

# SUSTAINABILITY REPORT

**CARTONPLAST GROUP  
2024**



“  
We offer the complete sustainable package of sustainable packaging!  
”

# WELCOME TO THE WORLD OF CARTONPLAST GROUP!



**Dear Stakeholders,**

I am proud to present the **first Cartonplast Group's sustainability report**. We believe that sharing our progress transparently is crucial in building trust and encouraging joint efforts towards a sustainable future. Preservation of the natural environment is our priority, because after all, our customers, we and all our families live in it. For this reason, Cartonplast Group has been **committed to sustainability** since the company was founded. Our actions are therefore aligned with **ecological, social and economic goals**. The protection of our nature and the satisfaction of our customers as well as our employees go hand in hand with our economic success. Our mission is to **provide innovative and sustainable packaging solutions** in collaboration with our customers, enhancing the efficiency and environmental sustainability of their supply chains. Therefore, our commitment is to improve people's life by creating lasting value through **reusable and recyclable transport packaging**. For Cartonplast Group, responsibility towards our customers and their customers, towards our employees and their lives is mandatory. The basis for this is our **closed-loop pooling system** based on reuse and recycling for transport packaging - a proven sustainable circular economy. Because we only have this one earth to live on.

The dedication and hard work of our employees, partners and stakeholders throughout the last years show a collaborative approach of the team. Together, we have achieved **remarkable progress in integrating sustainability** into every aspect of our operations. However, we acknowledge that there is still much to be done. The challenges of climate change, resource scarcity and social topics, among others, require ongoing innovation and collaboration. As we look to the future, we remain committed to our sustainability goals and to advancing our initiatives in alignment with the **United Nations Sustainable Development Goals (SDGs)**. We will continue to set ambitious targets, transparently report our progress and seek out new opportunities to make a positive impact. I invite you to explore our sustainability report to learn more about our efforts and achievements. Together, we can build a more sustainable future for all.

**Thank you for your continued support and partnership.**

**Sincerely,  
Serkan Koray, CEO**

# INDEX

**04** OUR VISION & MISSION

**05** ABOUT US

**09** CODE OF CONDUCT

**10** COMPANY VALUES

**11** SUPPLIER CODE OF CONDUCT

**12** JOIN US FOR A  
SUSTAINABLE FUTURE

**13** INCORPORATING  
SUSTAINABILITY  
INTO COMPANY STRATEGY

**14** DOUBLE MATERIALITY  
ANALYSIS & CSRD

**15** OUR ENGAGEMENT  
TOWARDS SUSTAINABILITY

**18** CARTONPLAST GROUP ESG-  
GOALS

**19** ESG-ROADMAP

**20** GOVERNANCE

**21** UNITED NATIONS GLOBAL  
COMPACT

**22** ECOVADIS

**23** COMPLIANCE MANAGEMENT &  
WHISTLE-BLOWER SYSTEM

**24** TRAINING & AWARENESS

**25** ENVIRONMENT

**26** ENVIRONMENTAL  
MANAGEMENT SYSTEM

**27** CLIMATE CHANGE

**28** LIFE CYCLE ASSESSMENTS  
PP LAYER PADS

**31** LIFE CYCLE ASSESSMENTS  
PP PALLETS

**36** CO<sub>2</sub>-EMISSION REDUCTION

**40** WATER

**41** WATER REDUCTION

**42** BIODIVERSITY & LAND USE

**44** MATERIAL CIRCULARITY

**45** REUSABILITY

**46** WASTE

**47** WASTE REDUCTION

**48** SOCIAL RESPONSIBILITY

**49** SOCIAL RESPONSIBILITY  
TOWARDS OUR CUSTOMERS

**50** HUMAN & LABOUR RIGHTS

**51** CARTONPLAST GROUP  
WORKFORCE

**52** HEALTH & SAFETY

**53** DIVERSITY

**54** SUPPLY CHAIN

**55** COMMUNITY ENGAGEMENT

**56** ABOUT THE REPORT

**57** DISCLAIMER



# OUR MISSION & VISION

## OUR MISSION

To provide innovative and sustainable packaging solutions in collaboration with our customers, enhancing the efficiency and environmental sustainability of their supply chains. Our commitment is to improve people's lives by creating lasting value through reusable and recyclable transport packaging.

## OUR VISION

To create a better world where nature is preserved and where packaging is not a waste anymore.



# ABOUT US

**19**  
service  
centers

Over  
**34** washing  
lines

Over  
**800** valuable  
employees

2023 sales revenue  
**100.9** millions

Customers in over  
**30** countries

“  
Our 19 service  
centers provide a  
unique service all  
over the world.  
”

“  
We have  
over 30 years  
experience in  
circular economy.  
”



# ABOUT US

## WE LIVE IN A CIRCULAR ECONOMY – WHAT DO WE DO?

We rent reusable and 99,99% recyclable transport packaging with the highest hygiene standard...

### ...and this now for over 30 years!

- We focus on renting reusable packaging that meets the highest hygiene standards.
- Our range includes various types of layer pads and pallets made from polypropylene (PP).
- Our PP layer pads and PP pallets are not only reusable but also 99,99% recyclable.
- The total inventory of packaging materials in Cartonplast Group's pool currently exceeds approximately 57 million units.
- Our **closed-loop pooling system** is optimised for efficiency, ensuring that locations and service centers in various countries and continents are within no more than 400 km from our customers.
- Our B2B operations are aimed at serving container manufacturers in the food, cosmetics and pharmaceutical industries.
- Essentially, the PP layer pads can be used for stacking glass, metal and plastic containers of any kind.

“  
We embrace circular economy by ensuring our products are designed for reuse and recyclability.  
”



CARTONPLAST  
POOL



# ABOUT US

## We establish benchmarks!

- We commit to ensure hygienic safety throughout the entire logistics chain, with a strong focus on food safety for our customers.
- Cartonplast Group consistently invests in enhancing cleaning processes across all our washing facilities globally, adhering to accurately controlled hygiene and disinfection standards, along with the most stringent environmental requirements.

“

*All our cleaning processes are managed within ISO 9001 and ISO 22000 certified systems.*

”

- Within the **closed-loop pooling system** for PP layer pads and PP pallets, we manage the entire closed-loop process: Encompassing delivery to pickup, sorting and inspection, as well as an efficient washing process that brings the PP layer pads or PP pallets back into circulation.

“

*We invest in innovative technologies, achieving economic and environmental rewards that benefit both our valued customers and our company, paving a further path for a sustainable future!*

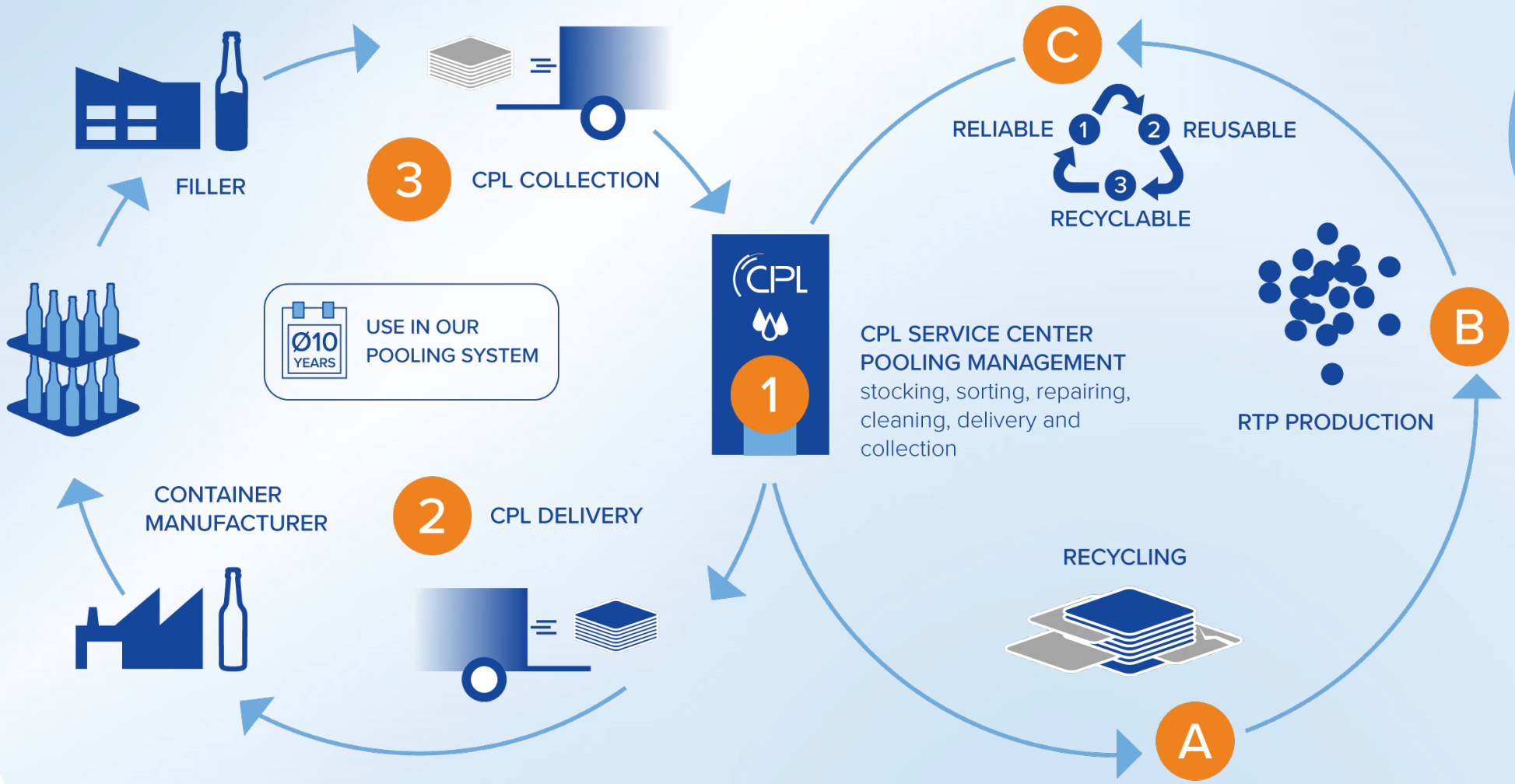
”





# ABOUT US

## Circular Economy – Efficient closed-loop pooling system



“  
The CPL business model is inherently sustainable - and always has been!  
”



# CODE OF CONDUCT

At the core of our company lies our **Code of Conduct**, embodying our company values. Through the introduction and enforcement of this code, we establish the groundwork for a more accountable and sustainable governance. This code articulates fundamental principles and regulations governing the conduct of our employees within the organisation and in their interactions with external stakeholders. Adherence to this code is mandatory for all members of the Cartonplast Group.



