means no beer. This changing world will undoubtedly have major implications for our industry.

Irresponsible drinking remains a complex social problem that can have detrimental effects for individuals and their families. As brewers, we must continue to work with governments and communities to move society towards a healthier, more positive drinking culture.

IMPORTANT CONTRIBUTION TO THE GLOBAL ECONOMY

Our impact as a Group is broad. With operations in more than 35 countries, and export and licence activities in more than 100 countries, we keep thousands of people employed and support infrastructure through our tax contribution, which in 2018 totalled around DKK 43bn.

FOCUSING ON THE AREAS THAT MATTER MOST

The actions we take with Together Towards ZERO are aligned with the UN's Sustainable Development Goals (SDGs). These priorities are based on a materiality assessment of the most important sustainability management topics, risks and impacts for our business. We expect to update our materiality assessment in 2019 to ensure that our activities remain aligned with internal and external stakeholders, and that we maintain focus on the most important areas for us and society.

In the Carlsberg Group, we believe in establishing clear global ambitions, frameworks and governance structures – all of which are realised locally across our markets. Together Towards ZERO is owned by our Executive Committee (ExCom) and overseen by the Supervisory Board. Responsibility for implementing the relevant key performance indicators (KPIs) is assigned to a network of area owners. This way, the functions that have the biggest impact and capacity to influence are empowered to create change. Every quarter, ExCom receives an overview of progress on selected sustainability KPIs, many of which are built into daily routines at sites across our business.

TOGETHER TOWARDS THE SDGs

Taken together, the UN's Sustainable Development Goals (SDGs) form a blueprint for a more sustainable world. They call on governments, civil society, businesses and the general public to act to end poverty, reduce inequality and limit climate change by 2030. Being interconnected, all the SDGs are important, and within each goal there are a number of targets and topics. We focus our efforts on the goals and targets that are material to our business and where we can create the greatest impact, and review them every year.

BUSINESS MODEL



TOGETHER TOWARDS ZERO

YOUNG SCIENTISTS COMMUNITY

In 2018, we hired a group of postdoctoral researchers to join the Carlsberg Young Scientists Community. This Community of creative, innovative and forward-thinking young scientists from all around the world is tasked with helping us find or develop relevant technologies and ways to apply them in our business. Their work will be crucial to the attainment of our targets of ZERO carbon footprint and ZERO water waste.

AN ITALIAN WITHIN THE CARLSBERG YOUNG SCIENTISTS

I am part of the Carlsberg Young Scientists Community. We are six young researchers working on the Together Towards ZERO project and we research new methods to reduce water and energy consumption in our breweries. Together with my colleague David Martinez, I work on the ZERO carbon footprint section. We have experience in research and we are up to date with the most advanced technologies in the fields of water and energy. Our task is that of pursuing the goals for 2022, which can be achieved with the current technologies, but also finding solutions for the 2030 goals,

which will be achievable through new technologies that need to be developed and studied in the coming years. We operate in the agri-food field, which uses a huge amount of resources. In order to reduce the impact, we had to adapt the supply, production and distribution chains to more sustainable processes with respect to people and the environment. In the future, this adaptation will be supported by an increased culture of business responsibility and a higher awareness among consumers. Sustainable conduct will be necessary to remain in the market and keep the “licence to operate” in the sector. We are proud to see that the Carlsberg Group has not only taken a clear position on this, in line with our goal of producing beer for a better today and tomorrow, but also supported one of the most ambitious and revolutionary sustainability programme in the field.

*Stefano Soprani (PostDoc YSC)
[in the photo: first on the right]*



MOST MATERIAL SDGs



The diagram on this page shows the goals most affected by each area of Together Towards ZERO, as well as those connected to all our activities. In each section of this Sustainability Report, for each of our challenges, we present the specific contribution towards each goal, and some examples of actions we are taking.

Our action for cross-cutting SDGs 12: Responsible consumption and production, and 17: Partnerships for the goals, can be found on pages 20 and 37 respectively.





ZERO CARBON FOOTPRINT

In 2018 we improved the environmental impact of our logistics department. With Number1, our partner, we introduced three new Iveco vehicles with LNG powered engines that ensure a reduction of 95% of particulate emissions, 40% of carbon monoxide and noise pollution (-5db) compared to Euro VI diesel vehicles.

The introduction of electric forklifts further reduces the emission of pollutants, ensuring a healthier working environment for our employees.

 **LEARN MORE ON
OUR WEBSITE**
[sostenibilitabycarlsberg.it/tt](https://www.iveco.com/sostenibilitabycarlsberg.it/tt)

ZERO CARBON FOOTPRINT

Climate change is threatening people's lives and livelihoods around the world. We are committed to both climate action that progresses towards a ZERO carbon footprint.

The Intergovernmental Panel on Climate Change (IPCC) has issued critical warnings for global warming of 2°C and more above pre-industrial levels. Without urgent action, by the end of the century temperatures will be more extreme, sea levels will be higher and crops will struggle. This is why we have designed our carbon targets in Together Towards ZERO to reduce our emissions in line with the more ambitious 1.5°C level of the Paris Agreement.

We believe it is possible for companies to significantly cut emissions while still driving business growth.

2030 TARGETS

ZERO
30%

CARBON EMISSIONS AT OUR BREWERIES

REDUCTION IN BEER-IN-HAND EMISSIONS

2022 TARGETS

50%
100%
ZERO

REDUCTION IN CARBON EMISSIONS AT OUR BREWERIES

ELECTRICITY FROM RENEWABLE SOURCES AT OUR BREWERIES

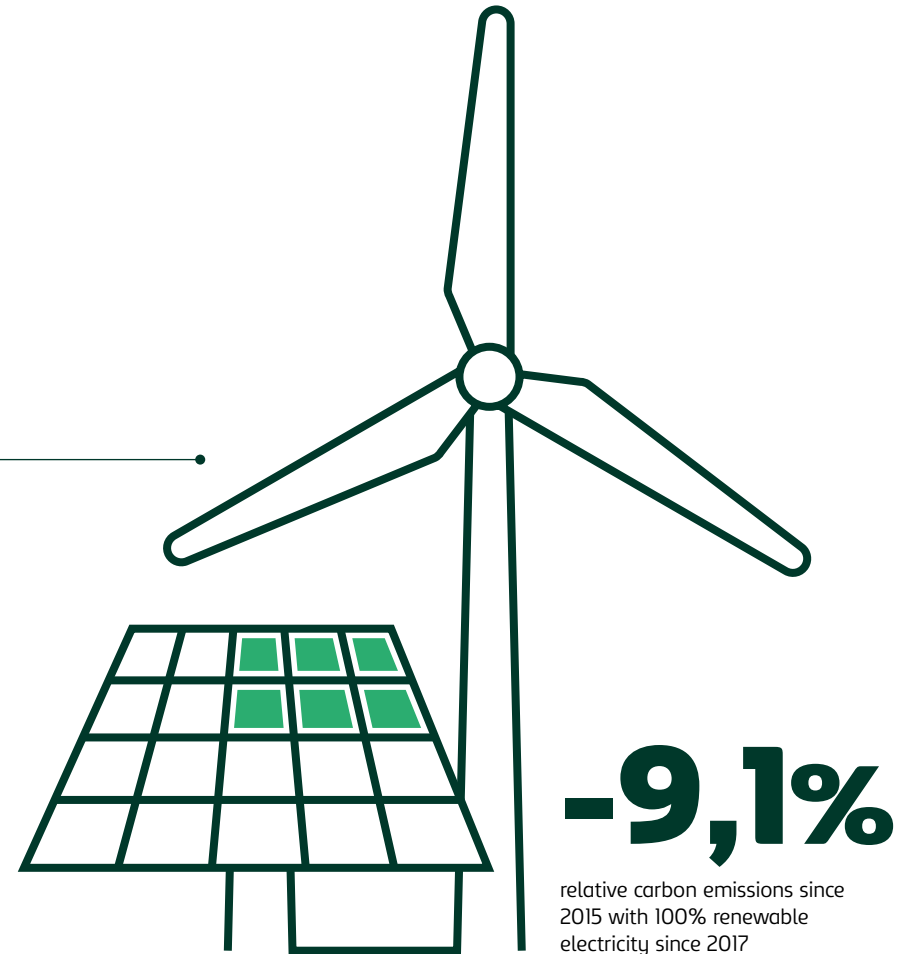
COAL AT OUR BREWERIES

15%
100%
30

REDUCTION IN BEER-IN-HAND CARBON FOOTPRINT

LOW-CLIMATE-IMPACT COOLING

PARTNERSHIPS TO REDUCE SHARED FOOTPRINT



100%

of coolers purchased during 2018 comply with our low-climate-impact standards



**ZERO CARBON EMISSIONS
EXAMPLES OF OUR ACTIONS**



SDG TARGETS

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

EXAMPLES OF OUR ACTIONS

- ▼ **Monitoring of energy use**
- ▼ **Improving energy efficiency**

SDGs TARGETS

- 13.1** Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.
- 13.3** Improve education, awareness and capacity to mitigate climate change.

EXAMPLES OF OUR ACTIONS

- ▼ **Improving our resilience to climate change (LIFE IRIS Project)**
- ▼ **Raising awareness, both in the company and with our main partners, of the need for action on climate change**

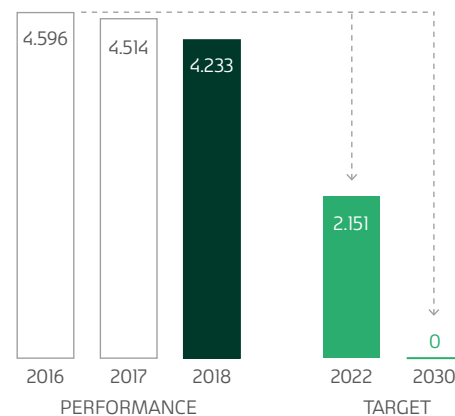
**ELIMINATING
BREWERY EMISSIONS**

2018 PERFORMANCE UPDATE

We wish to eliminate carbon emissions by improving the efficiency of our production processes through maintenance and innovation. In 2018, the Group implemented the Carlsberg Operational Manual (COM) in order to share best practices both within the Group and the sector.

We continued to improve energy saving methods as we did in previous years. We reduced relative carbon emissions of our brewery in Induno Olona by 6.2% compared to 2017. CO₂ emission decreased by 6.3% reaching 3.0 kg CO₂/hl, from 3.2 kg CO₂/hl in 2017. This represents a 9.1% reduction since 2015, our baseline year.

TOTAL CO₂ EMISSIONS IN THE INDUNO OLONA BREWERY
(t)



THE GREAT “ZERO CARBON FOOTPRINT” CHALLENGE OF THE PROGRAMME “TOGETHER TOWARDS ZERO” CAN ALSO BE OVERCOME THROUGH RELAMPING

Carlsberg Italy was one of the first companies in Italy to adopt a low-impact LED technology for indoor and outdoor illumination of the brewery. In 2018 we concluded the conversion of all light bulbs present in the production site of Induno Olona thanks to the collaboration with SITE, our supplier since 2011. This allowed us to:

- improve lighting in indoor production areas (in accordance with the UNI EN 12461-1) and, at the same time, ensure electricity savings and retain particular architectural characteristics of the building;
- equip the new parking area with the correct lighting while observing the strict light pollution regulations received from the Lombardy Region in 2011. Since the Induno Olona plant is located very close to the “Giovanni

Schiapparelli” Astronomical Observatory, closer attention was given in the compliance with these regulations.

Thanks to relamping, SITE registered the following results during the year:

- reduction of yearly energy usage by 66%
- radical reduction of CO₂ emissions corresponding to 269,195.92 kg of CO₂, equal to -65.84% compared to traditional lighting systems
- reduction of maintenance costs thanks to a longer lifespan of the installed devices (around 50,000 h)
- reduction of heat and pollutants produced in the recycling of the lighting elements
- increase in the illuminotechnic performance and more uniform and comfortable ground lighting in the production and storing areas.

Total energy use has decreased by 4%, compared to 2017, thanks to thermal energy savings. Meanwhile, the relative use of natural gas has decreased by 1.3% due to increased monitoring, better analysis of data collected from the plants, the optimisation of processes and the reduction of steel keg volumes.

However, yearly electricity use has moved from 10,786 MWh to 10,955 MWh. In order to improve electricity consumption we are working on the refrigeration process. In 2019, we expect an improvement in its efficiency also due to the use of the new Flash Pasteuriser which will contribute to the reduction of energy use in this phase.

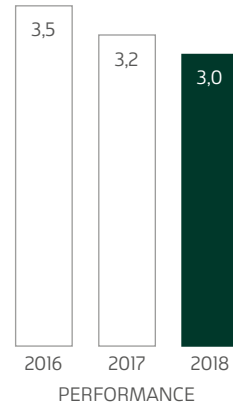
CERTIFICATIONS

Since 2011, Carlsberg Italy has been certified ISO 50001, the global reference standard for constant energy performance improvement and integrated and efficient resource management.

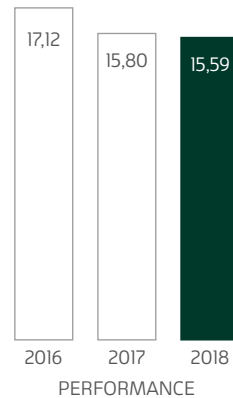
100% RENEWABLE ENERGY

Since 2017 we have been using 100% renewable energy in beer production. As a member of RE100, a coalition of influential businesses committed to 100% renewable electricity, we continue to promote the wider use of energy from renewable sources.

RELATIVE CO₂ EMISSIONS
(kg CO₂/hl)



RELATIVE USE OF NATURAL GAS
(MWh/hl)



EFFICIENCY IMPROVEMENT IN CHINA

Nowhere has seen more impressive results from our Group-wide efficiency drive than our Chinese breweries. Since 2015, thermal energy efficiency has improved by more than 29%, electricity by almost 11% and water by 15%. The rapid progress has been a result of many factors, such as implementing best practices through the Carlsberg Operational Manual (COM), educating our people, and converting coal boilers to natural gas boilers. One of the most innovative initiatives has been upgrading 24 packaging lines to use new “nano insulation” technology.

Originally developed to insulate spacecraft, this technology significantly reduces energy consumption, using material which is ten times thinner than traditional mineral wool to create the same effect. On average, nano insulation cuts the energy use of our packaging lines by 10%. Other benefits include the increased lifespan of up to 50 years, enhanced cleanliness due to the stainless steel finish, and a more comfortable working environment for our workers due to an average 5-7°C lower working environment temperature in summer.

LIFE IRIS PROJECT

The Project defines and implements a climate change adaptation Plan. We participate because we wish to contribute to the reduction of greenhouse gases emissions and manage the risk of climate change in our business together with our partners. Thanks to the Climate Risk Assessment carried out with the project Life IRIS, our awareness of the influence that climate change has on all activities and our reputation has increased through the years. In 2018 we continued the implementation of our Climate Change Adaptation Plan working on the actions already defined and identifying new future activities.



* Climate change: fresh ideas for a hot topic.



LIFE/14/CA/IT/00060

info@lifeiris.eu / www.lifeiris.eu

FIND OUT MORE ABOUT THE PROJECT ON THE WEBSITE
www.lifeiris.eu

CLIMATE CHANGE ADAPTATION PLAN PROGRESS

ACTION	EFFECT	PROGRESS
Feasibility study for the substitution of the pasteuriser	<ul style="list-style-type: none"> Reduction of energy use Reduction of room temperature and humidity Reduction of health risks for the employees Less absences in summer Stronger sense of belonging among the Operators who consider technology modification a significant improvement of working conditions 	<ul style="list-style-type: none"> Created a feasibility study Installed a new Flash Pasteurizer Carried out the first start-up trials with the support of our supplier GEA and implemented necessary system and software modifications Started the system at the beginning of 2019

<p>“Open Air Job” Project: creating outdoor working stations within the park of the Induno Olona plant</p>	<ul style="list-style-type: none"> Reduce the effects of air conditioning systems on workers’ health Prevent diseases linked to elevated temperatures in non-air conditioned environments Improve the wellbeing and quality of life of our people in terms of: stress reduction, memory improvement, creativity, self-esteem, increased sense of belonging 	<ul style="list-style-type: none"> Identified areas to be used for the working stations Extended wireless connection to the park and verified connection Intervention in the park with the collaboration of the Fish and Wildlife Police of Varese, to ensure the safety of the selected areas respecting the existing animals and plants Started the assessment of furniture suppliers to create working stations in line with the Circular Economy approach promoted by the parent company
--	---	--

ACTION	EFFECT	PROGRESS
Hydrogeological research to study possible climate change impact on water sources and identification of possible adaptation measures to improve company resilience	<ul style="list-style-type: none"> Evaluate safety and continuity of water sources to the plant 	<ul style="list-style-type: none"> Conducted hydrogeological research to study possible climate change impact on water source, which has also taken into consideration the quality of the sourced water Identification of necessary actions and commencement of the implementation of these actions: <ul style="list-style-type: none"> Removal of all obsolete and inactive pipelines located within the covered section of the Olona River to improve the plumbing section used for water discharge Installation of underground waste water collection pipelines which have been connected directly to the purification system (action initially not provided for, but carried out for environmental safety reasons) Positioning of a water level gauge near the dam upstream from the plant to identify low water levels Installation of a net in the riverbed to stop debris upstream and allow water flow Created a tender and assigned the task to an expert for the realisation of a continuous monitoring system of the flow Assigned task to an expert for the assessment of the technical possibility of temporary connection to the public water main in case of drought

ACTION	EFFECT	PROGRESS
Study of health status and protection requirements of plants within the park of the factory and identification of possible maintenance interventions	<ul style="list-style-type: none"> Protection of the eco-systemic service of soil regulation, erosion and landslide prevention, protection of the hydrogeological system Avoiding risks for people, machines and building safety within the plant due to possible (full or partial) tree fall The research will also be of interest for the Regional Park Campo dei Fiori, which forms part of the woods area Promotion of the park and informing visitors about the value of its plants as well as the Company's commitment to their protection 	<ul style="list-style-type: none"> Concluded the research on the health status and protection requirements of the plants within the park Classified maintenance and care interventions for plants: undelayable, urgent, necessary Intervened on undelayable and urgent elements identified through the research; those identified as necessary are in progress Continuous maintenance of the plants of the park Meeting with an agronomist to evaluate the condition of the park and plan the development of the project
Engagement measures for suppliers following the occurrence of extreme events and to ensure business continuity	<ul style="list-style-type: none"> Direct and active engagement of suppliers in the recovery plan Improve our suppliers' awareness with regard to the interventions to be promptly and efficiently carried out in case of extreme events Share our ZERO Accidents culture 	<ul style="list-style-type: none"> Beginning to define areas and contents of the safety plan of suppliers Direct and active engagement of suppliers: first meeting with the employees of our supplier Number1 which carries out the safety activities in our plant and focuses on risks and procedures to prevent accidents Tender publication and assignment of task to a safety expert to create a mapping of risky areas and identify indicators to be monitored

CROSS-CUTTING SDGs
EXAMPLES OF OUR ACTIONS



SDG TARGETS

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

EXAMPLES OF OUR ACTIONS

- ▼ Monitoring emissions in all steps of production of our products
- ▼ Presenting the advantages of *DraughtMaster™* and increasing the distribution of PET kegs
- ▼ Collaborating with the main suppliers to reduce emissions from machinery and services

REDUCING OUR BEER-IN-HAND EMISSIONS

It is not enough to eliminate out brewery emissions – we also need to tackle our value chain emissions for the total carbon footprint of our products. We have set targets to reduce “beer-in-hand” carbon emissions by 15% and 30% in 2022 and 2030 respectively. Since 2016, both as a Group and as Carlsberg Italy, we have been involved in a pilot project aimed at standardising the approaches to the Product Environmental Footprint (PEF). The project, coordinated by The Brewers of Europe, unites several partners, packaging suppliers, institutions, universities and other companies in the field with the goal of developing industrial standards to measure

CO₂ EMISSION IN THE LIFE CYCLE OF OUR PRODUCTS



the impact of the products based on their LCA. Carlsberg Italy has been analyzing all their packaging with the LCA method since 2010. In 2011 it was the first brewer in the world to obtain the Environmental Product Declaration (EPD) for its primary products. The certification is renewed yearly and all the documentation is available on www.environdec.com.

