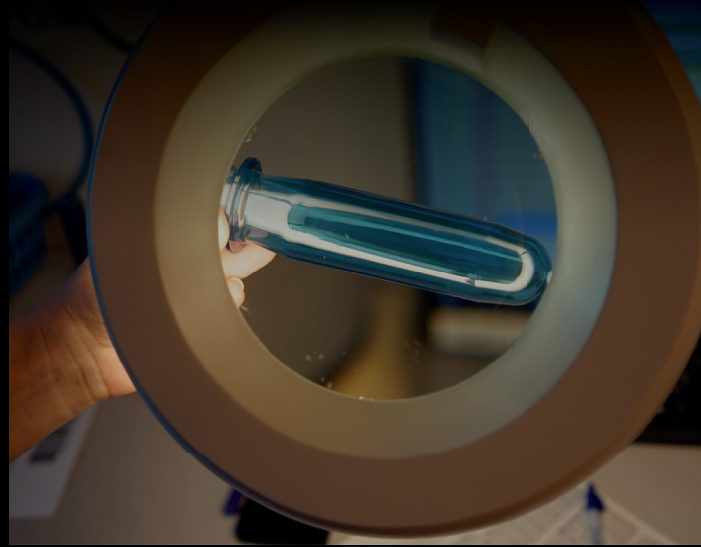


Petainer

Environmental, Social & Governance Report

2023



 petainer

Index

Introduction to Petainer

Message from our CEO	03
Introduction from our Sustainability Director	05
Introduction to our Production Locations	09

2023 Sustainability Progress

Carbon Disclosure Project	14
EcoVadis	16
ClimatePartner	19
Our People	20
Environment	26

A MESSAGE FROM OUR CEO

I am delighted to present our second ESG report covering the 2023 period. At the heart of Petainer's daily activity around the world is an ambition to provide a more sustainable future to our Customers and the population they supply. Our 338 Employees working from our Operating Centres in Americas, Europe and Asia serve over 1,200 Customers delivering to them ever more innovative PET based products built either on the basis of "Recycled Content" or "Reuse" or, in some cases, a combination of the two.

Petainer's culture is based on our Employees bringing a "can do" attitude to all their tasks. We work hard as a team to deliver ever more innovative solutions to our Customers as they seek to expand Carbon reducing packaging formats across their respective Brands.

Our Team consists of a nice blend of long serving, skilled Employees, many of whom have been with Petainer in excess of twenty years, coupled with an inflow of young talent who bring with them the passion of their generation to protect the planet for themselves and the generations who will follow.

Sustainability, in our eyes, is simply our commitment to play our part in allowing Consumers around the world to take better care of the environment in which they live. We are proud to be considered a lead partner to our Customers in supplying PET solutions which form the basis of their own Sustainability strategies.

Innovation comes from the vision and technical capability of our Team. Petainer has a well-earned reputation as a Technical leader capable of



Hugh Ross
Group CEO

translating creative vision into reality. Converting waste streams back into new product has been a long-established requirement from our Customers. So too the supply of PET Reusable packaging. The growth in interest in this element of our Product portfolio is being influenced not only by Regulatory change but also by the recognition that Reusable PET Bottles are the most beneficial carbon reducing packaging format when compared to Glass and Aluminium alternatives.

Given the Carbon benefits of Reuse, I am pleased to report that the next leg of our Strategy includes expansion of our Reusable PET manufacturing capacity in Americas in 2024, soon to be followed by a similar project to expand capacity in Southwest Europe in 2025. The essence of both projects is to bring Petainer's technical capability to the end user market and serve our Customers with environmentally beneficial products from within their region.

If you look closely at our manufacturing footprint you will see the range of accreditations we have won in all aspects of ESG. Be it EcoVadis, CDP or ClimatePartner certification, these accreditations are nothing more than a representation of the passion our Employees have for playing their part in the global quest to save the planet.

I hope very much you enjoy reading our 2023 ESG report and from this you are able to gain an insight into what matters to all of us in the Petainer team.

Hugh Ross
Group CEO, Petainer





 **Carryline**
carryline.se



FROM OUR SUSTAINABILITY DIRECTOR



Dr Michael Joyes
Sustainability Director

I'm pleased to share Petainer's Environmental, Social and Governance (ESG) report for 2023. Our results for 2023 showcase a concerted effort not just in the last year, but in the last 5 years to make a real impact to reduce our impact as a PET converter. Our key sustainability goals are focused on greenhouse gas emissions reduction and ensuring our products are truly recycled ensuring the material remains in the circular economy. Reuse, design for recycling and the use of recycled content form the key levers we can use to support our own and our Customers' carbon reduction strategies.





OUR CORE PRINCIPLES

Reuse

Reuse has been the cornerstone of our manufacturing footprint since the 1990s, when we supported the German beverage market in transition to a mixed one-way and refillables market. Since then, we have brought to market large container refillables in the form of our PET Watercooler Bottles. Petainer's Returnable PET bottles and Watercooler Bottles are the ultimate sustainable packaging solution, reducing both greenhouse gas emissions and material use. Returnable PET bottles can achieve up to 25 uses and Watercoolers up to 40 uses. This spreads out the greenhouse gas emissions of production over each reuse and uses the material for one container multiple times. Reuse is becoming ever more important, with powerful legislation in the EU mandating beverage packaging reuse from 2030, and the green shoots of reuse in North America encouraged by an existing flourishing South American market.