The responsibility for implementing the code is entrusted to our managing directors worldwide. Embedded within the Code of Conduct are values such as **respect, honesty** and **integrity**, alongside priorities such as **health, safety, environmental preservation** and **employee development**.

Additionally, we align ourselves with the basic principles of the **ETI Base Code** and prioritise the protection of personal data, among other core principles, across all branches of the Cartonplast Group globally.



“  
Our Code of Conduct reflects our core values and is essential for our business operations.  
”





# COMPANY VALUES

These are the seven values of the Cartonplast Group:

## 01 We are passionate about customers

As a service provider we strive to create and maintain long-term and trusting customer relationships. We seek their satisfaction and pursue their expectations while respecting their values.

## 02 We are performance driven

Market leader position requires best performance on our day-to-day duties.

## 03 We are supply chain masters, we deliver quality products

Our position in the food and beverage production supply chain requires high quality and food safe transport packaging.

## 04 We respect and value diversity

Similarities and differences among employees in terms of age, cultural background, physical abilities, race, religion, gender, linguistic differences and socio-economic status are respected at all times within our organisation.

## 05 We value people

Our employees are the most valuable of all our assets. We are people oriented, seeking motivation, professional development and remuneration that is based on performance and the achievement of goals.

## 06 We never compromise safety

For our customers as well as for our employees we pay strict attention to maintain the Cartonplast Group's work-safety-rules in everything we do.

## 07 We respect the environment

The driving force for improvements in our company are not only the economic benefits, but also a commitment to meet all environmental rules and regulations. We protect our environment through sustainable products and sound management practices.

“  
Employees  
want to work in  
companies that  
align with their  
values.  
”



# SUPPLIER CODE OF CONDUCT

The Code of Conduct is directed towards the Cartonplast Group, yet we recognise the significance of cultivating a respectful and transparent relationship with our suppliers. To reinforce this valuable interaction, we have implemented the **Supplier Code of Conduct**. This document outlines the principles guiding our business dealings with suppliers, consolidating mutual expectations and responsibilities. Both value-driven documents are publicly available on our company website.

## What suppliers can expect from us?

High ethical standards are ensured by our constant efforts that all our employees act in their daily work in accordance with our Code of Conduct. We respect our business partners and treat them fairly and objectively at all times. Our partnerships with them are based on transparency, honesty, collaboration, innovation and a focus on excellence. It is essential for us that we create stable and reliable relationships with our suppliers based on shared values.

## What do we expect from our suppliers?

We expect our suppliers to adopt a similar approach within their supply management system and for them to work with their own suppliers who are engaged with the same principles of sustainability and responsible purchasing.

*“Elevating excellence through supplier commitment.”*





# JOIN US FOR A SUSTAINABLE FUTURE



**SOCIAL**



**ECOLOGICAL**



**ECONOMIC**



**INNOVATION  
+ FUTURE**



# INCORPORATING SUSTAINABILITY INTO COMPANY STRATEGY

The Cartonplast Group company strategy is based on “five pillars”:

- 01 Product and service development
- 02 Market expansion
- 03 Customer-centric innovation
- 04 Digital transformation
- 05 Sustainability and corporate social responsibility

“  
A holistic approach  
is leading to  
sustainable growth  
- everything is  
connected to  
anything else.  
”



## KEY ELEMENTS FOR SUSTAINABLE DEVELOPMENT AND GROWTH

Sustainability and corporate social responsibility are deeply integrated into the company strategy. Eight key elements essential for our business, each requiring comprehensive consideration and interconnection to foster sustainable development and growth.



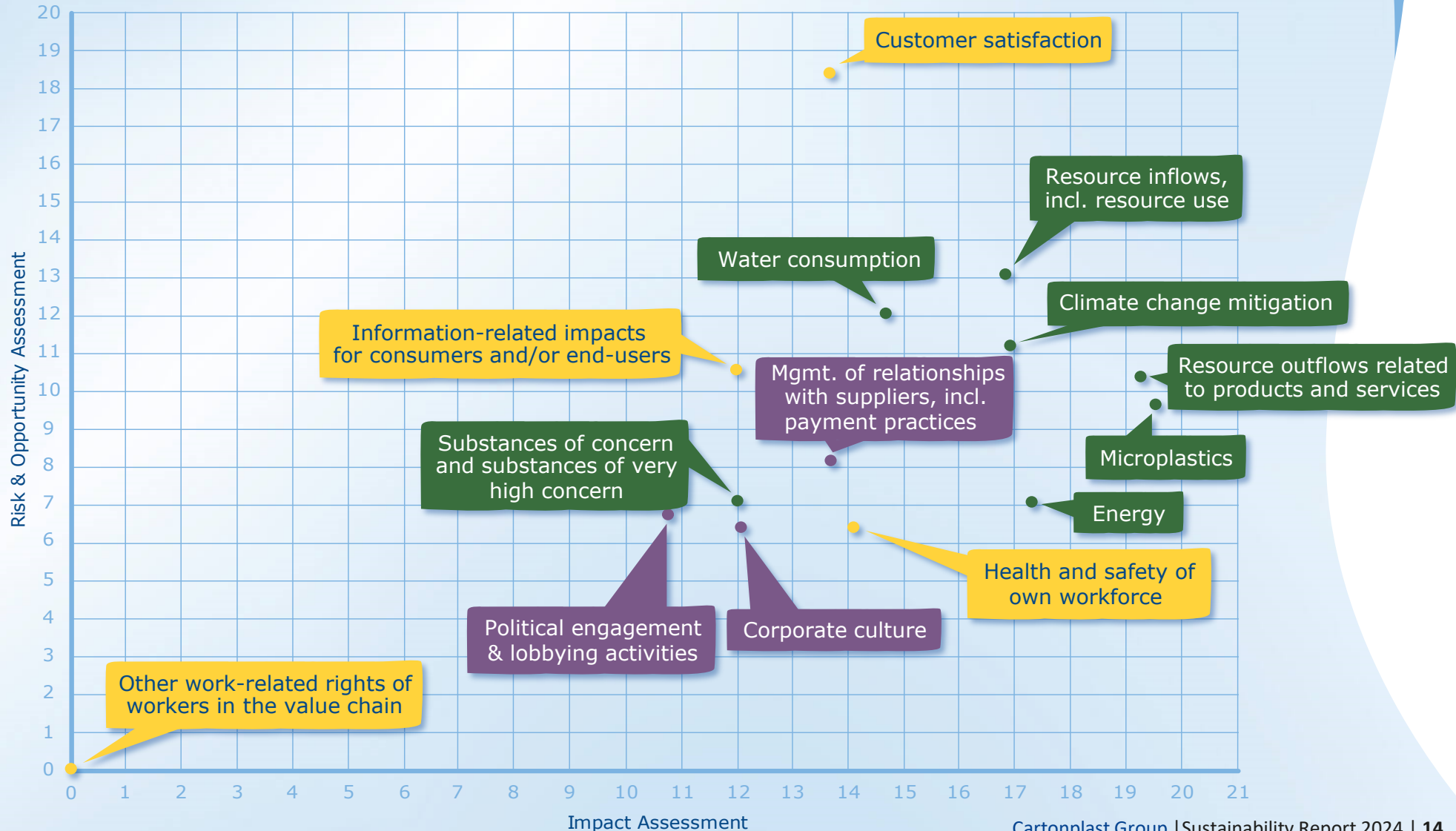
# DOUBLE MATERIALITY ANALYSIS & CSRD

We have recently initiated our progress towards Corporate Sustainability Reporting Directive readiness by conducting collaborative workshops with external advisors, resulting in a double materiality analysis as presented on the right.

The double materiality analysis highlights the essential topics for our organisation and stakeholders. While not all have been considered in the current report, it will be essential in the future.

- Governance
- Environment
- Social

Cartonplast Group's materiality matrix with a threshold of 17





# OUR ENGAGEMENT TOWARDS SUSTAINABILITY

Where do we start? With a framework!



**The Sustainable Development Goals (SDGs)** provide us with the ideal framework to both implement and communicate our dedication to sustainability.

The Sustainable Development Goals adopted by over 190 nations in 2015 as part of the 2030 Agenda, signify a collective commitment by all states to take action towards fostering global sustainability.

Recognisable and universally acknowledged, the SDGs serve as a common language for sustainability, embraced by all our customers who have committed to and communicate their alignment with these goals.

*All nations must unite in order to effect tangible changes in the world.*





# OUR ENGAGEMENT TOWARDS SUSTAINABILITY

The Sustainable Development Goals are a collection of 17 interrelated global goals designed to help individual companies, NGOs, associations etc. to contribute to global change through local action. Cartonplast Group is connected to all SDGs, but we know there are some goals where we can contribute more than to others.

We have identified the following SDGs as substantial for us:

<b>3</b> GOOD HEALTH AND WELL-BEING	<b>6</b> CLEAN WATER AND SANITATION	<b>7</b> AFFORDABLE AND CLEAN ENERGY	<b>8</b> DECENT WORK AND ECONOMIC GROWTH	<b>9</b> INDUSTRY, INNOVATION AND INFRASTRUCTURE	<b>10</b> REDUCED INEQUALITIES
<b>12</b> RESPONSIBLE CONSUMPTION AND PRODUCTION	<b>13</b> CLIMATE ACTION	<b>14</b> LIFE BELOW WATER	<b>15</b> LIFE ON LAND	<b>17</b> PARTNERSHIPS FOR THE GOALS	



EVERY CHAPTER IS TAGGED WITH THE RELEVANT GOAL TO WHICH WE ARE CONTRIBUTING.



# OUR ENGAGEMENT TOWARDS SUSTAINABILITY

The SDGs provide a framework, bringing forth commitments alongside the demands and challenges of our time. The European Green Deal and the 2015 Paris Climate Agreement present evident demands and challenges today. Nevertheless, we view these requirements as opportunities to contribute to decarbonisation, achieve the 1.5-degree goal and foster a sustainable environment for all.

