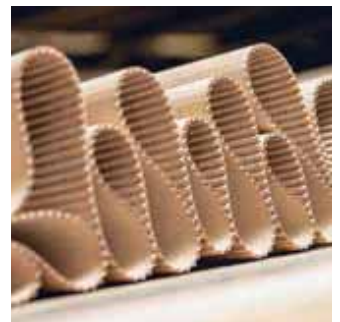


Continued Delivery for a Better Tomorrow



At Smurfit Kappa, as one of the leading global providers of sustainable packaging, we are proud to create, protect and care.

Smurfit Kappa is a business with an essential and enduring purpose – to create solutions that protect what we all care about. This is a role that is lived in our culture and behaviours at all levels and across all areas of our business. It is a purpose that informs our strategic business decisions and actions, now and into the future.

We operate across 36 countries with approximately 48,000 employees in over 350 production sites with revenue of €10.1 billion in 2021.



Overview	1-29	Planet	30-55	Impactful Business	78-89	Supporting Data	90-105	Supplementary Information	106-126
Delivering a Better Tomorrow	1	Climate Change	36	Innovation	84	Input/Output	92	About this Report	108
Highlights of 2021	2	Forest	43	Governance and Human Rights	86	Environmental Data	94	GRI Index	109
What We Do	4	Water	48	Sustainable and Responsible Sourcing	88	Management System Certifications	101	Task Force on Climate Related Financial Disclosures Index	115
Our BP2050 Commitments and Progress	6	Waste	52			Social Data	102	SASB Index	116
Our Innovative Products	8					Sourcing Data	103	Business in the Community, Ireland	117
Group Chief Executive Officer's Statement	12	People	56-77			Protected Areas and Biodiversity	104	UN Global Compact	119
Sustainability Committee Chair's Statement	14	People Values	62					Glossary	120
Our Priorities	18	People Strategy	64					Assurance Report of the Independent Auditor	125
Our Approach	20	Safety and Wellbeing	71						
Our Approach in Action	22	Communities	74						
Stakeholder Engagement	24								
Assessing Materiality	26								
Our Strategy	28								

DELIVERING A BETTER TOMORROW

We are committed to being an impactful business and supporting a greener, bluer planet. This means doing the right thing for our people, our communities and the environment, through products and processes that make a real difference for our customers and across our entire value chain.

True sustainability is end-to-end: from procurement and working with our suppliers, to production and product delivery to our customers. Our economic goals are aligned with our social, community and environmental responsibilities.



Global challenges

The world is facing critical challenges. With the number of people on the planet continuously rising, the way we live needs to change to secure a sustainable future for all.

As a global community, we need to find solutions to critical issues such as climate change, water scarcity, deforestation and loss of biodiversity, pollution of land and oceans and creating a just society.

At Smurfit Kappa, we focus on the social, climate, circularity and forest-related issues where we can have a real, positive impact.



Our priorities

As a leading company in sustainability, our ambition of sustainable growth is based on three pillars: Planet, People and Impactful Business.

Our strategic environmental priorities are Climate Change, Forest, Water and Waste. We understand that our success is driven by our highly valued and motivated team, and we ensure the health, wellbeing and safety of our people. We are committed to all of the communities we interact with.

In creating sustainable value for our customers, investors, employees, suppliers and communities, we strive for the highest standards of corporate governance and ethical business conduct.

This commitment is instilled across our business, from the boardroom to the factory floor, and throughout our operations and supply chain.



Reporting transparently

We provide industry-leading transparency and detail to our stakeholders on every aspect of our operations.

This report's contents have been assured by an independent third-party assurance provider with a level of limited assurance. We applied the 'Comprehensive' version of the GRI Standards for writing this report. For details see KPMG's Assurance Statement on page 125.

A LEADER IN SUSTAINABILITY



OUR REPORTING SUITE



To find out more information visit: smurfitkappa.com/sustainability



HIGHLIGHTS OF 2021

SBTi-validated

Our CO₂ reduction target was validated by the SBTi

€4.9m
in social
investments
in 2021

38.5%
COD reduction
since 2005

92,000
people impacted
through our
social projects
in 2021

6.2%
reduction in
water
consumption
from 2020

41.3%
relative CO₂
emission reduction
since 2005



13
percentage points
improvement in
employee
engagement
levels

€57m
of investments in
CO₂ reduction
in 2021





1st
packaging solution to receive a **Vegan Trademark**

93.45%
of products sold as **CoC certified**



€12.6m
in **social investments 2020-2021**

33.3%
of **women on the Smurfit Kappa Board**

€20m
of investments in **water-treatment projects in 2021**

29.2%
reduction of **waste to landfill** from our paper mills since 2013

1.7%
global reduction annually in **TRIR**



69
awards for packaging in areas such as innovation, sustainability, design and print



WHAT WE DO

We create innovative and sustainable paper-based packaging solutions for our customers

The combination of our global scale in 36 countries in Europe and the Americas, and our integrated model, delivers sustainable and secure supply to our customers helping them succeed in their marketplace.

We are involved in all stages of our supply chain: we collect and purchase recovered paper and we grow and purchase wood to supply the fibrous raw material our paper mills need to produce a full range of packaging papers. Most of this paper is converted by our corrugated converting plants into corrugated containers which we then deliver to our customers.



Paper

We manufacture a wide range of papers mainly used for packaging purposes. We produced 7.8 million tonnes of paper and board globally in 2021.



Packaging

We design, manufacture and supply paper-based packaging to package, promote and protect our customers' products. In 2021, we manufactured 12.9 billion square metres of corrugated packaging and have key supply positions in solidboard, folding carton, bag-in-box®, and tube markets.



Recycling

We provide recycling solutions to ensure our customers' corrugated packaging and paper is recycled responsibly, efficiently and reliably. We handle 7.4 million tonnes of primarily post-consumer recovered paper each year across the globe.



Forestry

We own approximately 68k hectares (ha) of forest globally, which are primarily FSC® or PEFC certified, promoting economic growth, the protection of biodiversity and ecosystems and the fostering social equity.

What sets us apart

Innovation: To cater for growing global demand, we constantly update our unrivalled portfolio of sustainable paper-based packaging solutions with market-leading innovations.

A truly circular business: We handle 7.4 million tonnes of primarily post-consumer recovered paper each year. We reuse or recycle side streams, power our business with renewable energy where possible and find smarter ways of saving energy.

Integrated model: Our vertical integration drives efficiency, security of supply and enables sustainability across the entire value chain.

Global: Our global reach enables us to leverage our solutions and their impact at scale across our operations and customer base.

Data: We use data to drive sustainable improvement, whether through our InnoTool suite to drive carbon reduction and customer supply-chain efficiencies, or our own process improvements.

Delivery: We focus on long-term ambition with action today, this is backed up by 15 years of reporting, independently assured since 2009. This continues to be recognised externally; most recently our CO₂ emission reduction target were approved by the SBTi.

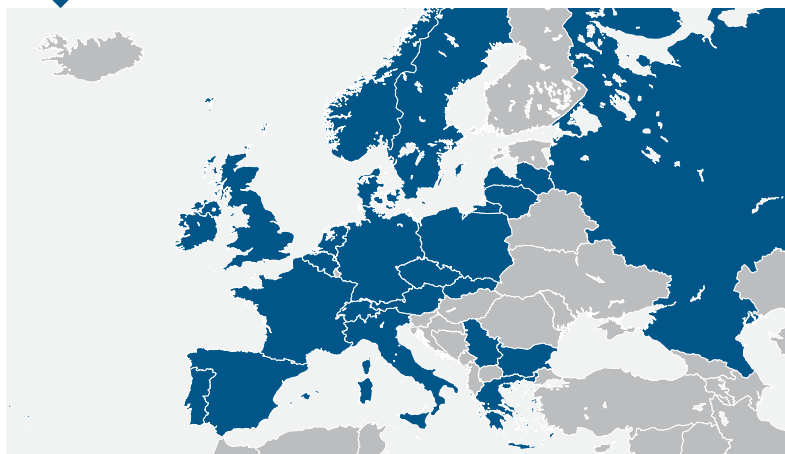
Governance: We have sustainability embedded throughout our capital structure and senior management long-term incentive plans, with strong Board oversight through its Sustainability Committee.

People: Through our commitment to diversity and equality, we create a working culture in which every member of our 48,000-strong team feels engaged, that they belong and are appreciated as they are.



Our scale and geographic diversity

Our manufacturing footprint provides us with a clear point of differentiation; the corrugated packaging market is a localised market and therefore converting plants need to be close to customers (within 300 kilometres). Our unique global footprint makes us well-placed to reliably deliver on customer requirements.



Forestry and plantations (hectares)

68,000

Recovered paper facilities and forestry operations

47

Production sites

355

Paper and board mills

35

Converting plants

241

Other production facilities

32

Employees

48,000

Countries









36

Our ambitious sustainability targets

Sustainability has always been part of our DNA, and our Better Planet 2050 (BP2050) commitments quantify what we are doing to protect what we care about – our planet, our people, our business. These ambitious sustainability targets demonstrate our will to sustain thriving communities, support good business, and create a better planet.

Category

Targets

Climate Change		Net zero Our ambition is to have at least net zero emissions by 2050 with a 55% reduction in relative CO ₂ emissions by 2030
Forest		>95% packaging solutions sold as Chain of Custody (CoC) certified to customers by 2025
Water		60% reduction in relative Chemical Oxygen Demand (COD) discharge by 2025
Water		1% reduction in our relative water usage annually
Waste		30% reduction in relative waste sent to landfill by 2025
Health and Safety		at least 5% reduction in Total Recordable Injury Rate (TRIR) annually
People		25% of management positions held by women by 2024
Communities		€24 million will be donated between 2020 and 2025 to support social, environmental and community initiatives

Key to Strategic Priorities



Planet



People



Impactful Business

Achievements

Link to Strategy

Link to SDGs

41.3%

reduction in CO₂ emissions since 2005



93.45%

packaging solutions sold as Chain of Custody certified in 2021



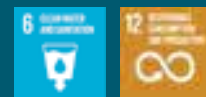
38.5%

reduction in Chemical Oxygen Demand since 2005



6.2%

reduction of our water usage annually



29.2%

reduction in waste to landfill since 2013



1.7%

reduction in Total Recordable Injury Rate in 2021



22%

of management positions held by women at end of 2021



€12.6 million

donated since 2020



➔ Read more on our strategy and SDGs on pages 28 - 29

OUR INNOVATIVE PRODUCTS

We create innovative and sustainable solutions for our customers

The demand for sustainable packaging continues to grow, with consumers increasingly the driving force. Packaging provides a clear opportunity for brands and retailers to demonstrate their commitment to sustainability, and as a result, build trust and strengthen the brand-consumer relationship.

Consumer awareness of the environmental impact of their choices is growing, and consumers increasingly want to be more sustainable. This has now translated into their purchasing decisions, and packaging plays a significant role in this decision to buy. A recent study conducted by Drapers states that 64% of consumers are more likely to buy from retailers with sustainable packaging, while

73% stated that the use of paper or cardboard packaging is important to them when considering a brand's level of sustainability.

With our innovative, sustainable packaging solutions designed for our customers, led by our Better Planet Packaging initiative, we provide sustainable, fit-for-purpose packaging that meets the expectations of consumers.

Our culture of innovation is based on our experience, science, creativity and data, with state-of-the-art facilities that ensure we are ready for the challenges of tomorrow. We can help our entire value chain, our customers and their customers, to reduce their carbon footprint and avoid packaging waste.

We have outlined in this section a number of examples of our recent innovations from across the world.

73%

of consumers say paper or cardboard packaging is important when considering a brand's sustainability

64%

of consumers are more likely to buy from a brand or retailer with sustainable packaging



Fantasy Flowers

No need for repacking (Colombia)

Fantasy Farms grow over 50 million stems of flowers each year. Historically, the flowers were grown, cut, and transported from Colombia to the USA then repacked in WETPACKS. We designed a two-piece corrugated solution that allowed Fantasy Farms to build a WETPACK in Colombia and export it, without having to invest in repacking. It consists of the flowers, a pot, a corrugated outer offering premium protection and an internal corrugated insert. The insert is displayed at the point of purchase to show off the brand. The new solution saves both packaging and product waste by giving the flowers up to five days, longer shelf life.

Mindful Chef

No food waste, no packaging waste (UK)

Mindful Chef is a startup by three Britons, who wanted to make it possible for everybody to cook healthy, fresh food. The company's product is a five-meals-a-week system, where they deliver the fresh ingredients and their recipes, directly to the customers, avoiding food waste. As the ingredients are fresh, the packaging has special requirements for temperature and humidity-tolerance. Smurfit Kappa designed Mindful Chef with a solution of insulated corrugated packaging that removes the plastic and foam previously used and is fit-for-purpose and carries the recipe on it. Now Mindful Chef is not only avoiding food waste, but their packaging is 100% recyclable and waste free, too.



||

Working in close collaboration with Smurfit Kappa has helped us in achieving our goal of becoming even more sustainable.

David Waller, Mindful Chef's Buying Manager

||

Roberto's Mangos

Packaging fit-for-transport, reducing food waste (Mexico)

Roberto's Mangos faced a problem with their reusable plastic crate packaging-system that was unstable in transport. The mangos arrived at the destination countries often damaged, and in addition, the crates were difficult to reuse or dispose of. To help Roberto's Mangos, Smurfit Kappa designed a recyclable corrugated fruit box, that has been designed specifically with transport stability in mind. The fit-for-purpose solution is easy to handle, can be assembled manually or mechanically, simplifies logistics, saves cost and is 100% recyclable.



OUR INNOVATIVE PRODUCTS CONTINUED

Fresh Fish Concept

Corrugated cardboard replaces plastic
(Sweden and Norway)

A new sustainable packaging solution has been developed for all types of chilled fresh fish. This Fresh Fish Concept, by Smurfit Kappa and its Better Planet Packaging initiative, supports the need to combat the amount of non-recyclable waste by replacing EPS materials with 100% recyclable and biodegradable paper-based packaging. To ensure a steady temperature in the box, ice, or an alternative cooling element, is added. A protective paper is placed inside the box which is water-resistant and keeps the packaging dry and durable throughout the supply chain.



“

Together, we have developed a package that matches the quality of our brand, all the way to the restaurant chef.

Simon Nesse Øklandnager, Development Manager, Bremnes Seashore

”

Signify

Sustainable packaging for antibacterial LED lighting systems (Poland)

As part of helping Signify achieve its goal of carbon neutrality, Smurfit Kappa developed a new integrated packaging system. In collaboration with the world leader in connected LED lighting systems, we designed the BioShift UV-C Chamber Case. This new packaging is a 100% mono-material paper-based solution that removes all plastics, and which reduces the amount of packaging materials needed compared to previous solutions. In addition to providing a more sustainable solution, the new integrated packaging system also reduces costs, with supply-chain efficiencies.

“

Smurfit Kappa has been vital in helping us reduce costs and ship our product in a safe and more sustainable manner.

Damian Grzelak, Strategic Buyer
Packaging EMEA, Signify

”



Flattler

A Bag-in-Box® solution that protects (UK)

UK Cider maker, Healeys Cyder, wanted their new flat cider to be as accessible as possible, which included catering for a variety of pack formats and usage scenarios. In addition, the packaging would need to complement their unique branding: with full-colour print, no requirement for glue or tape to erect, that could withstand vigorous supply-chain conditions and would provide protection to the cider. The end solution was an 'envelope'-style Bag-in-Box® made from double-wall corrugated board, printed full-colour litho and was quick to erect saving time on the production line. By introducing Bag-in-Box® cider to their packaging options, Healeys Cyder can now offer Flattler Cyder in more settings and in a still format, complementing their existing carbonated range. The solution is easy to separate for recycling, and the unique vacuum functionality of the Bag-in-Box® means that the shelf life of the cider, is long even after opening, so there is no product waste.





mymuesli

When packaging design helps to keep up with demand (Germany)

Three young Germans came along with an idea for a startup: mymuesli, an online shop for organic, individual muesli mixes, sold online. The demand rocketed and the company needed help with a packaging solution as everything was packed by hand. Smurfit Kappa's expertise in packaging, and packaging machinery, delivered a solution that scans each parcel individually and creates a fitting packaging without void fillers. This solution helped mymuesli to save up to 50% on packaging materials and 30% on transport. A recyclable e-commerce solution for a product that takes pride in sustainability.

Suit for Tank

A fit-for-purpose packaging for water tanks (Spain)

Lama Filtration Systems produces water filtration systems for agricultural and industrial uses. As they wanted to remove plastics from their packaging solutions, they approached Smurfit Kappa for a solution. A robust, recyclable, fit-for-purpose solution helped to improve efficiencies throughout Lama's supply chain with warehouse assembly time cut in half, and reducing plastics in packaging by 93%.

93%
reduction of
plastics in packaging



before



after

Dynamically and sustainably delivering



Tony Smurfit

Group Chief Executive Officer

Over the last two years, I have been immensely proud to see how our people have lived our core values of safety, loyalty, integrity and respect, guiding our actions through what have been challenging times for us all. I am also immensely proud that we have continued to deliver for all stakeholders with many landmark achievements in 2021. Our primary focus has been, and continues to be, the safety of our people and the continued delivery of our customers' packaging needs.

Delivering for all Stakeholders

The pandemic has further strengthened our belief that we need to employ an end-to-end approach to sustainability. This means not only deepening our understanding of every social, environmental and economic aspect of our business, but also any interdependencies between them. Our business impacts people and the environment in many different ways and by thinking of the issues in totality, rather than in isolation, we can achieve a greater positive impact.

In early 2021 we set new targets and revised existing targets through our Better Planet 2050 initiative, the aim of which is to combine long-term

ambition with action today, evidence of which you will see throughout this 2021 Sustainable Development Report.

2021 also saw the world increase its focus on climate change, with the publication of the Intergovernmental Panel on Climate Change (IPCC) report in August and the 26th Conference of the Parties, or COP26, in Glasgow. We saw deforestation and the need to create a circular economy also becoming key issues as part of COP26, and the EU's work on defining a path forward to deliver the Green Deal. Smurfit Kappa, as a leader in sustainability, is playing its part in making the necessary changes to ensure we stay aligned with the

goals of the Paris agreement. In late 2021, we were delighted to have our 2030 CO₂ emission reduction targets approved by the SBTi as being in line with the Paris Agreement.

We have seen how diversity, inclusion and equality are urgent issues for global society. Smurfit Kappa is committed to being an employer of choice for today, and tomorrow, engaging our employees, and providing a safe place to work in a global, culturally diverse and inclusive organisation, where people can achieve their full potential and that is at one with the communities in which we are located.

Recent years have seen an acceleration in changing consumer patterns, particularly around increased e-commerce penetration and heightened awareness of unsustainable packaging solutions. By producing a product that is renewable, recyclable and biodegradable, and, made in an increasingly sustainable manner, our innovative solutions have continued to deliver for our customers and their sustainability goals. Solutions such as TopClip and Click-to-Lock have demonstrable CO₂ reduction delivery for our customers. We deliver for our customers not just on the material change, but also in our approach, and how, by harnessing our business applications such as

CASE STUDY

Green Finance Framework Further Integrates Sustainability into Smurfit Kappa

In September 2021 Smurfit Kappa successfully launched its Green Finance Framework. Developing this framework and issuing green finance instruments is a further significant step in our sustainability journey, embedding sustainability into our capital structure alongside our sustainability-linked Revolving Credit Facility, and complementing the dedication of everyone in Smurfit Kappa, where we make a sustainable product in an increasingly sustainable way.

The Group's Green Finance Framework is reflective of the sustainable nature of our business model, with eligibility criteria that span the geographic scope of our operations and take into account our approach to producing circular products: from using certified sustainable raw materials and implementing circular production processes that are subject to continuous improvement, both in terms of environmental and social metrics and through responsible governance.

After the launch of the Green Finance Framework, the Group successfully issued €1 billion in green bonds which were over-subscribed multiple times and secured the lowest ever coupon for a corporate issuer at our credit rating. It was also pleasing to see the amount of dark green investors participating, further validating Smurfit Kappa's sustainable business model and credentials. At the 2021 Treasury Management International Awards, Smurfit Kappa was awarded the 'Best Sustainable Finance project' in the Treasury4Good category, further recognition of the leadership we are demonstrating in the field of sustainability.



To find out more information visit
[www.smurfitkappa.com/
investors/sustainable-finance](http://www.smurfitkappa.com/investors/sustainable-finance)

SupplySmart, we can design further CO₂ reductions through optimising design and by analysing the end-to-end use of the product.

Since we started reporting on our corporate sustainability journey almost 15 years ago, we have been focusing our efforts on delivering a positive impact for our customers, our other stakeholders and playing our part in having a positive impact on the planet. Our stated ambitions and specific and measurable goals continue to underpin our leadership in sustainability.

The Year's Sustainability Highlights

During 2021, we continued to progress our sustainability programme with some notable landmarks. Our Better Planet 2050 commitments, announced in February, broadened the Group's commitment to sustainability by introducing ambitious targets in new areas and updating its existing set of sustainability targets. We set additional targets in the areas of gender balance, employee and community engagement, inclusion and diversity, and ethics and values.

In March, we became the first FTSE 100 company to be awarded five stars by Support the Goals in recognition of the Group's support of the United Nations Sustainability Development Goals. In September we launched our Green Finance Framework, which was

accompanied by a very favourable second-party opinion from ISS ESG, with our product and circular business model being reported as a 'significant contributor' to SDG 12 'Responsible consumption and production'. In September we also launched our inaugural green bond which was over-subscribed multiple times and secured Smurfit Kappa the lowest ever coupon for a corporate issuer at our credit rating, with a strong participation from 'dark green' investors.

In December 2021, we had our CO₂ emission target validated by the Science Based Target initiative as consistent with levels required to meet the goals of the Paris Agreement, and well below 2°C. This validation is further evidence of our long-term ambition, coupled with action today.

A number of significant, sustainability-related investments were approved in 2021, one of which was a €11.5 million investment in reducing fossil CO₂ emissions by 55,000 tonnes annually at our Zülpich paper mill in Germany. Another significant investment is the replacement of the press section of the Paper Machine 2 at our Hoya paper mill, also in Germany. This project will lead to an annual reduction of 5,500 tonnes of CO₂ emissions through improved energy efficiency.

Finally during 2021 we appointed a new Group Chief Sustainability

Officer who will form an important link between the Executive, the Board and our broader stakeholder base.

Our Better Planet 2050 Targets The Year's Performance

We continue to make progress on our environmental and social targets. Compared to 2005, CO₂ emission was reduced by 41.3%, water discharge quality improved by 38.5%. Compared to 2013, waste to landfill decreased by 29.2% and Chain of Custody certified packaging deliveries to customers reached a level of 93.45%. Our safety performance improved by 1.7% in 2021.

These positive developments are the result of a combination of significant investments by the Group and relentless dedication by our people.

Russian Operations

On 1 April 2022 the Group decided to exit the Russian market. This exit will be effected in an orderly manner, during which we will continue to pay our employees and fulfil our legal obligations. Smurfit Kappa stands in solidarity with the people of Ukraine and everyone impacted by the totally unjustified attack on Ukraine and its people. The Group is providing, and will continue to provide, substantial humanitarian support for the Ukrainian people. We are also assisting the families of SKG employees and contractors from Ukraine as well as

providing products and services to support the relief effort together with financial assistance to a number of aid agencies. We have also partnered with the Red Cross to provide funding to support their vital work.

2022 and Beyond

As demonstrated at COP26, and evidenced by the IPCC report, the world has a need to take decisive action now, and material change is required to deliver the outcomes that science continues to tell us we have to make. Smurfit Kappa Group puts sustainability at the heart of how we think and act in everything we do. We use long-term targets to generate ambition, backed by action today, and I expect 2022 to be another year of progress and delivery. By collaborating with our value chain partners and like-minded organisations, we can continue to create greater social, economic and environmental value.

I hope you enjoy reading our 2021 Sustainable Development Report and I look forward to your feedback (sustainability@smurfitkappa.com).

Tony Smurfit
Group Chief Executive Officer
14 April 2022

Continuing to deliver for a better tomorrow



Jørgen Buhl Rasmussen
Chair of Sustainability Committee

The Board is pleased to see another year of continued delivery across our sustainability goals. This delivery against a continued backdrop of a global pandemic and tight global supply chains further demonstrates how sustainability is truly integrated across the Group.

Ongoing Development of Sustainability Committee and Supporting Governance Structures

In 2019, the Board established a permanent subcommittee of the Board with responsibility for sustainability, reflecting its strategic importance for Smurfit Kappa.

During 2021 the Group appointed new Group Chief Sustainability Officer, a role which will focus on delivering the sustainability strategy for the Group, maintaining our strong governance framework, but also on embracing new strategic

opportunities from a capital markets perspective, and, across all stakeholders.

As Chair of the Committee, I am pleased to be able to outline in this report the Committee's continued development, their objectives and their activities.

2021 saw a heightened focus on climate, with many parts of the world experiencing once-in-a-lifetime floods, droughts and extreme temperatures. These events were underlined by the IPCC report in August which sounded a 'code

red for humanity'. This was quickly followed by the 26th Conference of the Parties, or COP26, in Glasgow, which further highlighted the lack of urgency so far, and action needed to deliver the required change. What is clear from COP26 is that there is no lack of capital to drive the necessary change, nor a lack of science to validate the required change, but rather the world needs to take decisive action now. We all need to engage and take ownership of making changes at every level in society with governments leading the way through coordinated efforts.

We need to find solutions to critical issues such as climate change, water scarcity, deforestation and biodiversity loss, pollution of land and oceans while creating a just, inclusive and diverse society. The Paris Agreement and the UN 2030 Sustainable Development Goals provide direction on how to resolve these critical issues.

Strategic Sustainability Priorities

As a responsible company, operating globally, Smurfit Kappa has a product that is naturally sustainable and a process that is increasingly sustainable, driven by a culture with strong values of safety, loyalty, integrity and respect. Smurfit Kappa Group understands the challenges facing both our business and the planet and is committed to doing its part in resolving these critical issues. Therefore our ambition is to deliver sustainable growth for the benefit of all our stakeholders based on three pillars: Planet, People and Impactful Business. Within these pillars our People and our Communities, Climate Change, Forest, Water and Waste are the main strategic environmental and corporate social responsibility priorities.

Strategic Guidance

The Committee is comprised of four Non-executive Directors and is responsible for the guiding and directing of the Smurfit Kappa Sustainability strategy for the benefit of all of the Group's stakeholders.

The Committee has particular regard to the alignment of the Group's sustainability strategy with global best practice. The Board of Smurfit Kappa strives for the highest standards of corporate governance and ethical business conduct, and our aim is to create sustainable value for our stakeholders: customers, investors, employees, suppliers and the communities in which we are privileged to operate.

During 2021 the Board developed a greater understanding of the climate risks and opportunities for Smurfit Kappa, part of which is communicated via our enhanced TCFD this year. This enhanced disclosure reflects the

significant work that has been carried out by the Group, working with third parties, and considering the extensive climate scenario analysis project completed for the Group.

People are the Key to Success

Our success is driven by Smurfit Kappa's highly valued and motivated team. Therefore, the health, safety and wellbeing of our people is a key priority for us. With a workforce of 48,000 people, fostering inclusion, diversity and belonging is also key, and in Smurfit Kappa we strive to create a diverse workplace where everyone can bring their authentic self to work every day. We truly value our diverse mix of people, who add so much value to our organisation. Our commitment also extends to all of the communities we interact with and in which we are located.

2021 in Review

The Committee, in its second full year, had an active and productive year, with the Group completing many projects in its sustainability agenda over the course of 2021, which have been outlined and summarised below and throughout this Sustainable Development Report.

During 2021, we continued to create opportunities to engage directly with our workforce despite the virtual nature of working in many cases, due to the ongoing pandemic. It is important to us, that our Board of Directors are actively engaged with our diverse workforce right across the Group, and we all value a two-way dialogue, which is open, honest and covers a breadth of topics that matter to our employees. Open channels of communication and a good pulse on employee sentiment allows us to understand the engagement levels, motivation, trust, and values that our employees feel in Smurfit Kappa.

Throughout 2021, in light of the COVID-19 pandemic, the Committee increased its frequency of meeting opportunities with employees, to ensure the highest levels of positive support and engagement on a number of topics which included Health, Safety & Wellbeing, MyVoice, Female Engagement, Management of COVID-19, Workplace Satisfaction and Career Development. For further details on employee engagement, see page 65.

The Group announced ambitious new sustainability targets as part of Better Planet 2050 which were approved by the Committee and the Board in December 2020 and announced in January 2021, focusing on a further reduction of our environmental footprint, increased support for the communities in which we operate, and further enhancement to the lives of our employees. These targets build upon the Group's well established sustainability record, on which we have been reporting since 2007. Details of the targets of the Better Planet 2050 initiative are included on pages 34, 35, 60, 61, 82, 83.

