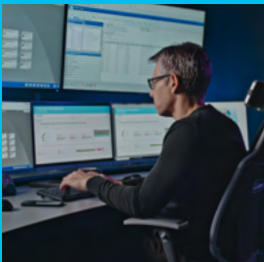


Sustainability Report FY24



Introduction

Message from the President & CEO

03

2024 highlights

05

About us

06

Our approach to sustainability

07

Refining our double materiality assessment

08

Stakeholder engagement

10

Embedding sustainability in our business

13

Spotlight story: Unlocking the 'Hidden Middle'

15

Our focus areas

Food systems

17

Circularity

31

Climate

46

Business conduct

87

Nature

58

Social sustainability

74

Appendix

97

About this report

This report¹ summarises the sustainability performance of the Tetra Pak Group of companies (Tetra Pak) for the period 1 January 2024 – 31 December 2024, which is why we refer to it as our “full year 2024” or FY24 report. Unless otherwise stated, all information in this report covers Tetra Pak, which includes the business activities performed by all entities operating under the Tetra Pak brand.

We have used the European Sustainability Reporting Standards (ESRS) as a reference when developing this report.² For detailed sustainability performance data see pages [102-110](#). For more details about our work in sustainability, please see our [website](#).

External assurance

Our scope 1, 2 and 3 greenhouse gas (GHG) emissions data³ has received limited assurance by a third party since 2013 and direct operations water data has received limited assurance by a third party since 2023.

[READ MORE](#)

Message from the President & CEO

Everyone everywhere deserves access to safe food. It is the foundation for health, education, opportunities in life and social prosperity. But feeding a growing population remains a challenge.

By 2050, the global population is forecast to rise to 10 billion¹, and the demand for food to increase by 60%². Furthermore, food security not only supports nutrition and health, it is also the foundation for economic growth.³ A lack of stable and long-lasting food security restricts the human capital⁴ development required for sustainable economic growth, raising government costs, thereby holding back growth in the long-term at country, regional and global levels. At the same time, however, although food systems⁵ are essential to feed the modern world, they are accountable for more than one-third of global greenhouse gas (GHG) emissions⁶. This tension between the demands for greater food productivity and lower emissions presents a significant challenge. Furthermore, in 2023, nearly 282 million people faced high levels of acute food insecurity⁷.

As global temperatures are currently forecast to rise to 1.5°C - 2°C above pre-industrial levels⁸, pressures on farming and food production are likely to escalate further leading to food insecurity, and increased hunger.

This is why as a company we want to drive the transformation of global food systems, ensuring people have access to safe food everywhere, with all the other benefits that come with that, while protecting people and the planet. In our sustainability agenda, we focus on five interconnected areas to do so: food systems (food); social sustainability (people); and climate, nature and circularity (the planet). Together these interconnected areas support one another to create a holistic approach that drives change across our value chain and our industry. In 2024, we made further progress in each area.

Food

As nations grapple with the urgent need to curb GHG emissions and enhance food security, the transformation of food systems has become a top priority. And as the [Climate COP in Baku \(COP29\)](#) highlighted, world leaders, policymakers, and sustainability advocates are increasingly focused on an often-overlooked segment: the so called

“hidden middle” of agri-food chains, meaning the steps between farm to table – food processing, packaging, storage, transportation and distribution. The hidden middle represents 18% of agrifood emissions and accounts for up to 40% of the economic value added in food systems⁹.

Establishing and driving sustainable food systems requires long-term commitment, forward-looking investment, continuous innovation, and collaboration with stakeholders. Since our journey started in 1951 in Sweden, we have worked to make food safe and available worldwide. Our technology and solutions have contributed to reducing food waste and making food accessible for over 70 years, protecting the quality and safety of perishable foods while extending their shelf life. In 2024 we celebrated 30 years in Vietnam, 40 years in the US, 45 years in Argentina, 45 years in China, and 65 years in Mexico, to name a few.

Across 29 sites around the world, last year we also provided Dairy Hub support to help 84,000 smallholder dairy farmers – helping them to achieve greater income security while providing stable raw milk supply to dairy manufacturers, thereby growing the local dairy industries sustainably. Furthermore, 66 million children in 49 countries enjoyed milk or other nutritious beverages in our packages through school feeding programmes.

Looking more broadly at all people on the planet, in 2024 we delivered 178 billion carton packages globally in total, while also processing millions of tonnes of additional food for consumer products such as cheese, ice cream and powder with our food processing solutions. The total value of the

global food and beverage sector that we serve as a company is significant, estimated by some sources to be at least €2.6 trillion¹⁰ of sales value, illustrating the importance that food production and distribution play to drive economic growth and associated benefits.

People

We aspire to improve the livelihoods of people across the world by giving access to safe food; contributing to economic growth; and respecting human rights in our workplaces, our value chain, and the communities in which we operate.

We take a value chain approach, and collaborating with our suppliers is key. As part of our Join Us in Protecting the Planet initiative, we work with a group of 150 prioritised suppliers to support livelihoods in our supply chain. In 2024, 29 of our suppliers committed to a climate target validated by the Science Based Target Initiative. We also helped suppliers to develop strategies to protect nature and carry out enhanced human rights due diligence to identify where impacts most need to be addressed.

We made improvements in safety, reducing our total recordable accident rate by 10%. And when it comes to employee attitudes around safety, we can proudly share that 92% of employees responded favourably in our global internal survey to the statement “people in my team are protected from health and safety hazards.” In that same survey, 84% of employees reported that they feel able to bring their “whole selves” to work – an important benchmark in our ongoing work on employee diversity, equity and inclusion for all.

Message from the President and CEO continued

In this spirit, we also launched a dedicated project focused on improving disability inclusion across our workplaces, with the aim to build a more inclusive environment where employees with disabilities have equal opportunities to grow and succeed. We're also proud to share we achieved an overall employee engagement score of 87%¹¹.

Within Tetra Pak we believe in making a positive impact on the communities where we live and work, and this includes volunteering. Because of this, on 4 December 2024, also International Volunteer Day, we launched new global volunteering guidelines. This means that since 1 January 2025, every employee has up to one day of paid leave per year to participate in volunteering activities that are organised by the company locally. The activities are designed to support our purpose to protect food (such as with food banks, hunger relief activities or food waste reduction activities etc.), people (with support for those affected by natural disasters, community building programmes, or child development and education) and the planet (such as with waste collection, recycling activities or tree planting).

Further downstream in our value chain, we also supported concrete actions that made a real difference in the lives of informal waste collection workers in Brazil, Colombia, Egypt, India and Vietnam. From increasing access to health and social services, providing personal protective equipment, or connecting people to community libraries or after-school reading classes – we

supported targeted solutions to make a tangible difference.

Planet

With more than one third of global GHG emissions attributed to food systems¹², the role of the food industry in mitigating climate change is paramount. Therefore, we remain focused on decarbonising our value chain. In 2024, we reduced GHG emissions in our own operations¹³ by 54% and across our value chain by 25%¹⁴, both figures versus our 2019 baseline. The share of renewable electricity used at our sites rose to 94% in 2024, and we are on track to achieve net-zero GHG emissions in our own operations by 2030.

Downstream, improving efficiency and competitiveness for customers went hand-in-hand with reducing climate impact. In 2024, we brought AirTight with Encapt™ technology for our separators to market – providing our customers with a reduction in energy consumption of up to 40%. This illustrates well how our advanced equipment, combined with services, can aid customers to save energy, water and emissions during food production operations, while reducing food loss in production sites around the globe. Elsewhere in this report you can read how our advanced manufacturing solutions help food production factories achieve up to a 40% reduction in energy consumption and a 60% improvement in quality consistency, preventing food waste. This shows how taking a holistic approach to food production, powered by advanced technologies, can unlock new opportunities to improve performance that

benefits food producers and the planet alike. Such advancements also demonstrate our ongoing commitment to work together with suppliers, customers and other stakeholders to achieve net-zero GHG emissions across the value chain by 2050 compared to our 2019 baseline.

Another highlight of 2024 was the launch of our comprehensive Approach to Nature framework. Built on concrete actions and more than 20 measurable targets, this framework defines our contribution to halting and reversing nature loss, supporting the restoration of ecosystems, and enhancing water security.

The [Araucaria Conservation Programme](#) in Southern Brazil had another breakthrough year in 2024 with a five-fold increase in land restored compared to 2023. In addition to the project's overall aim to promote native biodiversity and combat climate change¹⁵, by restoring this landscape in collaboration with local farmers, who receive government compensation for meeting environmental requirements, we create a sustainable development model that also secures livelihoods and economic growth.

Throughout 2024, we continued to apply circular economy principles across our value chain to reduce waste and resource use across our own operations, including for our packaging and our processing equipment. We take a holistic approach when it comes to circularity, from design to end-of-life. We design recyclable food packaging, increase the use of recycled and renewable materials, and expand collection and recycling infrastructure to keep materials in use.

We continue to invest approximately €100 million in packaging research and development every year to further enhance the environmental profile of cartons without compromising food safety. This investment led to innovations such as recycled polymer caps developed in partnership with Elle & Vire, and the Tetra Brik Aseptic 200 Slim Leaf with a paper-based barrier. In 2024 we also invested an additional €42 million to support the expansion of collection and recycling infrastructure for used beverage cartons worldwide. As part of the effort to help deliver our circular economy vision, over 1.3 million tonnes of used beverage cartons were collected and sent for recycling globally, supporting an increase of the global collection for recycling rate to 28%. As part of these efforts, we engaged with 215 recyclers worldwide.

It is only through collaboration with our customers, suppliers and other stakeholders, combined with the passion and dedication of our teams, that we can take these steps forward, to create solutions for the challenges society faces. It is also why our commitment remains intact. Together, we will continue to deliver on our purpose: "We commit to making food safe and available, everywhere, and we promise to protect what's good: food, people, and the planet."



Adolfo Orive,
President & CEO,
Tetra Pak

2024 highlights



Food systems

66 million children in **49 countries** received milk or other nutritious beverages in our packages through school feeding programmes

178 billion food and beverage packages delivered worldwide

Almost 84,000 smallholder farmers involved in Dairy Hub projects since 2011

42% **GHG emissions reduction** of dairy ambient processing lines since 2019 baseline (on track to meet targets of a 50% reduction by 2030)

€100,000 **Tetra Pak® Protein Mixer** significantly reduces product loss from foaming and spillage in protein mixing, saving over **€100,000** per year in product loss



Circularity

Certified recycled polymer content linked to our EU production rose **42% in 2024 vs. 2023¹** — calculated via a mass balance approach².

€100 million **invested** in packaging research and development addressing sustainability of our packages

>1.3 million tonnes **of used beverage cartons** collected and sent for recycling, supporting a **28%** global collection for recycling rate³

€42 million **invested** to support collection, sorting and recycling of our packages globally

215 recyclers **engaged with globally**

Launched **Circle Green stainless steel** in our homogenizers, which has a carbon footprint 93% lower when compared to the global industry average for stainless steel⁴



Climate

-25% **in total value chain GHG emissions** (scope 1, 2 and 3) since 2019 (-7% reduction since 2023)

-54% **in own operations** GHG emissions (scope 1, 2 and business travel) since 2019

94% **renewable electricity consumption** in Tetra Pak operations (on track to meet our 2030 target)

A List **Climate A List** for CDP⁵

11 billion **plant-based packages** and **12.3 billion plant-based caps** delivered, resulting in **47 kilotonnes of CO₂ saved** compared to the amount of CO₂ which would have been emitted if using fossil based polymers⁶



Nature

Conducted a **high-level assessment of nature-related impacts** for our entire **supply chain**, and prioritised the most impactful categories of suppliers for further engagement

1,564 hectares **of land under restoration** since 2022 of which **1,292 hectares** were added in 2024

A- score **achieved from CDP** for Forests and Water Security

17% **Total water withdrawal** from sites in scope of our water target **reduced by 17%** versus baseline (2019)

52% **decrease in volatile organic compounds (VOCs) emissions** vs. 2019 baseline driven by Solvent Free pre-press project in Packaging Solutions



Social sustainability

10% reduction achieved in our **Total Recordable Accident Rate (TRAR)**, from 1.82 in 2023 to 1.63 in 2024

84% **of employees** reported they can bring their whole selves to work

87% **employee engagement score**

Strengthened and scaled our **engagement with workers across the value chain** through worker voice surveys, impact assessments and third party interviews

Initiated the development and implementation of **action plans for human rights** across all of our priority supply chain categories

Made progress in **improving the lives of informal waste collection workers** in Vietnam, Brazil, India, Colombia and Egypt

About us

Our company in numbers

Figures at
1 January 2025

€12,820m*
Net sales 2024 in € million



24,546
Number of employees



>160
Countries in
which we had
sales in 2024



178bn
Tetra Pak®
packages sold
in 2024



89
Sales
offices

27
Market
companies

8
Technical
Training
Centres

6
R&D
Centres

8
Customer
Innovation
Centres

51
Production
plants

Delivered in 2024



227
Filling
machines



2,712
Processing
units



705
Downstream
equipment

In operation



8,592
Filling
machines



113,227
Processing
units



22,347
Downstream
equipment

* at prevailing rate

Who we are

We are a world-leading food production and packaging solutions company. As an advanced manufacturer at the forefront of technology and innovation, we provide modern systems for food production and packaging that enhance food security, increase affordable access to food, and help improve livelihoods and economies. In collaboration with our customers and suppliers, driven by our more than 24,000 dedicated employees worldwide, we protect food sustainably for billions of people in more than 160 countries.

More than 70 years ago, we began a journey to help make food safe and available, everywhere. Today, we continue to innovate to protect food, people and the planet. Using the latest science and technologies, our dedicated team of innovators, experts and collaborators work together relentlessly to find answers to some of the biggest challenges facing the global food and beverage industry today.

We are part of the [Tetra Laval Group](#), which also includes DeLaval and Sidel, all focused on technologies for the efficient production, packaging and distribution of food. Read more in the [Tetra Laval annual report](#) and on its [website](#).

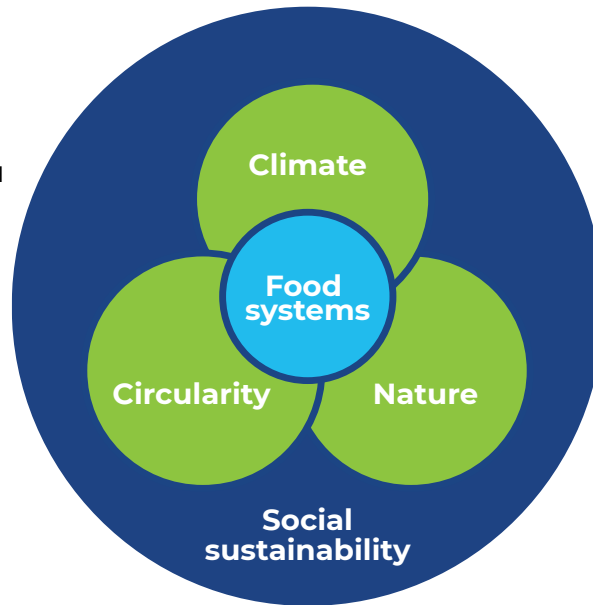
Our approach to sustainability

Our sustainability agenda is embodied by our purpose: “We commit to making food safe and available, everywhere and we promise to protect what’s good: food, people and the planet.” It starts with food and forms the foundation of our business decisions, unifies our people and is a driving force behind our innovations.

To meet our responsibility as a business and the expectations from stakeholders, our sustainability approach is built on the foundation of identifying and prioritising material impacts, risks and opportunities in business activities and relationships across the value chain. Material impacts on people and environment are derived from environmental and human rights due diligence, based on engagement with and understanding of affected stakeholders.

We develop action plans to prevent and mitigate negative impacts to create better outcomes for people and planet, and set metrics and targets to track effectiveness.

Based on materiality, there are five key areas to our sustainability agenda: **food systems, social sustainability, climate, nature, and circularity**. We recognise that these areas are interconnected and interdependent – when we take action in one area, we strive to understand and manage potential impacts on the others.



For example, there is a need to expand food production without exerting more pressure on natural resources, and to protect and restore ecosystems while mitigating climate change.

Additionally, the climate crisis and the necessary transition to a net-zero economy exacerbate risks to people across the value chain, such as lost livelihoods from extreme weather events or loss of employment as industries shift. Workers who are affected by the transition need safe work that enables them to improve their prospects and livelihoods. The interconnections across the five areas are detailed throughout this report.

[READ MORE](#)



Refining our double materiality assessment

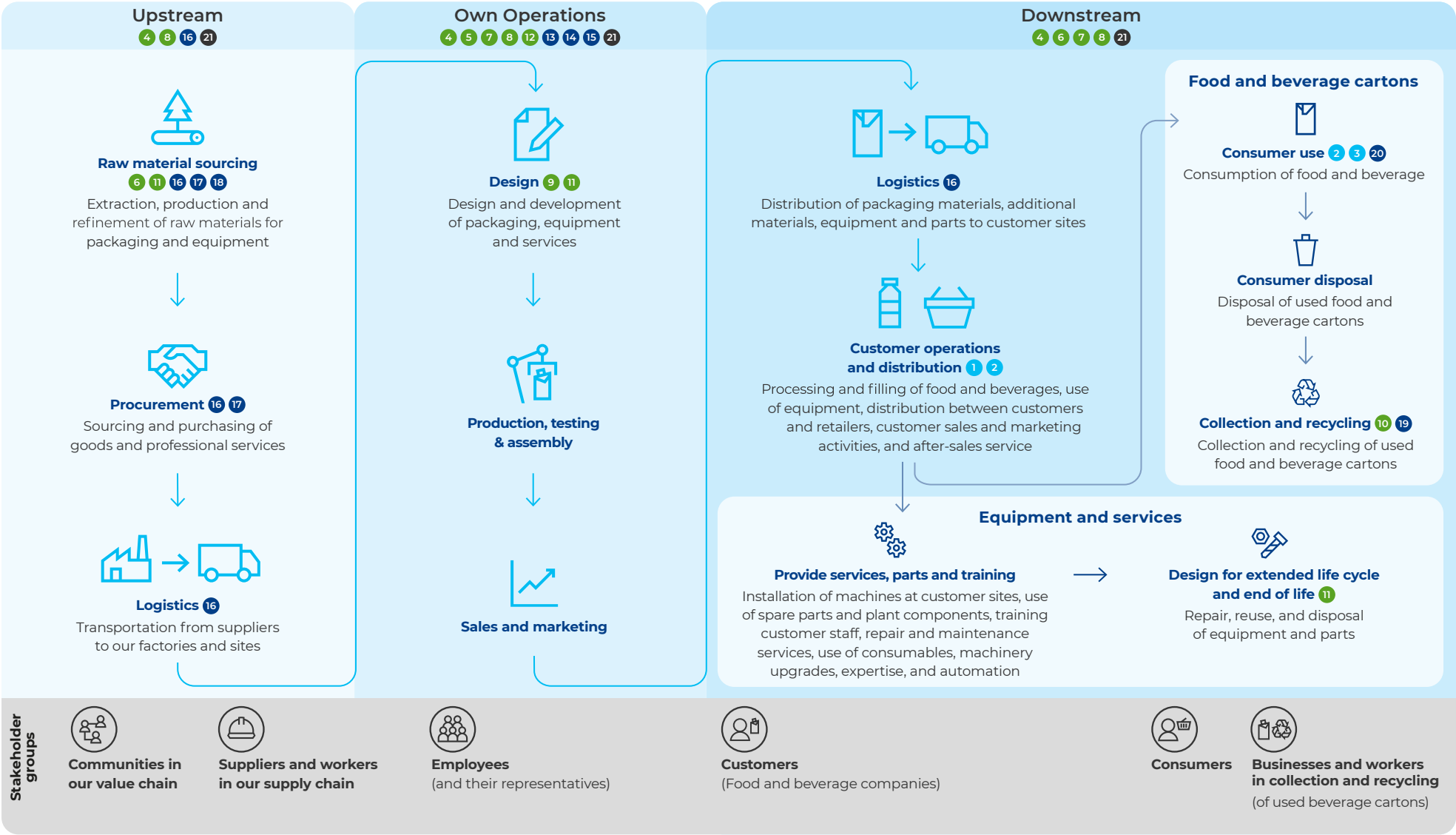
During 2024, we refined our Double Materiality Assessment (DMA)¹ process, considering learnings from our first assessment in 2023 and the implementation guidance² published by the European Financial Reporting Advisory Group (EFRAG) in December 2023.

The DMA used a four-phase consultative process that defines our sustainability priorities in line with the European Sustainability Reporting Standards (ESRS).

Phase 1: Understanding	Phase 2: Identification	Phase 3: Assessment	Phase 4: Determination
<p>Create understanding of Tetra Pak's value chain activities and stakeholders, and gather relevant information sources</p> <p>We mapped relevant business activities across our value chain and collected relevant information sources, such as our risk register, sustainability assessments and stakeholder engagement.</p> <p>→ Read more about stakeholder engagement here</p>	<p>Identify actual and potential impacts, risks and opportunities (IROs), and map to the business activities in our value chain and the ESRS topics</p> <p>Impacts: Drawing on insights from our ongoing affected stakeholder engagement due diligence processes for human rights and environment, and sustainability assessments, we listed actual and potential impacts by ESRS standard. Internal topic experts reviewed lists to identify any additional impacts. Impacts (actual/potential, negative/positive)³ were identified across the value chain – taking short, medium and long-term timeframes⁴ into account.</p> <p>Risks: We listed sustainability-related risks from our company risk register.</p> <p>Opportunities: Opportunities identified in our strategy process and programmes related to sustainability were listed.</p>	<p>Assess materiality for all identified IROs, resulting in impact materiality scores for impacts and financial materiality scores for risks and opportunities</p> <p>Impacts: Drawing on the sources of due diligence processes and assessments, internal subject matter experts assessed impact materiality based on severity (scale, scope, irremediability) and likelihood.⁵ Severity of impacts were calculated using the formula: (scale + scope + irremediability)/3.</p> <p>Risks: Financial materiality is based on potential financial effect, and likelihood⁶ in line with our risk register.</p> <p>Opportunities: Financial materiality was assessed based on potential financial effect, and likelihood, in line with the Business Units' three-year and long-term growth plans.</p>	<p>Determine material IROs based on a threshold for impact and financial materiality</p> <p>To determine the material IROs along our value chain, we used topic-specific thresholds, based on both the materiality scores of the full list of IROs and our internal experts' qualitative judgement. A total of 45 IROs were determined to be material. These 45 material IROs were grouped into 21 material topics under our five sustainability agenda areas to help structure sustainability reporting and strategic discussions.</p> <p>→ See our material topics here</p>

Tetra Pak’s Value Chain

Below is an overview of our key business activities, stakeholder groups, and value chain steps, including their relationship to our material topics. Our sustainability approach addresses the full value chain, from responsible sourcing and supplier management, to our own operations, product use at customer sites, and the end-of-life treatment of equipment and used food and beverage cartons worldwide.



Material topics

Food systems

- 1 Food production
- 2 Food loss and waste
- 3 Food access

Climate

- 4 Climate change mitigation and adaptation
- 5 Energy source and intensity

Nature

- 6 Biodiversity and ecosystems
- 7 Water management
- 8 Pollution to air and water

Circularity

- 9 Design and materials of packaging
- 10 Collection and recycling of carton packages
- 11 Design, materials and life cycle of equipment
- 12 Waste in our operations

Social Sustainability

- 13 Employee workplace and wellbeing
- 14 Employee health and safety
- 15 Employee diversity, equity and inclusion
- 16 Working conditions in our supply chain
- 17 Forced labour in our supply chain
- 18 Impacts on indigenous peoples' rights and local communities
- 19 Living and working conditions for informal waste collection workers
- 20 Consumer health and safety

Governance

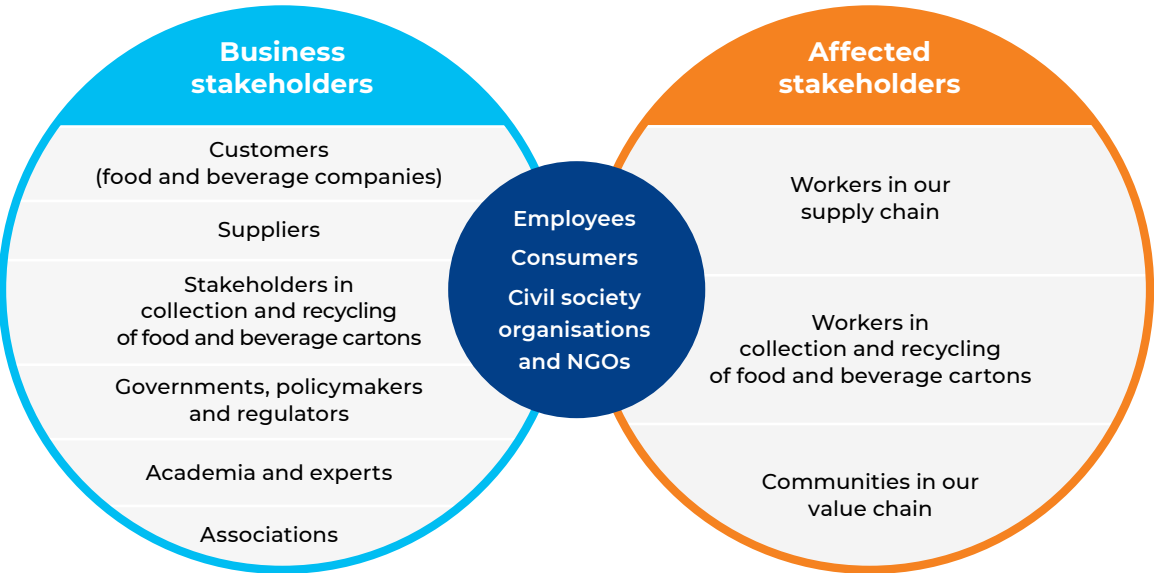
- 21 Business conduct

Material impacts, risks and opportunities (IROs) from Tetra Pak's 2024 Double Materiality Assessment were grouped under these 21 material topics.

Stakeholder engagement

As a global business, we have a diverse range of stakeholders – our employees, customers, consumers, workers in our supply chain, policymakers, academics, and more. By engaging with key stakeholders, we gain valuable insights into their perspectives.

Engagement with those who are potentially affected by activities across our value chain (called affected stakeholders) and external subject matter experts helps us identify, prevent and mitigate negative impacts on people and environment in a more effective way. Engagement with businesses, users of our products and services, and external experts helps us identify and address business risks and opportunities.



The methods we use for stakeholder engagement vary and are specific to the groups we are trying to reach. Across all engagement, we establish the most effective channels, our purpose and the desired outcomes. See more in the table below.

Key engagement channels	Purpose of engagements	Examples of outcomes of engagements
Employees		
<ul style="list-style-type: none">Annual employee engagement surveysWorks councils and union representationWhistleblowing / Speak Up platformRegular dialogues with managers on individual objectives, personal development and compensation review	<ul style="list-style-type: none">Understand employees' perceptions and experiences in the workplace, address any concerns and feedback, and establish career development and learning pathways for employees	<ul style="list-style-type: none">Defining actions to address concerns through corrective actions and prevention measuresUpdating internal policies or proceduresInforming the development and launch of global initiatives and campaigns
Customers (food and beverage companies)		
<ul style="list-style-type: none">Regular local engagements through leadership and sales teams, including top-to-top meetingsCustomer support and guidance, for example through innovation workshops at our Customer Innovation Centres and product trials at our Product Development Centres	<ul style="list-style-type: none">Collaborative relationship with customers to achieve common goals and targets (e.g. food security, food access and safety, food loss and waste, resource efficiency, recycling, etc.), and identify new business opportunities together	<ul style="list-style-type: none">Product and service improvementsNew foods innovation and product launchesInvestments in new production facilities

Stakeholder engagement continued

Key engagement channels	Purpose of engagements	Examples of outcomes of engagements
Suppliers		
<ul style="list-style-type: none"> Regular meetings and workshops with suppliers on common agendas, including senior strategic review meetings (top-to-top) Engagement with 100+ strategic and prioritised suppliers through our Join Us in Protecting the Planet supplier sustainability initiative, including supplier scorecards and awards Workshops, industry collaborations, supplier trainings, capability building sessions and supplier conferences 	<ul style="list-style-type: none"> Engage suppliers on our vision and strategic direction and ensure compliance with our Code of Conduct for Suppliers (Supplier Code) Influence positive change within our supply chain, including promoting responsible sourcing and decarbonising our supply chain, and enhancing the sustainability knowledge and capabilities of suppliers 	<ul style="list-style-type: none"> Streamlined supplier expectations Identify business opportunities through common agendas Supplier improvement plans Informed selection of suppliers
Workers in our supply chain		
<ul style="list-style-type: none"> Worker voice surveys On-site assessments and audits Human rights impact assessments 	<ul style="list-style-type: none"> Identify any actual negative impacts on people or environment in our supply chain Protect human and labour rights of workers in our supply chain 	<ul style="list-style-type: none"> In-depth understanding of conditions of workforce and action plans to prevent and address impacts Remedy enabled where actual impacts have occurred
Consumers		
<ul style="list-style-type: none"> Consumer insights research including both quantitative and qualitative methods such as surveys, in-home visits, shop-alongs and interviews Consumer awareness campaigns 	<ul style="list-style-type: none"> Understand the needs and behaviours of the end consumer Inform decision-making and finding new business opportunities 	<ul style="list-style-type: none"> Fact-based inspiration for customers through trends and reports, white papers, case articles, handbooks (see website for more)

Key engagement channels	Purpose of engagements	Examples of outcomes of engagements
Stakeholders in collection and recycling of food and beverage cartons		
<ul style="list-style-type: none"> Front line of 60+ employees managing existing and establishing new collaborations with C&R stakeholders Provide technical expertise and support Day-to-day collaboration to secure agreed results of the investments 	<ul style="list-style-type: none"> Establish and grow collection and recycling capacity and volumes in the markets Collaborate on recycling solutions with recyclers Support product development and enable market growth for products made of the recycled material 	<ul style="list-style-type: none"> Growing PolyAl capacity in Europe (+30kT in 2024) Exploring new collection channels through sorting investments Pioneering food and beverage carton recycling in e.g. Egypt and UAE
Workers in collection and recycling of food and beverage cartons		
<ul style="list-style-type: none"> With local NGOs, engage with workers through interviews and impact assessments National waste picker associations Fair Circularity Initiative and Circulate Initiative 	<ul style="list-style-type: none"> Gain insights into the conditions and priorities of these workers within specific contexts 	<ul style="list-style-type: none"> Collaboration with national waste picker alliance in multi-stakeholder initiative
Governments, policymakers and regulators		
<ul style="list-style-type: none"> Direct dialogue with policymakers Public consultation forums White papers Participation in policy events (e.g. COP29) 	<ul style="list-style-type: none"> Discuss climate, nature and circular economy-related topics as part of our sustainability ambitions Promote food systems transformation, in particular recognising the role of the 'hidden middle' in delivering food security and climate resilience 	<ul style="list-style-type: none"> Engagement on the role of the hidden middle and on the role of food packaging in reducing food loss and waste, and contributing to food security Continually innovate and develop packaging with increased renewable content and reduced carbon footprint

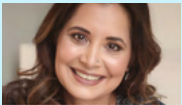
Stakeholder engagement continued

Key engagement channels	Purpose of engagements	Examples of outcomes of engagements
Civil society organisations and NGOs		
<ul style="list-style-type: none">Partnerships and collaborations with global and local civil society organisations and NGOs to engage at the forefront of sustainabilityEngaging with affected stakeholders along our value chain through global and local NGOs and other civil society organisations	<ul style="list-style-type: none">Advance the sustainability agendaUnderstand views and address concerns of value chain workers' representatives and affected stakeholders and local communities, for example by using civil society organisations as credible proxies for affected stakeholders	<ul style="list-style-type: none">Country-specific action plans with local NGOs to improve the living and working conditions of informal waste collection workers
Associations		
<ul style="list-style-type: none">Membership and active leading roles in trade, industry, business and sustainability associations, and multi-stakeholder initiatives	<ul style="list-style-type: none">Government and policy maker engagementDevelop industry standards and guidance on sustainability	<ul style="list-style-type: none">Contributed to WBCSD publications on avoided emissions, protein diversification and joint communications narrative for agriculture and food
Academia and experts		
<ul style="list-style-type: none">Sustainability Advisory PanelCollaborations with universities, innovation platforms, think-tanks, workshops, presentations and knowledge sharing	<ul style="list-style-type: none">Bring outside perspective and latest research into our sustainability agendaInform our engagement and sustainability work to ensure we have a science-based approach that is recognised globally	<ul style="list-style-type: none">Recommendations from the Sustainability Advisory Panel to our managementCollaboration with Lund University, Sweden, centred on innovation
Communities in our value chain		
<ul style="list-style-type: none">Engaging with raw-materials suppliers on their stakeholder engagementHuman rights impact assessmentsEngagement with credible proxies for communities via multi-stakeholder initiatives	<ul style="list-style-type: none">Identify any actual negative impacts on people or environment in our supply chainProtect human and labour rights of communities in our value chain	<ul style="list-style-type: none">Strengthening multi-stakeholder initiatives' grievance mechanisms

Our Sustainability Advisory Panel



Dan Esty
Hillhouse Professor at Yale University, Sustainability Advisory Panel Chair



Malini Mehra
FRSA, Chief Executive, Globe International Secretariat



John Morrison
CEO, Institute for Human Rights and Business



Changhua Wu
CEO at Beijing Future Innovation Centre

Formed in 2020, our Sustainability Advisory Panel comprises independent experts with experience across a broad range of sectors, ranging from academia to civil society organisations. It provides independent strategic insight, guidance and assistance focused on sustainability and innovations in pursuit of our purpose.

During 2024, the panel focused on the longer-term drivers of sustainable business and future-proofing our sustainability agenda across business, products and operations globally.

It provided guidance on our specific approaches to global supply chains, sustainability and trade, and collection and recycling of food and beverage cartons globally.

The panel has contributed to the approach for our Food for Development⁷ initiatives and panel members have also supported the sustainability team on deep dives into topics including nature, circularity and just transition in food systems.

[READ MORE](#)

Embedding sustainability into our business



Each of the five areas of our sustainability agenda are supported by our [Strategy 2030](#), which integrates sustainability across our packaging, processing and services businesses.