Petainer's reusable products encourage the return of containers to designated points where they are sent for recycling when rejected from the bottle/container pool. This serves to reduce plastic waste and reinforces the idea that plastic is a resource with value, that can be reused/recycled, not waste.



Recycled Content

Petainer has pioneered the use of recycled PET (rPET) in one-way preforms for decades, from our Swedish site based in Lidköping, primarily serving the Nordic market. The use of rPET serves a dual purpose, firstly, the reduction of a product's carbon footprint and secondly, it creates demand for used bottles for recycling, therefore contributing to the reduction of plastic waste. Petainer used 20,080 tonnes of recycled pellets and flakes in 2023, this led to avoided emissions of 35,585 tonnes. This equates to the production emissions of *ca.* 580 million 0,5 L virgin PET one-way bottles.

Design for Recycling

Petainer's products are designed with recyclability in mind to ensure they can be accepted into existing recycling systems. This requires a careful analysis of the PET and the additives sometimes used, as well as an understanding of current and future legislation.

Petainer's one-way and returnable small containers are returned to deposit return systems or collected via kerbside recycling where they can be recycled in bottle-to-bottle waste streams, ensuring this high quality material remains in the circular economy.

For larger containers, Petainer's Watercoolers are made of 100 % PET and allow for easy recycling after grinding of the product. Petainer's Kegs can be easily dismantled into separate waste streams to recover the maximum amount of recyclable and reusable material from the product.



Introduction to our Production Locations



Stephen Smith, Managing Director Sweden

Petainer Nordics: Lidköping, Sweden

Lidköping is the oldest Petainer location, starting operations in 1983. We're ideally located in central Sweden and supply the entire Nordic region with high quality pre-forms and bottles. The Nordics have long been associated with effective plastic waste management, with deposit return schemes consistently delivering high return rates and feedstock of the quality needed for food contact products. This has meant that at Lidköping, our team has become experts in adding recycled PET to our products, up to 100 %. We have supported leading brands in shifting to increasing percentages of rPET in their products, supporting a regional reduction in carbon emissions. Our team here is a blend of long-term expertise, with many over 10 and even 20 years of service, through to temporary staff in the summertime coinciding with the holiday season. Ingrained in all is a safety focused culture, of which I am pleased to see ever reducing instances of workplace accidents. Lidköping is a small town, making our factory a major employer in the region. We are proud to sponsor the local Bandy team (a hockey like game) with our logo placed under the ice, allowing for our team to visit games and support their local club. Even better for us is that Lidköping Bandyklubb is evergreen in finals and in lifting the trophy!



Mathieu Raphat, Managing Director Asia

Petainer Asia: Tianmen, China

Petainer Asia is a keg focused manufacturing centre based in Tianmen, Hubei province. Our Customer base has traditionally been focused purely on product quality, with sustainability a 'nice to have' and not an essential. These legacy attitudes are being challenged by the younger generation, and we're pleased to hear the topic spoken about increasingly by brewers in China and across Asia. We have found that the simplest way to introduce sustainability is by producing a product that substitutes itself like for like in the way our one-way keg does. Removing barriers, and often lowering costs makes it easier to make a sustainable choice. It offers our Customers a new way to engage with theirs, showcasing what their Customers want to see; a more sustainable product. We set up our factory in Hubei province following Covid, recruiting locally to instill confidence back in a region that had been impacted heavily by the pandemic. Our factory focuses on good, safe, working conditions, as we do across the Petainer Group. Fair pay, good training, application of standard operating procedures and maintenance of safe working conditions sit at the core, alongside an open dialogue between employees and management.





Craig Pope, Managing Director, Continental Europe



Chris McEwan, President Americas

Petainer Continental Europe: Aš, Czechia

As our Central European manufacturing centre on the border with Germany, we are well placed to service the European market, extending from Spain to Greece and everything in between. Our product mix offers carbon reduction solutions for beer, mineral water, and soft drinks. It is here that we make our refillable portfolio; small format refillable bottles and Watercooler bottles. These are increasingly interesting from a sustainability perspective. Not only are they proven to reduce carbon emissions compared to glass, aluminium and single use, but they also contribute towards avoided emissions, also known as Scope 4. Whilst not included in this year's report, Scope 4 emissions are those saved from the use of a more sustainable product, e.g. a refillable PET bottle compared to a one-way glass bottle. With our small format reuse used up to 25 times and large format 40 times, there is a significant benefit here.

Work-life balance is of great importance, so we look to offer out of work benefits beyond the factory. We're lucky that the atmosphere created has meant the formation of friendships that continue off the factory floor, so we offer opportunities for deepening those through sport. Our location doesn't just benefit our Customers, but our employees too, so each year, we purchase 8 ski passes to the local skiing resort to be used freely by our team. Being an active team, we rent a badminton court for an hour a week, and this is open to all employees to have a go. We're also pleased to sponsor a Petainer bowling team for the more competitive of us! Being an international business, there is a wealth of languages spoken, but English is an important skill set. We offer the team here English lessons, useful not just to communicate within the business, but as a life skill.