2018 PERFORMANCE UPDATE

As a Group, to measure progress towards our 2022 and 2030 targets, we are carrying out in-depth assessments of our beer-in-hand carbon footprint every three years. The 2017-2019 progress results will be available in 2020. Meanwhile, we are developing carbon-reducing initiatives in several areas: packaging, refrigeration, waste and recycling systems, and logistics.

PARTNERSHIP

Innovation is the element that contributes to achieving our goals, however, they have only been made possible by working closely with our supply chain partners.

LCA ANALYSIS UPDATE

At the end of 2017 we repeated the LCA analysis which included new important factors compared to the 2015 version. In particular, in the use phase, energy used to refrigerate the PET keg was included. In this context the LCA analysis results have significantly changed. In fact, CO₂ emissions to produce an hl of beer are equal to 16.2 kg, equivalent to 32% of the total amount.

Source: IEFE – Bocconi, 2017 LCA analysis

PACKAGING INNOVATIONS

Our approach to packaging is based on circular economy, that is the 4R model: Reduce, Reuse, Recycle, Rethink. Efficient use of packaging is a strategic

element to reduce excessive use of resources and materials, to reduce waste amounts and containment of costs. All this is possible only if we guarantee our clients the highest safety and quality of our products.

In 2018, the total packaging volume decreased by 4.4%. This reduction is the result of a more efficient management and lower production. In 2018 the Group launched several packaging innovations. In particular, the redesign of the

Carlsberg brand, identifying where more sustainable improvements could be made. Other improvements included reducing the weight of Carlsberg glass bottles by 10%, thus also reducing their CO₂ impact.



SNAP PACK

In 2018, we launched our new Snap Pack. The use of an innovative glue reduced plastic usage in our multipacks by up to 76%. Less material also means less CO₂ impact. Once fully rolled out, we estimate that the Snap Pack will reduce our total use of plastic packaging by more than 1,200 tons every year. The Snap Pack has been used for the first time in the beer industry and it took us and our partners three years to develop.



C2C LABEL INKS & COATING FOR REFILLABLE BOTTLES

In 2018, we launched Cradle to Cradle (C2C) silver inks on bottle labels to improve the future recycling potential of the materials where these inks are used. We also applied new coating to refillable glass bottles to keep them intact for longer, increasing reuse and thus decreasing CO₂ emissions.



RECYCLED SHRINK WRAP

In 2018, we launched recycled shrink wrap containing 50-100% recycled plastic – partly from our own production – for multipacks where Snap Pack is not available. With up to 60% lower CO₂ impact than non-recycled shrink wrap, it creates a higher demand for recycled materials, closing the material loop.

Packaging innovation lead us to create DraughtMaster™, the revolutionary draught system without added CO₂.

Many sustainable innovations in packaging have been developed after assessing their impact with the LCA analysis. Thanks to LCA we discovered, for example, the extreme sustainability of DraughtMaster™, which, with its PET kegs, now represents the standard format for draught beer. Compared to other packaging, DraughtMaster™ shows a series of advantages in all steps of the production cycle. It has a significantly lower impact compared to steel kegs and is even more sustainable than glass bottles in terms of quality of the product and environmental impact.

DRAUGHTMASTER™ THE REVOLUTION OF DRAUGHT BEER

DraughtMaster™ is a revolutionary draught system, unique in the beer industry, created from the union of our focus on quality beer and innovation research.

DraughtMaster™ is the draught system without added CO₂, thanks to the substitution of steel kegs with recyclable PET kegs. DraughtMaster™ preserves beer quality for longer. Without CO₂ it remains unaltered for 31 days from the opening of the keg (compared to an average of 5 days for steel kegs). We measured the environmental impact of PET kegs with LCA analysis.

DraughtMaster™ turned out to be the format with the lowest environmental impact compared to steel kegs, aluminum cans and glass bottles. For every 60 litres of draught beer (3 PET kegs) we prevent the emission of 25 kg of CO₂ into the atmosphere, the amount that a tree

can absorb in a year. Using this equation, we can calculate our ability to reduce environmental impact at any time.

DraughtMaster™ wins the competition against all other formats.

The environmental advantages are well-established compared to steel kegs and also glass bottles. The PET keg shows its superiority both for product quality and lower environmental impact.

Our research continues within the circular economy approach. Our goal is that of further reducing the environmental impact of the product. We are researching different design options in order to make the keg easily recyclable, verifying the possibility of granulating the PET kegs to create secondary raw materials and finding possible ways to reuse them as production input.



60 litres of draught beer from PET kegs contribute to the same reduction in greenhouse effects as a tree in one year*

Formula for the calculation of the #TreeClock

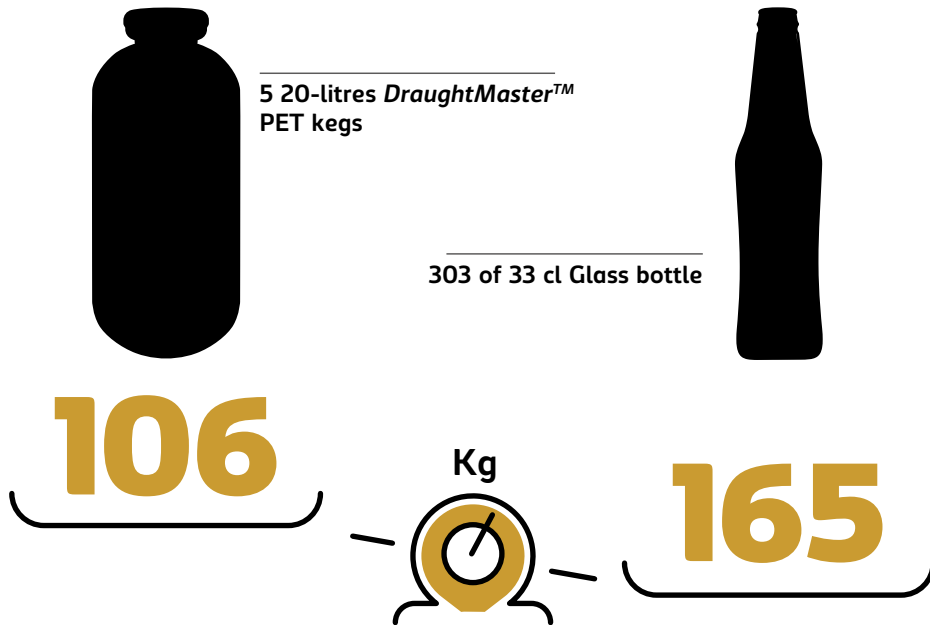
*Compared to the same quantity of beer in steel kegs. Elaboration on EPD 2013 data.

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 2017 LCA analysys



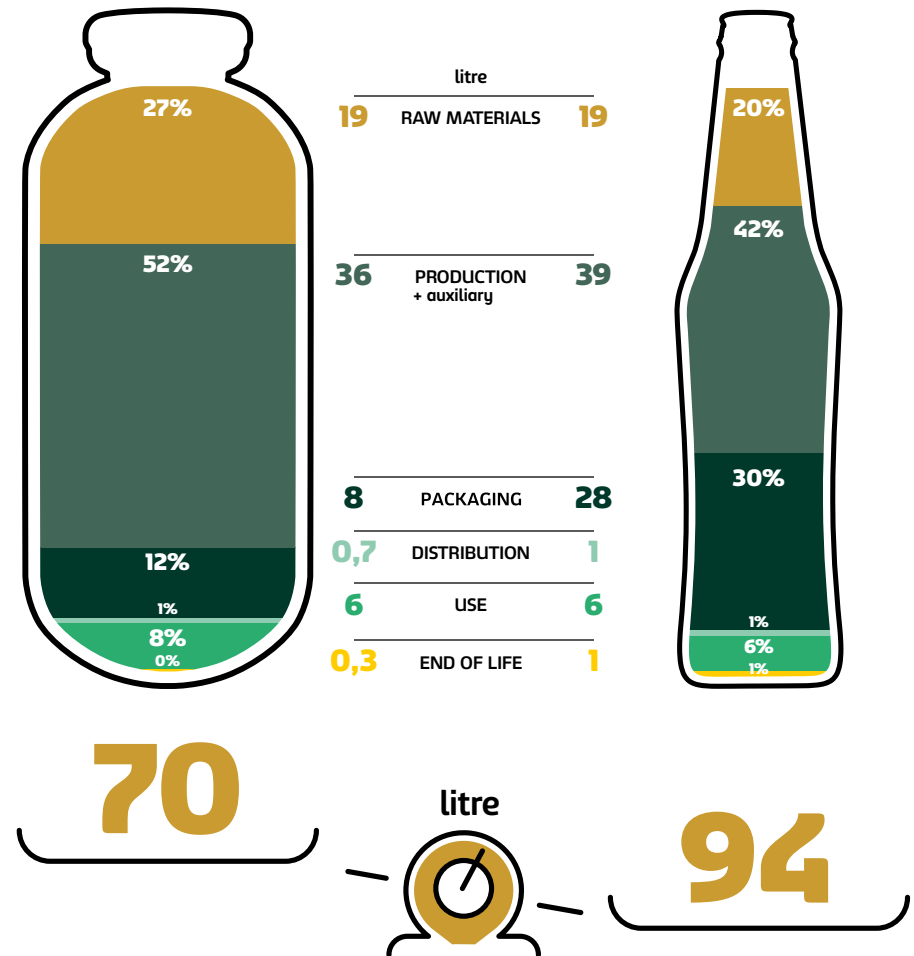
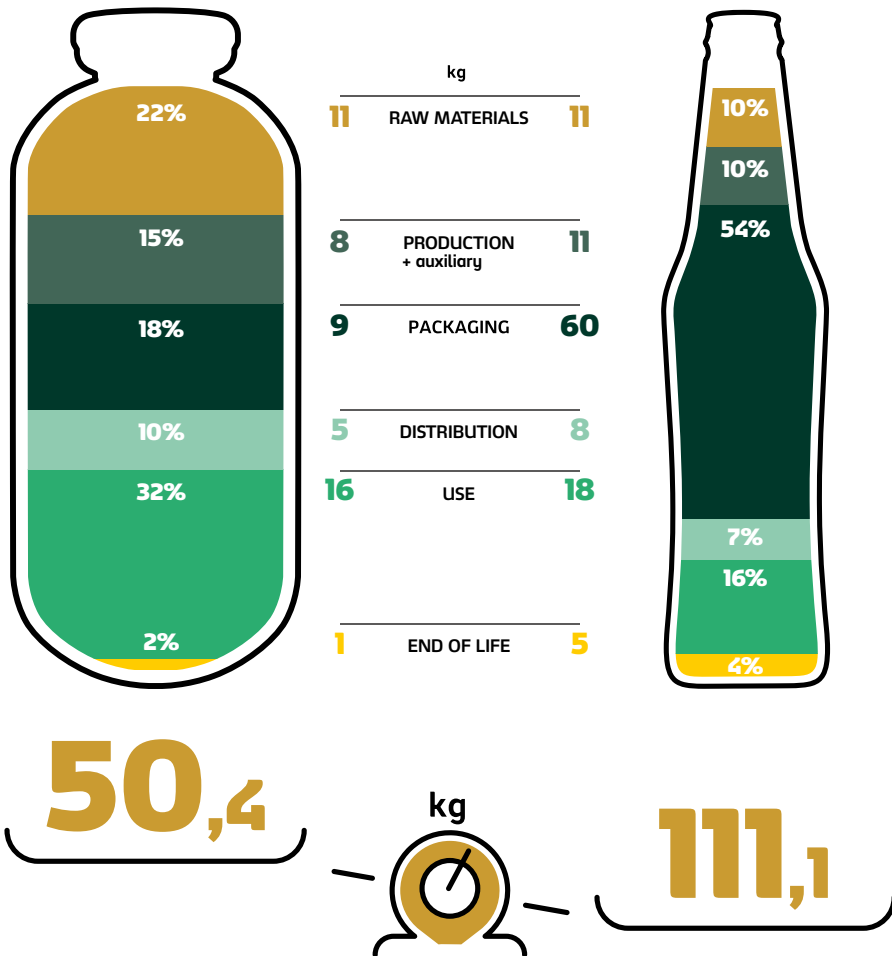
LA RIVOLUZIONE ALLA SPINA.


DRAUGHTMASTER
L'ESSENZA DELLA BIRRA

PET KEG VS GLASS BOTTLE

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

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

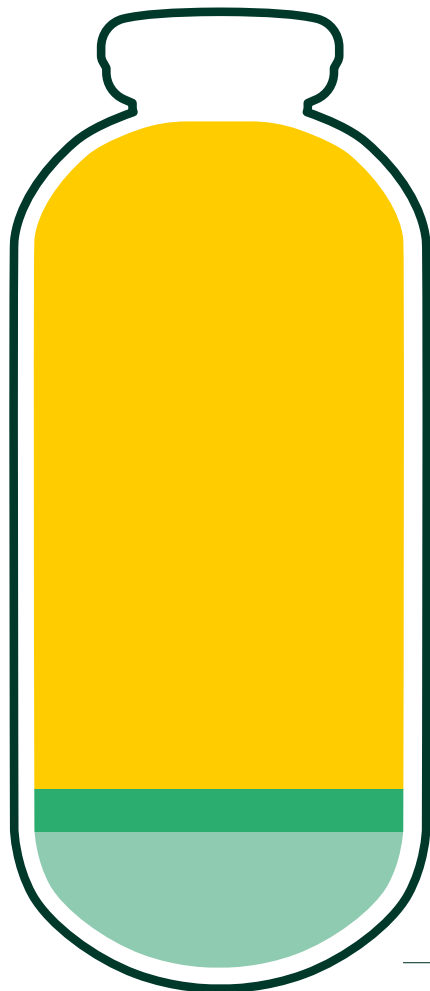


Source: IEFE calculation based on 2017 LCA analysis

Source: IEFE calculation based on 2017 LCA analysis

IN 2018 DRAUGHTMASTER™ IS NEAR 100%

In Carlsberg Italia in 2018, PET kegs represented 96% of all beer distributed in kegs. We are approaching our goal of 100% coverage.



KEG TOTAL AMOUNT 2018 ACT

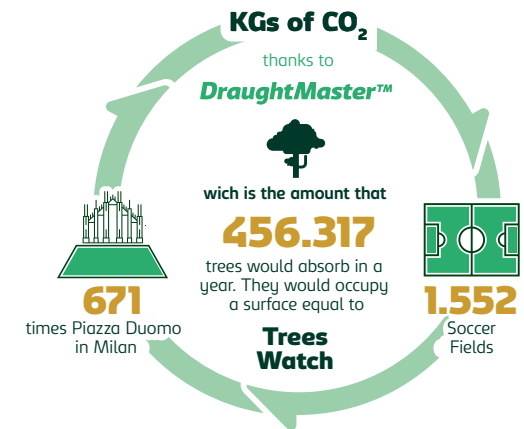
1.515.140

HL TOTAL AMOUNT 2018 ACT

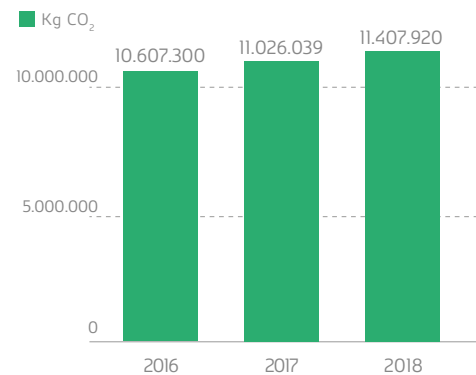
288.409

	KEGS 2018 ACT	HL 2018 ACT
79%	MODULAR20 1.134.035	226.807
5%	SELECT 146.190	14.619
16%	FLEX 234.915	46.983

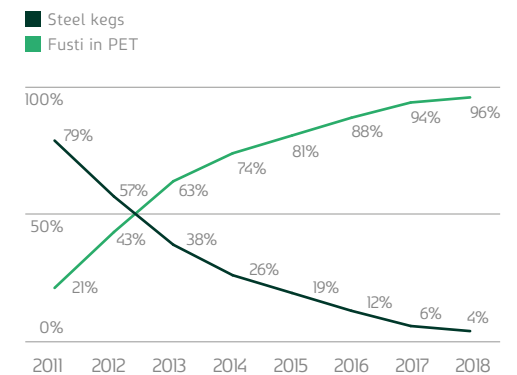
-11.407.920



Kg CO₂ saved thanks to Draughtmaster™



HL of beer distributed by type of keg



DRAUGHTMASTER™ QUALITY

CLIENT SATISFACTION

Real time monitoring of correct *DraughtMaster*™ functioning allows us to verify the quality of the product and promptly intervene to reduce waste.