Further validation of the Group's strong sustainability credentials was evidenced by the successful green bond transaction in September 2021, supported by a robust Green Finance Framework and an ISS ESG second-party opinion. The Group issued €1 billion in green bonds which were over-subscribed multiple times and secured SKG the lowest ever coupon for a corporate at SKG's credit rating with a very strong participation of 'green' investors including 'dark green' investors. In December 2021, the Group had its CO₂ emission target approved as being science-based and in line with the Paris Agreement and well below 2°C; this final approval concluded a year of continued delivery, third-party assurance and best-in-class certification.

As business evolved during 2021, the Group has delivered new innovative products to the marketplace that demonstrably lower our customers' carbon footprint. These, together with the inherent sustainable nature of our product, and our increasingly sustainable operating footprint, position Smurfit Kappa as an integral part of delivering on our customers' sustainability goals.

We focus on providing fit-for-purpose packaging solutions that are renewable, recyclable and biodegradable. Our Better Planet Packaging initiative also provides us with a key platform for differentiation in a competitive market. Details of some of the innovations and solutions we have provided to customers are included on pages 8-11.

Looking Ahead

The Committee is confident that Smurfit Kappa will successfully continue its sustainability journey in 2022. There are many projects, small and large, in the areas of People, Planet and Impactful Business that the Group is working on and that will come to fruition in 2022 and beyond. The Board is encouraged by the progress the Group has made so far and is thankful for the dedication of its employees. We look forward to reporting on our continued progress to all of our stakeholders in the years ahead.



Jørgen Buhl Rasmussen
Chair of Sustainability Committee
14 April 2022

“

What is clear from COP26 is that there is no lack of capital to drive the necessary change, nor a lack of science to validate the required change but rather the world needs to take decisive action now.

”

Non-executive Sustainability Committee Members



Jørgen Buhl Rasmussen
Non-executive Director

Biography

Jørgen Buhl Rasmussen is the former Chief Executive Officer of Carlsberg A/S. He served as the Chief Executive Officer of Carlsberg A/S from 2007 until he retired from this position in 2015, having joined the company in 2006. He previously held senior positions in several global FMCG companies, including Gillette Group, Duracell, Mars and Unilever over the previous 28 years.

He is Chair of Novozymes A/S, Chair of Uhrenholt A/S and Chair of the Executive Advisory Board in Blazar Capital.



Anne Anderson
Non-executive Director

Biography

Anne Anderson is an experienced international diplomat who most recently served as the Ambassador of Ireland to the United States from 2013 to 2017. She joined the Department of Foreign Affairs in 1972 and was appointed Assistant Secretary General in 1991 serving in this post until 1995. She was then appointed Ireland's Permanent Representative to the United Nations in Geneva after which she became

Permanent Representative of Ireland to the European Union in 2001. Following this she was appointed Ambassador of Ireland to France in 2005, where she served until 2009. In 2009 she became Permanent Representative of Ireland to the United Nations in New York. Anne chairs the Advisory Group for the Peacebuilding Fund at the United Nations. She is also a Board member of the Druid Theatre Galway.



Kaisa Hietala
Non-executive Director

Biography

Kaisa Hietala spent over 20 years at Neste Corporation, where she was a key architect in the strategic transformation of the company to become the world's largest producer of renewable diesel and renewable jet fuel. She served as Executive Vice President, Renewable Products at Neste Corporation and as a member of the Neste Executive Board from 2014 to 2019. Prior to this she held a number of senior positions

including VP, Renewable Fuels at Neste Oil Corporation. Kaisa was previously a Non-executive Director of Kemira Oyj and is currently a non-employee Director at Exxon Mobil Corporation.



Lourdes Melgar
Non-executive Director

Biography

Lourdes Melgar is a consultant and scholar recognised for her expertise in the areas of energy, sustainability and public policy. During her career, she held various positions in Mexico's foreign service and in the Ministry of Energy. During the design and implementation of Mexico's energy reform, she served as Vice-Minister for Electricity from 2012 to 2014 and was appointed Vice-Minister for

Hydrocarbons, a position she held until 2016. She is currently a Research Affiliate at the Center for Collective Intelligence at MIT and a non-resident Fellow at the Center for Energy Studies at the Baker Institute. She currently serves on the Board of Grupo Financiero Santander Mexico.

CASE STUDY

Click-to-Lock Box, a Child-safe Box for Laundry Pods

McBride, the leading European manufacturer of private-label products for the cleaning and hygiene market, looked to Smurfit Kappa to design and develop an innovative new packaging solution to provide a sustainable and safe alternative to the traditional plastic box for laundry pods. In response to this, we created the Click-to-Lock Box, a mono-material, 100% paper-based solution, which is 100% recyclable and biodegradable.

Creating a plastic-free solution and significantly reducing CO₂ emissions during production, the new Click-to-Lock Box is the latest example from our Better Planet Packaging portfolio of how we utilise our circular business model to identify the best packaging solution for each situation, alongside reducing the environmental impact.

Chris Smith, CEO of McBride plc, commented: "This project is an excellent example of the success that comes from pooling expertise between suppliers and customers to deliver the innovation to support the essential move to more environmentally friendly products."

Fundamental to the solution, the Click-to-Lock Box is tamper-proof, thanks to an effective, certified child-safe system and is in line with the International Association of Soaps, Detergents and Maintenance Products, following successful protocol testing.

Commenting on the collaboration, CEO of Smurfit Kappa Europe, Saverio Mayer said: "We are delighted to partner with such a prestigious company as McBride for this project. By combining our collective expertise, we have created this first-to-market innovative packaging solution that provides our customers with a child-safe, cost-effective and sustainable packaging option for laundry pods."

The packaging has 25% more capacity than the previous plastic version being used by McBride and brings efficiencies to the supply chain by facilitating an increased pallet-load.

Chris Smith, CEO of McBride plc, added: "My thanks to the dedication of the Smurfit Kappa and McBride experts to deliver this excellent solution which I am convinced will be an attractive option for our customers who are committed to delivering environmental improvement."

"

My thanks to the dedication of the Smurfit Kappa and McBride experts to deliver this excellent solution which I am convinced will be an attractive option for our customers who are committed to delivering environmental improvement.

Chris Smith, CEO, McBride plc

"



OUR PRIORITIES

Global challenges

The world is facing growing challenges. As part of a global community, we have a responsibility to operate sustainably and make a positive impact.

We have identified four key issues where we can make a difference and contribute to a better future.



Social Change

Equality, inclusion, diversity, human rights: these are the social themes of today's world; awareness of these topics is growing and people want action. We have a responsibility to the 48,000 people that make up Smurfit Kappa, but also to the communities in which our operations are located. By creating a safe and inclusive culture, and by being a good corporate citizen to our local communities, we can build a platform that transforms lives, unlocks opportunities and promotes fairness for everyone.



Climate

Tougher questions than ever before are being asked about how we treat our planet. From changing weather patterns and melting polar ice, to growing activism, the call for action has become urgent. We understand the challenges and the changes that need to be made and we are strongly committed to making a positive contribution. We are targeting at least a net zero carbon footprint by 2050 for our own activities, and through our sustainable paper-based packaging solutions, we can help our entire value chain reach that 2050 goal as well.



Circularity

As the number of people on the planet continues to rise, there is a greater need for a circular economy. Packaging that is well designed can play a critical role; our innovative and sustainable packaging solutions not only protect goods, but also seek to reduce waste. This, along with our circular processes and improvement in efficiency, help to minimise our use of resources and preserve our planet. Our Better Planet Packaging initiative seeks to proactively replace unsustainable packaging solutions with renewable, recyclable and actually recycled, biodegradable paper-based packaging alternatives.



Deforestation

Forests are the world's first line of defence in the fight against climate change and essential to biodiversity. As producers of paper-based packaging, we manage 68,000 ha of forests and plantations. Sustainable forestry and only delivering certified sustainable products to our customers is one of our top priorities. By being leaders in robust Chain of Custody, striking a balance between recycled and sustainably sourced, renewable fibres, we not only create great products, but help conserve our planet's valuable ecosystems.

Strategic priorities



Planet

A Greener, Bluer Planet

The circular economy is at the core of our business. We use renewable, recyclable, recycled and biodegradable materials to create sustainable packaging solutions. We play a part in ensuring that at their end-of-life, our products are recycled.

➔ Read more on pages 30-55

Reduction of relative CO₂ emissions (since 2005)

41.3%

Reduction of relative water intake from our paper and board mills since 2020

6.2%

Female representation in management positions

22%

Social investments in 2021

€4.9m

People

Empowering People and Communities

Having engaged employees is critical for the success of our business. We are committed to providing an inclusive and safe place to work for the talented people in our globally and culturally diverse organisation. Our commitment also extends to all of the communities in which we operate.

➔ Read more on pages 56-77



Impactful Business

Delivering for all Stakeholders

Through our activities, we aim to create sustainable value for our customers, investors, employees, suppliers and the communities in which we are privileged to operate. We do this with the highest ethical business standards.

➔ Read more on pages 78-89

Investments in sustainable production

€1.1bn
since 2005

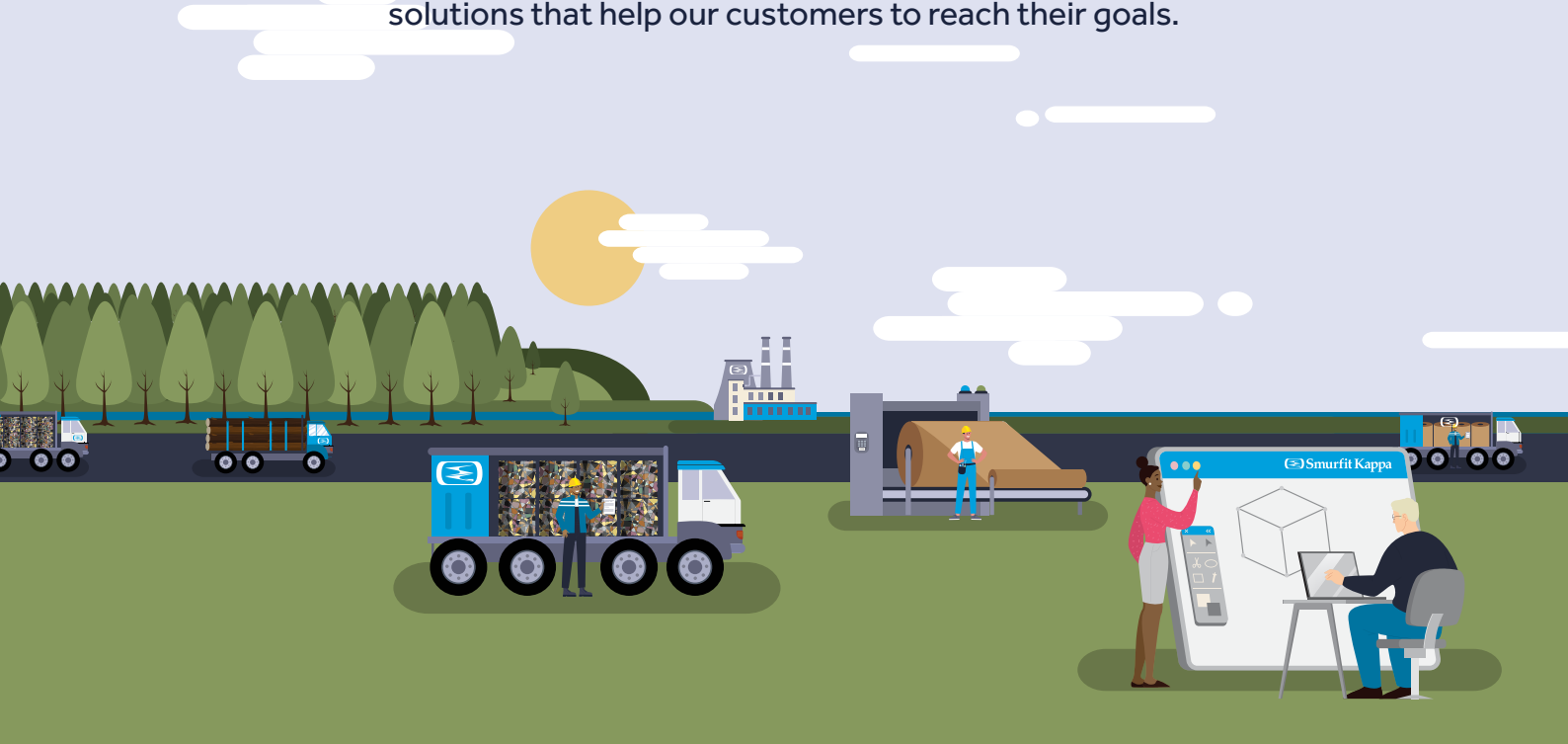
Supplier Code of Conduct signed by

337
suppliers



End-to-end sustainability

End-to-end sustainability means using a sustainability lens in everything we do: from sustainable and responsible sourcing of our renewable and recyclable raw materials, to the development of sustainable packaging solutions that help our customers to reach their goals.



Our circular value chain has a positive impact on the planet, people and business

Key to strategic priorities:

- Planet
- People
- Impactful Business

* Data from analysis by WRAP, 2020, UK
 ** Technische Universität Graz, Recyclability of Cartonboard and Carton, 2021

1

Sustainable Raw Material

100% of our raw material has a sustainable origin. Recycled fibres make up 76% and the balancing 24% are sustainable virgin wood fibres.

Supplier audits in 2021

22

Fibre produced and purchased as CoC certified

99.9%

2

Circular Paper Operations

We focus on reducing our CO₂ footprint, reducing our water intake, improving our water discharge quality, and minimising the amount of waste sent to landfill.

Reduction of waste sent to landfill

29.2%

Reduction of COD in water discharge

38.5%

3

Product Design and Innovation

Our approach to innovation is data-driven and focused on solving our customers' challenges, whether through product development and removing less sustainable packaging materials, process improvement, optimising supply chain efficiency or brand enhancement.

Designers

1,000

Views of the InnoTool suite in 2021

160,000

At every important step in our value chain, we consider where we can have a positive and lasting impact. We are constantly aligning our economic goals with our social, community and environmental responsibilities.

Sustainability is at the core of our way of thinking, affecting the ways in which our business operates, from product inception to final disposal. We recognise the importance of the circular economy through our value chain and collaborate with like-minded organisations to create greater social, economic, and environmental value for everyone that we impact.

Our Essential Products

We believe that paper-based packaging can be one of the answers to the challenges facing the world today and we have shaped our product life-cycle to reflect this belief. We use data-driven innovations together with renewable and recycled resources to create purposeful packaging that is better for the planet.

Our Circular Processes

Thinking sustainably is not just about products, but also our processes. Through our holistic approach to product design and manufacturing, we offer fit-for-purpose packaging solutions that minimise

inefficiency and waste. Working closely with our suppliers and customers, we design sustainability into every fibre.

Our People and Communities

The world's challenges affect everyone and we have a responsibility to the people and communities we work with. Our end-to-end approach considers our entire global network. We provide a value-driven culture that attracts top talent and empowers our 48,000 people to reach their full potential. Our responsibilities extend to helping local economies and partnering with like-minded organisations to make a bigger contribution.



4

Paper-based Packaging Production

We produce packaging with a high focus on production efficiency, employee safety and wellbeing, and aim to have the lowest possible environmental impact at any site in our global packaging production network.

Employees in 2021

48,000

Average TRIR reduction since 2018

14%
annually

5

Global and Local Customers

We offer our customers sustainable fit-for-purpose packaging solutions that are renewable, recyclable, recycled and biodegradable.

Designs, some

8,500

Our fibres can be recycled up to

25
times as per a recent study**

6

Sales Channels

Our products are designed to add value to our customers' value chains, ensuring that their packaged products are delivered, stored, displayed and sold undamaged to the consumer, avoiding waste in the supply chain.

We supply from

241

corrugated sites globally

Share of packaging in total product carbon footprint*

3%

7

End of Life: Paper Recycling

We are one of the largest actors in the circular economy in Europe and a significant player in the Americas, handling over 7.4 million tonnes of primarily post-consumer materials globally.

Paper recycling depots globally

45

We handled

7.4 million
tonnes of recovered paper in 2021

OUR APPROACH IN ACTION

Circular, fit-for-purpose and responsible

Global challenges need innovative solutions. Society needs to focus on reducing waste and carbon emissions and thinking end-to-end. Products and packaging need to be more recyclable, truly recycled, biodegradable and made from renewable sources.

We realise that to respond to the global challenges is not easy, and we believe paper-based packaging can be one of the answers. With consumer demand for sustainable packaging growing, and by considering the entire life cycle of our products, we can have a bigger impact on a greater scale.

We are committed to sustainability, and evolving our business model with new advancing technologies, to ensure we design our products and develop our processes to be innovative, fit-for-purpose and circular by nature. We design sustainability into every stage of our products' life cycle and follow the guiding principle of waste prevention by closing loops at every stage.

Circular by Nature

Our circular model focuses on making a positive climate impact, in terms of reducing both carbon and waste. This starts with our product being circular, as it is made with 100% renewable, recyclable, and biodegradable primary raw material.

It is not just about the products themselves, or the individual production steps, but the complete process. How we source the raw materials, how we create our products, how they are used and what happens when they reach the end of use.

Our Talented People

One of Smurfit Kappa's greatest responsibilities is to the people who work for us. They are at the centre of everything we do.

By providing them with a safe place to work and an inclusive and value-driven culture, we can attract, engage and empower the best talent. We believe that a diverse work culture makes us stronger and more innovative and our employees feel more engaged and are happier because they understand how their efforts can contribute to our success.

Our Respected Communities

Beyond our employees, our responsibilities extend to helping the communities where we are located,

by behaving as a good corporate citizen. Operating in accordance with the UN Declaration of Human Rights and the Fundamental Principles and Rights at Work is a basic principle. In addition, by supporting local education, income generation, collaboration and participation, we can strengthen communities. This is especially true in remote areas with limited opportunities for work.

In the communities where we operate, Smurfit Kappa is focused on breaking cycles of poverty and dependence when and where they exist, beginning with the younger generations. Aligned to The Smurfit Kappa Foundation, we work to improve the situation for young people through the lens of health and nutrition, basic care and education.

Our Circular Process



1
7.4
million tonnes
of primarily post-
consumer recovered
paper handled each year

2
100%
renewable, recyclable
and biodegradable

3
82.3%
corrugated
recycling rate

4
29.2%
reduction in
waste to landfill
(since 2013)

We believe, by working with key organisations in these areas and supporting projects that provide a better start for young people, we can break the cycle of disadvantage, because what happens to us in childhood shapes our future success and the adults we become.

Together, we are committed to building a better tomorrow.

Our Sustainable Raw Material

We start with 100% renewable and recycled resources. 76% of our raw material is recycled fibre and the remaining 24% comes from renewable, Chain of Custody certified wood. Our timber is often a natural side product – from the woodchips and tops of the trees too small for sawmills, as well as trees that are removed to support healthy growth in the forest. This means that everything is used, nothing is wasted.

Our Circular Operations

We aim to make our operations fully circular. Key to this is minimising waste by finding a use for our side product streams; whether doing so ourselves or in collaboration with regional partners and local communities. Already more than 50% of these side streams are recovered and recycled for reuse. Paper clippings from corrugating and converting operations are returned to our paper mills, while organic by-products such as wood bark and biogas from biological water treatment are used as biofuel; some water treatment sludges become soil improvers and waste ash can be used in the cement industry.

When it comes to the water we use, we are responsible stewards of this precious resource – recirculating our process waters several times,

and investing in best practice water treatment before it is discharged back to the local water system.

We are also continuously improving our energy efficiency and using more renewable energy to reduce impacts and lower costs – for example, in our paper mills we have achieved a 20% improvement in energy efficiency since 2005 and over 50% of the energy produced is now based on renewable energy.

Our Sustainable Finance

Since 2005, we have invested some €1.1 billion to make our operations more sustainable. Of this, some €904 million has been invested in different energy efficiency and CO₂ reduction projects, over €100 million in best practice water treatment systems and almost €90 million in projects optimising fibre use and reducing waste.

Our more recent approach to sustainable finance further integrates the sustainability ambitions at the core of our business model into our funding strategy. As part of this continued commitment, we launched our Green Finance Framework, which reflects the sustainable and circular nature of our business model. This considers our efforts to produce circular products, reuse of recycled paper or certified sustainable raw materials, and to implement circular production processes, which we continuously improve.

A deep understanding of the business environment enables us to increasingly integrate in the circular economy and drive sustainability in all areas of our value chain, positively impacting Planet, People, and Impactful Business.



CASE STUDY

Roermond, a Leading Circular Paper Mill

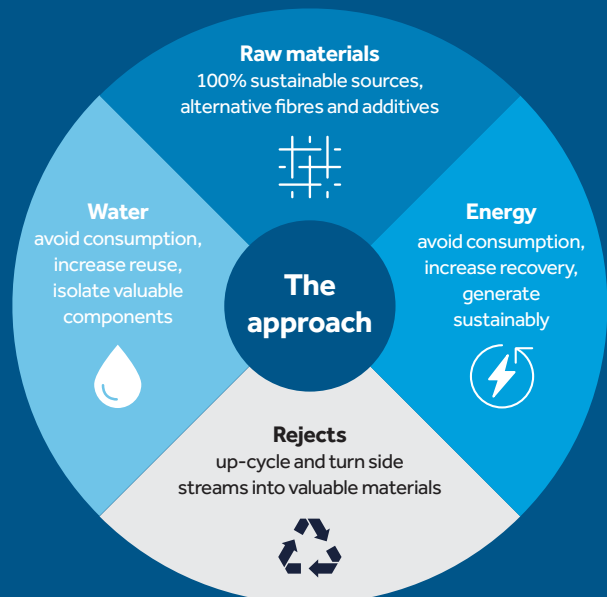
At Smurfit Kappa Roermond Papier, we aim to obtain the highest added value from resources in a sustainable and energy-efficient way. To achieve this, the mill capitalises by first closing the loop inside the mill, with a focus on raw materials, energy and water, but then closes the remaining loops for the rejects that can not be used within the mill by working with local partners from different sectors.

“For better reuse, better separation of material is needed. Separation starts at the very beginning of the paper-making process, but remains important throughout the entire production process,” says Wouter Lap, Managing Director, Roermond Papier.

“Our mill in Roermond is a front-runner when it comes to circularity. 99% of the raw material that comes into the mill is given a purpose and a second life.”

Roermond paper mill was recognised with the PPI award in 2013 and 2019 for its bioenergy strategy and environmental leadership. 100% of the raw material used is from sustainable sources. The majority of the raw material is converted into paper, but following our circular approach, the various so-called rejects or side streams, are reused or up-cycled and these side streams are turned into valuable materials. From approximately 1,000kg of recovered and recycled paper coming into the mill there is only 1% remaining that currently is not being utilised.

Innovation and continuous improvement support progress with energy consumption at the mill, which forms part of a benchmark for Europe. Importantly, although production at the mill has seen a growth of 95% since 1990, CO₂ emissions have only grown by 19%; this means the growth in production has almost been achieved as carbon neutral. To reach our goal of no fossil CO₂ emissions by 2050, we continue to create new opportunities, and focusing on new and innovative technologies.



Stakeholder engagement in sustainable development

Sustainable businesses encourage diverse views, and we provide opportunities for dialogue with the many stakeholders who impact our business. In our experience, this exchange of ideas and our end-to-end approach to sustainability delivers benefits for everyone.

Stakeholders' opinions are essential to how we develop our business. Our key stakeholders are customers, investors, employees, communities and suppliers.

Our Sustainable Value Dimensions

Our size gives us a unique position in our value chain, enabling us to create value for our stakeholders by meeting their sustainability requirements. For example, we help them meet sustainability commitments with CoC certified packaging deliveries, by reducing supply-chain risks, or by transparently measuring and reporting of environmental footprint or social impact, adding to their transparency.

We ensure our stakeholders receive these benefits, from high sustainability standards in our supply chains to helping customers reduce their carbon footprint through right-weighted, fit-for-purpose packaging. We also help customers track the carbon footprint of every box, so they can measure and reduce their own supply chain emissions.

Our Engagement Methods

We know which issues are important to our stakeholders through continual multi-level engagement across our customers, investors, employees, communities and other relevant parties. This engagement includes:

- Organising meetings and round-table discussions on sustainability with our stakeholders;
- Participating in discussions within and outside our industry through our membership of Capi, FEFCO, 4evergreen initiative and World Business Council for Sustainable Development (WBCSD);
- Participating in CDP, EcoVadis, FTSE4Good and SEDEX surveys, and benchmarking against UN 2030 Sustainable Development Goals; and
- Participating in the development of Forest Certification as a member of FSC and PEFC.

For stakeholders, our holistic approach ensures:

- Relevance: Constant dialogue to understand their sustainable business drivers and how we can help expand their capabilities;
- Influence: Valuing their opinion, and sharing experience and best practice from working with a wide range of suppliers and customers;
- Value: Ensuring we deliver maximum sustainability value by understanding the sustainability drivers throughout our value chain; and
- Affect: Sharing knowledge and expertise to increase understanding and find sustainable solutions. We do this through training courses, round-table discussions and meetings, including awards and partnership debates.

HOW WE ENGAGE

HOW WE INCLUDE OUR STAKEHOLDERS ACROSS OUR KEY FOCUS AREAS



KEY ACTIVITIES IN 2021

Our end-to-end approach to sustainability is supported by:



Circularity

Working with a circular business model is our approach to delivering environmental sustainability. This means we involve our stakeholders at all stages, and add value to each one.



Inclusiveness

Our approach to our people and stakeholders focuses on inclusiveness. To deliver innovative and circular solutions, we believe an inclusive approach works best. Employees, customers, investors, suppliers and local communities all have a part to play.



Innovation

Creating a business environment that enables innovation ensures that we and our customers operate at the cutting edge.

The ways in which we collaborate with our stakeholders in our three focus areas: **circularity, inclusiveness** and **innovation**.

Customers	Investors	Employees	Communities	Suppliers
<ul style="list-style-type: none"> Regular business meetings at our Experience Centres Customer conferences WBCSD membership Awards and competitions run by customers Collaboration through the full packaging value chain in the 4evergreen initiative, in collaboration with large FMCG companies 	<ul style="list-style-type: none"> Investor days and conferences One-to-one meetings ESG ratings by rating agencies Feedback from sustainability analysts Queries directly from investors 	<ul style="list-style-type: none"> MyVoice engagement surveys Global, regional and local learning and development programmes Works Councils Social committees Support to our employees through the Employee Assistance Programme Enable reporting of any possible wrongdoing through the Speak Up service 	<ul style="list-style-type: none"> Initiation of and participation in local social activities by members of our workforce Supporting social investment projects by local Smurfit Kappa companies and our Smurfit Kappa Foundations Supporting various local COVID-19-focused projects by local Smurfit Kappa operations 	<ul style="list-style-type: none"> Supplier sustainability audits Participating in the development of Forest Certification as members of the Forest Stewardship Council® (FSC) and the Programme for the Endorsement of Forest Certification (PEFC) WBCSD membership
<ul style="list-style-type: none"> Packaging solutions that enable safe delivery of our customers' products Packaging solutions that cut waste and improve recyclability 	<ul style="list-style-type: none"> Through our circular business model, lowering costs and increasing efficiency and revenue 	<ul style="list-style-type: none"> We ensure our employees are fully aware of our role within the circular value chain We circulate our talent and ideas across our operations and geographies to ensure we are sharing best practice 	<ul style="list-style-type: none"> We collaborate with our neighbours and communities to find synergies from education to action 	<ul style="list-style-type: none"> Sharing our sustainability knowledge Identifying opportunities to increase circularity and add value across the value chain
<ul style="list-style-type: none"> Benefits of our solutions to include all in the value chain 	<ul style="list-style-type: none"> Reduce reputational risk Streamline supply chains to reduce CO₂ emissions and minimise waste 	<ul style="list-style-type: none"> Make employees feel included and appreciated as part of a team We strive to ensure our employees can be their authentic selves at work every day 	<ul style="list-style-type: none"> Share value from Smurfit Kappa business growth with local communities Encourage employee volunteering in local programmes 	<ul style="list-style-type: none"> Wherever possible, procuring products and services from local suppliers Keep finances flowing through local economy
<ul style="list-style-type: none"> Fit-for-purpose, eco-design packaging 	<ul style="list-style-type: none"> Sustainable packaging innovations deliver an attractive return on investment 	<ul style="list-style-type: none"> We reward and recognise innovation amongst our workforce Our talent and development approach supports a culture of innovation 	<ul style="list-style-type: none"> We work with community groups to ensure the work they are doing leaves a lasting legacy and is not just a one-off contribution 	<ul style="list-style-type: none"> Encouraging our suppliers to be innovative about products and processes Helping test and optimise solutions before they go to market
<ul style="list-style-type: none"> SBTi approved Almost 160,000 uses of InnoTools to inspire sustainable packaging designs We sold 93.45% of our packaging as CoC certified in 2021 Delivering lower CO₂ recyclable packaging solutions 	<ul style="list-style-type: none"> SBTi approved Reporting consistent with the TCFD CO₂ emission reduction by 41.3% (see pages 34-35) Chemical Oxygen Demand (COD) discharge reduction by 38.5% (see pages 34-35) Waste sent to landfill reduced by 29.2% (see pages 34-35) 	<ul style="list-style-type: none"> Developed online approach to our Learning and Development programme to ensure ongoing employee personal growth Rolled out our Employee Assistance Programme globally MyVoice 2021 saw our engagement score increase by 13 percentage points 	<ul style="list-style-type: none"> €4.9 million in social investments (see page 76) 950 hours volunteering 92,000 people impacted 	<ul style="list-style-type: none"> 99.9% of our fibre produced and purchased as CoC certified (see pages 34-35) 22 supplier audit activities (see page 89)

Assessing what's important

To understand the sustainability issues most relevant to our business operations and our stakeholders, we conducted a thorough materiality process to assess the issues, the impact we have on them, and that they have on us.