Petainer Americas: Idaho, Tennessee, USA

Petainer Americas services North and Latin America from two locations in Idaho and Tennessee supported by distribution locations across USA, Canada, Mexico and Chile. Each offer quick communication and convenient freight rates, as well as providing jobs to specialists for those localities. Our products have broadened packaging choices for businesses and consumers alike, with a focus on returnable Watercooler Bottles and kegs as like replacements for polycarbonate Watercoolers and steel kegs respectively.

People are our greatest asset. Unlike many companies with our global footprint, we operate as one with a very flat hierarchy that allows easy dissemination of information and ideas to travel up and down the hierarchy at pace. Often, the best ideas come from those on the factory floor rather than push boardrooms. That's why we place a strong emphasis on creative freedom, trust, and respect in our Company culture, giving everyone a voice, developing talent and getting our people as close as possible to the market they operate in. This is critical for employee satisfaction and business performance. Whilst we are a global business, we are still a relatively small business and as such everyone must 'wear a lot of hats'. This is especially true during the start-up of new plants or projects – and that for me is the most enjoyable part of being in a business like Petainer.



Company Overview

Petainer enables businesses to grow without their CO2 footprint growing with them. We innovate easily integrated one-way and reusable PET packaging to decarbonise established food and beverage markets. Petainer manufactures in 4 countries across Europe, Asia and North America giving it a global manufacturing footprint, and local on the ground support.

Petainer is owned by Ara Partners. Ara Partners is a global private equity and infrastructure investment firm focused on industrial decarbonization. Founded in 2017, Ara Partners seeks to build and scale companies with significant decarbonization impact across the industrial

and manufacturing, chemicals and materials, energy efficiency and green fuels, and food and agriculture sectors. The Company operates from offices in Houston, Boston, Washington, D.C., and Dublin. Ara Partners closed its third private equity fund in December 2023 with over \$2.8 billion in capital commitments. As of December 31, 2023, Ara Partners had approximately \$6.2 billion of assets under management.

For more information about Ara Partners, please visit www.arapartners.com.

Ara Built to Decarbonize.™



2023 Sustainability Progress

2023 Sustainability Progress

Carbon Disclosure Project	14
EcoVadis	16
ClimatePartner	19
Our People	20
Environment	26





Carbon Disclosure Project

Your CDP Score



Average Performance

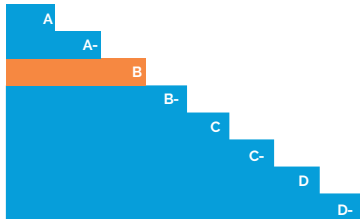


Plastic Product
Manufacturing

Europe

Global Average

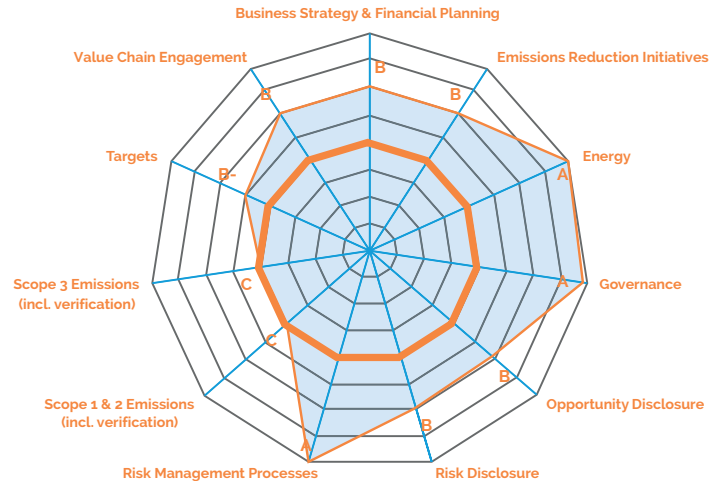
UNDERSTANDING YOUR SCORE REPORT



Petainer Group received a B which is in the Management band. This is the same as the European average of B, and higher than the Plastic product manufacturing sector average of C.

Leadership (A/A-): Implementing current best practices
Management (B/B-): Taking coordinated action on climate issues
Awareness (C/C-): Knowledge of impacts on, and of, climate issues
Disclosure (D/D-): Transparent about climate issues

CDP SCORE REPORT CLIMATE CHANGE 2023 CATEGORY SCORES



If a company scored C or below, they will not have been scored for management or leadership points (orange represents this).



Petainer is delighted to announce an improvement in our Carbon Disclosure Platform (CDP) Score from a B- to a B in its third disclosure to the CDP. This score places Petainer above the plastics manufacturing average of C and at the European average of B. The Carbon Disclosure Platform is a global non-profit organisation that runs the world's leading environmental disclosure platform.

In its submission, measured from a 2018 baseline, Petainer details the progress made to key sustainability targets. Measured against our intensity metric, an impressive reduction of 39 % (in tonnes of CO₂ per tonne of resin purchased) was made. A large contribution in carbon reduction is in the substitution of virgin PET for recycled PET. The increase in rPET usage reduces the need for virgin PET manufacture and uses 'waste' material for new products which is sensible for sustainable products. Coupled with incoming EU legislation and brands own commitments to carbon reduction, recycled content will become ever more important.