“  
*Our business is naturally sustainable.*  
”

Although Cartonplast Group’s business model is already deeply rooted in **circular economy principles** and **sustainable processes**, we acknowledge that there is always room for improvement. Through the double materiality analysis, we have identified several essential areas for the Cartonplast Group where we can have the greatest impact and potential leverage. The ESG-Goals and ESG-Roadmap embody the ambitious path we are pursuing, presenting significant opportunities and measures for our entire Cartonplast Group.

“  
*Sustainability starts with us!*  
”





# CARTONPLAST GROUP ESG-GOALS



Our goal is to continuously develop products and services that contribute to a **circular economy** and have a **lower environmental impact** than their single-use counterparts.



Our goal is to keep demonstrating that **plastic is not a waste** and our commitment is to improve people's lives by creating lasting value through **reusable, recyclable** and **CO<sub>2</sub>-efficient transport packaging**.



Our goal is to develop a **strategic ESG-value proposition**, emphasise the **sustainability commitment** and its communication.



Our goal is to reduce our impact on **climate change**, improve our **energy management** and commit to a **net zero approach**.



Our goal is to enhance our **career development framework**, a feedback system and establish an **employer brand**.



Our goal is to establish **well-being** and **health initiatives** for Cartonplast Group's employees.









Our goal is to apply an **ESG-lens** to our **services** and to our **product eco-design**.



Our goal is to foster a culture that prioritises **human rights** and **fair labour** practices.

# ESG-ROADMAP

ESG-GOAL	2023	2024	2025/26/27
 Apply ESG-lens to CPL's services and eco-design	<ul style="list-style-type: none"> <li>Define LCA based KPI's and regular reporting</li> <li>Collaborate with external experts on LCA approach</li> </ul>	<ul style="list-style-type: none"> <li>Systematic client engagement and internal stakeholder</li> <li>Brainstorming workshop on rethinking service offerings</li> <li>Based on workshop outcomes, develop a systematic innovation process</li> </ul>	<ul style="list-style-type: none"> <li>Regularly review innovation results and prepare incentives and communicate success</li> </ul>
 Develop a strategic ESG-value proposition, emphasise the sustainability commitment and its communication	<ul style="list-style-type: none"> <li>Conduct a value mapping exercise of key clients and stakeholder and outlined CPLs values and ambition level</li> </ul>	<ul style="list-style-type: none"> <li>Based on values and ambitions define what sustainability means to CPL and align existing or develop further initiatives</li> <li>ISO 14001 certification</li> <li>Develop implementation plan for initiatives (goal, KPI, timeline, required resources, etc.) and track progress</li> </ul>	<ul style="list-style-type: none"> <li>Launch CPL's sustainability strategy internally and externally and report on progress</li> <li>Issue sustainability report</li> </ul>
 Climate and energy management and CO <sub>2</sub> -efficiency	<ul style="list-style-type: none"> <li>Develop process to systematically screen, identify and evaluate improvements in accordance with sustainability strategy</li> </ul>	<ul style="list-style-type: none"> <li>Awareness raising within the company</li> <li>Collect and manage scope 1 and 2 data and calculate company carbon footprint</li> </ul>	<ul style="list-style-type: none"> <li>Development of company wide carbon management system including target setting</li> <li>Align with international standard and commit to net zero approach</li> </ul>
 Enhance career development framework and feedback system and establish an employer brand	<ul style="list-style-type: none"> <li>Update existing career development framework</li> <li>Brainstorm and establish what it means to be a CPL employee linked with sustainability strategy</li> </ul>	<ul style="list-style-type: none"> <li>Identify programs linked to CPL employee values and communicate internally/externally</li> <li>Develop training curriculum as well associated budget, planning and KPIs</li> </ul>	<ul style="list-style-type: none"> <li>Implement training program and appoint HR roles and responsibilities for monitoring</li> <li>Annually assess effectiveness of career development framework</li> </ul>
 Promote a human rights and labour culture	<ul style="list-style-type: none"> <li>Establish a human rights and labour policy statement for entire group</li> </ul>	<ul style="list-style-type: none"> <li>Inform about human rights and labour policy and start initiatives for implementation</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with external experts to enhance human and labour rights</li> </ul>
 Establish well-being and health initiatives for CPL's employees	<ul style="list-style-type: none"> <li>Conduct an employee well-being survey with specific questions on wellbeing</li> </ul>	<ul style="list-style-type: none"> <li>Set up a work-life program</li> <li>Launch and communicate health program</li> </ul>	<ul style="list-style-type: none"> <li>Certification against ISO 45001</li> <li>Ensure self-realisation of employees</li> </ul>



# GOVERNANCE



A responsible **corporate governance** is one of the key elements of our company strategy, ESG-roadmap and for our sustainable development. Responsible corporate governance means for us to be aware of our economic, social and ecological impact as a company and take responsibility by implementing appropriate measures and actions.

We are committed to make our contribution to these governance topics, outlined in the following governance chapters:

**Engaging with stakeholders**

**Participating in global networking initiatives for responsible governance**

**Providing transparent reporting**

**Managing compliance and implementing whistle-blower system**



***This chapter contributes to SDG***



# UNITED NATIONS GLOBAL COMPACT



To improve our sustainability measures we joined a worldwide initiative for sustainable and responsible corporate governance and implemented their approaches and values. The **UN Global Compact** is the world's largest and most important initiative for sustainable and responsible corporate management based on ten universal principles. The **ten principles** contain statements to human rights, labour, environment and anti-corruption.

“

*We adopted the ten principles of the UN Global Compact to take more responsibility.*

”

For more transparency and stakeholder involvement we have completed the UN Global Compact “CoP” voluntarily by end of 2023. CoP stands for Communication on Progress and it is a progress report to measure our own sustainability engagement which will be mandatory for all UN Global Compact contributors. CoP requires participants to annually submit an electronic statement by the Chief Executive Officer expressing support for the UN Global Compact as well as complete the CoP-questionnaire. We have reported our corporate action and performance related to the ten principles of the UN Global Compact and the SDGs in the five categories: Governance, human rights, labour, environment and anti-corruption.

“

*Our 2023 UN Global Compact “Communication on Progress” report is available on the UN Global Compact website.*

”

We successfully completed the following UN Global Compact accelerator programs for networking purposes, to continuously define and improve our sustainability targets as well as enhance our sustainability efforts: business & human rights accelerator, SDG ambition accelerator and climate ambition accelerator.



**THE TEN PRINCIPLES OF  
THE UN GLOBAL COMPACT**

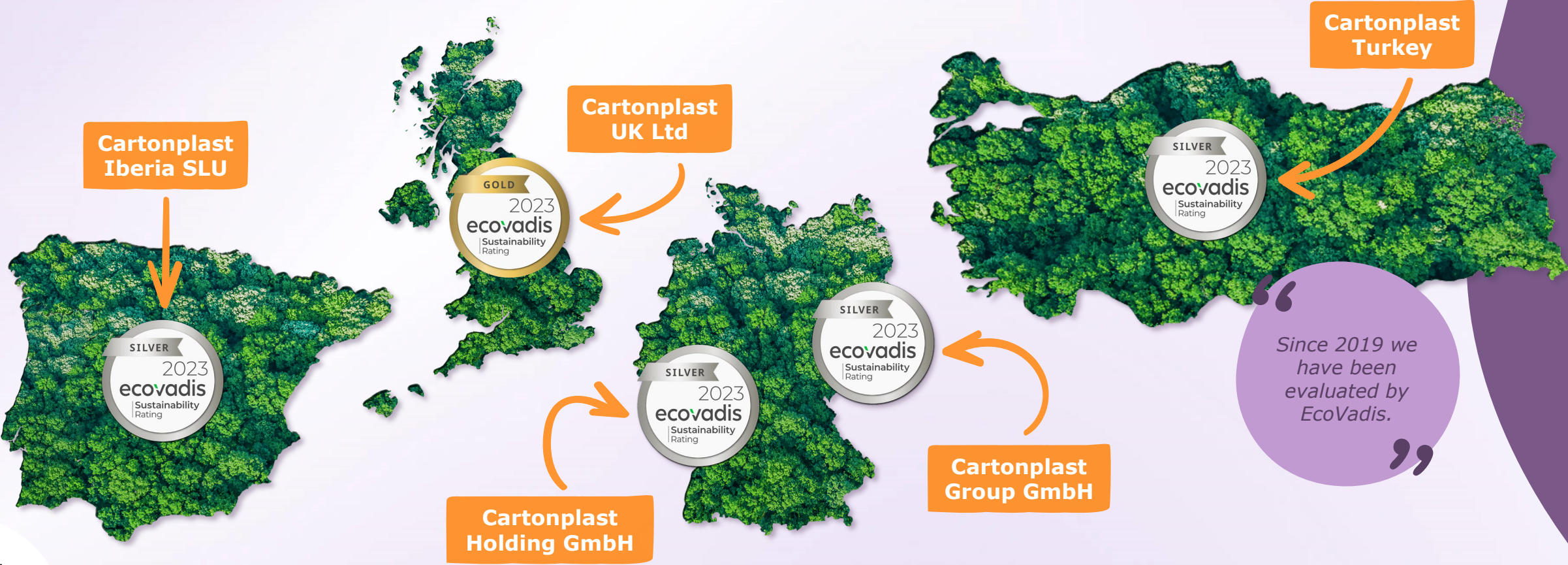




# ECOVADIS



EcoVadis positions itself as the global leader in providing trusted sustainability ratings for businesses. They assess the company's sustainability performance in four key areas: environment, labour and human rights, ethics and sustainable procurement. In 2019, Cartonplast Iberia SLU initiated the process of completing the EcoVadis questionnaire and shortly thereafter, several of our international subsidiaries followed. The assessed subsidiaries have shown impressive development in a very short time and have now all been awarded with silver or gold medals. EcoVadis also has proven to be a very suitable tool to fulfill our ever-growing reporting obligations on ESG-topics towards business partners.



“ Since 2019 we have been evaluated by EcoVadis. ”



# COMPLIANCE MANAGEMENT & WHISTLE-BLOWER SYSTEM



We are convinced that responsible corporate governance only works with structure and appropriate management systems. A groupwide compliance management system with its whistle-blower system helps us to fulfill our due diligence regarding legal compliance, corruption and bribery.