We reassess which issues are most material every three years to ensure our assessment is always up-to-date. Our most recent update was in 2019 and included engagement from across all of our stakeholder groups. By identifying key material issues, we can ensure that our reporting and commitments focus on those areas we affect.

Taking into Consideration all the Issues

To ensure that our material issues are well formed and relevant, we explore a myriad of internal and external factors. A desk study includes an assessment of internal policies and positions in areas including Environmental, Forest, Health and Safety and Sustainable and Responsible Sourcing, long-term strategic plans and the Code of Conduct. To understand the broader sustainability context, the external documents reviewed include sustainability frameworks, peers, industry publications and emerging regulation.

For the 2021 report we have evaluated our materiality assessment against the impact of COVID-19. It has an impact on the Health and Safety aspect that has gained a higher position in our matrix.

Engaging with our Stakeholders

The material issues identified at the research phase are validated through a stakeholder engagement process. We interviewed external stakeholders and offered an online survey to our own employees.

The employee survey covered a representative sample of employees in both regions and at all disciplines.

To better understand key sustainability issues and how we can have a greater positive impact across our value chain we conducted interviews with customers, investors and suppliers.

Aligning to External Frameworks

The materiality process undertaken is based on the globally recognised sustainability framework, Accountability's AA1000 Principles Standard, and aligned to the Global Reporting Initiative (GRI) framework and other best practice standards, including CDP, the FTSE4Good Index, Sustainability Accounting Standards Board and the TCFD.

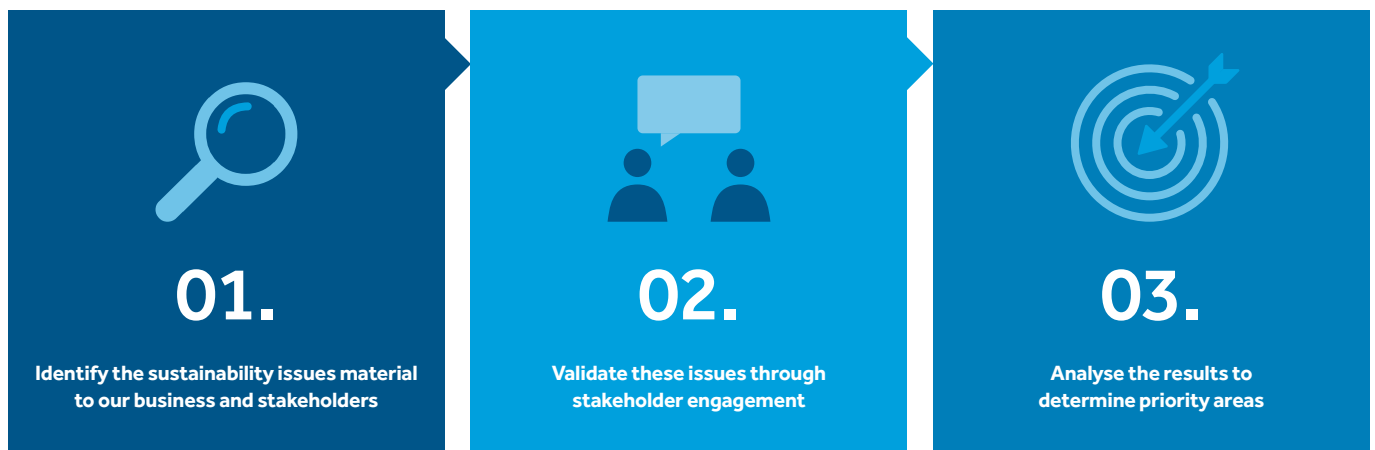
We have followed the WBCSD SDG roadmap and the GRI and UN Global Compact guidelines to assess the most relevant SDGs to our strategy, and the material issues. We chose our most relevant SDG targets based on where we can have the largest impact, either by minimising our negative impacts or by increasing the positive impacts.

We have mapped out our commitments to the SDGs across three levels:

- Smurfit Kappa impacts: We have set measurable targets to achieve the goal
- Smurfit Kappa contributes: We may have set a measurable target and we have a contribution to deliver towards the achievement of the goal
- Smurfit Kappa supports: By being a responsible business we support society to deliver these goals

The rationale behind each selection has been explained on pages 28-29, 34-35, 60-61, 82-83.

Our Materiality Assessment has Three Stages



Material Sustainability Aspects Through the Value Chain

(numbers referring to material aspects below)



Raw Materials

- **Planet**
01, 03, 05
- **People**
10, 11, 12
- **Impactful Business**
15

Suppliers

- **Planet**
05
- **People**
10, 11
- **Impactful Business**
14, 15, 17

Company Operations

- **Planet**
02, 03, 04, 06, 07
- **People**
09, 10, 11, 12
- **Impactful Business**
14, 15, 16

Distribution

- **Planet**
03, 04
- **People**
10, 11
- **Impactful Business**
16, 17

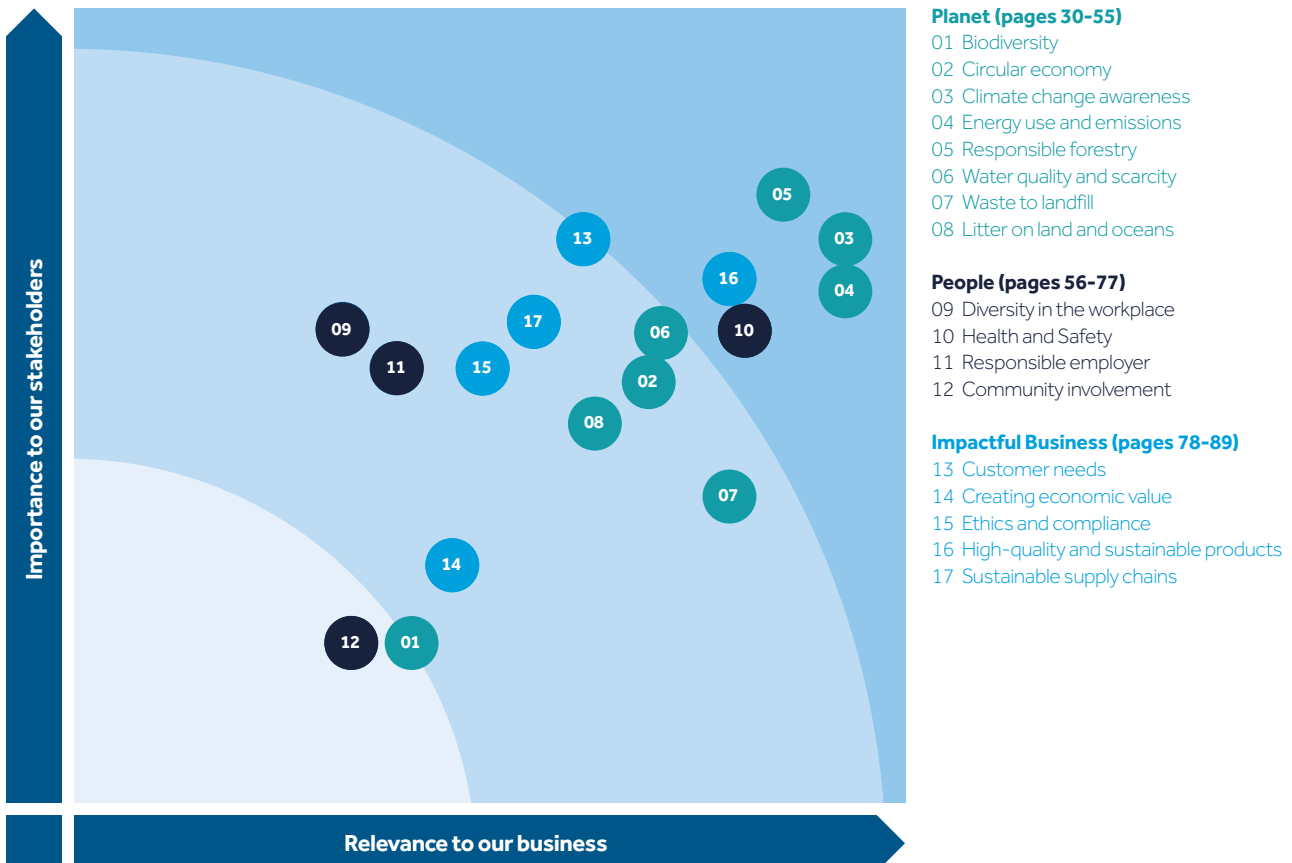
Product use

- **Planet**
02, 03, 06, 07, 08
- **People**
10, 11
- **Impactful Business**
15, 17

Product end-of-life

- **Planet**
01, 02, 03, 08
- **People**
12
- **Impactful Business**
16

Material Aspects Facing Smurfit Kappa



Planet (pages 30-55)

- 01 Biodiversity
- 02 Circular economy
- 03 Climate change awareness
- 04 Energy use and emissions
- 05 Responsible forestry
- 06 Water quality and scarcity
- 07 Waste to landfill
- 08 Litter on land and oceans

People (pages 56-77)

- 09 Diversity in the workplace
- 10 Health and Safety
- 11 Responsible employer
- 12 Community involvement

Impactful Business (pages 78-89)

- 13 Customer needs
- 14 Creating economic value
- 15 Ethics and compliance
- 16 High-quality and sustainable products
- 17 Sustainable supply chains

Delivering for UN Sustainable Development Goals

As a leading company in sustainability, we base our ambition of sustainable growth on three pillars: Planet, People and Impactful Business.



First FTSE 100 company with five stars

Delivering for SDGs (Goals)

Smurfit Kappa Impacts

These six SDGs have been identified as the core Goals where Smurfit Kappa has the most potential to influence and add value. Smurfit Kappa has set measurable targets within its impact area for each of these Goals.



Smurfit Kappa Contributes

These four SDGs have been identified as Goals where Smurfit Kappa's activities have a meaningful contribution towards their achievement. We have commitments within our impact area for these Goals but we recognise that a full achievement of these Goals require activities from other sectors in society.



Smurfit Kappa Supports

As a sustainable and responsible business, we support in delivery for each of the SDGs. These seven Goals are important to us through our values and way of working, however, we recognise that alone Smurfit Kappa cannot impact the needed change to deliver on these Goals.



Planet

Climate Change

We are stepping up our ambition with low-carbon and energy-efficient production systems, and increasing our use of renewable fuels. We are targeting at least net zero CO₂ emissions by 2050, our targets have been approved as science-based and in line with the Paris Agreement. We also offer our customers optimised packaging solutions that help them to reduce CO₂ emissions in their value chain.

➔ Find out more on [pages 36-42](#)

Forest

We balance the use of virgin and recycled fibres to maintain a positive and sustainable balance of renewable raw materials. We have committed to a complete Chain of Custody certified sourcing and manufacturing chain, from fibres to our packaging solutions.

➔ Find out more on [pages 43-47](#)

Water

We are committed to responsible water stewardship. We focus our efforts on continually improving the quality of water we discharge, decreasing our water intake and understanding the risks associated with water availability in the areas where we operate.

➔ Find out more on [pages 48-51](#)

Waste

Our products are specifically designed to protect the goods they package. Our main raw material itself is circular by nature, and we strive to eliminate all waste and keep removing the remaining linear elements from our processes.

➔ Find out more on [pages 52-55](#)

People

People Values

We endorse the principles of respect for human rights, freedom of association, fair compensation and diversity, regardless of age, disability, faith, gender, sexual orientation or gender identity, marital or civil partnership, parental responsibilities or race (colour, ethnic or national origin, nationality).

➔ Find out more on [pages 62-63](#)

People Strategy

Employees who find meaning at work are happier, more productive and more engaged. This is why we are constantly developing our People Strategy. We believe our employees are the beating heart of our business and by empowering them to grow and develop their careers, they will all feel a valued part of the organisation. If they are a success, we will be a success.

➔ Find out more on [pages 64-70](#)

Health and Wellbeing

Safety is one of our core values. Our approach to safety continues to be rewarded, with further reductions in all of our key indicators, as we strive to reach our zero-accident goal.

➔ Find out more on [pages 71-73](#)

Communities

We are proud to support the communities in which we operate. Our aim is to make positive, long-lasting changes in our communities. We do this by focusing on areas such as education, income generation, collaboration and participation.

➔ Find out more on [pages 74-77](#)

Impactful Business

Innovation

Offering tailored fit-for-purpose packaging is the core of our eco-design. We link data, engineering and creative thinking throughout the packaged products' value chain, from packaging solutions back to our supply chain and processes.

➔ Find out more on [pages 84-85](#)

Governance and Human Rights

Smurfit Kappa supports the UN Global Compact and is committed to promoting its 10 principles of human rights, labour, environment and anti-corruption. As part of this, Smurfit Kappa reports transparently on its activities and performance in these areas.

➔ Find out more on [pages 86-87](#)

Sustainable and Responsible Sourcing

Sharing our sustainability knowledge, experience and expertise with our suppliers increases the sustainability of our whole value chain. To be able to sustainably grow our business, our materials, goods and services, must have the right quality and cost, but also be securely and responsibly sourced.

➔ Find out more on [pages 88-89](#)

A greener, bluer planet

For many years, our operations have been designed around a circular business model. This means seeking closed-loop solutions, maximising resource efficiency and minimising waste, including CO₂ emissions.

It also means supplying packaging that protects our customers' products and avoids packaging waste and litter. Our ambition is to achieve at least net zero CO₂ emissions by 2050.



Packaging solutions sold as Chain of Custody certified

93.45%

Key Principles

We operate a circular business model using mostly recycled fibre raw material. The virgin fibre raw material we use is renewable and from a sustainable origin. We reuse or recycle side streams and we use renewable energy and strive for energy efficiency where we can. This circular approach increases resource productivity, adding to our competitiveness.

Our circular business model starts with sustainable primary raw materials. Our integrated approach to producer responsibility and paper recycling means that 76% of our raw material is recycled fibre. We use organic by-products as biofuel, circulate our process waters as many times as we can and we collaborate with local organisations to find alternative uses for the rejects we receive with our recovered paper deliveries, that we cannot use in our processes.

In our product-development phase, we work towards synergies within the whole value chain. For example, by designing mono-material packaging solutions, we create efficiencies in our customers' packaging lines, and we improve the recyclability of the packaging after use.

Forests themselves are a closed-loop system, fundamental for local climate and water systems. When managed sustainably, they also provide a renewable source of raw materials for industry, function as a carbon storage and provide employment.

Reduction of relative waste sent to landfill (since 2013)

29.2%

Reduction of relative CO₂ emissions (since 2005)

41.3%

Reduction of relative COD in water discharge (since 2005)

38.5%



Inside this section

30-55

Climate Change	36
Forest	43
Water	48
Waste	52

PLANET CONTINUED

Urgency in responding to climate change continued to be the most important environmental topic in 2021. The IPCC report, published in July, calls for urgent action in the face of the continuing rise in global temperatures. In October, the COP 26 discussed the urgent need to act and stop global warming well below 2°C. The UN's 2030 Agenda for Sustainable Development calls for action via 17 Sustainable Development Goals, and both the Paris Agreement and the EU have set tough carbon targets. By 2030, the Paris Agreement aims to limit climate change to under 2°C, and the European Commission during 2020 set ambitious targets for reducing net EU emissions by at least 55% by 2030 compared to 1990.

Achieving these requires a shift from linear to circular economic models, creating an era of opportunity and a need for innovation. At the same time, all parts of society need to set common targets. With its net zero ambition, Smurfit Kappa is well placed to make these targets a reality and the SBTi validation of our target evidences the robustness of our climate strategy.

We announced our support of the recommendations of the Task Force on Climate-related Financial Disclosures ('TCFD') in May 2020 and we included our first disclosure in the 2020 Annual Report. In 2021, we have significantly developed our disclosure as outlined below which is consistent with the TCFD recommendations. In completing this disclosure we have provided the recommended disclosures in terms of:

- Governance
- Strategy
- Risk Management
- Metrics and Targets

Our TCFD disclosure in full is available in our 2021 Annual Report (pages 54-61) and should be read in conjunction with our Carbon Disclosure Project ('CDP') Climate Change Response made by the Group in 2021. Further information can be found on our website at smurfitkappa.com/sustainability/.

Our progress and evolution of reporting in line with the TCFD recommendations included but was not limited to: a comprehensive top-down identification and process review of climate related risks and opportunities; scenario analysis in

conjunction with an expert third party; and an evaluation of the potential impact on assets from physical and transition risks under different climate scenarios. We expect that certain aspects of our disclosure will further develop and evolve over time.

Circularity has been our business model since our inception, so we are in the lead as the circular economy goes mainstream. Our operations in 36 countries, and 355 production sites in Europe and the Americas, influence the whole packaged goods value-chain. We drive positive change from sustainable and responsible raw material sourcing to minimising operational impact and lowering our customers' environmental footprints.

Our environmental sustainability strategy is in four main areas: Climate Change, Forest, Water and Waste. These strategic priorities cover the most material environmental aspects in accordance with our business and stakeholders' expectations. They cover biodiversity, the circular economy, climate-change awareness, energy use and emissions, pollutants to air, litter on land and oceans, responsible forestry, water quality and scarcity, as well as waste to landfill.

Risks and Challenges: Limits of Resources

Our challenge is to create value within natural resource limits, maximising resource productivity while minimising our environmental footprint. In 2021 we continued to work on our climate related risk register and identifying our physical and transitional risks. The key risks were published in our Annual Report 2021 on pages 60-61.

Climate Change

Climate change is one of the greatest challenges facing society. Our stakeholders are looking for low-carbon alternatives, and therefore we create packaging that is circular by nature and increasingly low-carbon.

Climate change has the potential to impact our business operations in a variety of ways. Extreme weather patterns may affect our operations and supply chain, potentially impacting forests, water, carbon regulation and taxation, and energy availability and affordability.

Forests play an important role in environmental resilience, especially in climate change. We therefore need to promote healthy forests and manage

these resources sustainably. Drought, flooding and local restrictions on water usage may limit our access to water, so we have been conducting water-risk assessments at our paper mills.

Furthermore, paper manufacturing is energy intensive, with a risk of carbon leakage if emission policies are not consistently applied. We recognise that climate change will only be slowed or stopped by a global low-carbon economy, and as we do 78% of our business in Europe, we fully support the EU Green Deal. However, to retain global competitiveness, there must be safeguards against 'carbon leakage' – firms moving to areas with weaker carbon policies.

The Forest Fibre Industry 2050 Roadmap to a low-carbon bioeconomy shows a CO₂ reduction of 50%-60%, compared with 1990 levels, is possible for our sector, based on available and emerging technologies. To reach a reduction of 80% or more by 2050, breakthrough technologies must be available by 2030. We play our part as a leader in this area for example by testing new technologies, such as our hydrogen project in our Saillat paper mill in France.

Scarce Resources

Our stakeholders expect Smurfit Kappa to use sustainable raw materials efficiently, especially forests and fibrous raw material. Halting deforestation is a particular concern for businesses supplying consumer goods and food who tackle this issue in their supply chains. Smurfit Kappa commits to only sourcing sustainable wood and fibre.

To decrease fossil CO₂ emissions we must shift to renewable energy. However, government incentives encouraging use of biomass for energy could lead to increased competition and higher raw material costs, putting paper packaging at a competitive disadvantage.

Packaging recycling and recyclability remain high interests for our stakeholders. Paper-based packaging holds a good position in recycling with its 91.7% collection rates and 82.3% recycling rates in Europe. However, the EU Green Deal emphasis on removing littering and plastic waste remains a risk to all packaging products. The important role of packaging as a vehicle to transport, protect and store goods and its role

Investments in sustainable production

€1.1 billion since 2005

in preventing waste must remain the key focus of regulatory changes which should not create a situation where packaging waste overrules the benefits of packaging.

Water scarcity remains a concern. Freshwater resources are not evenly distributed globally, and human activity is still degrading its quality.

Our water risk assessments and other measures confirmed that our mills' water use has no impact on water availability to neighbouring areas.

Opportunities: Embedding Circularity

A part of circularity is knowing the source of our raw materials and returning them to the production cycle. We depend on natural resources, so we aim to make our operations restorative by minimising waste and improving efficiency. We source natural materials responsibly, replacing and reusing resources and working with our partners to deliver better circular outcomes.

Using renewable wood fibres makes us a part of the biological and technical cycles of the circular economy. The biological cycle is called bioeconomy, and covers production and maximum value-capture of renewable biological resources, including their reuse, recycling and sustainable return through biodegradation. The technical cycle covers the circularity of mainly non-renewable processed resources. Paper and paper-based packaging are involved in both cycles and move between them.

Part of the Bioeconomy

We also recover paper-based packaging from our customers, making our packaging production part of our product's end-of-life. For us, material efficiency means that we are recycling our fibres as long as possible, practically producing new packaging from old packaging. As a natural, organic raw material,

wood fibres do however lose their quality after being recycled. Ensuring sustainably sourced wood fibres are used as part of our packaging solutions means our renewable, recyclable raw material can be sustained into the future.

We exist in both the bioeconomy and technical cycles of the circular economy, making us an efficient user of a sustainable, renewable raw material.

The virgin fibres used by the paper industry are mostly from the removal of young trees to support forest growth, or as by-products from sawmills, both of which are fully renewable, sustainable and reusable.

A total of 76% of our raw material is recycled fibre – the remaining 24% comes from sustainably-managed forests through Chain of Custody certified supply chains. Paper-based packaging has the highest recycling rate of any packaging. Trees capture atmospheric carbon, which remains sequestered in our fibres. Forests also contribute to the water cycle by regulating climate and purifying water. They also supply local industry and provide employment.

Smurfit Kappa participates in sustainable forest management through its own forests and plantations, and by only sourcing fibres from sustainably-managed forests.

Closing Loops

We continually work towards material efficiency, and aim to use all our production by-products ourselves, or by finding synergies with neighbours and local communities. Paper clippings from corrugating and converting operations are returned to our paper mills. Organic by-products – wood bark, dust and black liquor –

are used as biofuel. We work with local organisations which can use other materials, for example some water treatment sludges become soil improvers in road construction, and waste ash can be used in the cement industry. We also seek alternative ways to treat our rejects from the fibre recovery processes, one of them being palletising the plastic waste for alternative fuels (see case story on page 53).

We recycle our process waters several times, and invest in best-practice water treatment. Biogases from this become fuel for our Combined Heat and Power (CHP) plants. At some sites we work with local communities, sending our effluent to local municipal water treatment plants, where it can replace necessary nutrients.

Reducing Leakage

Paper-based packaging collection-rates were higher than for any other packaging material at 91.7% in 2019. Material leakage happens when used products are not being recycled but end up in landfill or as litter.

Paper benefits from being relatively easy for consumers to recycle. We work with municipalities and retailers to collect discarded paper packaging for recycling, and the demand for this is constantly increasing. Our fit-for-purpose packaging avoids over-packaging and waste, and we offer mono-material packaging solutions of corrugated board and paper, facilitating recycling. Eventually it returns to the biological cycle, and if it doesn't return to the recycling loop, it can either be combusted, releasing only the amount of CO₂ it captured while growing, or it degrades naturally, reducing the environmental footprint of the leakage.

Working with Life Cycle Assessments

The aim of the circular economy and waste hierarchy is a resource-efficient and environmentally sound choice. To be able to assess packaging solutions, our stakeholders, especially customers and regulators, are interested in Life Cycle Assessments (LCAs). Smurfit Kappa participates in various LCA projects: as members of Cepi, we take part in the EU Product Environmental Footprint development work, we are an active member in the FEFICO projects both by supplying data for the industry LCA studies and by working in a study to understand the corrugated packaging LCA. We also participate in our customers' LCA studies and

use our data and tools for our own LCA calculations. All these LCA projects deliver valuable information that is being further used for our product and service-development throughout our supply chain.

Investment
€1.74
million
in circular business
in Scotland

CASE STUDY

The Quality Challenge

"At the Glasgow Recycling Facility, we don't sort waste," states Lucy Russell, Managing Director for Smurfit Kappa UK Recycling Operations, "We add value."

The terminology is important. Not all paper provided for recycling is mill-compliant. The Glasgow Recycling Facility supplies raw material to our two UK mills, amongst others. If the mills receive good-quality recycled paper they run more efficiently, use less energy removing contamination, and have lower reject rates. It also means fewer contaminants being wastefully transported to and from mills.

The sorting operations at our Glasgow Recycling Facility are therefore vital and the large-scale operation is due to get bigger. Smurfit Kappa has invested €1.74 million in the facility, demonstrating our commitment to the circular economy, and helping towards responsible production and consumption. It also shows our support for sustainable investment in Scotland's recycling infrastructure, the local economy, and Zero Waste Scotland.

"Kerbside collection is a real challenge in the UK," says Lucy. "Different local authorities have different separation rules, and generally paper is mixed-grade and poor quality. Smurfit Kappa invested in a paper-upgrade line which lets us remove contaminants, then use screens to sort the paper into separate grades."

This upgrade also supports local communities. The UK's new Extended Production Responsibility Law will commence in 2023 and offers local authorities financial incentives to better separate recycling at source.

"They will be paid for quality, and we are geared up and ready to take it," says Lucy. "It's our job to support and educate local authorities on the coming changes so they don't lose revenue – we will pay them for quality recycling,"

Smurfit Kappa's investment in the future does not end there, however. "There are many new developments that not everyone is aware of," continues Lucy. "The huge rise in e-commerce means more packaging is going into homes – we want that to come back to us. Also, the replacement of plastic bags will lead to increased paper food packaging – we're going to get that coming back to us as well."



Responding to our Stakeholders

	What We Believe	What Our Stakeholders Expect from Us	Our Commitments
CLIMATE CHANGE	<p>We are tackling our CO₂ emissions by improving our energy efficiency, as well as moving from fossil fuels to bio-based energy. In addition, we are improving resource efficiency when producing paper products and optimising the use of raw material residual streams, such as black liquor, in bioenergy production. The circular economy is an opportunity for our business as we seek to use resources efficiently, especially in energy production and the creation of innovative packaging solutions. We collect sustainability data on innovation and product design, develop supportive tools and services, and create packaging solutions for customers that lower their carbon footprint.</p>	<p>Paper manufacturing is energy intensive, and our stakeholders, notably customers and investors, expect us to approach climate change responsibly and provide detailed progress reports. However, we can make a significant impact in the value chain through smart packaging solutions that can significantly cut our customers' emissions.</p>	<p>Commitment #1: A 55% relative reduction in Scope 1 and 2 fossil-fuel based CO₂ emissions in our mill system compared with 2005 levels by 2030. Reach at least net zero by 2050.</p> <p>Commitment #2: Collaboration with customers to determine carbon footprints of the packaging life cycle.</p>
FOREST	<p>Promoting sustainable forest management involves managing supplies of sustainable, renewable fibre, while protecting biodiversity and ecosystems as well as creating employment in rural areas. Wood fibres can be recycled up to 25 times as per a recent study when producing paper-based packaging. Using both recycled and virgin fibres in production, we deliver fit-for-purpose packaging with the best overall environmental footprint. We communicate transparently about the sustainable origin of our fibres.</p>	<p>As growing consumption raises pressure on resources, our stakeholders increasingly place value on sustainable consumption, integrity of origin, recycling and avoiding packaging waste. Sustainable forest-management and use of recycled fibres are at the core of the expectations for paper-based products.</p>	<p>Commitment #1: All fibre produced and purchased is CoC certified under FSC, PEFC or SFI.</p> <p>Commitment #2: At least 95% of our packaging is certified as CoC certified under FSC, PEFC or SFI.</p> <p>Commitment #3: All production sites use FSC, PEFC and/or SFI CoC standards.</p>
WATER	<p>Over 90% of the water we use is returned to nature in good condition, and the rest evaporates to the air during the process or is bound to the product. We focus our efforts on further improving the quality of water we discharge, decreasing our water intake and understanding the risks associated with water availability and use in the areas where we operate. This strategy positions us well to deliver a positive change to our processes and the environment.</p>	<p>Stakeholders are increasingly requesting information about our responsible water stewardship covering our paper and packaging production as well as our supply chains. Our key water footprint consists of paper manufacturing and forest and plantation management.</p>	<p>Commitment #1: Reduce the organic content of water returned to the environment from our mill plants (COD) by 60% compared with 2005 levels by 2025.</p> <p>Commitment #2: Perform environmental-impact assessments of the water use of our paper mills (where relevant) and develop water usage measurements.</p> <p>Commitment #3: At least 1% relative reduction annually of water intake by our global paper and board mill system with 2020 as reference year.</p>
WASTE	<p>We believe the circular economy is the business model for the future, and that we have an important role to play in it. Our products are designed to prevent loss and damage to the consumer goods they protect. Our packaging is produced efficiently and is 'right-weighted' to optimise resource use and minimise waste, and it is made from 100% renewable and recyclable fibres. Once fibres are depleted they are typically used for energy generation or in agriculture.</p>	<p>Avoiding customers, product and packaging waste, the circular economy and efficient use of raw materials are material issues for our stakeholders, and many of our customers have stated objectives to reduce waste.</p>	<p>Commitment #1: Decrease the waste sent to landfill by 30% per tonne of product produced by our mill system compared with 2013 levels by 2025.</p>

Progress Made in 2021

Progress made: Since 2005, we have reached 41.3% reduction. In 2021, Smurfit Kappa had its CO₂ target approved by the SBTi and further developed its TCFD disclosure.