We also created in Q4 2024 a new team, Sustainability Excellence, to empower our people across the company to lead and deploy our sustainability agenda. The team is establishing and strengthening the necessary sustainability capabilities, in the areas of processes, systems, data and people. This will embed sustainability more deeply into our daily operations and roles, supported by stronger governance and access to auditable data that supports our sustainability agenda.

Sustainability governance

Sustainability governance is embedded in our policies and procedures, and those of the Tetra Laval Group. Read more about our approach to sustainability and corporate governance, and ensuring ethical business conduct through appropriate policies, procedures and training in the [Business conduct](#) chapter of this report.

Incentivising and investing in sustainability progress

Our Balanced Scorecard (BSC) sets our direction and helps lead and prioritise many activities across the company. We integrate sustainability into the BSC by tracking ESG performance and 10% of BSC measures are dedicated to sustainability goals. For many employees in Tetra Pak, the BSC results impact their annual short-term incentive plan payout.

For the Executive Leadership Team (ELT), including the President & CEO, however, the payout is based on the achievement of both specific company financial measures as well as individual objectives. For 2024, our CEO had an individual objective dedicated to the development and deployment of the next generation of sustainable packaging solutions, this objective accounts towards his variable remuneration. While nearly half of the executive team have also been assessed against one or more individual objectives related to sustainability within their specific areas of responsibility.

Sustainability also guides our investments into research and development. In 2024, we invested approximately €100 million into research and development addressing the sustainability of our packaging. Over the next five to ten years, we plan to invest up to the same amount annually, focusing on making sure the 'package of the future' is designed for lower material use and improved recyclability.

→ [Read more in circularity](#)

Embedding sustainability into our business continued

Strengthening our sustainability disclosure practice

We are preparing to meet the obligations of the EU Corporate Sustainability Reporting Directive (CSRD) and associated European Sustainability Reporting Standards (ESRS) and other evolving requirements. To become CSRD-ready, we have established a dedicated cross-functional business transformation programme and governance, led by our Finance team and comprising representatives from Sustainability, Human Resources, Governance, Strategy, Risk Management, Supplier Management, and Global Information Management.

We are also working towards greater external assurance of our sustainability performance data.⁸ Our GHG emissions data has received third-party limited assurance since 2013, and our direct operations water data has received limited assurance by a third party since 2023.

In 2024, we strengthened our sustainability disclosure practices by:

Refining our DMA using learnings from our first assessment and latest EFRAG guidance.

Conducting an ESRS gap assessment and making progress addressing identified gaps.

Establishing a structured engagement with our auditors.

Implementing a new sustainability data collection reporting tool to improve controls and support assurance.

Expanding organisational capabilities and refining our operating model.

Issuing our ESG Reporting Manual, which provides common standards to ensure consistency in reporting.

Engaging in dialogue and learning with companies and business associations on best practices and common challenges when preparing for the CSRD.

Other third-party standards and rankings that we use to benchmark our sustainability efforts include:



We have been recognised for sustainability leadership by CDP,⁹ earning an **A** score for our work in Climate Change and an **A-** score for our work in Forestry and Water Security, placing us in the top 2% of over 21,000 companies assessed.



We received a **gold medal** in 2024, putting us in the top 1% of companies assessed in our category, and the top 5% of all companies assessed in the same period.



While we don't hold a global employee or workplace award, our teams have received a range of local recognition awards – reflecting the strength of our culture and the impact of our people in their markets.



We are committed to ethical auditing and are members of Sedex, the world's largest ethical data exchange platform and organisation for responsible business. Our own production sites and those of prioritised suppliers are Sedex Members Ethical Trade Audit (SMETA)¹⁰ audited on a regular basis. These audits assess working conditions, labour rights, health and safety, environmental impact, and business ethics.



United Nations Global Compact

We have been signatories to the UN Global Compact since 2004, meaning we are committed to upholding the UN Global Compact's Ten Principles on human rights, labour, environment and anti-corruption across our value chain.

Spotlight story

Unlocking the 'hidden middle'

Our advanced food and beverage processing and packaging solutions can lower [food waste](#), [energy consumption](#) and [water use](#), and if this potential were unlocked globally, it could make an even greater contribution to global emissions reduction targets.

Today, the global food systems contributes to over one-third of annual GHG emissions, yet only 4%¹¹ of global climate finance supports food systems, highlighting a pressing disconnect between climate goals and current financial priorities.

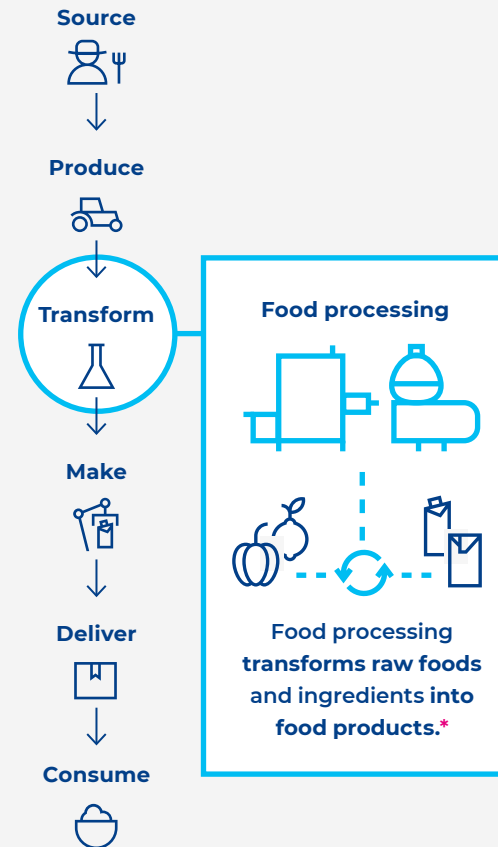
An analysis of these goals and priorities reveals that they are focused on agricultural production and healthy diets at the beginning and end of the agrifood value chain.

We believe there is now an opportunity to include the often overlooked 'hidden middle' of the chain to help address climate change and enhance supply chain resilience.

The hidden middle¹² is the centre of the food system between the farm gate and the end consumer. It covers the processing, packaging, transportation and storage of food through the agrifood value chain, and it plays a crucial role in addressing climate change, improving food security and enhancing supply chain resilience.¹³ In turn, this supports economic development and social sustainability by creating market certainty for farmers, allowing them to invest in best practices that lead to greater on-farm efficiency.¹⁴

Hidden middle value chain

Securing agrifood chains the essential role of food processing and packaging



Driving change

Our goal is to scale collective action between the world's businesses, financial institutions, civil society and governments to make the way food is grown, produced, processed, packaged, distributed and consumed more sustainable.

By highlighting the potential for the hidden middle to contribute to Climate change mitigation and adaptation,¹⁵ strengthen food security and improve livelihoods, we hope to encourage countries signed up to the Paris Agreement¹⁶ to include comprehensive food system transformation policies and funding in their 2025 Nationally Determined Contributions (NDC) climate plans.¹⁷

To make this case, we took our message to Climate Week, New York in September, and COP29 in Azerbaijan in November. Government support and incentives for food and beverage manufacturing SMEs are particularly important to enable them to invest in and deploy solutions (including packaging and processing) that reduce GHG emissions and resource use.

In 2025, we will attend COP30 in Brazil and continue to deliver our message on the potential of the hidden middle to push for the transition to secure, sustainable and resilient food systems worldwide.

Spotlight story continued

Technology for the hidden middle: Creating a world-leading dairy factory in rural China

Using advanced manufacturing and technology not only has the potential to transform the global food systems to be more sustainable, it also makes good business sense, as demonstrated by our customer Mengniu in Ningxia province, China.

We have worked with Mengniu to develop a dairy factory in Lingwu, a town located in a remote area renowned for its agricultural sector, with dairy farming accounting for 10.5% of the overall agricultural output of Ningxia province.¹⁸ The establishment of the factory brings the processing of raw milk closer to the dairy farms, helping to grow the dairy industry and contributing to the local economy.

Mengniu has leveraged our cutting-edge equipment and technology to create a world-first fully intelligent dairy factory that has reduced energy consumption by 43%,²⁰ operational costs by 32%, delivery lead times by 55% and quality issues by 60%.²¹

We co-designed the site with Mengniu using our latest equipment, including the Tetra Pak® E3/Speed Hyper – the world's fastest¹⁹ carton packaging machine – to provide an integrated full-line solution. The site is monitored and managed using our digital control room system, which runs the entire processing and packaging plant, monitoring performance in real time and automatically routing to the most suitable equipment.

The ambition with the Ningxia site is to have the highest annual efficiency of any dairy factory in the world, where its 100 employees process 1 million tonnes of raw milk annually.

Mengniu's Ningxia site is an example of the positive impact the hidden middle can create for the global food systems. Our innovations minimise product loss and lower the consumption of energy and water to create both financial savings and environmental benefits for Mengniu. Meanwhile, the factory supports the development of the wider dairy industry in the region, supporting livelihoods and economic growth.²²



The Ningxia site has been awarded 'lighthouse factory' certification by the World Economic Forum (WEF) as a world-first fully intelligent dairy factory with over 30 advanced 'Fourth Industrial Revolution' (4IR) use cases.

Food systems

Why it matters

Food systems are at the heart of our sustainability agenda. A transformation of how food is sourced, grown, processed and packaged is essential to feed a growing global population, contributing to health, education, opportunity and economic growth, while reducing the carbon footprint at every step.

Our ambition

Work together with stakeholders to continuously improve food security and reduce food loss and waste, while improving livelihoods and increasing access to food.

Material topics covered

Food access	→ READ MORE
Food production	→ READ MORE
Food loss and waste	→ READ MORE
Consumer health and safety	→ READ MORE

SDGs



Transformation of food systems and global influences in 2024

By 2050, the global population is forecast to rise to 10 billion,¹ and the demand for food to increase by 60%.² When combined with global uncertainties, such as extreme weather events caused by climate change and global health emergencies, the world's food system faces complex challenges if it is to meet our future needs.

Food security not only supports nutrition and health, it is also the foundation for economic growth.³ A lack of stable and long-lasting food security restricts the human capital⁴ development required for sustainable economic growth, raising government costs, thereby holding back growth in the long term at country, regional and global levels.

Although, food systems⁵ are essential to feed the modern world, they are accountable for more than one-third of global GHG emissions.⁶ This tension between the demands for greater food productivity and lower emissions presents a significant challenge.

Furthermore, in 2023, nearly 282 million people faced high levels of acute food insecurity.⁷ As global temperatures are currently forecast to rise to 1.5°C – 2°C above pre-industrial levels,⁸ pressures on farming and food production are likely to escalate further, leading to food insecurity and increased hunger.

10 billion
forecast for the global
population by 2050¹



60%
increase in the demand
for food by 2050²

Our role and approach

As an advanced manufacturer present in 160 countries and at the forefront of technology and innovation, we provide modern systems for food production and packaging that enhance food security, increase affordable access to food, and improve livelihoods and economies. We have broad expertise in global food value chains that puts us in a unique position to drive change.

By collaborating with stakeholders across the value chain, including the public sector, the food industry, associations, customers and suppliers, we collectively shape more sustainable, secure, equitable and resilient global food systems for generations to come.

Our approach to food systems is centred on four material issues: *food access, food production, food loss and waste, and consumer health and safety.*

We address these issues across our packaging products, food packaging and processing equipment and services. *For example*, our aseptic cartons increase consumer access to safe food by extending shelf life without the need for refrigeration, and our food processing equipment is designed for efficiency and longevity – reducing the use of energy, water, waste and raw materials.



To help improve food availability and security in the future while reducing pressure on natural resources, we champion cutting-edge innovation in new food sources, such as plant-based foods and protein diversification. Learn more about this work [here](#).

Food systems are complex, and transformation requires a systems approach. To enable this, we have developed four food systems pathways, each with a different focus, roadmap and measurable targets.

This chapter describes in more detail each of our pathways, the projects we are committed to and how they address our material topics.



We are uniquely placed to positively impact transformation across the food system. By collaborating with stakeholders to improve sustainability practices in the value chain, and innovating in packaging solutions and food processing, we can help reduce food waste and improve food security globally.”



Eija Hietavuo,
Vice President Corporate Affairs,
Tetra Pak

The four pathways are:

1.

Enable the transition to more sustainable dairy

→ [Read more](#)

2.

Innovate for new food sources

→ [Read more](#)

3.

Reduce food loss and waste

→ [Read more](#)

4.

Scale access to safe nutrition through sustainable food packaging

→ [Read more](#)

Progress against our targets and commitments

Related material topics	Targets	Value chain location	2024 progress summary
Food access	Increase global access to safe nutritious foods through our ambient packaging solutions by 2 billion litres by 2030 (Baseline 2022)	Downstream	<ul style="list-style-type: none"> The data tracking process of sales related to ambient sustainable packing for safe nutritious foods is in progress. School feeding programmes are one of the contributors for which the tracking is enabled. 66 million children in 49 countries received milk or other nutritious beverages in our packages in school feeding programmes +3 School Milk Programmes highlighted: India, Iraq and Rwanda
Food production	Reach 100,000 smallholder farmers in our Dairy Hub customer projects by 2030 (Baseline 2011)	Upstream	<ul style="list-style-type: none"> +4 new Dairy Hub projects introduced in 2024 (making a total of 29 Dairy Hub projects since implementation in 2011) Almost 84,000 smallholder farmers involved in Dairy Hub projects since 2011
	Reduce GHG emissions in our dairy ambient processing equipment by 50% by 2030 (Baseline 2019)	Downstream	<ul style="list-style-type: none"> 42% GHG emissions reduction of dairy ambient processing lines since 2019 baseline (on track to meet targets of a 50% reduction by 2030)
	Triple sales of plant-based and new food processing equipment and technologies by 2030 (Baseline 2023)	Downstream	<ul style="list-style-type: none"> Almost 20% increase in sales of plant-based and new food processing equipment and technologies compared to 2023
Food loss and waste	Achieve a 50% reduction of product loss in best practice processing lines by 2030 (Baseline 2019)	Downstream	<ul style="list-style-type: none"> Tetra Pak's Processing Business has established the methodology to measure the product losses across Best Practice Processing Lines (BPL) under all food categories. Currently, we are mapping the progress of all BPLs against our 50% reduction target with a view to reporting results in next year's sustainability report.

Pathway 1 progress in 2024:

Enabling the transition to more sustainable dairy

The global dairy sector plays a critical role in the global food systems through the food it provides and the jobs and livelihoods it supports around the world. It is, however, a considerable user of land, water and energy, and was responsible for 2.7% of global GHG emissions in 2023.⁹

The transition to a more sustainable dairy¹⁰ industry requires multiple interventions at many intersecting points in the value chain. Our approach to pathway one enables us to address these points as well as two of our material issues, *food access* and *food production*.

Almost 84,000

smallholder farmers
involved in Dairy
Hub projects
since 2011



Dairy Hubs

Through our Dairy Hub model, we collaborate in building sustainable value chains by improving smallholder farmers' productivity, thereby supporting our customers to source more milk with a higher quality. The Dairy Hub model links smallholder farmers to a dedicated dairy processor in a selected area, and we provide technical assistance and hands-on practical training to help develop professional skills, optimise farm productivity and efficiency, increase milk quality, and improve animal health and welfare.

By providing farmers with training services and setting up appropriate cooling infrastructure and technology, the supply of locally produced quality milk increases, and the smallholder farmers gain access to formal markets. This improves the livelihoods of smallholder farmers and as well as improving food access for local communities, giving them the opportunity to support local producers.

In 2024, we added four new Dairy Hub projects and reached around 84,500 farmers who have delivered milk to our customers.

[READ MORE](#)



Dairy Hub in Colombia improves productivity and livelihoods

The dairy industry represents 24.3% of Colombia's agricultural GDP, while generating over 700,000 jobs. However, the productivity per cow is low, with only 4.5 litres produced daily compared to 16 litres in Uruguay, for example.

To address these productivity challenges, a new Dairy Hub project was implemented in the Cauca Department of Colombia through a Public-Private Development Partnership project working together with our customers Alival and Alpina, SIDA (Swedish International Development Agency) and FAO (United Nations Food and Agriculture Organisation). We deliver training on dairy farming skills and data management, in addition to developing a more formal trading structure.

The technical support and training that we have provided through the Dairy Hub project has enabled smallholder dairy farmers to improve productivity so much that they achieved a 57% income increase from US\$242 to US\$379 per month in the first phase of the three-year project.

To date, over 330 farms benefit from the project, of which 174 belong to indigenous families.

Resource efficient dairy processing equipment

By the end of 2024, GHG emissions from our dairy ambient processing lines were 42% lower than our 2019 baseline and we are on track to meet our target of a 50% reduction by 2030.

This is the result of innovations in our dairy processing equipment and services that enhance productivity, lower resource use and reduce waste for our customers, while creating cost efficiencies.

Take the Tetra Pak® Blender VCC (Vertical Cottage Cheese).¹¹ Due to its vertical design that helps ensure complete emptying of residue from the equipment, product waste is reduced by 90%!

By significantly reducing product loss, the VCC supports more efficient use of raw materials, reduces the need for manual intervention, and improves hygiene and safety. The design also preserves product quality and simplifies operations. Together, these features can add up to savings of over €20 per batch.¹²

In fact, the average product loss in an average horizontal blender is 18-20 kg. With the VCC solution, the average product saved per batch is approximately 16kg. Based on a typical production schedule, the saved product could result in cost savings of 67,200 EUR per year per blender.¹³

Pathway 2 progress in 2024:

Innovating for new food sources

To advance innovation in protein diversification, we collaborate with stakeholders from public, private and academic sectors. By contributing our expertise in food processing and packaging, we support the development of these new food sources and facilitate production at scale. We believe these new approaches have the potential to help meet the future demands of feeding a growing global population.

CASE STUDY

Exploiting the potential of biotechnology in the food system

To help develop the future of food, we have launched the [Biotech Heights](#) innovation hub with Lund University for cross-disciplinary research into food source diversification.

This project fosters collaboration between academia, the public sector, start-ups and industry to advance fermentation technologies, promoting protein diversification as an alternative to animal products and agriculture, while enhancing side-stream value.

The fermentation technology being explored uses micro-organisms including yeasts, bacteria or fungi to digest typically sugar solutions or suitable side streams, producing carbohydrates, fats, proteins and other nutrients. We provide state-of-the-art labs, and pre-pilot and pilot facilities equipped with cutting-edge technology. Building on decades of research, our innovative approach to food production emphasises sustainability, biodiversity and waste reduction.

In 2024, Biotech Heights hosted workshops with diverse stakeholders to refine focus areas, engaged master's students in naming new food products and in research collaborations, and advanced the organisational structure.



Pathway 3 progress in 2024:

Reducing food loss and waste



Over one-third of food produced globally goes to waste.¹⁴ The value of household, food services and retail food waste alone is estimated at approximately \$1 trillion annually, while nearly 800 million people each year are affected by hunger.¹⁵ Our ability to reduce food loss and waste is identified as a material positive impact by our [DMA](#).

How we reduce food loss and waste

Our equipment, technologies and services are expertly designed to enable efficient food production, minimise food loss and waste at the manufacturing stage, and keep food safe for longer without refrigeration with our aseptic packaging. And in fact, we sold 178 billion food and beverage packages in 2024 alone.

For example, the Tetra Pak® Direct UHT unit uses direct contact with clean steam via injection or infusion to reduce product loss by 48% and water consumption by up to 6%.¹⁶

Award-winning equipment innovation

Our research and development teams have also pioneered innovative technologies to utilise food manufacturing side streams for production of value-added products. For example, a 'whole soya' processing technology that uses 100% of the bean, with no waste or side products.

The World Plant-Based Innovation Awards 2024¹⁷ recognised our Vietnam-based customer, Vinasoy, with the Technology Innovation Award for its 'Fami Green Soy' product. Vinasoy describes its process: "Wholesome Soy is our groundbreaking whole-bean grinding technology. Compared to the normal process for soy milk production, our wholesome technology utilises 100% of soya beans – resulting in zero waste – and enhances the nutritional value of soy milk, especially fibre, protein and natural Omega 3-6-9. It also improves the taste and delivers greater health benefits to consumers. Fami Green Soy is made from non-GMO soybeans, contributing to the product's exceptional quality."

[READ MORE](#)

Pathway 3 progress in 2024:
Reducing food loss and waste
continued

**Tackling food waste at
our own sites**

At our own sites, we aim to meet our target of 50% food waste reduction by 2030 (compared to 2021). By the end of 2024, we have reduced food waste per meal served by 38% (compared to 2021) through initiatives, such as kitchen waste reduction and portion size awareness among employees. To support this, we have introduced a third-party technology platform called Leanpath to measure food waste more accurately, currently in eight of our locations.

When it comes to disposing food waste, we have worked to identify creative ways to reduce and minimise the amount of waste sent to landfill.

Some examples of progress across our sites:



**Arganda factory,
Spain:**

We reduced food waste to landfill by introducing biodigesters on site. In nine months, it produced 96kg of gas which powered some of our kitchen stoves for cooking, saved 3,600kg of CO₂, saved 1,409 kilowatts of electricity and 3,015kg of food waste was avoided being sent to landfill.

3,015kg
of food waste kept out
of landfill in 9 months



**Lund site,
Sweden:**

39 tonnes of food waste was processed in an on-site food waste digester, then converted by an external company into biogas, which was then returned to Tetra Pak and surrounding areas.

39 tonnes
of food waste
converted into biogas



**Lahore factory,
Pakistan:**

The factory's food garden had its second full year of harvest in 2024, with 21 different types of herbs and vegetables grown and an annual total harvest of 4,322kg. All food waste and organic waste have been composted on-site.

4,322kg
harvested from our
food garden in 2024



Chakan factory, India:

The team has been growing fruit and vegetables in large scale since 2019. In 2024, 2,262kg of fruit and vegetables were harvested and served at our restaurant. Our food-waste biodigesters also compost 800kg of food waste and 500kg of garden waste per month. This generated 270kg of compost that goes back to the garden on site.

1,300kg
of waste composted
monthly, feeding our
on-site garden

Spotlight story

Protein-powered efficiency savings

The Tetra Pak® Industrial Protein Mixer reduces waste and inefficiencies in mixing powder protein, creating cost savings for customers and improving product quality while also lowering environmental impact.

The secret to its success is the elimination of excess foaming in the liquid protein mixing process. Traditional methods of mixing cause air entrapment which leads to foaming when not controlled and leads to product loss, ingredients loss and costly disruptions.

Our new mixer controls foaming by employing an advanced multi-step process that minimises air ingress and streamlines production. By preventing foam overflow and reducing burn-on during heat treatments, the mixer conserves valuable resources. It also simplifies cleaning and maintenance, leading to as many as 450 hours of reduced downtime per year, and fewer expenses related to spare parts and labour.

Eliminating the need for defoaming additives and preventing nutrient oxidation, it also enhances product quality and extends shelf life. Compared to standard processing, the Tetra Pak® Industrial Protein Mixer can:¹⁸

- Reduce product losses – When compared to traditional mixing technologies, it can reduce 44,400kg of dry matter annually;
- Reduce use of downstream equipment cleaning materials and ongoing maintenance needs;
- Reduce downtime due to less cleaning and maintenance by up to 455 hours per year; and
- Save over €100,000 per year in product loss foam overflow in the mixing phase.

As the global market for active nutrition products including protein enriched powders is expected to reach €80 billion by 2030,¹⁹ this efficient Tetra Pak® Industrial Protein Mixer is poised to play an important role in efficient future food processing.



Pathway 3 progress in 2024: Reducing food loss and waste continued

CASE STUDY

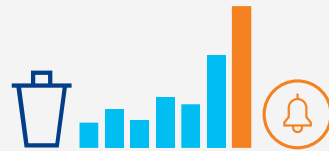
Ice Cream Line Insight™ provides detailed live data to accurately manage waste.

In 2024, we launched Ice Cream Line Insight™. By collecting data from the machines in our customers' ice cream production lines, Ice Cream Line Insight™ gives them the insights they need to reduce product waste and to monitor their lines' energy consumption. The system even provides waste maps that tell customers where, when and why products go to waste – so they can troubleshoot, identify root causes and improve their product-to-waste ratio.

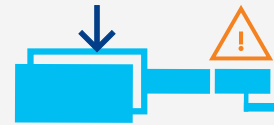
Ice Cream Line Insight™ also displays the energy consumption of each machine,* enabling more robust and accurate energy analysis, and allowing customers to even calculate the electricity cost per ice cream product and improve overall energy efficiency.

* Central compressor system not included.

1 Problem: Increasing waste
The number of wasted products have increased the last x hours.



2 Where is the waste coming from?
The frontpage points to one of the cutter areas.



3 Problem identified
The waste dashboard says that "cutter wirebreak" is the reason for most of the waste.



4 Root cause discussion
The production manager discusses potential root causes with the operators.



5 Ruling out reasons
Why is the wire breaking? Possible reasons are investigated – and ruled out.



6 Root cause found!
Could it be that the temperature of the cutting wire is too high? Yes! The required adjustments are made.



7 Problem solved
The product/waste ratio returns to its right level.

Pathway 4 progress in 2024:

Scaling access to safe nutrition through more sustainable food packaging

We are committed to increasing access to safe nutritious foods²⁰ through our ambient packaging solutions. Aseptic processing and packaging keep perishable foods safe for six to twelve months without the need for refrigeration or preservatives, while also retaining their colour, texture, taste and nutrition.²¹ Additionally, since 1962, we have participated in the development of school feeding and nutrition programmes around the world.

We continue to support our customers and collaborate with relevant stakeholders in the development of school feeding and nutrition programmes, providing access to safe nutrition to children and vulnerable communities.



How we improve access to safe nutrition now and for the long term

We enhance food access by providing equipment and services that enable the production of safe food, especially for remote communities without access to refrigeration. Our recyclable packaging plays a role in maintaining a steady supply of food while reducing dependence on natural resources.

We define 'sustainable food packaging' as packaging that achieves its functional requirements with minimal environmental impact, is made from responsibly sourced renewable or recycled materials, is recyclable, and has low carbon footprint in regard to manufacturing, production, shipping and recycling.

Food production: Our commitment to sustainable food production involves using advanced technologies and practices that minimise environmental impact while maximising efficiency. This enables a reliable supply of food and helps shape a more sustainable and secure global food systems. Innovations in new food sources, such as alternative proteins, offer options with lower environmental impact than traditional meat. See [page 22](#) for more on new foods.

Spotlight story

School feeding programmes

We support our customers and work in collaboration with governments, NGOs, the UN and international development aid agencies in the development of school feeding programmes so that children all over the world can have improved access to safe nutrition.



In 2024, 66 million children in schools in 49 countries received milk or other nutritious beverages in our packages. Over the years, the benefits of our processing and packaging technology have provided practical solutions to distribute these products safely to schools, in particular where there are local infrastructure challenges.

To grow our impact, we share best practices used in our school feeding programmes around the world with our customers and other organisations involved in similar programmes. The training and technical assistance we provide covers: food safety best practices, administration of the programmes, distribution, monitoring quality control, and community engagement. We also provide support with environmental education and best practices used in the collection and recycling of the packages.



India

This programme is a collaboration with our customer Verka Dairy, which packs and distributes aseptically packaged beverages with local milk once a week to 100,000 schoolchildren. Insights from the UHT Milk Acceptability Study, conducted by the customer and Punjab University, explored milk consumption habits in children aged 3 to 13. The findings revealed strong product acceptance (80%) and growing awareness of health benefits (69%). The programme also encourages responsible behaviours, with 82% of students properly disposing of empty packages.



Iraq

Tetra Pak Arabia area joined with local customer Alssad to provide milk to schoolchildren in Iraq. The current milk programme is part of the broader National School Feeding programme run by the United Nations World Food Programme and the Iraqi Ministry of Education. Through this initiative, we grew from supporting 7,000 students with milk in 2021–2022, to an impressive 750,000 students by 2024.



Rwanda

The goal for this collaboration with our customer Inyange Industries and Rwanda's Child Development Agency is to provide 2 million litres of UHT milk annually to schools, early childhood development centres and health centres across the country. In addition to health benefits, regular milk is a positive incentive to attend school, helping to reduce illiteracy rates and increasing life opportunities for the children.

Consumer health and safety

As pioneers in food safety technologies, we enable our customers to deliver safe, high-quality products and continue to raise their own quality standards.

Our aim is to guarantee the safety of all products and services across our processing and packaging systems and comply with the most widely recognised internationally leading food safety standards,²² in addition to local requirements, ultimately protecting consumer health and safety. Our food safety ambitions are specified in our Food Safety Policy which defines the requirements and ways of working in food safety for everyone at Tetra Pak. Our implementation guidelines and procedures break down the policy to concrete processes and defined roles and responsibilities for each function.

[\[\] READ MORE](#)

Food safety and quality

Our Food Safety Policy defines the food safety guidelines for everyone in the company. It provides processes and identifies roles and responsibilities to ensure that the policy is applicable across all functions. In addition to focusing on safety in our own operations, we support our customers with systems to prevent contamination or compromised product in their operations.

We have two policies that detail our commitment to safety:

1. Food Safety Policy – this policy includes microbiological safety, safe chemical use, physical safety of packaging, hygienic equipment design and mitigation of reputational risks.
2. Quality Policy – this policy covers aseptic performance, package material quality and robustness until consumption, and compliance with food safety standards.

Together, these policies set out our implementation guidelines for safe products, preventing impacts on consumers' health and life.

[For further information on these policies see the Business conduct chapter, Policies table.](#)

Food safety and regulatory compliance model

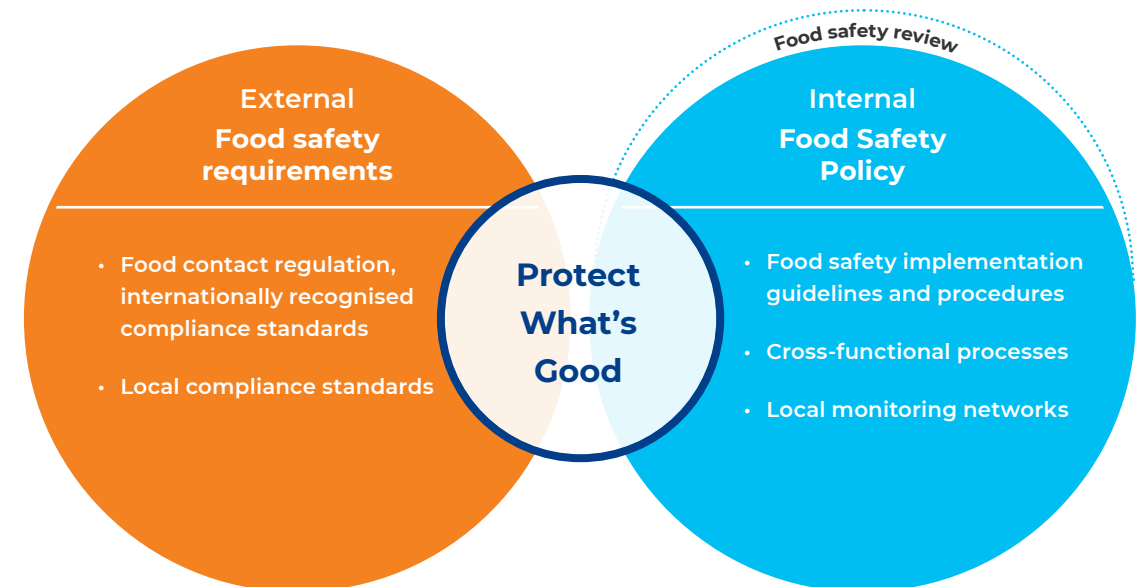


Codex Alimentarius*

**Safe food
for everyone**



**Tetra Pak food
safety framework**



* A collection of standards, codes of practice, guidelines and recommendations, released by the Food and Agriculture Organisation (FAO) and the World Health Organisation's (WHO)

Consumer health and safety continued

Package physical safety

Package safety is a primary consideration in the design and manufacture of all our products and it relates specifically to mechanical and physical safety of packaging for consumers. We are rigorous in ensuring that all aspects of our packaging products, from the sourcing of raw materials to their use in the manufacturing process, meet industry-leading quality and safety standards and that our products fulfil all necessary legal and regulatory requirements.

Our technical corporate standards, procedures and tools are continuously improved, and the Package Safety Risk Assessment ensures safety by integrating across all our processes, taking into consideration reasonably foreseeable uses of our products.

Equipment safety

Equipment safety includes ensuring that equipment we design, manufacture and sell to customers is safe to use and compliant with equipment legislation and standards. We continuously monitor external safety best practices and translate these into technical corporate standards, which are applied during the design of equipment and throughout the lifecycle. The necessary equipment safety tasks and decisions have been integrated across our processes, to ensure that we deliver safe and compliant equipment.

A team at the heart of our commitment to food safety

For half a century, colleagues at our Scientific and Regulatory Affairs Centre in Stuttgart, Germany, have ensured that all our materials that come into contact with food are safe for use and are fully compliant with leading and internationally recognised food safety standards.

The team includes 47 chemists, physicists, microbiologists and highly specialised lab engineers, from our sites around the world.



Our job is to make sure every layer of material works together to protect what's inside. How we do that differs from food to food, whether it's milk or a very acidic product like juice, the product type dictates the requirements for the food package."



Davide Marchesi,
Director of Food Packaging Safety
and Interaction, Development and
Technology (D&T)



Circularity

Why it matters

The global population is projected to grow to around 10 billion by 2050, and global material use is projected to more than double in the same time frame.¹ Since 2015, the global economy has consumed 70% more new materials than the Earth can safely replenish.²

The food packaging and processing sector can work towards a circular economy by moving away from the 'take-make-waste model'.³ A circular approach can help extend equipment life, minimise the use of resources in packaging, and increase the use of recycled and renewable materials to reduce pressures on finite resources and ensure that all packaging gets recycled after use.

Our ambition

To contribute to a more circular food system, we drive circular solutions in all three of our businesses, including by:

- improving the circularity of our food and beverage packaging through increasing the use of circular raw materials, improving the recyclability of our packaging and expanding collection and recycling
- designing our equipment to help customers increase their energy, material and water efficiency
- prolonging the lifespan of our equipment, designing for longevity and offering services that help maintain the equipment.