The communication channels for our whistle-blower system are published on our website and communicated internally in our compliance documentation, which ensures that it is accessible to all stakeholder groups, our employees, shareholders and business partners.



We strive to be fully compliant with our Code of Conduct and other legal requirements. All complaints should be communicated safely through our accessible whistle-blower system.

Our goal is the ongoing development of an anti-corruption compliance program that includes comprehensive policies, employee training and regular audits to prevent and detect corrupt practices within the organisation.



“

**Zero tolerance for corruption and bribery within the Cartonplast Group.**

”

# TRAINING & AWARENESS

Trainings can help to create awareness of important issues such as data protection, occupational health and safety or diversity and to make employees sensitive to them. Aside from that, trainings help to improve employees skills and performance, prepare them for change and promote a positive company culture.

Our employees are trained in:

**Regulatory and policy compliance**

**Health and safety**

**IT-Security**

**Expert knowledge for that respective field of work**

**Environment and sustainability topics**



Our goal is to enhance our **career development framework**, a feedback system and establish an **employer brand**.



We aim to implement a **training program**, appoint HR roles and responsibilities for monitoring.



“  
*Employee development and creating awareness is an investment in the future for our company.*  
”





# ENVIRONMENT



Embedded within our seventh company value, **“We respect the environment”**, we prioritise the preservation of the natural world. Ultimately, it serves as the habitat for our customers, ourselves and our families.

We are committed to make our contribution to several topics, outlined in the following environmental chapters:

**Establishing effective systems for controlling, monitoring and evaluating processes and documents**

**Addressing and managing climate change and its associated impacts**

**Managing water resources and promoting water conservation**

**Preserving biodiversity and managing land use sustainably**

**Managing waste responsibly**

“  
Protecting our planet and all life on it is of crucial importance.  
”



***This chapter contributes to SDG***

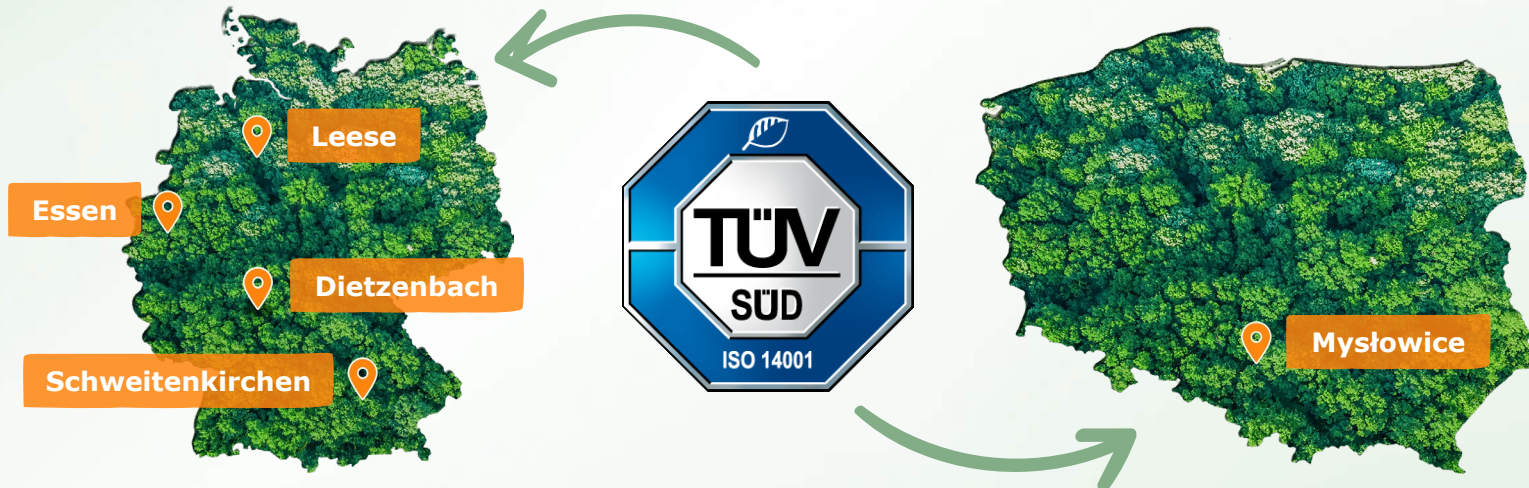


# ENVIRONMENTAL MANAGEMENT SYSTEM



## We respect the environment

We always had and will have the focus on the environment and our impact towards it. An **environmental management system** in this matter is required to be able to organise processes regarding environmentally friendly action and identify risks and opportunities. Through this framework, we prioritise the efficient management of resources, the reduction of waste and pollution, and the continual improvement of our environmental performance. We set annual environmental targets and in 2023 five sites got their environmental management system certified.



Our goal is to develop a **strategic ESG-value proposition**, emphasise the **sustainability commitment** and its communication.



We aim to attain **ISO 14001 certification** for all our subsidiary companies.

“*Five CPL sites have been certified for their environmental management according ISO 14001 in 2023!*”



# CLIMATE CHANGE



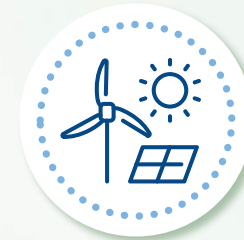
Climate change is a significant concern for the global community. It is crucial for individuals and organisations to take responsibility and address their own contributions to greenhouse gas emissions. Within our ESG-roadmap we have defined different stages to achieve our set goal. But we have to assess our emissions first, to be able to develop effective strategies to keep minimising our impact on the climate and to take account of climate adaptation and mitigation.

## How are we accomplishing this?

In Q3 of 2023 we have internally gained expertise through specialised training in a life cycle assessment (LCA) calculation program called SimaPro, using the Ecoinvent Database. This enables us to calculate the environmental impact of our operations effectively and helps us to define operational KPIs which are in line with CO<sub>2</sub>-reductions.



*“ We acknowledge that climate change and its impact are all-determining concerns for the global community. ”*



Our goal is to reduce our impact on **climate change**, improve our **energy management** and commit to a **net zero approach**.



We aim to align with **international standards** for the **net zero approach**.



# LIFE CYCLE ASSESSMENTS

## PP LAYER PADS



Life cycle assessment (LCA) is a methodology for evaluating the environmental burdens associated with a product, process or activity over its entire life cycle. We conduct LCA studies to sharpen our environmental awareness, recognise our impact on the environment and understand the importance of our actions for a sustainable future.



### POLYPROPYLENE (PP) LAYER PADS – BUSINESS CASE | GERMANY

In 2014, we conducted a comparative LCA of our PP layer pads and cardboard layer pads used in transportation. This assessment was updated and verified in 2021, once again demonstrating that PP layer pads significantly outperform corrugated cardboard in terms of greenhouse gas emissions, fossil fuel use and water consumption throughout their life cycle. Efficient logistics, very low scrap rates and best-in-class washing services contribute to the conclusion that Cartonplast Group's pooled PP layer pads have a much lower environmental impact than cardboard.



Our goal is to apply an **ESG-lens** to our **services** and to our **product eco-design**.



We collaborated with **external experts** on LCA approach.

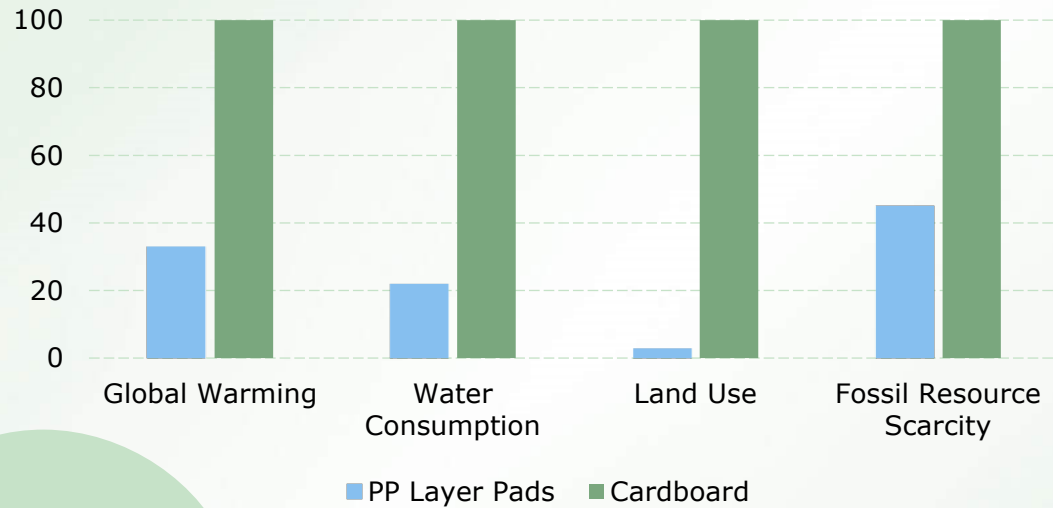




# LIFE CYCLE ASSESSMENTS PP LAYER PADS



Overall impact indicator results in %:  
PP layer pads vs. cardboard



“  
The environmental impact of our PP layer pads is much lower compared to single used products.  
”



Main findings and conclusions  
Business case | Germany



**Global warming:** A PP layer pad emits 67% less kg CO<sub>2</sub>-eq than the cardboard pad variant over the span of a product life cycle.



**Water consumption:** In a product life cycle of a PP pad, 78% less water is required compared to the equivalent cardboard pad variant.



**Land use:** Most significantly, the land use impact of PP layer pads is 97% lower than that of cardboard pads.



**Fossil resource scarcity:** A life cycle of a PP pad consumes 55% less fossil resources than the equivalent in cardboard pads.