Progress made: Our suite of tools that help to determine the carbon footprint of our customers' packaging were used 160,000 times in 2021.

➔ [Read more about our progress on pages 36-42](#)

Progress made: We continued to produce and purchase 99.9% of our fibres under fibre-origin management systems that are CoC certified in 2021. This is within our margin of 1% variation.

Progress made: 93.45% packaging solutions sold as CoC certified in 2021. This was down slightly on 2020 and was driven predominantly by low paper availability in what were extremely tight global markets.

Progress made: All production sites use FSC, PEFC and/or SFI CoC standards.

➔ [Read more about our progress on pages 43-47](#)

Progress made: Since 2005, we reached a 38.5% reduction.

Progress made: We finalised the water risk assessments in our paper mills with two final sites assessed in 2021.

Progress made: In 2021, we reached a 6.2% reduction of water intake at our paper and board mills compared to 2020.

➔ [Read more about our progress on pages 48-51](#)

Progress made: Since 2013, we reached a 29.2% reduction.

➔ [Read more about our progress on pages 52-55](#)

Delivering for SDGs

As an energy-intensive manufacturing business that uses natural resources, Smurfit Kappa has a direct impact on affordable and renewable energy. Through our efforts to reduce the climate impact of our operations as well as our products that can help our customers reduce the climate impacts in their supply chain, we can contribute to the global climate action.

Smurfit Kappa contributes to the realisation of the following SDG and targets:



7.2, 7.3 and 7.A 12.6 13.1, 13.3

As a paper-based packaging company that uses recycled and virgin fibres as its key raw material, Smurfit Kappa has a direct impact on ending deforestation and supporting forest biodiversity and ecosystems.

Smurfit Kappa's forestry and sustainable fibre sourcing actions impact the following SDGs and targets:



12.2, 12.4, 12.5 and 12.6 13.1 15.1, 15.2, 15.3, 15.5 and 15.8

Water is a critical element in pulping wood and recovered paper-fibres and formation of paper. With returning the water back to the nature, Smurfit Kappa has a direct impact on clean water resources.

Smurfit Kappa's water management practices impact the following SDGs and targets:



6.1, 6.2, 6.3, 6.4 and 6.6 12.2, 12.4 and 12.6

As a paper-based packaging company that uses recycled fibres as its key raw material and that produces packaging solutions that are recyclable and recycled, and help to reduce waste of packaged goods, Smurfit Kappa has a direct impact on responsible consumption and production.

Smurfit Kappa's circular business model and packaging design impact the following SDG and targets:



12.2, 12.3, 12.4, 12.5 and 12.6

Scope

- This priority area covers energy use, climate change and greenhouse gas emissions. Our reporting covers our operations from gate-to-gate
- All CO₂ emissions from our paper and board mills relate to the production of paper and board
- Only paper and board production is taken into account, given its fossil CO₂ emissions are 80% compared with our converting operations and its subsequent contribution to fossil fuel CO₂ emissions
- For Scope 3 emissions, we currently cover transport in Europe, Central cluster and Mexico only. We finalised our initial Scope 3 emission evaluation at the end of 2021 as part of our SBTi validation process. As Scope 3 emissions are mainly related to our supply chains, our next step is to understand which are the key reporting items and how we will obtain and manage the data to be reported

- This strategic priority covers forest management, biodiversity, fibre sourcing and the communication of how we use sustainable fibres through certified CoC
- Our reporting encompasses all of our own operations and products

- This priority area covers the water intake and discharge to and from our processes. The data covers all Smurfit Kappa paper and board mills discharging water produced through the process directly to water bodies. Mills that have their process water treated externally are not included
- Only paper and board production is taken into account because this contributes to 95% of all organic discharges and 98% of total water intake
- Our target is set against COD in water which is an indicator of the organic content in water
- As a processor and not a consumer of water, we focus our efforts on further improving the quality of water we discharge, and understanding the risks associated with water availability and use in the areas where we operate

- This priority area covers non-hazardous waste (recovered and landfilled) and hazardous waste generated from Smurfit Kappa's manufacturing processes
- Our target is set against waste sent to landfill from our paper and board mills per produced tonne of paper
- The amount of hazardous waste produced in our production processes is very low and depends on local activities such as construction or change of light bulbs on site. Therefore we have no set target for hazardous waste

Climate change

Minimising energy use and moving from fossil fuels to renewable sources, including biomass, are core elements of our Climate Change strategy aimed at reducing our CO₂ emissions in line with the Paris Agreement, reaching at least net zero by 2050.

Mitigating Climate Change is the most pressing issue of our time and our strategy is to reduce fossil CO₂ emissions throughout our value chain. Our drive for energy efficiency reduces climate impact and lowers cost. Aligning our Climate Change strategy with the UN 2030 SDGs 7 (affordable and clean energy), 12 (responsible consumption and production) and 13 (climate action) which are related to climate change, our focus is on increasing our own low-carbon and energy efficient production systems, increasing our use of renewable fuels, lowering customer carbon footprints and decreasing CO₂ emissions in our supply chain through e.g. transport optimisation. Focus on contributing to

these UN 2030 SDGs and our circular business model makes us an efficient user of natural resources such as wood and energy, and leads to optimal use of residual product streams.

In line with our Climate Change strategy, we are committed to at least net zero by 2050, and have set interim targets on reducing our Scope 1 and 2 CO₂ emissions per produced tonne of paper by 2030 from our paper mills. To support this, we have set a CO₂ reduction programme that focuses on energy efficiency and a shift towards renewable energy.

As part of our Better Planet 2050 initiative, we are committed to reporting consistent with the TCFD

recommendations, see the TCFD table on page 115. Additionally in 2021, we had our CO₂ emission target validated by the SBTi in line with the objectives of the Paris Agreement and well below 2°C. Our SBTi baseline is 2019 and a respective intensity target reduction of 37.7% by 2030 for all our Scope 1 and 2 CO₂ emissions. The actions we are taking to deliver on our interim CO₂ emission target of 55% specific reduction per tonne of paper produced by 2030 complements our validated SBTi target.

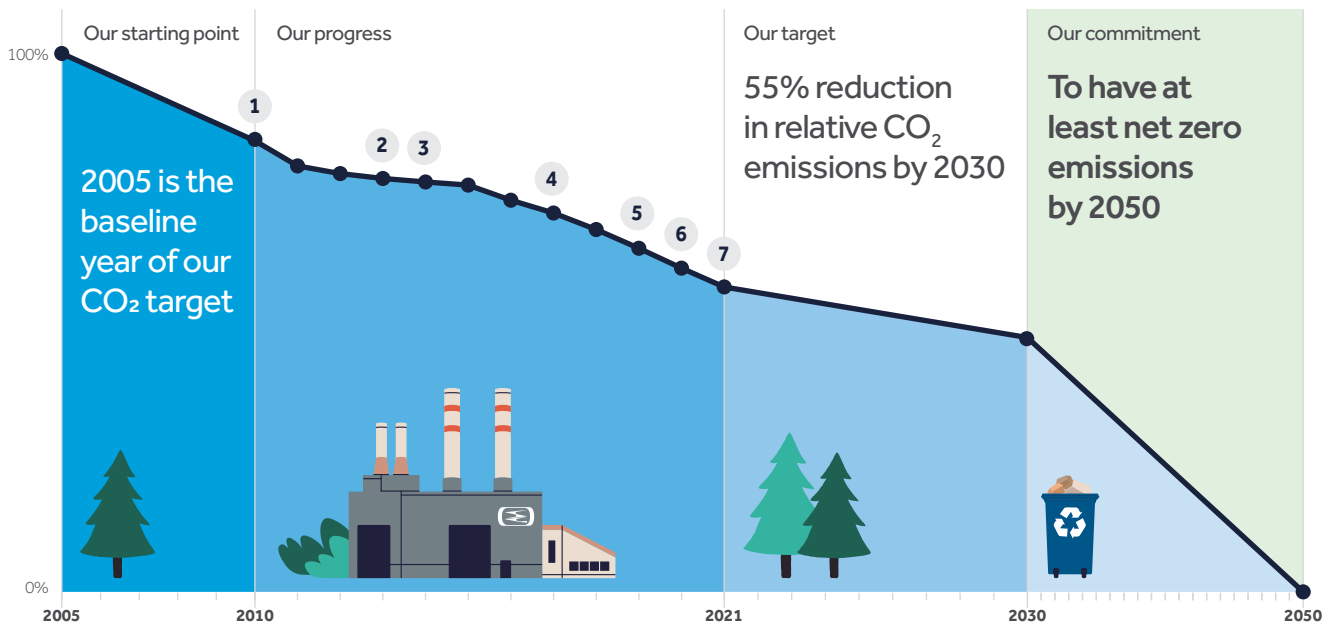
In line with the efficient resource use hierarchy, we only use wood biomass for which no higher value-added purpose exists as fuel and we also use

residual products of wood such as black liquor to generate energy.

The key focus of our energy efficiency investments is to deliver CO₂ emission reductions; however, we support the EU general energy efficiency target with our target to improve our energy efficiency at least by 1% annually in our global paper mill network.

We started to report on EU Taxonomy in our Annual Report (pages 50-51) in 2021. The Taxonomy regulation currently covers the Climate Change Adaptation and Mitigation.

Our Net Zero Roadmap



- 1 Set 2020 target of 20% reduction in relative CO₂ emissions target (2005 baseline).
 - 2 2020 target of 20% reduction achieved with a 21% reduction by the end of 2013.
 - 3 New relative emissions reduction target of 25% reduction set for 2020.
 - 4 2020 target of 25% reduction achieved and more ambitious relative emissions reduction target of 40% by 2030 set.
 - 5 Approval of €134 million new recovery boiler in Nettingsdorf (Austria).
 - 6 Long-term target of at least net zero emissions by 2050 and increased the 2030 emissions reduction target to 55%.
 - 7 SBTi approval received for our CO₂ emission target as being in line with the Paris Agreement and a well below 2°C trajectory. Launched Better Planet 2050 programme.
- Continuous work to understand the scope and new technologies needed to achieve net zero, such as our trial with hydrogen at our Saillat paper mill (France).

Indirect CO₂
emissions reduction

55,000
tonnes
per year

CASE STUDY

Reducing CO₂ at Zülpich – the Logical, Ecological Step

“We wanted to reduce our CO₂ footprint while ensuring our current energy supply. That meant upgrading our lignite-burning boiler. When Smurfit Kappa introduced its Better Planet 2050 targets and committed to having its CO₂ reduction target validated by the SBTi, we knew we needed to do our share,” says Jürgen Groth, Technical Manager, and member of the Zülpich ‘Energy Step 1’ project team.

The current multi-fuel boiler works on 75% lignite, 20% plant rejects, mainly plastic, and 5% biogas from waste-water, to produce half a million tonnes of paper annually. Smurfit Kappa has invested €11.5 million in the ‘Energy Step 1’ project that will help us to significantly reduce CO₂ emissions.

“Naturally, we wanted to replace the lignite with a more sustainable fuel,” says Jürgen, “We also wanted to use more rejects, particularly from other paper mills. It is a waste to pay for reject disposal and incineration elsewhere when we could use it and increase the use of mainly pelletised plastic rejects in our energy mix.”

Lara Hofmann, Personal Assistant to the Zülpich Management Team, points out, “For 150 years the Zülpich mill was supplied by local opencast lignite mines. We have a tradition of a circular approach, with a closed water-loop and use of rejects: more than 90% of our streams are closed. So, this was the next logical, as well as ecological, step.”

Rejects would not be enough, however, and natural gas was used to replace lignite. The power plant was fully operational at the beginning of 2022. The new setup will be less than 60% gas, up to 40% rejects, and around 5-6% biogas.

“Natural gas is currently more expensive than lignite,” says Lara, “But we are future-proofing the plant.”

The reduction in CO₂ from the plant will help Smurfit Kappa contribute to its target to reduce 55% of its CO₂ emissions by 2030. As Lara puts it, “The CO₂ footprint of the paper mill in Zülpich was 220,000 tonnes until the project and we expect it to fall by 55,000 tonnes annually. This means a CO₂ emission reduction by a quarter for the mill and 2% for the entire Smurfit Kappa Group.”

PLANET CONTINUED

Progress in 2021

In December our target to reduce our Scope 1 and 2 emissions was validated by the SBTi. In our approach to tackle climate change, we are using less fossil fuel and emitting less CO₂, promoting renewable sources and closing loops to create circularity in our production process. There are three parts to our CO₂ reduction programme:

- **Investing in efficient energy-generation**
 - Investing in highly efficient CHP systems; and
 - Improving the efficiency of our existing boilers.
- **Investing in efficient energy use**
 - Investing in technologies that reduce energy consumption; and
 - Reengineering our processes and implementing smart energy-efficient solutions.
- **Investing in fossil CO₂ reductions**
 - Where possible, shifting to CO₂ neutral biofuels and other renewable solutions.

Between 2005 and 2021, we achieved a 41.3% reduction of relative CO₂ emissions from our mills. Our global CO₂ emission reduction programme currently covers 100% of our operations with a focus on the paper and board operations that represent 10% of global operations but emit over 80% of our CO₂ emissions.

In 2020, we finalised an evaluation of a suitable CO₂ emission-target for our corrugated operations. Our conclusion is that the current approach to encourage any change is sufficient as the average share of a corrugated site to the Group CO₂ emissions is below 0.5%.

Energy Efficiency

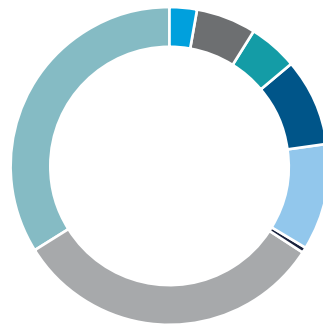
Further progress in energy efficiency is key in achieving our CO₂ emission reduction targets. Since 2005 we have invested €904 million in more efficient energy-generation, technologies that reduce the use of energy and technologies that recover energy. Examples of this are investments in for example CHP generation and heat exchangers. These investments have improved overall energy efficiency in our paper mill system by 20%.

During 2021 Smurfit Kappa Group delivered a 41.3% reduction of relative CO₂ emissions compared with 2005, some of the key actions are listed below:

- The rebuild of PM5 at our Factice mill (France) in 2020 delivered a 22.2% reduction in the mill's CO₂ emissions year-on-year
- The energy efficiency improvements at our Sangüesa mill's (Spain) pulp plant, together with an increased use of biomass improved the mill's CO₂ emissions by 20.2% year-on-year
- Our Nettingsdorf mill (Austria) recovery boiler investment which started in 2020 continued to deliver with further CO₂ emission reductions of 9.0% year-on-year
- Our Zülpich mill (Germany) started its 'Energy Step' project with a rebuild of its multifuel boiler leading to a 8.4% reduction in its CO₂ emissions year-on-year
- Continued work on our PM6 machine in our Los Reyes mill (Mexico) resulted in a 8.2% CO₂ emission reduction year-on-year.

The above mentioned projects are an illustration of the fact that reducing energy usage is both strategic sustainability as well as a business imperative for our paper and board mills.

Our packaging causes only 3% of the carbon footprint in the food product value chain



Key:

- Packaging – 3.0%
- Manufacturing – 6.0%
- Transport – 5.0%
- Retail and Hospitality – 9.0%
- Consumer – 11.0%
- Post-consumer – 0.5%
- Imports Production – 32.0%
- Domestic Ingredients – 34.0%

Source: Data from analysis by WRAP, 2020, UK

Renewable Energy

To reach our CO₂ emission reduction target, we are moving from fossil to renewable fuels. During 2021, our paper mills used 51.8% biofuels, compared with 37.4% in 2005 and 47.7% for all operations.

The Smurfit Kappa Nettingsdorf mill in Austria started its bioboiler in April 2020. Our Smurfit Kappa Piteå mill in Sweden has had its energy production biofuel based since 2018.

As part of our sourcing strategy for grid electricity, we are shifting to CO₂ neutral energy.

Working with our Customers

Using a suite of tools, including Innobook, Pack Expert, Paper to Box, Shelf Viewer and SupplySmart we work with customers to determine their packaging's carbon footprint. These tools provide CO₂ emissions data and other information to optimise solutions.

In 2021, our tools were used 160,000 times. Our InnoTools suite of design software also shows customers the carbon footprint for each packaging unit and tracks its development over time. Our Group CO₂ emission reductions will be reflected in our InnoTools and from there in the footprints of our customers' packaging solutions.

Scope 3 Emissions

We started our work to address all our Scope 3 emissions in our SBTi validation project. Part of this work was an assessment of all of our CO₂ emission sources. This work has given us more insights to our Scope 3 emissions which in line with our estimations for the SBTi make 30-39% of our total emissions. The work done to establish an estimation of the Scope 3 emissions will make the basis for our work to establish a robust reporting system for all relevant Scope 3 emissions. We currently collect data and report on our emissions from transport, where the European operations have been covered and we will gradually cover all countries in the Americas operations. Other Scope 3 emissions will be included in the calculations in the near future, including setting targets for them.

Direct Fuel Consumption, All Operations

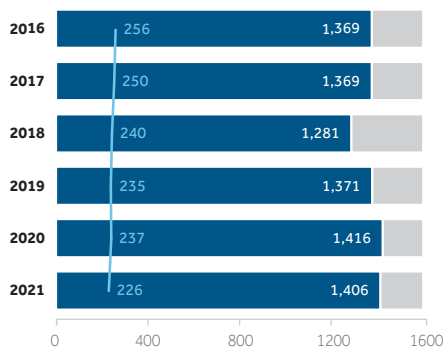


Key:

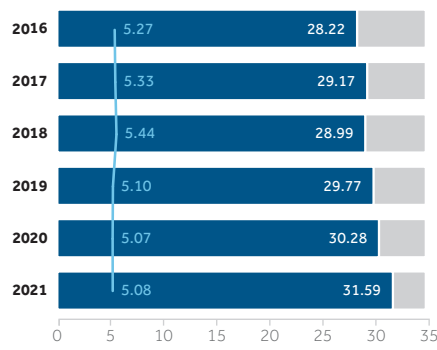
- Natural gas – 44.1%
- Coal – 5.5%
- Other fossil fuels – 2.6%
- Biofuels – 47.8%



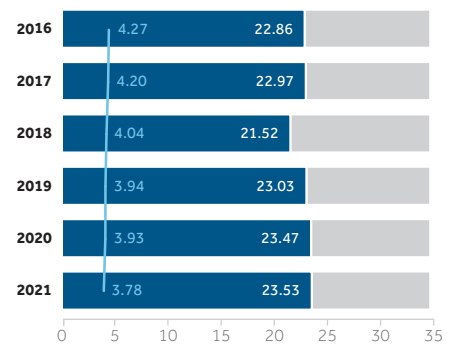
Direct Fossil (Scope 1) CO₂ Emission: European Mills



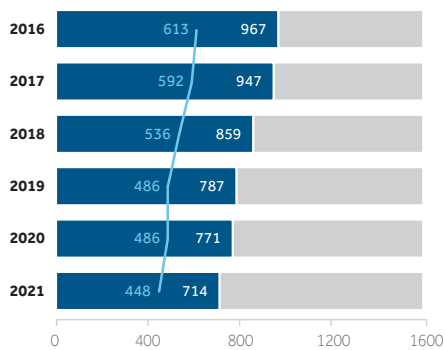
Biofuels: European Mills



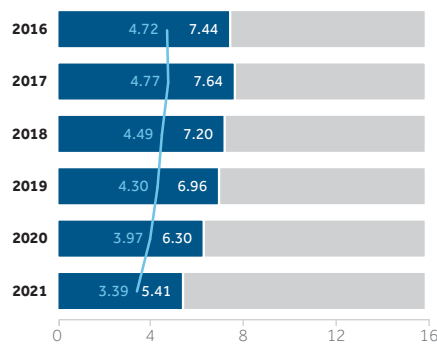
Fossil Fuels: European Mills



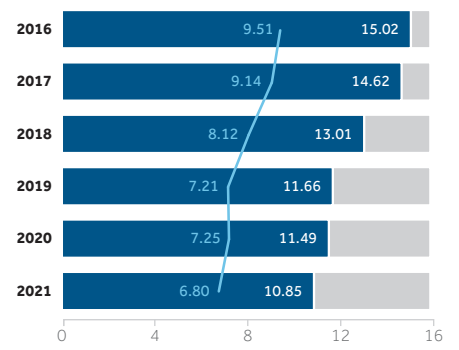
Direct Fossil (Scope 1) CO₂ Emission: The Americas Mills



Biofuels: The Americas Mills



Fossil Fuels: The Americas Mills



Key:

■ Absolute – (ktonnes) ■ Specific – (kg/tonne)

Key:

■ Absolute – (PJ) ■ Specific – (GJ/tonne)

Key:

■ Absolute – (PJ) ■ Specific – (GJ/tonne)

CASE STUDY

Solar Power in Guadalajara

"The COVID-19 pandemic has taught us we are all on the same planet, and if we don't take care of it, it can't take care of us," says Stephany Meza, Project and Environment Coordinator at Smurfit Kappa Mexico. "That's why our solar energy project couldn't be postponed."

Organising a new power supply during a pandemic is not an easy task. However, Mexico is one of the world's best places for solar power. The Distributed Generation Scheme introduced by the government some years ago allows private generation of energy and there are many companies that enable this.

Smurfit Kappa worked to set up 1,693 panels on the roof of our corrugated plant in Guadalajara, Jalisco. This is Smurfit Kappa's second solar project, and the site was chosen as our flagship Mexican solar project which would deliver the best possible environmental benefits, highlighting the possibilities of renewable energy.

"Our clients regularly enquire how we are addressing climate change," says Stephany, "And this is a great example, making us a model and example of what can be done."

The Guadalajara site was also chosen to maximise a return on investment – important given a rise of 4% in electricity costs in Mexico was predicted (which turned out to be 5%). Fortunately, the installation was a success from its operational start in March 2020, producing 900,000 KWh/year: 20% of the plant's total energy requirement. This will reduce indirect CO₂ emissions by 500 tonnes per year, helping towards Smurfit Kappa's CO₂ reduction goals, as well as helping to realise SDG 7: Affordable and Clean Energy.

"The project was very exciting," says Stephany. "We benefitted from excellent teamwork with the plant and Smurfit Kappa engineering teams from Mexico and the Americas, and we gained interest from other firms in the region. It was rewarding to be part of this sustainable development – important for me, my colleagues and the Company."

"It reassured me personally that Smurfit Kappa would keep working on sustainability projects like this, no matter what was happening around us."



Emissions from Transport

We have included emissions in our transport-related supply chain decisions since 2017. Our strategy focuses on three opportunities to decrease transport emissions: maximising efficiency through payload optimisation and reducing empty mileage; developing a good modal mix of road, rail and water transport; and using less carbon-intensive fuel technologies.

For this, data management is essential. Since 2018, we have included transport emission data in logistics decision-making. Therefore our operating companies report transport data annually, and data is aggregated in a central database where an emission calculation is applied based on CO₂ equivalent emission default values according to the Global Logistics Emissions Council by Smart Freight Centre (GLEC) reference model and standards. Since 2021, the transport

emission reporting is validated annually by Smart Freight Center from where we successfully achieved validation certification for 2021 stating that the reporting complies with the GLEC standards. The scope and transport streams in the reporting are described below.

In the reported upstream transport emissions, we include the transport of wood, recovered paper and market pulp, as well as from transporting intermediate products such as reels of paper, corrugated and solid-board sheets from paper mills to converting plants. In 2021 for Europe, these were the equivalent of 373,400 tonnes of CO₂ equivalent. Whilst transport emission calculation for paper reel transport between our own mills and converting plants is accurate, the transport emissions reported also cover a good estimate for emissions when reels of paper are supplied to our corrugated plants by third parties (paper reels supplied from third parties

represents 25% of the total paper reel supply). The estimate for third party suppliers is based on the assumption that the average emission intensity per tonne shipped equals the emission intensity of internal supplies. The assumptions in our transport emission calculations are part of the GLEC validation process.

We also report transport emissions from delivering to customers, representing 118,500 tonnes of CO₂ equivalent.

For 2021, this amounts to a total transport emission of 491,900 tonnes of CO₂ equivalent in Europe.

While corrugated transport is mainly by road over shorter distances, for all remaining transport we operate a modal mix of 4.3% rail, 7.4% water and 88.3% road based transportation. The modal mix is calculated based on shipped volume per mode. Including corrugated transport the total modal

mix is at 3.3% rail, 5.5% water and 91.2% road based transportation.

We started calculating the transport emissions for the Americas in 2019. We have now mapped the transport streams similar to Europe for The Central cluster (Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador and Peru) and Mexico and estimated the transport distances. Given that local transport emission factors are not yet available for these countries, we have applied the GLEC reference emission factors to the Central cluster and Mexican transports. The total transported volume was estimated to be 18 million tonnes. These equal 665,800 tonnes of CO₂ equivalent. This is the second year to calculate transport emissions in this pilot project and the information will become more accurate as we learn from the pilot.



Transport Decarbonisation Journey

Smurfit Kappa is committed to continuously optimise and decarbonize their transportation operation. Therefore a wide range of initiatives are followed with focus on:

- 1. Modal shift:** CO₂ reduction by shifting transport from road to lower emission transport modes. Smurfit Kappa is making use and continuously develops multi-modal transportation leveraging rail, water and wide range of multi modal transport solutions. Access to rail or waterway transportation is part of our logistics infrastructure investments.
- 2. Operational efficiency:** CO₂ reduction by optimising transport operations, increasing load-fill and tonnage per unit, reducing empty mileage, back-loading of trucks to reduce truck movements, supply-chain network optimisation to reducing transport distances between sources and destinations.

- 3. Fuel efficiency:** CO₂ reduction by leveraging new technology, alternative fuels, engine efficiency. As Smurfit Kappa mainly operates transportation with third party transport providers the strategy is to mutually set targets and monitoring progress with our external transport partners.

Scope Statement

The current scope is structured in the following main flows, and transport streams included are outlined in the diagram below.