Material topics covered

- | | |
|--|-----------------------------|
| Design and materials of packaging | ➔ READ MORE |
| Collection and recycling of carton packages | ➔ READ MORE |
| Design, materials and lifecycle of equipment | ➔ READ MORE |
| Waste in our operations | ➔ READ MORE |

SDGs



See page **page 112** for footnote references

Sustainability context and global influences

Human consumption of materials is escalating at an unsustainable rate, with the World Bank estimating that annual global waste⁴ will be 73% higher in 2050⁵ versus 2020. Between 2018 and 2023, humans consumed over 500 gigatonnes of materials – that's 28% of all the materials humanity has consumed since 1900.⁶

There is an urgent need to adopt circular economy thinking, moving away from the take-make-waste models of the past to new models that promote a sustainable economy. Circular strategies can achieve reduced material consumption by designing out waste, using fewer resources, increasing recycled or renewable materials and reusing, repairing, refurbishing or recycling to keep materials in use for as long as possible at the highest value possible.

Design for recycling and effective recycling are critical elements of a circular economy. Effective recycling rates are high in the countries where formal collection and recycling infrastructure along with supporting policies exist in countries where less developed waste management infrastructure and policies, informal waste collection models add to the challenge. All of the above require diversified market strategies and high levels of collaboration across the entire recycling value chain.

An increasing amount of regulation concerning packaging and packaging waste the circular economy has been introduced globally during recent years. As part of circular economy strategies, packaging and waste are also being increasingly regulated, for example, the EU Packaging and Packaging Waste Regulation (PPWR) entered into force in February 2025, with the aim to reduce packaging waste in the EU and ensure that all packaging is recyclable and, in certain cases, also reusable, as of 2030. The legislation provides an opportunity for the entire

packaging industry to promote the development of innovative solutions to reduce the amount of packaging waste.

There is also wider acknowledgement among businesses that circularity is interconnected with restoring nature and working towards net-zero emissions. Circularity practices can benefit businesses that are at risk of supply chain shortages, by keeping materials in circulation.⁷ A circular value chain also has the potential to boost social and economic growth and development by opening new markets, stimulating innovation and creating jobs.⁸

By 2050 global waste is projected to be 73% higher than in 2020⁵



Our role and approach

Our ambition is to drive circular solutions by designing our packaging, equipment and services in ways that reduce material use, avoid waste, improve recyclability and extend lifespan. These ambitions relate to our material topics for circularity: design and materials of packaging; collection and recycling of carton packages; design, materials and lifecycle of equipment, and waste in our operations.

In 2024, we invested approximately €100 million into research and development addressing sustainability of our packaging. Over the next five to ten years, we will continue to invest up to the same amount annually, focusing on simplifying the material structure, enhancing the use of renewable and recycled materials, minimising waste and making sure the package of the future is designed for recycling – without compromising food safety.

Our overall circularity strategy is informed and guided by the principles of the [Ellen MacArthur Foundation \(EMF\)](#). Read more about our collaboration with EMF on [page 44](#). For our packaging products this means:

- **Deploying circular raw materials:** we are working to increase the share of certified recycled polymers and renewable raw materials in our packaging.
- **Design for recycling:** we have established internal Design for Recycling standards to be followed when designing our packaging in recognition of the fact that circularity starts with design.
- **Collection and recycling:** we work with stakeholders across the recycling value chain to ensure our beverage cartons are collected and recycled where collection, sorting and recycling systems exist at scale.



For our processing and packaging equipment and services this means:

- We consider the circularity of the materials and processes already in the design phase.
- We develop equipment enabling circularity for our customers through reduced production losses and increased resource efficiency.
- We offer a comprehensive range of services to extend the lifespan of equipment in use.

In 2024, we expanded our circular economy reporting to include broader aspects beyond collection and recycling. We've made significant strides in articulating the value chain, covering circular inputs, product design, and end-of-life management. This comprehensive approach gives greater stakeholder visibility of our circularity initiatives and enables us to critically evaluate and advance our efforts."



Kristiina Veitola
Director Corporate Affairs, Circular Economy and Packaging Policy

Progress against our targets and commitments

Related material topics	Targets	Value chain location	2024 progress summary
Design and materials of packaging	By 2030, achieve a minimum of 10% recycled polymers across our beverage cartons sold in Europe	Own operations	<ul style="list-style-type: none"> The share of certified recycled polymers of the total polymers we purchased in the EU increased by 42% in 2024, compared to 2023⁹
Collection and recycling of carton packaging	In 2025, Tetra Pak will review the existing collection and recycling targets in light of the new EU Packaging and Packaging Waste Regulation (PPWR) and other relevant packaging regulations to ensure that our ambition is driving the sector and aligned with external expectations	Downstream	<ul style="list-style-type: none"> In 2024, global collection for recycling rates of used beverage cartons (UBC) increased to 28%, with over 1.3 million tonnes of UBCs collected and sent for recycling¹⁰ Invested €42 million to support collection, sorting and recycling of our packages globally 215 recyclers engaged with globally
Design, materials and lifecycle of equipment	Design our equipment for food processing and packaging to be maintained, leased, reused, repaired and upgraded to extend its lifespan	Own operations	<ul style="list-style-type: none"> Launched Circle Green stainless steel in our homogenizers. This material has a carbon footprint 93% lower when compared to the global industry average for stainless steel¹¹ The certified renovated equipment initiative restores and upgrades used Tetra Pak machinery to extend lifespan and reduce waste (29 filling machines and 42 pieces of distribution equipment delivered in 2024)
Waste in our operations	Eradicate waste to landfill from Tetra Pak production sites by 2030	Own operations	<ul style="list-style-type: none"> 4% reduction in amount of waste from our own operations sent to landfill vs. 2023

Progress in 2024:

Design and materials of packaging

Our [DMA](#) identified that ‘depletion of finite resources caused by the extraction and production of raw materials’ represents a negative impact on environment, with the aim¹² of ensuring that the materials we use come from responsible and renewable sources. ‘Supply chain shortages for packaging and materials, caused by climate change, regulatory changes, or geopolitical issues’ also represent a material risk identified by our DMA, which makes procurement from sustainable sources a priority.

The circular economy starts with designing products for circularity. Our packaging is intended and designed for recycling. We have defined internal corporate design for recycling criteria, which are based on relevant industry guidelines ([4evergreen Circularity by Design Guidelines](#)) and [The Food and Beverage Carton Alliance](#).

Our cartons are recyclable where collection, sorting and recycling infrastructure exists at scale. By increasing the fibre content and reducing the plastics and aluminium, our packaging becomes more attractive to paper mills and fibre recyclers, and easier to recycle. Through this process, we aim to create ‘the world’s most sustainable food package’.¹³

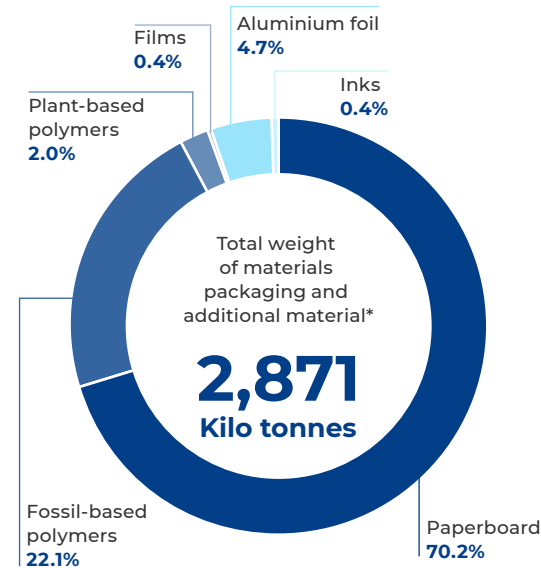
Today, our beverage cartons use paperboard from Forest Stewardship Council™ (FSC™) certified forests and other controlled sources.

When sourcing renewable materials, we use voluntary certification standards such as the Forest Stewardship Council (FSC)¹⁴ and Bonsucro.¹⁵ (The FSC licence code for Tetra Pak is FSC C014047.)

All our suppliers, and our facilities, are certified with FSC Chain of Custody certification. And all of our plant-based polymers made from sugarcane – that can be used in plastic layers, caps, straws and tops of our packages are Bonsucro certified.

→ [Read more about these initiatives](#)

Resource inflows



* Excluding tab strips, liners and hotmelts

Our ambition is to produce ‘the world’s most sustainable food package’: paper-based, with the lowest possible carbon footprint, made solely from responsibly sourced renewable or recycled materials, and fully recyclable.



Design and materials of packaging continued

Circular raw materials Certified recycled polymers

The use of recycled content supports the development of the circular economy by reducing the consumption of fossil-based polymers and incentivising recycling by providing an end market for recycled materials. We have deployed packaging with certified recycled plastic content, which has been ISCC PLUS Certified,¹⁶ based on a mass balance system.¹⁷



42%

The share of certified recycled polymers of the total polymers we purchased in the EU increased by 42% in 2024, compared to 2023.⁹

Tethered caps to reduce littering

We support our customers in meeting legislative requirements and, in 2024, we successfully completed the transformation to tethered caps in EU markets that was started in 2022, to help prevent litter and to meet the requirements of the EU Single Use Plastic (SUP) Directive.

The packaging recyclability tool

In 2024, we introduced the packaging recyclability tool, an innovative automated solution for measuring the recyclability of our packaging portfolio. With this tool, we aim to guide the development of solutions with improved package recyclability and improve the design of our products to meet upcoming European legislation.

Paper-based barrier

Our ambition is to develop packaging with a higher share of renewable content and improve the recyclability of our packaging. The paper-based barrier is a key part of that ambition, providing an alternative solution to the current aluminium foil-based barrier normally used in ambient-distributed packed products. This alternative barrier technology represents the future-looking solution for beverage cartons, and it is a major milestone of the low carbon circular economy for cartons.



CASE STUDY

Stepping up use of recycled polymers with Elle & Vire

First in the food and beverage carton packaging industry to introduce certified recycled polymers to its caps, our French dairy customer Elvir, is now set to expand across its entire portfolio through 2025. Once completed, as many as 115 million Elle & Vire packages will be sealed with these innovative caps, manufactured at our Europe-based production sites and certified by ISCC PLUS according to a mass balance system.

This represents another step towards material circularity, while meeting consumer expectations. In fact, our research conducted in 2023¹⁸ indicates that 78% of consumers are concerned about environmental impact of plastic waste, with 29% reporting an increase in purchasing products packaged in recycled materials in the last year.

“By extending the use of certified recycled polymer to all our cream cartons’ caps, Elle & Vire is confirming its position as a pioneer in the circular economy,” said Elvir Global Marketing Director Annick Renou. “Thanks to Tetra Pak’s expertise, Elle & Vire is taking another step towards material circularity, thus meeting consumer expectations whilst addressing the challenges of the sustainable transition.”



Spotlight story



Increasing the fibre yield for recyclers with a paper-based barrier

In 2015, we were the first in the industry to introduce a package made fully from plant-based renewable materials – paperboard and sugarcane-based plastic. Now, the Tetra Brik® Aseptic 200 Slim Leaf carton with paper-based barrier, together with Lactogal, provides a package that can be distributed under ambient conditions, while hitting the 90% renewable content mark. Made of approximately 80% paperboard, the package also reduces its carbon footprint by up to 33%.¹⁹

This brings us one step closer to our ambition of creating ‘the world’s most sustainable food package’.

More benefits of a paper-based barrier occur further downstream where efficient recycling depends on the yield of paper fibre. Specifically, cartons with a higher fibre yield are more attractive to paper mills.

GHG emissions, food waste and plastic littering are cited as the top three environmental sustainability concerns facing food and beverage businesses today, and this is expected to remain the case over the next five years.²⁰ Packaging solutions such as the paper-based barrier, which expand the amount of paper and lower the carbon footprint, while protecting food, can help us as an industry overcome these challenges.

Our progress in 2024

Collection and recycling of carton packages

Effective recycling of materials is an important part of a circular economy, which requires collection and recycling infrastructure²¹ and a market for recycled materials. Collection and recycling infrastructure varies across the world, so we need to apply different strategies to advance our collection and recycling agenda in different parts of the world.

We are continually improving the circularity of our packages through collaborations (including customers, suppliers, policymakers, governments, academic institutions and actors in the global recycling value chain) to strengthen collection and recycling infrastructure and further increase collection and recycling rates of beverage cartons. We co-invest with players along the collection and recycling value chain globally, in new technologies, in equipment and in facilities to increase collection, sorting and recycling capacities, and to support operations.

In 2024, we invested €42 million to deliver on our collection and recycling targets, and we will continue to invest to further strengthen collection and recycling value chains worldwide. Already in 2019, we were among the founding members of [4evergreen](#), a European cross-industry alliance that aims to boost the contribution of fibre-based packaging in a circular and a sustainable economy.

→ [Read more about 4evergreen](#)

[Click here to learn more about the materials in our packages](#)

28%
global collection for recycling rate.²²

>1.3 million
tonnes of used beverage cartons collected and sent for recycling.²²

Our global approach to collection and recycling

We aim to strengthen collection and recycling worldwide. Our focus in Europe is to improve the PolyAl recycling rate and further increase collection rates of used beverage cartons. To do this, we are increasing fibre and PolyAl recycling capacities through collaborations and co-investments, exploring alternative collection models and working with PolyAl recyclers and converters on development of high-quality, sustainable products. In 2025, we will review the existing collection and recycling targets in light of the European PPWR and other relevant legislation to ensure our ambition drives the sector and is aligned with external expectations.

In other major markets, we work with various value chain players on building the food and beverage carton collection and recycling value chain, focusing on sorting and recycling pure UBC and preparing for future EPR implementations. We run lighthouse projects to have as 'proof cases' to show how the recycling beverage cartons works in practice, serving as inspiration for further scaling. We invest in collection programmes, sorting stations, recycling capacities and consumer awareness campaigns, and help to set up packaging recovery organisations. In other countries outside these markets, we work to secure initial local recycling capacity and support collection initiatives.



Collection and recycling of carton packages continued

Beverage carton collection and recycling

In 2024, more than 1.3 million tonnes of UBCs were collected and sent for recycling²², giving a global collection for recycling rate of 28%, 1 percentage point higher than in 2023.

Recycling facilities that we
collaborate with worldwide

113

fibre recycling facilities
recycle fibres by
hydropulping

39

PolyAl recyclers turn the
material into pellets
which are then used by
plastic converters in their
production

63

integrated recyclers
recycle both fibre and
PolyAl (separately
or together)

Collaborating towards a circular future

In 2024, we announced through a collaboration with Yellow Dreams involving an investment of around €3 million, a new recycling plant is set to start operations in Ittervoort, The Netherlands in the second half of 2025. With a planned capacity of 20,000 tonnes, this second Dutch plant complements the existing 8,000-tonne capacity at Recon Polymers' facility in Roosendaal, marking a significant increase to the region's recycling capacity.

Once recycled, the protective layers of polymers and aluminium can replace virgin plastics or other recycled plastics in applications for injection moulding, extrusion or thermo-forming, and be used to produce goods such as pallets, crates, outdoor furniture, flowerpots, tiles and more.

For us, it is a priority to collaborate with stakeholders across the value chain to drive collection, sorting and recycling, and this endeavour with Yellow Dreams sets an example of the value of such collaboration towards building a circular system. For more information, visit: [Tetra Pak and Yellow Dreams set to boost carton recycling | Tetra Pak Global](#)



Collection and recycling of carton packages continued

Improving the global recycling value chain and a circular future

Drive a step change towards highest recycling performance in Europe

Netherlands: together with Recon Polymers, we strengthened our cooperation with AVK Plastics for a more circular future for our beverage cartons – enabling the PolyAl fraction to be used in transportation pallets.

[\[\] READ MORE](#)

Italy: Keter launched a designer pot range made from up to 98% recycled PolyAl from used beverage cartons. Now available in Spain and Portugal, the initiative reduces waste, lowers carbon emissions and lessens reliance on virgin resources, showcasing circular innovation in home and garden products.

[\[\] READ MORE](#)

Stay ahead and transform recycling value chain in other major markets

Turkey: through an investment with Momentum Waste Management, a new packaging waste collection and sorting facility has begun operating in Ankara, Turkey. This investment in sorting capacity intends to enhance the recycling rate of UBC and aims to separate 5,000 tonnes of beverage cartons annually.

UAE: Union Paper Mills and Tetra Pak launched a first-of-its-kind recycling line for carton packages in the UAE. The joint investment will process up to 10,000 tonnes of post-consumer carton packaging material annually.

[\[\] READ MORE](#)

Brazil: expansion of UBC recycling capacity in Brazil with HCR Alto Vale Celulose. Initially, processing 6,000 tons of UBC annually, with our investment, the facility's recycling capacity has now increased to 18,000 tonnes per year. The commissioning of this project was approved in December 2024, and the new equipment is now operating at full capacity.

Activating collection and recycling in other markets

Egypt: together with Uniboard Paper Mill, we are pioneering UBC recycling in Egypt via a collaborative investment of €2.5 million, to establish a recycling line spanning 1,000 sq metres with the capacity to process up to 8,000 tonnes of post-consumer carton packaging material annually.

Philippines: in collaboration with Del Monte Foundation, we refurbished classrooms in six Mindanao schools through its 'Cartons for Communities' initiative. Collected UBCs were recycled and transformed into chipboards used for walls, flooring and roofing material, as well as made into 115 tables and 460 chairs delivered to the schools as part of the preparation for the new school year.

[\[\] READ MORE](#)



Our progress in 2024

Design, materials and lifecycle of equipment

In addition to our packaging, we implement circular practices within our packaging and processing equipment businesses.

For our equipment, circular economy means three key initiatives:

1. Deploying circular and low emission raw materials for equipment
2. Enabling efficiencies at customer operations: we have an important role in supporting our customers in their sustainability journeys with our solutions. Our processing best practice lines reduce water and energy consumption and product losses. Additionally, we offer and develop technologies enabling upcycling of current by-product streams into components of food, such as brewers' spent grain and whole soya. For more information [click here](#).
3. Expanding the lifespan of our equipment: we address this in two ways: firstly, by designing for longevity including design for serviceability and maintenance, increasing lifespan of wear parts, and through the deployment of upgrades; and secondly, through certified renovated equipment.

Deploying circular raw materials for equipment

Our processing and packaging lines are predominantly composed of stainless steel and electrical components. Therefore, the main route being explored to alternative circular raw materials is to source recycled, sustainable or green steel.



Efficiencies at customer operations

Our processing solutions can help customers to reduce water and energy consumption and product losses at their sites, thus reducing resource consumption and related GHG emissions. We measure our impact through two targets: on reducing losses on best practice lines and on sales of our products in our sustainable processing equipment portfolio. Concretely, we have an impact through deploying new solutions, such as our Industrial Protein Mixer, which help to reduce product losses.

[Read more in Food systems](#)

Our 50/50/50 ambition

All our equipment is designed with sustainability and efficiency in mind, helping our customers to reduce their use of resources such as energy, water and cleaning chemicals. Our 50/50/50 ambition sets a goal for 2030 of 50% reduction (against 2019 baseline) in water use, 50% waste reduction and 50% CO₂ emissions reduction on the best practice processing lines. One example of our products supporting this ambition is our In-Line Blender B, which cuts energy use by 20%, water use by 50% and product losses by up to 95%.

Our sustainable portfolio

Our Processing Solutions & Equipment (PSE) sustainable portfolio is designed to achieve our 2030 ambitions by significantly reducing GHGs, waste and water impact in customer operations. This approach not only supports profitable business growth through enhanced sustainability performance but also meets customer expectations. By embedding sustainability in every decision, strengthening our portfolio with innovation, leveraging data in product value proposition and aligning efforts for transparency and accountability, we ensure a comprehensive and effective strategy.

In 2024, we identified 15 products²³ to form our PSE sustainable portfolio. These products were selected for their ability to minimise product losses while reducing energy and water consumption. Examples include Whole Grain Technology for soy and oat solutions, Tetra Pak® Industrial Protein Mixer, and Sustainable Filtration Solutions for water and product loss recoveries. By monitoring the sales and real-world impact of these products, we aim to double their sales on sustainable portfolio by 2030 compared to 2022. This initiative underscores our commitment to sustainability and innovation, driving meaningful progress towards our own as well as our customers' sustainability goals.

By monitoring the sales and real-world impact of these products, we aim to double their sales on Sustainable Portfolio by 2030 compared to 2022. This initiative underscores our commitment to sustainability and innovation, driving meaningful progress towards our own as well as our customers' sustainability goals.

Design, materials and lifecycle of equipment continued

CASE STUDY

Circle Green Steel

In 2024, we piloted low carbon stainless steel in our homogenizers for the first time, using machines manufactured with Outokumpu Circle Green^{®24,25} steel at our Lund site.

This material has a carbon footprint up to 93% lower when compared to the global industry average for stainless steel.²⁶ Depending on the model, using Circle Green can reduce the CO₂ emissions by between 160kg to 1,370kg per machine.²⁷

With approximately 7% of the world's carbon dioxide emissions stemming from the global steel industry, innovating with new forms of stainless steel plays an important role in reducing overall greenhouse gas (GHG) emissions.

By offering homogenizers with a Circle Green stainless steel hood, we can provide F&B manufacturers with a viable path to reducing their scope 3 emissions – and continue to offer the benefits of durability, reliability and ease of operation.

[READ MORE](#)



Extending the lifespan of equipment

We give a second life to our filling and distribution lines through our [certified renovated equipment programme](#). The certified renovated equipment can include restoring missing parts, installing upgrade kits for obsolescence, and removing corrosion and rust to allow the equipment to be kept in use longer. In 2024, we delivered 71 pieces of certified renovated equipment.

Services

Our Services business contributes to extending the lifespan of our equipment through maintenance, maintenance units, Asset Health Monitoring, repair services and implementing circular practices within logistics for shipping spare parts. We have also been looking into new circular 'as-a-Service' business models.

Circularity in logistics and transport packaging

Our Services distribution centres ship large amounts of spare parts to our customers to support them prolonging the lifespan of our equipment. We are embedding further efficiencies into this process by working to reduce the amount of waste generated from transport packaging and reducing the distances over which the parts are shipped.

Activities cover:

- Reusing transport packaging material and reducing use of plastic for transportation of spare parts: Distribution centres have reduced the use of plastic void fill by replacing it with reused cardboard. Services distribution centres are also reusing all packing materials possible from Distribution Centre Lund, including cardboard boxes that are reused as boxes for customer deliveries or shredded to become void-fill material. Wood and plywood are also being reused. Plastic void-fill is only used when required, for instance for dangerous goods. An initiative to replace the plastic bags for spare parts to further decrease environmental impact has been started. Plastic tape has been replaced with paper tape on all our distribution centres.
- Flexible distribution network: To improve the sustainability of our logistics flow, Services is building a flexible distribution centre network to shorten travel distances and therefore reduce CO₂ emissions associated with longer distances. By increasing regional sourcing, both air shipments and inbound distances are being reduced. We are also focusing on supporting customers and market companies to choose ground transportation to a higher extent, by promoting planned orders instead of express orders.

Design, materials and lifecycle of equipment continued

Improving performance of our assets

We are deploying a new business model that offers performance guarantee and predictable long-term pricing for services and equipment to our customers called Capacity-as-a-Service (CaaS). In this model, customers pay for the capacity to produce a specific quantity of products, with guaranteed equipment output throughout the agreement, ultimately accelerating the introduction of new sustainable technologies.

CaaS is expected to contribute to lowering the customer's Total Cost of Ownership (TCO) and sustainability footprint through reducing waste and the consumption of utilities.²⁸ This is achieved by leveraging advanced solutions such as Asset Health Monitoring (AHM) and Maintenance Management with the support of Expert Services to optimise services delivery throughout these long-term agreements.



CaaS and other as-a-Service solutions are the foundations towards a more sustainable and circular economy whereby we can employ the right assets (new or renovated) to achieve the customer's desired outcomes.

In addition, using the latest Industrial Internet of Things (IIoT) technologies along with a machine learning algorithm based on our subject matter expertise on our filling machines, downstream equipment as well as key components, we can proactively monitor a wide variety of parameters to gain a comprehensive, holistic understanding of our customers' assets health. This contributes to extending the asset lifetime, preventing downtime and improving the design, serviceability and sustainability footprint of our equipment.

AHM enables us to securely collect aggregated data from utilities consumption on Tetra Pak® A3 filling machines, for example. This data can be used to define actions in terms of technical improvements and best practices. For example, to put processing equipment under hibernation mode during periods of downtime that saves utilities cost. This has brought savings in terms of electricity consumption that can easily be translated to CO₂ savings that each customer can unlock at any time using AHM. By deploying these advanced technologies, we can provide a higher level of service solutions that deliver TCO benefits to our customers.



Maintenance and repair

In Services, the concept of Maintenance Units is globally established. We offer a wide assortment of pre-assembled and pre-tested products, containing all the single parts that together perform a function in the machine. The purpose of Maintenance Units is to provide high-quality refurbished units to ensure efficient maintenance events by saving time and reducing complexity.

When a customer buys a refurbished Maintenance Unit, the old one is sent back to one of our Maintenance Unit workshops. The unit is then dismantled and cleansed. In the Maintenance Unit production process, old reconditioned and new parts are entered into a refurbished Maintenance Unit which is to be sold to another customer. We also offer a repair service, complementary to the Maintenance Units (MU) offering.

Our progress in 2024

Waste in our operations

We are committed to the principles of circularity, which play a central role in how we manage and reduce operational waste.

Our goal is to eradicate waste to landfill (and incineration without energy recovery) from our production sites by 2030.²⁹

In 2024, total waste from our operations reduced by 4% compared to 2023, of which 95% was recycled and less than 1% sent to landfill, continuing a year-on-year downward trend.

The key driver for this reduction over time is the continuous improvement we strive for through our World Class Manufacturing (WCM) work. WCM is a globally recognised methodology and certification that focuses on optimising factories so they can increase quality and safety while reducing costs, time and resource use. The WCM methodology provides a framework through which small, purposeful changes can be made over time, leading to larger results.

Waste (tonnes)	2024	Δ% 2024 vs. 2023
Total waste generated	177,608	-4%
Non-hazardous waste	167,671	-1%
Hazardous waste	9,937	-32%
Total amount of non-recycled waste	9,669	-22%
Waste management		
Recycling	167,939	-2%
Incineration	8,067	-25%
Landfill	1,602	-4%

Collaborations and alliances for change

Building a circular economy requires system-wide action and cooperation. As part of these collaborative efforts, we participate in two key industry alliances – The Food and Beverage Carton Alliance (FBCA) and 4evergreen. Both organisations work towards the goal of fibre-based packaging being recognised as an integral part of circular and resilient food systems.

We also have a partnership with the Ellen MacArthur Foundation (EMF) and engage with the Consumer Goods Forum and other regional and national forums to advance circular design, influence policy and drive projects focused on collection and recycling of packaging. In 2024, circular economy was also added to our 'Join us for Protecting the Planet' supplier initiative and we aim to deepen our dialogue with suppliers on their Circular Economy strategies, targets and offering going further.

➔ [Read more in the Business conduct](#)

The Food and Beverage Carton Alliance (FBCA)

We are a member of the FBCA (and its predecessor organisations ACE and EXTR:ACT). With a new global scope, the alliance comprises members who innovate towards fully renewable and increasingly sustainable packaging that contributes to food system resilience and climate security. Membership includes food and beverage carton manufacturers and their paperboard suppliers.

The FBCA platform provides the food and beverage carton value chain with a common trusted voice – globally and locally – leading policy representation and stakeholder engagement to improve understanding of how food and beverage cartons contribute to circular economies and food system transformation. In 2022, ACE published Design for Recycling Guidelines specifically focused on beverage cartons and a revision process of the guidelines was initiated in 2024.

Collaborations and alliances for change continued

4evergreen

We continue to be an active member of [4evergreen](#), the cross-industry alliance of over 100 members representing the entire lifecycle of fibre-based packaging – from pulp, paper and board manufacturers, packaging producers and converters, brand owners, retailers and waste management companies to recyclers.

4evergreen members share expertise to develop tools and guidelines for an even more sustainable sector. Their goal is to reach a 90% recycling rate for fibre-based packaging in Europe by 2030. In October 2024, the alliance updated its toolbox with the [4evergreen Circularity by Design Guideline](#) for Fibre-based Packaging Version 3, which now covers requirements for conventional, de-inking and specialised paper mills. At the same time, it also released an updated Guidance on the Improved Collection and Sorting of Fibre-based Packaging for Recycling Version 3. In January 2025, the alliance launched its Recyclability Evaluation Protocol, a tool for assessing how efficiently fibre-based packaging materials can be recycled into usable raw material, taking into account the different recycling technologies in place across the EU.

Collaborating with our peers in [The Food and Beverage Carton Alliance](#), and other industry associations, makes our position stronger and our collective voice more compelling. It allows us to

influence the policy agenda for our industry and across the value chain, with the shared goal of tackling the complex global challenges we face. Together, we advocate for public policy and collaborate to provide science-based facts that reinforce the essential role of food and beverage cartons in Europe, and beyond.

[\[\] READ MORE](#)

Ellen MacArthur Foundation

Our three-year partnership with EMF since 2023 focuses on four pillars:

1. Our solutions on Circular Food within the EMF Big Food Redesign framework
2. Capacity building
3. Driving consortium projects such as one creating a briefing paper on 'Regenerative wood-based products in circular Economy', which was published in 2024
4. Being a signatory of the [EMF Plastics commitment](#).



Capability building

In 2024, we continued building our internal capabilities on circular economy through a circular economy training programme. This included cultivating internal circular economy champions who attended in-depth training courses and/or sprints, through our partnership with the EMF.

In addition to the champions, we raised awareness of the circular economy by hosting a circular economy specific session with EMF in our annual learning conference, launching an in-house e-learning training module introducing the basic concepts of circular economy and rolling out function specific training modules for Supplier Management. Our aim is to encourage the wider organisation to think about how circular economy principles can be applied to what we do.

Climate

Why it matters

Global food systems account for more than one-third of global GHG emissions¹ and are key to tackling the climate crisis. To avoid the widespread adverse impacts and related losses and damages to nature and people, keeping warming to not more than 1.5°C above pre-industrial levels requires deep, rapid and sustained GHG emissions reductions in all sectors.

Our ambition

Take action on mitigating climate change by decarbonising² our operations, products and our value chain.

Material topics covered

Climate change mitigation and adaptation → [READ MORE](#)

Energy sources and intensity → [READ MORE](#)

SDGs



See [page 113](#) for footnote references

Sustainability context and global influences

According to the EU's Copernicus Earth Observation Programme, 2024 was the planet's warmest year on record and the first when global annual average surface air temperature exceeded 1.5°C above pre-industrial levels³ – a significant moment as 1.5°C is the level of global warming that signatories to the UN FCCC Paris Agreement⁴ have committed to keep to by the end of this century.

To meet this Paris goal requires rapid and sustained GHG reductions across all sectors with reduction and adaptation measures needed to effectively build resilience to the impacts of climate change.⁵ Net Zero Tracker's 2024 stock-take revealed that the number of net-zero plans published by states and regions, cities and companies increased overall in 2024, but less than 5% of these plans met all their process and integrity criteria.⁶

Turning plans into action is vital as current levels of warming are already having profound effects on people around the world. A report from World Weather Attribution and Climate Central estimates that 3,700 people died in 2024 due to extreme weather events made worse by climate change.⁷ Extreme weather has also contributed to significant increases in food commodity prices over 2024.⁸ Cocoa, coffee and sunflower oil prices increased 163%, 102% and 55% respectively in 2024, and prices are forecast to remain volatile due to continuing extreme weather.

The global food systems is dealing with this climate disruption at a time when increased food production is required to meet the needs of population growth.



Our role and approach

We are working to reduce our environmental impact at every step of the value chain.⁹ The food industry therefore has a crucial role to play in mitigating climate change, and we recognise our responsibilities as an advanced manufacturer at the heart of the food system.

We have the opportunity to improve resource efficiency and reduce emissions across our business while supporting our customers with food processing and packaging solutions that help reduce their GHG emissions.

To drive implementation of our Climate Transition Plan, we focus on the climate targets, performance, decarbonisation levers and climate risks across our entire value chain, including suppliers, our own operations, customer operations, transportation, and the sale and end-use of our products by customers.

Within our own operations, we seek to lower GHGs by increasing renewable energy sources, removing the use of fossil fuels at our sites, and generating our own renewable energy, and through transformation of our global car fleet.

Upstream in our value chain, we work collaboratively with our suppliers to identify opportunities to reduce emissions in their operations and throughout their own supply chains.

Downstream, we help our customers [reduce emissions](#) by increasing the energy efficiency of the equipment and systems that we provide, and by designing more sustainable packaging.¹⁰

Our actions to reduce our climate impact are closely interlinked with our approach to nature and targets, as well as circularity.

The carbon footprint story of cartons

Packaging contributes to greenhouse gas emissions, making it important to choose options with a reduced environmental impact. Cartons are primarily made from paperboard, a renewable material that can be replenished. Multiple Life Cycle Assessments indicate that paper-based cartons tend to have a lower carbon footprint than single-use, fossil fuel-based packaging in the dairy and juice categories.¹¹

[READ MORE](#)



As a leader in our industry, we have a unique opportunity to influence and support stakeholders across the value chain. Our commitment to reducing environmental impact is deeply intertwined with our goals in climate action, circularity, social sustainability and food systems.”