Courtesy Call is the service for Carlsberg Italy's clients that collects information on HORECA client satisfaction with regards to *DraughtMaster*™ technology in addition to product quality information.

In 2018, 175 phone calls were made: this service thus reached 3,421 contacts.

The positive assessment of the product quality has been stable at 99% for almost 7 years.

The technical service confirmed the performance at 99%, stable since 2016.

Moreover, the system functionality maintained a positive result at 98%, which has been reached for the first time in 2017.

To be more aware of our clients' perceptions, during the year we trained one of our employees who, from 2019, will allow us to increase and improve our service.

DRAUGHTMASTER™ AND ITS ADVANTAGES

CHARACTERISTICS

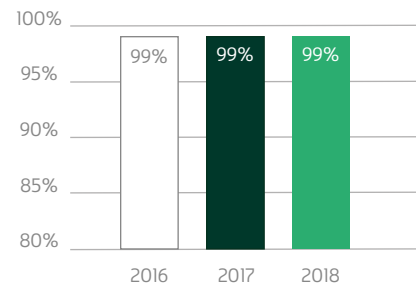
- PET disposable keg, practical and light
- Draught beer using compressed air
- 100% natural product without added CO₂
- Reduced feeling of bloating due to the absence of added CO₂
- Beer as fresh as just produced
- Perfect and compact foam
- Radically lower environmental impact (LCA)
- Automatic wash
- Wide range of beers
- Keg lasts:
 - Open: 31 days
 - Closed: 9 months

ADVANTAGES

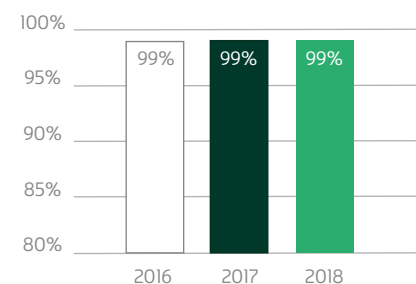
- The absence of CO₂ does not give the feeling of bloating
- Increased loyalty
- Increased profitability
- Less bulky and easier to store kegs
- It is not necessary to have space for empty kegs and cylinder
- No risk of being left without CO₂
- No need to manage the saturation level
- Eliminate some sources of infection risk in the system
- No need to buy CO₂ cylinder
- No deposit on CO₂ cylinder and kegs
- No waste of beer (e.g. change of the keg or wash)
- No waste of beer because of old or spoiled product

DRAUGHTMASTER™ QUALITY EVALUATION

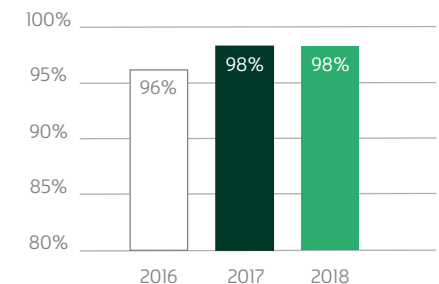
TECHNICAL SERVICE



PRODUCT QUALITY



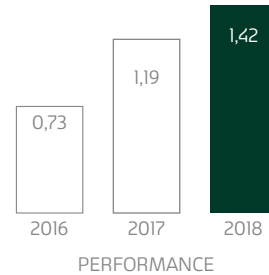
SYSTEM FUNCTIONALITY



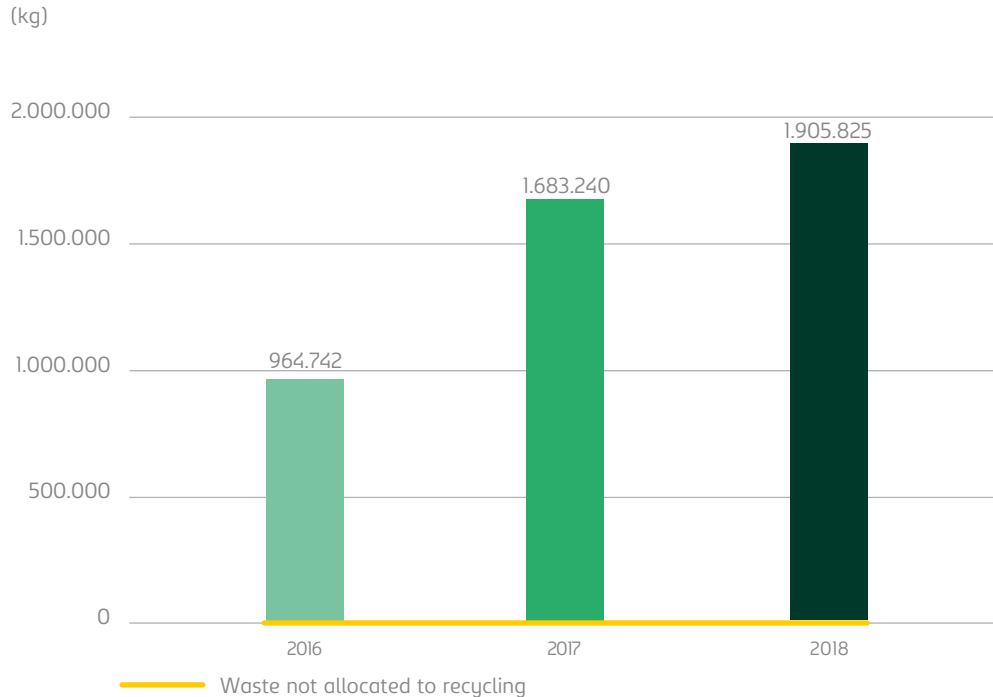
WASTE MANAGEMENT

In 2018, the waste produced increased by almost 13%. This waste production is equal to 1.42 kg/hl of beer. The increase is due to the disposal of obsolete material present in the plant, which was primarily glass that broke due to non-compliant material for which complaints have been made to the supplier. 100% of produced waste has been allocated to recycling.

RELATIVE WASTE PRODUCTION
(kg/hl of beer)



WASTE ALLOCATED AND NOT ALLOCATED TO RECYCLING



WHAT WE SAID 2017

Energy efficiency programmes
Installation of Flash Pasteurizer

Innovation
Continuous research for innovation in processes, packaging and services

Supplier engagement
Initiate actions with main suppliers to reduce emissions

Consumer awareness
Increase communication and engagement with consumers on environmental themes and in particular on the impact of climate change

WHAT WE DID 2018

Constant monitoring of consumption allowed us to reduce the total emissions of the production chain. Our improvement in the area of energy efficiency will be more evident with the introduction of the Flash Pasteurizer



Energy Saving refrigeration units with low environmental impact have been installed on Modular 20 draught devices



We engaged our suppliers in the implementation of the IRIS Project as provided in resilience project to climate change



We carried out the press conference in Piazza Città di Lombardia in Milan to present our new electric vehicles, involving not only the employees, but also the general population



At our Lainate offices we are particularly committed to reduce paper waste.

We reached great results by:

- Sending PDF invoices through certified email and EDI to our clients. This way we drastically reduced the use of paper, envelopes, postage stamps and revenue stamps which are now applied virtually.
- At the end of 2018 65% of invoices were sent through certified email, 25% via Edidel and only 10% through the traditional method;
- Signature of contracts with clients through tablets. Since 2017, Carlsberg HORECA sales force have been able to use this method which does not require contract printing. Contracts signed on a tablet are sent as a PDF copy to the client via mail and stored in our shared drive;
- Recycling of documents without sensitive data such as note paper;
- Increasing awareness of and commitment to recycling in the offices.

LOW-IMPACT REFRIGERATION SYSTEMS

Refrigerant gas, such as chlorofluorocarbon (CFC) and hydrofluorocarbon (HFC), cause environmental damage with negative effects on the ozone layer and on global warming.

For many years now we have tried to reduce the impact of these gases. In 2016, the Montreal Protocol was updated, signed by more than 200 countries, with the goal not only of eliminating CFCs, but also to substitute HFCs with alternatives such as low-impact hydrocarbons.

Carlsberg Italia has been trying to find sustainable solutions for a long time by adopting

cooling systems with high energy efficiency natural refrigerants. This has been in collaboration with Celli, an Italian company and global leader in the design and production of drink tapping and cooling systems.

We are constantly looking for sustainable solutions. Since Expo, we have started to install Energy Saving cooling units to the Modular 20 draught devices which can bring energy savings of up to 40%, compared to traditional units. This equipment is certified by external bodies who ensure the functionality and low environmental impact.

Refrigeration represents a significant part of the emissions in the lifecycle of our products. This is why, before 2022, we committed to purchasing exclusively low-impact cooling systems. 100% of the cooling devices installed in 2018 are in accordance with our standards of low climate impact.





“When the scientific community recognised man’s role in climate change, companies became key actors in the research of alternative production and consumption models to decrease the impact of greenhouse effect. This means reducing greenhouse gas emissions and researching ways to adapt to the environmental and social impact arising from this phenomenon that is difficult to reverse. Carlsberg Italia presents itself as a leading company in the development of concrete answers by developing product innovation and company organisation aimed at fighting climate change.”

Fabio Iraldo, Full Professor of Sustainability Management, Management Institute, High School of Education Sant’Anna of Pisa

LOGISTICS

As logistics makes up an important part of our carbon footprint, we are always looking for more efficient ways to transport our products. We chose our logistics partners – Number1 and Beverete Group – because they can offer solutions that are able to reduce carbon emissions and they are interested in the development of more sustainable logistics projects.

In 2018, we continued to optimize our efficiency programmes in collaboration with our logistics operator, to rationalize loads to put fewer and fully load vehicles on the road. Through *DispatchAdvise* (sending all information contained in the waybill before the delivery of goods) we gave our clients the possibility to organise storage space in advance and to speed up the unloading operations. Moreover, through the *Syncro* project, we increased efficiency within the producer – sales point chain using an order and delivery synchronisation process for Mass Market Retailers.

Substituting diesel forklifts with electric ones at the Induno Olona Brewery

In collaboration with Number1, diesel forklifts have been gradually substituted with high capacity electric forklifts which has significantly reduced emissions: -90% CO₂e (TtW) that is to say -67% CO₂e emissions (WtW).

Distribution with LNG and full electric vehicles

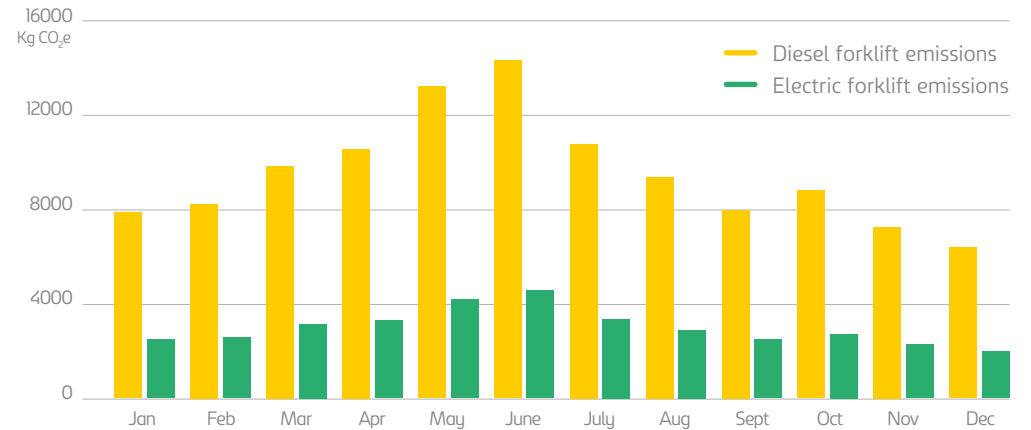
We developed an upgrade plan for our vehicle fleet with the goal of improving urban

logistics. The plan provides for the use of LNG vehicles for industrial distribution and the gradual introduction of full electric vehicles for last mile distribution. LNG vehicles cover part of the supply route between the Induno

Olona plant (VA) and the main storage center in Settala (MI).

Starting from 2019, in collaboration with our logistics provider Beverete, all last mile deliveries in the city centre of Florence will be

FORKLIFT COMPARISON (2017/2018 VS. 2018/2019)



carried out by electric vehicles. This will result in a significant reduction of annual emissions: -90% CO₂e (-8.75 kg per year) and -89% PMx (-1.02 kg per year).

Distribution in the city centre of Florence with electric vehicles

In 2018, our logistics partners that regularly operate in the factory have been involved in training activities connected to our Climate Change Adaptation Plan.

In 2018, we started the conversion of our fleet made up of about 130 cars, substituting the old diesel vehicles with 25 new hybrids, which make up around 30% of the whole company's fleet. The goal in the coming years is to substitute the whole fleet. During the year we also introduced 3 electric cars for company car pooling. The cars have been presented, in collaboration with our supplier E-Vai, to a wide audience at *Piazza Città di Lombardia* in Milan, in order to raise awareness among a range of people on the topic of sustainable mobility.



WITH NUMBER1 FOR GREENER LOGISTICS

“For a few years now we have made sustainability, in connection with innovation, one of our primary goals. Sustainable logistics is already possible: it’s a challenge that should be taken on and overcome together, logistics operators and customers, starting from concrete and meaningful projects.” says Renzo Sartori, engineer, President of Number1 Logistics Group, top player in fast-moving consumer goods logistics and our partner for a many years. Carlsberg Italia and Number1 share and continue to address the challenge of increasingly more sustainable mobility: the creation

of concrete actions based on the development of the potential of new technology while respecting the environment.

In 2018, we started using new Liquefied Natural Gas (LNG) vehicles: cutting edge and high performance vehicles. LNG is a clean fuel and its molecular simplicity allows for combustion with incredibly reduced solid residues. LNG vehicles are the future of sustainable transport since they allow for a significant reduction of CO₂ emissions and other pollutants.

“NUMBER1 reconfirms itself as a logistics operator that cares for the environment and is up to date with the changes in our sector. It forms strong partnerships with all its clients by fully sharing sustainable strategies. In some distribution routes, the new LNG vehicles are already circulating, decorated with our logo and that of the partner company to send a strong and clear signal”, Maurizio Bortolan, Sales Director Number1.



FLASH PASTEURISER: INCREASED QUALITY AND BEER SUSTAINABILITY

The pasteurization is the step in the production process that stabilises the product so that the taste, the aromatic component and the quality of the beer leave the Brewery and arrive unaltered to the final consumer. The implementation of the Flash Pasteurizer ensures an improvement in our environmental performance thanks to the reduction of time necessary to complete the process. Beer reaches the 71°C necessary for the process in just 20 seconds, making the whole production process more efficient and sustainable.

The implementation of this production equipment represents our continuous search for innovative solutions to constantly respond to our stakeholders' requests: our beers need to be of high quality and sustainability needs to remain one of our cornerstones.



ACTIONS TOWARDS ZERO 2019

Brewery

Constantly monitor energy consumption

Improve energy efficiency thanks to the use of the new Flash Pasteurizer

Carry out the actions provided for in our project for resilience to climate change (LIFE IRIS Project) and publish the achieved results

Find innovative solutions to reduce carbon footprint and climate impact

Beer-in-hand


Continue the initiatives of monitoring and reducing beer-in-hand CO₂ in the various steps of the lifecycle of our products, in particular refrigeration and logistics

Engage our main suppliers in actions aimed at reducing emissions from machinery and services

Make the advantages of *DraughtMaster™* known and further increase beer distribution in PET kegs.

Water is a scarce resource on our planet and a fundamental ingredient in our activity. Our water has a particularly high degree of purity and it comes from two springs that flow directly from the mountains above the Brewery. It is thanks to this water that we produce high-quality beer.

Our responsibility to the environment is to ensure that the quality of our water output is the same as that of the intake. For this reason, we are equipped with an innovative purifier. In 2018, more than 70% of the water we used was returned to the environment.

 **FIND OUT MORE ON
OUR WEBSITE**

sostenibilitabycarlsberg.it/tt



**ZERO
WATER
WASTE**

ZERO WATER WASTE

Current trends show that, by 2025, two thirds of the world's population may face water shortages and that ecosystems will be under stress.

To put this in context, only 3% of the world's water supply is fresh and safe for human use – yet most is frozen in glaciers or otherwise inaccessible. Today, with the impact of pollution, climate change and other factors, 1.1 billion people worldwide have no access to fresh water. For 2.7 billion people, water is scarce for at least one month every year.

This is why we have set targets to halve water usage at our breweries by 2030 and to support the mother company in creating partnerships in high-risk areas to protect shared water resources to benefit all.

2018 PERFORMANCE UPDATE

If we used no water at all, there would be no beer. Water is an essential ingredient both in our products and for the cleanings during the brewing process. We need to manage this while keeping in mind the goal of reducing water usage by 50% by 2030.