The greatest impact on the target is the transition to renewable energy (Scope 2). At our two major manufacturing sites, which account for 98 % of the energy purchased across the group, we have used renewable energy since 2019.

Petainer has used renewable power since 2019.



Furthermore, operations at our Lidköping site are ClimatePartner Certified which is conferred by fulfilling the following: calculating carbon footprints, setting reduction goals, implementing reduction measures, financing climate projects, and maintaining transparent communication.

As part of strict internal measures, targets are assessed every quarter to ensure Petainer is on track and any course correction can be taken.

Petainer continues to support businesses to grow, without growing their carbon footprint. A key pillar of this is sustainable manufacture, which is why Petainer commits to science-based targets and transparency in our processes. Improving from a score of a B- last year is recognition of the work undertaken to reduce Petainer's impact. The plastic product manufacturing sector averages a C score, and Petainer is committed to lead the sector in terms of sustainable practices. Petainer works closely with our Customers and understands that their own carbon reduction strategies rely heavily on emissions out of their direct control; Scope 3. The work Petainer can do to make production more sustainable has an impact in the value chain, making it a simpler process for our Customers to work to their own carbon reduction strategies.



EcoVadis

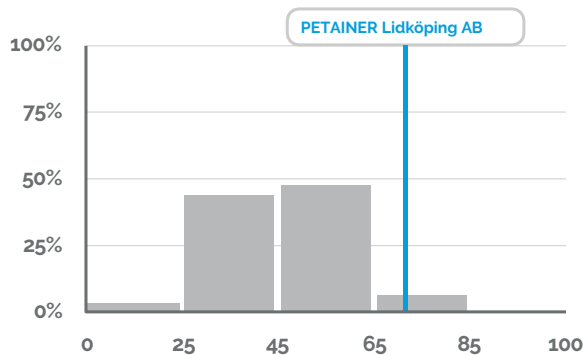


EcoVadis is a platform with which hundreds of thousands of companies collaborate on a common platform, universal scorecard, benchmarks and performance improvement tools. With a common framework, brands look to increase their score across 4 key areas: Environment, Labor & Human Rights, Ethics and Sustainable Procurement.

Petainer's Lidköping site is awarded a Gold Medal, and our Czechia site received a Bronze. A Gold Score places us in the 96th percentile of companies measured by the platform.

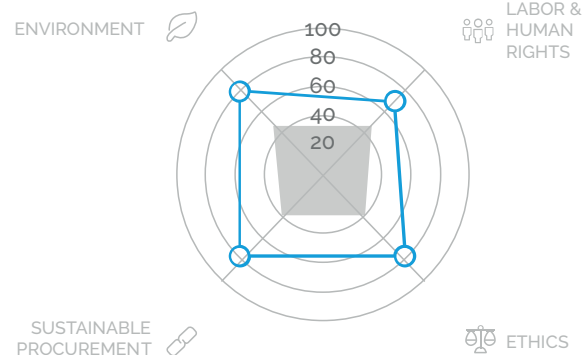


Overall Score Distribution



● All companies rated by EcoVadis in this industry

Theme Score Comparison



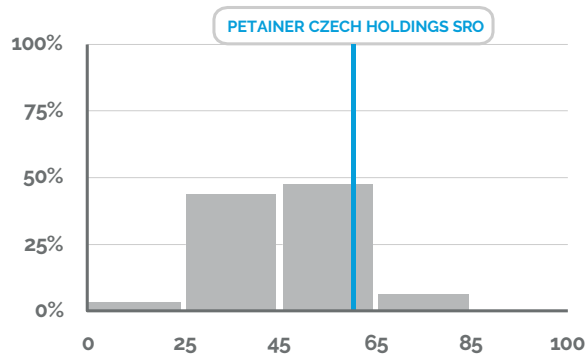
○ PETAINER Lidköping AB Score

● All companies rated by EcoVadis in this industry



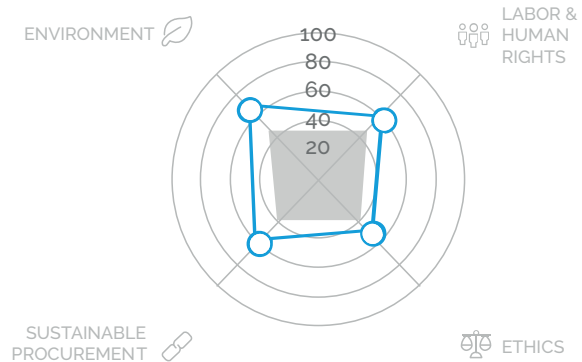


Overall Score Distribution



● All companies rated by EcoVadis in this industry

Theme Score Comparison



○ PETAINER CZECH HOLDINGS SRO score

● All companies rated by EcoVadis in this industry



Energy Use

Petainer has been using 100 % renewable electricity at its core manufacturing sites in Czechia and Sweden since 2019. In 2023, 99 % of electricity used in Petainer's operations worldwide is from a renewable energy source, mainly hydroelectric, this compares to 10 % in 2018. Petainer is developing a strategy to transition other sites to renewable power at the appropriate time.