1. Smurfit Kappa operated transport of wood and wood chips to Paper Mills
2. Transport of recovered paper to Paper Mills
3. Transport of paper reels and solid board sheets from internal Paper Mills to internal or external Corrugated plants
4. Transport of paper reels from external Paper Mills to Corrugated plants
5. Corrugated boxes from Corrugated plants to Smurfit Kappa customers

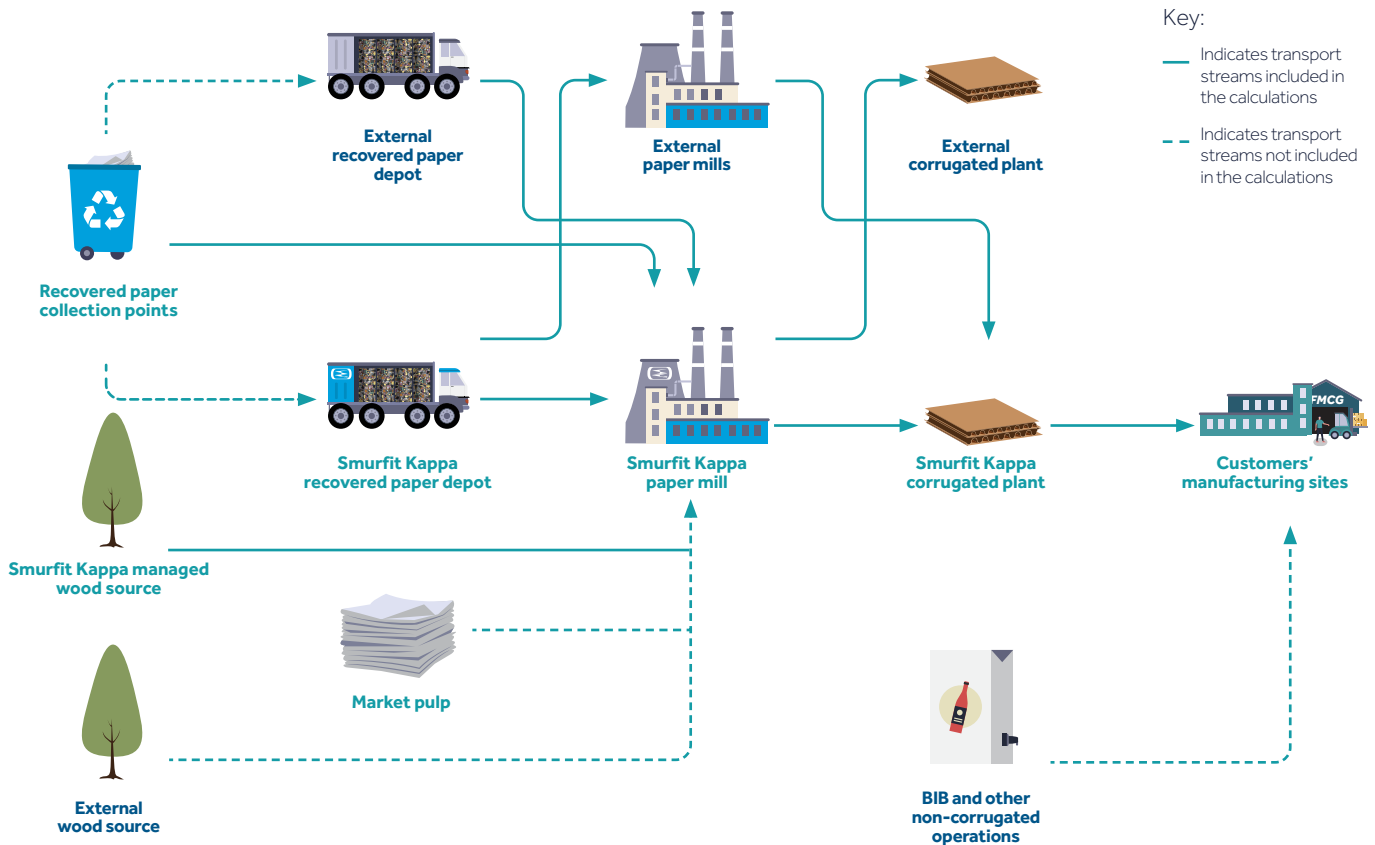
Not in scope for now are the following areas while the intention is to incrementally extend the scope:

- Geography: All other regions beyond Europe are currently not in scope but are in progress to be covered in the next steps
- Goods flows: All material and goods flows beyond the main flows expressed above are out of scope like transport of raw chemicals, starch, or any other commodity supplies. The magnitude of these remaining raw materials will be estimated going forward
- Warehousing: Any external warehousing operation is currently out of scope. The scope for external warehouses is estimated at 1.6 million tonnes of paper transport from paper mills to corrugated plants where external warehouse activity applies. This amounts to 26% of flow 4 and 7% of the entire reported volume in scope

Boundaries

The logistics emission reporting is validated annually by SmartFreight Center for assuring that our reporting complies with the GLEC framework model and requirements. For 2021 the validation process was conducted for the first time in full where we successfully received the validation certification. As part of the validation process a gap analysis is performed in order to incrementally improve the data and reporting maturity. Scope and data maturity is worked continuously to further improve the reporting maturity in line with the requirements from the GLEC framework and to anticipate the future requirements of the forthcoming ISO14083.

Transport Streams



Forest

Natural fibres are our main raw material of which 76% is primarily post-consumer recycled fibres. Producing corrugated packaging from recycled fibres only is not possible. To maintain an optimised recycling system we need fresh fibres, and therefore virgin fibres make up 24% of our raw material supply. We source all our fibrous raw materials sustainably as CoC certified, including our recycled fibres.

Our raw material is renewable, recyclable, recycled and biodegradable. This makes us part of the circular and bioeconomy which we have explained in more depth on pages 32-33. We need virgin fibres for food safety and other technical properties of our packaging solutions. As fibres can only be recycled a limited number of eight times, we also need fresh virgin wood fibres to sustain a healthy fibre recycling-system.

The virgin fibres we use are primarily made of wood for pulp from certified sustainably-managed forests. Smurfit Kappa sustainably manages its own eucalyptus and pine plantations in Colombia which are FSC Certified since 2003, and our forestry operations in Spain and France support small forest owners to manage their forests, certified by FSC and/or PEFC. In Europe, Smurfit Kappa buys most of the virgin fibres from suppliers: Austria, the Baltic countries, France, Germany, Spain and Sweden.

Our Commitment to Sustainable Fibre

Products delivered to our customers must meet the commitments we make in our policy statements (Forestry Policy, Code of Conduct, Social Citizenship).

We source virgin fibres from certifiably well-managed forests, or at least of non-controversial origin, or certified recycled fibres. All materials must be delivered through a third-party-verified CoC certified supply chain. We accept Forest Stewardship Council (FSC), Programme for Endorsement of Forest Certification (PEFC) and Sustainable Forestry Initiative (SFI) certified wood, and the CoC systems at our mills and plants also cover recycled fibre sourcing. We regard these certification schemes as the best available means to conserve forests and their biodiversity. Sustainable Forest Management certification schemes require regular monitoring of the protection of ecosystems and biodiversity.

This is being monitored annually on our sites as part of the forest certification audits and auditing by independent third parties applies to our suppliers through the certified CoC.

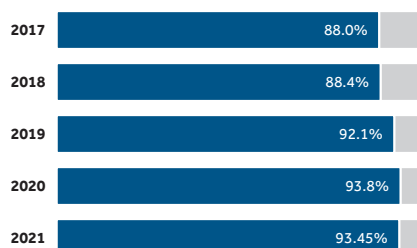
100% of the wood we use to produce virgin paper or pulp comes, at least, from sustainable non-controversial origin. In 2021, 56% of this wood is from sustainably-managed forests certified under the FSC, PEFC and/or SFI schemes and the remaining 44% is from FSC Controlled Wood sources, risk-assessed through our FSC and PEFC CoC system and verified by a third party. 12.4% of the wood we use originates from our own forests and plantations.

Our objective is to increase certified wood supplies. Low availability of certified wood at competitive prices in the regions where we can economically source our wood supplies is limiting the possibility of increasing certified wood supplies.

The administrative effort to achieve certified CoC status means that it is often not economically feasible for small forest holders to certify their forest holdings, further limiting the availability of certified wood supplies. However, efforts to increase FSC certified supplies have started to have positive impacts on the certified wood volumes in Spain, where we support forest owners, all smallholders, in achieving the FSC certification of their forests. Also, in Sweden volumes could be increased through finding better agreements with forest owners in the region.

Annually, Smurfit Kappa's recycling operations handle some 6 million tonnes of recovered paper in Europe, and 1.4 million tonnes in the Americas. We have a network of 20 recycled paper depots in Europe, and 25 in the Americas, using recovered paper from municipalities, retailers, industries, and our own corrugating and converting operations. All recycled fibre we use is certified CoC.

Share of Packaging Products Sold as CoC Certified 2017-2021



Key: Smurfit Kappa Group

Our Certified Raw Materials



Key: Recycled, Virgin, Certified, FSC Controlled wood

CASE STUDY

Team Work for Improved Due Diligence

“How can we consistently ensure sustainable sourcing of wood fibre across a global organisation with over 350 sites?” asks Emilio Ledesma, “We wanted to create a global system that covers both certified CoC and regulatory requirements.”

The answer is the Wood Fibre Risk Assessment platform: a Microsoft SharePoint-based tool to be used globally by all CoC managers and local purchasers. It is the product of an international team from all relevant Smurfit Kappa sites. For instance, Matteo Ferrari (Italian, working in the Netherlands) assessed large centrally-purchased suppliers, whereas Emilio Ledesma (Mexican) and Pierre Dumestre (French) used their extensive experience of the particular requirements of local suppliers.

“First we had to list wood species and origin country for all our paper mills and third-party paper suppliers,” says Matteo, “Together with our ‘Preferred by Nature’ partner organisation we used FSC national risk assessments to update the Smurfit Kappa National Risk Assessment map. Then, using the CoC status of the suppliers and our standardised purchasing-decision flowchart, we divided all centrally-purchased paper suppliers into high, medium or low risk. For high-risk suppliers we worked together to find the right risk mitigation actions.”

The Due Diligence System (DDS) procedure, and use of the Assessment platform, have been implemented through team meetings and training in fibre-origin risk, a process which was third-party verified by ‘Preferred by Nature’. It is part of our DDS, to ensure implementation of Smurfit Kappa’s sustainability policies at local and central levels. This all goes towards supporting SDG 15, ‘Promoting Sustainable use of Ecosystems’, and 12, Responsible Production, as well as increasing regulatory demands as the UK is developing its own sustainable fibre regulation next to the EU Timber Regulation and the US Lacey act that we currently comply with.

The Assessment Platform also promotes fairness. “This means that we don’t stop using uncertified small suppliers – we help them get their certification,” says Pierre. “More than 93% of our packaging is FSC certified, and CoC certification makes it easier for us, but it will take some time for everyone to be CoC certified.”

“It was really a team effort,” says Matteo. Pierre agrees; “We could do it because we are a very structured group, with harmonised nomenclature of materials and information. The Platform and DDS procedure defines a clear supplier status for everyone in Smurfit Kappa.”



Chain of Custody

Smurfit Kappa does not source fibre from high deforestation-risk areas including High Conservation Value areas. Through supply-chain transparency we ensure our sustainability commitments and fibre origins. We use robust monitoring and third-party auditing of our wood and fibre supply chain.

The best practice to deliver our commitments is through CoC certification.

Our complete paper mill system has been CoC certified under FSC and PEFC schemes in Europe since 2010, and under FSC, PEFC and/or SFI schemes in the Americas since

2015. At the end of 2021, 92.8% of our paper was produced as CoC certified, according to FSC, PEFC or SFI standards. The remaining 7.2% are from non-controversial fibres in accordance with FSC Controlled Wood standard, and managed through the mills' CoC certified risk assessment systems.

We have increased our targets for the production of certified CoC paper, produced by our mills and packaging solutions, delivered to customers to 95%, to be reached by 2025 at the latest.

At the end of 2021, we reached 93.45%. This was down slightly on 2020 and was driven predominantly

by low paper availability in what were extremely tight global markets.

The goal of the Smurfit Kappa DDS is to further ensure that all of the related Group sustainability policies are implemented at local and central purchasing level. The new wood fibre risk assessment procedure together with the Wood Fibre Risk Assessment platform facilitates greater team work and standardises local purchasing processes. The implementation of the DDS has been third party verified by 'Preferred by Nature' and the verification process consisted of both overall group and on-site gap assessments. The audit report will be used to further strengthen our

related policies/procedures and the implementation of our sustainable fibre sourcing policy requirements.

Although we source most of our wood from Europe, in 2021, we sourced wood fibres from 39 countries among which nine are classified as potential high-risk countries: Argentina, Belarus, Brazil, Bulgaria, Chile, Colombia, Indonesia, Russia, Slovakia, Slovenia and Ukraine. In Colombia, we only source from our own FSC certified plantations. Fibres sourced from the other eight countries require additional due diligence before purchasing to ensure our sourcing policy requirements are followed.

CoC: Proven Trail for Sustainable Fibres

Transparency throughout the supply chain is vital to delivering our sustainability commitments. Robust monitoring and third-party auditing of our supply chain is ensuring sourced fibre complies with our sustainability principles.

Our manufacturing sites are CoC certified, and over 99% of our fibres are sourced through CoC certified supply chains. Our commitment is to deliver over 95% of our sold products as CoC certified.

Our definition of sustainable forest management comprises optimising the forest's benefits: supplying timber for our business, providing jobs and income for communities and maintaining healthy forest ecosystems that support biodiversity, protect water bodies and supply non-wood forest products.

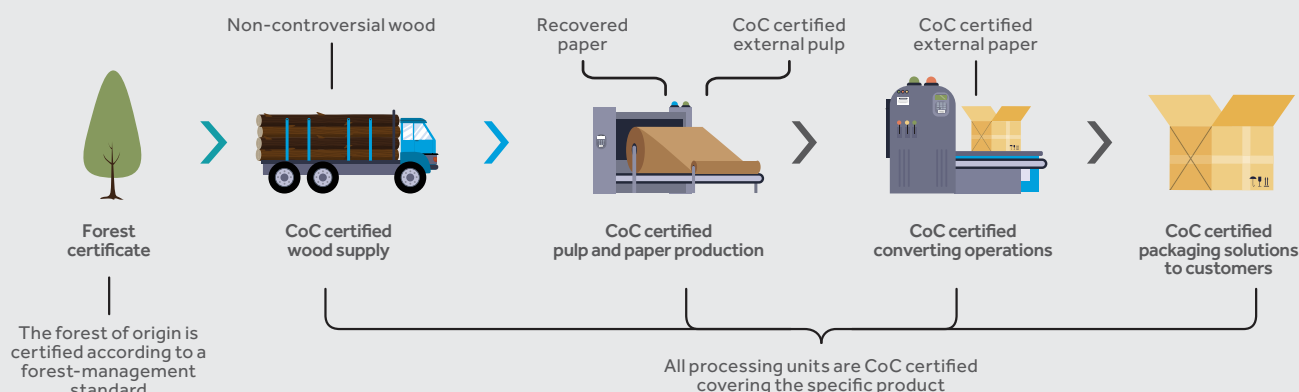
Production of sustainable paper-based packaging starts in the forest. The forest-owners commit to manage their forests and plantations according to sustainable forest management criteria. They obtain a certification after an independent, third-party audit and follow a regular audit scheme where their forest management-practices are being evaluated.

The forest certification related CoC management systems start from the harvest of the trees. Each operation and entity processing the material has its own CoC system which covers storage and use of the material, production and shipping of products, documentation of material and product flows and communication to customers through invoices and delivery notes. In the Smurfit Kappa system, the paper production and converting operations have their own CoC certificates.

Each product carrying a forest certification scheme on-product label carries a licence number that can be further traced back to the supplier, producer and the country of origin of the raw material.

A small amount of fibres used in CoC certified products may come from non-certified forests. Evidence of these 'non-controversial' sources is required to comply with the minimum standard of sustainable forest management. Smurfit Kappa requires this portion to comply with the FSC Controlled Wood standard.

CoC Model



PLANET CONTINUED

Forest and Plantation Management

All of Smurfit Kappa's own forest plantations are based in Colombia, France and Spain. All our plantations are certified, either to FSC or PEFC standards.

Colombia

Almost all the virgin wood fibre our Colombian plants need is supplied by 67,000 ha of certified forests and plantations which we own and manage. We use nature conservation programmes with the best sustainable development principles, promoting responsible use of natural resources along with economic development and social inclusiveness in collaboration with NGOs and other third-party organisations. We also conform to comprehensive legal, technical and environmental regulations, subject to annual review.

Our 67,373 ha of forests and plantations in Colombia include:

- 41,672 ha of commercial plantations, of which 4,966 ha are partnerships with private landowners;
- 22,593 ha of protected natural forest; and
- 3,107 ha for infrastructure.

In our commercial plantations, 57% of the land is pine, 36% eucalyptus, 5% is being replanted and 2% is dedicated to research. Our Colombian forest management programmes have been certified by FSC since 2003.

Biodiversity and Ecosystem Conservation

A third of our Colombian forest land is dedicated to protecting forest sustainability, helping maintain the area's rich biodiversity and preserving watersheds, habitats and ecosystems.

To maintain forest biodiversity and sustainability, our principles for our commercial plantations are to:

- Conserve them, by protecting and promoting species, diversity, sustaining ecosystems, and protecting water sources and habitats;
- Identify appropriate species and practices that increase plantation yields whilst protecting the environment; and
- Develop research programmes to preserve and enhance soil productivity.

Fibres for paper are efficiently-produced on our commercial plantations. We use carefully selected areas for plantations, avoiding valuable ecosystems and protected forest areas.

Protecting and promoting natural habitats is important to our approach, so in Colombia we use our own research centre as well as third-party institutions. Since 2009, we have worked with four local universities – Cauca, Nacional, Valle and Quindío – studying the flora and fauna populations in and around our forests.

Examples include:

- Since 2013, a partnership with the Biology Programme of the Natural Science School of Universidad del Valle has studied the 'diversity of birds, mammals and plants in the natural forests of the forestry nucleus in Sevilla'.
- In 2014, a literature review aimed to inform conservation planning by identifying areas of special biodiversity close to the Company's plantations and natural forests in the Santa Rosa-Pereira core areas.
- During the past five years, studies developed by Smurfit Kappa identified 1,280 species in our forests. This includes 662 trees, 540 birds, 77 mammals, and one amphibian, of which 53 species are threatened. Our plantations and neighbouring protected forests form important wildlife corridors, contributing to species, conservation in the Andean ecosystem, and need careful management.

- Since 1994 we have collaborated with coffee farmers in the regions where we have forest plantations to introduce ecological synergies from coproduction of forest plantations and coffee farming.

We also work with neighbouring communities, engaging local people in our decision-making. This is especially important where indigenous people may have land rights, and livelihoods are often dependent on forests. Smurfit Kappa is a proud member of the communities it operates in, abiding with local laws and striving for best practice in what we do. We respect the local ways of working and when those are in line with the sustainable forest management practices, we support their use.

CO₂ stored in our growing trees

9.26 million tonnes

Forest Growth and Carbon Sequestration

Colombia

Every year the trees in our plantations sequester carbon from the atmosphere and store it in the growing stock.

Our plantations in Colombia have been established on land that has been in low-productivity use. Since the start of our forestry operations in Colombia, we have established sustainably managed tree stock which has increased the CO₂ sequestration capacity and carbon stock to a total current storage of over 9 million tonnes of CO₂ equivalents (eq). In 2021, the biomass on our plantations sequestered in total a little over one million tonnes of CO₂ eq from the atmosphere, a figure similar to the CO₂ eq in the wood we harvested, and stored in total 9.26 million tonnes of CO₂ eq from the atmosphere in our growing trees inventory that remains at this level year on year.

To calculate this, we use a methodology, developed in collaboration with the Ministry of Agriculture and Rural Development (MADR), National Centre of Coffee Research (CENICAFE), and several forestry companies to quantify the growth and carbon sequestration capabilities of commercial pines and eucalyptus species grown under tropical conditions.

Europe

The forested land area in Europe has been in a steady growth since 1950's. The land area has grown during this time by some 30% and between 2005-2015 by 44,000km² (FAO), an equivalent of over 1,500 football fields. Smurfit Kappa owns some 500ha of forest in Europe, and we source a large proportion of our timber used at our virgin paper mills from forest owners whose forest holdings are located in boreal or hemiboreal forests.

Sustainable forest management benefits carbon sequestration and carbon storage in boreal forests. According to a recent study*, the carbon storage in intensively managed boreal forests grows faster than in those that are less managed. The study shows that the carbon sinks in the sustainably managed forests in Nordic Countries grew by 35% during 1990-2017, where as in other, less managed boreal forests it remained about the same. This means that supporting sustainable forest management is a means to mitigate climate change.



*Höberg P. et al. Sustainable boreal forest management – challenges and opportunities for climate change mitigation.

Our forest management activities are independently audited each year and must demonstrate compliance with the 10 FSC principles (including Principle 3 relating to Indigenous peoples' rights) which set out the essential elements of environmentally appropriate, socially beneficial and economically viable forest management. The last such audit was conducted by FSC in July 2021 with no issues identified.

In July 2021, sections of both our commercial and natural forests in Cajibío, Colombia were cut down or burnt by individuals or groups allegedly representing the Misak community. The company reported these actions to local authorities in order to protect the personal safety of our employees, the local community and the forests. There has been no further unlawful activity or damage to the local ecosystem since then. Through our operations in the Cajibío region and our ongoing commitment to the social development of this traditionally agricultural area, we have been firmly established as a part of the local community since we purchased the farms there 52 years ago. These forests have been FSC certified since 2003.

In 2021, there were no substantiated violations reported of the rights of indigenous people.

France and Spain

In Europe, we offer forest management services through our wood supply companies in Spain and France, where we own and manage some 500 ha of forest. In both, we follow local best practice for forest management, as certified by PEFC. Our wood-handling operations are CoC certified to FSC and PEFC standards.

100%
certified raw material
supplied to Cali mill

CASE STUDY

Sustainable Forest Management – A Personal Mission

"We have to take care of the environment because if we don't, in the future there isn't going to be much nature left," says Grimanesa Ramirez, Harvest Supervisor. Grimanesa has been with Smurfit Kappa over 30 years and currently works at our forest plantation in Santa Rosa de Cabal, Colombia, a city on the western slopes of the central Andean mountain range.

Like everyone working in Smurfit Kappa Forestry operations, Grimanesa is trained in sustainable forest management and understands how to protect habitats and ecosystems. She leads a team of thirteen people, ensuring careful felling of full-grown trees, planting new trees, and minimising impact on the surrounding diversity.

All Smurfit Kappa forest plantations in Colombia are FSC Certified; this Colombian plantation supplies our Cali mill with 100% certified raw material. Working with our forest is not just about managing a raw material, everyone understands their role in the value chain and the importance of delivering a CoC certified product – and takes pride in this.

"I have always taught my son that the environment must be protected," says Grimanesa. "I took him to the plantation where I work, and he was so excited! Now, every day he asks me to send pictures of the birds and animals I see and tell him how I am taking care of them. If we don't take care of what we have, then how are we going to do it? We have to be an example and allow children to be a reflection of what we do."

Grimanesa believes in her work and why it is important, commenting "I am providing a service and passing on knowledge to other people, and it's really wonderful to share like that."

Smurfit Kappa mainly uses recycled fibres but will always need new wood from sustainably managed forests. As Grimanesa puts it, "If we don't take care of what we have, then who will do it? We have to set an example for our children."



Water

Using water is critical in the paper-making process. Without water, we cannot produce the paper we need for our packaging solutions.

Smurfit Kappa is mainly a processor of water, as illustrated in the diagram below. Our global operations used 140 million m³ of water in 2021. Almost all of that – 137 million m³ – was used by our 34 paper and board mills and the remainder is used by our 241 other (packaging) operations.

Of the 137 million m³ used by the paper and board mills, 125 million m³ was discharged in good condition and almost 12 million m³ is evaporated in the air and will return as rainfall. We also reuse water several times, after which it is processed in our water treatment facilities and returned to public water bodies. Of the water discharged, 76 million m³ was used for processing and 49 million m³ for cooling.

Water treatment is part of the bioeconomy. We use bacteria to clean the water, and the resultant biogas fuels our on-site CHP plants. The water-cleaning sludges can be used for other water treatment processes, or in agriculture. We also support forests in maintaining nature's water-cycles through promoting certified sustainable forest management. For example, preserving water bodies linked to commercial forests

is an indicator of sustainable forest management, while allocating protected forest land, as we do in Colombia, further supports natural water ecosystems (see Forest section on page 43).

Committed to Sustainable Water Stewardship Assessing Risks Related to Water

Since 2014, we have investigated the environmental impact of our paper and board mills and undertook water risk assessments across all our mills. We first conducted a global risk assessment based on the geolocations of our mills using the Aqueduct and WRF tools and created a water scarcity risk mapping for our sites followed by individual risk assessments at sites. During 2021, we finalised water-risk assessments in all our paper mills. We will continue our programme starting in 2022 with the new acquisitions.

The water-risk assessments process focuses on three main risks – physical risk, including local water scarcity and mill equipment, regulatory risk, and reputational risk. Each assessment comprises a supporting desk

study and an on-site audit of each category, including interviews with key stakeholders. Since 2018, the mills have included these assessments in their ISO 14001:2015 certification risk assessments.

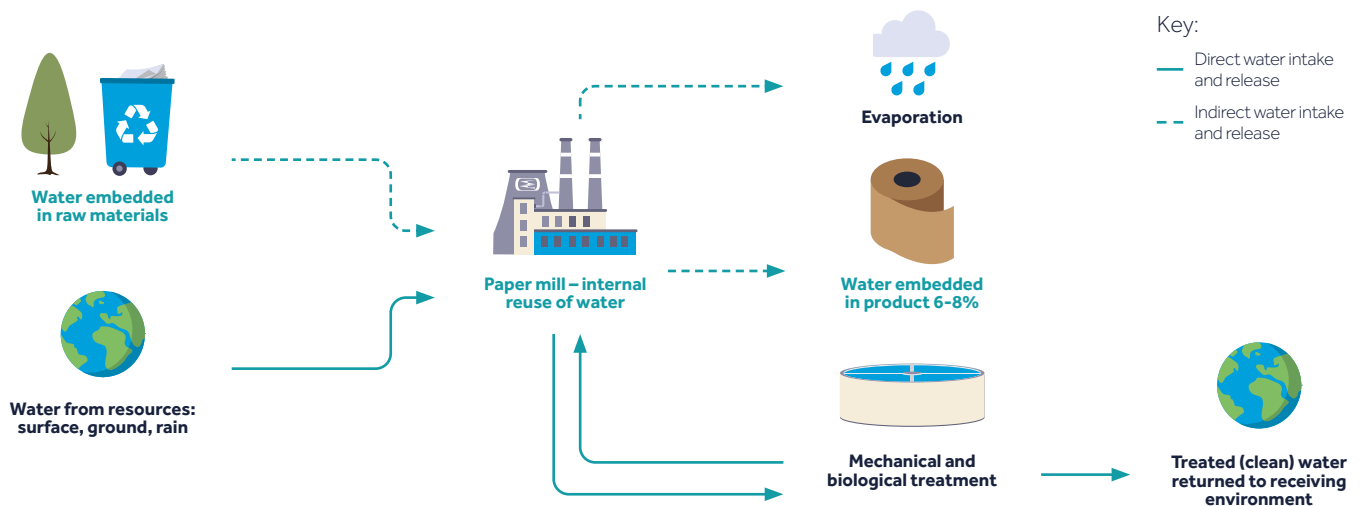
All assessments to date confirmed that our mills' water use has no impact on water availability to neighbouring areas. Only 12% of our paper and board production and just 4% of our water intake takes place in areas of water scarcity. Nevertheless, we always use water sustainably – many of our stakeholders are concerned with local quality and expect good water management practices.

Our products need to meet hygiene standards, and our paper-making technologies require good-quality water. Together with our neighbours and stakeholders we have a common interest in good water stewardship and we will use these findings to build individual site water stewardship strategies. To manage possible changes in our mill environments, the assessments will be repeated every five years.

Since 2018, we are a signatory to the CEO Water Mandate and we are also a member of the CEPI Water Issue Group that is looking into water specific industry issues.

Our paper mills engage with their stakeholders in multiple ways. Six of our paper mills – Forney (USA), Los Reyes and Monterrey (Mexico), Nervión (Spain), Nettingsdorf (Austria) and SSK (UK) – discharge their water to the municipality water treatment system and our Morava mill (Czech Republic) shares its water treatment plant with the local municipality. This collaboration benefits all participants as the water discharge from paper mills helps to balance the nutrition needs for municipality water treatment and thus reduce the need for additional water treatment nutrients needed by the municipality. Depending on location, we participate in water-body management and cross-industry collaboration, for example, our Roermond paper mill (Netherlands) receives the phosphorus it needs for water treatment from a neighbouring baby food plant where it is a by-product of their processes.

Water in the Paper Mill



CASE STUDY

Improving Water Treatment – Good Enough is Never Good Enough

“This takes us to a new level of excellence in how we process water,” says Alvaro Jose Henao Ramos, CEO of Smurfit Kappa Colombia, referring to the €6.3 million sustainable new water treatment facility at the Barranquilla Paper Mill.

This huge two-stage investment shows Smurfit Kappa’s commitment to SDG 6: Clean Water and Sanitation, and to the UN Global Compact CEO Water Mandate, which address the importance of clean water and action on water scarcity. An in-depth assessment in 2017 had already confirmed that the mill’s water use had no material impact on local water availability. “Currently, more than 90% of the water we use is returned to nature in good condition, and the remaining water is transformed into steam or linked to the product during the production process,” Alvaro explains.