2030 TARGET

50% REDUCTION IN WATER USAGE AT OUR BREWERIES

PARTNER TO SAFEGUARD SHARED WATER RESOURCES IN HIGH-RISK AREAS

2022 TARGETS

25% REDUCTION IN WATER USAGE AT OUR BREWERIES

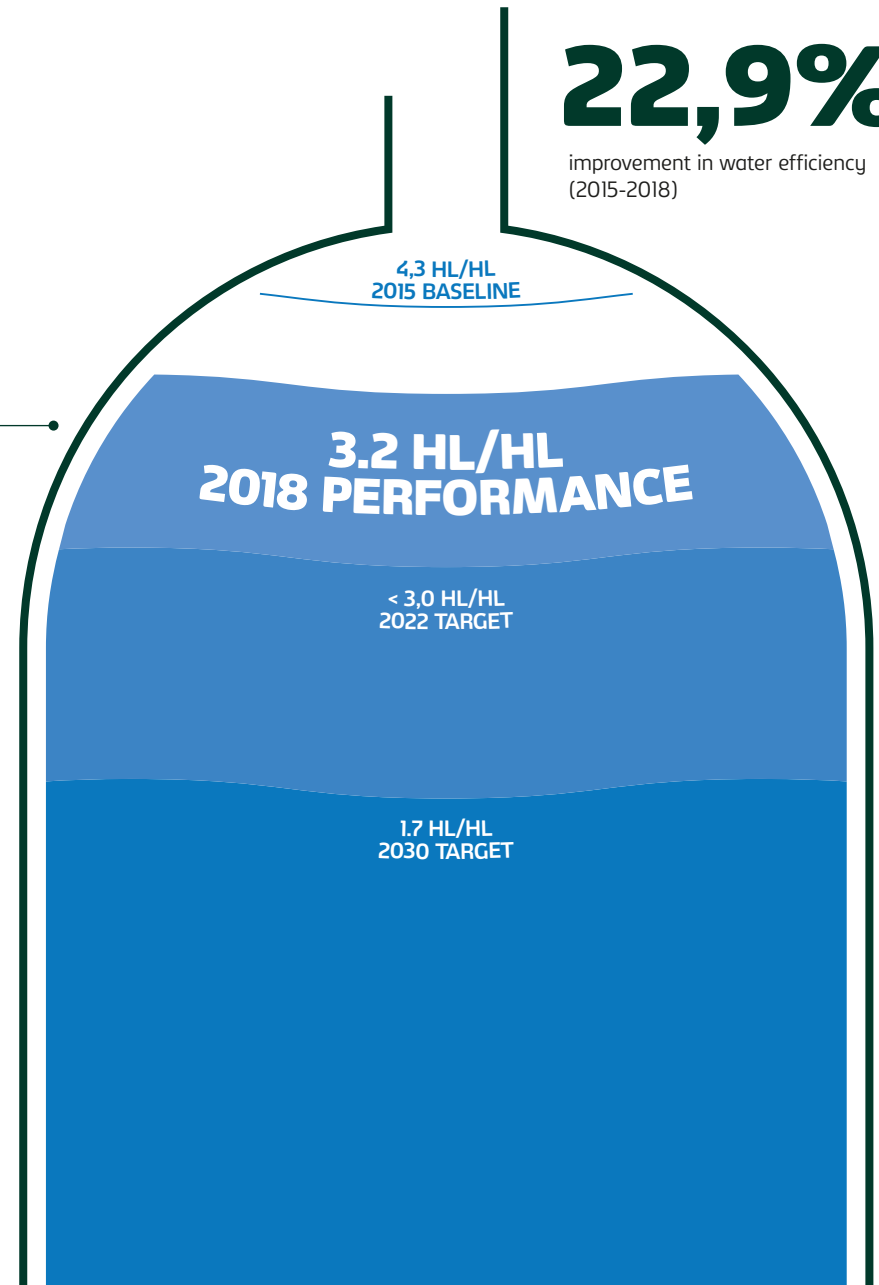
PARTNER TO SAFEGUARD SHARED WATER RESOURCES IN HIGH-RISK AREAS

LIFE IRIS PROJECT



22,9%

improvement in water efficiency (2015-2018)



In 2018, our water efficiency improved slightly. We saved 2,634 m³ of water (-0.6%) and reduced wastewater by 1.2% compared to 2017. Relative water usage, that is the water necessary for the production of one hectolitre of beer, has slightly increased from 3.1 hl/hl in 2017 to 3.2 hl/hl. This is due to decreased beer production. Compared to 2015, our baseline year, the amount of water consumed has reduced by 22.9% confirming our ability to improve water efficiency. We saved 127,970 m³, the equivalent of 4,412 tankers.

Performance in 2018, compared to 2017, underlines the fact that it will be necessary to speed up the change process to reach 2022 target. The launch of the new Flash Pasteurizer will be fundamental and we predict a further 4-5% reduction of total water usage.

OUR WATER PERFORMANCE 2015-2018

WATER SAVED BETWEEN 2015 AND 2018

127,970 m³

Compared to 2015, our baseline year, the amount of water consumed have reduced by **22.9%** confirming our ability to improve water efficiency.

Filling 4,412 tankers is what we could have done with all the saved water from 2015 to 2018, equivalent to 127,970 m³.

4,412 TANKERS



1 tanker = 29m³



**ZERO WATER WASTE
EXAMPLES OF OUR ACTIONS**



SDG TARGETS

- 6.4** By 2030, substantially increase water-use efficiency and ensure sustainable intake and provision of fresh water to address water scarcity.
- 6.5** By 2030, implement integrated water resource management at all levels.

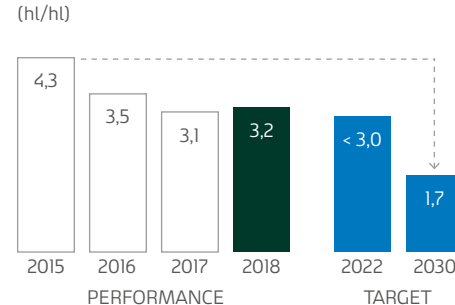
EXAMPLES OF OUR ACTIONS

- ✔ **Constant monitoring of water usage and supply**
- ✔ **Reducing water usage and optimising wastewater treatment**
- ✔ **Installing the new Flash Pasteurizer which will allow further reductions in water usage at the Brewery**

The majority of our progress since 2015 is the result of close attention to efficiency. This was strengthened in 2018 by a review of operative standards for water, conducted by the Carlsberg Group, taking reference from the best practices in the sector. Reducing water usage by 50% by 2030 will require technological innovation which is the focus of the work of the Carlsberg Young Scientists Community .

In 2018, the construction of the new Flash Pasteurizer was completed and in the months of July and September, thanks to the support of our supplier GEA, the first start-up trials were carried out. Tests highlighted some technical issues that can be resolved by carrying out maintenance work on the machine and software. We expect the Flash Pasteurizer to be fully operational at the beginning of 2019. The substitution of the Pasteurizer required a significant investment. The expected benefits are important in terms of the consumption of both water (we estimate a reduction of 4-5% of the total) and energy (gas and electricity).

RELATIVE WATER USAGE



MONITORING AND MAKING PROCESSES MORE EFFICIENT

To improve our performance, we should be aware of and monitor the condition of our water supply network which dates back to the beginning of the 1900s. The network has been upgraded over the years, overcoming obstacles regarding the position of buildings in the factory which are close together in a valley


above the Olona River, in addition to the relocation of departments and the nature of the production process. However, some sections of the network are fifty or sixty years old. To reduce our water usage, we carry out weekly monitoring of the wastewater infrastructure. This allowed us to promptly identify leaks or malfunctions and drastically improve our performance compared to 2015, our baseline year.


WHAT WE SAID 2017

Monitoring processes
Constant monitoring and installation of new meters in specific areas

Innovation
Installation of the new Flash Pasteurizer which allows a further reduction of water usage in the Brewery

WHAT WE DID 2018

We intensified monitoring and checks, also thanks to increased attention by the majority of operators. New meters have not been installed 

Concluded the construction phase for the new Flash Pasteurizer, we carried out start-up trials and implemented the necessary machine and software modifications 

In 2018 we continued to increase meter tests and checks to make data processing more precise. The monitoring system is composed of 22 physical meters from which data are read on the spot and transcribed weekly, in addition to 16 meters which send the data directly back to the monitoring server. Each area of data is individually analysed and processed. Summary graphs are sent to the department manager and placed on the blackboards. This allows for immediate identification of irregular usage and deviations, which helps to raise the awareness of the whole department.

WASTEWATER TREATMENT

Treating wastewater so that it can be reused is an essential phase to cut water usage within the brewing process. Water output from the purifier is used to wash conveyor belts to avoid using clean water.

In 2018 the company's purifier, which was put back into service in 2017, reached its full operational efficiency. Therefore, the quality of the water output was as close as possible to that which we taken from the environment.



PU:REST A CRYSTAL-CLEAR PILSNER BREWED WITH PURIFIED WASTEWATER

To challenge our consumers' preconceived notions and demonstrate how wastewater technology can help solve future world water shortages, we created PU:REST, a crystal-clear pilsner brewed with purified wastewater.

The wastewater used in PU:REST was purified at the Hammarby water treatment plant near Nya Carnegiebryggeriet (New Carnegie Brewery), Sweden, where it was used together with organic pilsner malt, Spalter hops and Brooklyn House lager yeast. Developing and producing PU:REST involved a close collaboration

between Nya Carnegiebryggeriet, IVL Swedish Environmental Institute and Carlsberg Sverige. The limited-edition beer sold out in major retailers within a week.

**LEARN MORE
ON THE WEBSITE**

www.carlsberggroup.com/sustainability

CROSS-CUTTING SDGs
EXAMPLES OF OUR ACTIONS



SDG TARGETS

- 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.

EXAMPLES OF OUR ACTIONS

- 🍷 **Partnering with all public or private bodies and societies that, like us, are interested in protecting water sources**
- 🍷 **Looking for partners to develop innovations and solutions that will allow us to achieve ZERO Water Waste**
- 🍷 **Promote water research conducted by the Carlsberg Young Scientists Community**



“We’ve gotten to know Carlsberg Italia since we awarded it with the Legambiente Innovation award for *DraughtMaster*. Carlsberg Italia can be considered an example because it addresses every aspect of sustainability. For example, Carlsberg has set an ambitious goal in relation to water; a goal that is in line with the Brewery’s performance which has constantly improved water efficiency in the last few years.”

Stefano Ciafani
President of *Legambiente*

**LIFE IRIS PROJECT:
A PARTNERSHIP BETWEEN CARLSBERG
ITALY, UNIVERSITIES AND INSTITUTIONS
TO PROTECT WATER SOURCES**

In 2015 we joined the IRIS (Improve Resilience of Industry Sector) project, a partnership between Italian companies, universities and institutions to raise awareness about the consequences of climate change among business and finance operators. The goal is to encourage the adoption of adaptation measures that limit the impact of climate change.

Carlsberg Italia, the only company of the agrifood sector to join the project, developed its own “Climate Change Adaptation Plan”, which provides for hydrogeological research to assess the potential impact of climate change on its water resources.

As a consequence of the hydrogeological research:

- Obsolete pipelines within the covered section of the Olona River has been removed and the factory’s wastewater collection pipelines have been eliminated, moved underground and connected directly to the purification system for safety reasons
- A water level gauge equipped with a red signal to indicate the alert level has been installed in the river
- A weir has been created on the riverbed to hold debris upstream

By 2019, a continuous water flow monitoring system will be implemented and the possibility to temporarily connect supply pipelines to

the public water main to withstand periods of severe drought will be considered. For a few years now, every month the riverbed of the Olona River is inspected and we regularly maintain the dam upstream from the plant to eliminate debris. In this way we contribute to protecting our territory and our community by preventing environmental emergencies.

**ACTIONS
TOWARDS ZERO 2019**

Increase monitoring and checking of meters

Activate the Flash Pasteurizer and verify the impacts on the reduction of water usage

Raise awareness in all employees about how to avoid water waste

Create a continuous water flow monitoring system

Start research to evaluate the possibility of a temporary connection to the public water main in case of drought



ZERO IRRESPONSIBLE DRINKING

Consumers have the right to know what is in our beers and we are proud of showing them. 100% of our product packaging provides information on ingredients and nutrition facts for 100 ml of beer.

We want our beer to be drunk responsibly. This is why we encourage pairing food with beer by proposing Birrificio Angelo Poretti beers with some of the most typical Italian dishes.

➤ **FOR FURTHER INFORMATION,
PLEASE VISIT OUR WEBSITE**
sostenibilitabycarlsberg.it/ttz

ZERO IRRESPONSIBLE DRINKING

Our beers are consumed in moments of fun and relax. Sometimes they may not be drunk responsibly. We and our partners constantly promote a safer drinking culture, and try to find efficient solutions for such a complex problem.

Something is actually changing. The World Health Organization (WHO) has recorded a significant decrease in excessive and dangerous alcohol consumption since 2002. The decrease, is particularly remarkable in the Nordic Countries and the United Kingdom, and it is mainly related to the constant state of drunkenness, alcohol consumption at an early age and excessive alcohol consumption. In Italy, on the contrary, the problem is much less extensive.

However, this is still an important challenge and, in order to improve, we also need the help of all stakeholders. Although the way to drink our beers is a consumer's choice, anyway we still encourage them to make responsible choices.

2030 TARGET

100% OF OUR MARKETS IMPROVE RESPONSIBLE DRINKING YEAR BY YEAR

2022 TARGET

100% AVAILABILITY OF ALCOHOL FREE BEERS

100% 'DRINK RESPONSIBLY' MESSAGE CONVEYED THROUGH PACKAGING AND BRANDS

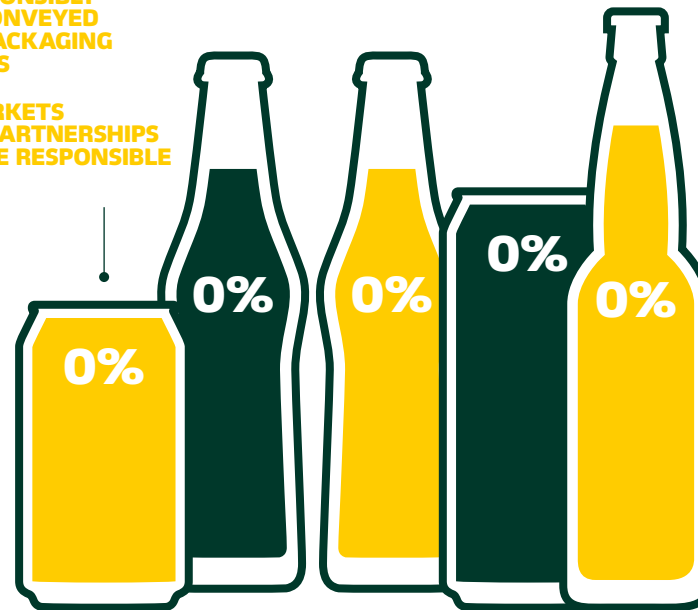
100% OF OUR MARKETS ESTABLISH PARTNERSHIPS TO PROMOTE RESPONSIBLE DRINKING

100%

of our products display messages about responsible consumption of alcohol, which suggest to "don't drink and drive", if you are pregnant or if you are under the legal drinking age.

16,7%

Increased volume of alcohol-free beers in Italy



ZERO IRRESPONSIBLE DRINKING
EXAMPLES OF OUR ACTIONS



SDG TARGETS

- 3.5** Strengthen prevention and treatment of substance abuse, including dangerous consumption of alcohol.
- 3.6** By 2020, halve the number of deaths and injuries caused by car accidents at a global level.

EXAMPLES OF OUR ACTIONS

- ✔ **Increased number of messages about responsible alcohol consumption both on packaging and online.**
- ✔ **Added information on ingredients and nutrition facts, "Don't Drink & Drive" symbol on the brands' websites**
- ✔ **Introduced procedures to prevent minors from accessing digital platforms.**
- ✔ **Equipped new company car fleet with Alcolock devices**
- ✔ **Given disposable alcohol tests as a gift during Open Days at our Brewery**

Our approach is to inform and encourage a responsible choice (see below). As a Group, we develop campaigns addressing the main problems in each market, such as drunk driving, underage drinking and binge drinking. We collaborate with local partners, identify the key behaviour to be changed and then intervene in stores, consumption habits, as well as through our marketing communication.

ENCOURAGING RESPONSIBLE DRINKING

MARKETING COMMUNICATION

Our Marketing Communication Policy and Responsible Drinking Policy are at the base of any marketing communication to consumers. Furthermore, as Carlsberg Italia we adhere to

Assobirra's Alcohol Policy and to the Advertising Code of Practice of the Italian Advertisers Union.

As a Group, we follow a strict self-regulation in our marketing communication and our Parent Company carries out inflexible controls on the advertising contents delivered in each Country to make sure that they comply with the following requirements: no use of models under 25 years of age, never refer to minors, advertisements present only in contexts where at least 70% of the audience is above the legal drinking age (Responsible Marketing Agreement managed by the World Federation of Advertisers, an independent supervisory authority).

In the course of the year, our brands' websites have been enriched with transparent informa-

tion on the ingredients and nutrition facts of our products.

PACKAGING

In order to encourage responsible consumption of beer, we provide clear information both on the labels of our beers and online.

100% of our products convey messages about responsible alcohol consumption, suggesting not to drive if under the legal drinking age or pregnant.

Our brands are the most relevant communication channel with consumers. It is therefore of outmost importance to use them in a responsible way by conveying messages that promote moderate drinking discourage alcohol consumption by those who are not legally entitled to.

OUR APPROACH



OFFER

Offering a wide range of alcohol-free beers for different consumption occasions

INFORM

Providing information on responsible drinking both on packaging and online to encourage positive consumption choices.

ENCOURAGE

Promote responsible drinking among consumers through dialogue and participation



DO NOT RISK: DON'T DRINK AND DRIVE

In 2018 we worked hard to make consumers aware of the effects of alcohol on driving. In fact, thanks to our special 3D glasses, called Beer Goggles, during the Open Days at our Brewery, visitors had the chance to experience the risks of drunk driving. Inside Villa Magnani there was an area entirely dedicated to sensory activities: by wearing the Beer Goggles, which simulate a state of drunkenness, visitors can walk through a slalom path and then try to shoot a small basketball. By doing this, they can understand the effects of excessive alcohol consumption. In 2018, over 2,200 people participated in these activities.

All of this was possible thanks to our employees and especially thanks to the enthusiasm of the 55 employees responsible for engaging and raising awareness among visitors during the Open Days.

These 55 employees are ambassadors both of beer quality and responsible consumption to protect everyone's health. Together with our awareness raising activities for responsible drinking, this year we started distributing single-use alcohol tests to customers buying a beer pack at our Brewery's Shop.

Actions to foster responsible consumption, however, were not just limited to our Brewery.

We have used the Beer Goggles in Milan as well, during the press conference for the presentation of two electric cars provided by E-Vai. In that occasion we tried to raise journalists', participants' and passer-bys' awareness also by offering them single-use alcohol tests.

To help consumers to make informed choices, we have enriched our product communication by providing information on ingredi-

ents and nutrition facts on all our packages: consumers have the right to know what is in our beers.