Francesca Priora
Vice President Climate & Nature, Tetra Pak

Progress against our targets and commitments

Related material topics	Targets	Value chain location	2024 progress summary
Climate change mitigation and adaptation	Value Chain targets¹² By 2050, work together with our suppliers, customers and other stakeholders to achieve net-zero GHG emissions across our value chain (scopes 1, 2 and 3) compared to our 2019 baseline By 2030, achieve 46% GHG reduction across our value chain (scopes 1, 2 and 3) compared to our 2019 base year, in line with a 1.5°C Science Based Targets (SBTs) commitment compared to our 2019 baseline	Full value chain	• 25% reduction in total value chain GHG emissions since 2019 (-7% reduction since 2023)
	By 2030, achieve net-zero GHG emissions in our operations (scopes 1, 2 and business travel) by reducing emissions and balancing residual emissions with removals	Own operations	• 54% reduction in own operations GHG emissions (scope 1, 2 and business travel) since 2019
Energy sources and intensity	By 2030, source 100% renewable electricity in our operations in line with RE100 Commitment	Own operations	• 94% renewable electricity consumption in Tetra Pak operations (on track to meet our target)

Tetra Pak's net-zero roadmap

Accelerating and moving faster

Value chain target

- Revised SBTi goal to reduce GHG emissions² by 46% by 2030 (2019 baseline)

Operational targets

- Reduce business travel related GHG emissions by 50% by 2030
- 100% renewable electricity in all our sites by 2030
- Reduce GHG emissions in our operations¹ by 70%
- Balance remaining emissions with land restoration in Brazil and thereby achieve net-zero GHG emissions in own operations¹ by 2030

Packaging material

- Targets and plans developed with suppliers to reduce the impact of purchased raw materials by 50%
- Driving recyclability and recycling

Best practice lines

- Accelerate development and deployment of processing and filling solutions with 50% less emissions per unit of production

Scaling systems-wide decarbonisation³ of energy and materials through the value chain

- Reduce fossil-based material use, increase share of renewable and recycled material
- Drive electrification of our equipment offering to enable customers to utilise decarbonised electricity grids
- Collaborate with transport suppliers to increase share of renewable fuels and energy for transportation
- Scale carbon removal solutions with value chain stakeholders

Reaching our targets

- Reduce absolute value chain emissions² by 90%
- Balance remaining emissions² by removing and storing CO₂ through natural or technical solutions

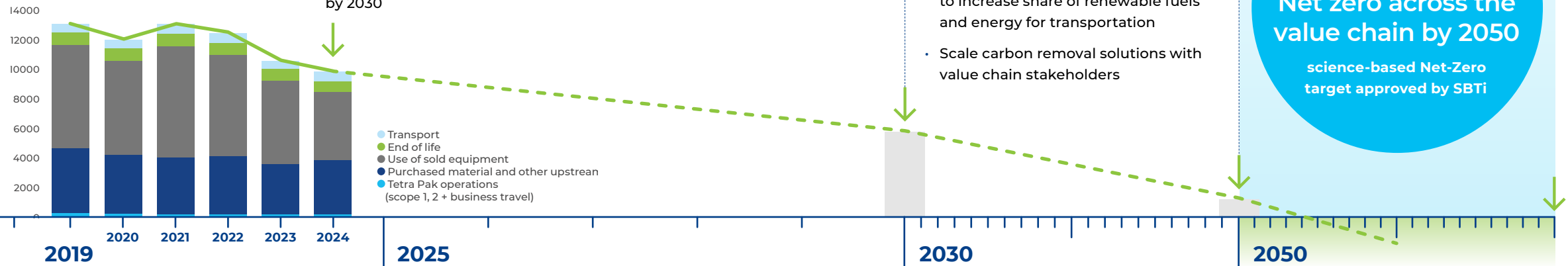
Work together with suppliers, customers and other stakeholders to reach

Net zero across the value chain by 2050

science-based Net-Zero target approved by SBTi

Value chain GHG emissions

K tonnes CO₂e



- Net-zero GHG emissions in own operations¹
- 46% reduction of GHG emissions in value chain² vs. 2019

¹ Scopes 1, 2 and business travel

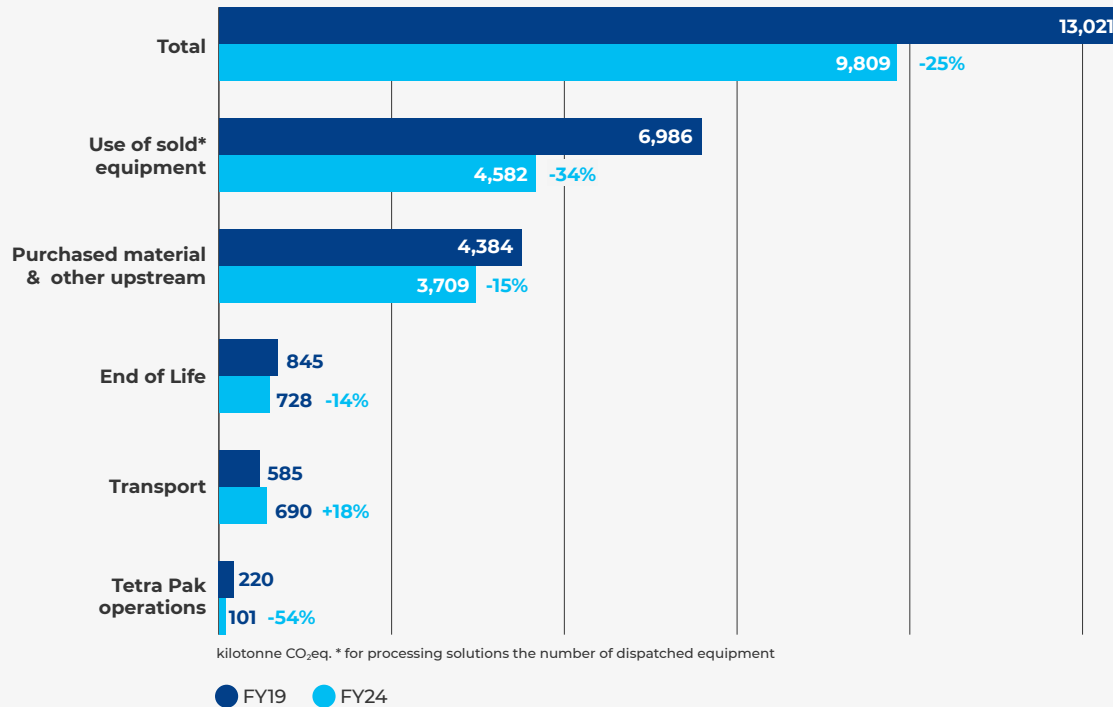
² Scopes 1, 2 and 3

³ <https://sciencebasedtargets.org/business-ambition-for-1-5c>

⁴ Decarbonisation: reducing our CO₂ emissions associated with electricity, industry and transportation (adapted from SBTi Corporate Net-Zero Standard). Used here to encompass also defossilisation: decreasing the share of fossil and increasing share of renewable and/or recycled carbon in materials. Value chain emissions reductions consistent with reaching global net zero in 1.5°C pathways; and neutralising impact of any emissions by permanently removing an equivalent volume of CO₂ (adapted from SBTi Corporate Net-Zero Standard).

Our progress in 2024

Our emissions performance in 2024:



We are on track to achieve our 2030 GHG emissions target¹³ to reduce absolute scope 1, 2 and 3 GHG emissions by 46%. This follows a further year of progress decarbonising our own operations and helping customers reduce their emissions through the equipment, technology and services we provide.

By the end of 2024, we reduced the total absolute GHG emissions across our full value chain by 25% compared with our 2019 baseline.

Notable developments include:

- In 2024, we continued to reduce overall emissions with the reduction primarily driven by decreases in emissions from purchased material and PSE – meaning the packaging and processing equipment our customers purchased from us last year.*
- Emissions from the use of sold equipment have dropped 34%.^{*14}
- Emissions from purchased materials are down 15%*, driven by improved volume allocation and reductions from our work with suppliers through our Join us in Protecting the Planet (JUIPP) initiative.^{*15} See more on JUIPP [here](#)
- End-of-life emissions fell by 14%*, reflecting our progress in improving collection and recycling of UBCs and a reduction in UBCs sent to landfill and incineration without energy recovery.*

- Transport emissions (including both inbound and outbound transport), which make up approximately 5% of our footprint, rose by 18% since 2019. We have identified opportunities to improve these figures and look to increase focus on inbound and outbound logistics in the coming year.
- Overall emissions from our own operations (scopes 1, 2 and business travel) are down 54%*, keeping us on track to meet our target to reduce emissions by 70% by 2030. This progress, considered together with the impact of the Aracauria land restoration project,¹⁶ means we are on course to reach net-zero GHG emissions for our operations in 2030. We have made good progress in reducing scope 1 and 2 emissions and have increased the share of renewable electricity used from 72% to 94% in 2024. Business travel emissions remain 29% lower than 2019 levels, though they have tripled since their lowest point during the COVID-19 pandemic.

54%

reduction in GHG emissions*
from our own operations
(scope 1, 2 and business travel)

*Compared to 2019 baseline unless otherwise stated

Reducing our operational emissions

Global energy monitoring

In 2024, we continued the roll out of our Common Energy Monitoring Platform (CEMP), using our technology and data visualisation expertise to understand and manage our energy consumption on a global level. As a result, 98% of our manufacturing energy consumption is now monitored via CEMP, enabling identification, measurement and verification of completed energy efficiency projects.

The data from CEMP allowed us to roll out our first Facilities Energy Management Partnership (FEMP) pilots at five manufacturing sites in 2024. The initial results are encouraging, indicating that low-cost/no-cost operational efficiencies identified can result in energy savings of between 2% and 11%.



The FEMP pilot project has provided a solid analysis and a clear understanding of our energy consumption logic. It has fostered excellent teamwork and established a clear action roadmap to further reduce our energy consumption and support our environmental targets."



Tony Huang
Factory Director, Kunshan,
China – FEMP pilot site

Direct emissions (scope 1)

Decarbonising our sites

We are phasing out fossil fuels across the building heating systems of our facilities. In 2024, we completed the electrification of all gas boilers in Rubiera and Sezzadio (Italy). At our Tomaszkowo site in Poland, we reduced natural gas use by 85% by installing heat pumps. Further decarbonisation was achieved in Arganda (Spain) and Izmir (Turkey), with electric cooking equipment in the restaurant kitchens.

Global car fleet decarbonisation

In 2024, we continued the transition of our car fleet to low carbon options from traditional fossil fuel. The new fleet solution is now implemented in 74 countries, focusing on replacing older vehicles with the safest, lowest emissions options available, including electric vehicles where possible. So far, 1,200 cars have been replaced with these lower emission models, avoiding over 3,000 tonnes of CO₂ emissions.

Electric forklifts on the rise

We continued our efforts to phase out the use of liquid petroleum gas (LPG) for our forklift fleet around the globe. The proportion of electric units in our forklift fleet increased 19% over the year, resulting in 78% of our fleet being electrified. At other operations and sites, we implemented route optimisation activities to reduce fossil fuel consumption while we continue our LPG phase-out efforts.



Double decarbonisation in Beijing

Our Beijing site successfully completed both solar PV and boiler electrification projects to drive down emissions. Between April and December 2024, the solar installation generated 1,315MWh, avoiding 880t of carbon. And in its first two months of operation, the new electric boiler saved 440t of carbon and 2,500m³ of water.

880t
of carbon saved

2500m³
of water saved

Reducing our operational emissions continued

Indirect emissions (scope 2)

Renewable energy growth

As signatories to [RE100](#), we are committed to using 100% renewable energy across our operations by 2030. In 2024, renewables accounted for 94% of energy used, up from 89% in 2023. We increased investment in on-site renewables in countries where we face challenges sourcing renewable energy from the grid.

Generating our own energy through solar PV provides another opportunity to reduce indirect emissions. In 2024, we continued the roll-out of solar PV installations at our own sites, resulting in on-site solar capacity increasing to 14.7MW from 12.7MW in 2023. This means 1.5% of our total energy consumption globally is now provided by our own solar installations and, in 2025, we will focus on increasing installed solar PV capacity in different countries.

Renewable electricity consumption and on-site solar photovoltaics (PV) capacity in Tetra Pak operations

	2019 (baseline)	2022	2023	2024	Δ% 2024 vs. 2023
Percentage renewable electricity consumption in Tetra Pak operations	72%	84%	89%	94%	5.6%
On-site solar photovoltaics (PVs) capacity in megawatts (MW)	2.7	8.47	12.7	14.7	15.7%

Increasing low emission office sites

Moving to newer buildings with lower energy consumption helps reduce emissions. When office leases come to an end, we seek new premises with LEED¹⁷ or an equivalent certification. In 2024, our Shanghai office achieved LEED Gold certification and we are committed to all new buildings we own or lease meeting LEED certification, or equivalent.

When selecting new office sites, we aim to move from offices in the suburbs to central locations with easy to access via public transportation. In 2024, there were nine office relocations, and each was assessed for GHG emissions impact. The relocations resulted in a 50% decrease (across these nine sites) in carbon emissions due to lower building energy consumption and lower employee commuting emissions.

Reducing logistics emissions

In 2024, as a consequence of the already implemented global packaging standard, four more of our manufacturing sites – in the US, Denmark, Poland and Mexico¹⁸ – were included in the NEFAB GreenCalcTM tool, with the objective to monitor and reduce CO₂ emissions.

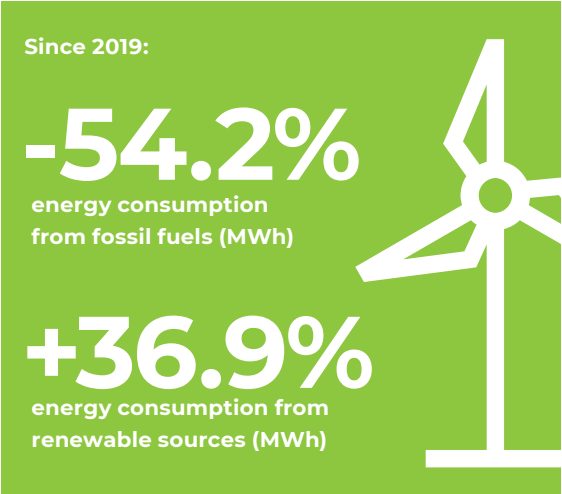
Working with our packaging solutions supplier, NEFAB, we can now calculate the full environmental impact (a cradle-to-grave lifecycle assessment) of the crates we use in logistics to transport our equipment from these sites, together with other PSE MSCI sites that were implemented in 2023. The standard uses the GreenCalcTM tool owned by NEFAB and co-developed with PRé Sustainability, SimaPro, to measure the environmental impact and visualise the results.

We now have eight manufacturing sites using the packaging solution standard and in 2024 we continued to drive the environment agenda in our packaging sites by reducing the total amount of material in our packaging solutions*.¹⁹

* This improvement can include our open crate solution, reduction from 22mm to 19mm material, less use of packaging material by testing new materials in our pilots, and more.

Business travel-related GHG emissions

Our target is to reduce business travel-related GHG emissions by 50% by 2030 from a 2019 baseline. Business travel in 2024 was down 29% from 2019 but has risen in the years since COVID-19, we continue to adapt our travels to meet the target.



→ See a detailed breakdown of our energy consumption in the appendix

Reducing our upstream emissions

Working with our suppliers

Our upstream impacts include those related to the production of the goods we purchase, such as liquid packaging board, aluminium and polymers. These accounted for 38% of our GHG emissions in 2024. We work closely with our suppliers to identify opportunities to reduce carbon emissions in their operations and throughout their own supply chains. To reach our 2030 target of 46% absolute emissions reduction across the entire value chain compared to a 2019 baseline, we set a target to reduce emissions from our purchased base materials by 50% by 2030.

We encourage prioritised suppliers in our Join Us in Protecting the Planet initiative²⁰ to set a target certified against the SBTi's Corporate Net-Zero Standard to limit global temperature rise to 1.5°C and drive decarbonisation together. Among this group, 29 now have their climate targets validated by the SBTi, while others are currently in the validation process.



As of 2024, we reduced the absolute climate impact from our base materials (scope 3) by 15% since 2019²¹. This is mainly driven by improvements made together with our aluminium and liquid packaging board suppliers, as well as by allocating a higher share of our volumes to suppliers with low emissions, while removing volumes from some high-emitting suppliers. The average emissions intensity per kg of base material has been reduced by 15% since 2019.

Increasing the use of plant-based polymers

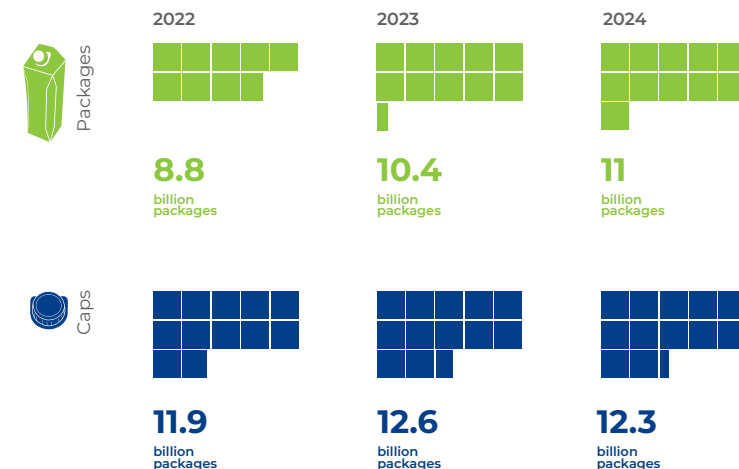
We deploy packaging containing plant-based polymers, based on sugarcane, which contributes to reducing the consumption of fossil-based polymers and further reduces the GHG emissions associated with our packaging.

We are expanding our plant-based polymers offer to new packaging solutions, giving our customers the opportunity to deploy sustainable innovations [with lower carbon footprint compared with solutions deploying fossil polymers](#), which is in line with our company commitments under the [Ellen MacArthur Foundation Global Plastics Commitment](#), and [consumers' expectations](#) to reduce the use and environmental impact of traditional plastic polymers.

In 2024, the share of plant-based polymers reached 8.2% of the total amount of polymers we purchased. This resulted in 47 kilotonnes of CO₂ saved compared to the amount of CO₂ which would have been emitted if using fossil-based polymers.²²

[Read more about why plant-based polymers in packaging material matter here](#), and [more about our approach to raw material sourcing in the Nature and Business conduct chapters](#).

Plant-based packages and caps growth



Enabling customers to reduce their emissions

4,080MWh

saved over its lifetime through the New AirTight with Encapt™ separator technology which cuts energy use by up to 40%.²²



Increases in the energy efficiency of the packaging and processing equipment, lines and whole factory systems that we provide to our customers drive reductions in our downstream GHG emissions. In fact, in 2024, we reduced emissions from the use of sold equipment by 19% compared to 2023.

Technology inspired by space travel

In 2024, we brought to market AirTight with Encapt™ technology for our separators. It results in up to a 40% reduction in energy consumption, amounting to 4,080MWh saving over a lifetime of equipment use.²³ The Encapt™ technology that reduces the air pressure and friction around the separator's spinning bowl is inspired by the low friction encountered in space travel, achieving the significant energy reduction, and the Airtight technology ensures gentle mechanical product treatment without air incorporation.

Lowering emissions from dairy lines

When we established our current targets in 2019, ambient dairy lines accounted for 48% of emissions from our sold processing lines and equipment and 20% of all GHG emissions across our value chain. Focusing on reducing emissions in this product line is therefore key to reaching our emissions reduction targets.

In an effort to improve environmental impact and efficiency of ambient dairy lines, in 2024, we evaluated the contributions of GHG reductions from a range of our solutions, including solar thermal collectors, heat pumps, and more.

We also initiated 'sustainability enablers' such as our Change OneStep Technology. As a result, the GHG emissions from sold ambient dairy lines reduced by 14.1% compared with 2023 and by 41.8% from our 2019 baseline.

To drive the sales of our Solutions and Equipment Sustainable Portfolio, we introduced an internal Sustainability Sales Index. The Index has been tracking sales of processing equipment included in the Sustainable Portfolio for the past three years and included services and factory-wide solutions sales for the first time in 2024. Our aim is to double the sales of our Sustainable Portfolio by 2030 to help meet our target to reduce GHG emissions from our best practice processing lines by 50% by 2030 compared to a 2019 baseline.

Enabling customers to reduce their emissions continued

CASE STUDY

A factory level approach to sustainability

In May 2024, we launched our Factory Sustainable Solutions offer to help food and beverage manufacturers optimise every aspect of their sites to minimise energy, water and waste.

In a world where every kilowatt counts, the Factory Sustainable Solutions team takes a holistic view of each site and delivers tailored recommendations to customers that bring together our leading technologies with our plant integration capabilities and engineering experience.



We have developed state-of-the-art technologies to create resource efficiencies. Our Nanofiltration technology reclaims the chemicals used to clean our equipment, allowing them to be used again rather than becoming a waste stream. This saves water and enables up to 90% recovery of the total spent liquid in cleaning.²⁴

We are also collaborating with technology experts to offer energy recovery solutions that provide another route to energy and cost savings. We offer heat pump solutions with Johnson Controls and Olvondo Technology A/S that recycle 10-50% of waste heat from factory processes and upcycle it to use again on site. Our solar thermal collectors in collaboration with Absolicon use the power of the sun to deliver hot water and steam at up to 150°C to use in UHT processing.

[READ MORE](#)



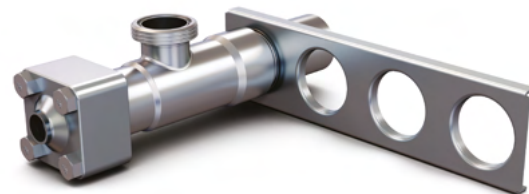
Spotlight story

Design innovation drives 40% energy savings

We have a long history designing and manufacturing Tubular Heat Exchangers²⁵ and are constantly seeking new ways to improve their performance for our customers.

Our latest innovation is Q-corrugation. It's a unique, patent-pending pattern to the multitubes within our heat exchanger that reduces energy consumption by 40% compared to our previous model, which was already market leading. Q-corrugation reduces pressure drop by 40%, resulting in a corresponding reduction in the energy costs of the pump, creating cost savings and a lower carbon footprint for our customers.

The new Q-corrugation in combination with our successful use of product-to-product (P2P) heat generation will contribute additional energy savings for our customers. We have used P2P for more than 20 years where heat is transferred between two different product streams. Our P2P design allows our modules to be more compact and as result retain more heat because the tubes are closer together. Because P2P systems are also more efficient, the same treatment tasks can be performed using fewer tubular modules, resulting in up to 55% energy consumption savings compared to product-to-water²⁶ designs.



Nature

Why it matters

Global food systems and our value chain depend on the services provided by nature. The nature loss crisis is now threatening these services, with potentially major impacts on human societies.^{1,2,3}

Our ambition

Work with our own operations, suppliers and customers to reduce the impacts of our value chain on nature and to restore landscapes, in order to contribute to the halting and reversing of nature loss and the achievement of global water resilience.

Material topics covered

- Biodiversity and ecosystems —> [READ MORE](#)
- Water management —> [READ MORE](#)
- Pollution to air and water —> [READ MORE](#)

SDGs



Sustainability context and global influences

Nature underpins livelihoods, global economies and food systems through the ecosystem services it provides, but these services are under pressure, with 14 of the 18 categories of ecosystem services in decline.⁴ Human activity continues to impact biodiversity, ecosystems, and water resources – deepening the nature crisis.⁵

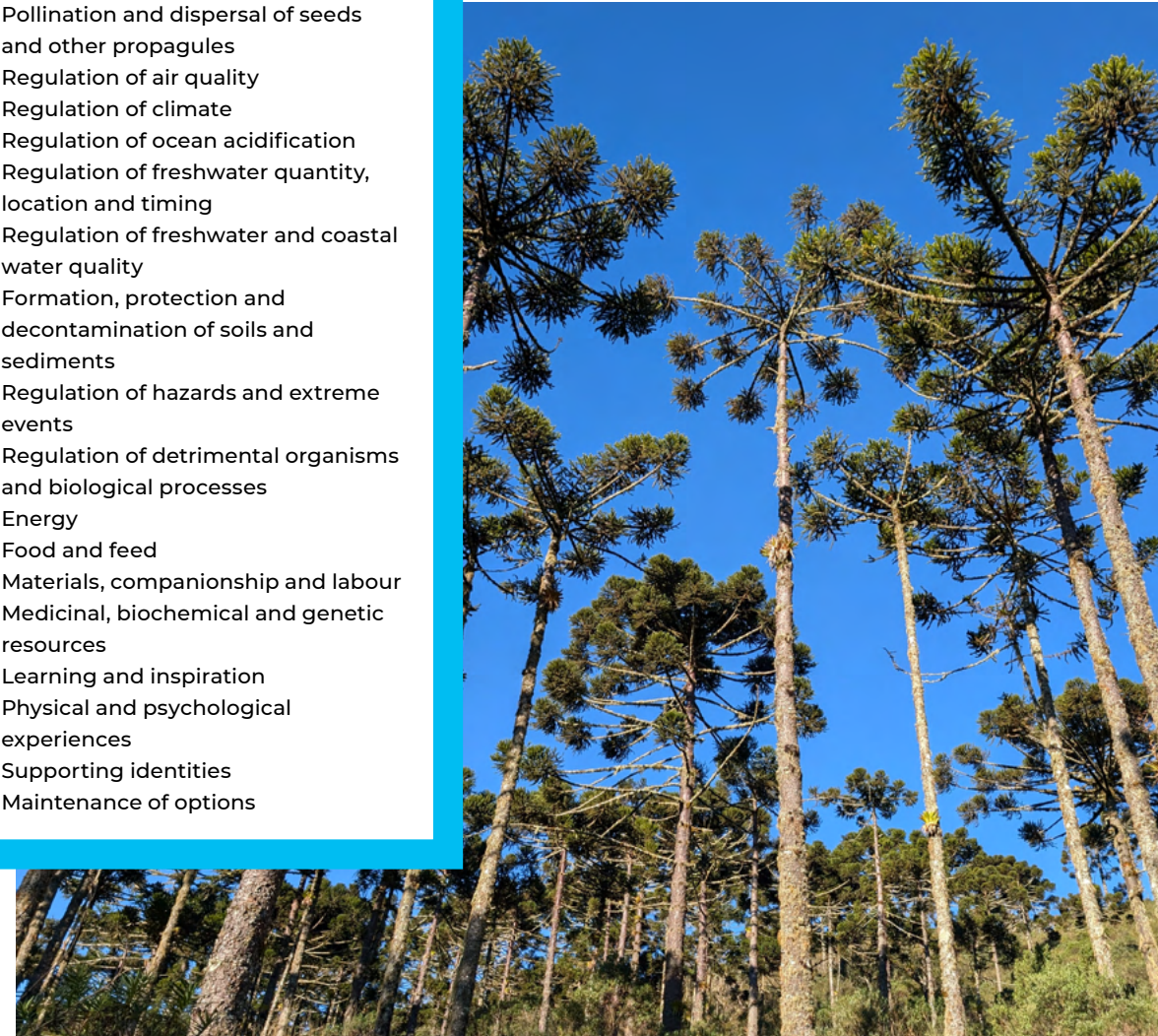
Global food systems depend on the services provided by nature that are under threat. At the same time, global food systems are a key driver of nature loss and the global water crisis. Agriculture is responsible for 72% of freshwater withdrawals⁷ and is the main cause of biodiversity loss,⁸ while food production is among the leading causes of water pollution.⁹ As an advanced manufacturer at the heart of this food system, we believe we have a responsibility to take action and work with other stakeholders to reduce these impacts on nature.

The Kunming-Montreal Global Biodiversity Framework (GBF) was adopted in 2023 to halt nature loss and put nature on a path to recovery by 2030. Aligned with this global agreement, policies and regulations to protect nature are on the rise and risks related to biodiversity loss and water scarcity are increasingly recognised by businesses and governments globally.¹⁰ Requirements related to nature-related impacts, risks and opportunities are guided by regulatory frameworks as well as voluntary initiatives such as the Science Based Targets for Nature (SBTN) and the Taskforce on Nature-related Financial Disclosures (TNFD).¹¹ These globally recognised frameworks for how organisations can assess, set targets and report on nature related impacts, dependencies, risks and opportunities.

Regulatory developments in recent years also include the EU Deforestation Regulation on Products (EUDR) that entered into force in 2023 and must be complied with by 31 December 2025. Under the EUDR, seven commodity products that are major drivers of deforestation – soy, beef, palm oil, wood, cocoa, coffee and rubber – can only be sold in the EU if legally produced and sourced from deforestation-free areas.

Ecosystem services categories⁶

1. Habitat creation and maintenance
2. Pollination and dispersal of seeds and other propagules
3. Regulation of air quality
4. Regulation of climate
5. Regulation of ocean acidification
6. Regulation of freshwater quantity, location and timing
7. Regulation of freshwater and coastal water quality
8. Formation, protection and decontamination of soils and sediments
9. Regulation of hazards and extreme events
10. Regulation of detrimental organisms and biological processes
11. Energy
12. Food and feed
13. Materials, companionship and labour
14. Medicinal, biochemical and genetic resources
15. Learning and inspiration
16. Physical and psychological experiences
17. Supporting identities
18. Maintenance of options



Our role and approach

Target 15 of the GBF calls for large companies to disclose their nature-related impacts, dependencies and risks, to progressively reduce negative impacts and increase positive impacts on biodiversity. Aligned with this target, we have conducted a detailed assessment to identify the impacts and dependencies of our own operations and value chain on nature. We've also identified *biodiversity and ecosystems, water management, and pollution to air and water* as material topics for our business.

Our assessment shows that in our own operations, water use is the most significant driver of material nature impacts, with severity and scope varying across sites. We assessed our production sites as having low to moderate dependence on ecosystem services, but as being vulnerable to water supply disruptions.

Our supply chain has significant dependencies on nature, and is responsible for the largest share of impacts in our value chain. Land use was found to be the largest driver of impacts (90%), while the second most important pressure, water withdrawal, follows far behind (2%).

The production of paperboard is responsible for around 80% of our upstream nature impact, owing to its large land use footprint. Other upstream activities have comparatively lower impacts on biodiversity, ranging from 1-4% of the total.



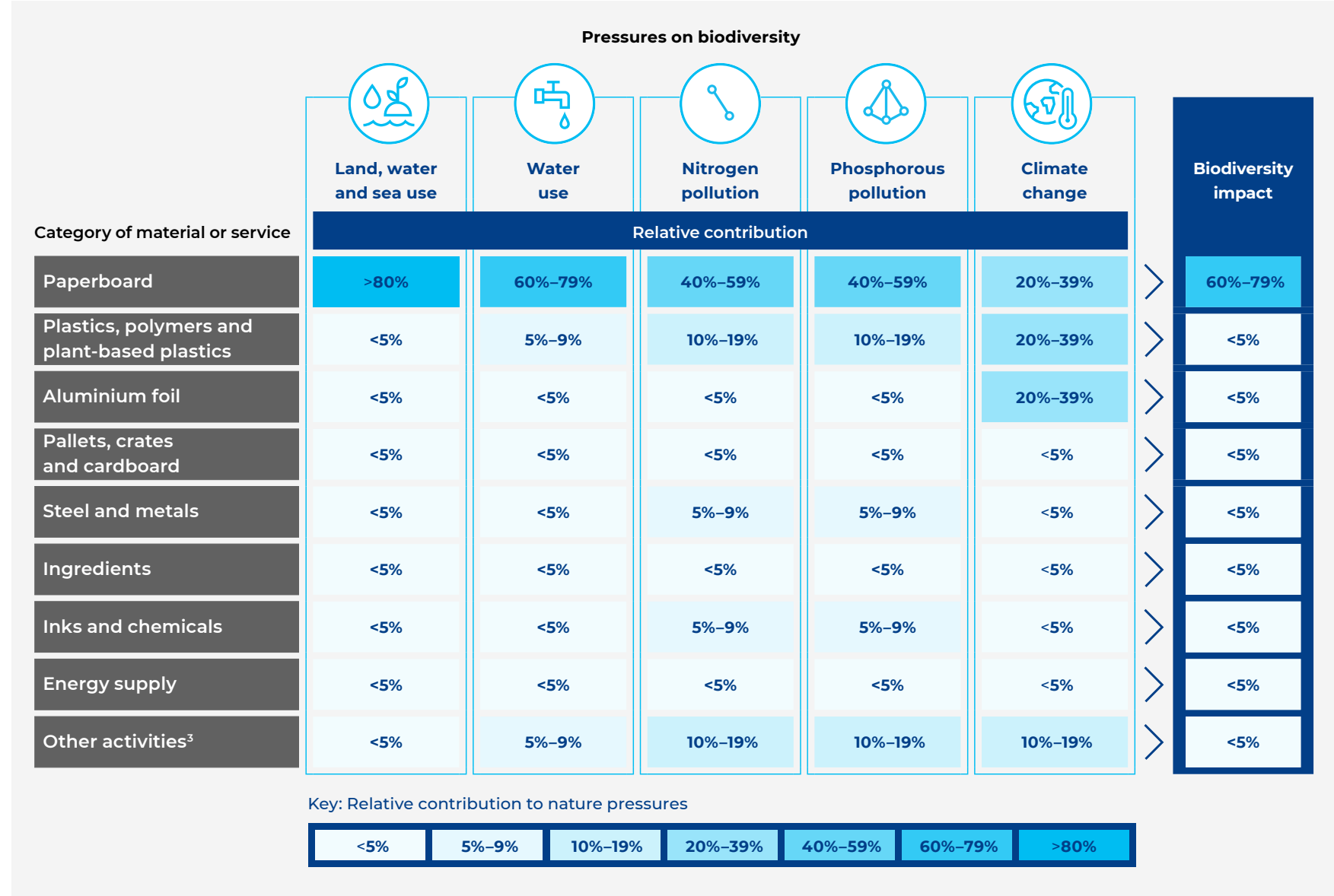
Our role and approach continued

Nature-related impacts and dependencies in our value chain

We also mapped the dependencies of the production processes in our supply chain on biodiversity and ecosystem services.

This shows that direct physical inputs, such as wood and fibre, and protection from environmental disruption (e.g. climate regulation, flood control) are the most critical ecosystem services for our upstream activities, followed by services that enable production processes (e.g. water flow and quality). These results highlight the importance of safeguarding ecosystem services to ensure the continuity and resilience of our supply chain, and therefore our ability to continue providing people with access to safe food.

We assessed our water footprint, looking at both water quantity and quality indicators across our value chain. Regarding water consumption, it is clear the biggest impact relates to our suppliers, as well as to the water consumption of the processing equipment we put to the market.



Our Approach to Nature

In 2024, we launched our comprehensive Approach to Nature, a pioneering framework defining our contribution to halting and reversing nature loss and enhancing water security.