Total Energy Use - All Sites

Year	2018	2019	2020	2021	2022	2023
Renewable Energy	10 %	92 %	97 %	98 %	98 %	99 %





ClimatePartner

Petainer has continued to invest in sustainability at site level, working with ClimatePartner to certify our site in Lidköping, Sweden. ClimatePartner certification is conferred upon fulfilling five essential steps: calculating carbon footprints, setting reduction goals, implementing reduction mea-

asures, financing climate projects, and maintaining transparent communication. Described by ClimatePartner as placing higher demands on climate action engagement, mandating the establishment of reduction goals and long-term strategies, Petainer has achieved this certification.



Our People

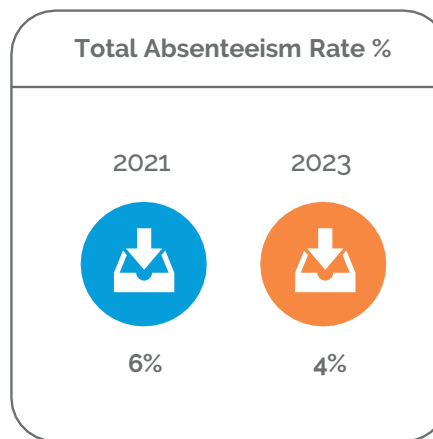
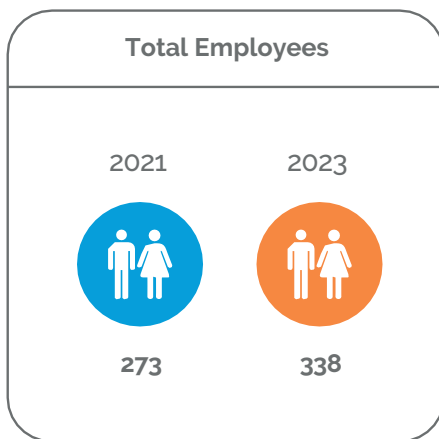
Petainer strongly believes that the people working throughout the business are at the core of its success as a Company. Employee satisfaction is measured by development, engagement and support, where Petainer employees can feel motivated to progress within the Company. With an open culture, where ideas can be formed at site level through to the boardroom, Petainer seeks to attract best in class team members to ensure we stay at the cutting edge of our industry. Feedback is garnered from employees using an engagement survey in which all employees can feed back into the business with ideas around sustainability, processes and conditions. This dialogue serves to keep safety at the highest level and encourage the implementation of new and innovative ways to make Petainer increasingly sustainable and efficient.

2023 saw our overall workforce increase once again, as Petainer readies itself to meet demand to 2030. An engaged workforce and focus on safety have shown through, with a higher retention rate, fewer accidents and an increase in replies through our engagement survey. Our factory floors are the centre of our business, where the sustainability practices we outline are implemented.



Our People

Metric	2021	2022	2023
Total Employees	273	301	338
Total Net New Hires	3	29	35
% Employee Turnover	14	26	18
% Female Employees	25	28	28
Total Absenteeism Rate %	6	5	4
# of Work Related Injuries	25	29	29



Code of Conduct

The Petainer Group is committed to an ethical business practice and to make a positive contribution to the environment and society in general. Our ambition is to work closely with our suppliers to obtain the very highest standard of these practices.

This Code of Conduct is based on general principles such as the UN Guiding Principles for Business and Human Rights, UN Global Compact and International Labour Organization Conventions, the Universal Declaration of Human Rights and the Children's Rights and Business Principles.

In addition to meeting the requirements of this Code, all shall comply with national laws and regulations as well as other applicable standards and any other relevant statutory requirements, whichever are more stringent.

Petainer Group adheres to the principles of this Code and no matter where you work or what you do for the Company, you have a responsibility to make good judgement and follow this code.

Petainer Code of Conduct applies to all Suppliers, Contractors, Consultants and other providers of services or goods. It is the responsibility of the Suppliers to ensure that this Code is followed by their Employees, Supply Chain and other parties acting on their behalf.