WHAT WE SAID 2017

Make employees aware

Alcolock, the device the new Carlsberg Italia car fleet will be equipped with and that does not allow to start the car if you are not completely sober

Make consumers aware

Donating part of the proceeds of our Brewery's Shop to associations whose aim is to raise awareness on the topic of responsible consumption

ACI Agreement - "DON'T DRINK AND DRIVE" awareness campaign

Free alcohol-test kits during the Open Days

Paid taxi service with the purchase of a beer

WHAT WE DID 2018

25 cars of Carlsberg Italia fleet have been equipped with the *Alcolock* device



We have not found a partner able to carry out awareness activities yet, in order to promote responsible consumption in line with our policy



ACI has carried out some awareness activities addressed to visitors during the Open Days at our Brewery



We have distributed single-use alcohol tests to both customers buying a pack of beer at our Brewery's Shop and during public events, where it is of utmost importance to convey the message of responsible drinking



The initiative was not implemented as we have rather focused on the prevention of excessive alcohol consumption for the safeguard of consumers' health



UNDERAGE DRINKING

To reach the 2020 targets, we must draw particular attention to prevent alcohol from being consumed and sold to minors. In this context, greater control over youngsters' access to digital platforms is needed. This is why the Group is implementing the Digital Guiding Principles (DGP), a new standard in the sector, to apply our marketing policies to digital channels. Particular attention is paid to youngsters to make sure that they are not exposed to alcohol advertising. For this reason, we:

- use *age-gating* to check their age
- do not send advertisements to minors
- launch awareness raising campaigns for the most followed channels by youngsters in collaboration with associations working in this field, other producers and stores.

Preventing underage drinking is a great challenge. We are committed to challenge it.

PREVENTING DRUNK DRIVING

To raise awareness in consumers on the risks of drunk driving, we:

- apply the "Don't Drink & Drive" symbol on the labels of all our beers
- include the website address www.beviresponsabile.it* in all our communication materials and packs

- organize initiatives during the Open Days at our Brewery in Induno Olona. In 2018, we invested additional resources to increase the number of visitors during the Open Days at our Brewery. Therefore, we welcomed over 10,000 visitors (almost double the number of 2017), who were involved in activities related to responsible drinking that were particularly appreciated.

The awareness-raising activities are also addressed to Carlsberg Italia. In compliance with the Group policy, introduced in 2017, all the company cars purchased in 2018 are equipped with Alcolock devices, which do not allow you to drive if the legal limit of blood-alcohol level has been exceeded. The device is present on 25 cars (about 19%).

ALCOHOL-FREE BEERS

Alcohol-Free Beers (AFB), are an alternative to traditional beers, particularly when it is better not to drink alcohol.

As a Group, we have set an important goal, that is to reach 100% availability of alcohol-free beers on the market by 2022. The wider choice of alcohol-free beers in our portfolio and their greater availability on the market allows consumers to make choices in



LAUNCH OF BIRELL IN BULGARIA AND POLAND

In May 2018, Birell, a new alcohol-free beer, was launched. The brand, in the Pilsner Lager and Belgian Wit version, made its debut in Bulgaria and Poland, with another launch set for 2020. This new AFB was developed to meet the strong consumers' demand for alcohol free beers, which has increased in the last 10 years.

Birell meets the needs of all potential consumers wishing a wider range of alcohol free beers, while keeping the traditional taste. Birell offers indeed the same body, feeling and, above all, taste of a traditional beer.



VISIT BIRELL WEBSITE:
www.birell.com

* www.beviresponsabile.it is Assobirra's communication platform dedicated to responsible drinking. It contains several information and specific campaigns on the topic.



“ Responsible drinking can be helped by the cultural model proposed by a nightspot. The model we propose at Spirit de Milan (music, fun, cross-generational and a cross-cultural environment) has what it takes to avoid excess. Such diverse audience can discourage over-the-top behaviour. Also, offering an environment that stimulates dialogue, with music and dance creates interaction and synergy. In the future we would like to develop a sustainable mobility project, such as car sharing”

Luca Locatelli
Spirit de Milan

a more conscious and responsible way. The Group is making huge steps in this respect, also launching new alcohol-free beers brands, such as Birell in Bulgaria and Poland.

PROMOTING A POSITIVE BEER CULTURE

Our brands play a key role in promoting a correct drinking culture. Through our brands, we convey targeted and positive messages on moderate drinking. Among our initiatives, the ones in partnership with the Birrificio Angelo Poretti brand, aimed at promoting beer culture in all its aspects, also through the concept of drinking while eating healthy and quality food.

Birrificio Angelo Poretti carefully selects the best events dedicated to Food and develops food and beer pairings, with the precious contribution of its Beer Experts. In such occasions, the product is described to consumers in its whole, explaining characteristics and pairing criteria, based on similar or contrasting aspects. In 2018 we took part in several events related to food, such as Taste of Milan and Rome, Cibo a Regola D'Arte in Milan, tastings with La Scuola della Cucina Italiana and ALMA, courses with food pairings at Farm 65, dinners with beer tasting in partnership with renowned Chefs at PRESSO, beer courses

providing a final certificate of attendance, as well as in the best known ones, such as Milan Design and Food Week. We strive to promote an ever more responsible beer consumption: it is not easy to change habits but, we are constantly highly committed to open a productive dialogue with consumers, engaging them more and more actively in the fascinating world of beer.

ACTIONS TOWARDS ZERO 2019

Install the Alcolock device on the new cars of the Carlsberg Italia's fleet

Continue with awareness-raising initiatives to promote a responsible and moderate consumption during the Brewery openings

Promote responsible drinking within events and public initiatives

Place new non-alcoholic beers in our portfolio



ZERO ACCIDENTS CULTURE



“Always follow the lock out/tag procedures”. This is one of the five “Carlsberg Life-Saving Rules”. The training on the Life-Saving rules has deeply influenced our company.

➤ FOR FURTHER INFORMATION,
PLEASE VISIT OUR WEBSITE:
sostenibilitabycarlsberg.it/tz

ZERO ACCIDENTS CULTURE

Protecting life and health of our people is a key value to us. We aim at reaching the 'ZERO accidents' goal always putting health and safety first and ensuring compliance with our rules and standards.

How are we creating a long-lasting 'ZERO accidents' culture? Taking our managers as an example, first of all. However, action is more efficient when our employees on site are trained to follow rules and procedures and have the possibility to constantly identify risks and propose solutions independently. This allows the company to prevent accidents or to learn from them, if they occur.

2030 TARGET

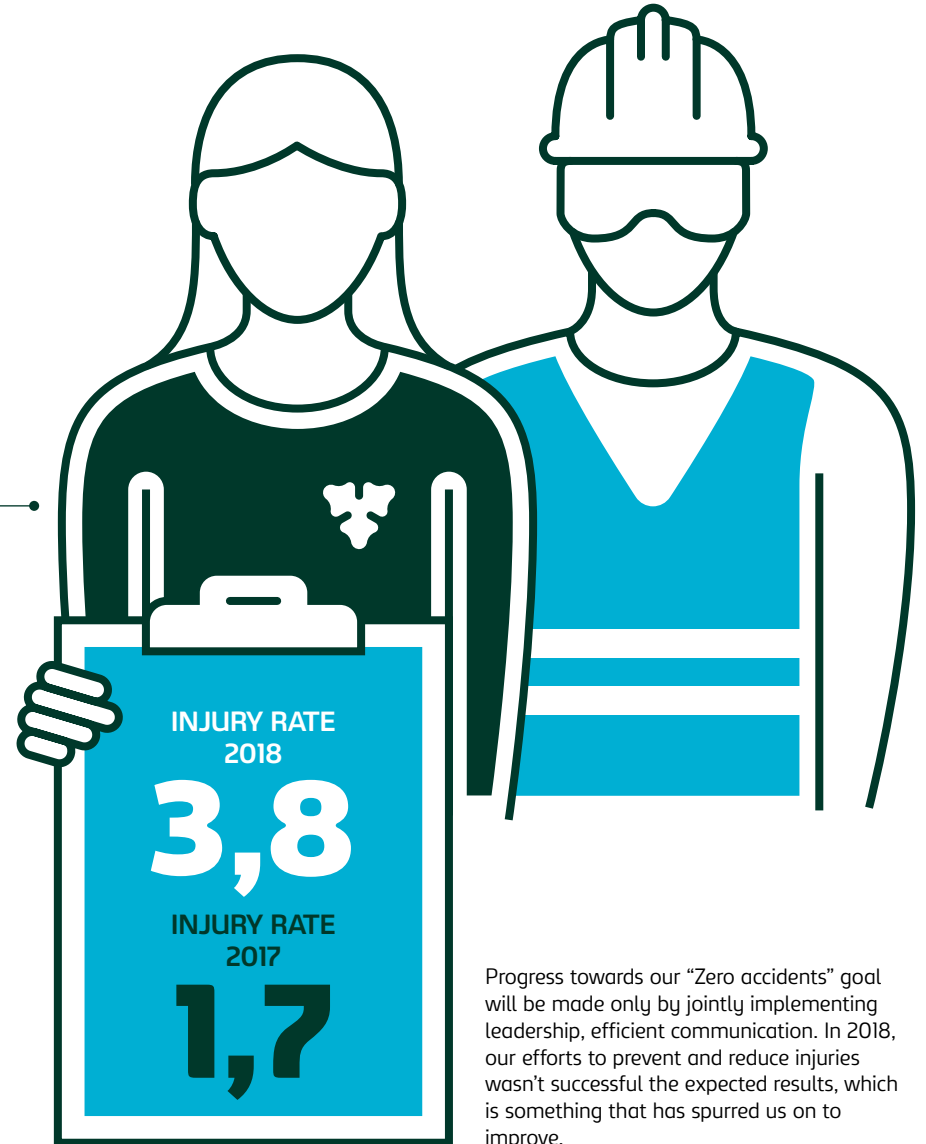
ZERO ACCIDENTS

2022 TARGET

REDUCE THE ACCIDENTS RATE YEAR BY YEAR



"Carlsberg Life-Saving Rules" were shared through a wide company training programme. Based on the company's experience in the sector, it focuses on specific areas where people's life is at risk if the Rules are not followed correctly.



Progress towards our "Zero accidents" goal will be made only by jointly implementing leadership, efficient communication. In 2018, our efforts to prevent and reduce injuries wasn't successful the expected results, which is something that has spurred us on to improve.

**'ZERO ACCIDENTS' CULTURE
EXAMPLES OF OUR ACTIONS**



SDGs AND TARGETS

8.8 Safeguard workers' rights and promote a safe working environment for all workers.

EXAMPLES OF OUR ACTIONS

- ✔ **Developed further procedures for the collection and recording of possible dangers to improve risk management, thanks to the support of all the managers**
- ✔ **Implemented new procedures and improved existing ones**
- ✔ **Carried out communication and training activities addressed to managers and employees to raise awareness and grant responsibility on health and safety and, in particular, help managers lead as an example, communicate in a consistent way and commit to the Life-Saving Rules together with their team**
- ✔ **ZERO accidents culture spread among employees, at all levels, and suppliers through periodic communication and specific initiatives**

OUR PERFORMANCE IN 2018

We aim at reducing the number of accidents year by year and reaching the ambitious 'ZERO accidents' goal by 2030. In 2017, the accident rate decreased significantly (2.9 in 2016; 1.7 in 2017). We managed to achieve the incredible result of 'ZERO' car accidents. In 2018 the rate of accidents increased up to 3.8 due to 4 car accidents not caused by our employees. The number of accidents recorded inside factories, instead, is equivalent to that of 2017. The accident severity index, amounting to 36.5, has slightly increased. This highlights the importance of daily supervision and the steps taken towards a culture of safeguarding health and safety at work.

IDENTIFYING RISKS AND PREVENTING ACCIDENTS

In 2018, reports from our employees on both factory and office departments, including the external areas and the purifier, have increased. Therefore, we have had the chance to implement a series of preventive measures.

The increased engagement of our employees in timely reporting shows that the awareness raising process on the culture of safety was effective.

Implemented in our production site in Induno Olona, the Near Miss procedure allows to report any work-related event that could have caused injuries, illness or damaged structures (and actually didn't). It has now been enriched with the introduction of two new types of reports:

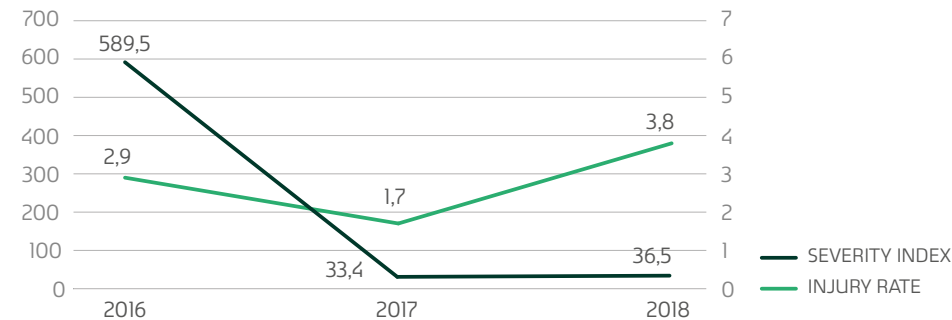
- Safety Conditions, related to "conditions of structures and places that could cause injuries or damages"
- Safety Behaviour, related to "repeated behaviour that sooner or later will cause damages or injuries".

In 2018, a total of 450 reports were collected: 110 regarding "Near Miss", 243 related to unsafe Conditions and 97 to unsafe Behaviour.

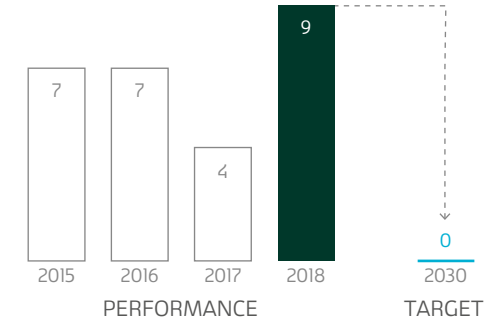
Throughout the year we monitor the plant's safety by means of a "Safety Walks". In 2018 the number of Safety Walks amounted to 183, among which: 30 in the Production department, 13 in Maintenance, 10 in the Laboratory, 102 in Packaging, 10 in Logistics and 18 in the external areas.

Furthermore, in order to prevent any repeated incidence, we analyze accidents and try to identify their causes and consequently plan preventive actions. Such actions are shared also within the Group, so that what the results of the analysis can be translated into safety requirements for the production plants of Carlsberg Group all over the world.

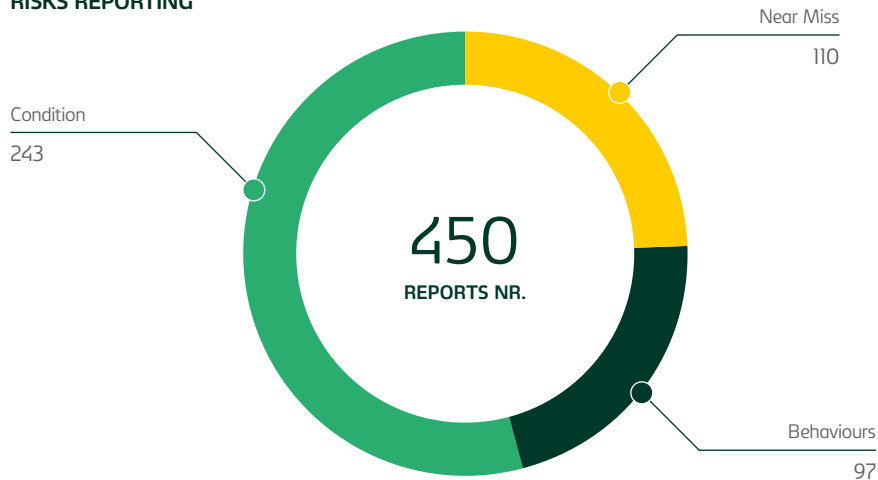
INJURIES AND SEVERITY



ACCIDENTS



RISKS REPORTING



ACCIDENTS MANAGEMENT PROCESS

IDENTIFICATION

All Carlsberg Group plants are equipped with devices that promote and ease the report of accidents. In event of an accident, the Health and Safety Manager must be immediately notified in order to promptly implement the controls aimed at limiting danger and preventing any further damage.

CLASSIFICATION

The Health and Safety Manager ensures that accidents are correctly classified based on the local applicable law and requirements set by Carlsberg Group. Injuries and illnesses are considered separately, and each accident is classified based on severity.

COMMUNICATION AND REPORTING

Accident reporting follows a defined process, according to type of accident and consequences. In addition, it is based on Carlsberg Group Records Management & Personal Data Protection Policy, Carlsberg Crisis Management Policy and local laws.

Depending on the type of accident, a precise communication and reporting process is indicated. The latter provides for the filling out of a form available on the Group's intranet, to be sent to all managers involved, including the CEO.

ANALYSIS

An analysis is carried out right after an accident is identified. The more severe the accident is, the more in-depth the analysis will be.



LEARN FROM ACCIDENTS: REAL-LIFE STORY

ACCIDENT DESCRIPTION:

After measuring and sampling unbottled beers, the operator, while going down the three steps of the tank's staircase, put his foot on the last step edge, thus twisting his ankle.

CAUSE:

Tank having a tight staircase and no handrail, sides or other anchorage points.

ACTION PLAN:

- Establishing a specific procedure to go down the staircase

- Strengthening communication as for not carrying materials while using a staircase
- Check that the same risk is not present in other activities
- Providing the Brewery with staircases of a suitable size and equipped with handrail
- Equipping the tank with bulks, so that operators can reach the anchorage points directly from the ground, without using a staircase.

The actual consequences and severity of each accident will be taken into account

Accidents must be analysed together with the parties involved (where possible), the manager of the area concerned and the Health and Safety Manager.

A preliminary report shall be drafted within 24 hours and shall include:

- basic information: place/area, date and time, type of worker involved (temporary, permanent or seasonal worker, on-site supplier), type of injury (fracture, sprain, cut, burn, etc.), diagnosis and prognosis
- description of the accident (what happened)
- analysis of the main causes, including causes and factors contributing to the accident
- immediate actions and action plan follow-ups.

Once completed, the preliminary report shall be sent by email to the parties involved.

REVIEW AND FOLLOW-UP

Within 48 hours from the accident, a meeting shall be organized and attended by all the subjects indicated in the reporting model previously filled out. The aim of the meeting is to discuss the accident in detail, analyse the main causes and factors, define the corrective measures needed and plan their implementation. Such corrective measures shall be implemented and monitored under the supervision of the director in charge, who shall ensure their prompt implementation.