However, for Smurfit Kappa there is always room for improvement. “We focus on reducing use, and improving the quality of the water we discharge, going beyond the minimum required by law,” says Alvaro. The new Wastewater Treatment Plant greatly reduces water uptake from the nearby Magdalena River and improves the quality of water returned to it. For example, the COD in the water discharged from the plant will be reduced by 80%, helping towards the company-wide goal of reducing COD by 60% by 2025.

The Barranquilla site produces containerboard from 100% recycled materials. As Alvaro says, “For many years, our operations have been based on a circular-economy model in which we seek to maximise resource efficiency and minimise waste.” The new Wastewater Treatment Plant is no exception. It is a state-of-the-art, self-sustaining anaerobic reactor which will also generate biogas that can be used to help power the mill, reducing the need for external power sources. This helps towards our commitment to net zero emissions by 2050.

Barranquilla is part of an investment programme covering Smurfit Kappa paper mills in Colombia, and which includes upgrading facilities at the Barbosa and Cali paper plants. “Water is a fundamental resource for Smurfit Kappa,” says Alvaro, “and we are happy to see how our investments in water treatment in Colombia leave us with room for growth as well.”

COD water discharge reduction

80%

PLANET CONTINUED

Focus on Better Water Use and Water Quality

For the vast majority of our operations, availability of 'fresh' water is not a concern for the foreseeable future. Nevertheless, we believe that a responsible approach to water is crucial.

As a processor and not a consumer of water, we focus our efforts on further improving the quality of water we discharge, and understanding the risks associated with water availability and use in the areas where we operate. We therefore continually implement best practice in our mills' water treatment. In 2021, over 98% of paper and board was produced at mills with best-practice water treatment systems. This involves decreasing the organic content of process water through anaerobic and aerobic treatments before returning it to public water bodies. Future investment plans include building best practice water treatment for the remaining operations.

Smurfit Kappa strives to continuously improve its water management, with current focus on better water use and improve the quality effluent release. Improved water efficiency in our paper mills means improved production efficiency. Therefore, we monitor closely the opportunities arising from best practices to improve our efficiency. In 2020, we set a new target to reduce water intake at our paper and board mills by 1% annually per produced tonne of paper, making 2021 the first year to report on our progress. Our COD target is a good measurement also in terms, of understanding how our water-efficiency strategy works, as the COD impacts both paper production as well as effluent.

Progress in 2021

In 2021, we made steady progress reducing our relative COD discharge from our paper and board mills. This year the progress is mainly due to our investments and projects in the Americas.

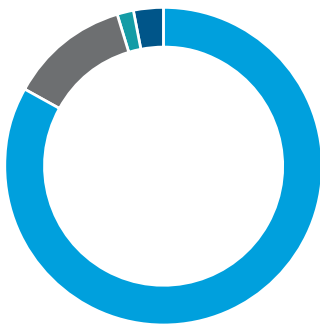
Between 2005 and 2021, the COD content of processed water returned to the environment has decreased by 38.5% relative to production, compared with 38.2% in 2020. The reduction is due to the start of the biological waste water-treatment plant at our Barbosa mill (Colombia). The 2021 result was impacted by an incident in the water treatment plant at our Alfa d'Avignon mill (France) at the end of 2020, which led to temporarily higher COD emissions through 2021.

In 2020, we introduced a new target to reduce our water by 1% annually in our paper and board mill network. The water intake of all our operations was 137 million m³, in comparison with 144 million m³ in 2020. For 2021, compared with 2020, the average water intake by our paper and board mills decreased to 17.6 m³ per tonne of paper produced, from 18.7m³. 2021 is our first year reporting against the target, and we achieved a 6.2% reduction in comparison to

the baseline year 2020. Whilst the specific water intake trend has been decreasing, the key contributors to the target in 2021 were our Cali mill (Colombia) and Parenco mill (the Netherlands).

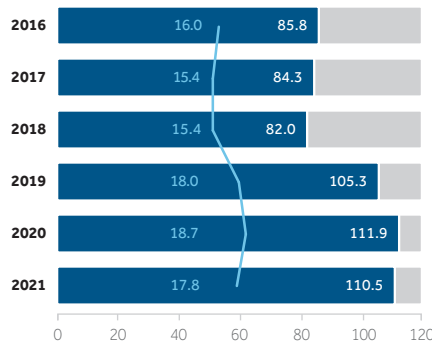
Our paper mills recycle water at a high rate. At the headbox of a paper machine, the pulp consistency is around 1% in the water mix. Initially, 75-125m³ water is used per tonne of paper. We discharge 3-7m³ water – about the same amount as the intake per tonne of paper. Depending on the specific local location, we recycle 10-40 times the amount of water needed in the paper-making process, and reuse this in the paper machine before returning part to our process, after treating it in our water-treatment plants. Our Smurfit Kappa Zülpich (Germany) and Bento (Brazil) mills operate closed water loop systems.

Water Sources – All Operations



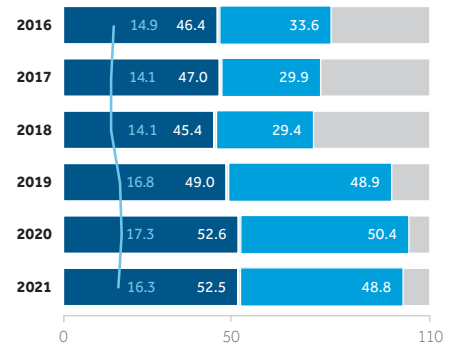
Key:
■ Surface – 83.2%
■ Ground – 12.1%
■ Grid – 2.9%
■ Other – 1.8%

Water Intake: European Mills



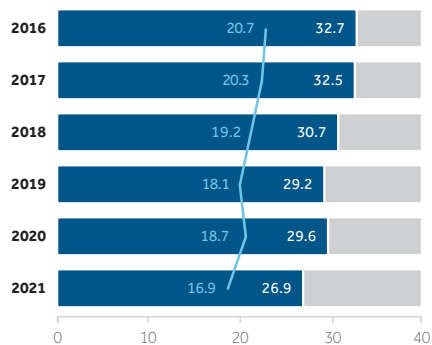
Key:
■ Absolute (Mm³)
— Specific (m³/tonne)

Water Released: European Mills



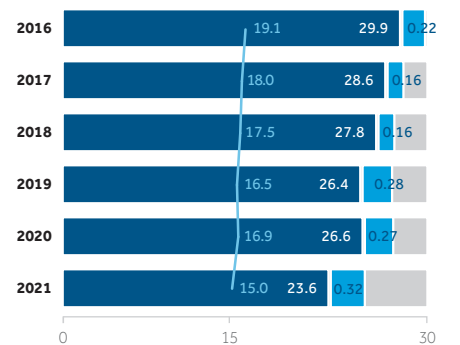
Key:
■ Absolute process (Mm³)
■ Absolute cooling (Mm³)
— Specific (m³/tonne)

Water Intake: The Americas Mills



Key:
■ Absolute (Mm³)
— Specific (m³/tonne)

Water Released: The Americas Mills



Key:
■ Absolute process (Mm³)
■ Absolute cooling (Mm³)
— Specific (m³/tonne)

CASE STUDY

Upgrading water treatment at Eslöv Corrugated

"A huge growth in our production volumes meant that we needed to redesign our water treatment," says Martin Engholm, General Manager at the Eslöv converting plant Sweden.

"The increased amount of printing inks, challenged our old water treatment and we needed to work out a new solution." This is because Eslöv is a conversion plant – as well as corrugating and cutting, it also prints. Print units need to be thoroughly cleaned between print runs to wash out the old colour, using beautiful colours means that our effluent has unwanted sediments that can't be sent to the municipal water treatment plant as it can't handle them. A standard water treatment plant could bring down the COD level, but with the sediment, the plant continued to have an issue.

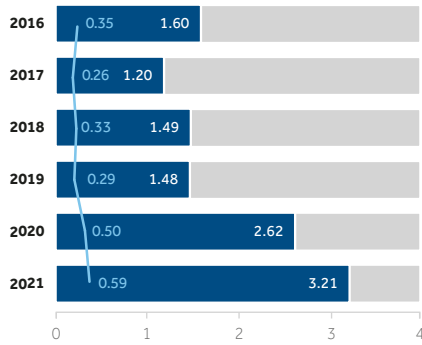
"What we needed," says Emma Hansson, Head of Quality Control, "Was some flocculation!"

Flocculation is a chemical process which removes a sediment from a fluid. The flocculating chemical causes the sediment to clump together, making filtration possible. "After flocculation, the sediment looks like brown popcorn," says Emma. "That's a lot easier to remove than fine particles. We run the factory in three shifts, accumulating the wastewater in a tank and then run the wastewater treatment plant during the day. After flocculation, the water is suitable for the municipal water treatment plant." The sediment will then be sent to a local waste management company for a suitable treatment.

The flocculation plant is surprisingly tiny for a plant of the size of Eslöv – it fits on a small truck. "The pilot plant arrived on a trailer, actually," says Martin. "We tried it for six months and there was a lot of fine tuning needed, but at the end of the trial, the flocculation plant stayed and the trailer was sent away."

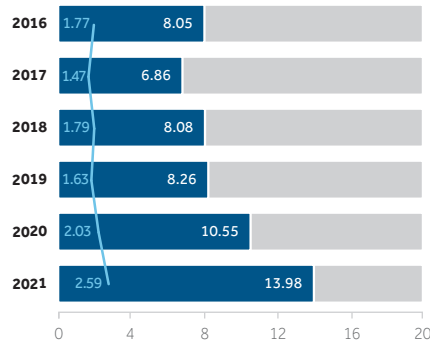
In addition to helping the Eslöv plant with its sediment treatment, the flocculation plant has helped the site to reduce their COD emissions by 25%. The next step the team is thinking about is to return the cleaned water back to the process and increase circulation. "Clean water is one of the UN SDGs, the SDG 6. We are proud that our plant can play a role in the global sustainability movement and delivering to our Group commitments," conclude Martin and Emma.

Process Water Discharges* Biochemical Oxygen Demand (BOD): European Mills



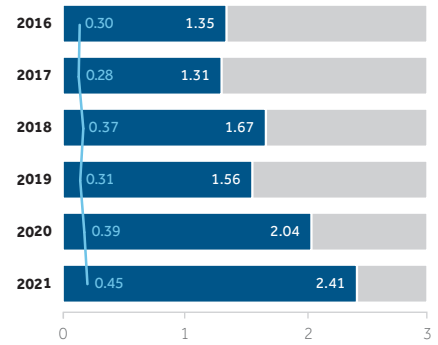
Key: Absolute (ktonnes) Specific (kg/tonne)

Process Water Discharges* Chemical Oxygen Demand (COD): European Mills



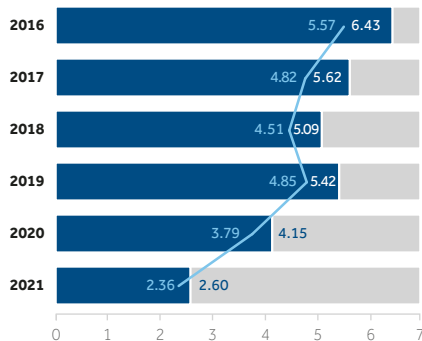
Key: Absolute (ktonnes) Specific (kg/tonne)

Process Water Discharges* Total Suspended Solids (TSS): European Mills



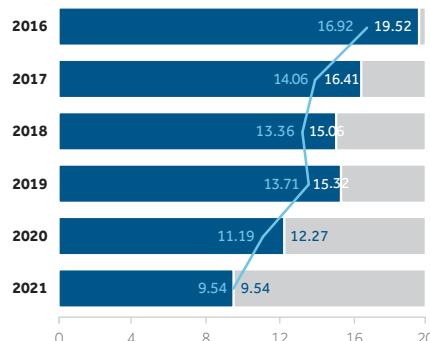
Key: Absolute (ktonnes) Specific (kg/tonne)

Process Water Discharges* BOD: The Americas Mills



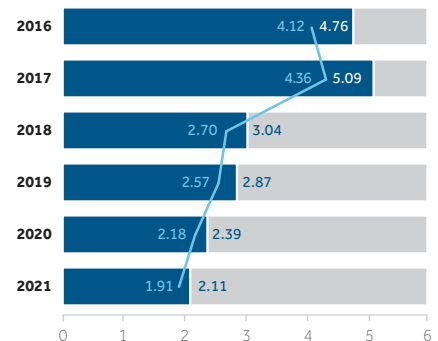
Key: Absolute (ktonnes) Specific (kg/tonne)

Process Water Discharges* COD: The Americas Mills



Key: Absolute (ktonnes) Specific (kg/tonne)

Process Water Discharges* TSS: The Americas Mills



Key: Absolute (ktonnes) Specific (kg/tonne)

* Figures of mills releasing to the environment (mills that released water to external water treatment plants) are not reported.

Waste

Efficiency of material usage is vital for the bioeconomy and circular economy. We continually find alternative ways to reuse, recycle and recover, to end the linear economy where products end their life-cycle at landfill.

Our packaging solutions help prevent waste generated, especially in food products' supply chains by protecting products from damage or spoilage. After use – at the end of its life, any paper-based packaging becomes a valuable raw material – it has the highest recycling rate of all packaging materials, supported by advanced recycling systems. As the graph on page 55 shows, 91.7% of old corrugated packaging is being collected for recycling and the industry is currently able to recycle 82.3% of its weight as recycled fibres.

Smurfit Kappa also participates in its product end-of-life management. Our 45 recycling depots collect recovered paper and paper-based packaging, returning it back to our paper mills, where the fibres will be recycled. It is in our interest that the products will be recycled back to the paper-making process. In addition, our packaging reduces its own impact by being 'right-weighted', using the minimum necessary material, and we are committed to offering sustainable packaging concepts to all our customers. Read more about the Circular Aspects of our Products on page 85.

Our product end-of-life is part of our material sourcing strategy and we collect used boxes to make new boxes from them. Therefore, we can say that we have fully committed to the product end-of-life management; we are a key actor in the circular economy and one of the largest recyclers of paper in Europe, as well as many of our regions in the Americas.

Our key raw material is recycled fibre and, globally, we use 76% of recycled fibres and only 24% virgin. Our other raw materials have been explained in the tables on pages 92-93.

However, whilst our products are recyclable, we generate under 107 kilogrammes of non-hazardous waste per tonne of paper and board, 51% of which is recovered. A large part of the non-hazardous waste we generate is due to the fact that we are a significant player in the paper-recycling business. The recovered paper bales sent to us by recycling companies often contain unwanted plastic, metals, glass, textiles, sand and other non-usable materials; 49% has to be sent to landfill. On average, it takes 1,084 kilogrammes of recovered paper to produce one tonne of paper and board. To reuse as much as possible, we separate unwanted elements using water, some of which is retained by the non-usable materials and can contribute as much as 53% to the weight of subsequent waste.

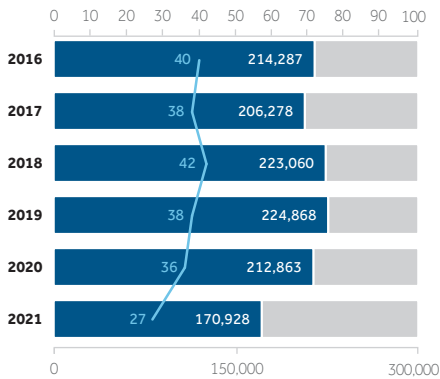
To minimise landfill, we reuse our own waste as far as possible. Currently, approximately 51% is recovered, and we aim to reduce the amount of waste sent to landfill by 30% per tonne of paper by 2025, compared with 2013.

Our converting operations send paper clippings back to our mills, delivering high-quality recycled fibre. Recovered paper from our corrugating and converting operations comes with minimal auxiliary materials, decreasing waste from the recycled fibre pulping process, further evidencing our circular approach to production.

Our production waste streams and collaboration with other industries to use our side streams are described in the diagram on page 55.

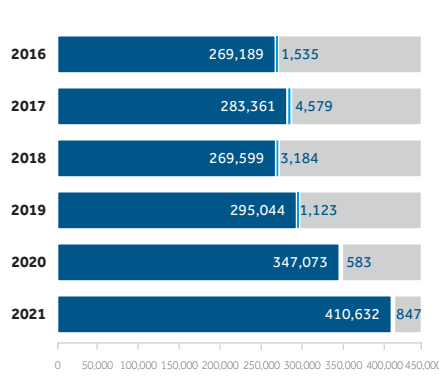
Non-hazardous Wastes

European Mills



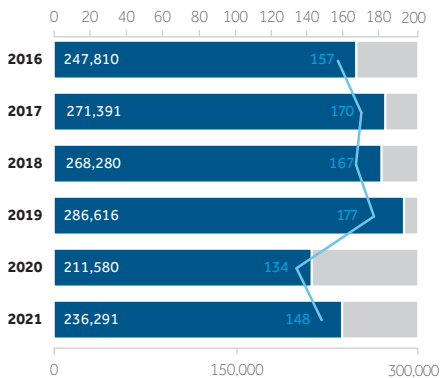
Key:
■ Waste sent to Landfill (tonnes)
— Specific (kg/tonne)

European Mills



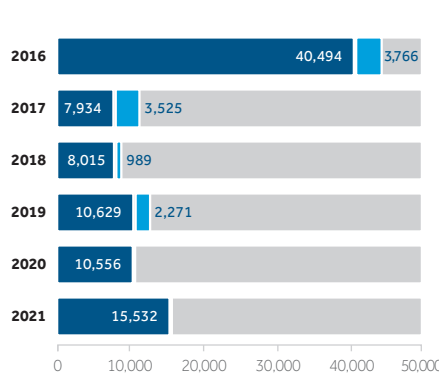
Key:
■ Waste sent to Recovery (tonnes)
■ Waste Sent to Other (tonnes)
■ Waste sent to Landfill (tonnes)

The Americas Mills



Key:
■ Waste sent to Landfill (tonnes)
— Specific (kg/tonne)

The Americas Mills



Key:
■ Waste sent to Recovery (tonnes)
■ Waste Sent to Other (tonnes)
■ Waste sent to Landfill (tonnes)

Reduction of waste to landfill from 2020

90%

CASE STUDY

One Company's Waste is Another Company's Fuel

"We are always focusing on continuous improvement, and finding more sustainable solutions," says Pieter van de Noort, Sourcing Manager of Smurfit Kappa Parenco, The Netherlands.

Smurfit Kappa has always had a commitment to reducing landfill use, and therefore we look for alternative ways to extract the full value from our rejects. Parenco's waste is non-recyclable waste products, mostly plastics, which they receive with their raw materials for pulping. Historically this would have gone to landfill, but the Group has committed to decreasing landfill waste by 30% by 2025. Also, recent legislation has severely restricted landfill use. So far, Parenco has been able to reduce its waste by 90%.

This circularity is possible because of a synergy across Smurfit Kappa sites. When it was acquired in 2018, Parenco was upgraded according to the Smurfit Kappa 'best practice' standard, which included upgrading the pulping detrashing system so it was able to remove metals. The resulting rejects were largely plastic, which can be used as fuel. The mill looked for partners to make this possible, and now part of the rejects are being further processed into pellets called subcoal, that is as versatile as a fuel, and can be easily and safely shipped to customers using, for example, cement and lime kilns, which prefer alternative fuels.

Meanwhile, 200km away from Parenco, the Smurfit Kappa Zülpich mill started a major project to renew its energy production and can also use these plastic rejects as fuel.

"This way the circularity remains within our company, we optimise the usage of our own resources within Smurfit Kappa, and reduce external expenses," says Jan Klijn, Pulp and Energy Manager at Parenco. "Of course, we had to get a permit to transport the waste across the border," says Pieter. "A consultant helped us with that, and now we can start implementation."

"In the future, the majority of the detrashed rejects will go to Zülpich," says Jan, "The rest goes to other parties, such as subcoal production."

"All these measures mean we save money, stop using landfill and provide affordable fuel," continues Jan. "It's the kind of win/win we find with environmental solutions."

Work Against Litter

Litter and the reduction of packaging waste are a global megatrend. Our products are the world's most recycled packaging materials. While the paper industry in Europe generally achieves 72% recycling rates (lower than paper-based packaging's 82.3% recycling rate in the graph on page 55), in the US and in Latin America recycling rates of 68% and 47% have clear upward potential. This, along with our raw material's biodegradability, positions us to work with stakeholders towards litter-free solutions.

Eventually, our packaging returns to the biological cycle – if not to the recycling loop, then it will either be combusted, emitting only the CO₂ that the wood captured while growing, or will degrade naturally with an even smaller environmental footprint than effectively all other packaging solutions.

Work Towards Optimised Use of Raw Materials

We continually collaborate with other industries to use our side streams, including agriculture, cement and pharmaceutical. In 2019, we joined the 4evergreen initiative that aims to support product design for recyclability and calls for the development of optimised collection systems and appropriate recycling infrastructures. The 4evergreen initiative brings together the whole paper-based packaging value chain, from suppliers to packaging customers such as fast moving consumer goods businesses, to find solutions to current and future challenges in collaboration.

Progress in 2021

Our starting point is paper-mill waste sent to landfill. After a Group-wide assessment in 2015, we set a target to reduce this by 30% per tonne of paper by 2025. Most waste is reject material from the recovered paper pulping and screening process. Other sources include sludge from our water-treatment facilities, calcium carbonate residue from lime kilns and ash from biomass boilers.

We made significant progress against our target in 2021, reaching a reduction of 29.2% of waste sent to landfill (23.7% in 2020) from our paper mills per tonne of paper since 2013.

The circular collaboration between SK sites Parenco (the Netherlands) and Zülpich (Germany) was the key contributor to the reduction of waste sent to landfill. With the Zülpich Energy Step project, combined with pelletizing rejects for energy use elsewhere, our Parenco mill was able to reduce its waste sent to landfill by over 90%. As the Zülpich energy project moves ahead, an increasing amount of rejects from Parenco will be sent to Zülpich for energy production, ensuring that we utilise the valoric value of the otherwise useless materials at the end of their life and help our Zülpich paper mill reduce its CO₂ footprint.

In addition, the Nervion mill (Spain) found an outlet for its lime mud that is being sent to recovery at a local cement plant.

Around 1% of our waste is classified as hazardous, with it mostly coming from maintenance, ink sludge from printing and converting operations and per operation, the amount is small. Our hazardous waste assessment showed the key issue is correct waste classification. Due to local and national lack of clarity in hazardous waste definition, we believe it is conservatively reported in this report.

Our hazardous waste figure decreased from 10,000 tonnes in 2020 to 8,800 tonnes in 2021. The annual amount varies due to maintenance, product additives and hazardous waste tanks taking over a year to fill.

CASE STUDY

Corrugated Journey to Zero Landfill (UK)

The West Auckland Corrugated plant has been working to find a recycling or energy recovery alternative to all its waste streams. Only one waste stream was left to find an alternative disposal to landfilling. "This was the most complicated one," says Lily Joynes, the Health, Safety and Environmental Manager at the plant. "Finding a recycling option for our die-cut machine cutting tools was surprisingly challenging, considering that all the materials are easily separable and recyclable," explains Anth Jones the plant's Production Team Leader.

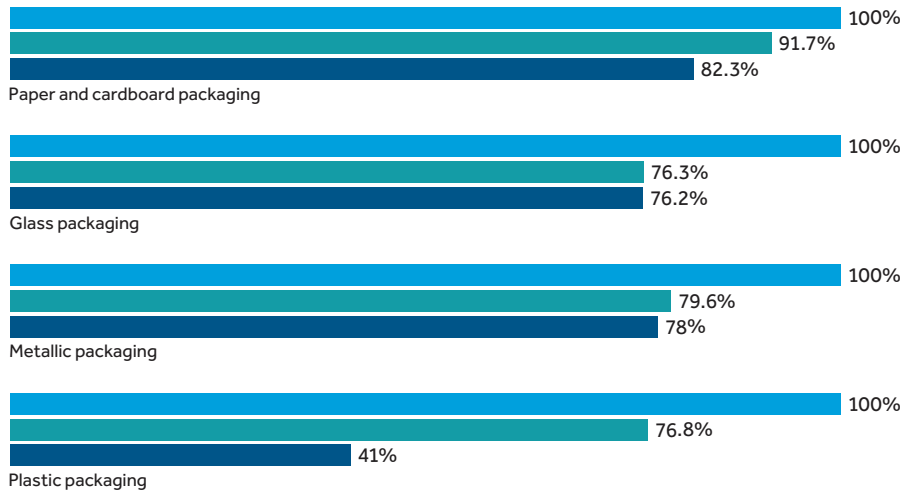
The plant follows the waste hierarchy in its decision-making, and recycling the valuable raw material from the old tools was the ambition of the team. "After a thorough investigation, we found out that none of our current recycling partners could take the material for further processing," says Lily, "however, we found a solution with a timber recycling-plant 20 miles away from our site." Timber-Pack is able to remove the metal cutting parts from the wooden board and further process the wood into chipboard. "The best part is that this chip board can be used, for example, in building kitchen countertops. That shows how valuable the material still is in its second life," says Alex.

Now, West Auckland Corrugated recycles some 15 tonnes of cutting tools annually, leading up to 420 tonnes of avoided waste by 2050. This will also mean 160 tonnes avoided emissions of CO₂ equivalent from landfilling, another important measure.



15 tonnes
of cutting tools recycled annually

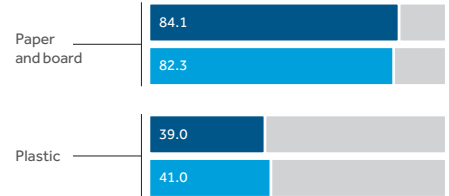
Circularity of Packaging in 27 EU Countries (%) Source: Eurostat



Key: Year 2019

Used Collected Recycled

Packaging Recycling Rate in 27 EU Countries (%)



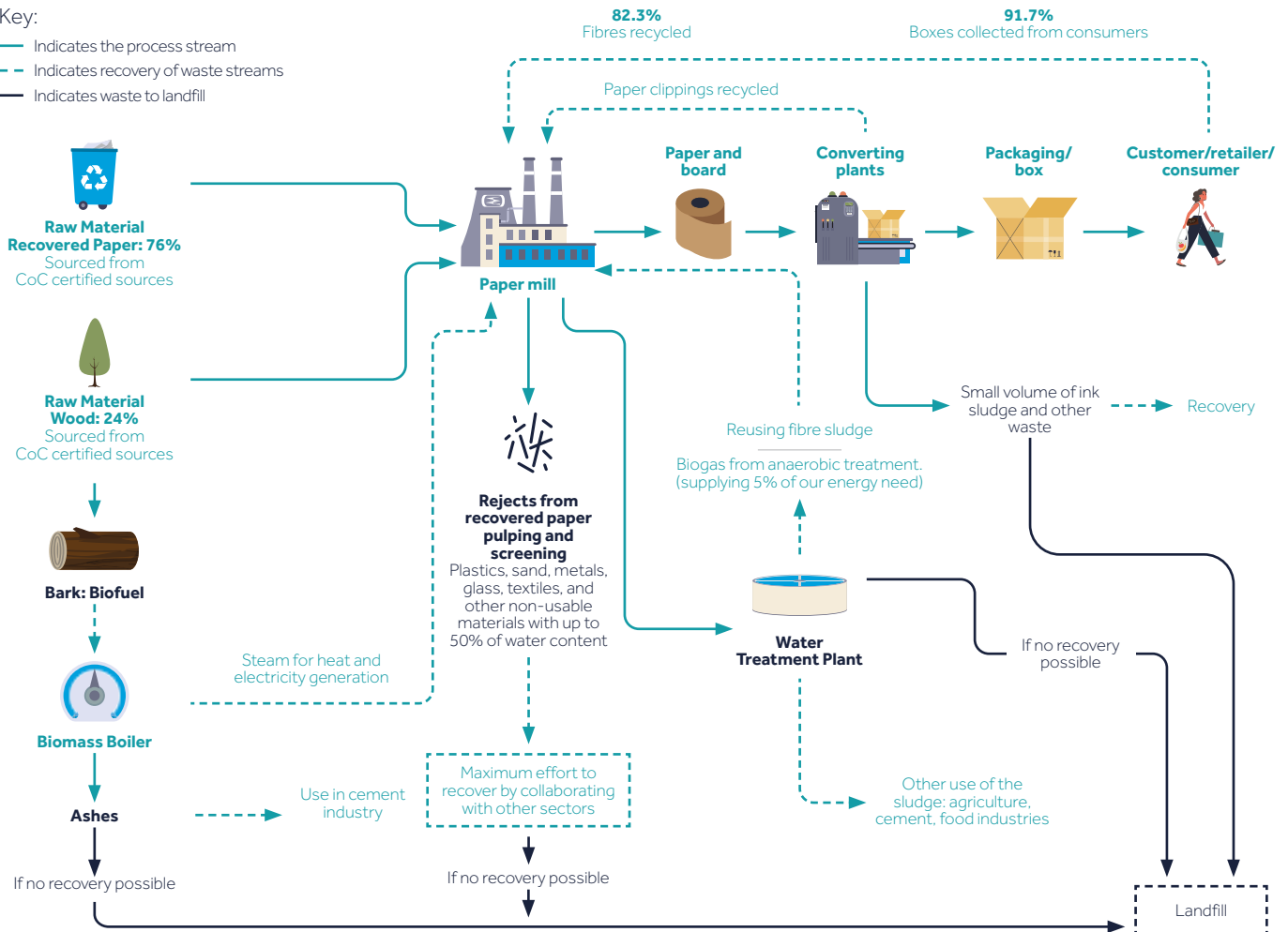
Key:

2014 2019

Production Waste Streams

Key:

- Indicates the process stream
- - - Indicates recovery of waste streams
- Indicates waste to landfill



➔ For complete disclosure of our wastes, please see **pages 92-100**

Empowering people and communities

It is Smurfit Kappa's ambition to be recognised as a globally-admired company, a great place to work and an employer of choice for top talent. These ambitions are not just about our business growth, but based on our understanding that our success is driven by our highly valued and motivated teams, across the world.