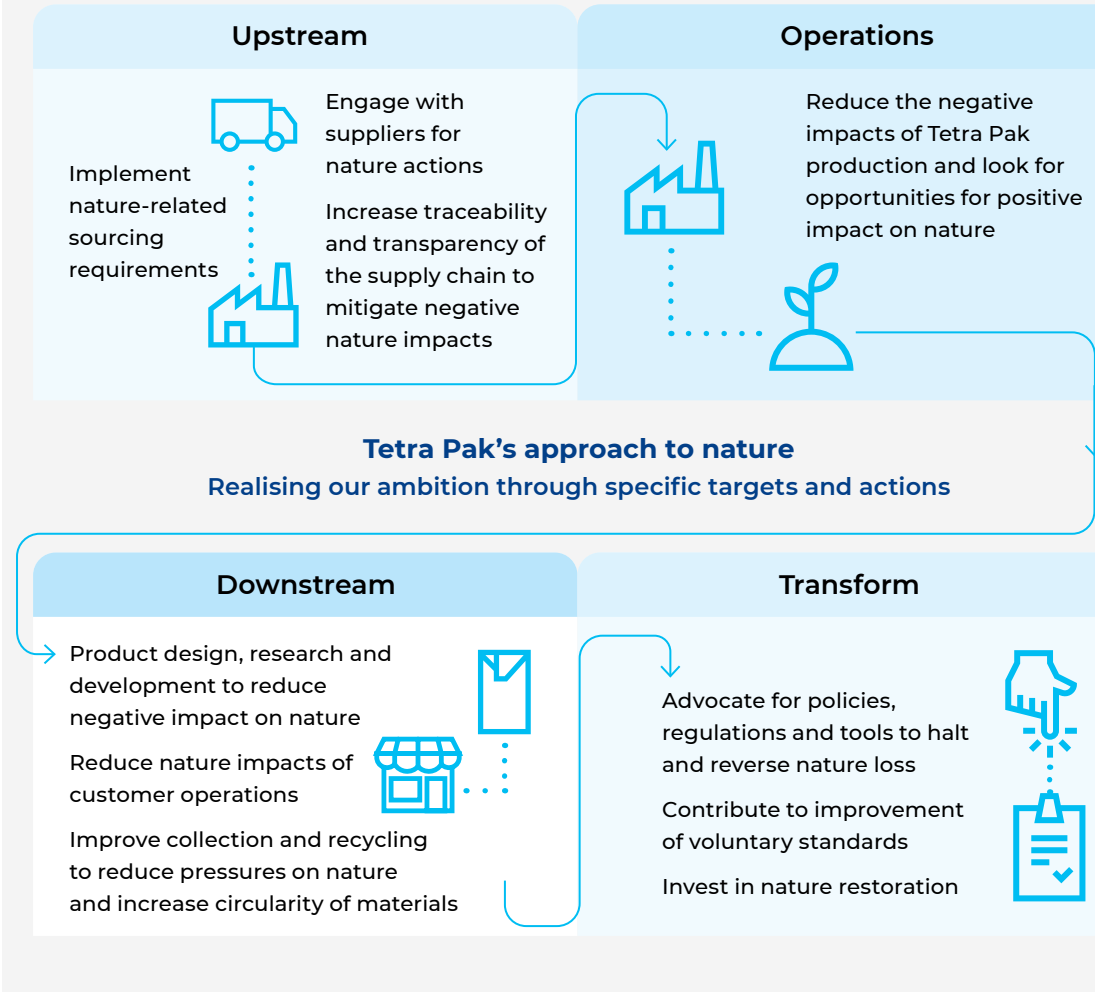
With over 20 measurable targets across the value chain, the approach goes well beyond our operations to address suppliers' and customers' nature-related impacts, as well as those connected to packaging end-of-life.

We focus on three core areas:

- Contribute to reversing and halting nature loss by reducing the negative impacts of our value chain on nature and by supporting landscape restoration.
- Contribute to global water resilience by reducing the negative impacts on local water resources and by working to solve shared water challenges in at-risk basins¹² across our value chain.
- Work with suppliers and customers to reduce the negative impacts of food value chains on nature, contributing to more secure, resilient and sustainable food systems.

Our Approach to Nature strategy featured as part of the 'It's Now for Nature' campaign led by the Business for Nature coalition at COP16 rallying businesses to act on nature and contribute towards a nature-positive future.

Delivering Approach to Nature across every part of our value chain.



We go beyond our value chain to help restore lost habitats and landscapes through our [Araucaria Conservation Programme](#) in Brazil where we are committed to restoring 7,000 hectares of Atlantic Forest by 2030. The project includes potential certification of up to 13.7 million ha under international voluntary standards¹³ for carbon sequestration measurement.¹⁴



Tetra Pak's 'Approach to Nature' marks an important milestone, emphasising how the corporate world must step up to support the ambitious targets of the Global Biodiversity Framework. We're pleased to have them involved in our It's Now for Nature campaign and encourage all companies to develop and submit a credible nature strategy – a clear plan for how they will contribute towards a nature-positive future by 2030. The more companies can share and learn from each other, the quicker we accelerate action."



Eva Zabey
CEO, Business for Nature

Progress against our targets and commitments

Related material topics	Targets	Nature Approach pillar	2024 progress summary
Biodiversity and ecosystems	All our production sites have done a nature assessment and have an action plan in place by 2025	Own operations	<ul style="list-style-type: none"> In 2024, 2 pilot sites (Lund and Monte Mor) completed a nature assessment and have action plans in place
	By 2025, all of our supply base has been included in assessment of nature impacts and is subject to nature-related procurement requirements	Upstream	<ul style="list-style-type: none"> All of our supply chain has been included in a high-level assessment of nature-related impacts, and we have prioritised the most impactful categories of suppliers for further engagement We launched a new version of our Code of Business Conduct for suppliers in March 2025, which includes specific requirements related to assessing and mitigating impacts on nature
	By end of 2025, 100% of our raw materials with the most significant land footprint originate from certified or controlled sources	Upstream	<ul style="list-style-type: none"> Our due diligence process includes a risk assessment, regular engagement with our suppliers, and verification that 100% of the paperboard we procure comes from FSC certified forests or other controlled sources. In 2024, we sourced around two million tons of paperboard. Based on our due diligence and the certified or controlled origin of products sourced, we conclude that we met our commitment to source only from deforestation-free areas for 100% of the paperboard sourced. 35% aluminium volumes were delivered as ASI Chain of Custody (CoC) standard certified. 100% of plant-based polymers used in our products were Bonsucro certified
	By end of 2025, we will use geographic information to verify the deforestation-free status of 100% of the paperboard and plant-based polymer in our products	Upstream	<ul style="list-style-type: none"> We are improving our due diligence system to comply with the EU Deforestation Regulation by end of 2025 We plan to use geographic data to verify the deforestation-free status of our paperboard and biopolymers, pending supplier geolocation data
	By 2027, 100% of our high-impact suppliers have assessed their material impacts on nature and are implementing actions to reduce negative impacts	Upstream	<ul style="list-style-type: none"> In 2024, we incorporated the requirement to assess nature-related impacts and develop action plans into Join Us in Protecting the Planet, our flagship supplier sustainability initiative. This includes all our major suppliers of paperboard, aluminium and polymers (together responsible for over 80% of our upstream biodiversity footprint) In 2024, 30% of the suppliers reported having initiated or completed an assessment of their nature impacts

Progress against targets and commitments

continued

Related material topics	Targets	Nature Approach pillar	2024 progress summary
Biodiversity and ecosystems continued	By 2030, 80% of high-impact suppliers have reduced their negative nature impacts as quantified with an external, science-based initiative	Upstream	<ul style="list-style-type: none"> Introduced in 2024, this target has yet to yield significant supplier reporting. We will continue engaging with suppliers to support effective action plans and progress toward reduced impacts by 2030
	By end of 2025, reach full traceability to the point of production for 100% of our suppliers of the raw materials with the most significant land footprint	Upstream	<ul style="list-style-type: none"> We continue to ensure 100% traceability of the wood fibre contained in our packages, at minimum to the processing facilities producing the paperboard. This is verified through an information system that tracks the flow of paperboard from paper mills to our converting factories. To verify that all the paperboard in our packages comes from FSC certified forests and other controlled sources, all of our suppliers and our own facilities are third-party certified with FSC Chain of Custody (CoC) certification Our suppliers are required to report annually on the paper mills, tree species, certification status, and the country and region of origin of the wood fibre used in the paperboard supplied to us In 2024, we actively engaged with our suppliers to enhance the traceability of our products, even further, back to the point of production. However, we faced challenges in obtaining detailed traceability information within the pulp and paper industry, where supply chains are often complex, and data is not always consistently shared across the supply chain
	By end of 2025, we will implement an external engagement plan to support policies, regulations and tools to halt and reverse nature loss	Transform ¹⁵	<ul style="list-style-type: none"> We continued to demonstrate our nature work and talk about the importance of policy and tools considering nature in business at several high-level policy events. Nature is included in our external engagement plan
	Restore 7,000 ha of land by 2030	Transform	<ul style="list-style-type: none"> The Araucaria Conservation Programme is on track to deliver our 2030 target, with a total of 1,564 hectares of land under restoration since 2022 of which 1,292 hectares were added in 2024
	By 2030, key voluntary standards and initiatives that we utilise demonstrate nature benefits	Transform	<ul style="list-style-type: none"> We contributed to an initiative to fast-track Biodiversity Assessments of FSC certified forests, with the aim to evaluate the biodiversity value associated with FSC forest management verification and strengthen the monitoring of forest biodiversity in certified forests. The initial results of the project, released in 2024, showed a promising indication of positive impacts from FSC certification

Progress against targets and commitments

continued

Related material topics	Targets	Nature Approach pillar	2024 progress summary
Water management	We will achieve a 35% water withdrawal reduction across our production sites by 2030 compared to 2019	Own operations	<ul style="list-style-type: none"> In 2024, our total water withdrawal from sites in scope of our water target was 1,708 ML, a 17% reduction versus our baseline (2019) volume of 2,121 ML¹⁶ Reduction in water intensity by 6% vs. 2023 and 22% vs. 2019
	By end of 2025, all our production sites will have established a water balance, where withdrawals and discharges are identified for quantity and quality	Own operations	All our production sites have an established water balance including information on quantities of water withdrawals and water discharge. For information on water quality (including information on standard pollutants and treatment levels) 56% of sites completed their reporting in 2024
	By end of 2025, 100% of our high water impact suppliers report on water use and quality	Upstream	<ul style="list-style-type: none"> In 2024, 78% of the suppliers responded with water withdrawal data. This is up from 73% in 2023 For water quality data, only paperboard suppliers are asked to report, and the reporting rate was 65% in 2024, down from 95% in 2023
	Achieve a 50% reduction in water use in best practice processing lines by 2030 compared to 2019	Downstream	Our processing solutions development work continues in order to deliver more water efficient lines as part of our Processing Solutions Portfolio
	More than double sales of the Sustainable Portfolio (Equipment and Services Solutions) by 2030 compared to 2022	Downstream	We are working across our businesses to increase the sales of our sustainable portfolio
Pollution of air and water	By 2030, our production sites will have achieved a 50% reduction of volatile organic compound (VOC) emissions compared to 2019	Own operations	We have achieved a 52% decrease in VOC emissions compared to the 2019 baseline. This reduction is mainly driven by Solvent Free pre-press project in Packaging Solutions which replaces high solvent use process with alternative solvent free solution

Our progress 2024:

Supporting biodiversity and ecosystems

Taking action in our own operations

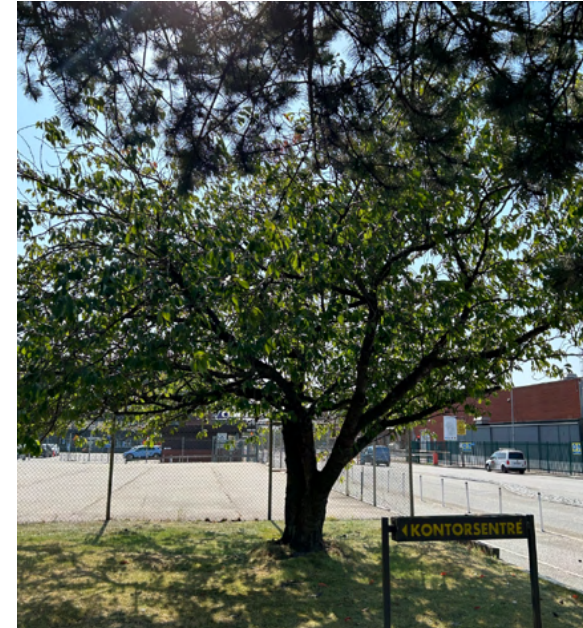
The biodiversity and ecosystems impacts of our own sites are relatively small compared to those elsewhere in our supply chain. However, these sites are part of the value chain that we can influence directly, so it is important for us to take action. We focus on our 46 production sites around the world, which are responsible for the nature impacts associated with our own operations.

In 2024, we completed an exciting step towards addressing nature-related impacts at our own sites by completing biodiversity pilot projects at our Lund, Sweden and Monte Mor, Brazil sites.

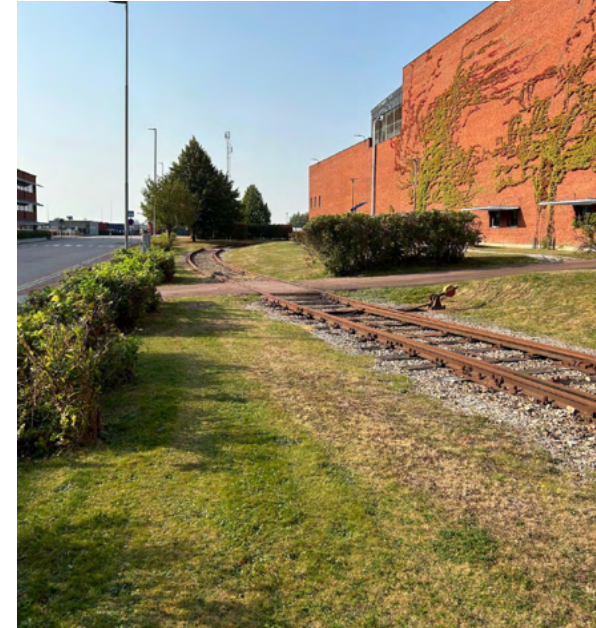
These pilots help us better understand and improve the natural environment at our sites, which has the potential to benefit local ecosystems, communities and site employees.

- In Lund, actions include improving management of gravel, sand and rocky areas to encourage habitats for rare local species, and establishing a wetland or pond area to naturally filter stormwater and provide habitats for wildlife.
- In Monte Mor, the assessment highlighted tailored opportunities to enhance biodiversity, especially considering the site's proximity to protected areas.

Among many benefits, these pilots help us establish a baseline for working with biodiversity within our manufacturing sites, supporting the implementation of our nature targets in our own operations. Based on the lessons learned, we'll continue expanding nature assessments and action plans in our sites globally – with the objective of making Tetra Pak production sites better for nature and people.



Our Lund site, Sweden



Supporting biodiversity and ecosystems continued

Taking action in our supply chain

A key target in our Approach to Nature Strategy is for 100% of our raw materials with the most significant land footprint – paperboard, aluminium and bio-based polymers – to originate from certified or controlled sources, and to be traceable to the point of production.

Deforestation is a key driver of nature loss and a risk to our business. To address this, we are committed to sourcing paperboard only from deforestation-free areas. Our due diligence process includes a risk assessment, regular engagement with our suppliers, and verification that 100% of the paperboard we procure comes from FSC certified forests or other controlled sources. In 2024, we sourced around two million tonnes of paperboard. Based on our due diligence and the certified or controlled origin of products sourced, we conclude that we met our commitment to source only from deforestation-free areas for 100% of the paperboard sourced.

Take a look at some of our other actions for nature in our supply chain:

- To verify that all the paperboard in our packages comes from FSC certified forests and other controlled sources, all of our suppliers and our own facilities are third-party certified with FSC CoC certification.
 - Our suppliers are also required to report annually on the paper mills, tree species, certification status, and the country and region of origin of the wood fibre used in the paperboard supplied to us.
 - Regarding aluminium, 99.6% of our volumes in 2024 were delivered by suppliers certified according to the Aluminium Stewardship Initiative (ASI) Performance Standard, with 35% of our aluminium volume ASI Chain of Custody (CoC) standard certified.
 - The plant-based polymers of the plant-based plastics used in our products are Bonsucro certified, supporting sustainable sugarcane production.
 - We continue to ensure the traceability of 100% of the wood fibre contained in our packages to the level of processing facilities that produce the paperboard as a minimum. This is verified through an information system where we can track the flow of paperboard from paper mills to our converting factories.
 - In 2024, we engaged with our suppliers to enhance the traceability of our products even further, to the point of production. However, we faced challenges in obtaining detailed traceability information within the pulp and paper industry, where supply chains are often complex, and data is not consistently shared between supply chain players. We continue active engagement with our suppliers to progressively increase the share of material that can be traced to the point of production.
 - One of the most effective ways we can drive action for nature with our suppliers is through our procurement processes and focus on responsible sourcing.
- [Read more](#)
- A [new Supplier Code](#) developed in 2024 was launched in March 2025 and includes specific requirements related to assessing and mitigating impacts on nature.
 - We also drive progress towards our nature targets by working with suppliers in our [Join Us in Protecting the Planet \(JUIPP\) initiative](#), [which includes all of our high-impact paperboard, aluminium and polymer providers.
 - In 2024, we also developed an improved deforestation due diligence system to support our compliance with EUDR, which is expected to come into force at the end of 2025.



Engaging policymakers

We collaborate with stakeholders to drive policy and regulatory change for halting and reversing nature loss at a system level. We support the goals and targets of the [Kunming-Montreal Global Biodiversity Framework \(GBF\)](#) adopted at COP15 to halt nature loss and put nature on a path to recovery by 2030.

In 2024, we attended Biodiversity COP16 in Cali, Colombia and presented our Approach to Nature strategy at an event organised by the Business for Nature Coalition.

Supporting biodiversity and ecosystems continued

CASE STUDY

A step change in nature restoration

In 2024 we brought a further 1,292 hectares of degraded rural land under restoration through our Araucaria Conservation Programme in Southern Brazil. This is nearly five times the area under restoration in 2023 (185 ha) and brings the cumulative total area under restoration since 2022 to 1,564 ha. This was a result of new agreements with local landowners who have responded positively to the programme following intensive local liaison work with our collaborator, [Apremavi](#).

By mobilising a workforce from local communities to restore the flora and fauna in the region, we support livelihoods, create employment and deliver a sustainable development model while restoring the landscape.

At the heart of the restoration is the replanting of the Araucaria Angustifolia tree, decimated since the 1930s by agricultural clearance. Over 250,000 seedlings were cultivated at the project's nursery in 2024 ready for planting, and the site was improved and expanded to prepare for higher levels of activity, such as the expansion of the nursery to enable more seedlings to be produced in order to meet the increased rate of restoration activity, as the project grows.

As well as providing employment, the programme also initiated the Mais Floresta Seed Network in 2024, which trains family farmers and traditional communities on how to collect and process native seeds. In the first year alone, the network collected 346kg of seeds across over 200 species.

We are also integrating our efforts with the priorities of the Brazilian government. Our 1,100 ha site, Fazenda dos Arroios, acquired in 2023, is now undergoing restoration within a Brazilian state and federal priority area for biodiversity and water. Its location midway between two existing nature reserves will help form the basis for a large ecological corridor.

[READ MORE](#)



The Conservador das Araucárias project is a powerful example of how a strategic relationship can drive large-scale restoration and create lasting, transformative impacts. Over the past years, we have grown and planted more than 257,000 native seedlings, with over 1,564 hectares under restoration – helping to protect biodiversity, safeguard water resources and strengthen the resilience of the Atlantic Forest. Now, as we move forward with the certification of carbon credits, we take another step toward establishing restoration as a tangible solution for balancing conservation and development. The collaboration between Apremavi and Tetra Pak demonstrates that by joining forces, we can create more sustainable landscapes, restore ecosystems and support local communities.”



Carolina Schäffer
Vice President Operations, Apremavi

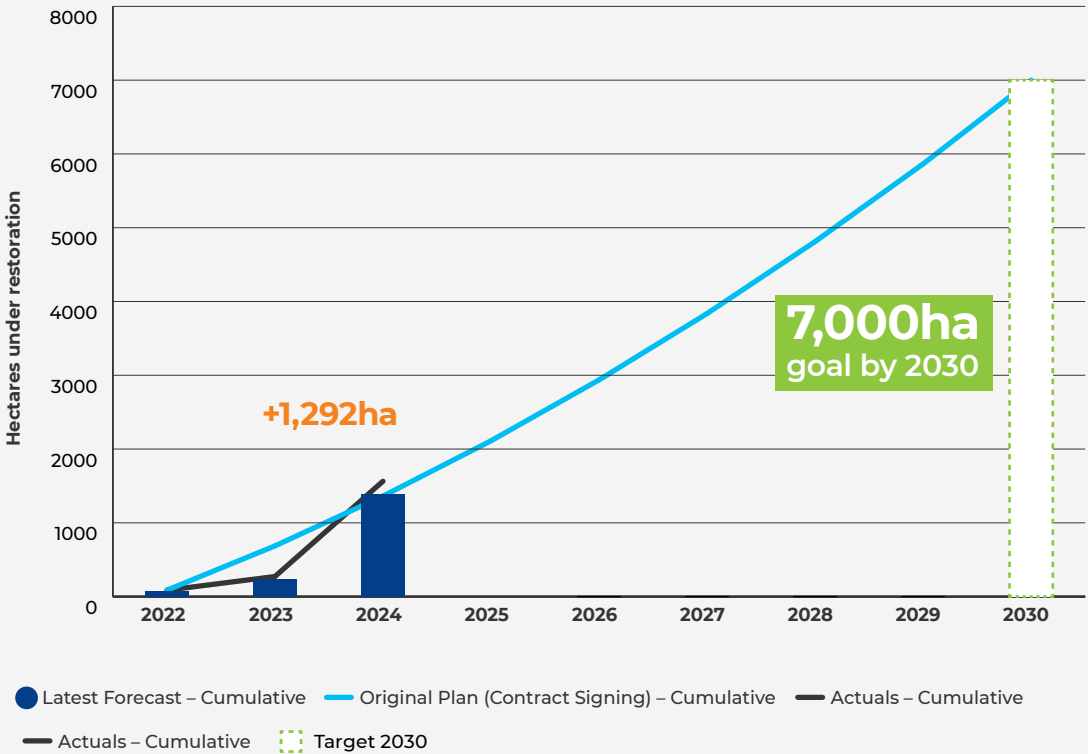


Photograph by: Wigold B. Schaffer

Supporting biodiversity and ecosystems continued

Land restoration progress

Cumulative land under restoration through Araucaria Conservation programme in the Brazilian Atlantic Forest (hectares) since 2022



The restoration project in Brazil exemplifies how our efforts in one area can create important ripple effects across multiple interconnected sustainability agendas. By restoring over 1,500 hectares of land, we not only contribute to our climate targets through carbon sequestration but also enhance biodiversity and support local communities. This interconnected approach underscores the complex synergy between climate action, nature conservation and social sustainability.”



Martin Carlsson
Nature Manager, Tetra Pak



Our progress 2024:

Water management

Taking action in our own operations

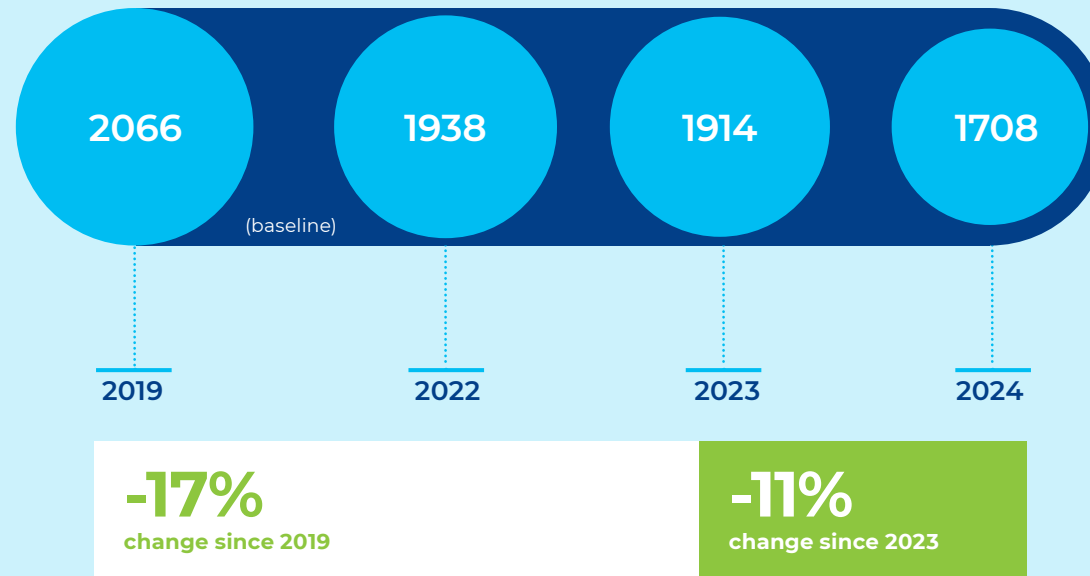
We reduce the use of freshwater across our production sites through applying solutions such as optimising cooling systems, irrigation and domestic water systems; rainwater harvesting; water reuse and circulation.

In 2024, our total water withdrawal for Tetra Pak sites in scope of our water withdrawal reduction target was 1,708 ML (megalitres), a 17% reduction compared to our 2019 baseline year volume of 2,121 ML, and 11% lower than 1,914 ML in 2023.¹⁷

Every year, we review our water data collection process to ensure we capture the necessary site-based water data. We also improve our local water data by adding more meters to measure various water flows at our sites. In this way, we better understand our water impact, both in volumes and in quality, and use this information to drive actions where most needed.

Production sites are also assessed annually for water risk using third-party tools [WRI Aqueduct](#), [Water Risk Atlas](#) and [WWF Water Risk Filter](#). These assessments help determine the plans and resources required to meet each site's water withdrawal reduction target.

Water withdrawal (megalitres)



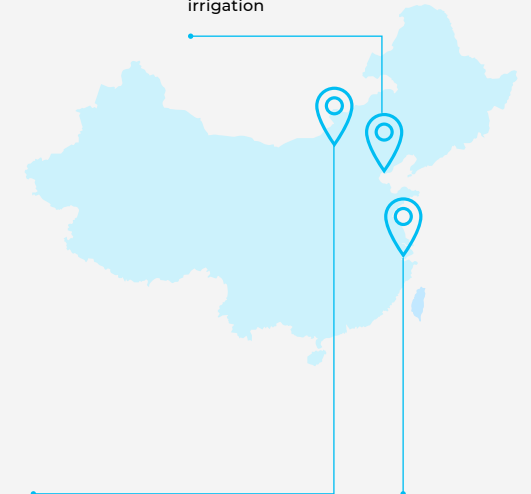
Our water withdrawal target is broken down per production site with specific targets given to each site depending on their level of water risk. With our site-based targets, we aim to achieve a 35% water withdrawal reduction across our production sites by 2030 compared to 2019.

We implemented water saving measures at three of our Chinese sites in 2024, with diverse solutions reflecting the local context:



Beijing

Collecting rainwater for irrigation



Hohhot

Using reclaimed water for irrigation, and using water saving taps

Kunshan

Re-using production wastewater for dosing system

Water management continued

Taking action with our supply chain

We work to understand and track the water withdrawal data of our high water impact suppliers. In 2024, we sent a water questionnaire to 49 of these suppliers requesting water withdrawal data from 2023, gaining a 78% response rate. We also received 13 responses to a water quality data questionnaire sent to our paperboard suppliers. These insights help us to focus on those suppliers with the highest water impact in our engagement initiatives with them.

→ [Read more](#)

78%

response rate to our 2024
supplier water questionnaire.

Taking action with our customers

We aim to reduce water use by 50% in our best practice processing lines by 2030 compared to a baseline year of 2019. Using state-of-the-art technologies such as [membrane filtration](#) and [reverse osmosis](#) we can help customers cut their water usage.

Water use efficiencies can be achieved by replacing whole production lines with more sustainable equipment, or simply by upgrading machine components. Using filtration technology components such as the Alfa Laval ThinkTop V50 and V70 can save up to 90% of the water and chemicals traditionally used for the cleaning in place (CIP)¹⁸ of dairy equipment valves by cutting down the wastewater generated in the cleaning process. Further water savings are being generated by our Rotary Jet Head technology, which can reduce water consumption by 60% during tank cleaning due to its efficiency over traditional systems.

By using a reverse osmosis¹⁹ system at our customer White & Green's site, we were able to turn wastewater into drinking water, and as a by-product, extract sellable raw ammonia. For White & Green, the financial benefits have been substantial, with 14 million litres of water saved annually amounting to €330,000 in water saving and €20,000 in ammonia sales.

CASE STUDY

Wastewater and chemicals cut by 90%

Dairygold is one of Ireland's largest dairy companies, producing cheese, milk powder and whey powder. To help make its production processes more efficient and sustainable, we deployed our membrane filtration technology to improve the cleaning in place (CIP) processes at its Mitchelstown Factory.

This technology has helped Dairygold reduce its water, heat and chemicals requirements, saving it money while lowering environmental impact. Historically, Dairygold used large amounts of caustic soda to clean its evaporators, creating 30,000 litres of caustic wastewater each day that had to be neutralised with acid. By fitting our nanofiltration units to filter out the caustic soda, Dairygold now recovers 90% of the caustic soda for re-use, reduces the overall wastewater stream by 90% and avoids the requirement to use acid as a neutralising agent.

→ [READ MORE](#)



Our progress 2024:

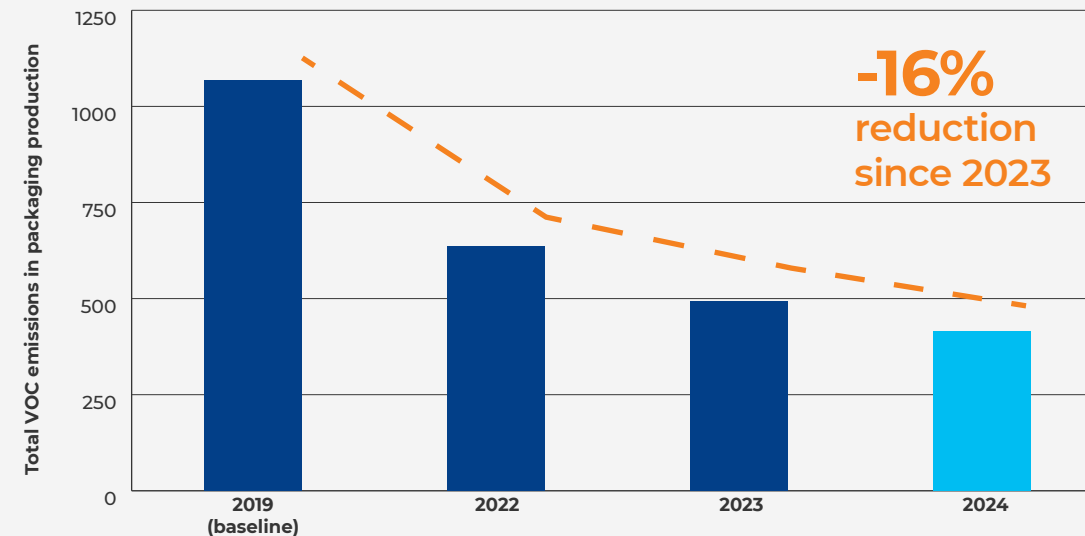
Pollution to air and water

Taking action in our own operations

We are working to reduce air pollution from our flue gas emissions in the manufacturing stage, with a focus on volatile organic compounds (VOCs). Historically, these VOCs arise from solvents used in printing plate preparation at our packaging material converting factories. To reduce VOCs, we developed our 'solvent free pre-press' technique. This uses a thermal processing technology, rather than solvents, to clean the polymers off the plates. It reduces VOCs by an estimated 99% and also shortens lead times for the plate-making process as a drying stage is no longer needed.

This process has now been rolled out to nine factories with positive results across all sites. VOC emissions reduced 16% from 2023 to 2024 for implemented sites, from 493 tonnes in 2023 to 414 tonnes in 2024. This contributed to group solvent input reducing by 12% from 4,837 tonnes in 2023 to 4,271 tonnes in 2024. As a result, there was an overall 27% reduction in solvent emissions at our operations through production process improvements.

Air pollution metrics (tonnes)



At 12 of our sites, we introduced Regenerative Thermal Oxidizer technology to tackle VOCs in a different way. An efficient oxidiser technology, this process converts VOCs into less damaging CO₂ emissions while recovering up to 97% of thermal energy generated during combustion.

These solutions follow our pollution reduction hierarchy of avoid (solvent free pre-press), reduce (Regenerative Thermal Oxidizer) and phase out or eliminate.

Taking action upstream

Our raw material supply chains create pollution risks across soil, air and water. Agricultural and forestry operations can lead to nutrient run-off into water bodies, extraction of raw materials and mining can lead to air, water and soil pollution and unrecycled materials can contribute to groundwater pollution.

We address these impacts through our Supplier Code and ongoing dialogue with our suppliers concerning nature impact, including through our [JUIPP](#) initiative. This is reinforced by our certifications with FSC, Bonsucro and the ASI, which include requirements related to pollution impacts of forestry, sugarcane and aluminium production.



Spotlight story

Improving water resilience and quality at scale in New Zealand

In 2024, we leveraged our technological, engineering and project management expertise to help one of our large dairy processing customers, Fonterra Co-operative, to meet new wastewater environmental standards.

New Zealand-based Fonterra discharges treated wastewater from its processing plants into the local environment by water and land. In order to maintain its discharge licences, Fonterra needed to lower concentrations of nitrogen, phosphorous and other substances in its treated wastewater.

They realised that to achieve these improvements, a new wastewater treatment plant and processes would be required. Tetra Pak already provided dairy processing and packaging technologies to Fonterra and decided to step forward, with our engineering team and other design collaborators, to offer solutions at the Te Awamutu and Hautapu sites.

Project details

Material in Wastewater	Pre-project	Post Project	Reduction (%)
Annual Mass Load	1.8 tonne/year (FY21)	Expected (1.6 tonne/yr)	
Nitrogen	(derived from median daily load)	(derived from median daily load)	11%
Annual Mass Load	0.53 tonne/year (FY21) (derived	Expected 0.33 tonne/yr)	
Phosphorus	from median daily load	(derived from median daily load)	38%



“We deeply appreciate Tetra Pak for their successful execution of the large wastewater projects at our Te Awamutu and Hautapu sites. Their dedication and expertise were pivotal in ensuring that we met our environmental commitments and maintained our manufacturing sites’ licence to operate.”



Vaughan Mace
Head of Water and Wastewater Construction at Fonterra

Hautapu processing plant

We are taking the lessons learned from Te Awamutu to build a greenfield wastewater treatment solution at Fonterra’s Hautapu site in Waipa district of Waikato.