The results of the review and those of the accident analysis shall be shared with employees, on-site suppliers and all parties involved so to prevent any repeated incidences.



INNOVATIVE TECHNOLOGY FOR WAREHOUSE SAFETY

To ensure better safety conditions to all our operators, we have implemented technologically advanced forklift trucks for our warehouse handling. This applies to our Induno Olona and Number1 hubs, the latter located in Settala, Milan, where all domestic Carlsberg Italia shipments and product storage are managed. The forklifts are equipped with three safety systems:

- **Blue Light:** a warning system installed on the forklift trucks that, by projecting a blue light projection on the ground, warns passers-by that a vehicle is coming. It is particularly useful when architectural structures, furniture and shelves limit visibility of vehicles in motion
- **Spot Me:** technology that, thanks to

infrared sensors sensitive to the driving direction, allows to detect the presence of fork-lift trucks and operators at the crossroads. Through a flashing led light, it then signals potential collision risks in time;

- **I-Site:** an innovative device that, mounted on forklift trucks, sends data to a server that, in its turn, sends it to operators, who can access it through computers, tablets and smartphones. Each operator, by means of the smart access provided by their badge, can access only their assigned vehicles. In this way, its use by non-authorized operators will be prevented. Furthermore, thanks to the information available, in case of relevant collisions, each operator can block the trucks automatically.



“Nothing is more important than the health and safety of our people and no task is so important to put their life at risk. We have a challenge, and this challenge is to create a ‘ZERO accidents’ culture for the whole Group. More than 40,000 employees have been required to identify and eliminate possible risks, and to be ambassadors of our safety rules”

Philip A. Hodges
EVP Group Supply Chain
Carlsberg Group

LIFE-SAVING RULES

In 2018 we implemented the “Life-Saving Rules” programme created by the Parent Company for the whole Group. Based on a general experience in the field, the programme focuses on specific areas where people’s life could be put at significant risk if rules are not correctly followed.

Such initiative has deeply affected the organization.

We worked on a wide company training programme on all the “Life-Saving Rules” and we started creating detailed communication and training initiatives for each Rule. This for the staff to fully understand the all requirements and get ready to observe them.

In particular, in the course of the year, we have created a campaign on Rule #2 “Always follow the lockout/tag out procedures”. Besides theoretical and practical training on-site, posters were hung in the factory to remind employees of the importance of such Rule.

LIFE-SAVING RULES:

- #1. Always follow traffic rules (on-site and on the road)
- #2. Always follow the lock out/tag out procedures
- #3. Do not remove, bypass or damage safety devices and interlocks
- #4. Always observe procedures for working at heights
- #5. Always observe the procedures before entering confined spaces (closed or partially closed spaces, where it is difficult to enter or exit and/or with a hazardous atmosphere)


WHAT WE SAID 2017


Involvement of all employees
Continue with communication and training activities at all levels


Procedures to communicate and manage any risks
Improve the procedures for collecting and recording reports of probable situations or risk behaviors thanks to the support of all managers

Policies and management systems
Implement the new Health and Safety policy and Carlsberg’s “Life-saving Rules” program

WHAT WE DID 2018

Communication and training activities, in particular on the Life-Saving Rules, addressed to managers and employees have increased awareness and responsibility 

New procedures for collecting and registering reports of probable dangers, developed thanks to the support of all managers, have improved risk management 

The new Health and Safety policy and the Life-saving Rules program have been implemented by improving existing procedures and methods and creating new ones 



NEPAL, WHEN HELP COMES FROM A CELEBRITY

Gorkha Brewery in Nepal saw Jitu Nepal, a famous actor, as the protagonist of an internal communication campaign promoted to help the introduction of the 'ZERO accidents' culture. The campaign consisted in posters related to safety and a series of downloadable videos. After a health and safety assessment of the brewery, key messages to be used in the campaign were identified to encourage safety procedures in the workplace and later popularized by Jitu Nepal in an engaging way.

TRAINING AT ALL LEVELS

In 2018, more than 200 people participated in the training sessions. Among the participants, employees from our offices in Lainate, our factory in Induno Olona, logistics and our sales team. Furthermore, we have addressed a specific module to the forklift drivers of our supplier, Number1, operating in our factory, with a focus on Rule #1. Always follow traffic rules (on-site and on the road). Also seasonal workers participated in the training. In the course of the year, our programme has made huge progress in helping our managers behave at their best, communicate in a consistent way and commit to health and safety conditions together with their teams.

All managers are required to:

- make sure that the Life-Saving Rules are correctly communicated to all members of their staff and that the latter receive a suitable training;

- provide to all the staff involved infrastructures, equipment, processes and procedures needed to comply with and then implement the Life-Saving Rules;

Employees, in their turn, must

- always observe the applicable Life-Saving Rules;
- participate in trainings;
- ask their manager for help in case how to apply one of the Life-Saving Rules.

In 2019, we will implement other actions aimed at introducing the Life-Saving Rules in Carlsberg Italia's activities in a more consistent way.

ACTIONS TOWARDS ZERO 2019

Continue to develop training and communication of our Health and Safety Policy at all levels

Continue with the training on the Life-Saving Rules through specific campaigns

Continue with the implementation of the Life-Saving Rules updating and improving processes and procedures, while verifying their compliance

Implement new ways to engage employees and collect suggestions, so that everyone can actively take part in health and safety processes



Ethics, integrity, honesty and fairness are some of the core values of our business culture. Our behaviour is shaped on them. We produce quality beers thanks to a motivated and skilled team, respecting the environment and the territory. We are the only beer producer in the world whose main shareholder is a Foundation that funds scientific, cultural and social activities.

▶ **DOWNLOAD OUR POLICIES FROM OUR WEBSITE**
carlsbergitalia.it

RESPONSIBLE BUSINESS



RESPONSIBLE BUSINESS

LIVE BY OUR COMPASS

Carlsberg Group's activity is based on solid values, such as honesty and integrity. We promote a business culture whose pillar is ethical and fair behaviour.

The management of our business requires full awareness of the responsibility we held towards our stakeholders. We have therefore created an organization through which we manage our business. In this way, thanks to a skilled and motivated team providing quality products, respecting the environment and the territory, we meet the needs of the market in a transparent and ethical way.

CORPORATE GOVERNANCE

Carlsberg Group owns 100% of Carlsberg Italia and is in its turn controlled by a Foundation, whose Articles of Association provide that it holds the majority of votes of the Board and at least 25% of the share capital. Carlsberg Group directs and coordinates the activities of Carlsberg Italia through the Assembly of Shareholders and the Board of Directors. The Board of Directors is composed

of 5 members appointed by the Parent Company. The Chairman of the Board does not have executive 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.

In this Sustainability Report, the reference is to the governance of Carlsberg Italia S.p.A.

Ethics and transparency are the pillars of our management model, a series of clear protocols and procedures through which we implement our strategy.

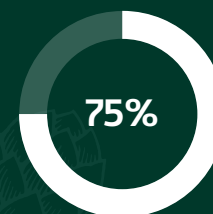
CARLSBERG FOUNDATION

The success of the company was the result of the contribution of the whole. However, J.C. Jacobsen, the founder, was convinced that such results were also due to the contribution given by the social fabric. His success had to be shared with citizens.

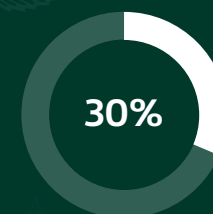
And J.C. Carlsberg Foundation was born, to put the company's talent in the production of quality beer, the richness of the territory and collectivity all together.

Carlsberg Group is still the only beer producer in the world owned by a business foundation.

CARLSBERG FOUNDATION

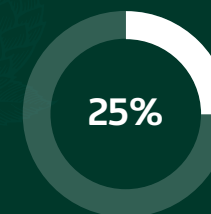


OF VOTES

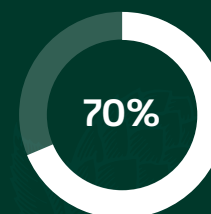


OF CAPITAL

PUBLIC FLOAT ON FINANCIAL MARKETS



OF VOTES



OF CAPITAL

Carlsberg A/S
100%

Listed on Nasdaq and OMX Copenhagen

Carlsberg Breweries A/S
Not Quoted

Local/National businesses

ETHICS AND TRANSPARENCY

Ethics and transparency are the pillars of management model: codes, protocols and procedures to build our strategy.

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 bring together ISO 9001 (quality management) for the office in Lainate and the factory in Induno Olona, ISO 14001 (environmental management) and OHSAS 18001 (occupational health and safety). Furthermore, we hold ISO 50001 (energy management) accreditation for our factory in Induno Olona.

SUSTAINABILITY GOVERNANCE

Sustainability is an integral part of our management model. For this reason, we adopt management tools and processes, such as the Sustainability Report, and have meetings with our stakeholders (Accountability AA1000 guidelines).

To manage the sustainability of our products and processes, we adopt the Life Cycle Assess-

ment (LCA), the scientific tool that assesses the environmental impact throughout the various phases of the life cycle, based on the Kg of CO₂ emitted.

IMPROVEMENTS IN 2018

In the course of the year, we have assessed and researched proper and efficient existing mechanisms to prevent crime, as per Legislative Decree 231/01 and subsequent amendments and integrations.

We have also implemented protocols and procedures aimed at preventing 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.

Furthermore, special training sessions concerning Compliance (Code of Ethics and Law on the protection of free competition and market) addressed to all Carlsberg employees, including blue collars, were organised. This shows the company's commitment to reach its goals while remaining faithful to the values of integrity and ethics that have always characterized it.

Further training sessions concerned the entry into force of the European regulation on data protection (GDPR).



CARLSBERG FOUNDATION

Sharing with society the value we create.

J.C. Jacobsen saw fit to share his company's success with the community. He believed the company plays a key role in supporting Carlsberg's activity.

Producing beer of such a high quality to honour the company requires the contribution of the community where the company works. According to Carlsberg's founder, the community has the right to be acknowledged for the contribution given.

And based on this idea, Carlsberg Foundation was born. In 2018, Carlsberg Foundation donated more than 500 million Danish kroner, equal to more than 60 million Euros, for scientific, cultural and social activities. Such higher allocation of money was possible thanks to the greater financial performances recorded by the Group.

CARLSBERG ITALIA FOUNDATION MULTI-YEAR RESEARCH AND ARCHEOLOGICAL EXCAVATIONS PROJECT IN THE FORUM OF CAESAR IN ROME

In 2017, Carlsberg Foundation allocated 1.5 million Euros to a multi-year project of research and archeological excavation at the Forum of Caesar in Rome. The excavations started in 2018 and are expected to continue until 2021. Using the latest technology in science and archeology, the excavations will provide vital information to learn more about Rome and its urban development over a 3000-year period.

The results of the excavations will be published both on scientific journals and on the newspapers of the Danish Institute in Rome, *Analecta Romanae Instituti Danici*. The project involves renowned Italian and Danish scientists and is led in collaboration with the Cultural Heritage Authority (*Sovrintendenza Capitolina ai Beni Culturali*), Urban Network Evolution (UrbNet) of Aarhus University. UrbNet is in fact a research initiative funded by the Danish National Research Foundation, run by Professor Rubina Raja and the Danish Institute in Rome.

TIMPONEMOTTA: A COLLABORATION PROMOTING ART AND ARCHEOLOGY SINCE 2007

Since 2007, Carlsberg Foundation has been supporting scientific research at the Timpone Motta archeological site in Francavilla Marittima (Cosenza). The Italian-Danish archeological project is aimed at exploring a fundamental site for the understanding of cultural development between 800 BC and 500 BC in the western part of the Mediterranean area. In those years, connections and trading among Calabria, Salento, Campania and the Etruscan area developed. That was when the Southern Italy came into contact with populations from the East and the Aegean Sea area. In recent years, the support of Carlsberg Foundation allowed to discover ruins of ancient houses and of a sacred building. Located in the Timpone della Motta sanctuary and dating back to the 6th century BC, this sacred building hid incredible archeological finds that.

In 2018 an exhibition was set up at Palazzo De Santis in Francavilla Marittima. Titled 'Francavilla Marittima - un patrimonio ricontestualizzato' (Francavilla Marittima - a recontextualised heritage) the exhibition dis-

plays 65 finds dating back to the 8th and 6th century BC. Among the finds, there are finely manufactured terracotta vases, terracotta and ivory statuettes. Such objects are part of Ny Carlsberg Glyptotek and were brought back to Italy after proving they were actually stolen during illegal excavations in the 1970s. The repatriation is part of a wide cultural project born from the collaboration between MiBAC and Ny Carlsberg Glyptotek.

In summer 2018, in the ancient Aquinum site (near Frosinone), four marble portraits were also found. Besides being of high artistic qual-

ity, they also represent important evidence of the ancient Roman sculpture tradition.

Moreover, an analysis of the paint traces on the portraits and on-site research, for which Carlsberg Glyptotek is at the forefront will be carried out. All of this, thanks to the collaboration between the Cultural Heritage Department of the University of Salento and the Superintendence of Archeology, Fine Arts and Landscape. This initiative, supported by Carlsberg Foundation, will take place in 2019. Before getting back to Italy, the portraits will be displayed in a temporary exhibition at Ny Carlsberg Glyptotek.

CARLSBERG FOUNDATION

- One of the oldest business Foundations (1876)
- Was set up to manage Carlsberg Laboratory and to support scientific research in Natural Science, Mathematics, Philosophy and Human Science
- Founder of the Museum of Natural History in Copenhagen
- Carlsberg Group's controlling shareholder. It owns at least 70% of the votes of the Board and 30% of the share capital
- Makes sure that the business is focused on Research, Innovation and high-quality beer (Carlsberg Research Laboratory)
- Gives its own contribution to society by supporting science, education, arts and culture.



OUR PEOPLE

Carlsberg Italia values people. Through a careful performance analysis, we create training programmes to enhance their skills and provide opportunities of professional growth.

The Human Resources team supports both the Group's business and all the departments. To be ever more effective, in 2017 it decided to adopt the Business Partner logic. In fact, there is a single contact person for each specific area of responsibility so that the organization can be ready to face any internal and market change. Carlsberg Italia integrates initiatives proposed by the Group with local projects aiming at

meeting the specific needs of our people, those who allow us to really make a difference.

TOOLS AND PROCESSES OF THE AREA

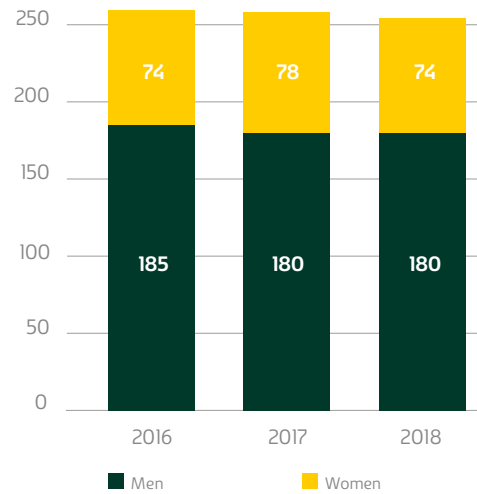
- **People@carlsberg:** a cloud-based HR platform implemented in 2017 shared within the Group, mainly for the management of the performance and training proposed by the Parent Company.
- **My Voice:** survey on the business environment promoted, every two years, in all countries. The results are shared through team meetings and interdepartmental focus groups. Based on these results areas of intervention and possible improvements are defined.
- **Sailing Together** and **Site meeting:** meetings between managers and operational teams to share performance results and strategies.