# LIFE CYCLE ASSESSMENTS

# PP LAYER PADS



**67 %**  
LESS CO<sub>2</sub>\*

**78 %**  
LESS WATER

**97 %**  
LESS LAND USE

\*numbers are based on the comparative life cycle assessment for PP layer pads in Germany



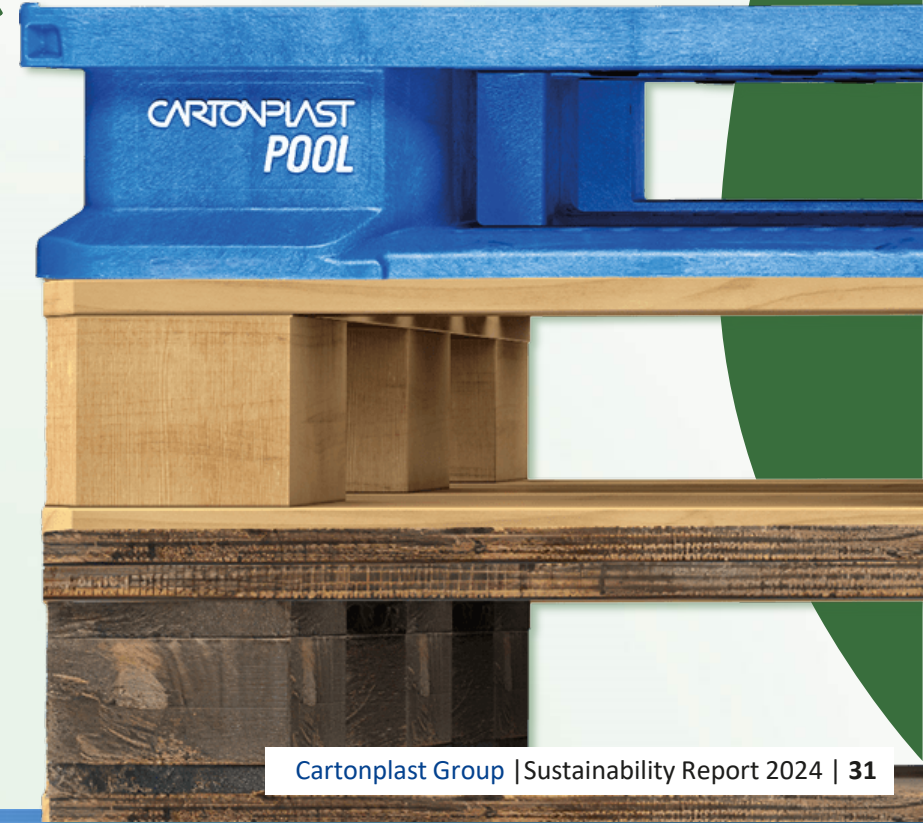
# LIFE CYCLE ASSESSMENTS PP PALLETS

## POLYPROPYLENE (PP) PALLETS VS. ONE-WAY WOODEN PALLETS AND MULTIPLE-USE WOODEN PALLETS

Comparative life cycle assessments for our PP pallets have been conducted compared on the one hand with one-way wooden pallets and on the other hand with multiple-use wooden from a cradle-to-grave perspective by an independent institute.

Our findings demonstrate again that our strong operational expertise, well-designed products and long-lasting performance result in a lower environmental impact and better outcomes compared to wooden pallets.

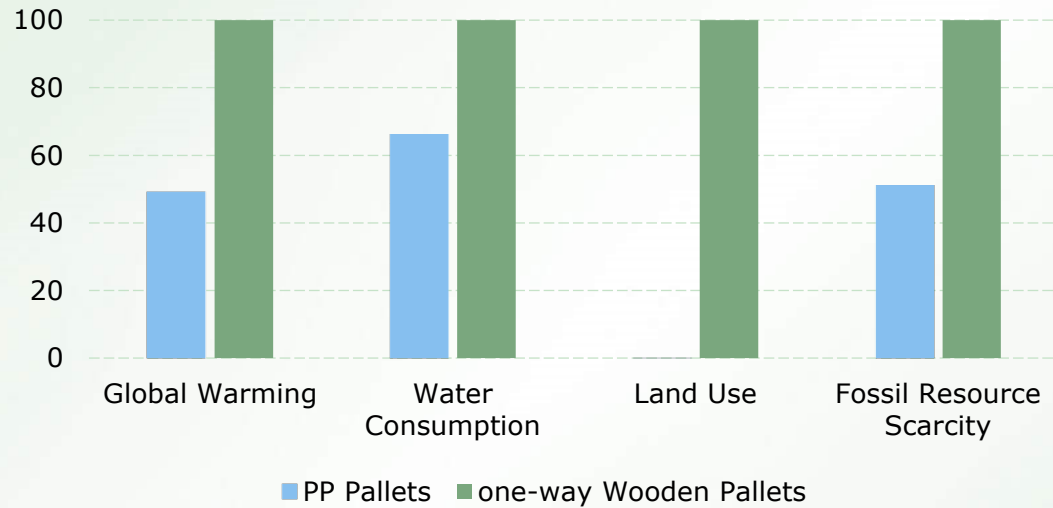
“  
CPL Turkey leads  
the way:  
170 000 PP pallets  
replaced millions of  
one-way wooden  
pallets.  
”



# LIFE CYCLE ASSESSMENTS PP PALLETS



Overall impact indicator results in %:  
PP pallets vs. one-way wooden pallets



“  
In Turkey, wooden pallets are typically discarded after a single use, which is considered absolutely unsustainable.  
”



## Main findings and conclusions Business case | Turkey



**Global warming:** PP pallet from Turkey emits 51% less kg CO<sub>2</sub>-eq than the one-way wooden pallet over the span of a product life cycle.



**Water consumption:** In a product life cycle of a PP pallet 34% less water is required compared to the equivalent one-way wooden pallet variant.



**Land use:** The land use impact category quantifies the biodiversity loss associated with different land use types. Our PP pallets have 99% less land use equivalence compared to one-way wooden pallets.



**Fossil resource scarcity:** A life cycle of a PP pallet consumes 49% less fossil resources than the equivalent in one-way wooden pallets.





# LIFE CYCLE ASSESSMENTS

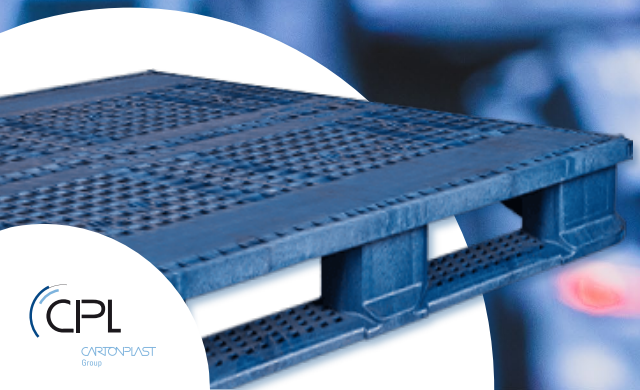
# PP PALLETS



**51 %**  
LESS CO<sub>2</sub>\*

**34 %**  
LESS WATER

**99 %**  
LESS LAND USE



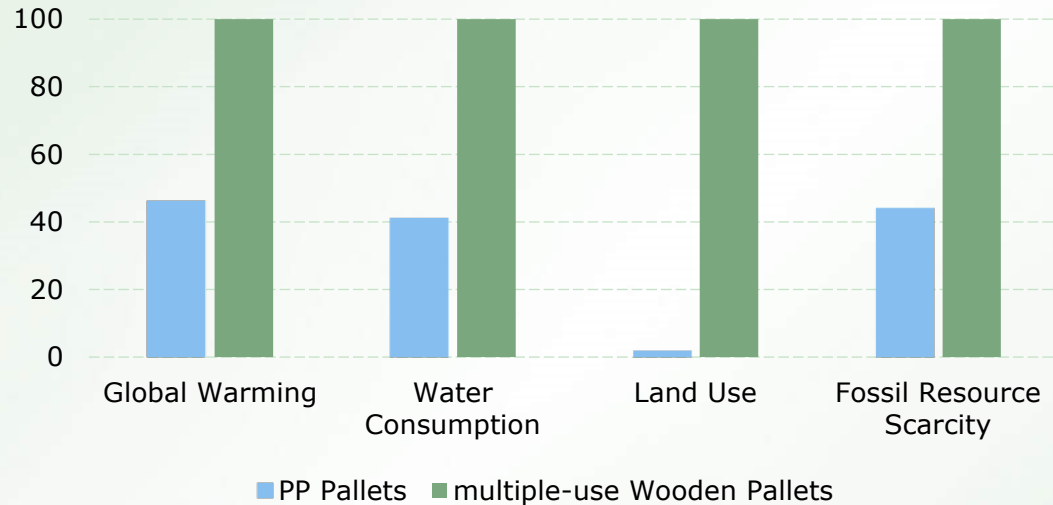
\*numbers are based on the comparative life cycle assessment for PP pallets in Turkey



# LIFE CYCLE ASSESSMENTS PP PALLETS



Overall impact indicator results in %:  
PP pallets vs. multiple-use wooden pallets



## Main findings and conclusions Business case | Spain



**Global warming:** PP pallets from Spain emits 54% less kg CO<sub>2</sub>-eq than the multiple-use wooden pallet over the span of a product life cycle.\*



**Water consumption:** In a product life cycle of a PP pallet 59% less water is required compared to the equivalent wooden pallet variant.



**Land use:** The land use impact category quantifies the biodiversity loss associated with different land use types. Our PP pallets have 98% less land use equivalence compared to multiple-use wooden pallets.



**Fossil resource scarcity:** A life cycle of a PP pallet consumes 56% less fossil resources than the equivalent in wooden pallets.



\*numbers are based on the comparative life cycle assessment for PP pallets in Spain (calculated in the most favorable scenario in Iberia)



# LIFE CYCLE ASSESSMENTS

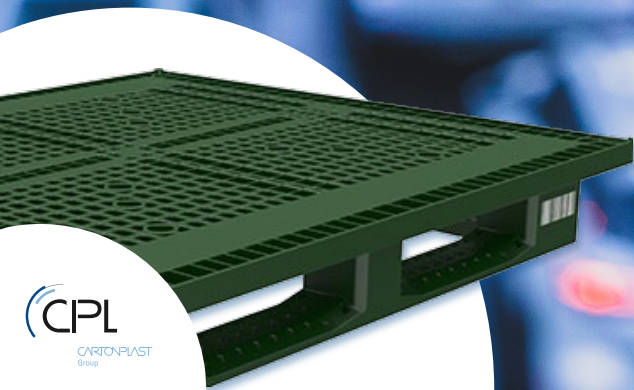
## PP PALLETS



**54 %**  
LESS CO<sub>2</sub>\*

**59 %**  
LESS WATER

**98 %**  
LESS LAND USE



\*numbers are based on the comparative life cycle assessment for PP pallets in Spain  
(calculated in the most favorable scenario in Iberia)



# CO<sub>2</sub>-EMISSION REDUCTION



The following chapter aims to detail our efforts in reducing greenhouse gas emissions and outline the steps we are taking to contribute to the broader initiative of decarbonisation. These efforts not only lead to CO<sub>2</sub>-reductions, but also result in cost savings and increased operational resilience.