The design is similar to Te Awamutu, but includes a tank-based bioreactor system instead of lagoons, providing significant cost and resource savings. The plant and equipment were installed on site in 2024 and will be fully commissioned in 2025. When the new plant is fully operational in 2026, the levels of nitrogen and phosphorus in the wastewater are expected to fall by 91% and 99% respectively, preventing over 230 tonnes of these materials reaching the environment each year.



Hautapu site under construction – March 2025

Social sustainability

Why it matters

Global value chains depend on people, and people depend on global value chains for their income, livelihoods and wellbeing. Businesses, through their operations and value chains, can enhance the lives of people by proactively respecting human rights. For us, this can take many forms: across our workplaces, supply chains and in local communities.

Our ambition

To respect human rights¹ across our operations and value chain, creating positive social impact.²

Material topics covered

- Employee workplace and wellbeing → [READ MORE](#)
- Employee health and safety → [READ MORE](#)
- Employee diversity, equity and inclusion → [READ MORE](#)
- Working conditions in our supply chain → [READ MORE](#)
- Forced labour in our supply chain → [READ MORE](#)
- Informal waste collection workers → [READ MORE](#)
- Indigenous peoples and local communities → [READ MORE](#)

While not listed as a material topic under this pillar, food access is closely related to Social Sustainability and human rights. You can find more information about this topic in the [Food Systems chapter](#).

SDGs



See [page 114](#) for footnote references

© 2020 Addictive Creative/Shutterstock

Social sustainability context and global influences

Access to adequate food is a human right, and of crucial importance for the enjoyment of other rights, as stated by the United Nations¹. As a company that provides advanced food production systems, helping producers process and prepare millions of tonnes of food every year, which packaged food in over 178 billion carton packages in 2024, for consumers in almost every country worldwide, Tetra Pak plays a critical role ensuring the world's food value chains respect this fundamental human right.

In doing so we also recognize that global value chains depend on people, and people depend on global value chains, and human rights across the globe remain under pressure, due to various causes. The crisis of climate change, biodiversity and nature loss, and pollution increasingly affect the human rights of people across the world. Impacts on environment and impacts on people are also interdependent – vulnerable groups and communities tend to be disproportionately affected.

By 2030, it is estimated that up to 3.8% of total working hours worldwide could be lost due to rising temperatures making outdoor work dangerous at the hottest time of day in certain parts of the world. This is equivalent to the loss of 136 million full-time jobs and economic losses of \$2,400 billion. In addition, the World Economic Forum (WEF) estimates that more than half of the world's GDP is at risk due to nature loss³ with potentially grave consequences for livelihoods, health and prosperity of people and communities everywhere.

The rights of workers across the globe also remain under pressure. Figures from the 2024 Global Rights Index⁴ show that 80% of countries worldwide denied workers the right to bargain collectively on pay and 43% denied or constrained freedom of speech or assembly. Forced and child labour remain a severe challenge. According to the International Labour Organization (ILO), 27 million people are in forced labour worldwide⁵ and both the ILO and UNICEF estimate 160 million children are in child labour globally.⁶ Preventing and mitigating discrimination and creating an inclusive workplace remain important aspects of social sustainability.

Against this backdrop, regulation on human rights and environmental due diligence is growing globally.

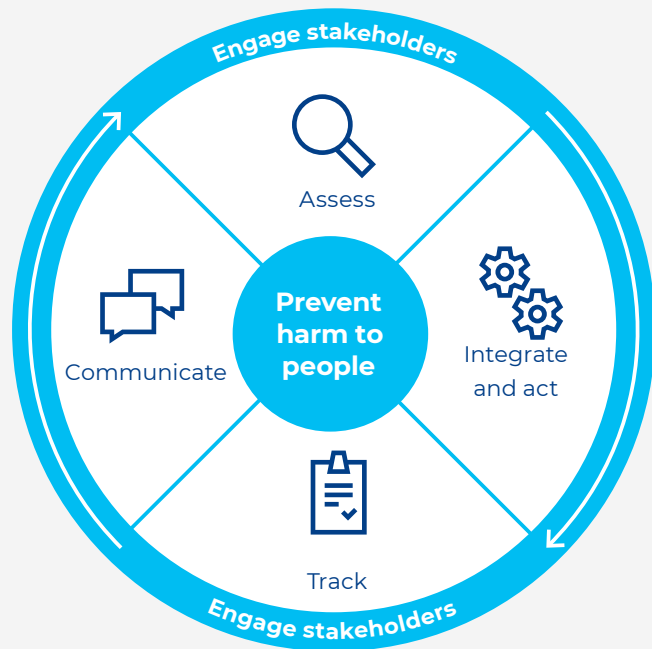
1. <https://docs.un.org/en/E/C.12/1999/5>



Our approach and role

We strive to improve the livelihoods of people across the world by giving access to safe food; contributing to economic growth; and respecting human rights in our workplaces, our value chain and the communities we operate in.

Approach to human rights due diligence



Graphic adapted from [Shift](#)

Social sustainability in practice means putting people first and implementing business practices that contribute to the human dimensions of sustainable development. It includes our employees, workers in our value chain and people in affected communities.

The [UN Guiding Principles on Business and Human Rights \(UNGPs\)](#) – the global standard for business conduct on human rights – is the foundation of our social sustainability work. They provide the framework for our ongoing effort to identify, understand and act on actual and potential impacts through human rights due diligence (HRDD), informed by our engagement with those workers and groups who are potentially affected across our value chain. Engaging with workers and affected stakeholders in the value chain puts people at the centre of our due diligence process, and informs our prioritisation of impacts and the action we take to address these impacts.

Our approach to this stakeholder engagement is directed at three levels: 1) advice from human rights experts to help guide our overarching strategy and process, 2) relationships with credible proxies who provide insights into the views and challenges of affected stakeholders, 3) direct engagement with affected stakeholders in specific prioritised locations and contexts.

How we contribute to creating positive social impacts through the provision of safe food with our core business operations can be read about elsewhere in this report.

To help advance our social sustainability work and to identify opportunities for collective action with customers, peers and others, we actively engage in human rights-related initiatives such as [AIM-Progress](#), [Shift's Business Learning Program](#), the [Nordic Business Network for Human Rights](#) and the [Fair Circularity Initiative](#).



In 2024, we worked on enhancing our approach to stakeholder engagement, and putting people and their voices at the centre of our work. We selected specific contexts and areas based on the outcome of our overall assessment of potential impacts. This included human rights impact assessments in pigment production supply chains, worker voice survey in warehousing supply chains and tailored engagement with informal waste collections workers through expert NGOs."



Lisa Rydén
Vice President Social
Sustainability, Tetra Pak

Progress against our targets and commitments

Related material topics	Targets	Value chain location	2024 progress summary
Employee workplace and wellbeing	Continue to deliver wellbeing programmes for employees, supporting a positive and open safety culture across the company	Own operations	<ul style="list-style-type: none"> Worked towards ensuring that our compensation ranges meet legal minimum wage and adequate wage thresholds in every country of operation, offering a living wage that supports workers and their families in living with dignity The fourth year of the Employee Assistance Programme (EAP) included a diversification of providers in Greater Middle East & Africa, reinforced by the first Greater Middle East & Africa health week, offering on-site and remote wellbeing activities for employees and families We launched our first Health and Wellbeing Track at our global Learning Conference, offering all employees valuable insights on topics such as menopause, sleep, financial wellbeing and work-life balance
	Sustain investment in world-class training and development for all employees, as well as our Future Talent Programmes	Own operations	<ul style="list-style-type: none"> Expanded leadership and skills development programmes to support career growth. Continued emphasis on a culture of curiosity, knowledge sharing and competence-building
Employee health and safety	Achieve and maintain zero accidents and work-related ill health (our 2025 TRAR target for employees is to reduce the number of accidents using 2024 as the benchmark)	Own operations	<ul style="list-style-type: none"> Achieved a 10% reduction in our Total Recordable Accident Rate (TRAR), from 1.82 in 2023 to 1.63 in 2024
	Aim and maintain 80% favourability score on “people in my team are protected from health and safety hazards” question in our global employee engagement survey	Own operations	<ul style="list-style-type: none"> 92% favourability score on “people in my team are protected from health and safety hazards” question in our global employee engagement survey
Employee diversity, equity and inclusion	Continue to ensure we have an inclusive workplace	Own operations	<ul style="list-style-type: none"> DEI employee engagement survey results 10% above manufacturing norm Launched a dedicated project focused on improving disability inclusion across our workplaces

Progress against targets and commitments

continued

Related material topics	Targets	Value chain location	2024 progress summary
Working conditions in our supply chain	<ul style="list-style-type: none"> Implement action plans to prevent and mitigate human rights impacts in each of our priority categories in our supply chain Develop and establish a measurement framework, metrics and targets for priority human rights impacts for workers in the value chain and affected communities⁷ Undertake human rights due diligence for workers in post-consumer packaging collection, across markets where we engage with informal waste collection to increase packaging recycling rates 	Upstream	<ul style="list-style-type: none"> Initiated the development of action plans across all of our priority categories in our supply chain and have begun implementing these. The actions vary depending on the severity of the impacts, the stage of the supply chain where the impacts occur and the geographical context Throughout 2024, we have been developing a measurement framework for our priority human rights impacts with the support of our expert advisor, Shift. While we aim to finalise this framework in 2025, it includes the quality of our own due diligence and that of our suppliers, and outcome-orientated KPIs for our priority impacts We have engaged with informal waste collection workers in Brazil, Colombia and Vietnam to assess the impacts on their working and living conditions in the local context. Based on the assessments, we have developed action plans to address the most severe of these in each country. In 2025, we will be undertaking assessments and developing plans in India and Pakistan
Forced labour in our supply chain		Upstream	
Impacts on indigenous peoples' rights and local communities		Upstream	
Living and working conditions for informal waste collection workers in the value chain		Downstream	

Our progress in 2024

In 2024, we continued to make positive social impact, by respecting human rights across our own operations and our value chain. We continued to develop and enhance policies and processes that underpin and enable us to prevent and mitigate negative outcomes and drive better outcomes for people.

Key actions taken in 2024 include:

- Reviewing and updating our grievance mechanism for employees and encouraging individuals to speak up if they experience discrimination or harassment of any kind.
- Launching our new Workplace Conduct Policy and related training.
- Establishing our Contingent Workforce organisation within the Human Resources and Transformation unit, responsible for establishing the strategy, structure and governance for managing our contingent workforce.⁸
- Reviewing and updating a new Code of Business Conduct for Suppliers with enhanced HRDD requirements.
- Introducing a new Sustainability Incident Management Protocol for our supply chain, including social sustainability concerns.
- Using worker voice surveys to hear directly from supply chain workers.
- Drafting a measurement framework to evaluate our work on human rights in the value chain and aim to finalise this framework in 2025
- Expanding our [JUIPP initiative](#) beyond base materials suppliers, deepening our knowledge of human rights impacts amongst equipment and services suppliers.
- Set up a cross-functional working group to ensure that we are prepared for meeting the obligations under the EU's Corporate Sustainability Due Diligence Directive (CSDDD) for environment and human rights.

Own workforce

We are committed to a working environment that promotes respect for human rights, diversity, inclusion and equal opportunity. We recognise the rights to freedom of association, collective bargaining and peaceful demonstration, and do not tolerate any kind of discrimination, harassment or abuse in the workplace.

[Our Workplace Conduct Policy](#) sets mandatory rules of conduct that reflect our company's values. It promotes a healthy, safe and inclusive workplace that supports wellbeing and addresses material topics relevant to our workforce: *employee workplace and wellbeing, employee health and safety, and employee diversity, equity and inclusion*.

CASE STUDY

Encouraging everyone to Speak Up: If all employees feel empowered to speak up if they experience, or witness, breaches of our policies or codes of conduct, we create a safer, more effective workplace. In November 2024, we launched an update to our 'Speak Up' campaign which aims to promote a culture of openness and accountability. Employees were reminded of the multiple channels available to report any concerns, including our whistleblowing process which enables issues to be reported anonymously. This whistleblowing channel is also available to external individuals such as contractors or suppliers who wish to report any suspected wrongdoing.

Workplace and wellbeing

The foundation for just and favourable conditions at work is fair pay and we ensure that our compensation ranges meet legal minimum wage and adequate wage thresholds in every country where we operate.

We set clear working hours and implement work-life balance measures such as flexible working arrangements to promote wellbeing. Additional benefits including transportation, medical check-ups, fitness benefits or subsidised meals are also available.

Learning about wellbeing – In 2024, our global Learning Conference included a Health and Wellbeing track delivering eight separate wellbeing-related sessions, covering topics such as menopause, good sleep, financial wellbeing and work-life balance.



Our progress in 2024 continued

Our Employee Assistance Programme (EAP) is available to all employees and their families 24/7 and provides services ranging from legal advice to counselling. We have a mental wellbeing programme with tools, training and support services to raise awareness and de-stigmatise mental health issues.

To promote an open and honest working environment, all employees are encouraged to speak up and report any concerns through different channels, including our [confidential whistleblowing process](#).

Health and safety

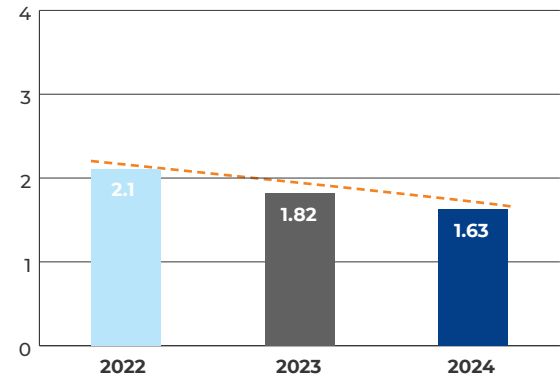
Safety is paramount and our occupational health and safety (OHS) approach is set out in our [Global OHS Policy](#) and our OHS Procedures and Guidelines. We are committed to ensuring the health and safety of employees, contractors, visitors and anyone affected by our operations on our own sites or others we operate.

We continued to focus on managing risks to health and safety in 2024 to promote safety across our manufacturing sites. Supporting safety at the point of work has been a priority, including dynamic risk assessments and machinery guarding improvements through our Zero Access programme. We continued to pay attention to high potential incidents, including near misses, with increased leadership involvement to support investigations and share learnings to prevent reoccurrence.

Looking after our employees and contractors who work at our customers' sites, such as service engineers and project teams, was also a priority in 2024, and we introduced a global OHS induction pathway, and ensured consistent inspection against life-saving rules and personal protection equipment (PPE) standardisation.

As a result, our Total Recordable Accident Rate (TRAR) continues to fall, achieving a rate of 1.63 in 2024 from 1.82 in 2023. This is a 10% reduction since 2023, and a 52% reduction in TRAR since 2020.

Total Recordable Accident Rate (TRAR)*



*Total Recordable Accident Rate (TRAR) = (number of recordable accidents) / work hours x 1,000,000



Take Five to Keep Five

In September 2024, we launched the 'Take Five to Keep Five' campaign, a global initiative to enhance hand safety across our workforce. The campaign was designed to prevent hand injuries and strengthen a culture of vigilance and responsibility towards operational health and safety.

Frontline employees in our factories, production sites and customer locations worldwide actively participated in several five-minute management-led interventions over five days including daily briefings and practical exercises.



Our progress in 2024 continued

Diversity, equity and inclusion

Our ambition is to have a workplace where every employee is respected, included, engaged, offered fair opportunities and treated equally, irrespective of their background. Our employees deserve to work in an environment free from discrimination, harassment and bullying, where every voice is heard and they feel empowered to contribute their unique perspectives.

In our latest large-scale employee engagement survey, we achieved diversity and inclusion engagement survey results 10% higher than the manufacturing industry average in 2024, highlighting our commitment to fostering an inclusive workplace where diversity is valued and celebrated. Additionally, 84% of our employees report that they can bring their whole selves to work.

By taking proactive steps to better understand and address the perspectives of vulnerable and marginalised groups within our workforce, we further enhance inclusion. In 2024, we introduced voluntary self-identification (self-ID) questions in our large-scale employee engagement survey.

These questions cover ethnicity, disability, neurodiversity and LGBTQIA+ identities, allowing us to:

- Gain insight: better understand the experiences, challenges and needs of diverse employee groups.
- Identify gaps: spot trends and disparities in engagement, inclusion and workplace satisfaction.
- Drive action: use survey insights to inform our diversity and inclusion strategies, ensuring that policies, programmes and resources effectively support under-represented employees.

We also strengthen inclusion through training and development initiatives. A refreshed Inclusive Leadership programme was re-launched in 2024, providing updated strategies and insights to help leaders break down barriers, challenge biases and deepen understanding of diverse identities.

To ensure inclusive hiring practice and that our recruitment processes attract a wide and diverse talent pool, we strive to remove bias by auditing job descriptions for accessibility, using a wide range of recruitment sources and running structured interviews to remove biases. We apply equal pay principles⁹ in all the locations in which we operate, regardless of whether equal pay legislation exists in the location.

Additionally, in 2024, we launched a dedicated project focused on improving disability inclusion across our workplaces. The aim is to build a more inclusive environment where employees with disabilities have equal opportunities to grow and succeed. As a first step, we brought together a cross-functional project team to define our objectives and begin identifying opportunities to improve accessibility – including infrastructure, technologies and tools that support full participation in the workplace.



“At Tetra Pak, we treat each other with dignity and respect regardless of personal identities.”

90%
of employees
agree

“Tetra Pak provides a working environment free of discrimination and harassment.”

88%
of employees
agree

“I can be myself at this company without worrying about how I will be accepted.”

84%
of employees
agree

Total favourable scores
overall for diversity and
inclusion at Tetra Pak

81%

Our progress in 2024 continued

Workers in our value chain

Global value chains are a potential source of negative human rights impacts, such as excessive working hours, wages that do not afford an adequate standard of living, unsafe working conditions and obstacles to freedom of association. Our relevant material topics in this section are *working conditions, forced labour in our supply chain and working conditions for informal waste collection workers*.

We use a wide range of methods to identify and prioritise human rights impacts in our value chain including desk research, supplier sustainability assessments, our Supplier Sustainability Incident Management protocol, dialogue with suppliers and customers, interviews with external experts and internal stakeholders, and most importantly engagement with affected workers or communities.

We have prioritised categories within our supply chain with higher risk of negative impacts on people, including the production of base materials involved in our packaging supply chains – paperboard, polymers, aluminium foil and inks.

Here collaboration is vital, and we work with our suppliers both to build their due diligence capabilities and to address impacts in their operations and supply chains. Increasingly, we use techniques to reach the workers in those supply chains directly to hear and understand the perspective of sometimes under-represented groups.

Workers in the supply chain who experience negative impacts should be able to access an effective grievance mechanism.

We support the strengthening of grievance mechanisms by:

- Evaluating the quality of grievance mechanisms at the 150 prioritised suppliers in our JUIPP programme.
- Providing guidance on effective grievance mechanisms to prioritised categories, for example warehousing suppliers.
- Analysing impact assessments and surveys to ascertain if workers are aware of grievance channels.
- Undertaking projects on specific areas, such as working with AIM-Progress to strengthen grievance mechanisms for Brazilian sugarcane farm workers together with other members.

Anonymous worker surveys

In a number of supplier categories identified as higher risk for potential negative impacts, such as warehousing, road transport and installation services, we worked with the Ulula technology platform to run anonymous worker voice surveys at 14 supplier sites in nine different countries. The surveys allow respondents to indicate their gender, contract and migration status in order for us to understand any particular impacts experienced by these groups and tailor our preventive and remedial actions to the context specific impacts experienced.



Our progress in 2024 continued



Working conditions in our supply chain

We set clear expectations of suppliers which are enshrined in the Business Code of Conduct for Suppliers (Supplier Code).

→ [Read more in Business conduct](#)

Based on the identification and prioritisation of working conditions impacts in 2023, we focused our actions in 2024 on a set of higher risk business relationships, featuring a number of supplier categories. This included the working conditions in our upstream ink supply chain in India, workers at farm-level in our Brazilian plant-based polymer supply chain and migrant workforce in European logistics and warehousing.

Close collaboration with our suppliers is essential if we are to understand and address the human rights impacts in our shared supply chains. In our upstream inks supply chain, we worked closely with our supplier Siegwerk and the expert organisation [Human Level](#) to undertake a human rights impact assessment of our sub-suppliers' pigment production sites in Gujarat, India.

The semi-structured interviews and focus groups included workers who are potentially at greater risk of impacts, including contract workers, internal migrants and women. We are now developing a collaborative action plan to address any identified human rights impacts.

In global supply chains, despite best efforts, actual impacts do occur. In 2024, we added a Sustainability Incident Management Protocol as a new annex to the Responsible Sourcing Procedure to ensure that allegations of impacts on human rights and the environment at supplier level are investigated and that remedial action is taken. The protocol brings together internal experts to diagnose and respond to severe impacts that have occurred in the supply chain, including by providing or enabling remedy where appropriate.

Forced labour in our supply chain

The payment of recruitment fees by migrant workers to labour brokers in certain contexts can result in debt bondage and heighten the risk of exploitation. The nature of our global supply chains means that some of the workforce in our upstream supply chain may be exposed to this systemic risk, particularly in Thailand, Singapore, Vietnam and Malaysia. The value chain workers that may be exposed to these potential impacts are often those in lower skilled and contract roles. We have sought insight into how these workers are at risk through worker voice surveys with suppliers.

For prioritised upstream suppliers operating in these high-risk contexts for recruitment fees, we have engaged an external expert to support capacity building on responsible recruitment practices.

This work will take place over the course of 2025. We have also supported suppliers to participate in training by both the [UN Global Compact](#) and [AIM-Progress](#) on these context-specific risks.

Our progress in 2024 continued

Living and working conditions for informal waste collection workers

We are committed to enhancing the working and living conditions of informal waste collection workers, who play a vital role in the collection and recycling value chains for packaging in countries without formal waste management infrastructure. In these countries, our strategy to increase the collection and recycling rates of used beverage cartons depends upon these informal workers and we tailor our approach in each market to support them.

→ [Read more in Sustainability context and global influences](#)

These workers are among the most marginalised in global value chains. They face challenging working conditions with potential impacts on health and safety, low incomes and long working hours, and lack of access to social security. Women may be even more at risk of violence, and children who accompany their working parents are also vulnerable.

We aim to improve their incomes and livelihoods, providing protection in hazardous work environments and encouraging their involvement in shaping the policies that affect them.

Our work with the [Fair Circularity Initiative](#) and [The Circulate Initiative's Responsible Sourcing Initiative](#) has helped to build our understanding at a global level of the informal waste worker landscape and the challenges these workers face, and how to implement responsible practices to protect their rights. In the markets where we have prioritised HRDD in collection and recycling value chains – Brazil, Colombia, India and Vietnam – we have sought to understand the conditions faced by informal waste collection workers through engagement with cooperatives, through relationships with waste-picker associations and through collaborations with expert NGOs that engage directly with [waste-pickers](#).



Affected communities

Indigenous people continue to face human rights abuses related to business activities in their traditional lands and territories.¹⁰ Some of the supply chains for the commodities in our packaging materials and equipment can have land, health or environmental impacts on local communities. For example, iron ore and nickel mining for steel, bauxite mining for aluminium foil and forestry operations for paperboard are core areas in our upstream supply chain where we focus our attention.

We have taken action to address potential impacts on communities from the bauxite mining in our supply chain. This involved collaboration with one of our key aluminium suppliers to support the strengthening of mine-level grievance mechanisms. A key step has been to engage with affected communities through an expert organisation, [Levin Sources](#), to assess whether these communities were aware of – and trusted – the channels available to them to communicate with the company.

To assess and drive improvements with our paperboard suppliers, we initiated work on the development of a framework for evaluating how our suppliers manage potential impacts on indigenous peoples from their forestry operations, or those of their suppliers. This work was guided by expertise from Shift and will continue during 2025.



With a key steel supplier, we have held several workshops on the need to put in place systems to enable remedy in upstream mining supply chains. These capacity building exercises are intended to lead to the enhancement of internal processes to identify where severe impacts on communities are more likely to occur and on which specific groups of people, and the types of remedy that may be needed to address these impacts.

We support the strengthening of grievance mechanisms for affected communities that have experienced negative impacts in our supply chain. Our memberships of ASI, FSC and Bonsucro provide affected communities with a channel to raise any issues they have with a relevant member company, while our evaluation of suppliers via our supplier sustainability initiative JUIPP includes an assessment of the strength of grievance mechanisms available to communities where relevant.

Spotlight story

Supporting informal waste collection workers

In 2024, we further increased initiatives to improve the lives of *informal waste collection workers* in Vietnam, Brazil, India, Colombia and Egypt. In each case, we worked with expert organisations to ensure the support that we provide is tailored to the local context and the particular needs of *informal waste collection workers*.



Medellin, Colombia

Insight: Significant child protection risks with children accompanying parents to work. Identified opportunity to improve literacy skills in informal collection community.

Action: Expansion of access to community libraries with safe spaces for children. Introduction of after-school reading classes and implementation of reading promotion programme in material recovery facilities.

Progress: Key impacts identified and collaboration established with Fundación Grupo Familia from Essity in Colombia to expand access for the families of waste-pickers to community libraries, with safe spaces for children.

Collaboration: [Fundación Grupo Familia](#)



Salvador, Brazil

Insight: Low incomes and lack of access to social security were identified as the most severe impacts.

Action: Create a mobile support hub that provides workers with access to essential services, such as social workers, health professionals and legal advisors, to help with registration with the municipality, access to healthcare and other social assistance.

Progress: Developed a strategy to reach waste pickers by mapping high concentrations of autonomous waste pickers in order to help identify the best placement for new mobile support hubs.¹¹

Collaboration: National Association of Recyclable Material Collectors (ANCAT)², HEINEKEN Institute



Bangalore, India

Insight: Waste-pickers should be involved in the design of interventions and policy environment that affect them to ensure solutions reflect their day-to-day realities and needs.

Action: Commencement of a three-year project to implement The Circulate Initiative's [Harmonised Responsible Sourcing Framework](#) in India.

Progress: Close collaboration established with The Circulate Initiative and local stakeholders to commence implementation in 2025.

Collaboration: [The Circulate Initiative](#)



Cairo, Egypt

Insight: Workers face unsafe working environments without access to personal protective equipment (PPE).

Action: 500 waste-pickers given access to PPE and social behavioural change training to encourage sustainable use, targeting a gender balance.

Progress: Monitoring demonstrates targeted waste-pickers utilising PPE.

Collaboration: [CID Consulting](#)



Ho Chi Minh City, Vietnam

Insight: Street waste pickers who work independently to collect recyclable materials individually face the most challenging living and working conditions, including low incomes, excessive working hours, lack of residential status, no access to personal protective equipment and no access to social security and health insurance.

Action: Establish a cooperative model for these workers to increase incomes and enable them to register with the local municipality and access social security and health benefits.

Progress: 300+ street waste pickers registered, increasing their access to social security and health insurance and access to PPE.

Collaboration: [ENDA](#), NGO partner supporting waste pickers

Donations and volunteering

Humanitarian assistance

Conflict and natural disasters cause devastating harm to people and communities. The Tetra Laval Group, which Tetra Pak is part of, make donations in response to humanitarian crises. In 2024, donations were made, providing assistance in Spain and Ukraine, focusing on speed and appropriate response. We are working to further enhance our impact with a greater focus on the speed and type of response to humanitarian crises, providing assistance when required. The following donations were made in 2024 by Tetra Laval Group of which we are a part.

Spain

Our parent group Tetra Laval donated €350,000 to support communities affected by floods in the Valencia region. The contribution helped fund the relief efforts of the local Red Cross, helping to cover immediate needs of food, water, shelter (safe housing and temporary shelter), as well as hygiene and healthcare services.

[READ MORE](#)

Ukraine

Our parent group Tetra Laval donated over 1,000 power generators worth €10 million to Ukraine as humanitarian aid ahead of winter. This donation is in addition to the €20 million already contributed for generators, humanitarian support and food distribution since the start of the Russian invasion.

[READ MORE](#)



Employee volunteering

At Tetra Pak, we believe in making a positive impact on the communities where we live and work. Volunteering is a tangible way to turn our purpose into action, while building stronger connections with colleagues, developing new skills and strengthening our sense of wellbeing. Because of this on 4 December 2024, which was also International Volunteer Day, Tetra Pak launched new global volunteering guidelines.

This meant that from 1 January 2025, every employee has up to one day of paid leave per year to participate in volunteering activities that are organised by the company locally. The activities are designed to support our purpose to protect:

- **Food** (e.g. food banks, hunger relief activities, food waste reduction)
- **People** (e.g. support for natural disasters, community building programmes, development and education of children)
- **Planet** (e.g. waste collection, recycling activities, tree planting)



“When we volunteer, we not only give our time, we make an impact. We help others, and we also gain new experiences and perspectives. I encourage all colleagues to use this opportunity to volunteer and see the difference we can make together.”



Adolfo Orive
President & CEO,
Tetra Pak

Business conduct

Why it matters

Sound business conduct supports legal compliance, strengthens stakeholder relationships, reduces operational risks and strengthens supply chain relations. This helps boost our market position and support sustainable business practices.

Material topics covered

Business conduct [→ READ MORE](#)



See [page 116](#) for footnote references

Our business conduct approach

We are committed to conducting every aspect of our business with integrity, complying with the rule of law and respecting human rights across our operations and value chain in line with the UN Guiding Principles on Business and Human Rights (UNGPs). We expect the same level of ethical business conduct within our own operations and among the companies we do business with, including suppliers.

This means having policies and processes in place to ensure that business is conducted in a responsible way.

→ [Read more on Policies table](#)

As signatories to the [UN Global Compact](#) since 2004, we commit to upholding its Ten Principles on human rights, labour, environment and anti-corruption across our value chain. By embedding these principles in our policy framework and governance, we aim to build and enable a culture that supports the realisation of these commitments.

We are part of the [Tetra Laval Group](#) which includes [Sidel](#) and [DeLaval](#). The Tetra Laval Group Code of Business Conduct establishes a set of rules and standards in key areas, which must be followed by all group companies and employees. This Code is supported by our own policies that support responsible business conduct and sustainability such as our Code of Business Conduct for Suppliers (Supplier Code) and our Responsible Sourcing Procedure.

→ [Read more on Policies table](#)

As part of our 2024 DMA process, we identified sustainability impacts, risks and opportunities related to business conduct. These were primarily assessed based on our enterprise risk management approach included within the Corporate Governance Framework, as well as internal audits, assessments of control mechanisms and other processes such as whistleblower reports. As a result, six material impacts related to governance were identified and no material risks or opportunities. The impacts cover corporate culture, protection of whistleblowers, political engagement and lobbying activities, corruption and bribery, and management of relationships with suppliers.



Spotlight story

Join Us in Protecting the Planet – collaboration to drive change

Collaboration with our suppliers is vital if we are to enable the transition to secure, sustainable and resilient food systems worldwide. By working together, we can identify opportunities to improve our joint supply chains.

To accelerate this, we launched our flagship initiative Join Us in Protecting the Planet (JUIPP) four years ago. It asks suppliers to identify ways to reduce their GHG emissions, assess and address their impact on nature, maximise the use of recycled content and address human rights impacts, and more (see graphic to the right).

In 2024, we tripled the scope of JUIPP suppliers to include more from different categories and industries, including from logistics, IT, facility services, equipment and parts. Over 100 new equipment, component and services suppliers participated in their first full year of JUIPP membership in 2024, joining the 43 base materials suppliers who were the original cohort of JUIPP members from 2021. Together, these suppliers account for 68% of our 2024 procurement spend.

Last April and May, the new members completed their first annual JUIPP questionnaire, allowing us to define a baseline for their sustainability maturity level and build their scorecards, which have now been shared back with them so that they are aware of the scoring criteria that will be in use in 2025 and can prepare accordingly.

Alongside the annual questionnaire and scorecard process, we support our JUIPP members with regular communication and webinars throughout the year to improve and learn how we can drive sustainability transformation together.

In 2024, we saw good progress towards the ‘Leadership’ pillar. The number of JUIPP members reporting to CDP on climate in 2024 increased to 125 (2023: 119), 29 of these JUIPP suppliers now have a climate target that is validated by the Science Based Targets initiative (SBTi) (2023: 26) and 22 are assessing their impact on nature using the Taskforce on Nature-related Financial Disclosures framework (TNFD). Twenty suppliers were also considered to have a mature or advanced¹⁰ assessment process for human rights impacts in their value chain.

	2024
Number of suppliers involved in JUIPP	147
Base materials suppliers	43
Spend coverage of base materials suppliers (%)	99%
Equipment and services suppliers	104
Spend coverage of equipment and services suppliers (%)	40%

All JUIPP members are asked to commit to collaborating on four key pillars and nine actions:

Climate

Reduce GHG emissions by 50%

Share GHG emissions data

Leadership

Achieve CDP A List

Nature

Assess and address nature impact

Enhance certification and traceability of materials

Set an SBTi Net Zero target

Circularity

Maximise recycled content

Maximise recyclability/ refurbishment

Assess and address human rights impact

Spotlight story

JUIPP supplier sustainability award winner

Each year, we recognise one of our suppliers in the JUIPP initiative for its leadership in sustainability.

For its holistic sustainability strategy, including an SBTi approved net-zero target and its own supplier sustainability initiative to drive change in its own value chain, the winner of the 2024 Supplier Sustainability Award was Siegwerk, one of our major suppliers for printing inks.

Siegwerk also collaborated with us in 2024 to undertake a joint human rights impact assessment of workers in pigment production in India and we are currently developing a collaborative action plan in response.

→ [Read more in social sustainability](#)



Collaboration both upstream and downstream is how we influence and activate sustainable progress in our value chains. Tetra Pak's JUIPP initiative has helped us to deepen our human rights due diligence and action, and further develop our collaboration initiative into our own supply chain. We look forward to identifying further opportunities in the years ahead to support one another's sustainability goals."



Alina Marm,
Head of Sustainability and
Circular Economy, Siegwerk

Looking ahead

In 2025, we continue to collaborate with our JUIPP members to progress our sustainability strategy pillars.

- **Climate** – Implement a climate roadmap to reduce all scopes of GHG emissions by 50% by 2030 compared to a 2019 baseline.
- **Nature** – Assess their impact on nature and enhance certification and traceability for materials at the first point of production, particularly paperboard, aluminium and bio-based plastics.
- **Circularity** – Encourage suppliers to maximise the volume of recycled content in the products supplied and maximise the recyclability of those products.
- **Social sustainability** – Encourage implementation of a human rights due diligence process for their own operations and supply chains.