Number of employees
48,000

Key Principles

Employees who find meaning at work are happier, more productive, and more engaged. This is well understood by the business community. People who believe their job has meaning and a broader purpose are more likely to work harder, take on challenging or unpopular tasks, and collaborate effectively. We aim to create meaningful work with a broader purpose, while ensuring the health, safety and wellbeing of our people at work, on the journey to and from work and home.

This is why Smurfit Kappa strives to constantly evolve and improve its People Strategy and why our HR pillars: People Development & Talent Management, Employee Experience for Performance, Inclusion, Diversity and Equality and Reward and Recognition have been developed. These are underpinned by the five fundamentals of our HR strategy – Safety and Wellbeing, Legal Framework, Employee Relations, HR Information Systems, and Internal Communications.

In the communities in which we are located, and aligned to the principles of our Foundation, Smurfit Kappa is focused on breaking cycles of poverty and dependence when and where they exist, beginning with the younger generations.

Female representation
Senior Management

31.6%

Social investments in 2021

€4.9m

Global reduction of
the TRIR since 2020

1.7%

Inside this section

56-77

People Values	62
People Strategy	64
Safety and Wellbeing	71
Communities	74



PEOPLE CONTINUED

Building on our adaptation to the extraordinary conditions of the COVID-19 pandemic, in 2021 we worked on managing, mitigating and normalising the disruption to our people and our business.

As we continued to navigate the pandemic, the agility, adaptability and resilience of our people stood out at Smurfit Kappa. They have proved again to be a truly valuable asset in our response to COVID-19 and a critical value-chain partner in supporting and delivering for all our stakeholders, including our communities. We are proud of the continued efforts, contribution and commitment of our people.

To help support our people, we directed our HR strategy and initiatives through four key pillars: Employee Experience for Performance; Inclusion, Diversity and Equality; People Development and Talent Management, and Rewards and Recognition. These pillars were underpinned by our five HR foundations.

Smurfit Kappa unites some 48,000 people around the world, and during the year we also welcomed new colleagues, through various acquisitions. We are a truly diverse organisation, spread across 355 sites in 36 countries, speaking over 21 different languages, across four generations. Our primary objective for all our colleagues is to provide a great place to work.

This involves creating opportunities for work that is productive and delivers a fair income; provides security in the workplace and social protection for families; offers better prospects for personal development and social integration; allows freedom for people to express their concerns; empowers people to organise and participate in the decisions that affect their lives; and ensures equal opportunity for all. Our materiality assessment, which shows that the core areas for us as an employer are being a responsible employer, diversity in the workplace, and health and safety.

We value safety, loyalty, integrity and respect. These values work hard together to create a safe and inclusive culture, with equal opportunities for all, and where inclusion and

adherence to human rights are a priority. We take our responsibilities seriously, and believe that through good corporate citizenship and giving back to our local communities, we can help others build a platform that transforms lives, unlocks opportunities and promotes fairness for everyone.

During 2021, we started to deliver on our Better Planet 2050 sustainability targets. As part of our commitment to driving inclusion, diversity and equality within Smurfit Kappa, we are targeting female representation across the Group of more than 30% over time. We are also committed to our female workforce in management positions across the Group reaching 25% by 2024.

We are committed to building a better tomorrow for our customers, our shareholders, our communities and for all of our employees.

Risks and Opportunities Attracting Talent and Maintaining Diversity

One of the important challenges for Smurfit Kappa is attracting and retaining the talent we need for internal succession planning and leadership continuity. Our talent agenda ensures we have the right people, in the right places and at the right stages of development to fill key positions as they arise.

We aim to attract talented people and help all our employees grow their careers and deliver on their potential. Developing the organisation's culture of talent management is vital to our success; it supports high performance and safeguards the values underpinning our organisation.

To attract the best and most diverse talent available, we continuously improve our recruitment processes, while also introducing a more flexible approach to working arrangements where possible to provide a better work/life balance.

We believe that local hires are imperative for our success, so our succession planning has been designed to take this into account and we have development programmes where employees of potential are given the opportunity to spend one to two years in different teams to encourage cross-team working,

During the year, we progressed our strategic talent management initiatives to focus on open career conversations, helping employees to understand and work towards achieving their career ambitions. This approach to talent management has delivered many leaders for the organisation, who have built and grown successful careers over many years – with an average tenure of 18 years among this cohort.

The Smurfit Kappa Academy is an important source of development for our people and therefore, it was crucially important for us to adapt our people-development programmes in 2021 to an online offering. This ensured that we could continue to upskill and invest in our people right through the pandemic.

Our suite of Global Academy programmes include; Senior Leadership Development, our flagship Open Leadership Development programme in partnership with INSEAD, a Global Manager Programme for new plant, mill and functional managers, and our Advanced Management Development programme, which develops our leaders of the future. We also have our Graduate Workshop, which brings together graduates from across the Group. All of these courses were updated to an online experience in 2021.

In Europe, we also launched a newly designed Graduate Development programme to build the capability of these high potential talents in the region, mirroring a similar programme in The Americas region.

In total 324 employees participated in one of six Smurfit Kappa Academy programmes run in 2021, for a total of 5,623 training hours, or 17.35 hours per person. However, the work done at a Group level is just a snapshot of the work that has been done to support the development of all of our people over the last year. Across the organisation each of our employees received on average 18.7 hours of training.

Therefore we are continuing to build on what we have already achieved within the organisation, while ensuring our recruitment and development processes continue to enhance and support our diverse

community of approximately 48,000 employees, across 36 countries, located in our 355 sites.

In 2021, we revisited our people commitments and as part of that work, we strengthened our People Strategy, by converting those commitments into measurable targets. Over the past year we have worked to deliver against these targets and you can see an update of our commitments and targets on pages 60-61.

Health and Safety Culture

As with many manufacturing companies operating large machinery, complex logistics and regular shift work, health and safety is a value, and our Safety For Life Programme is making great progress. Safety is one of our core values and we believe that operating safely is non-negotiable – no task is so important that it cannot be done safely.

The safety and wellbeing of our teams across the world is at the core of how Smurfit Kappa operates. It is part of our culture and cemented into our organisational values. We strive to ensure that every day, each of our Smurfit Kappa employees return home safely to their family.

Our health and safety culture is founded on authenticity, empowerment and accountability, with our attention focused around our 'six high-risk areas': working at heights, management of contractors, people and vehicles, warehouses and backyards, contact with moving machines, and energy isolation.

We continually strive to improve our approach to Health and Safety, and are firmly of the belief that 'what gets measured gets done'. Therefore, for the first time in May 2021, we took the opportunity to have our annual Health and Safety survey included and integrated into MyVoice, our global employee engagement survey.

Equally, we recognise that it is not just about counting incidents, and increasingly our focus is on the actions we know will reduce the numbers of injuries; for example, having safety conversations, recognising strong safety performance and further controlling potential risks within our operations.

CASE STUDY

Building on Female Engagement

One of Smurfit Kappa's challenges is to attract and engage female talent across our various management levels. Our business traditionally attracts more men and the career paths for our females, especially in management are less clear.

Our approach to gender balance is to listen, learn and act. The needs of women in the workplace may or may not differ from those of their male counterparts, but they often express and weigh them up differently. In 2021, we restructured EveryOne, our inclusion, diversity and equality programme, introducing five focus communities, see graphic on page 67. Each of these communities has a champion among our top executives and an ally network to promote this specific area of the Company culture.

This year our gender community focused some of their activity on International Women's Day (IWD). The official campaign theme for 2021 was 'Choose To Challenge', highlighting that from challenge comes change, and we can all choose to challenge and call out gender bias

and inequality. We can also choose to seek out and celebrate women's achievements to help create a more inclusive world. Various activities took place centrally and at site level, a highlight of which was a Zoom event, which included internationally-renowned speaker Caroline Casey, whose First 500 initiative we support.

Additionally, in November 2021 we hosted a focus group with women from across the group to hear directly about the feedback they had provided as part of our MyVoice survey earlier in the year. They were joined by Non-executive Directors from our Board's Sustainability Committee, the Group CEO, and the Group Vice President of HR.

In an open and honest discussion the group shared the impact that supportive and progressive managers have had on their careers, helping them to find a good work/life balance and enabling them to fulfill their career ambitions. They also shared recommendations to further improve the female experience in Smurfit Kappa. A full report from the session, including the full list of recommendations has been shared with the Group Executive Committee for action.

Responding to our Stakeholders

	What We Believe	What Our Stakeholders Expect from Us	Our Commitments
PEOPLE VALUES	<p>As a business, we strive to create a diverse workplace where everyone has a real sense of belonging and can be their authentic self at work, every day.</p> <p>With a workforce of approximately 48,000 people, fostering diversity, inclusion and equality is important to us.</p> <p>We truly value our diverse mix of people, who bring so much to our organisation.</p>	<p>Our stakeholders expect us to be a unifying force for our 48,000 people across the world. To respect their human rights and those of anyone who comes into contact with our organisation, while providing a fair working environment where everyone feels included and respected.</p>	<p>Commitment #1: By 2024 we strive to have a 25% female representation in management positions across the Group.</p> <p>Commitment #2: Provide a 'Speak Up Service' where our employees and all stakeholders can report wrongdoing or possible wrongdoing in full confidence, ensuring all of the allegations are fully investigated and actioned accordingly, in a timely and professional manner.</p>
PEOPLE STRATEGY	<p>It has always been the ambition of Smurfit Kappa to be recognised as a globally admired company, a great place to work and an employer of choice for top talent. These ambitions are not just based on our business growth, but also on our understanding that our success is driven by our highly valued and motivated team across the world.</p> <p>Our employees are the very centre of our business.</p>	<p>Our stakeholders expect us to be a best-practice organisation in the context of our day-to-day interactions with our employees. We are expected to deliver on our promise to be a great place to work, by delivering top-level Training and Development and Rewards and Recognition programmes.</p> <p>We are also expected to be inclusive to all employees, no matter what their background.</p>	<p>Commitment #1: At least 3% improvement every two years in employee engagement until 2025 (MyVoice surveys as reference).</p> <p>Commitment #2: 100% implementation of all Learning and Development programmes within our Global Smurfit Kappa Academy.</p>
SAFETY AND WELLBEING	<p>As an industrial business operating in 36 countries with around 48,000 employees, we are responsible for the health and safety of a large number of people. At Smurfit Kappa, we believe that health and safety extends from work to home.</p> <p>We engage our employees with policies and procedures to deliver, innovate and produce in a safe environment.</p>	<p>Our stakeholders expect us to provide a safe and healthy working environment, and to promote a health and safety culture that encompasses all who work with us, whether it is directly or indirectly.</p>	<p>Commitment #1: Reduce TRIR by at least 5% annually for the next three years.</p> <p>Commitment #2: Maintain a productive and safe workplace by minimising the risk of accidents, injury and exposure to health hazards for every employee and all sub-contractors, aiming at a zero-accident working environment.</p>
COMMUNITIES	<p>We see ourselves as a 'corporate citizen' in the communities in which we're privileged to operate around the world, and we actively make positive and lasting changes.</p> <p>By supporting local education, we can strengthen communities by creating opportunities for income generation, collaboration and participation. This can in turn also provide a talent pool for our future workforce.</p>	<p>Our impact is not only on the people we work with. Our responsibilities extend beyond, to supporting local economies and livelihoods, especially in remote areas with limited opportunities for work, where we are a significant employer.</p>	<p>Commitment #1: Our Employee Volunteering Programmes will support paid time off for employees to participate in chosen community activities.</p> <p>Commitment #2: Between 2020 and 2025 we will donate over €24 million to support social, environmental and community initiatives (20% more than the previous five years).</p>

Progress Made in 2021

Progress made: In the first reporting year we were able to achieve a 22% female representation in management positions.

Progress made: A Materiality Assessment was developed to define material and reportable cases. 70 cases were identified and fully investigated, with 27 of them substantiated or partially substantiated.

➔ [Read more about our progress on pages 62-63](#)

Progress made: We achieved an improvement of 13 percentage points between the 2017 and 2021 MyVoice surveys in employee engagement.

Progress made: In 2021, all Smurfit Kappa Academy training programmes took place.

➔ [Read more about our progress on pages 64-70](#)

Progress made: We achieved a 1.7% reduction in comparison with 2020. Whilst our year-on-year improvement did not meet our 5% target, we were pleased that we were able to improve on what was a significant step change in performance in 2020 (29% from 2019).

Progress made: In 2021, we had 270 lost time accidents.

➔ [Read more about our progress on pages 71-73](#)

Progress made: Multiple local projects took place during 2021.

Progress made: We invested €4.9 million in social projects in 2021. We are now at €12.6 million level targeting our €24 million level by 2025.

➔ [Read more about our progress on pages 74-77](#)

Delivering for SDGs

As a good corporate citizen, we play our part in society by creating decent work for our 48,000 strong team. We are committed to delivering gender equality, reducing social inequality and ensuring our employees have fair pay and freedom of association.

Smurfit Kappa contributes to the realisation of the following SDGs and targets:



As a responsible employer, we are ensuring a working culture in which every member of our 48,000 strong team feels engaged, appreciated as they are and has a sense of belonging. We help our employees to grow their careers and deliver on their potential and reward them fairly for their contributions.

Smurfit Kappa contributes to the realisation of the following SDGs and targets:



The safety and wellbeing of everybody on our sites is part of our organisational values. Our focus also extends to work place wellbeing and work-life balance.

Smurfit Kappa's approach to safety and wellbeing has a direct impact on the following SDG and targets:



3.3, 3.4., 3.5 and 3.9

As a good corporate citizen, we play our part in society by creating decent work and delivering economic growth in the communities where we are located. We are committed to delivering gender equality and reducing social inequality.

Smurfit Kappa's approach to safety and wellbeing has a direct impact on the following SDG and targets:



8.5 10.2

Scope

- All Smurfit Kappa operations

- All Smurfit Kappa operations

- All Smurfit Kappa operations

- Empowering people in our communities to improve their lives, and where the cycle of poverty, hardship and dependence is an issue we aim to help end this. Applies to the local communities or regions where we are present

People values

We are committed to managing our employees in accordance with our declared values. We recognise that good social citizenship, shown in our interactions with employees, business partners and host communities, is essential to creating a sustainable future.

Smurfit Kappa fosters meritocracy and respect, in a safe and open work environment. In keeping with the United Nations Declaration of Human Rights and the Fundamental Principles and Rights at Work developed by the International Labour Organisation (ILO), the following principles and conditions are maintained in every country in which we have a presence. While our policy is to select the best person for a position, by far the greater proportion of senior operational positions are held by local managers.

Respect

We value the contribution our employees make to our business. Smurfit Kappa is committed to providing a working environment which is safe, respects individuality, is non-discriminatory, appoints and promotes people on suitability, rewards fairly, encourages personal and professional development, and has effective mechanisms of communication.

Smurfit Kappa operates in countries where the indigenous people have rights to their land and culture. For us, this applies to our forestry operations in Colombia. Our respect to indigenous people's rights have been covered in the FSC certified sustainable forest management processes and more of this can be read on pages 46-47. To learn more of the activities and engagement with our communities read Our Open Community booklet at www.smurfitkappa.com/sustainability.

No Discrimination

Smurfit Kappa prohibits discrimination on the grounds of age, disability, faith, gender, sexual orientation or gender identity, marital or civil partnership status, parental responsibilities or race (colour, ethnic or national origin, nationality) or other legally protected status in the countries in which we conduct business. This commitment extends to our own employees and on-site contractors, through

external suppliers and other business partners and to communities near our operations.

Working Fairly

We prohibit child labour. We will not employ anyone under minimum school-leaving age or minimum employment age in any country, and no violations of this were identified in 2021. We do not tolerate forced labour or physical abuse, from ourselves or from our suppliers, contractors, sub-contractors and others with whom we do business. In 2021, 53 of our operations were subjected to SEDEX Members Ethical Trade Audits of which 39 were first-time audits.

Furthermore, we have started Group-wide assessments looking into prohibition of child labour, forced labour, non-discrimination and realisation of freedom of association. The assessments are being completed by the local operations and are due to be finalised by the end of 2022.

Compliant Acquisition Practices

In all of our acquisition processes, due diligence involves examination of the target organisation's policies and practices on human rights, anti-corruption and anti-bribery. We examine their compliance with local, national and international laws, and the day-to-day application of these.

If any serious non-compliance to these policies and practices arises, the acquisition will be reconsidered.

Freedom of Association and Collective Representation

We support all our employees' right to join trade unions, and for representatives to negotiate on their behalf. If freedom of association and collective bargaining are restricted, or employees do not want trade union membership, we work with them to establish mutually acceptable means of representation.

We ensure employee representatives do not suffer any disadvantage or discrimination because of their role. In 2021, we did not have a confirmed case, where either the association or bargaining rights of any individual or group of employees have been denied. Collective agreements, currently applicable in some 90% of the Group's sites and covering 74% of our employees, are the result of either local or national negotiations in the countries concerned.

In many countries, Smurfit Kappa conducts formal employee consultations with local Works Councils (WC). Read more about these councils in our Annual Report 2021 on page 52. Formal employee consultations include topics on working conditions such as Health and Safety, minimum notice periods, and benefits not included in basic employment agreements.

Modern Slavery Act

Smurfit Kappa is subject to the provisions of the UK Modern Slavery Act. Our principles and policies with respect to our employees and suppliers were updated in 2018 to ensure compliance. See also our Annual Report 2021 on page 53.

Ensuring Ethical Behaviour

Every year approximately 6,000 managers and market-facing employees in the business are required to formally confirm adherence to the Competition Law policy in place. In addition, extensive training was carried out over the course of 2020 and 2021. Approximately 10,000 employees completed a competition law compliance e-learning module together with 30+ other seminars and presentations. Finally, we have also been continuing to educate colleagues about our Speak Up service. It was launched in December 2019 in order to guarantee a confidential employee process for issues or matters that align with the three underlying principles of Smurfit Kappa's Code of Conduct;

Compliance with the law, ethical behaviour and a commitment to quality and service.

It allows all stakeholders to easily and confidentially report any issue or instance of wrongdoing, with the service available 24/7/365, guaranteeing user confidentiality and/or anonymity, as well as assurance of non-retaliation.

In the two years since its inception, we are pleased to see increasing awareness of our Speak Up system. Our people understand that it is 'okay' to speak up and that is what we encourage.

Our objective for the system is to ensure that in every site, each of our employees is aware of our Code of Conduct and Speak Up services in order to promote a transparent and trustworthy workplace.

Every case reported to the Speak Up service is carefully processed and analysed against a set of basic criteria, that help us decide if corrective action is required to mitigate further risks.

In 2021, a total of 70 cases were reported via our Speak Up service. All of the cases were fully investigated and resulted in 27 corrective actions or improvements to address substantiated cases. All substantiated cases were evaluated using our formal materiality assessment and it was determined that there were no material cases in 2021.



CASE STUDY

Wellbeing Challenge to Learn to Know New Colleagues

The Smurfit Kappa Recycled Paper operations were divided into clusters geographically. In 2021, two clusters were merged into one. This meant that Recycled Paper Cluster East and Recycled Paper Cluster West became Recycled Paper Cluster (RPC).

Overnight the team doubled in size and challenged the HR team to come up with a way to engage and build team work, all in the middle of a pandemic.

"The idea of walking around Europe was born. At first I thought we were going to walk 1,200 kilometres around Europe," says Valentina Azzi, HR Manager based in our Ania paper mill in Lucca, Italy. "I was relieved to find out it would be a virtual event."

The RPC Wellbeing Challenge became a 30-day virtual journey taking in 15 plants across the new cluster structure. It began in the UK, before heading to the Netherlands, Germany, and the Czech Republic. Then it took in Serbia before coming back to central Europe and virtually walking across Italy, and France, then finishing in Mengibar, Spain.

Participants from different sites throughout the RPC formed teams and had to cover the equivalent of 10,000 steps/day until they had reached the 1,200 kilometres distance either walking, running, or cycling in a challenge, which promoted mental, social, and physical wellbeing.

"Autumn/Winter 2020-2021 was a terrible time everywhere," says Valentina. "We needed this to bring us together, but it wouldn't have been possible if our people were not willing to give it a go and work together."

There were over 90 teams from across the new cluster, comprising of 450 people, who between them completed 192,000,000 steps. Valentina organised A3BC, one of Ania's teams, and was joined by the health and safety coordinator, his assistant, the project manager, and an IT manager.

"There were rewards to keep us going," says Valentina. "Whenever we virtually arrived at a mill, we received a postcard with a history of the mill or its surroundings: I collected 15!"

Afterwards, Valentina created a video "to remind everyone of how great it was to be part of it all," she explained.

"I have a full-time job and three kids – the challenge helped me prioritise my own wellness," says Valentina. "Most of our work is sedentary, but after the challenge we all started doing more exercise and improving nutrition. Lots of people have said how much better they feel now!"

People strategy

Our Vision: To be a globally admired employer of choice, we believe our employees are the beating heart of our business.

We launched our evolved People Strategy for 2020-2023 in 2019 and have continued to build and develop it year-on-year, to ensure the business is set for success from a people perspective.

Our strategy aims to help us attract, retain, reward and unlock people's

talent and potential – developing our people to grow our business and to deliver. It is specifically focused on:

1. Understanding the organisational needs and the business strategy
2. Identifying the HR strategy and people priorities required to execute the business strategy

3. Defining the HR Roadmap to ensure we have the 'human capital' to address business challenges and deliver on the strategy
4. Ensuring HR services and capabilities are in place for the current and future needs of the business

Our people strategy is based on four key pillars:

- People Development and Talent Management;
- Employee Experience for Performance;
- Inclusion, Diversity and Equality; and
- Rewards and Recognition.

Our People Strategy 2020-2023



Employee Experience for Performance

Our Ambition: To create a continuous two-way dialogue, to ensure our people understand our strategy and the role they play in its delivery and to inspire them to perform at their best every day.

See [page 65](#) for more details



Inclusion, Diversity and Equality

Our Ambition: To create an inclusive workplace where each one of us feels included, supported and respected in our daily work.

See [pages 66-68](#) for more details



People Development and Talent Management

Our Ambition: To help our people grow their careers and deliver on their potential, so we can realise our ambition for them and the organisation, as we move forward.

See [page 68](#) for more details



Rewards and Recognition

Our Ambition: We aim to attract, retain and recognise our employees, through competitive work practices. Making sure that people are not just appropriately rewarded from a monetary perspective, but also see their achievements recognised and valued in the workplace.

See [pages 69-70](#) for more details

Five Foundations of our HR Strategy

Safety and Wellbeing

Legal Framework

Employee Relations

HR Information Systems

Internal Communications

See more in our HR section – [pages 56-77](#)

Underpinning our four strategic pillars are the five foundations of our HR strategy; Safety and Wellbeing, Legal Framework, Employee Relations, HR Information Systems and Internal Communications.

We focus on these five fundamentals to ensure the health and wellbeing of our people, the reliability of our information, the integrity of our organisation and to ensure we communicate with all our colleagues in a consistent and timely manner. These provide us with an approach and way of working, behind which the entire HR organisation is aligned.

For example, at Smurfit Kappa, every relevant meeting begins with a discussion on Health and Safety.

Employee Experience for Performance

Our focus: To stay connected to our people to ensure they feel safe, supported and part of a strong global Smurfit Kappa community. We also aim to ensure all communications are delivered with a clear voice, at every level of our organisation, while providing the opportunity for open two-way dialogue and employee feedback.

We are a diverse team in the context of background and life experience, but also in terms of longevity of service. We are proud so many employees choose to stay with us for most, if not all, of their careers. Almost 46% of our workforce have a tenure exceeding 11 years, which provides a great mix of experience across our workforce.

It is our belief that the people who commit to the organisation, along with everyone who joins us on their career journey, deserve a working life full of moments that matter, from the day they are hired, to the time they leave the organisation or when they choose to retire.

Progress in 2021

As the pandemic entered its second year, we continued our work around employee engagement and communications. Our emphasis was on ensuring our people continued to feel supported, recognised and valued for the role they played during 2021 in our organisation's overall performance and success.

Our COVID-19 communications continued, led from the top by our Group and Regional Executive

Committees. We also worked to instil a sense of pride, and help employees to recognise the crucial role they were, and are still, playing in keeping the world's supply chains moving. The work they were doing every day was ensuring that vital food, sanitation and medical supplies, so important in the fight against COVID-19, arrived safely and on time in the many communities where we operate.

To continue to measure employee sentiment and engage with our teams, we also hosted our third global engagement survey, MyVoice 2021 took place from 6 to 25 May and was our first 100% digital survey, attracting our biggest number of participants ever. It provided a direct feedback opportunity for all employees, with almost 42,000 comments captured and reviewed demonstrating just how much our people want to contribute and to be heard.

However, the most welcome advance since our last full global survey in 2017 was the 13-percentage point growth in our overall engagement score, which has brought us ahead of the external industrial-sector average. This also included an increase of 11-percentage points among our 'highly engaged' employees.

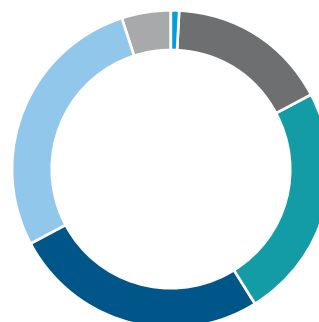
We also saw very strong engagement levels among our top-level executives and leaders of over 95%, with managers reporting levels in the region of 75%.

Additionally, we did not see any substantial differences in engagement levels between gender and age groups, which endorses our approach of focusing on all of our diverse talent across the business.

The results also delivered strong increases of between 10 and 18% on all aspects of the employee experience, which includes key areas such as Leadership (+11%), the Company (+16%), Infrastructure (+18%), Talent & Development (+11%) and Recognition (+18%). Health & Safety and ongoing COVID-19 support were rated among our top strengths, particularly important to us with the global pandemic still present.