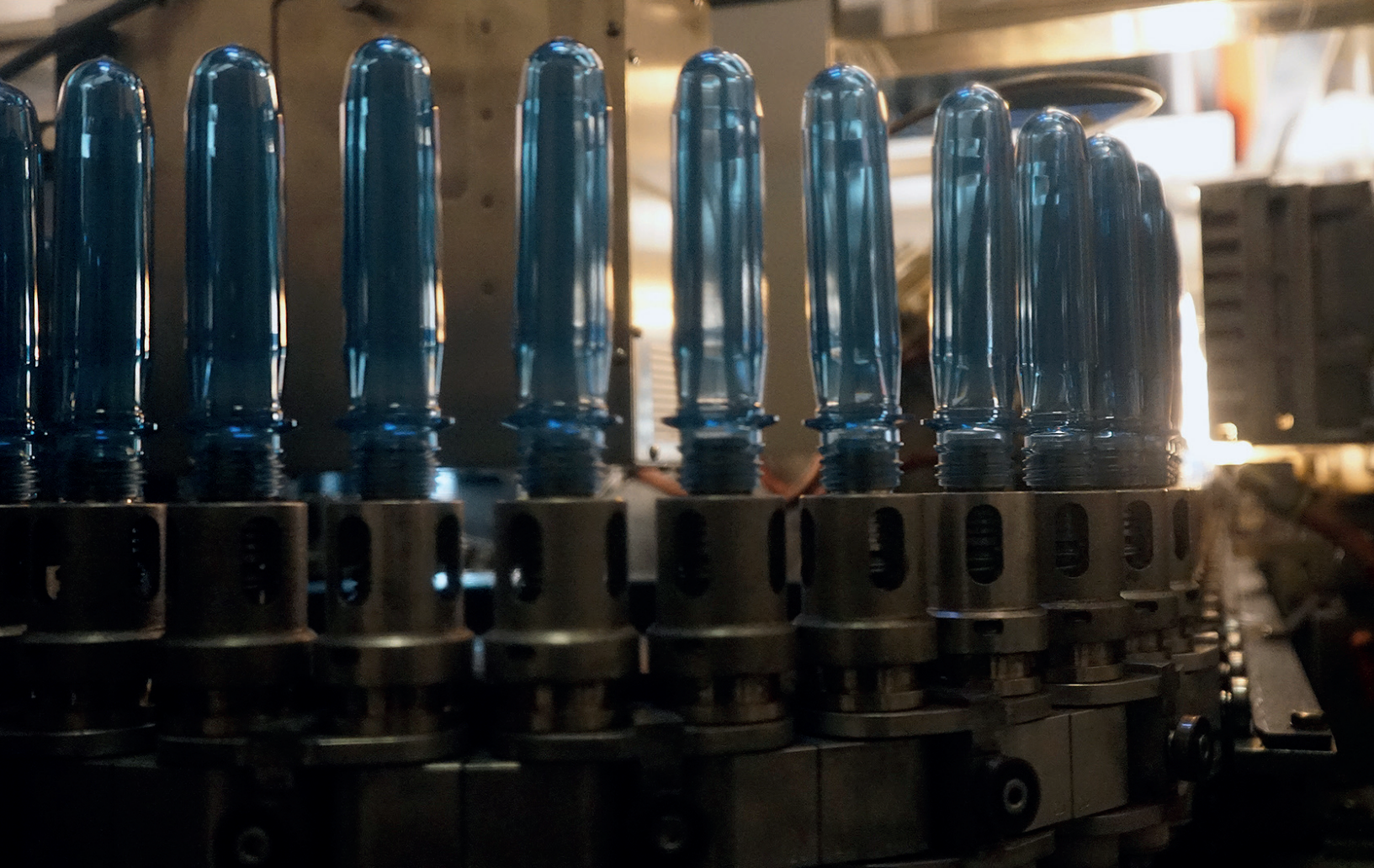
Human Rights

Petainer Group adheres to all international principles, conventions, and declarations of human rights. Equal rights and opportunities are promoted within the Company.

We expect our suppliers to:

- Have no engagement in or support of discrimination on the basis of race, colour, sex, language, religion, political or other opinion, caste, national/ social origin, property, birth, union affiliation, sexual orientation, health status, family responsibilities, age, and disability or other distinguishing characteristics during recruitment and employment.
- Respect Employees' right to privacy and integrity.





Working Conditions

Fair working conditions together with a safe work environment are a top priority within the Petainer Group. This is regardless of position or status within the organization. Systematic health and safety work is a natural part of our daily activities. Occupational Health and Safety performance is constantly reviewed and improved to prevent injuries and illness in the workplace, both physical and mental. Internal and external resources are available to ensure that this is achieved.

We expect our suppliers to:

- Ensure that all workers have the right to form and join unions or other associations to bargain collectively.
- Ensure all Employees have a written employment contract.
- Ensure that Employees receive at least the legal minimum wage, benefits and are compensated for all hours worked. Employees should not be required to work more than 60 hours a week, including overtime, on a regular basis.
- Ensure that all Employees will be granted paid holiday, parental leave and sick leave if required.

- Have no engagement in, or take benefit from, any form of child labour.
- Have no form of forced labour including bonded labour, nor the use of prison, illegal labour or compulsory agreements.
- Deduction from wages shall be according to law and/or collective agreements and must never be used as a disciplinary measure.
- Provide an adequate health and safety policy to state intent and guidelines to steer decisions and reach targets.
- Employees shall be provided with the necessary protective equipment and safety equipment to perform their tasks safely.
- All equipment shall be maintained, used and provided free of charge where required. The workplace shall be maintained to protect workers from work-related hazards and ensure good working conditions.
- Incidents and accidents shall be reported and evaluated with the necessary actions being taken as a result.

Business Ethics

Petainer Group is committed to developing a business focused on innovation and sustainable development. Conducting our business in an ethical and sustainable way is fundamental to our strategy. Petainer Group has a reputation for integrity in its business activities which is central to our relationships with Customers, Employees, Suppliers and local communities.

We strive to maintain the highest standards of Ethical Conduct and Corporate Responsibility.