## Circular economy

Through our innovative full-service pooling solution for reusable and recyclable transport packaging, we actively contribute to foster a **true circular economy**. This not only ensures the safe utilisation of resources but also leads to a reduction in emissions. Our entire business model is designated for a twofold closed loop system and considering itself as a **low carbon business**.

“  
With our circular business model, we are adhering to planetary limits, effectively reducing CO<sub>2</sub>-emissions and so ensure climate and biodiversity protection.  
”

“  
Circular economy is not a trend for us. It is simply what we do!  
”



# CO<sub>2</sub>-EMISSION REDUCTION



*“ We are very customer-oriented: Did you know, that most of our service centers are **not more than 400 km** away from our customers? ”*

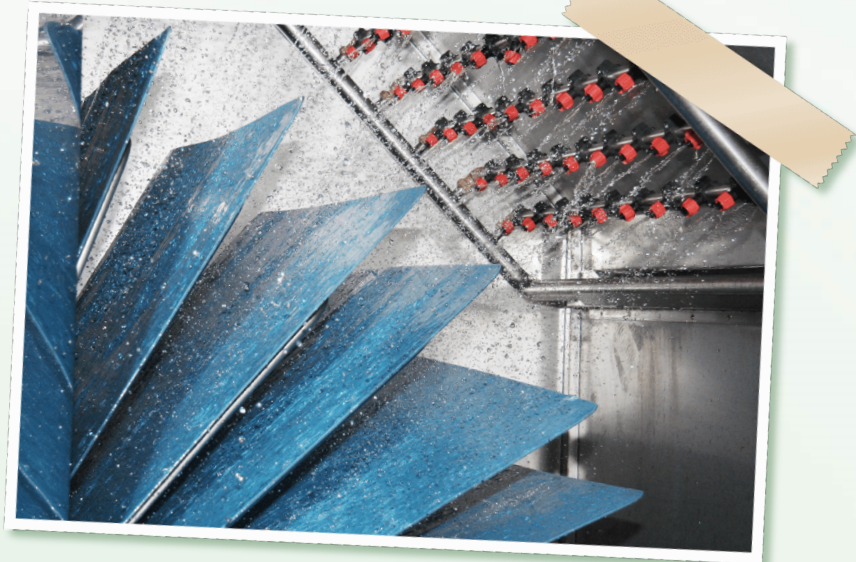


## Efficient transports

By strategically situating our service centers and establishing a comprehensive European-wide network, we guarantee minimal distances for manufacturers and fillers. This results in optimised, energy-efficient transport, contributing to reduced emissions.

## Machine efficiency

More than 30 years of expertise have gone into developing the best cleaning parameters and machines. Our washing machines are constantly being improved based on the experiences gathered in our service centers. Through intelligent technical solutions, we continuously increase the throughput and performance of our machines and save water, energy and consequently CO<sub>2</sub> at the same time.

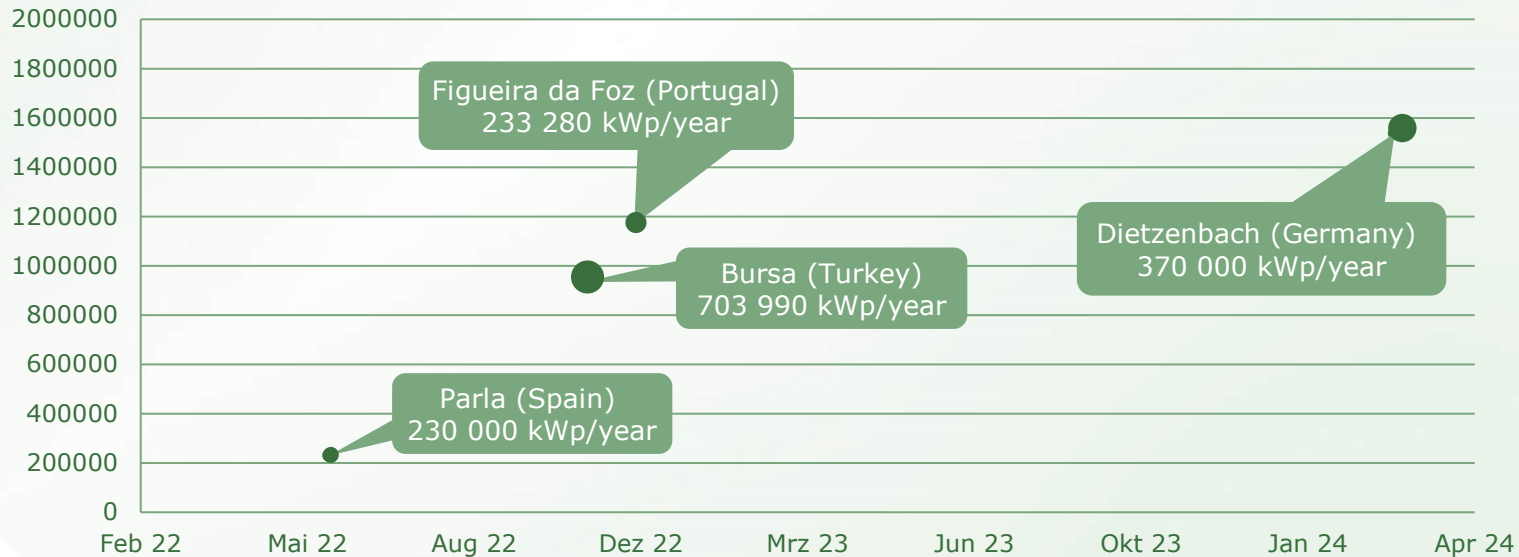


# CO<sub>2</sub>-EMISSION REDUCTION

## Renewable energy

One of our primary initiatives involves a significant shift towards renewable energy sources. We have invested in renewable energy projects, such as **solar panels** and **charging stations**, to power our operations sustainably. By prioritising more clean energy in the future, we not only reduce our dependence on fossil fuels, but also actively contribute to a **low-carbon energy landscape**. Cartonplast Turkey has been sourcing almost half of its energy needs from the installed PV system to December 2022 until September 2023. As expected, the solar panels demonstrates the highest effectiveness during the summer months. Also, on certain days, the latest installed solar panels at Cartonplast Dietzenbach generate so much energy that we can even feed it back into the power grid.

**Kilowatt-peak per year from all installed CPL solar panels**



“CPL Ibérica received the *Calculo-Reduzco seal* for its outstanding commitment for reducing carbon footprint!”





# CO<sub>2</sub>-EMISSION REDUCTION



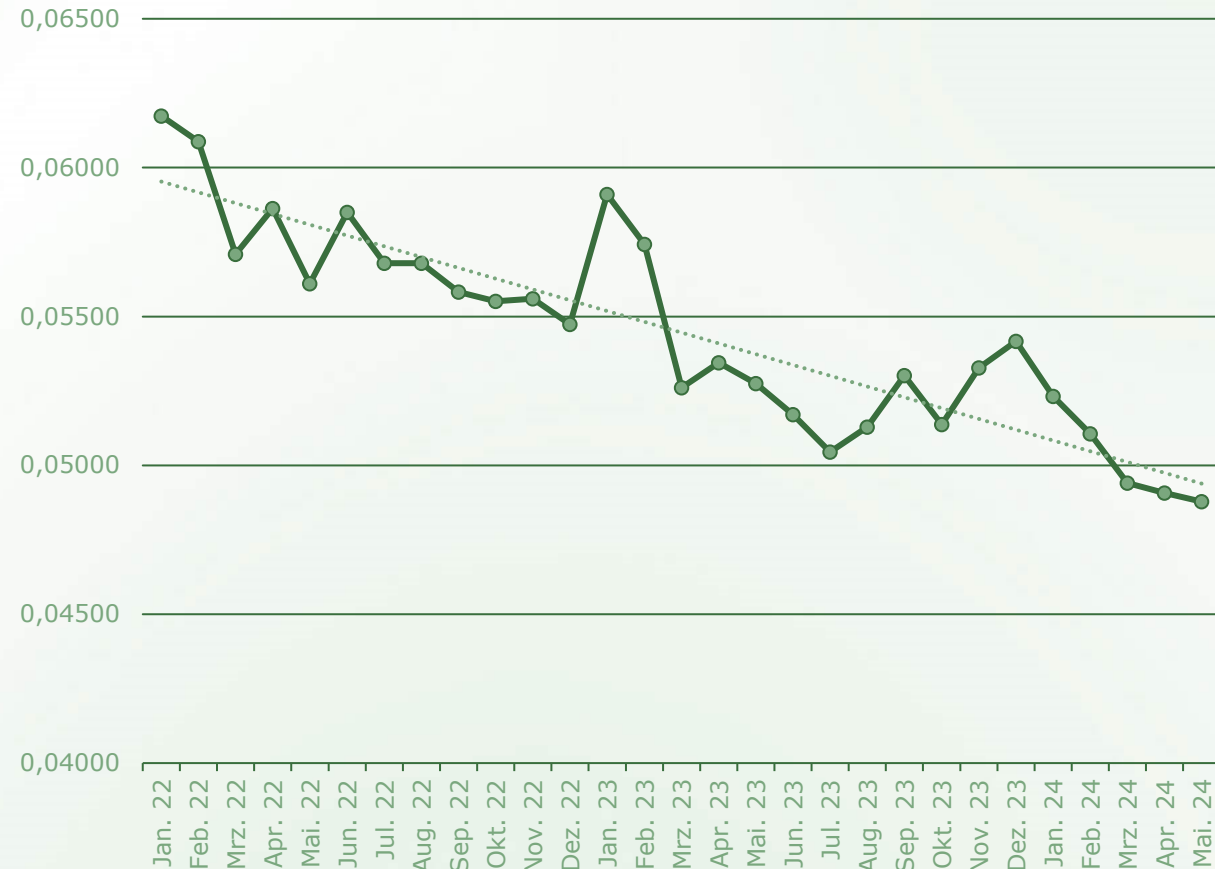
## Machine efficiency

We are diligently working on improving our machine efficiency, aiming to achieve the highest workload with minimal resource consumption. Despite occasional fluctuations, we strive for a consistent downward trend in resource usage, shown in the graphic on the right.