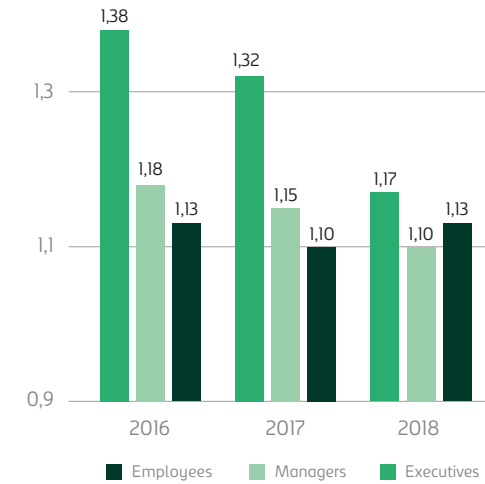
PEOPLE OF CARLSBERG ITALIA

- 254 employees: 74 women (29%) and 180 men (71%)
- 27%: employees under 40
- 50%: people employed in Sales & Marketing
- 1 employee out of 4 produces beer (Production department)
- 96%: employees with a permanent contract
- Human Resources Turnover: 22 terminations and 18 new recruitments
- Gender Equal Opportunities in the turnover
 - terminations: 7 women, 15 men
 - recruitments: 3 women, 15 men
- Male/female pay gap index: decreased among executives and managers

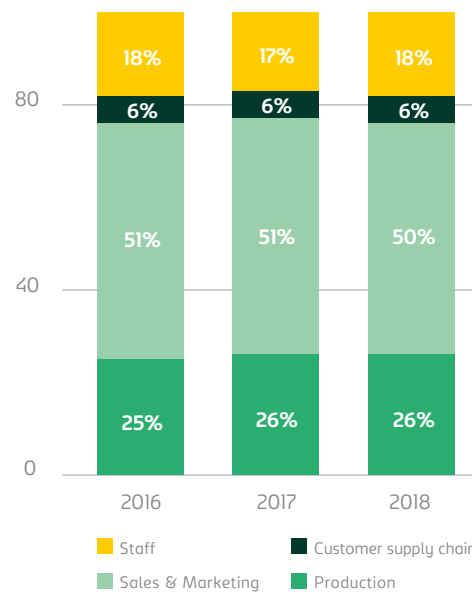
EMPLOYEES BY GENDER (number)



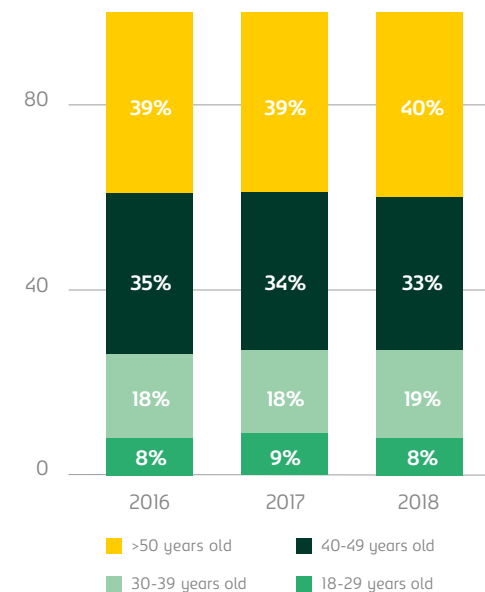
PAY GAP INDEX (Men/Women)



EMPLOYEES BY FUNCTION (%)



EMPLOYEES BY AGE GROUP (%)



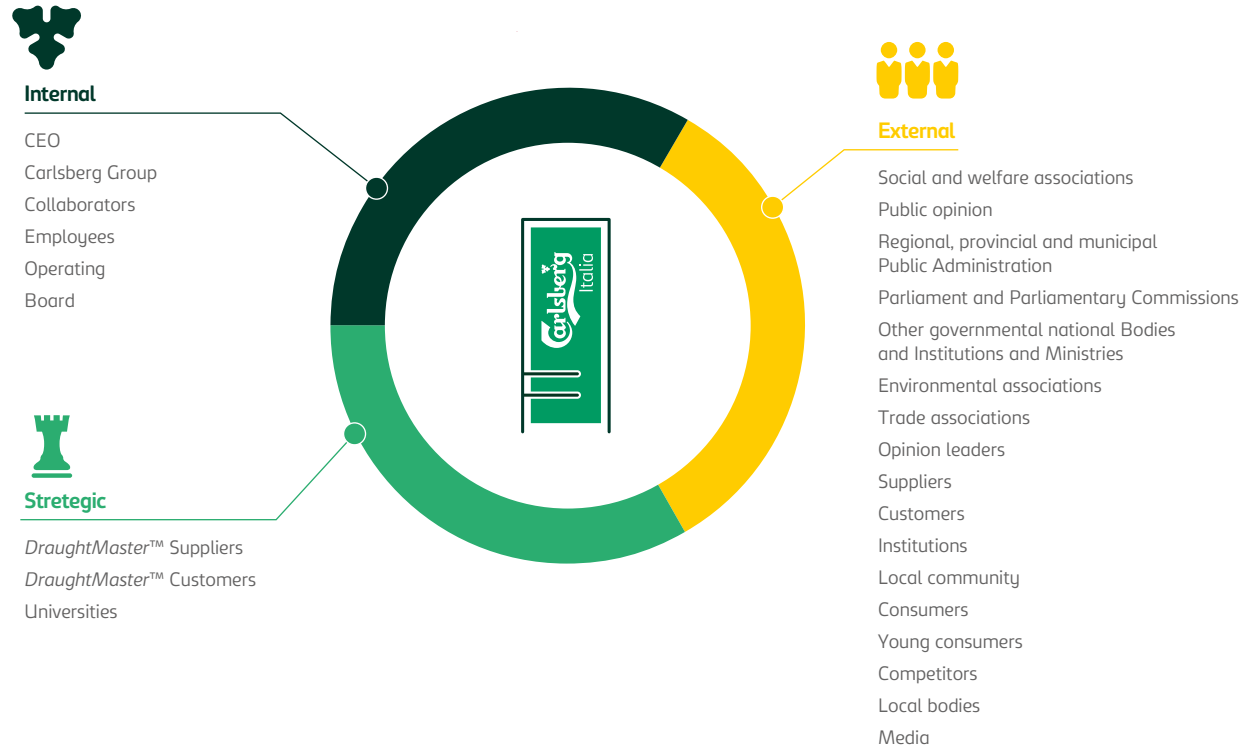
STAKEHOLDER ENGAGEMENT

In 1961, there was not an actual definition for stakeholder engagement. It was more about implementing it. In 1961, Carlsberg's Personnel Department used to engage employees by asking them how to improve the brewery. The results of the anonymous questionnaire distributed to them were published in the company newspaper. The engagement of our network and stakeholders for the achievement of our goals has always been part of Carlsberg Italia's reference strategy. Also, early problems related to *DraughtMaster™* were solved by engaging all the parties concerned: assistants, users, manufacturer's components. In this way, solutions could be found faster.

A process born out of such engagement culture, developed over the years and today implemented by the company in an innovative way.

In 2018, the focus groups in which our employees, customers and suppliers were engaged were so relevant that provided useful information also for this Sustainability Report. The 2019 focus groups will be organised shortly after the publication of this Report. Our aim is to compare the stakeholders' activity with our main report while data are still valid.

STAKEHOLDERS MAP



TERRITORY

The regions and communities we are present in and the ones we come into contact with actively contribute to our success thanks to a mutual exchange of resources and wealth. This is why we feel a strong sense of responsibility towards them, so much that we are always open to a continuous and constructive dialogue with local communities. We understand their needs, commit to enhancing them and contributing to their well-being.

OPEN DAYS

Following Angelo Poretti's tradition, we keep the doors of our Brewery always open. In the course of the year, visitors can come and explore the Brewery for free during our Open Days: 4 events organized every change of season to celebrate the arrival of the seasonal beer of Angelo Poretti Brewery. These days are important to us to make our beer known and to strengthen our virtuous presence in the area, by promoting the meeting between our visitors and the important local realities involved in social activities.

Once again this year, during our Open Days we have hosted some NGOs to give them the chance to promote their activities. To these organizations we also donated part of the proceeds of our Brewery's shop.



The NGOs involved during the Open Days were:



in March, “**Samudra Insieme**”: they carry out voluntary and social solidarity activities to support and protect people in a post-comatose state and their

families. Over the years, they have come into contact with 260 families, giving them concrete and friendly support;



in June, “**Il Granello**”: deals with training

and job placement of youngsters and adults with physical and mental disability through social-educational and working activities. They have a highly specialised digital printing and lithography department. Today, 230 youngsters, 51 employees and 100 volunteers work for the organization;



in September, “**La casa di sabbia**”: founded to support families with children and youngsters with severe

disability, it is committed to combating marginalisation, it promotes equal treatment, in the protection of rights and fights against the discrimination of disabled people;



in December, “**Cuore di Maglia**”: thanks to numerous volunteers

across Italy, manufactures knitted soft caps, scarves, stuffed animals and blankets to wrap up, warm and colour the life of the hospitalized children in 90 Italian Neonatal Intensive Care units.

NETWORK





OUR LINKS WITH THE TERTIARY SECTOR

The Voluntary Sector is one of our “partners”, through which we can act in the region, thus contributing to a better society. Along with the non-profit organisations that collaborate with us during the Open Days, we work with the following associations:

- **Legambiente**, the major environmental non-profit organisation in Italy. For years, Legambiente has chosen our beers served with *DraughtMaster™* for their summer parties, in particular for *Festambiente*.
- **Banco Alimentare**, to which, throughout the year, we donate our nearly expired products in stock.
- **Associazione ON** dealing with environmental education in the municipalities surrounding the Brewery.

Furthermore, especially through product donation, we try to support the local communities in our area that contribute to its development.

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 Brewery.

TUBORG

Danish brand that has always been synonymous with exploration and new experiences, in particular through music. It was the first beer to feature our innovative ring pull cap, thanks to which it is possible to open the bottle using just one finger. Easy to open and find, anywhere and anytime, but especially easy to drink, due to its unique taste, which makes it the best companion for concerts, parties or nights with friends!

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 ALCOHOL FREE

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

TUCHER

Tucher's beer recipes refer to the 1516 Purity Edict



CARLSBERG

Along 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** e **Grimbergen Triple** are top-fermented Belgian beers, still produced today respecting the process and the features of the XIth century

KRONENBOURG 1664

is the French excellence in the world of beer

BROOKLYN BREWERY

Brooklyn Brewery is one of the major attractions of New York: its beers are protagonists not only in the United States, but known and appreciated all over the world

OUR BEERS

Since 1877, Angelo Poretti Brewery has been passionately promoting the culture of drinking good beer by experimenting, sharing and offering a wide and well-structured range of beers, a wise combination of different varieties of hops. To guide consumers through this unexplored and charming world, Angelo Poretti Brewery has chosen a simple and intuitive method: numbers. Symbolising the number of different hops

used for each recipe, these numbers guide consumers through a tasting journey that gets more and more complex and innovative. Angelo Poretti Brewery's Master Brewers select and combine more than 300 varieties of hops to create unique recipes. Hop's Masters since 1887.

THE ORIGINALS

The family of beers it all started with
The beers with a familiar and traditional flavour

THE SEASONALS

A 7 Luppoli for every season
Different tastes to match each season and time of the year. Four special recipes to perfectly accompany every season

BEYOND BORDERS

Beers from all over the world
Taste experiences beyond borders, Beers inspired by other countries' brewing traditions for a never-ending discovery.

LE ANGELO
Le Riserve del Birrificio
Pale Ale and Brown Ale



4 LUPPOLI LAGER BIO

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

HARMONIES OF FLAVOURS

The perfect harmony between food and beer
The beers that create a perfect harmony of flavours when pairing dishes with the same aromatic nuances

BUBBLES

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



ECONOMIC CONTRIBUTION TO SOCIETY

With our beers we contribute to the country's economy, creating jobs in all sectors connected to us.

For every Carlsberg Italia employee there are 29 jobs.

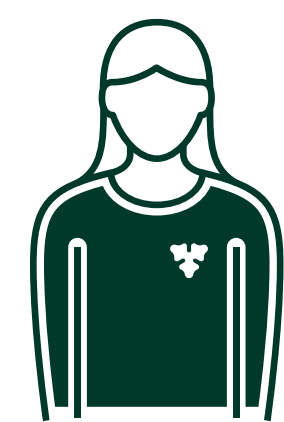
In 2018, the added value produced amounted to € 2,021,000. 65% of the added value was generated in the hospitality sector

FURTHER INFORMATION ON OUR WEBSITE:
[carlsbergitalia.it](https://www.carlsbergitalia.it)

ECONOMIC CONTRIBUTION TO SOCIETY

GENERATING EMPLOYEMENT

In 2018, Carlsberg Italia's team, with its 254 people, generated 29 jobs in beer-related sectors. Food and service sector in Italy is particularly fragmented, which is why a job in Carlsberg Italia is able to generate 24 jobs.



1 JOB IN CARLSBERG ITALY GENERATES...



24 JOBS IN HOSPITALITY



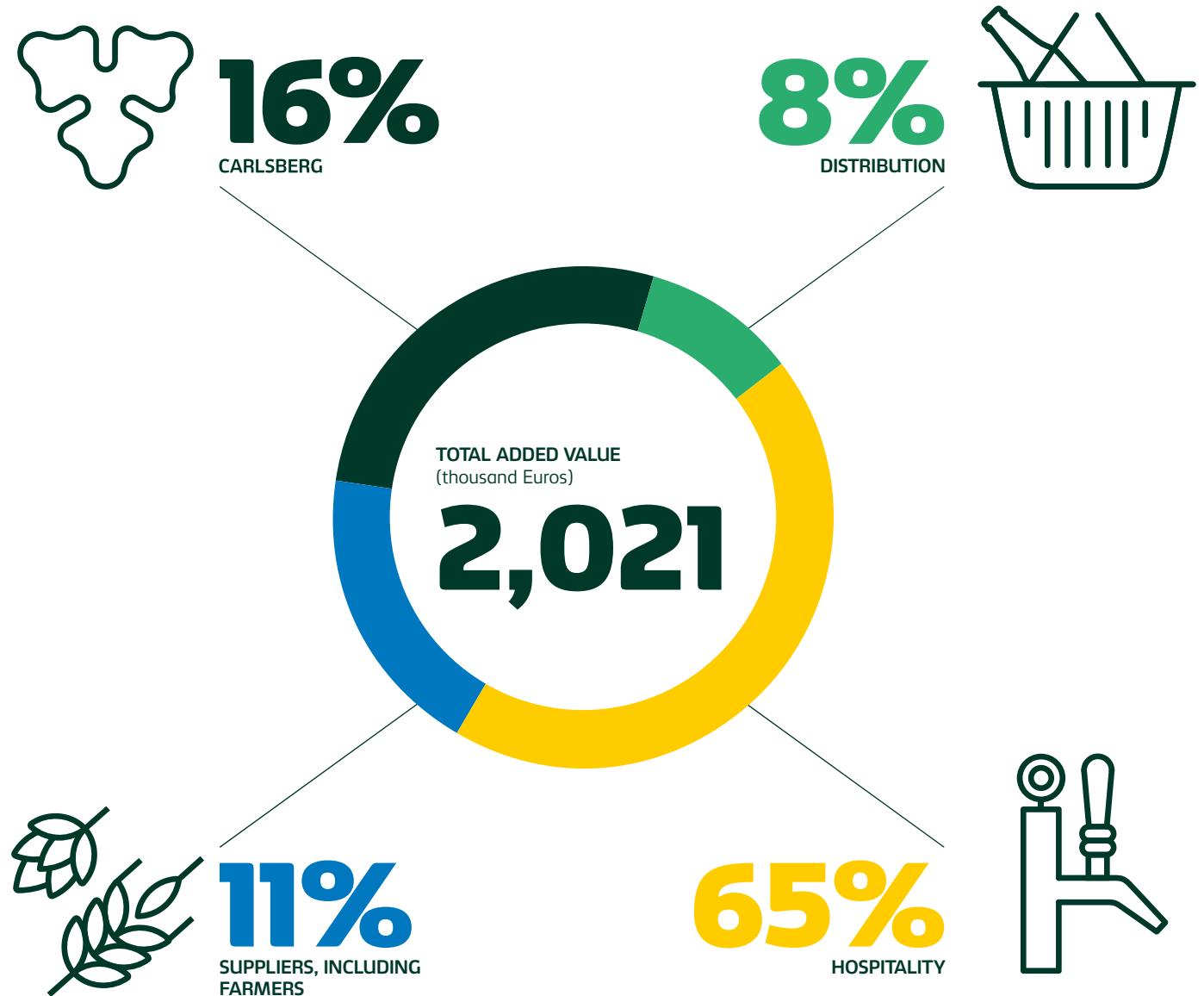
2 JOBS AMONG SUPPLIERS, FARMERS INCLUDED



3 JOBS IN DISTRIBUTION

GENERATE VALUE THROUGH THE VALUE CHAIN

Our beers can be sold to consumers all over Italy thanks to our suppliers, distributors, production departments and logistics. Their contribution adds value to the final product. The **total added value** is given by the difference between the cost of the goods and services purchased to produce beer and its market value. The added value enables us to pay our employees, tax and investors. Carlsberg Italia's **total added value**, calculated using an established methodology, amounted to € 2,021,000 in 2018.



ECONOMIC DIMENSION

CARLSBERG ITALIA S.P.A.

The 2018 financial year was characterised by economic stability, with a slight increase in the beer market: the Modern channel increased by 1% and the Horeca channel by 1.2%.

Such slight market growth was mainly attributed to the consolidation of the special beer segment.

Carlsberg Italia S.p.A. closed the 2018 financial year with a revenue of € 19,543,963, a significant improvement compared to 2017 (+ € 16,572,073). This improvement was due to the sales growth in the Large Retail Sector of Turborg and Birrificio Angelo Poretti brands and mainly to the assignment of intellectual property rights (IPR) to the Parent Company.

In the course of the year, the investments made mainly concerned:

- renovation of the production plant in Induno Olona, building of the new Brewery's shop and purchase of new infrastructures, IT hardware components, as well as furniture;
- the purchase of *DraughtMaster*TM draught beer system and of production and bottling plants.

CARLSBERG HORECA S.R.L.

The 2018 fiscal year closed with a revenue of € 3,686,177, confirming the positive results achieved in the previous year.

The trend of the operating margin is largely to be attributed to the company's decision to

strategically boost of Carlsberg Italia's products, acting on three main levers of development:

- the Birrificio Angelo Poretti brand;
- *Draught Master*TM technology;
- the "Craft&Specialities" segment, for a constant improvement in an ever-growing market segment.

MAIN RISKS LINKED TO THE BUSINESS OF CARLSBERG ITALIA

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

Credit risk: in the fiscal year 2018, the company 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 the 31st December 2018, were of dubious collectability. The risk is mitigated by the choice, based on careful and detailed financial analyses, 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 any exchange risk due to the scarce items in foreign currencies.

Risks associated with 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 2018, the the GNP growth led to a slight recovery of food consumption (about + 1.2%). While in the first half of the year, the number of places selling drinks increased, particularly in urban areas, in the second half, a consumption reduction was recorded.

The 2018 fiscal year was didn't benefit from the summer season compared to 2017.

In fact, the beer market growth factors were mainly due to the consumption growth of special beers from both channels.

Risks linked to the relations 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, due to the type of business carried out, is subject to environmental risks. For this reason, it is always committed to mitigate such risks, paying particular attention to safety, environmental pollution, waste and wastewater management. The company has never been accused of environmental crimes and has never been sanctioned for it.

GLOBAL GROSS VALUE ADDED

The Added Value statement pictures the wealth generated by the company, where both Carlsberg Italia's production and commercialisation and Carlsberg Horeca's Distribution can be found.

The analysis on the creation and distribution of the Added Value, calculated by aggregating data from the two companies, features Carlsberg Italia'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 stakeholders: Employees and Collaborators, Public Administration, Backers, Shareholders, Business System and Communities.

The global gross Added Value (Carlsberg Italia SpA and Carlsberg Horeca Srl) amounted to € 61,902,796 (+70%) in 2018. This is the result of a growth in the production value by 4% compared to 2017 (€ 286,881,706) and a decrease in inventories and intermediate consumption.

The Added Value generated was entirely distributed and 38.1% of it was used for our employee's remuneration. PA remuneration recorded a remarkable growth as a result of direct taxation paid by the Company. Furthermore, the company's remuneration, in terms of operating result, has grown as well.

It is notable that the community remuneration, equal to € 412,489, in 2018 recorded a growth of 59% compared to 2017.