We expect our suppliers to:

- Have zero tolerance towards bribery and corruption in its worldwide business operations, whether in the public or private sector.
- Conduct business in an ethical manner.





Environment

Sustainability is a cornerstone of our strategy for the future growth of our business and our long-term vision. We are committed to the principles of sustainable development and aim to encourage and work with Suppliers who uphold the same principles as ourselves. To be truly sustainable, our packaging must provide value, be safe and secure and economically effective. As well as meeting consumer needs, ideally it should be capable of being reused and recycled.

The foundation of our environmental work is an ambition to protect the environment using renewable resources in such closed circuits as possible, avoiding the use of environmental pollutants, thereby preventing contamination.

Petainer has implemented an Environmental Management System based on an international standard – ISO 14001.

In the fight against climate change Petainer is committed to strive towards carbon neutrality. We engage in carbon offsetting projects together with external partners. Offsetting carbon emissions, in addition to avoidance and reduction, is an important step towards carbon neutrality. We encourage our suppliers to initiate such projects themselves.

Petainer Group strives to minimise the negative environmental impacts of its activities, products and services through a proactive approach and the responsible management of its environmental impact as follows:

Innovation; develop sustainable products through design and material choice. Products shall be safe, provide value and be economically effective. Continually exploring and assessing opportunities to introduce modern technologies and new equipment which will give cost-effective improvements to activities that have an impact on our environmental performance.

Carbon Footprint; proactively work to reduce its direct and indirect carbon footprint throughout the whole supply chain.

Waste-Management; pesticides, chemicals and other hazardous waste are handled in compliance with applicable laws and regulations. Work pro-actively to ensure that no hazardous waste ends up in land, air or water. Implement measures to avoid water pollution by preventing and reducing waste-water. Continuously strive to reduce waste by reusing and recycling resources.

We expect our suppliers to:

- Continuously improve the environmental performance of products and services.
- Maintain effective policies, processes and procedures to manage their environmental impact and to operate their business in a sustainable way.

Global Health and Safety Policy Statement:

Petainer is committed to promoting the health, safety, and well-being of its Employees, visitors, and the communities in which we operate around the world. We recognise our responsibility to protect the health and safety of our workforce and the public.

Global Health and Safety Policy available on request





Science Based Targets

Petainer has committed since 2022 to a Near-term Science Based Target of 1.5 °C by 2030. Petainer commits to reduce Scope 1 and Scope 2 GHG emissions by 50 % by 2030 from a 2018 base year, and to measure and reduce its Scope 3 emissions.

Circular Economy

Ensuring that PET, the world's most recycled plastic, stays within the packaging sector is hugely important for sustainability. Recycled content from recycled beverage bottles can be used in like for like products, reducing the requirement for virgin plastic production.

Petainer experts work to increase the amount of recycled content as a total % of resin utilized, whether flakes or pellets. As a % of total resin used, from a 2018 baseline, Petainer has increased the percentage to 35 % from 18 %.

Petainer raises awareness of circular economy principles through its membership of Petcore Europe, articles on the Petainer website and across social media. Petainer engages with shareholders and Customers to showcase the impact increasing their recycled material content could have across their carbon footprint.

Petainer's use of 35 % rPET equates to avoided CO₂ emissions of 35,585 tonnes CO₂ equivalent, compared to the total if only virgin material was used.