*Our washing machines are the centerpiece of our business.*

Monthly kWh/pad – top 6 CPL entities  
Iberia, Germany, Poland, Russia, Turkey, UK



# WATER

Water is crucial for our operations, particularly in maintaining the highest hygiene standards throughout our 34 wash-lines. Consequently, we have been awarded with **ISO 9001** and **ISO 22000** certificates.



We continuously invest in improving the efficiency of our cleaning processes to conserve water across all our washing facilities worldwide. Additionally, we adhere to stringent hygiene and disinfection standards as well as the highest environmental requirements. As a result of our efforts, we have successfully reduced our water consumption in our processes over the years.



The water usage for cleaning our PP layer pads is minimal relative to their size. For example, in January 2023, the average water consumption per pad in Poland was only 66 ml, equivalent to the amount of water that fits in only 6 tablespoons!



“  
*Excellent cleaning results with minimal water consumption!*  
”





# WATER REDUCTION



## Innovative washing technology

A Cartonplast Group innovation helps reduce water consumption. We are adapting our internal process of washing and disinfecting of PP layer pads to become more environmentally friendly.

We have implemented a **new washing technology** using a physical agent for water disinfection. We keep our high standard of cleaning effectiveness and still have reduced our water consumption to a minimum. A disinfectant has been replaced by a **UV light system**, which is just as effective as chemicals, but much more sustainable.



**This improvement in our process reduced the water usage up to 26% and chemicals up to 35%.**



“  
Throughout the entirety of 2023, while moving over 57 million PP layer pads with over 15 billion bottles, our water consumption across all four sites in Germany was less than the water consumption of 48 households.\*  
”

\*in 2023 all sites in Germany had a water consumption of approx. 8500 m<sup>3</sup>  
A 4-person household in Germany has an average water consumption of 180 m<sup>3</sup>/year ([Source](#))

# BIODIVERSITY & LAND USE

While climate change is a significant concern, the loss of biodiversity is equally crucial and the two are inherently interconnected. Biodiversity ensures that there are healthy ecosystems, but unfortunately these are increasingly at risk from various factors like land use, deforestation etc.

Given that our products substitute packaging materials derived from trees, such as cardboard or wooden pallets, we have to explore their origin. Trees are renewable, but a study from the WWF in 2022 shows that the global wood consumption is 4.3 to 5 billion cubic meters per year and therefore already higher than the sustainable renewable wood harvest volume, which is 3 billion cubic meters per year. Currently, 40% of industrially produced wood is used for paper production, with 60% of this being used for packaging.\*

**Considering that more wood is removed than grows back or that trees are mostly grown in monocultures, we offer an alternative with our PP layer pads and PP pallets that contributes positively to the biodiversity account.**



“ Biodiversity encompasses the variety of living organisms on earth and requires urgent protection. ”

\*Source: Published by WWF [Alles aus Holz? WWF-Studie fordert dringend Umdenken](#)



# BIODIVERSITY & LAND USE



The external conducted LCAs shows a significant difference in the impact category land use:



**So how can we contribute to prevent biodiversity loss?**

By continuing to expand our **circular business model** and keep offering a sustainable alternative to replace single-use packaging, which originates from trees, we make our contribution to biodiversity loss! **Our business helps to prevent deforestation and fosters biodiversity!**

# MATERIAL CIRCULARITY

**We live material circularity; expressed in our mission:**

To provide innovative and sustainable packaging solutions in collaboration with our customers, enhancing the efficiency and environmental sustainability of their supply chains.

Our commitment is to improve people's lives by creating lasting value through **reusable** and **recyclable transport packaging**.



*We live material circularity.*



**We don't generate waste - all our products are 99,99 % recycled at the end of their life cycle!**

We achieve industry-leading low scrap rates for our products and maintain a 99,99% **closed-loop pooling system**. This enables us to reuse our materials, ensuring material circularity. Thanks to our high-quality materials, we can recycle scrap material almost indefinitely to create new products.

Our PP layer pads and PP pallets pool material is not only one of our valuable assets; everything that entered the cycle since the beginning remained within it. And so, they all fulfill the requirements of DIN EN ISO 13429 for packaging reuse and DIN EN ISO 13430 for **material recyclability**.



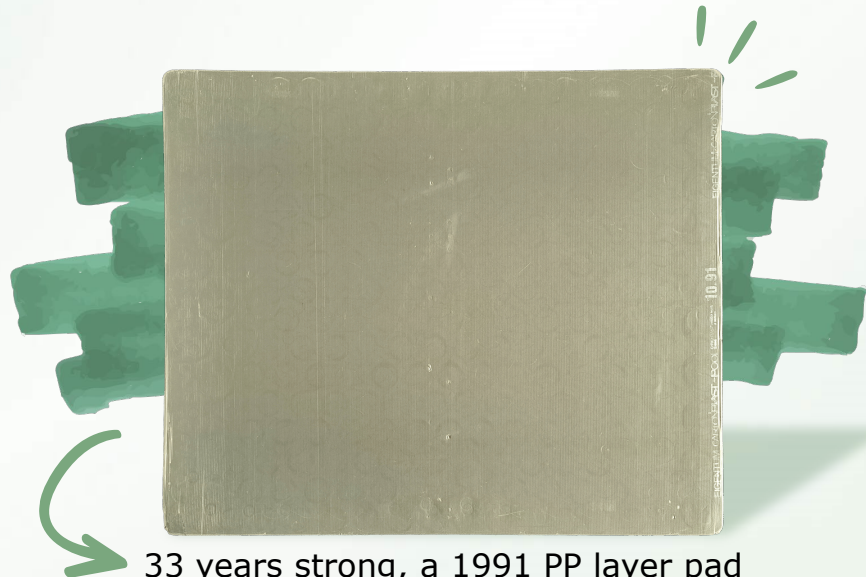
# REUSABILITY



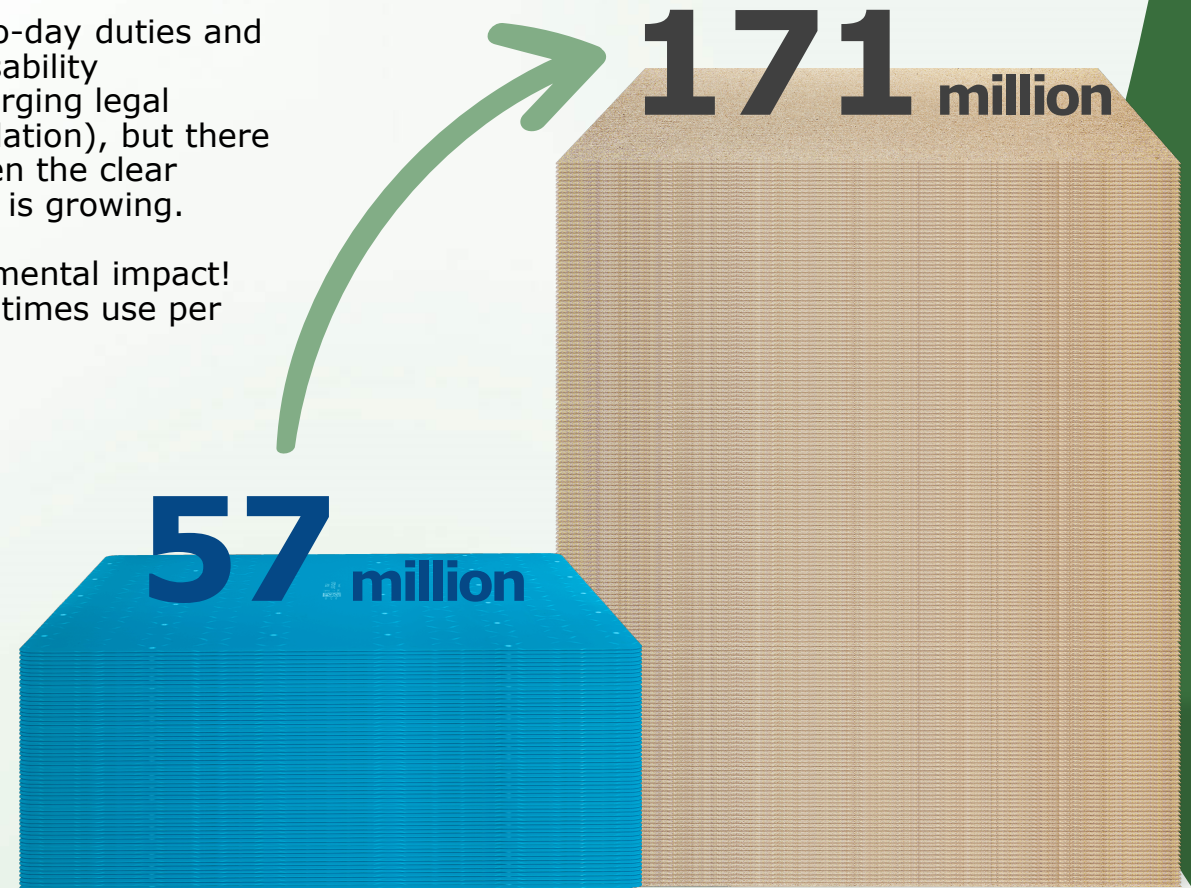
**We are performance driven**

**A market leader position** requires the best performance on our day-to-day duties and our product reusability is one foundation of our good performance. Reusability is considered as the best solution for packaging. Not only are there emerging legal requirements, such as the PPWR (Packaging and Packaging Waste Regulation), but there is also a widespread global movement favoring reusable packaging, given the clear benefits of using packaging multiple times, awareness of its advantages is growing.

**Reusability** and a **circular economy** significantly reduces the environmental impact! 57 million Cartonplast group PP layers pads are used with an average 3 times use per year - that's around 171 million single used cardboards saved annually!



33 years strong, a 1991 PP layer pad still part of our pooling system.



# WASTE



Our B2B business model results in **minimal waste generation** with our products. But we also do have waste which occurs in production. Therefore, we still aim to address areas reducing waste where we have the most significant leverage, such as foil waste, as it constitutes a considerable amount of our waste statistics. Roughly one-third of the total waste generated across all four German sites comprises foil used for wrapping the PP layer pads. We have identified different scenarios where foil waste emerges:

## Inbound foil waste

Upon return, our PP layer pads are either secured with strapping tapes or wrapped in foil by fillers.