JUIPP is an example of the power of collaboration to effect change. By working together, we are accelerating the sustainable¹² transformation of our global value chain and tackling the challenges of climate change, nature loss and social sustainability together.

Our business conduct approach continued

Our Corporate Governance Framework

The [Tetra Laval Group Board](#) has the overall responsibility for strategy of the Tetra Laval Group, and for controlling and supervising its business operations. It issues the [Charter of Responsibility](#) (the Charter), which outlines the roles of top governing bodies. The Board appoints our President & CEO and approves and monitors the overall Corporate Governance Framework. The Tetra Laval Group Board has four regular meetings each year; when required, additional meetings are held. Sustainability reporting and ESG topics are a regular part of the Tetra Laval Group Board's agenda and are integrated into strategy development, risk reviews and as stand-alone topics.

[Tetra Pak's Corporate Governance Framework](#) encompasses the behaviours, activities and responsibilities that provide a foundation for our strategy development, approach to leadership, decision-making, and how we operate and act. Our President & CEO is responsible for the overall Corporate Governance Framework and the implementation and enforcement of both Tetra Laval Group and our policies and procedures.

The framework also describes our decision-making structure: the Executive Leadership Team (ELT) takes top-level decisions for the company, or delegates responsibility to identified and relevant people within Tetra Pak. Each legal entity also has a Board of Directors who are responsible for oversight of that legal entity's activities and operations.

The framework includes our enterprise risk management approach, where corporate risks, together with the policies and procedures to mitigate these risks, are each owned by a member of the ELT. The Governance, Risk and Compliance process is embedded across the organisation's operations to enable effective risk mitigation. The Tetra Laval Group ESG Reporting Policy and Procedure provides the framework to manage appropriate ESG reporting across industry groups.

Sustainability governance

The Charter is the foundation for our sustainability governance. It outlines the specific roles and duties of the Board and ELT regarding sustainability and governance. It defines accountability for managing impacts and risks, ensuring that leaders understand their obligations to uphold ethical practices and deliver sustainability initiatives.

Alongside the Charter, our Business Resilience and Risk Mitigation Procedure details the processes for identifying, assessing and managing risks related to sustainability and business operations. It assigns specific responsibilities to individuals and teams for implementing risk management strategies and ensures that sustainability risks are integrated into broader business continuity planning.



Our business conduct approach continued

Policies, standards and supporting initiatives

Our policies and procedures are in place to mitigate key business risks and safeguard responsible business practices in the areas of assets, ethics, and financial and non-financial reporting. They cover a variety of topics, including food safety, supplier management and environment.

Key sustainability-related policies and procedures specify the operational responsibilities for achieving our sustainability ambitions and targets. They outline how the Board and ELT are accountable for setting targets, monitoring progress, and reporting on sustainability impacts and opportunities. These policies are summarised in [Appendix](#). The implementation, cascading and monitoring of global policies and processes takes place within each department, and policies and procedures are reviewed on a continuous basis.

Code of Business Conduct

The [Tetra Laval Group Code of Business Conduct](#) details our commitment to ensure a working environment that promotes diversity, inclusion, equal opportunity and respect for human rights, and recognises the rights of freedom of association. Employees will not be penalised for any loss of business resulting from adherence to this code, or for reporting any actual or suspected breaches of the code.

Labour standards and Workplace Conduct Policy

We have stringent labour standards that apply to our own employees and across our supply chain. [Our Workplace Conduct Policy](#) forms the foundation to protect our employees from discrimination, harassment and bullying, and outlines the procedures to be followed in the event of a grievance.

[Our Recruitment Policy and Procedure](#) states that there shall be no discrimination in the recruitment, employment and promotion of employees on the grounds of religion, social standing, ethnic origin, gender, age, physical abilities or sexual orientation, and equal opportunity shall exist for all candidates. It also details the provision of learning and development opportunities as well as benefits to our employees.

Remuneration

Remuneration is governed by the Tetra Laval Group Remuneration Policy which outlines three key remuneration principles. These are that remuneration will be:

- Relevant to attract and retain talent, and appropriate for the respective labour market;
- Predictable, transparent, equitable, balanced between fixed and variable elements, and understandable; and
- Sustainable to serve business strategy, affordable and set in a responsible way so it aligns to different stakeholder interests.

Whistleblowing and grievance mechanisms

Employees as well as external stakeholders can, and are encouraged to, report concerns related to business ethics, possible discrimination, harassment and bullying, and other unacceptable behaviour. We have established secure and confidential channels through which employees can report suspected wrongdoing or misconduct. These channels are designed to be accessible both internally and externally, and to ensure that reports can be made anonymously if the whistleblower so chooses.

Employees may raise concerns to their line manager or another senior manager, and external parties¹ can raise concerns with their business contact or any senior manager. These concerns are then escalated to our Corporate Governance Officer and Head of Audit, to decide if an investigation should be initiated.

All reports are handled strictly confidentially, with information shared on a need-to-know basis for the purpose of investigation, and in line with our own privacy rules, GDPR and regulatory requirements for the treatment of whistleblowers. All breaches of the Code of Conduct or related allegations are reported annually to the Tetra Laval Group Board. After each concluded whistleblowing investigation, in cases where actions were taken, checks are made three, six and 12 months later to see whether there has been any negative impact or change to the whistleblower's position in the company.

Employees are trained on a three-year cycle on grievance mechanisms and how to raise a concern. Since October 2024, this regular training is delivered through our 'Speak Up' initiative.

→ [Read more](#)

Our business conduct approach continued

Policies, standards and supporting initiatives continued

Anti-corruption and bribery

Tetra Pak takes a zero-tolerance approach to corruption, bribery and fraud, and our Anti-Corruption Policy² applies to our operations worldwide.

A Gift and Hospitality Procedure and a Third-Party Representatives Procedure are in place to prevent corruption and bribery. Internal controls and audits are in place to detect any corruption, bribery and fraud, and incidents are addressed through the investigation and whistleblowing mechanisms. Breaches result in disciplinary action, which may include termination.

In 2024, we launched an initiative for our Corporate Governance team to train market leadership teams on the Corporate Governance Framework, and customer-facing employees on anti-corruption rules and support mechanisms, such as whistleblowing and conflicts of interest.

Trainings are also provided to key business functions, including those working with sourcing and with business collaborators such as recyclers. Over 2,000 employees were trained during the year.

The Good Governance, Good Business e-learning covers business ethics and the Code of Conduct, and is mandatory for all new employees, with a target of 100% completion. At the end of 2024, 97.7% of our employees had completed this training. In-person training is also provided to new middle and senior managers joining the company as part of the Crash Course.

Competition law training is provided to the sales force on a biannual basis, with an emphasis on anti-corruption. In 2024, 90 training sessions on competition law were held.

97.7%

of our employees had completed their Code of Conduct training by the end of 2024.



Our business conduct approach continued

Policies, standards and supporting initiatives continued

Risk management and internal controls

The relationship between risk management, policies, control and assurance activities is outlined in our Governance, Risk and Compliance (GRC) process. Controls are assessed on an annual basis and serve as input to risk assessments. Leadership teams review their risks on a quarterly basis, and corporate risks are reported to the Tetra Laval Group Board. In addition, internal audits are conducted by Tetra Laval Audit. A Management Declaration report is provided to the Tetra Laval Group Board to provide assurance on our Corporate Governance activities throughout the year.

In July 2024, Tetra Laval issued a new Business Resilience and Risk Management (BRRM) Procedure, and we are progressively implementing it across Tetra Pak. The new procedure is based on the COSO³ framework and defines different approaches for managing operational and strategic risks. The purpose of the procedure is to drive process simplification and leverage the use of data analytics, while focusing on critical risks and reinforcing 'second line of defence' control assurance activities.

Political donations

Tetra Laval Policies prohibit donations (cash or in kind) to any politician, political party or associated body or otherwise of a political nature by the Group or Group entities or individuals in the name of the Group or Group Entities. We are introducing systems to request membership associations to provide details of any political donations that they may make.

Responsible marketing and labelling

We have an internal procedure in place to guide environmental communication and claims. In 2024, we updated our Environmental Communication and Claims Procedure, and began development of an Environmental Claims Toolkit, including updated environmental claims guidance in the form of a handbook and e-learning course. These new materials reflect the latest changes in regulation⁴ and provide guidance on how to communicate about topics such as recyclability, renewability, third-party labelling, comparative claims, biodiversity, the use of lifecycle assessments, and more. The procedure is aligned with leading international standards in order to implement consistent best practice globally. This material is updated on a regular basis.



Our business conduct approach continued

Sustainable procurement and managing supplier behaviours

We prioritise building strong, sustainable and ethical relationships with our suppliers. Our approach is guided by comprehensive procurement policies and procedures and a commitment to continuous improvement, ensuring that our procurement processes align with our sustainability goals and ethical standards.

As part of our onboarding process, we require suppliers to sign our Business Code of Conduct for Suppliers (Supplier Code). This code sets out our expectations in areas such as human rights, labour standards, occupational health and safety, environmental management, and business ethics. Our Supplier Code is an integral part of our supplier onboarding process and purchasing agreements, setting mandatory requirements for our suppliers and their sub-suppliers.

91%

of procurement staff were trained on sustainability procurement topics in 2024



In 2024, we reviewed our Supplier Code and an updated version was published in March 2025, underlining our commitment to the UNGPs and ambition to respect all internationally recognised human rights, specifically those expressed in the International Bill of Human Rights and the principles and standards set out in the International Labour Organization's Declaration on Fundamental Principles and Rights at Work.

This updated [Supplier Code](#) is designed to enhance our human rights and environmental due diligence work. By setting clear expectations for our suppliers, we aim to minimise negative impacts and foster positive contributions across our value chain.

The Supplier Code also includes information on monitoring and audits, remediation, training and engagement. In case of non-compliance, we collaborate with suppliers that acknowledge their impacts and seek to reasonably address them. We reserve the right to end a supplier relationship where a supplier shows a consistent or significant lack of commitment to complying with our requirements.

Responsible sourcing and supplier management

[Our Responsible Sourcing Procedure](#) sets out how we manage procurement risks in relation to human rights, labour practices, OHS, environment, biodiversity and business integrity.

To ensure suppliers meet our responsible sourcing requirements, we apply a risk-based approach using EcoVadis and [Sedex Members Ethical Trade Audit \(SMETA\)](#) to assess compliance and sustainability maturity. Strategic suppliers are prioritised based on risk and spend, with corrective actions agreed upon and followed up as necessary.

We use the EcoVadis IQ tool to assess inherent supplier risk, combining country and industry factors. Based on the risk assessment, suppliers may be asked to complete either an EcoVadis assessment or a site-specific SMETA for critical sites.

All strategic suppliers undergo an EcoVadis assessment, regardless of risk and spend. This risk model helps determine which suppliers require additional assessments or ethical audits.

In 2024, we placed greater emphasis on using SMETAs as part of our responsible sourcing programme, which helps us understand the actual conditions at the site level.

For our base materials⁵ we aim to ensure that environmental and social aspects are covered by using leading sustainability standards such as the Forestry Stewardship Council ([FSC](#)), [Bonsucro](#),⁶ [Aluminium Stewardship Initiative](#) (ASI) and International Sustainability & Carbon Certification ([ISCC](#)).

Our specific [Responsible Sourcing Procedure for Liquid Packaging Board](#)⁷ and our [Responsible Sourcing Procedure of Renewable Polymers](#)⁸ are available publicly and further encourage respect for the environment and the human rights of workers and communities in these supply chains.

We have also developed a Sustainability Incident Management Protocol as an annex to the [Responsible Sourcing Procedure](#).

In 2024, we developed a new Conflict Minerals Procedure and launched a campaign with selected suppliers in high-risk categories to request information on conflict minerals due diligence using the [Conflict Minerals Reporting Template](#) from the Responsible Minerals Initiative (RMI). We have also developed an OHS Handbook for Contractors, which sets out the minimum OHS requirements to be understood and followed by all our contractors.

Our business conduct approach continued Sustainable procurement and managing supplier behaviours continued

Assessing suppliers' impacts on people and environment

We assess our suppliers' environmental and human rights impacts, and conduct regular mapping of human rights risks related to the countries and industries in which our suppliers operate. Prioritised suppliers can be contacted to request improvement or, in the case of SMETA audits, to put a corrective action plan in place.

In 2024, we developed a Human Rights and Environment Due Diligence (HREDD) agreement to guide due diligence in the supply chain, with the roll-out planned for 2025. It will allow us to collaborate with suppliers to clarify where responsibilities lie to assess and address adverse impacts on people and the environment.

During 2023, we engaged with prioritised suppliers to communicate our expectations on human rights.

This included assessing the strength of their due diligence processes and guiding them on where they can enhance their systems. Suppliers within our Join Us in Protecting the Planet initiative⁹ also provide information on their HRDD process and how they manage human rights in their own supply chains.

We are signatories to the [Sustainable Procurement Pledge](#) (SPP) which works to increase knowledge on sustainable procurement practices and facilitate collaboration between companies to engage and empower procurement professionals. During 2024, we participated in a number of sessions with the SPP such as scope 3 decarbonisation peer groups and the League of Champion and Transformation Panel meeting at NY Climate Week. 'The Guide – for procurement by procurement' of the Sustainable Procurement Pledge now features a [case study](#) on suppliers' engagement on sustainability from Tetra Pak.



Appendix

Our policies	98
Sustainability performance data	102
End notes	111



Our Policies

This section provides an overview of the most relevant policies and procedures we have to manage our material impacts, risks and opportunities, it is not an exhaustive list of all Tetra Pak policies and procedures.

Policy	Purpose	Scope	Policy Owner	Availability	Applicability across Sustainability Report
Tetra Laval Group Code of Business Conduct	Establishes a set of rules and non-negotiable standards in key areas.	All companies and employees within the Tetra Laval Group	Approved by the Group Board and issued by the President of TLI	Tetra Pak webpage	Social sustainability Business conduct
Tetra Laval Group Policies	Forms part of a framework of mandates, charters, policies, standards documents and lines of reporting (the Framework) constituting the formal aspects of corporate governance in the Tetra Laval Group (the Group).	Group Financing, Financial Planning & Reporting, Corporate Governance, Legal Structures and Tax Management, Mergers & Acquisitions and Environmental, Social and Governance (ESG)	Approved by the Group Board and issued by the President of TLI. The CEO of each Industry Group and the President of TLI are accountable to the Group Board for monitoring and enforcement of these Group Policies in their respective organisations	Tetra Pak Intranet	Social sustainability Business conduct
Tetra Pak Air Emissions Management Procedure	Provides requirements and thresholds to help Tetra Pak's production sites implement the Tetra Pak Group Environmental Policy, with respect to controlling air emissions.	All of Tetra Pak's global activities	Executive Vice President, Sustainability	Tetra Pak Intranet	Nature
Tetra Pak Anti-Corruption Policy	To prevent corruption and ensure compliance with all applicable anti-corruption laws globally. Implementation: Includes training programmes for employees to recognise and avoid corrupt practices, and mandates due diligence for mergers, acquisitions and third-party partnerships.	All employees of Tetra Pak Group companies	EVP Legal Affairs & General Counsel Tetra Pak	Tetra Pak Intranet	Business conduct
Tetra Pak Code of Business Conduct for Suppliers	A fundamental part of our approach to human rights and environmental due diligence (HREDD) and defines what we expect of suppliers to Tetra Pak. In case of non-compliance, we collaborate with suppliers that acknowledge their impacts and seek to reasonably address them.	Tetra Pak's Suppliers	Tetra Pak's Chief Financial Officer	Tetra Pak webpage	Climate Nature Circularity Social sustainability Business conduct
Tetra Pak Environmental Policy	Covers a wide variety of environmental aspects such as climate, water, energy, nature and pollution. It promotes the management of these practices within Tetra Pak business processes, a lifecycle view and the setting of targets.	All of Tetra Pak's global activities	The owner of the policy is the Executive Vice President for Sustainability	Tetra Pak webpage	Climate Nature

Our Policies

continued

Policy	Purpose	Scope	Policy Owner	Availability	Applicability across Sustainability Report
Tetra Pak Food Safety Policy	Defines the aims, requirements and ways of working in food safety for everyone in Tetra Pak, including specifying our food safety ambitions.	All employees of Tetra Pak Group companies	EVP Development & Technology	Tetra Pak Intranet	Food systems
Tetra Pak Gifts and Hospitality Procedure	Clearly defines what is acceptable in terms of giving and receiving gifts and hospitality to avoid conflicts of interest and maintain transparency. Monitoring: Requires employees to report any gifts or hospitality above a certain threshold to ensure they are appropriate and justified.	All employees of Tetra Pak Group companies	EVP Legal Affairs & General Counsel Tetra Pak	Tetra Pak Intranet	Business conduct
Tetra Pak Global Medical Benefits Policy	Defines Global Medical Principles that describe the importance of primary care and how the company sponsors medical plans in specific countries.	All employees of Tetra Pak Group companies	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability
Tetra Pak Group Environmental Site Assessment Procedure	This procedure is to establish minimum requirements and provide guidance for Environmental Site Assessments (ESAs) performed at sites during acquisitions & sales.	All of Tetra Pak's global activities	Executive Vice President, Sustainability	Tetra Pak Intranet	Climate Nature
Tetra Pak Group Total Remuneration Policy	Elaborates on other benefits that help maintain work-life balance. These benefits typically include paid time off, transportation, medical check-ups, fitness benefits or subsidised meals, etc.	All employees of Tetra Pak Group companies	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability
Tetra Pak Long Term Employee Benefit Policy	Supports the accumulation of savings for employees' post-retirement phase of life, and helps provide financial security to employees and their families in case of long-term illness, disability or death.	All employees of Tetra Pak Group companies	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability
Tetra Pak Occupational Health and Safety Policy	Outlines the approach to achieve a safe and healthy environment, with zero accidents and work-related illness.	All employees of Tetra Pak Group companies	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability
Tetra Pak Quality Policy	Stipulates the bottom line in terms of quality requirements of Tetra Pak products.	All employees of Tetra Pak Group companies	EVP Development & Technology	Tetra Pak Intranet	Food systems

Our Policies

continued

Policy	Purpose	Scope	Policy Owner	Availability	Applicability across Sustainability Report
Tetra Pak Recruitment Policy & Procedure	States that Tetra Pak companies are expected to recruit, employ and promote employees on the sole basis of their individual qualifications and abilities, against criteria related to the duties of the relevant vacant position. It describes that as a company committed to diversity and inclusiveness, there shall be no discrimination on the grounds of religion, social standing, ethnic origin, gender, age, physical abilities or sexual orientation, and equal opportunity shall be for all candidates.	All employees of Tetra Pak Group companies	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability
Tetra Pak Responsible Sourcing Procedure	Sets out the requirements for all purchasing categories to manage risks in relation to human rights, labour practices, occupational health and safety (OHS), environment, biodiversity and business integrity, as part of the Tetra Pak Responsible Sourcing Assurance System.	All employees of Tetra Pak Group companies	EVP Finance and Supplier Management	Tetra Pak Intranet	Climate Nature Circularity Social sustainability Business conduct
Tetra Pak Responsible Sourcing Procedure for Liquid Packaging Board	Tetra Pak requires every supplier of LPB to comply with this procedure, which is attached to every contract signed by both parties. We seek to identify partners and suppliers that are aligned with our commitment to responsible sourcing of LPB. In the case of non-compliance with the requirements of the procedure, Tetra Pak will work with the supplier to develop and implement an appropriate corrective action plan. Tetra Pak reserves the right to terminate the agreement if the supplier continues to fail to comply with the requirements.	All suppliers of liquid packaging board	Tetra Pak's EVP Sustainability is accountable for its implementation	Tetra Pak webpage	Climate Nature Circularity Social sustainability Business conduct
Tetra Pak Responsible Sourcing Procedure of Renewable Polymers	Requirements specifically applicable to renewable polymers sourcing. We expect all suppliers of renewable polymers to comply with the procedure and the commitments for sustainable sourcing of renewable polymers as stated.	All suppliers of renewable polymers	Tetra Pak's EVP Sustainability is accountable for their implementation	Tetra Pak webpage	Climate Nature Circularity Social sustainability Business conduct

Our Policies

continued

Policy	Purpose	Scope	Policy Owner	Availability	Applicability across Sustainability Report
Tetra Pak Third-Party Representation Procedure	Selection Process: Involves thorough assessment of third-party representatives to ensure their business practices align with Tetra Pak's ethical standards. Compliance: Mandates regular compliance assessments and audits of third-party representatives.	All employees of Tetra Pak Group companies	EVP Legal Affairs & General Counsel Tetra Pak	Tetra Pak Intranet	Business conduct
Tetra Pak Waste Management Procedure	Establish correct way of managing waste through operations and minimising waste generation through 5R concept.	All of Tetra Pak's global activities	Executive Vice President, Sustainability	Tetra Pak Intranet	Circularity
Tetra Pak Water Management Procedure	This procedure is to establish minimum requirements and provide guidance for water management at sites.	All of Tetra Pak's global activities	Executive Vice President, Sustainability	Tetra Pak Intranet	Nature
Tetra Pak Workplace Conduct Policy	Articulates standards of workplace conduct which support the creation of an effective, productive and safe working environment. It covers discrimination, harassment and bullying, and personal relationships in the workplace, and outlines the procedures to be followed in the event of a complaint.	All employees of Tetra Pak Group companies. In case of contradiction between this policy and local policies and/or laws, the local requirements apply	EVP Human Resources & Transformation	Tetra Pak Intranet	Social sustainability

Sustainability performance data

This section details Tetra Pak’s sustainability performance data for the period 1 January 2024 – 31 December 2024. Data is organised under each pillar of our sustainability agenda and then by material topic.

Our scope 1, 2 and 3 GHG emissions and water metrics were assured by EY to the level of limited assurance in 2025. More information on the accounting principles and methodology can be found in the Assurance statements [here](#).

Sustainability performance ratings

	2022	2023	2024
CDP Climate	A	A-	A
CDP Forests	A	A	A-
CDP Water	-	A-	A-
EcoVadis	Gold Medal	Gold Medal	Gold Medal



Food systems

Food production

	2022	2023	2024	Δ% 2024 vs. 2023	2030 target (baseline)
Cumulative number of smallholder farmers involved in Dairy Hub projects since 2011	65,880	77,376	83,967	9%	100,000 (2011)
Cumulative number of Dairy Hub projects since implementation in 2011	22	25	29	16%	
Absolute GHG emissions reduction of dairy ambient processing lines (tCO ₂ e) since 2019 baseline	-32%	-33%	-42%	-13%	-50% (2019)
% of progress towards sales target of plant-based and new food* processing equipment and technologies vs. 2023 baseline	N/A	0	18.1%	–	Triple (2023)

* 'New food sources' is a term broadly referring to any food produced through a combination of new ingredients or innovative new processes. It includes, but is not limited to, the EU definition of 'novel foods' in EU Regulation 2015/2283 on novel foods

Food access

	2022	2023	2024	Δ% 2024 vs. 2023
Number of children reached by school feeding programmes worldwide (in millions)	66m	64m	66m	3%
Number of countries participating in school feeding programmes worldwide	44	49	49	0%

Performance data
continued

Circularity

Materials used for packaging and additional material*

Weight (kilo tonnes)	2024	Relative proportion (%)
Total weight of materials for packaging and additional material*	2,871	
Paperboard	2,016	70.2%
Fossil-based polymers	634	22.1%
Plant-based polymers	57	2.0%
Films	11	0.4%
Aluminium foil	136	4.7%
Inks	10	0.4%

* Excluding tab strips, liners and hotmelts

Materials used by weight (%)	2024
Renewable materials (paperboard & plant-based polymers)	72%
Non-renewable materials (fossil-polymers, aluminium foil, films & inks)	28%

Proportion of FSC labelled carton packages delivered to customers

	2022	2023	2024
FSC labelled packages (billion packages)	156	148	148
Total packages with FSC label (%)	81%	83%	83%

Waste in our operations

Waste (tonnes)	2022	2023	2024	Δ% 2024 vs. 2023
Total waste	192,730	184,076	177,608	-4%
Non-hazardous waste	177,354	169,537	167,671	-1%
Hazardous waste	15,376	14,539	9,937	-32%
Total amount of non-recycled waste	12,914	12,422	9,669	-22%
Waste management				
Recycling	179,816	171,654	167,939	-2%
Incineration	11,515	10,756	8,067	-25%
Landfill	1,399	1,666	1,602	-4%

Collection & recycling of used food and beverage cartons

	2022	2023	2024	Δ% 2024 vs. 2023
Total amount invested in collection and recycling programmes worldwide (million €)	€30m	€40m	€42m	5%
Total weight of used beverage cartons collected and sent for recycling (kilo tonnes) ¹	1,206	1,291	1,358	5%
Global collection rate (%) ¹ of used beverage cartons	25%	27%	28%	
Total recyclers Tetra Pak engages with ²	203	211	215	2%
Fibre	103	107	113	6%
PolyAl ³	36	38	39	3%
Integrated	61	66	63	-5%

- ¹ The total volume of beverage cartons placed by the entire industry on the market is estimated from externally available industry data and research. The quantity of used beverage cartons collected for recycling is based on the latest official data published or supplied by reliable sources such as governmental bodies, registered recycling organizations, national industry associations, or non-governmental organizations, etc. In cases where such official data is unavailable, the figure is based on our best estimate.
- ² Historical numbers for PolyAl and Integrated recyclers have been adjusted vs. previous years, due to an error in Tetra Pak's FY22 and FY23 Sustainability Report
- ³ PolyAl = polymer and aluminium

Performance data

continued

Climate

Greenhouse gas emissions

Tonnes CO ₂ equivalent	2019 (baseline) ¹	2022	2023	2024 ¹	Δ% 2024 vs. 2019	Δ% 2024 vs. 2023
Scope 1 emissions						
Direct emissions from owned/controlled operations	64,233	59,464	48,188	42,373	-34%	-12%
Scope 2 emissions						
Market-based	112,770	58,187	43,339	27,841	-75%	-36%
Location-based	347,221	360,588	353,232	357,246	3%	1%
Scope 3 upstream emissions²						
C1: Purchased good and services	4,330,682	3,892,188	3,361,715	3,683,052	-15%	10%
C3: Fuel and energy-related activities (not included in scope 1 or scope 2) (Market-based)	53,630	37,494	28,920	25,568	-52%	-12%
C3: Fuel and energy-related activities (not included in scope 1 or scope 2) (Location-based)	99,406	106,174	96,653	100,324	1%	4%
C4: Upstream transportation and distribution	548,612	649,088	531,195	642,563	17%	21%
C5: Waste generated in operations	2,742	1,762	1,974	1,932	-30%	-2%
C6: Business travel	42,987	15,288	22,364	30,535	-29%	37%
Scope 3 downstream emissions²						
C9: Downstream transportation and distribution	36,317	40,756	37,062	47,032	30%	27%
C11: Use of sold products ³	6,986,498	6,823,596	5,654,918	4,582,011	-34%	-19%
C12: End-of-life treatment of sold products	842,122	814,692	798,632	725,633	-14%	-9%
Total scope 3 (market-based)	12,843,591	12,274,863	10,436,780	9,738,327	-24%	-7%
Total GHG emissions (market-based)	13,020,594	12,392,515	10,528,307	9,808,541	-25%	-7%
Emissions intensity (market-based tonnes CO ₂ e / revenue in million €)	1137	992	825	765	-33%	-7%

¹ Assured by EY to the level of limited assurance in 2025. Find the assurance statement [here](#)

² Categories excluded due to limited impact = 2 (capital goods and services), and 7 (employee commuting). Categories excluded due to not being relevant to Tetra Pak = 8 (upstream leased assets), 14 (franchises), and 15 (investments)

³ Categories 10 (Processing of sold products) and 13 (downstream leased assets) are included within category 11

Performance data

continued

Climate continued

Biogenic CO₂ emissions and removals

(metric kilotonnes CO ₂)	2019 (baseline)	2022	2023	2024
Direct biogenic CO ₂ emissions from combustion of bio-based fuels	1.62	1.61	1.86	1.82
Indirect biogenic CO ₂ emissions from landfills and incineration without energy recovery	156	151	152	135
Indirect biogenic CO ₂ removals referring to the biogenic content of the raw materials purchased	2,781	3,040	2,737	2,840

Value chain GHG emissions

(ktonnes CO ₂ e) and share (%)	2019 (baseline)	2022	2023	2024	Δ% 2024 vs. 2019	Δ% 2024 vs. 2023
Purchased material & other upstream	4,384	3,930	3,391	3,709	-15%	9%
Transport	585	690	568	690	18%	21%
Tetra Pak operations (scope 1, 2 + business travel)	220	133	114	101	-54%	-12%
Use of sold equipment	6,986	6,824	5,655	4,582	-34%	-19%
End of life	845	816	801	728	-14%	-9%

Renewable electricity consumption and on-site solar photovoltaics (PV) capacity in Tetra Pak operations

	2019 (baseline)	2022	2023	2024	Δ% 2024 vs. 2023	Target 2030
Percentage renewable electricity consumption in Tetra Pak operations	72%	84%	89%	94% ¹	5.6%	100%
On-site solar photovoltaics (PVs) capacity in megawatts (MW)	2.7	8.47	12.7	14.7	15.7%	–

¹ Assured by EY to the level of limited assurance in 2025. Read more [here](#)

Energy source and intensity

Energy consumption and mix	2019	2022	2023	2024	Δ% 2024 vs. 2023
Energy consumption – Fossil sources (MWh)	512,895	402,582	292,405	238,844	-18%
Coal & coal products	598	0	0	0	–
Crude oil and petroleum products	44,926	40,531	38,586	33,832	-12%
Natural gas	244,209	231,113	151,443	144,172	-5%
Other fossil sources	0	0	0	0	–
Purchased or acquired heat from fossil sources	223,162	130,938	102,376	60,839	-41%
Energy consumption – Renewable sources (MWh)	603,883	746,376	772,675	826,723	7%
Biomass, biofuels, biogas, hydrogen from renewable sources	8,017	7,961	9,140	8,960	-2%
Acquired electricity, heat, steam or cooling from renewable sources	593,738	732,581	753,053	804,427	7%
Self-generated non-fuel renewable energy	2,127	5,834	10,481	13,336	27%
Total energy consumption (MWh)	1,116,777	1,148,958	1,065,080	1,065,567	0%
Share of non-renewable energy consumption	46%	35%	27%	22%	
Share of renewable energy consumption	54%	65%	73%	78%	
Energy production (MWh)	28,673	26,840	11,261	13,934	24%
Non-renewable energy production	26,545	21,007	779	599	-23%
Renewable energy production	2,127	5,834	10,481	13,336	27%
Energy intensity from activities in high climate impact sectors¹ (MWh/million €)	98	92	84	83	-0.5%

¹ Energy intensity is based on the total 2024 energy consumption and revenues. All consumed energy is associated with activities in high climate impact sectors 'NACE Code C – Manufacturing' and 'NACE Code G – Wholesale and Retail Trade'

Performance data
continued

Nature

Water management

Water metrics (megalitres)	2019 (baseline) ¹	2022	2023	2024 ¹	Δ% 2024 vs. 2019	Δ% 2024 vs. 2023	Target 2030
Total water withdrawal from all areas in scope of water target	2066	1938	1914	1708	-17%	-11%	-35% ²
Total water withdrawal from all areas	2121	2505	2470	2316		-6%	
Surface water	78	531	537	578		8%	
Ground water	605	476	508	442		-13%	
Seawater	–	–	–	–		–	
Produced water	–	–	–	–		–	
Third-party water	1435	1,498	1,425	1,296		-9%	
Total water withdrawal from areas with water stress	976	1,015	945	898		-5%	
Surface water	78	0	3	5		67%	
Ground water	245	223	186	175		-6%	
Seawater	–	–	–	–		–	
Produced water	–	–	–	–		–	
Third-party water	651	792	756	718		-5%	
Total water discharge to all areas	1,145	1,491	1,566	1,463		-7%	
Surface water	No data	637	685	706		3%	
Ground water	No data	43	3	3		0%	
Seawater	–	–	–	–		–	
Third-party water	No data	811	855	735		-14%	
Total water consumption from all areas	976	1,013	905	852		-6%	
Water consumption in areas with water stress	571	575	532	528		-1%	
Water intensity (m³ consumption per million € revenue)	85	81	71	66	-22%	-6%	
CDP score for Water	–	–	A-	A-			

1 Assured by EY to the level of limited assurance in 2025. Find the assurance statement [here](#)

2 Our water withdrawal target is broken down per production site with specific targets given to each site depending on their level of water risk. With our site-based targets, we aim to achieve a 35% water withdrawal reduction across Tetra Pak production sites by 2030 compared to 2019

Performance data
continued

Nature continued
Pollution

Air pollution metrics (tonnes)	2019 (baseline)	2022	2023	2024	Δ% 2024 vs. 2023
Total VOC emissions in packaging production	1,068	637	493	414	-16%
Reduction in solvent emissions in own operations through production process improvements (%)	–	–	29%	27%	–

Biodiversity and ecosystems

	2022	2023	2024	Δ% 2024 vs. 2023	Target 2030
Cumulative land under restoration through Araucaria Conservation programme in the Brazilian Atlantic Forest (hectares) since 2022	87	272	1564	475%	7,000 ha
CDP score for Forests	A	A	A-	N/A	N/A

Performance data
continued

Social sustainability

Employee numbers

	2022		2023		2024	
Total number and share of employees	24,370		24,814		24,954	
Female	5,630	(23%)	5,895	(24%)	6,107	(24%)
Male	18,740	(77%)	18,919	(76%)	18,847	(76%)
Contract type¹						
Total number of permanent employees	–		24,297		24,443	
Female	–		5,692		5,914	
Male	–		18,605		18,529	
Total number of temporary employees	–		254		259	
Female	–		76		63	
Male	–		178		196	
Total number of non-guaranteed hours employees	–		263		252	
Female	–		127		130	
Male	–		136		122	
Employee turnover						
Employees who left Tetra Pak (number)	3,384		2,488		2,463	
Rate of employee turnover	13.7%		10.1%		9.9%	
Employee engagement survey results²						
Employee Engagement score (%)	–		–		87%	
Employee Engagement Participation rate (%)	–		–		85%	

1 Data before 2023 is not available due to changes in category definitions, meaning historical data before 2023 would not be comparable with 2023 and 2024 data

2 No historical data shown due to changes in methodology and platform used to collect Employee Engagement results in 2024. While we do have historical results related to Employee Engagement, these results would not be fully comparable with the 2024 results