PRODUCT AGGREGATED ADDED VALUE	2017	%	2018	%
Revenues from sales	238,854,288		234,504,017	
Changes in inventories	807,472		56,490	
Other revenues	35,709,869		52,321,199	
Production value	275,371,629	100%	286,881,706	100%
Expenses for materials	151,106,603		149,103,363	
Expenses for services	78,432,361		69,693,128	
Expenses for assets leased to third parties	5,009,566		4,807,330	
Changes in the inventory of raw, ancillary and consumable materials and goods	505,443		-424,547	
Provisions for liabilities	2,385,183		1,659,995	
Other provisions	723,157		0	
Other operating expenses	54,081		112,919	
Intermediate consumption	238,216,394	87%	224,952,188	78%
Gross AV from operations	37,155,235	13%	61,929,518	22%
Ancillary items	189,926		175,605	
Extraordinary items	-830,986		-202,327	
Overall gross AV	36,514,175	13%	61,902,796	22%
AGGREGATED ADDED VALUE DISTRIBUTED	2017	%	2018	%
Shareholders Remuneration	0		0	
Employees Remuneration	23,839,571	65.3%	23,615,731	38.1%
Employees	20,207,840		19,881,905	
Non-employees	3,631,731		3,733,826	
PA Remuneration	1,007,807	2.8%	7,605,368	12.3%
Indirect taxation	569,575		554,664	
Direct taxation	438,232		7,050,704	
Debt Capital Remuneration	1,101,623	3.0%	876,452	1.4%
Interests and other financial charges	1,101,623		876,452	
Company remuneration	10,306,200	28.2%	29,392,756	47.5%
Intangible fixed assets amortization	115,967		184,042	
Tangible fixed assets amortization	5,820,805		5,978,574	
Operating result	4,369,428		23,230,140	
Collective remuneration	258,974	0.7%	412,489	0.7%
Total AV distributed	36,514,175	100%	61,902,796	100%

METHODOLOGY NOTE

Carlsberg Italia Sustainability 2018 Report is the 8th financial report since the Company implemented the process in 2011. It is the main tool for the management and reporting of environmental, social and economic sustainability and also the means of communication and transparent dialogue with our stakeholders.

2018 SUSTAINABILITY REPORT SCOPE

Reporting scope:

- Recurrence: annual
- Reporting period: 1st January 2018 – 31st December 2018
- Previous Sustainability Report publication date: May 2018 (year 2017)
- Reference guidelines: Global Reporting Initiative (GRI) and AA1000 for Stakeholder engagement
- Companies included in the reporting scope: Carlsberg Italia S.p.A. and Carlsberg Ho.Re.Ca. S.r.l. (In the Report, the terms “Carlsberg Italia” and “the Company” always refer to both, unless otherwise specified)
- Limitations: none

- Significant changes during the reporting period: none.

METHODOLOGICAL NOTE

The 2018 Sustainability Report shows a continuous improvement in the development of the Company’s sustainability. In terms of response to the stakeholders’ expectations, the document is in line with the previous edition. Starting from data of Carlsberg Group’s sustainability reporting software, Enablon, Carlsberg Italia CSR Team, made up of representatives from all the company’s departments, collected data with the contribution of Aida Partners and carried out adequate assessments. For the drafting of the Sustainability Report, procedures set by the CSR Team in October 2014 were followed. The KPI are based on the best information available, the GRI G4 guidelines and the related measurement provisions were applied whenever possible. For information representation, the reporting was aligned with the guidelines of Carlsberg Group Sustainability Report 2018 showing continuity with the previous edition to allow

comparison between the two. In the reporting, where no remarkable changes had been recorded, processes and procedures were not described in detail. Finally, it was agreed to publish data related to the last 5 years, in line with the previous edition. The 2018 Sustainability Report explains all the steps made by Carlsberg Italia towards the adoption of sustainability as management model based on dialogue and stakeholder engagement. In this sense, the company continued with the objective measurement of the relations with its stakeholders and of the materiality analysis. The Report is divided into three sections:

- **Introduction**, main data recorded in 2018, letters by the CEO of both Carlsberg Italia and Carlsberg Group, our SAIL’22 strategy, our ‘Together Towards ZERO’ sustainability programme, our business model and the contribution of the Company to the SDGs that are of outmost importance to us.
- **Our challenges**, it describes our performances in relation to the 4 priority goals

of “Together Towards ZERO”: ZERO CO₂ Emissions, ZERO water waste, ZERO irresponsible consumption, ZERO accidents culture. It also includes significant cases of both the Group and Carlsberg Italia.

- **Supplement**, it provides additional information to the chapters: Responsible business, Financial contribution to society and Performance tables.



Carlsberg Italia Sustainability Report can be downloaded from the website:

www.carlsbergitalia.it

For further information, please send an email to the following addresses
info@carlsberg.it
carlsbergpervoi@carlsberg.it

PERFORMANCE TABLES

BEER QUALITY	2014	2015	2016	2017	2018
Production					
Volume of beer (hl)	1,201,119	1,296,943	1,327,933	1,411,801	1,336,677
Subdivision of beer distributed in kegs					
Steel kegs	26%	19%	12%	6%	4%
PET kegs	74%	81%	88%	94%	96%
DraughtMaster™ Quality					
Technical service	98%	99%	99%	99%	99%
Product quality	99%	99%	99%	99%	99%
Plants functionality	94%	95%	96%	98%	98%
ENVIRONMENT AND RESOURCES	2014	2015	2016	2017	2018
Total consumption of raw materials (tons)	18,738	20,136	21,211	23,033	22,283
Barley and wheat malt	12,903	13,728	14,293	15,417	14,836
Barley	2,411	2,422	3,598	3,827	2,556
Hop	25	31	33	37	43
Glucose extract	3,399	3,955	3,287	3,744	4,837
Others (raw materials used for specialities)				8	12
Specific consumption of raw materials (kg/hl)	15.6	15.5	15.5	16.3	16.7
Barley and wheat malt+ barley + hops	12.8	12.5	13.5	13.7	13.0
Glucose extract	2.8	3.0	2.5	2.7	3.6

ENVIRONMENT AND RESOURCES

	2014	2015	2016	2017	2018
Total consumption of water (m³)	509,065	558,310	459,827	432,974	430,340
Water used for production (m ³)	206,372	215,957	117,707	124,270	127,168
Water returned to the environment (m ³)	302,693	342,353	342,120	308,704	303,172
Water specific consumption (hl/hl)	4.2	4.3	3.5	3.1	3.2
Total energy consumption (MWh/year)	29,638	31,215	32,995	33,134	31,792
Thermal energy	20,678	21,393	22,723	22,347	20,837
Electricity	8,960	9,821	10,266	10,786	10,955
Natural Gas Specific Consumption (KWh/hl)	17.2	16.5	17.1	15.8	15.6
Electricity Specific Consumption (KWh/hl)	7.5	7.6	7.7	7.6	8.2
CO ₂ Direct Emissions (kg CO ₂ /hl)	3.5	3.3	3.5	3.2	3.0
Packaging materials (kg)	42,411,910	50,345,422	50,820,568	54,483,302	52,080,116
Glass	38,222,766	44,643,786	45,727,809	49,576,288	47,220,582
Paper/Cardboard	2,554,836	3,685,629	3,249,035	3,351,075	3,354,005
Aluminium	434,209	465,293	363,590	384,431	369,653
Steel	206,255	267,807	195,946	232,237	205,537
PET Plastic	306,858	367,952	400,902	421,191	412,121
Plastic	686,986	914,955	883,286	518,080	518,219
Beer produced per Packaging Type (%)					
Glass (33/66 cl)	64%	66%	67%	72%	69%
Steel kegs	5%	5%	3%	1%	1%
Cans	10%	6%	6%	6%	6%
Kegs <i>DraughtMaster</i> [™]	21%	23%	24%	22%	24%
Total Waste Produced (Kg)	693,454	782,589	967,362	1,683,240	1,905,825
Waste destined for recovery	693,454	782,589	967,362	1,683,240	1,905,825
Waste not destined to recovery	0	0	0	0	0

ENVIRONMENT AND RESOURCES

	2014	2015	2016	2017	2018
Waste destined for recovery (%)	100.0%	100.0%	100.0%	100.0%	100.0%
Paper/Cardboard	225,060	243,220	277,180	277,180	279,300
Glass	202,730	282,640	198,230	275,090	411,940
Plastic	124,640	128,610	122,240	163,050	154,740
Wood	66,500	57,840	74,540	97,160	95,880
Iron	9,500	14,780	16,790	23,240	27,840
Aluminium	5,520	4,500	5,040	11,300	5,760
Mixed packaging	54,500	44,840	48,880	100,020	135,280
Waste oil	620	1,000	720	1,700	900
Mud			215,600	702,420	778,120
Others (toner, inorganic and organic substances)	4,384	5,159	8,142	4,400	16,065
Waste Specific Production (kg/hl of beer)	0.6	0.6	0.7	1.2	1.4

PEOPLE AND PROCEDURES

	2014	2015	2016	2017	2018
Employees by gender (nr.)	266	266	259	258	254
Male	189	188	185	180	180
Female	77	78	74	78	74
Employees by qualification (nr.)					
Directors	7	7	7	7	7
Executives	36	34	35	34	32
Employees	176	178	170	171	169
Workers	47	47	47	46	46
Employees by age group (%)					
18 - 29 years old	8%	9%	8%	9%	8%
30 - 39 years old	26%	21%	18%	18%	19%
40 - 49 years old	33%	34%	36%	34%	33%
>50 years old	33%	36%	39%	39%	40%
Employees by function (%)					
Production	25%	24%	25%	26%	26%
Sales & Marketing	53%	53%	51%	51%	50%
Customer supply chain	5%	5%	6%	6%	6%
Staff	17%	18%	18%	17%	18%

PEOPLE AND PROCEDURES

	2014	2015	2016	2017	2018
Employees by gender and office (nr.)					
Lainate Female	57	58	55	62	55
Lainate Male	90	92	89	84	88
Induno Olona Female	7	7	7	6	6
Induno Olona Male	68	66	68	68	68
Territorio Nazionale Female	13	13	12	10	10
Territorio Nazionale Male	31	30	28	28	24
Employees by type of contract (%)					
With an permanent contract	91%	97%	98%	95%	96%
With a temporary contract	9%	3%	2%	5%	4%
Gender Pay Gap Index (male/female)					
Directors	1.34	1.44	1.38	1.32	1.17
Executives	1.22	1.22	1.18	1.15	1.1
Employees	1.15	1.15	1.13	1.1	1.13
Standard Salary for New Employees and Minimum Local Salary Ratio					
	0.85	0.89	0.93	0.88	0.91
Staff turnover by age and gender (nr.)					
18 - 29 years old Female	0	1	5	0	1
18 - 29 years old Male	3	1	0	2	1
30 - 39 years old Female	3	4	1	1	3
30 - 39 years old Male	2	5	6	5	1
40 - 49 years old Female	6	0	0	1	2
40 - 49 years old Male	6	2	2	2	3
>50 years old Female	7	1	1	1	1
>50 years old Male	16	2	2	7	10
Total of Female	16	6	7	3	7
Total of Male	27	10	10	16	15
Staff turnover by geographical area (nr.)					
Geographical area (Lainate unit)					
Residents in the province of Varese	5	1	1	2	2
Residents in the province of Milan	11	3	6	2	2
Residents in the province of Como	2	0	0	0	1
Residents in the province of Monza Brianza	0	1	0	1	1
Residents in other provinces	22	7	3	7	6

PEOPLE AND PROCEDURES

	2014	2015	2016	2017	2018
Geographical area (Induno Olona unit)	2	3	2	5	9
Residents in the province of Varese	2	3	2	4	8
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	0	0	0	1	1
Geographical area (National Territory unit)	1	1	5	2	1
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	1	1	5	2	1
Evolution of training hours pro capita (nr.)					
By qualification					
Directors	40.9	59.3	25.4	33.6	35.4
Executives	32.0	38.8	29.8	33.9	35.9
Employees	23.9	24.7	18.4	27.6	24.5
Workers	32.2	17.2	19.8	9.0	22.7
Agents	17.1	32.0	11.1	7.8	15.2
Dealers	0.0	0.0	0.0	0.0	0.0
Collaborators	2.0	0.0	0.0	0.0	1
Interns	4.0	8.0	9.0	12.8	53.5
By function					
Production	31.7	21.8	23.2	14.3	23.3
Sales & Marketing	25.3	27.5	16.8	25.4	26.1
Customer supply chain	35.4	21.0	16.2	38.3	19.5
Staff	44.4	29.4	17.2	16.0	20.4
Industrial relations (nr.)					
Hours by Trade Union Activity	323.0	242.5	304.0	266.0	639
Employees involved in Trade Union Activities	10	7	7	8	6
Hours of Strike	400.0	0.0	255.0	320.0	654
Employees involved in strikes	50	0	65	73	70
Hours of absence	23	34	40	38	40
Overtime hours	24	33	27	26	25

PEOPLE AND PROCEDURES

	2014	2015	2016	2017	2018
Average of INPS leave pro capita (nr.)	6	7	4	2	2
Total of accidents by function (nr.)	4	7	7	4	4
Production	2	3	3	4	5
Sales & Marketing	1	3	3	0	0
Customer supply chain	0	0	0	0	0
Staff	1	1	1	0	9
Accidents	4	7	7	4	9
Road accidents	1	4	3	0	5
Total of Reports (nr.)	77	80	117	107	450
Near Miss					110
Inadequate Conditions				Data are not comparable with previous years' ones due to a change in the method of classification of events	243
Inadequate Behaviours					97

ECONOMIC PERFORMANCE

** 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)*

	2014	2015	2016	2017	2018
Product Aggregated Added Value					
Sales revenue	224,063,249	232,028,403	230,987,935	238,854,288	234,504,017
Changes in inventories	-3,217,701	969,730	702,127	807,472	56,490
Other revenue	30,740,363	30,290,708	31,480,775	35,709,869	52,321,199
Production value	251,585,911	263,288,841	263,170,837	275,371,629	286,881,706
Expenses for materials	140,916,238	148,454,511	147,054,702	151,106,603	149,103,363
Expenses for services	79,229,246	79,923,376	75,096,476	78,432,361	69,693,128
Expenses for assets leased to third parties	6,010,675	5,436,563	4,911,980	5,009,566	4,807,330
Changes in inventory of raw, ancillary and consumable materials and goods	214,103	-636,061	344,367	505,433	-424,547
Provisions for liabilities	1,642,633	3,034,364	1,643,151	2,385,183	1,659,995
Other provisions	320,000	80,072	237,408	723,157	0
Other operating expenses	230,455	283,484	100,063	54,081	112,919
Intermediate consumptions	228,563,350	236,576,309	229,388,147	238,216,394	224,952,188

ECONOMIC PERFORMANCE

	2014	2015	2016	2017	2018
<i>* 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 Istituzionale di Contabilità)</i>					
Gross AV for operations	23,022,561	26,712,532	33,782,690	37,155,235	61,929,518
Ancillary items	639,738	257,646	62,676	189,926	175,605
Extraordinary items	-225,833	-408,705	-419,747	-830,986	-202,327
Overall gross AV	23,436,466	26,561,473	33,425,619	36,514,175	61,902,796
Aggregated Added Value Distributed					
Stakeholders remuneration	0	0	0	0	0
Employees remuneration	23,831,679	23,779,678	23,409,231	23,839,571	23,615,731
Employees	19,524,117	18,982,750	19,130,844	20,207,840	19,881,905
Non-employees	4,307,562	4,796,928	4,278,387	3,631,731	3,733,826
PA remuneration	456,543	690,761	735,160	1,007,807	7,605,368
Indirect taxation	548,155	875,873	698,655	569,575	554,664
Direct taxation	-91,612	-185,112	36,505	438,232	7,050,704
Debt capital remuneration	714,228	690,079	854,196	1,101,623	876,452
Interests and other financial charges	714,228	690,079	854,196	1,101,623	876,452
Company remuneration	-1,640,222	1,321,131	8,182,002	10,306,200	29,392,756
Intangible fixed assets amortization	255,736	160,731	103,048	115,967	184,042
Tangible fixed assets amortization	8,793,843	8,764,611	6,181,688	5,820,805	5,978,574
Operating result	-10,689,801	-7,604,211	1,897,266	4,369,428	23,230,140
Community remuneration	74,238	79,824	245,030	258,974	412,489
Total AV distributed	23,436,466	26,561,473	33,425,619	36,514,175	61,902,796
VA Aggregato distribuito					
Stakeholders remuneration	0%	0%	0%	0%	0%
Employees remuneration	102%	90%	70%	65%	38.10%
PA Remuneration	2%	3%	2%	3%	12.30%
Debt capital remuneration	3%	3%	3%	3%	1.40%
Company remuneration	-7%	5%	24%	28%	47.50%
Collective remuneration	0.3%	0.3%	0.7%	1%	0.70%

**THIS SUSTAINABILITY REPORT WAS
EDITED AND COORDINATED BY CARLSBERG
ITALIA'S CSR TEAM**

We would like to thank all our colleagues,
whose invaluable collaboration has made this
project possible. A special thanks to those col-
leagues, clients and consumers who, devoting
their time, commitment and collaboration,
allowed us to engage Stakeholders.

Methodological consulting and editorial staff

Aida Partners
(Civil Economy & Sustainability)

Communication

Aida Partners

Graphic design and Illustrations

Mediatría srl

Web Area

Mediatría srl

Photos

Archivio Carlsberg

Adobe Stock

Printing

Litografia Stephan

FOLLOW US!



www.carlsbergitalia.it
www.sostenibilitabycarlsberg.it
#CarlsbergItalia



@CarlsbergItalia
@CarlsbergItalia



www.birrificioangeloporetti.it
#BirrificioAngeloPoretti
#MaestriDelLuppolo



@BirrificioAngeloPoretti
birrificioporetti



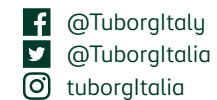
www.carlsberg.it
#Carlsberg
#ProbablyTheBest



@CarlsbergItaly
carlsbergItaly



www.tuborg.it
#Tuborg
#StRappalaTuborg



@TuborgItaly
@TuborgItalia
tuborgItalia



www.grimbergenbeer.com/it
#LegendaryExperience
#Grimbergen



@GrimbergenItaly

Carlsberg Italia SpA
Via Ramazzotti 12,
20020 Lainate (MI)

www.carlsbergitalia.it
www.sostenibilitabycarlsberg.it
www.beviresponsabile.it