## Outbound foil waste

To ensure food safety, freshly washed and disinfected PP layer pads are wrapped in polyethylene shrink foil before being sent to customers.

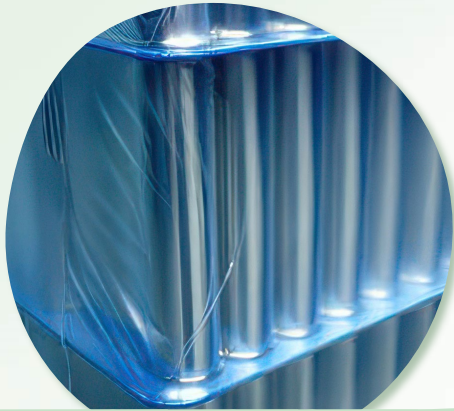
“ Even though we move 171 million times 1.5 kg PP layer pads per year, totaling 256 500 tons; the waste we generate is less than 1% of the material we move! ”



# WASTE REDUCTION



“  
Our commitment  
as a company:  
Taking  
responsible  
strides to  
diminish waste.  
”



## Reducing outbound foil

We initiated a project to search for an alternative solution to the shrink foil we use, when our products are washed, disinfected and ready to be shipped to the client. The project has already entered the test phase and will be expanded after successful completion.



## Reducing inbound foil

We are currently exploring the possibility of eliminating the foil wrap around our pads entirely during returning process and replacing it with strapping bands instead. This change could result in a significant reduction in foil waste.



## Reducing waste in offices

Regularly there are environmental workshops to train all employees to the topic of waste separation and to gather and develop new ideas how to reduce even more waste.

# SOCIAL RESPONSIBILITY



Social responsibility with the due diligence coming along, is another key element of our company’s strategy. Social responsibility goes beyond legal requirements and we see a commitment to contribute to the well-being of society. It is not only an ethical obligation, but also an essential aspect of long-term successful corporate governance. Furthermore, we see an important part in our social responsibility by having a standard setting role in the community providing safe and clean transport packaging with an excellent service quality.

We are committed to make our contribution to the following social topics:

**Social responsibility towards our customers**

**Human rights and labour practices**

**Our own workforce**

**Health and safety standards**

**Diversity**

**Supply chain and supplier relations**

**Community engagement**

***This chapter contributes to SDG***



*“Our employees are the most valuable of all our assets.”*



# SOCIAL RESPONSIBILITY TOWARDS OUR CUSTOMERS



## We are passionate about customers

As a service provider we strive to create and maintain **long-term** and **trusting customer relationships**. We seek their satisfaction and pursue to meet their expectations while respecting their values.

We also have a strong social responsibility towards our customers and a binding obligation to the community. For over 30 years we annually transport billion of our customers' products save and clean to their destination. Our business is **system relevant**, ensuring people have access to glass-bottled beverages, food in glass containers and baby nutrition in glass.

Our social responsibility towards our customers involves prioritising their needs, ensuring high-quality transport packaging and upholding the highest standards in all our interactions and services.

“

***Our obligation to the community?  
Deliver clean and safe transport packaging!***

”

# HUMAN & LABOUR RIGHTS

When we joined the UN Global Compact in 2022 we underlined our transparent commitment with its ten principles. In this context the „Human Rights and Labour Policy Statement“ has been issued. We aim to carry out our due diligence continuously and gain more comprehensive understanding of how we can elevate human rights and labour standards to a higher level at Cartonplast Group.

## How can CPL contribute to the implementation of human and labour rights?

As a small and another step to carry out our due diligence regarding social responsibility, we have created a poster to actively inform all employees about their human and labour rights and repeatedly create awareness for the whistle-blower channel.



Our goal is to foster a culture that prioritises **human rights** and **fair labour** practices.



We aim to collaborate with **external experts** to enhance **human** and **labour rights**.



“The human and labour rights poster has been displayed in all CPL locations, translated into their respective national languages.”





# CARTONPLAST GROUP WORKFORCE



## We value people

Our employees are the most valuable of all our assets. We are people oriented, seeking motivation, professional development and remuneration that is based on performance and the achievement of goals.

We recognise the importance of fostering a supportive and **inclusive work environment** where every individual feels valued and empowered to contribute their unique perspectives and skills. And we also recognise the potential of our own workforce and the chances we see in areas such as employee satisfaction, employer branding and diversity. Our ESG-roadmap contains the goal “Establish **well-being** and **health initiatives** for Cartonplast Group employees” which we are about to implement by starting with an employee survey in Germany to receive feedback about needs and concerns from employees. The survey will be expanded for other Cartonplast Group countries and based on the results, we will work on improvement measures for well being and health initiatives.

“*Each of us has the responsibility to foster a culture that embraces and values respect, tolerance and appreciation for the diversity among all employees!*”



Our goal is to establish **well-being** and **health initiatives** for Cartonplast Group’s employees.



We aim to launch and communicate a **health program.**



We aim to set up a **work-life program.**



# HEALTH & SAFETY

## We never compromise safety

For our customers as well as for our employees we pay strict attention to maintain the Cartonplast Group's work-safety-rules in everything we do.

Health and safety for all our employees is and always has been a central topic for the Cartonplast Group. But we felt the urge to keep evolving by striving for a health and safety certification. Not only because it is part of our ESG-roadmap, it shows that we are very serious about ensuring safe working conditions and minimising potential risks as well. Overall, it improves the efficiency and productivity of our company by providing a structured framework for managing health and safety aspects and helping us to implement best practices in this area.

Our recent efforts regarding the improvement of **health** and **safety management** is the implementation of **work safety rules posters** for all countries in all national languages.

*Our goal is zero harm.*

**10 CARTONPLAST WORK SAFETY RULES**

- You are responsible for your safety. Don't take unnecessary risks.
- Wear correct PPE. Defective safety equipment must be replaced immediately.
- Safety devices must be operational. Bypassing or disabling them is illegal and dangerous unless officially authorised.
- Machines under repair must be locked out. Use the Lock Out/Tag Out procedure.
- Wear safety gloves when using knives. Use only Cartonplast-approved knives.
- Inspect steps and ladders before use. Always hold the handrail.
- Be aware of forklifts. Drivers must be aware of pedestrians. Pedestrians must stay alert and maintain eye contact.
- Wear goggles and gauntlets when handling chemicals. Follow safety procedures.
- Report all accidents and near misses. Ensure they are reported to your supervisor immediately.
- Everyone is responsible for workplace safety. Hold yourself and others accountable.



Our goal is to establish **well-being** and **health initiatives** for Cartonplast Group's employees.



We aim to attain the certification against **ISO 45001**.



# DIVERSITY



## We respect and value diversity

Cartonplast Group recognises the great **value of diversity** and actively cultivates an international environment.

By leveraging the strengths of a multicultural team, Cartonplast Group not only improves its operational capabilities, but also sets a strong example of inclusivity and forward-thinking in the industry.

To understand the value of an **international environment** is one of our strengths and drives the entire Group towards a more innovative and successful future.



*“The international environment we work in is a strength and opportunity at the same time.”*

# SUPPLY CHAIN

**We are supply chain masters, we deliver quality products**

Our position in the food and beverage production supply chain requires high quality and food safe transport packaging...



...therefore, we have established a trusting and strong relationship with our suppliers and customers. It is not without reason that a key element of our strategy is **"long-term relationships and excellent service."** Our collaboration with direct suppliers is grounded in **partnership** and **equality**. This enables us to jointly develop outstanding products and maintain our circular economy. Prompt payment practices and timely invoice settlement, especially for small businesses, are standard company policies that foster trust and reliability in our partnerships.

**We are about to implement a company-wide supplier management system with supplier audits to ensure supplier quality, reliability, sustainability and compliance.**

*“ Long-term relationships and excellent service – the key to good and trustful collaboration. ”*



**ESG**  
SOCIAL  
RESPONSIBILITY





# COMMUNITY ENGAGEMENT



**Dietzenbach, Germany**

Since 2021, we've been hosting the **sustainability awards ceremony**. These awards acknowledge exemplary management practices in Cartonplast Group transport's use of reusable packaging, leading to enhanced operational efficiency and prolonged packaging lifespan. This reduces environmental impact, benefiting both users and society at large. Winners not only receive a commemorative diploma but also participate in the sustainable forests project for reforestation. Through this initiative, Cartonplast Group pledges to plant 150 trees, contributing to offsetting the company's CO<sub>2</sub> emissions and absorbing a total of 24 600 kg of CO<sub>2</sub> over 40 years.

A matter of heart: The children of today are the adults of tomorrow. That's why it's very close to our hearts to **support disadvantaged children**. With donations to a local institution, **BlaUMACHER Kids** in Dietzenbach, we support the project that has been privately funded so far and want to encourage pushing forward with this great endeavor.



**Parla, Spain**

*“A matter of heart: The children of today are the adults of tomorrow.”*





# ABOUT THE REPORT

---

## **Published**

Cartonplast Holding GmbH  
Marie-Curie-Straße 8  
63128 Dietzenbach  
Germany

## **Contact**

Sustainability | Janina Schlabitz | [sustainability@cartonplast.com](mailto:sustainability@cartonplast.com)  
Marketing | Alena Alamouti | [marketing@cartonplast.com](mailto:marketing@cartonplast.com)

## **Design**

Kamikaze Digital Marketing GmbH | Vanessa Wronna





# **DISCLAIMER**

---

This report is the first sustainability report for the Cartonplast Group.

All rights to the content of this sustainability report (the “report”) are reserved by Cartonplast Holding GmbH (“Cartonplast”). This report and its contents are protected by copyright laws and international treaties. Unauthorized copying, distribution, reproduction or any other dissemination of this report, in whole or in part, is strictly prohibited without prior written consent from Cartonplast.

This report has been prepared by Cartonplast with the utmost care and attention to detail. However, we cannot guarantee the absolute accuracy or completeness of the information contained herein. While every effort has been made to ensure that the content of this report provides a true and fair view, there can be no guarantee that all statements and data fully meet the expectations and requirements of every stakeholder. The content of this report is intended to provide information and should not be used as a basis for making any decisions. Cartonplast accepts no liability for any loss or damage caused by reliance on the information contained in this report.





# END

## Reporting year 2024