Headcount by country¹

	2024		
	Female	Male	Total
Argentina	72	370	442
Brazil	388	1,142	1,530
China	523	1,984	2,507
Denmark	97	425	522
France	166	487	653
Germany	146	645	791
Hungary	158	300	458
India	239	1,308	1,547
Italy	507	1,238	1,745
Japan	101	500	601
Mexico	227	888	1,115
Netherlands	53	243	296
New Zealand	58	193	251
Pakistan	32	310	342
Panama	186	142	328
Poland	94	354	448
Saudi Arabia	9	249	258
Serbia	119	264	383
Singapore	95	173	268
Spain	185	601	786
Sweden	1,151	2,473	3,624
Switzerland	89	166	255
Thailand	141	314	455
Turkey	68	299	367
United States	372	1,304	1,676
Vietnam	102	408	510

1 Per country with 250 employees or more representing at least 10% of Tetra Pak’s total number of employees

Performance data
continued

Social sustainability continued

Diversity metrics

Total number and share (%)	2022		2023		2024	
Tetra Laval Board¹						
Female	1	(12%)	1	(12%)	0	(0%)
Male	8	(88%)	8	(88%)	8	(100%)
Executive Leadership Team (ELT)						
Female	1	(10%)	1	(10%)	2	(18%)
Male	9	(90%)	9	(90%)	9	(82%)
Senior management²			114		118	
Female	–	–	29	(23%)	32	(27%)
Male	–	–	85	(77%)	86	(73%)
Age split for all employees	24,370		24,814		24,954	
Below 30 years	2,552	(10%)	2,868	(12%)	2,905	(12%)
30-50 years	15,270	(63%)	16,057	(65%)	16,007	(64%)
Above 50 years	6,327	(26%)	5,889	(24%)	6,042	(24%)

1 TLG Board members are non-executive and independent

2 Senior management is defined as Tetra Pak employees in the Executive Leadership Team (which includes our President & CEO and Direct Leader Reports) and ELT -1, excluding Administrative Assistance. Metrics calculated using end-of-period headcount as of December 31 of the reporting year. The way we define and measure the number of employees in 'senior management' positions changed in 2023; hence, 2022 data is not comparable with 2023-2024 data and is not reported

Training and skills development metrics

Training and skills development¹

	2022	2023	2024
Average number of training hours per employee	18.7	18.6	17.1
Female	15.4	15.2	13.9
Male	19.7	19.7	18.1
Total workforce who received career- or skills-related training (%)²	81%	88%	79%

1 Training hours are captured from multiple learning systems and include all types of training available at Tetra Pak. The training hours of an employee who left the company before 31 December 2024 are excluded from the calculation, as are trainings performed by consultants

2 At Tetra Pak, all employees have access to a wide range of training opportunities. While participation is not mandatory, training is actively promoted and encouraged on a voluntary basis. The data disclosed reflect the percentage of employees who completed career- or skills-related training during the reporting period

Career management

	2022	2023	2024
Employees who participated in regular performance and career development reviews (%)	100%	100%	100%
Number of employees with personal development plans ¹	1,908	4,836	5,381
Number of internal mobility cases	4,905	4,587	3,944

1 At Tetra Pak, we do not have a yearly cycle to close a personal development plan. For this reason, historical data provided for years 2022-2023 is based on an extract from February 2025

Health and safety metrics

	2022	2023	2024
Total fatalities (including contractors)	0	0	0
Number of employee recordable work-related accidents	121	104	94
Total Recordable Accident Rate (TRAR) ¹	2.1	1.82	1.63
Number of employees covered for health care	–	–	19,888
Share of manufacturing sites ISO 45001 certified	96%	96%	96%

1 Total Recordable Accident Rate (TRAR) = (number of recordable accidents) / work hours x 1,000,000

Performance data
continued

Business conduct

Business ethics metrics

	2022	2023	2024
Total workforce trained on business ethics issues (%)	97%	98%	98%
Operational sites for which an internal audit/risk assessment concerning business ethics issues has been conducted (%)	100%	100%	100%
Number of confirmed information security incidents	0	0	0
Operational sites with an information security management system (ISMS) certified to ISO 27000	1	1	1
Number of child or forced labour incidents within own workforce reported	0	0	0

Sustainable procurement

	2024
Suppliers committed to Tetra Pak's Supplier Code of Conduct (%)	97%
High-risk category/strategic suppliers undergoing ESG assessments	100%
High-risk category/strategic suppliers undergoing on-side audit	82%
High-risk category/strategic suppliers engaged in corrective actions or capacity building	6
Procurement staff trained on sustainable procurement topics (%)	91%

Join Us in Protecting the Planet (JUIPP) Supplier Sustainability Initiative

	2024
Number of suppliers involved in JUIPP	147
Base materials suppliers	43
Spend coverage of base materials suppliers (%)	99%
Equipment and services suppliers	104
Spend coverage of equipment and services suppliers (%)	40%

Endnotes

About this report

- 1 Tetra Pak's FY24 Sustainability Report is not a CSRD-compliant report. Rather, we have chosen voluntarily to use the ESRS to structure our FY24 Sustainability Reporting to keep pace with evolving best practice in sustainability reporting
- 2 'We' 'us' and 'our' in this report refers to the Tetra Pak Group of companies
- 3 Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions that occur in a company's value chain

Message from the President & CEO

- 1 World Economic Forum (2024). Renovation and reinvention are key to saving our food system. Source: <https://www.weforum.org/stories/2024/06/renovation-reinvention-food/>
- 2 World Economic Forum (2024). Renovation and reinvention are key to saving our food system. Source: <https://www.weforum.org/stories/2024/06/renovation-reinvention-food/>
- 3 IFPRI <https://www.ifpri.org/blog/food-security-brings-economic-growth-not-other-way-around/>
- 4 WEF definition of human capital - <https://www.weforum.org/publications/the-global-competitiveness-report-2020/in-full/section-2-human-capital/>
- 5 Food systems refer to all the elements and activities related to producing and consuming food, and their effects, including economic, health and environmental outcomes. Source : <https://www.oecd.org/food-systems/>
- 6 FAO (2022) <https://openknowledge.fao.org/server/api/core/bitstreams/121cc613-3d0f-431c-b083-cc2031dd8826/content>
- 7 Global Report on Food Crises 2024 <https://www.wfp.org/publications/global-report-food-crises-grfc>
- 8 Copernicus (2024): 2024 is the first year to exceed 1.5°C above pre industrial level <https://climate.copernicus.eu/copernicus-2024-first-year-exceed-15degc-above-pre-industrial-level>
- 9 <https://www.tetrapak.com/sustainability/acting-for-sustainability/moving-food-forward/global-events>
- 10 Source: GlobalData. Includes packed water, dairy, cheese, plant-based, juices and nectars, still drinks, ready to drink beverages, wines and spirits, ice cream, plus pet food.
- 11 Tetra Pak employee engagement survey, Perceptyx defines employee engagement as the level of commitment, enthusiasm, and involvement that an employee has toward their work and their employer.
- 12 FAO (2022) <https://openknowledge.fao.org/server/api/core/bitstreams/121cc613-3d0f-431c-b083-cc2031dd8826/content>
- 13 Scope 1, 2 and business travel since 2019
- 14 Since 2019; -7% reduction since 2023
- 15 <https://www.tetrapak.com/sustainability/focus-areas/biodiversity-and-nature/land-restoration>

2024 highlights

- 1 This does not reflect a physical share of recycled polyethylene in each individual package
- 2 Mass balance definition
- 3 For the reported used beverage cartons collected for recycling we use, where available, official publicly available data from renowned sources such as governmental agencies, registered recovery organisations, nationwide industry associations, NGOs etc. reported on a regular basis using a consistent approach. For markets where such official data is not available, volumes of used beverage cartons collected for recycling are estimated based on internal data

- 4 Global average CO₂ emissions (2023): 7kg CO₂e per kg of stainless steel (Outokumpu's calculation based on data provided by CRU, worldstainless and Kobolde & Partners AB). Outokumpu Circle Green CO₂ emissions: down to 0.5 kilos of CO₂e per kg of stainless steel
- 5 CDP is a global disclosure system in which companies report how they measure and manage their impacts and opportunities for the areas of climate, forests and water. Each area is scored by CDP based on completeness of disclosure and performance. Source: <https://www.cdp.net/en>
- 6 Based on climate accounting internal calculations (volume x emission factor) considering 56.9 kilo tonnes of plant-based plastic purchased in 2024. To calculate the avoided emissions number, we use a third-party emission factor for the plant-based polymers from public available lifecycle assessment by Braskem. Source: PE-Im-green-bio-based-LCA-Results-SUMMARY-ENG.pdf

Our Sustainability Agenda

- 1 A DMA includes how sustainability issues might create financial risks for the company (financial materiality), but also the company's own impacts on people and the environment (impact materiality). Source: <https://ec.europa.eu/newsroom/fisma/items/754701/en>
- 2 European Financial Reporting Advisory Group (EFRAG), "Materiality Assessment Implementation Guidance" Source: <https://www.efrag.org/Assets/Download?assetUrl=%2Fsites%2Fwebpublishing%2FsiteAssets%2FDraft%2520EFRAG%2520IG%2520I%2520MAIG%2520231222.pdf>
- 3 Positive Impacts: These refer to beneficial effects that an undertaking has or could have on people or the environment. Positive impacts can be either actual or potential
Negative Impacts: These are adverse effects that an undertaking has or could have on people or the environment. Negative impacts can be actual or potential, short-term or long-term, intended or unintended, and reversible or irreversible
Actual Impacts: These are impacts that have occurred or are occurring as a result of the undertaking's activities or its business relationships
Potential Impacts: These are impacts that could occur but have not yet materialised. They represent possible future effects resulting from the undertaking's activities or its business relationships
- 4 Timeframes used were – short term = < 1 year, medium term = 1-5 years, long-term = > 5 years
- 5 Scale – how severe or beneficial the impact is or would be for people or the environment
Scope – how widespread the impact is, based on extent of the damage or amount of stakeholders affected
Irremediability – when the impact is negative, how hard it is to counteract or remedy the harm (N/A for positive impacts)
Likelihood – chance of a potential impact occurring (always scored as 'certain' for actual impacts)
- 6 Potential financial effect – sales or costs value related to operational resiliency, compliance, reputation, ethics, people, or environment
Likelihood – how likely the risk/ opportunity is to occur
- 7 <https://www.tetrapak.com/sustainability/focus-areas/food-access-availability-and-resilience/food-for-development>
- 8 Assurance of sustainability data helps to provide external validation and credibility of our data gathering procedures. More information specific to sustainability data assurance can be found here: <https://accountancyeurope.eu/publications/faqs-fundamentals-to-assurance-on-sustainability-reporting/>
- 9 CDP is a global disclosure system in which companies report how they measure and manage their impacts and opportunities for the areas of climate, forests and water. Each area is scored by CDP based on completeness of disclosure and performance. Source: <https://www.cdp.net/en>
- 10 SMETA = Sedex Members Ethical Trade Audit, <https://www.sedex.com/solutions/smeta-audit/>
- 11 New study reveals vast and critical climate finance gap for global agrifood systems – CPI (climatepolicyinitiative.org)
- 12 Reardon, Thomas. (2015). The hidden middle: The quiet revolution in the midstream of agrifood value chains in developing countries. Oxford Review of Economic Policy. 31. 10.1093/oxrep/grv011
- 13 @Tetra Pak – Source for this Claim from COP29 intranet post 12 November 2025. Footnote to be deleted on copy approval.
- 14 Reardon, Thomas. (2015). The hidden middle: The quiet revolution in the midstream of agrifood value chains in developing countries. Oxford Review of Economic Policy. 31. 10.1093/oxrep/grv011

Endnotes continued

- 15 @Tetra Pak source for this from Hidden Middle Webinar – Rita Lousa. Footnote to be deleted on copy approval.
- 16 **The Paris Agreement** – is a legally binding international treaty on climate change signed by 196 countries at COP21 in Paris on 12 December 2015. Its overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels.”
- 17 **Nationally Determined Contributions (NDCs)** – these are voluntary plans through which signatory countries communicate actions they will take to reduce their greenhouse gas emissions in order to reach the goals of the Paris Agreement
- 18 https://www.nx.gov.cn/hdjl/zxta/202012/t20201225_2539536.html
- 19 There is no reported commercial Aseptic Carton Filling Machine in the market with a capacity equal or above 40,000 packages per hour.
- 20 <https://www.mengniu.com.cn/en/news/detail/21665.html>
- 21 <https://www.tetrapak.com/about-tetra-pak/news-and-events/newsarchive/Mengniu-wins-World-Economic-Forum-Lighthouse-certification-with-Tetra-Pak-technology>
- 22 Source – ‘Value to the World VI’ Powerpoint from Carol Yang

Food systems

- 1 World Economic Forum (2024). Renovation and reinvention are key to saving our food system. Source: <https://www.weforum.org/stories/2024/06/renovation-reinvention-food/>
- 2 World Economic Forum (2024). Renovation and reinvention are key to saving our food system. Source: <https://www.weforum.org/stories/2024/06/renovation-reinvention-food/>
- 3 IFPRI <https://www.ifpri.org/blog/food-security-brings-economic-growth-not-other-way-around/>
- 4 WEF definition of human capital – <https://www.weforum.org/publications/the-global-competitiveness-report-2020/in-full/section-2-human-capital/>
- 5 Food systems refer to all the elements and activities related to producing and consuming food, and their effects, including economic, health and environmental outcomes
Source : <https://www.oecd.org/food-systems/>
- 6 FAO (2022) <https://openknowledge.fao.org/server/api/core/bitstreams/121cc613-3d0f-431c-b083-cc2031dd8826/content>
- 7 Global Report on Food Crises 2024 <https://www.wfp.org/publications/global-report-food-crises-grfc>
- 8 Copernicus (2024): 2024 is the first year to exceed 1.5°C above pre-industrial levels <https://climate.copernicus.eu/copernicus-2024-first-year-exceed-15degc-above-pre-industrial-level>
- 9 <https://pubmed.ncbi.nlm.nih.gov/37747649/>
- 10 Sustainable dairy’ is defined as a dairy industry that emits less GHG emissions by introducing technologies, equipment and best practices in production and processing to safeguard nutrition security and sustain a billion livelihoods for tomorrow, while helping secure a future for us all. [Read more at Global Dairy platform](#)
- 11 <https://www.tetrapak.com/solutions/integrated-solutions-equipment/processing-equipment/curd-blending-buffering/tetra-pak-blender-VCC>
- 12 Footnote: Tetra Pak® Blender VCC – potential savings per batch compared to a non-vertical design
- 13 Product loss in Blender VCC = 2.5 kg. Product loss in average horizontal blender 18-20 kg. Product saved per batch = ~16kg. With typical production schedule – 2 batches daily, 350 working days annually and 6 EUR price per kg the value of product being saved is 67 200 Eur per year. This is per blender as a saving, most customers have multiple blenders at one line
- 14 Save One Third. (n.d.). Retrieved from <http://www.saveonethird.org>
- 15 UNEP Food Waste Index report 2024 <https://www.unep.org/news-and-stories/press-release/world-squanders-over-1-billion-meals-day-un-report>
- 16 Compared to the Tetra Therm Aseptic Vacuum Thermal Instant Sterilizer (VTIS) based on same production volume/year of product and conditions. Direct UHT has a longer running time than VTIS. VTIS runs 52 hours (h) then cleaning in place (CIP); Direct UHT runs 72h. Both Branded Processing Units (BPUs) run with Aseptic Intermediate Cleaning (AIC) every 10 to 12h
- 17 <https://www.theplantbasemag.com/news/world-plant-based-innovation-awards-2024-winners-announced>

- 18 Based on standard protein powder processing and assuming 300 working days per year, a 35,000kg batch size, four batches per day and a €6/kg DM product cost
- 19 Source: <https://www.tetrapak.com/en-us/about-tetra-pak/news-and-events/newsarchive/tetra-pak-industrial-protein-mixer-launched>
- 20 Although this term doesn't have a commonly recognised definition in regulation, we track food categories packed in our packaging and use the EU Pledge Nutrition Criteria White Paper, 2021 version as a reference
- 21 <https://www.tetrapak.com/sustainability/acting-for-sustainability/moving-food-forward/targets#target5>
- 22 The specifications for our packaging, additional material and food contact consumables products that are sold worldwide must comply with the standards for food contact materials defined by Europe (EU), the US (Food and Drug Administration) and China (GB). We undertake proactive monitoring and compliance to local legislation within all food safety areas to secure customer food safety production

Circularity

- 1 OECD, “Global Material Resources Outlook to 2060: Economic Drivers and Environmental Consequences”, 2019
- 2 Circularity Gap Reporting Initiative, “Five Years of the Circularity Gap Report, 2022”. Source: <https://www.circularity-gap.world/2022>
- 3 Ellen MacArthur Foundation, “The circular economy in detail”, 2020. Source: <https://www.ellenmacarthurfoundation.org/the-circular-economy-in-detail-deep-dive>
- 4 The World Bank defines global waste as the total amount of solid waste generated by human activities.
- 5 World Bank. (2025). “What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050.” Retrieved from World Bank <https://www.worldbank.org/en/topic/urbandevelopment/brief/solid-waste-management>
- 6 Circularity Gap Reporting Initiative, “The Circularity Gap 2024”. Source: <https://www.circularity-gap.world/2024>
- 7 Ellen MacArthur Foundation, “What is a circular economy?”. Source: <https://ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>
- 8 European Commission Circular Economy Action Plan, 2020. Source: https://environment.ec.europa.eu/strategy/circular-economy-action-plan_e
- 9 Progress against this target is measured based on the share of ISCC+ certified recycled polymers used at European sites
- 10 The total volume of beverage cartons placed by the entire industry on the market is estimated from externally available industry data and research. The quantity of used beverage cartons collected for recycling is based on the latest official data published or supplied by reliable sources such as governmental bodies, registered recycling organizations, national industry associations, or non-governmental organizations, etc. In cases where such official data is unavailable, the figure is based on our best estimate.
- 11 Global average CO₂ emissions (2023): 7kg CO₂e per kg of stainless steel (Outokumpu’s calculation based on data provided by CRU, worldstainless and Kobilde & Partners AB). Outokumpu Circle Green CO₂ emissions: down to 0.5 kilos of CO₂e per kg of stainless steel
- 12 <https://www.tetrapak.com/sustainability/focus-areas/biodiversity-and-nature/responsible-sourcing>
- 13 Paper-based, with the lowest possible carbon footprint, made solely from responsibly sourced renewable or recycled materials, and fully recyclable
- 14 Forest Stewardship Council <https://fsc.org/en>
- 15 Bonsucro <https://bonsucro.com/>
- 16 The International Sustainability & Carbon Certification (ISCC) – operates a globally applicable sustainability certification system that covers all sustainable feedstocks. ISCC is a multi-stakeholder organisation established in 2010 to support the shift towards the circular economy and bioeconomy. Read more about ISCC here: www.iscc-system.org
- 17 A chain of custody model of a supply chain in which certified inputs are mixed with non-certified inputs. The amount of certified outputs from the mass balance supply chain cannot be more than the amount of certified inputs. Normally they are fewer, due to waste in the supply chain processes
- 18 Source: Sustainable Packaging Consumer Research 2023, conducted during summer 2023 and comprising a total of 14,500 consumer interviews based on an online questionnaire in 29 markets: Germany, France, UK, Italy, Belgium, Denmark, Netherlands,

Endnotes continued

- Poland, Portugal, Romania, Spain, Sweden, Saudi Arabia, Turkey, South Africa, Egypt, China, India, Japan, Australia, Indonesia, Philippines, South Korea, Vietnam, Brazil, USA, Mexico, Colombia, Argentina
- 19 Source: Carbon Trust™-verified Tetra Pak 'Carton CO₂ Calculator' model version 9 (valid from 2023-01-01). Scope: cradle-to-grave measurement of a Tetra Brik® Aseptic 200 Slim Leaf carton with plant-based polymers in coating and paper-based barrier compared to a standard Tetra Brik® Aseptic 200 Slim Leaf package. Geography: EU Industry data
- 20 Tetra Pak B2B research on Planetary Challenges and their impact on F&B manufacturers' operations (2023)
- 21 Recycling infrastructure to include collection, sorting and processing
- 22 The total volume of beverage cartons placed by the entire industry on the market is estimated from externally available industry data and research. The quantity of used beverage cartons collected for recycling is based on the latest official data published or supplied by reliable sources such as governmental bodies, registered recycling organizations, national industry associations, or non-governmental organizations, etc. In cases where such official data is unavailable, the figure is based on our best estimate.
- 23 15 solutions were selected internally based on their sustainability profile. We have defined these internally as, "A product or solution that delivers a measurable and demonstrably lower environmental impact", helping our customers to reduce the environmental impact of their operations. These solutions reduce and/or optimise one or several of the following: GHG emissions, energy usage, water usage, chemical usage, product losses, solid waste - thereby also reducing operational cost."
- 24 <https://www.outokumpu.com/en/expertise/2023/your-questions-about-circle-green-answered>
- 25 Global average CO₂ emissions (2023): 7kg CO₂e per kg of stainless steel (Outokumpu's calculation based on data provided by CRU, worldstainless and Kobilde & Partners AB). Outokumpu Circle Green CO₂ emissions: down to 0.5 kilos of CO₂e per kg of stainless steel
- 26 Outokumpu's calculation based on data from CRU and worldstainless: European average 2.8t/tCO₂; Circle Green 0.57t/tCO₂
- 27 These calculations are made on a scenario of production 6 days/week, 20 hours/day with production of 20,000 l/h. They make three product changes/day. In the batch solution they produce from two mixing tanks of 20,000 litres each
- 28 <https://www.tetrapak.com/solutions/services/service-offerings/expert-services>
- 29 The scope only covers waste that is legally possible to manage without sending to landfill or to incineration without energy recovery. In many places, the local regulations require for example that hazardous waste be sent to landfill or to incineration without energy recovery. This waste is then not in scope for the 'Zero waste to landfill' target
- ## Climate
- 1 Arthur, C. (2021), "New research shows food system is responsible for a third of global anthropogenic emissions". Source: [Unido.org](https://www.unido.org)
- 2 Our decarbonisation efforts focus on avoiding and mitigating GHG emissions correlated to our products and company, and carbon removal to balance unavoidable residual emissions through nature-based solutions and other initiatives
- 3 EU Copernicus Global Climate Report 2024 – <https://www.copernicus.eu/en/news/news/copernicus-global-climate-report-2024-confirms-last-year-warmest-record-first-ever-above>
- 4 UNFCCC – The Paris Agreement – What is the Paris Agreement – <https://unfccc.int/process-and-meetings/the-paris-agreement>
- 5 World Resources Institute, "10 Big Findings from the 2023 IPCC Report on Climate Change", 2023. Source: <https://www.wri.org/insights/2023-ipc-ar6-synthesis-report-climate-change-findings>
- 6 Net Zero Tracker (2024) Net Zero Stocktake 2024: NewClimate Institute, Oxford Net Zero, Energy and Climate Intelligence Unit and Data-Driven EnviroLab. www.zerotracker.net/analysis/net-zero-stocktake-2024
- 7 When Risks Become Reality, Extreme Weather Events in 2024, World Weather Attribution and Climate Central, 2024 <https://www.worldweatherattribution.org/when-risks-become-reality-extreme-weather-in-2024/>
- 8 Insight – Food prices expected to remain volatile, Inverto – <https://www.inverto.com/en/insights/food-prices-expected-to-remain-volatile/>
- 9 'Energy intensity' is the total energy consumption from activities in high climate-impact sectors, calculated as megawatt hour (MWh)/Net revenue from activities in high climate-impact sectors (monetary unit)
- 10 Paper-based, with the lowest possible carbon footprint, made solely from responsibly sourced renewable or recycled materials, and fully recyclable
- 11 Wohnner, B., & Tacker, M. (2021, November). Supporting evidence - Environmental performance of beverage cartons. University of Applied Sciences Campus Vienna.
- 12 <https://www.tetrapak.com/en-gb/sustainability/focus-areas/climate-and-decarbonisation/decarbonising-the-value-chain-end-note-instead>
- 13 These targets have been assessed, validated and approved by Science Based Targets initiative. They follow the SBTi Corporate and Near-term Criteria, SBTi Net Zero Standard, and GHG Protocol Corporate Standard
- 14 As a result of a portfolio shift and a growing share of the sustainable portfolio
- 15 A slight increase was recorded from 2023 to 2024 due to a return to regular purchasing after running down stock in 2023
- 16 Because we will be able balance remaining emissions with removals from the Aracauria project – See more – <https://www.tetrapak.com/sustainability/focus-areas/biodiversity-and-nature/land-restoration>
- 17 Leadership in Energy and Environmental Design – <https://www.usgbc.org/leed>
- 18 This adds to our existing sites in China, Italy, India and Sweden
- 19 The GreenCalc results have been verified by PRé Sustainability
- 20 Prioritised suppliers include 43 base materials suppliers, responsible for 99% of emissions from our packaging raw materials, and over 100 equipment and services suppliers selected on the basis of their strategic importance to Tetra Pak and belonging to industries with notable climate impact, such as logistics and steel. We engage with these suppliers within our Join Us in Protecting the Planet initiative
- 21 'Base materials' are the materials we use to produce the packaging we sell to food and beverage producers, including paperboard, polymers, aluminium foil and inks
- 22 Based on climate accounting internal calculations (volume x emission factor) considering 56.9 kilo tonnes of plant-based plastic purchased in 2024. To calculate the avoided emissions number, we use a third-party emission factor for the plant-based polymers from public available lifecycle assessment by Braskem. Source: PE-Im-green-bio-based-LCA-Results-SUMMARY-ENG.pdf
- 23 **vs. Separators without Encapt™ & AirTight Technology**, 20 hours of run time/day; 340 production days/year; hot milk skimming at 55 000 l/h with including feed and booster pumps. <https://www.tetrapak.com/solutions/integrated-solutions-equipment/processing-equipment/separation/tetra-pak-separator-encapt-technology>
- 24 [Resource-saving filtration solutions | Tetra Pak Global](https://www.tetrapak.com/solutions/integrated-solutions-equipment/processing-equipment/separation/tetra-pak-separator-encapt-technology)
- 25 Tubular Heat Exchangers' role in dairy and food processing is to transfer heat between fluids during processes such as pasteurization and UHT treatment
- 26 A product- to-water (PTW) Tubular Heat Exchanger design transfers heat between the product and water as the heating medium
- ## Nature
- 1 J. Bélanger & D. Pilling (eds), *The State of the World's Biodiversity for Food and Agriculture*, FAO, 2019
- 2 E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo (eds), Global Assessment Report on Biodiversity and Ecosystem Services, Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), 2019
- 3 J. A. Johnson, et al. The Economic Case for Nature: A Global Earth-Economy Model to Assess Development Policy Pathways, World Bank, 2021
- 4 IPBES. (2019). Global Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity. In E. S. Brondizio, Settele, S. Díaz, & H. T. Ngo (Eds.), IPBES secretariat. IPBES secretariat, Bonn, Germany Source: <https://doi.org/10.5281/zenodo.3831673>
- 5 IPBES. (2019). Global Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity. p. 1109 in E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo (Eds.), IPBES secretariat. IPBES secretariat, Bonn, Germany. Source: <https://doi.org/10.5281/zenodo.3831673>

Endnotes continued

- 6 IPBES. (2019). Global Assessment Report of the Intergovernmental Science-Policy Platform on Biodiversity. p. 1109 in E. S. Brondizio, J. Settele, S. Díaz, & H. T. Ngo (Eds.), IPBES secretariat. IPBES secretariat, Bonn, Germany. Source: <https://doi.org/10.5281/zenodo.3831673>
- 7 FAO, 2021. The State of the World's Land and Water Resources for Food and Agriculture – Systems at Breaking Point. Synthesis Report 2021. Rome (2021)
- 8 Benton, T.G., et al. (2021). Food system impacts on biodiversity loss: Three levers for food system transformation in support of nature. Chatham House
- 9 FAO, 2018. More people, more food... worse water? – Water Pollution from Agriculture: a global review
- 10 World Economic Forum. Source: <https://www.weforum.org/stories/2024/01/why-businesses-are-waking-up-to-the-threat-of-nature-related-risks/>
- 11 Taskforce on Nature-related Financial Disclosures. Source: <https://tnfd.global/tnfd-marks-continued-global-momentum-and-new-capability-building-initiatives-one-year-after-release-of-disclosure-recommendations/>
- 12 At-risk basins are identified using the SBTN methodology, based on eight different indicators across water quantity, quality and wash. For each indicator, a score between 1 and 5 is attributed. Within these three categories, one indicator with a score of 3 or above indicates that the basin is at risk
- 13 Certification of the project will follow the standards set by [Social Carbon](#) and its methodologies [SCM0003](#) and [SCM0009](#)
- 14 European Environment Agency definition: This is the uptake and storage of carbon – for example, from trees and plants that absorb carbon dioxide, release the oxygen and store the carbon. Source: <https://www.eea.europa.eu/help/glossary/eea-glossary/carbon-sequestration>
- 15 'Transform' is one of our four pillars of our approach to nature, which goes beyond our immediate value chain and includes actions that contribute to the transformative change required to tackle the fundamental drivers of nature loss. Read more [here](#)
- 16 This is data collected from our own sites which has gone through external assurance. Full data reported in the end of the report.
- 17 Our water withdrawal target is based on total water withdrawal from own operation production sites but excludes the water withdrawals for the cooling system at our site in Sunne, Sweden. In 2021, our Sunne site installed a cooling system using surface water from a nearby lake. This water is withdrawn from the lake, passes by a heat exchanger, and then is returned back to the lake. Both volumes and water quality are left unchanged as there is no water consumed or polluted by the site. For this reason, this volume, on average 500ML/year, is not included in the water withdrawal targets
- 18 Cleaning in place (CIP) in dairy processing equipment refers to an automated method of cleaning the internal surfaces of tanks, pipes, pasteurizers, and other equipment without needing to disassemble them. This process involves circulating cleaning solutions through the equipment to remove impurities, residues, and bacteria <https://dairyprocessinghandbook.tetrapak.com/chapter/cleaning-dairy-equipment>
- 19 <https://www.tetrapak.com/en-gb/insights/cases-articles/save-resources-adding-reverse-osmosis-to-powder-production>
- 20 Positive social impact' means driving better outcomes for our workforce, workers and communities in our supply chain, workers in collection and recycling and people in our value chain, across areas that include labour, discrimination, hazardous working conditions and sustainable income
- 21 <https://www.weforum.org/publications/nature-risk-rising-why-the-crisis-engulfing-nature-matters-for-business-and-the-economy/>
- 22 <https://www.ituc-csi.org/global-rights-index>
- 23 <https://www.ilo.org/topics-and-sectors/forced-labour-modern-slavery-and-trafficking-persons>
- 24 <https://www.unicef.org/press-releases/child-labour-rises-160-million-first-increase-two-decades>
- 25 New target introduced in 2024
- 26 Contingent workforce comprises our non-permanent employees who are not on company payroll, such as temporary workers, project workers, independent contractors and freelancers, who give us the flexibility to scale our workforce according to project demands and skills needs
- 27 As set out in the Equality Act 2010, men and women in the same employment performing equal work must receive equal pay. Source: <https://www.equalityhumanrights.com/guidance/equal-pay>
- 28 The UN Guiding Principles on Business & Human Rights and Indigenous Peoples: Progress Achieved, the Implementation Gap and Challenges for the Next Decade, The International Work Group for Indigenous Affairs (IWGIA), 2021. Source: <https://www.iwgia.org/en/resources/publications/305-books/4419-the-un-guiding-principles-on-business-human-rights-and-indigenous-peoples---progress-achieved-the-implementation-gap-and-challenges-for-the-next-decade.html>
- 29 The first step in this project has been to map where new hubs should be located within the city to offer the most effective support

Social sustainability

- 1 Human rights are rights we have simply because we exist as human beings – they are not granted by any state. These universal rights are inherent to us all, regardless of nationality, sex, national or ethnic origin, colour, religion, language, or any other status. They range from the most fundamental – the right to life – to those that make life worth living, such as the rights to food, education, work, health, and liberty. Source: <https://www.ohchr.org/en/what-are-human-rights>

Business conduct

- 1 External parties are anyone outside Tetra Pak, including customers, suppliers, recyclers, individuals or any third party
- 2 Our Anti-Corruption Policy strictly prohibits bribery in all forms, defining it as any gift, loan, fee, reward, or other advantage given as an inducement to perform something dishonest, illegal, or breach trust
- 3 COSO stands for the Committee of Sponsoring Organizations of the Treadway Commission, which is a joint initiative of five private sector organisations and is dedicated to providing thought leadership through the development of frameworks and guidance on internal control, enterprise risk management and fraud deterrence
- 4 For example, the [Green Claims Directive](#) and the Council on the Directive Empowering Consumers for the Green Transition through Better Protection against Unfair Practices and Better Information (known as the [Greenwashing Directive](#))
- 5 Base materials are the materials we use to produce the packaging we sell to food and beverage producers, including paperboard, polymers, aluminium foil and inks
- 6 Bonsucro is the leading global sustainability platform and standard for sugarcane <https://bonsucro.com/what-is-bonsucro/>
- 7 [Responsible Sourcing of Liquid Packaging Board Procedure](#)
- 8 [Responsible Sourcing of Renewable Polymers Procedure](#)
- 9 This includes our base materials suppliers that supply the materials we use to produce the packaging we sell to food and beverage producers, including paperboard, polymers, aluminium foil and inks
- 10 Based on defined internal criteria to evaluate if a supplier's risk assessment and prioritisation process is advanced, maturing, or basic (or non-existent)
- 11 Base materials are the materials we use to produce the packaging we sell to food and beverage producers, including paperboard, polymers, aluminium foil and inks
- 12 Sustainable food systems mean growing, producing, processing, packaging, distributing and consuming food without negatively impacting the planet. Source: <https://www.oecd-ilibrary.org/sites/c6fd4d2f-en/index.html?itemId=content/component/c6fd4d2f-en>

Tetra Pak, Protects What's Good, Tetra Pak® Direct UHT Unit, Tetra Therm® Aseptic Vacuum Thermal Instant Sterilizer, Tetra Brik® Aseptic, Tetra Rex®, Tetra Brik®, Tetra Top®, C38™ and TwistCap™ are trademarks belonging to the Tetra Pak Group. www.tetrapak.com