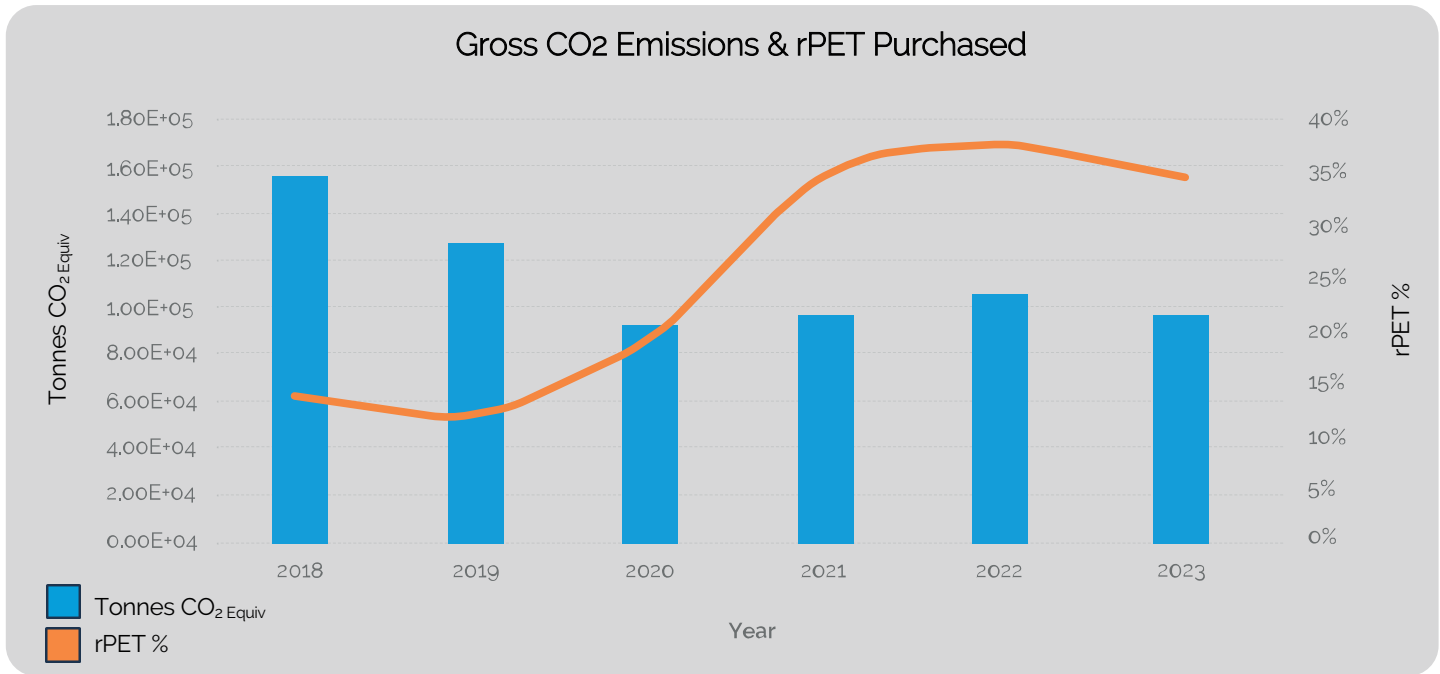
Senior Scientist Sonia San Martin

"We're pleased to maintain a substantial proportion of recycled content across our product mix. Our aim is to collaborate with our Customers on their long-term carbon strategies, with our joint ambition supporting projects from lightweighting and rPET inclusion to product innovation. It's only through deep understanding of the product ecosystem from the legislative framework to Customer acceptance that carbon reduction strategies can be formed and followed."

Petainer has been at the forefront of high recycled PET preforms for the past 15 years due to a strong polymer science development team. One-way PET preforms have been produced with 100 % rPET and significantly reduce the carbon footprint of our Customers' products. Our refillable PET bottles are also available with up to 50 % recycled content. Both products benefit from a lower carbon footprint whilst maintaining product quality.



Change in Gross CO₂ Emissions & rPET Purchased Over Time



Greenhouse Gas Emissions 2023

	2018	2022	2023	Vs 2018 Baseline	
Scope 1	144	156	99	-45	Tonnes CO ₂ equiv
Scope 2	30,559	1,219	387	-30,172	Tonnes CO ₂ equiv
Scope 3	125,570	104,688	97,593	-27,977	Tonnes CO ₂ equiv



Petainer's **Scope 1** emissions comprise of company vehicle use and the use of methane gas for warehouse temperature control. Projects are underway to understand the best way to decarbonise these direct emissions. We are pleased to report a 31 % reduction from the 2018 baseline.

In an important reduction of our **Scope 2** emissions, Petainer has achieved 99 % renewable energy across the group. A plan is in place to transition sites to renewable power when supply and conditions allow. From our baseline in 2018, our Scope 2 emissions are 99 % lower.






Petainer's **Scope 3** emissions are made up primarily of: purchased goods and services, downstream transportation and distribution, upstream transportation and distribution, waste generated in operations, business travel and employee commuting. Smaller contributions are present but are not currently measured. The major component of this is virgin PET production. The overwhelming majority of Petainer's greenhouse gas emissions come from Scope 3 emissions, which is primarily made up of

purchased goods and services. We work with our suppliers to ensure that we are receiving product which is sustainably produced and try to purchase low carbon product where possible.

Petainer is committed to supporting its Customers in the transition to more sustainable products through the inclusion of rPET content and the use of reusable solutions, which both reduce the relatively carbon intensive virgin PET use. The second biggest impact to Petainer's Scope 3 emissions are components produced by suppliers, the use of recycled content is used where appropriate to reduce the carbon footprint. Further to this, lightweighting to reduce product weight and engaging with suppliers to ensure renewable energy use, forms part of Petainer's strategy to decrease emissions in this category. Upstream and downstream transport emissions represent a small, but addressable contribution. Petainer is optimizing logistics where possible and is exploring ways to increase energy efficiency of existing deliveries.



Production emissions of Petainer's Product Portfolio

	1.7x less carbon	6x less carbon	3x less carbon	3x less carbon	12x less carbon
					
	Reusable PET Watercooler Bottle	One-way Keg	Reusable PET Bottle	One-way PET Bottle 50% rPET	Preforms 100% rPET
Factory Gate Emissions (per unit unless specified)	Per kg material PET: 2.2 kg CO ₂	4.31 kg CO ₂ /keg	0.1093 kg CO ₂ equiv	0.0357 kg CO ₂ equiv	0.0083 kg CO ₂ equiv
Competing Substrate Emissions (per unit unless specified)	Per kg material Polycarbonate: 3.79 kg CO ₂	Steel Keg: 26.68 kg; CO ₂ /keg	Refillable Glass bottle: 0.340 kg CO ₂ equiv	500ml Aluminium can: 0.1061 kg CO ₂ equiv <small>71% recycled content</small>	500ml Aluminium can: 0.1061 kg CO ₂ equiv <small>71% recycled content</small>