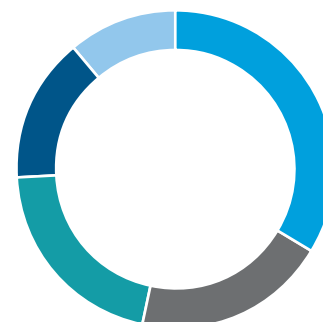
The results from the survey were shared across our regions, countries and sites. In the last quarter of 2021 our teams have been considering what they have learned and the

Employee by Age Group



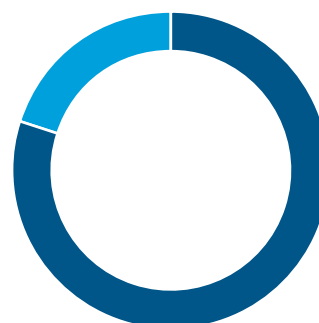
Key:
■ <20 – 1%
■ 21-30 – 17%
■ 31-40 – 25%
■ 41-50 – 27%
■ 51-60 – 26%
■ >60 – 5%

Length of Service



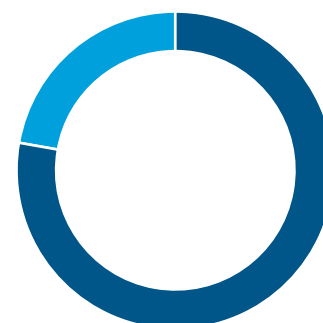
Key:
■ <5 yrs – 33.7%
■ 5 to 10 yrs – 20.2%
■ 11 to 20 yrs – 20.7%
■ 21 to 30 yrs – 14.7%
■ +30 yrs – 10.6%

Total Employees by Gender



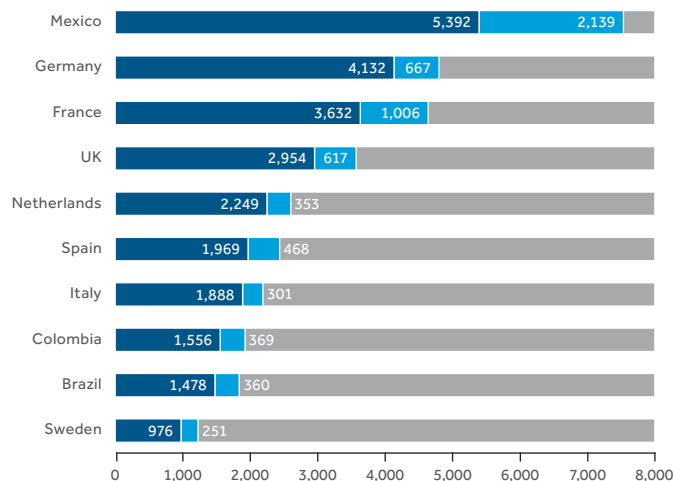
Key:
■ Male – 80%
■ Female – 20%

Management by Gender



Key:
■ Male – 78%
■ Female – 22%

Top 10 Countries, Total Employees by Gender



Key:
■ Male
■ Female

CASE STUDY

Free To Be Me

"I wanted everyone to have the same support I've had at Smurfit Kappa," says Lilia Nahon, Human Resources Director at Smurfit Kappa Mexico, "Knowing you have allies and bringing all your experience into your work is a huge company resource. However, our biggest challenge to deliver this was where to start – Pride month was coming up so we used it as our launch platform."

We began our Pride celebrations by creating a suite of materials all focused on our theme of 'Free to be Me'. These materials included LGBTQ+ definitions, banners, posters, Instagram frames and posts to be used on social media.

"Then we did three virtual coffee-talks – I absolutely loved these," added Lilia. "400 people heard about LGBTQ+ employees' lives, including our first trans contributor, who spoke movingly on how being treated with dignity at work changed her life."

"400 is the largest attendance we've had for any event," says Stefano Gambarotta, European Talent & Leadership Development Manager. "And it gathered momentum – people thanking our guests, and telling their own stories, plus those of their friends, children and family." "These unheard stories are important," says Lilia, "We learn so much through empathy and understanding."

"LGBTQ+ & Allies" is one of the communities within our EveryOne, inclusion, diversity and equality programme. It is our aspiration to create a global workplace where everyone is equal, belongs and thrives regardless of sexual orientation, gender identity or expression. This includes equality and freedom from discovery for people unable or unwilling to be 'out' as LGBTQ+.

"Smurfit Kappa is in many countries with different cultures," says Stefano. "We are only at the beginning of our journey, but hope that our events have opened channels for conversation, and will attract and retain people from all communities, who align with our company values. If we don't accept and nurture them, we lose them, or part of them."

This company-wide message has the support of our senior leadership team around the world including Tony Smurfit, Sharon Whitehead and LGBTQ+ sponsor Edwin Goffard. Smurfit Kappa is a signatory to the Amsterdam Declaration, guaranteeing equal rights to everyone. Smurfit Kappa also partnered with Accenture to create a global call to raise awareness and empower the many supporters of the LGBTQ+ community within the organisation.

"It's wonderful to be part of something which can change people's lives," says Lilia.

Free to be me



LGBTQ+ virtual coffee talks
400
participants



actions needed to address any issues raised, or to cement the engagement gains we have seen. Over the coming months these plans will be collected and reviewed centrally, so progress can be monitored and measured.

In February 2021, we hosted our first global virtual leadership conference. It brought together over 500 of our leadership teams from across the organisation, providing us with the opportunity to build deep connections and issue a compelling call around our key theme of Creating Our Future, Together.

Our hybrid and agile ways of working also continued to evolve, with our Smurfit Kappa MyWork initiative. This is allowing us to take forward the efficient ways of working we discovered during the pandemic, while we continued throughout the year to invest in the collaboration tools and technology to help our people be successful and deliver.

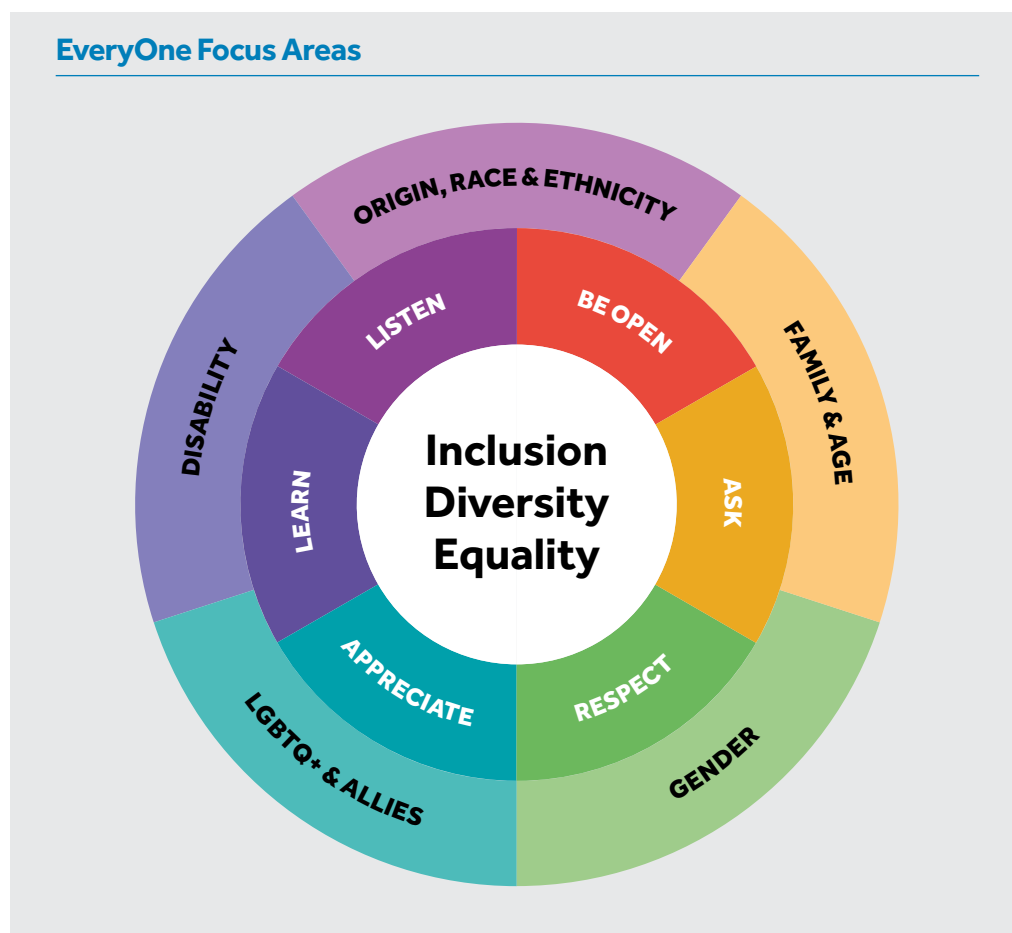
As part of our target to improve our engagement levels by 3% biennially, we have focused efforts in interacting with our employees as frequently as possible to gain insight into the things that matter most to them at Smurfit Kappa. This way we want to ensure that we are continuing on a journey to be a globally admired employer of choice.

One of our priorities in 2021 has been to prepare a new Group-wide HRIS system for Smurfit Kappa. We are designing a process to enhance our overall employee experience that will empower our managers to manage and plan for performance, talent, compensation, engagement and learning. It will also give our employees autonomy over their working experience, enabling them to shape their employment experience no matter where they are in their career journey.

Inclusion, Diversity and Equality

Our Ambition: To create an inclusive workplace where each one of us feels included, supported and respected in our daily work. We truly value the diversity of our 48,000 employees who bring so much to our organisation in terms of culture, perspective, leadership and innovative thinking.

Embracing and celebrating these differences is a core component of our EveryOne programme. We



have continued to advance our commitment to nurturing an inclusive culture, where all employees can thrive and contribute to our success.

We are committed to promoting equality of opportunity for all employees and those yet to join the Smurfit Kappa family. It is our commitment not to discriminate against colleagues or candidates on the basis of age, disability, faith, gender, sexual orientation or gender identity, marital or civil partnership, parental responsibilities or race (colour, ethnic or national origin, nationality).

With our lived values of safety, loyalty, integrity and respect – we strive to create an inclusive work environment where all individuals can simply, be themselves and contribute, free from discrimination or harassment, and where all decisions are based on merit. It is our commitment not to discriminate against colleagues or candidates on the basis of age, disability, faith, gender, sexual orientation or gender identity, marital or civil partnership, parental

responsibilities or race (colour, ethnic or national origin, nationality). Embracing and celebrating these differences is a core component of our EveryOne, Inclusion, Diversity & Equality programme.

Progress in 2021

Over the past year we have evolved our EveryOne programme, to include five new diverse community groups including; Disability, Family & Age, Gender, LGBTQ+ & Allies and Origin, Race & Ethnicity. These communities were chosen, as they reflect the life-stages and the diversity of our employees.

In addition, our six inclusive behaviours to promote inclusion in our daily interactions with colleagues have remained the same and are as relevant today, as when they were first developed back in 2018.

Regular performance and career-development reviews are part of our employee ambition. All managers are encouraged to have performance reviews annually in a structured way, for which we provide training.

These discussions are two-way and their ambition is to allow both personal and team-development that supports the sense of belonging and engagement to Smurfit Kappa. As our HR data management system is currently being developed, we can't as yet, provide the full statistics for these reviews.

To help deliver on this agenda, we have been making progress by forming key strategic alliances. During the year, we continued our work with our strategic Inclusion, Diversity and Equality partners, such as The Valuable 500, a global CEO community revolutionising disability inclusion through business leadership and opportunity. We have also recently partnered with the Employers Network for Equality and Inclusion (ENEI), which is a leading global-employer network promoting equality and inclusion in the workplace.

We continue to make progress in the area of gender diversity within our organisation. While female employee representation in our total workforce

PEOPLE CONTINUED

was 20% in 2021, a 1% increase over 2020, our manager population and Executive Committee female representation increased. At Board level, female representation is now at 33.3%, up from 23% in 2017, with our Group Executive Committee at 30.8%, up from 0% in 2017, demonstrating progress on our journey to gender-equality.

We are aiming to ensure that female gender representation across the Group is above 30% over time, with at least 25% of females holding management positions across the Group by 2024.

We are supporting the 30% Club, which is a global campaign led by company Chairs and CEOs who are committed to taking action to increase gender diversity at Board and senior management levels. All of these partnerships are elements of the next stage of our EveryOne programme, which we updated in January 2022.

During the year, across Smurfit Kappa, we celebrated a series of events, which have now become highlights on our annual Inclusion, Diversity and Equality calendar. Two such events were International Women's Day (March) and International Pride Day (June) in 2021. Celebrating these events internally helps us raise awareness of our equality programmes, while

educating and inspiring everyone to focus and participate with our wider inclusion and diversity agenda.

People Development and Talent Management

Further supporting and developing the culture and practice of talent management in the organisation is core to our success and we recognise it is what will guarantee high performance and the continuation of the values and culture which underpin our organisation. Additionally, focusing on talent by having the right succession plans in place, will ensure we can continue to fill key operational and strategic positions. This will help us deliver the right people, with the right skill set, for our various roles as they arise, in order to ensure our ongoing success.

This approach to talent management has delivered many leaders for the organisation. They have built and grown their careers over many years, with an average tenure of 18 years among this Leadership cohort. A significant number of them joined us straight from university and have built their careers through a mix of internal and external learning and development programmes, as well as real-life and on-the-job training.

We believe it is part of our role to ensure that no matter who joins our organisation, at whatever stage

in their career, our learning and development programmes will equip them with skills and experiences that will be applicable long into the future. This focus on training is supported by ongoing performance dialogue and 360 degree feedback for our senior teams. All aimed at supporting their work and personal lives, both within and outside of Smurfit Kappa.

Progress in 2021

During the year, our approach to our learning and development programmes in the Smurfit Kappa Academy had to change from our usual in-person training to online development. We developed and led a number of online modules in virtual classrooms across the globe for our key programmes including; the 'Leading Self' module from our Advanced Management Development (AMD) programme, while we also completed a virtual Graduate workshop in the Americas. In addition, we created and delivered a virtual learning event for our cohort of leaders who had attended our Open Leadership programme with INSEAD, and across our global business, countries innovated at a local level to adapt and carry on with their learning events.

We also created a blended (online and in person) Smurfit Kappa Academy programme of events for 2021. The programmes we designed,

continued to have a strong focus on building networks and connections with colleagues and maintained and enhanced the learning objectives of our key programmes.

Our suite of Global Academy programmes include; Senior Leadership Development, our flagship Open Leadership Development programme in partnership with INSEAD, a Global Manager Programme for new plant, mill and functional managers and our Advanced Management Development programme, which develops our leaders of the future. We also have our Graduate Workshop, which brings together graduates from across the group.

In Europe, we also launched a newly designed Graduate Development programme to build the capability of these high potential talents in the region, mirroring a similar programme in The Americas region.

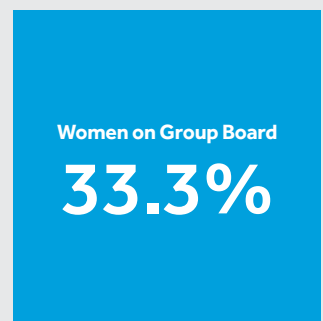
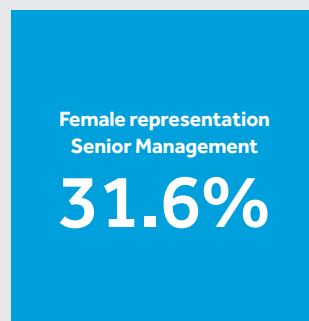
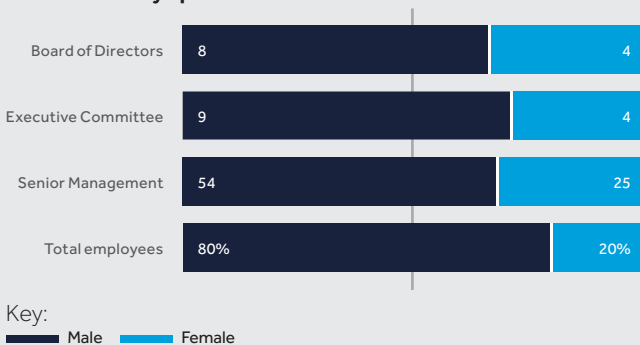
In total 324 employees participated in one of our six Smurfit Kappa Academy programmes run in 2021, for a total of 5,623 training hours, or 17.35 hours per person. The work done at a Group level is just a snapshot of the work that has been done to support the development of all of our people over the last year. Many other training and development programmes take place at regional, country

Diversity of Executive Team

We take part in the FTSE Women Leaders Review (formerly the Hampton-Alexander Review) which sets out recommendations for FTSE 350 companies to improve the representation of women both on their Executive Committee and the direct reports to this committee. The Hampton-Alexander Review set a target of 33% female representation on FTSE 350 Boards by 2020.

The 2021 report was published in February 2022 and represents women on Boards as of 10 January 2022, and senior management as at 31 October 2021.

Gender Diversity Split



and site level. These programmes delivered an average of 18.7 hours of career development for each of the permanent members of our workforce.

Rewards and Recognition

Our ambition is to attract, retain and recognise our employees through competitive working practices, and making sure that people are not just appropriately rewarded from a monetary perspective, but also see their achievements recognised and valued in the workplace.

We recognise the success of our people in a variety of ways, because people feel rewarded and are motivated in different ways. Recognition can be anything from a simple thank you from coworkers, to a success story published on the Smurfit Kappa intranet.

There are many ways in which we communicate to our employees that we respect and value them. For example, we have competitive wage structures aligned with market standards, multiple career advancement opportunities, a commitment to global mobility, easy to understand communication of rewards packages; as well as a policy of openly thanking our colleagues for going above and beyond what is expected.



CASE STUDY

Developing Our Future Leaders

The AMD programme is part of the Smurfit Kappa Academy and is aimed at nurturing high potential talent across the Group and to enhance the individual's experience at Smurfit Kappa. The programme consists of internal and external presentations and workshops, as well as the delivery of a team project in order for participants to learn more about aspects of Smurfit Kappa outside of their day-to-day work, and to help them develop both personally and professionally.

AMD 2021 took place virtually. Adrian Arenas, Stefano Beretta, Isabel Callejon, Juan Pablo Orrego and Wadi Portela formed one of the teams on the programme. They say "the main lesson we learned from this unique experience was our ability to work, grow and learn as a team in a virtual setting."

This brought with it some challenges, one of them being the seven-hour time difference with Isabel, Stefano and Wadi working from Spain, Italy and Ireland respectively, while Adrian was in Mexico and Juan Pablo in Colombia.

"We missed the chance to get to know each other face-to-face, and this limited our ability to develop a really strong bond. However, on a positive note, we each learned that we had to have a greater sense of responsibility for delivering, as the team-work windows were shorter, which helped develop our own self-awareness and understanding of our own personal strengths and weaknesses."

For this group the topic of team-work left a lasting imprint on how they will approach their work in the future. "We worked on creating a pathway to net zero climate impact. We now have a greater understanding of the role sustainability plays in our Group and our future, particularly the use of renewable energy and reducing carbon emissions. We have all become advocates for sustainability for the organisation."

PEOPLE CONTINUED

The Group also endeavours to ensure that positive employee and trade/labour union relations are maintained to the highest of standards, so we can ensure fair and sustainable Collective Labour Agreements.

Progress in 2021

In 2021 we continued to review our approach to Rewards and Recognition, with this work continuing into 2022. Our aim is to ensure we have a fair and competitive package of compensation benefits in place, which compares favourably with the market, and a rewards philosophy that attracts and retains key talent.

We recognise how critical it is for employees to be appreciated at work because it confirms that both they and their work are valued. It is also critical that our reward and recognition programmes are clearly aligned with pay for performance, so our people can see a clear link to their compensation package when they perform above and beyond what is expected.

In setting our reward packages, Smurfit Kappa takes into consideration the employee's performance, external benchmark data for their role in companies of similar size and scope, while also ensuring internal equity within the Group.

We are increasingly looking at total rewards when benchmarking our remuneration levels. The overall rewards package is tailored to help meet both short and long-term financial needs, but also the development and wellbeing of our employees.

Our key objectives for our Rewards Policy are to:

- Create a framework to enable the Group to attract and retain talented employees;
- Motivate employees at every level of the organisation to achieve the Group's strategic objectives; and
- Provide competitive rewards and benefits that are clearly linked to performance.

As an organisation, we are committed to gender pay equality and we continue to proactively monitor the pay of male and female colleagues, in similar roles to ensure it is comparable. For example under UK legislation, employers with more than 250 employees are

required to publish key metrics on their gender pay gap. Our UK business has published their figures which shows an improvement over the last few years.

Fair Pay, Compensation and Benefits

We provide competitive rates of pay to ensure fair compensation benefits across all our locations. We apply the 'same job, same pay' principle, and do not gender-discriminate on salary, benefits or any other consideration.

Wherever possible, we engage with unions, works councils and employee representatives to ensure fair and sustainable collective labour wage agreements. Employees are rewarded for their individual and business performance.

Smurfit Kappa provides a range of employee benefits such as parental leave within local legislations and, depending on our countries, pensions and life insurance form an integral part of the remuneration packages.

Our compensation policy ensures that we pay above minimum wage in all our 36 countries. Our ambition is to be a Living Wage employer, who offers all employees rewards that provide a decent standard of living. We are currently investigating our compensation levels in all of our countries against these criteria and currently, we estimate that in over 90% of our countries we pay above the local living wage. It is our ambition to achieve this in all the countries where we operate.

CASE STUDY

Wellbeing for Life

We value the health, safety and wellbeing of our people, keeps us focused on continually improving our support to our employees. Over the past year, with COVID-19 still constantly on our minds, our commitment to the wellbeing of our employees has never been more in focus.

As part of World Day for Safety and Health at Work on 28 April 2021, we launched Wellbeing for Life, a new initiative that sits within our Safety for Life programme. Wellbeing for Life specifically focuses on the mental, physical, social, and financial wellbeing of our people. This initiative is focused on understanding, supporting and aiming to improve the wellbeing of all our employees across Smurfit Kappa. It provided a call to action asking all employees to: be active; be connected; be supported; be fulfilled; and be together, thereby touching all four of our wellbeing pillars; social, mental, physical and financial wellbeing.

Our EveryOne Gender community took this initiative to help shed some light on male mental health. Men still make up a large majority of our workforce and their wellbeing, as well as that of their families is something we take seriously.

Therefore, we decided to mark International Men's day on 19 November, when we encouraged our sites across the world to mark the contribution made by our male colleagues to the organisation, their families, communities and friends. In addition to recognising the positive male role models in our lives.

We also asked them to highlight the key issues affecting men such as higher rates of suicide, lower life expectancy, higher work-accident rates and higher rates of cancer and heart disease. Activities included many events around the world, while we also hosted a global event involving men from across the Company.

The virtual event was a conversation where our panel members spoke about times and experiences, which had left them feeling vulnerable or uncomfortable. Each participant outlined and discussed how he had dealt with his situation, in the hope that it would help someone else.



Safety and wellbeing

Having products produced in a safe and healthy environment is important to all our stakeholders, especially our employees, their families and the communities where we operate. Therefore, the safety and wellbeing of our workforce is something we take very seriously.

The health, safety and wellbeing of our teams across the world is at the core of how Smurfit Kappa operates and also at the heart of our corporate social responsibility. It is part of our culture and cemented in our organisational values of: Safety, Integrity, Loyalty and Respect. Indeed, our vision is to ensure that every day, every Smurfit Kappa employee returns home safely to their families.

This concept applies equally not only to our own employees, but also to contractors, sub-contractors and other visitors to our sites. Operating a global, integrated business model means that we have a set of health and safety procedures and management systems, owned and managed by countries or clusters, spanning all of our operations from production sites to offices. The local health and safety teams ensure that we abide by local legislations, but also adhere to the Group policies and audit protocols.

Our Safety for Life Initiative has identified six high-risk areas for which specific tools have been developed to promote strong risk-management and safe choices at work. These areas are: Energy Isolation; Management of Contractors; Contact with Moving Machines; People and Vehicle Interactions; Warehouse and Backyards; and Working at Heights.

Focus on Behaviour

Health, safety and wellbeing is a mindset, and our approach is to instill a safety-first approach so deeply in the company culture that we aspire to eliminate all serious incidents and accidents from our operations. We believe that strong health and safety is about individual and collective choices and actions. Our Safety for Life initiative does this through building an emotional link between the choices we make at work and how that affects the choices we are able

to make in our personal lives. Similarly, we also support the choosing of a healthy lifestyle, as that also impacts our employees wellbeing at work and at home.

Alongside our COVID-19 ways of working, we also kept our focus on our business-as-usual progress, and continued to deliver our core Safety and Wellbeing programmes including 'Safety for Leaders' across our European business. This programme helps build resilience, joined up thinking and good teamwork, at a time when it is really needed. In the Americas, we launched a Behavioural Safety Initiative – Human Reliability Training – in order to improve the safety culture and leadership, particularly, of front-line operational leaders, which will continue into 2022 and beyond, and our strong audit programme remains in place despite disruption due to COVID-19.

The wellbeing of our employees is core to our agenda. In 2020, we launched a new Employee Assistance Programme (EAP) and made it available to all of our European colleagues and their families. The programme was piloted in the Americas region in Mexico and has now been rolled out in all countries in the Americas. This means we now have an EAP programme in place across the entire organisation.

Health and Safety Policy

We continuously review and improve our Health and Safety practices and performance, to progress towards our vision. We know that doing the right things in the right way, with integrity and respect, is necessary to engage our employees and create a successful business based on trust. Smurfit Kappa has a structured approach to health and safety, through which we continually improve our safety performance.

CASE STUDY

Caring for your Coworkers – Using Shop Floor Insights to Prevent Accidents

Smurfit Kappa's health and safety policy is focused on creating a culture where everyone cares for each other's health and safety. This means engaging with openness, involvement and dignity. We encourage speaking up and coming with ideas and suggestions on how we can prevent incidents from happening and create greater safety awareness.

In our Argentina and Chile Cluster, focus on insights from the shop-floor has resulted in new ways of working. The Cluster started a 2020 Safety Alert campaign which aims at reducing its accident rate. All sites now implement a Quarterly Safety Plan which is included in the cluster's risk management plan. This means ongoing reviews of the cluster's safety status by the management team, and the introduction of innovative new approaches to health and safety.

At the Sunchales Corrugated plant in Argentina, the COVID-19 pandemic brought with it many challenges. As part of their health and safety training, the site used 60-90 minute long safety trainings focusing on motivation, prevention of safety hazards and identification of safety controls. With the pandemic, they could no longer bring everyone together for such long periods at a time, so they moved to Safety pauses. A 'Safety Pause' allowed a shift to take a break to discuss and reflect on safety at the site and share ideas to keep everyone safe.

The Chile corrugated plant decided to focus and improve the attention placed on contractors visiting the site, ensuring their safety was treated with as much importance as that of a full-time staff member. Coordinating contractors can be complex and so the Safety Coordinator at Corrugado Chile, Jaime Carreño, and the team on site came up with an idea. Creating a Safety Table which could be used to share relevant information along with control documents for working on site, could be shared with visitors. This included having support material for safety talks and all paperwork available for filling in.

"We have achieved a lot of good progress in our Cluster," says the Cluster Health and Safety Manager, Claudio Martinez. He added "we can see that encouraging openness and room for discussion motivates teams to drive for improvements and innovate in their approach. The real proof of this has been the reduction in our TRIR by 26% in the last two years."

PEOPLE CONTINUED

It is our policy to:

- Promote a supportive culture focusing on openness, involvement and dignity in the workplace; we are all responsible for each other's health, safety and wellbeing;
- Provide constructive feedback to success and setbacks in equal measure. We care for our employees and expect them to care for each other, by speaking up when noticing anything they feel is unsafe or would harm anyone's health or wellbeing;
- Review workplace incidents so there is consistent reporting, investigation and, where appropriate, identification of improvement opportunities that strengthen our health and safety management systems and wellbeing;
- Comply with all applicable legal requirements and implement good health, safety and wellbeing practice by effective deployment of our health and safety management systems;
- Ensure that all line managers foster a work environment where every member of the workforce, including contractors, understands their role in health, safety and wellbeing and delivers on their individual responsibilities;
- Ensure that all operational managers take responsibility for health and safety implementation, communication and compliance;
- Foster a work environment where every member of the workforce understands their role in health and safety, and delivers on their individual responsibilities;

- Ensure that our employees and contractors are trained to work safely; and
- Have processes in place to identify health, safety and wellbeing hazards so that risks are assessed and minimised to acceptable levels, to prevent the occurrence of injury and ill health to our employees, contractors, partners and visitors.

Health and Safety Processes

Our health and safety systems are owned by the respective businesses but are audited to consistent policies across the Group, so that we work to the principles of our Group Health and Safety Policy, local legislation and local risk assessment. All sites have local health and safety support to guide on the implementation of the Policies and systems. We have Health and Safety Committees at site, regional and Executive Committee levels.

Understanding the health and safety risks is based on our Policy on Incident Investigation, Reporting and Communication. In addition, we have a policy on Hazard Identification and Risk Assessment, applicable to all businesses. We also have an Energy Isolation Policy Lock out, Tag out, Try out (LOTOTO) applicable to all sites across the Group. All employees, contractors and visitors are encouraged to report any incidents, including near-misses, ensuring that we learn from our mistakes and repeat-incidents are avoided.

Embedding health, safety and wellbeing thinking into the Company culture means that we have opportunities to listen and share new initiatives, alongside a strong safety agenda in all meetings. Supporting this is a positive culture of competence bought about by consistent and Company-wide training programmes. Employees receive extensive health, and safety training that adheres to both country legislation, and also the progressive ambitions of Smurfit Kappa. Significant behavioural-based safety training programmes are in place for all site-based levels of management.

Progress in 2021

In 2021, our Global health and safety performance continued to improve but fell short of our improvement target (5%). Our key metric Total Recordable Injury Rate (TRIR) improved by 1.7% with TRIR's of 0.60 and 0.59 in 2020 and 2021 respectively. Nonetheless, we were pleased that we were able to improve on what was a significant step change in performance in 2020.

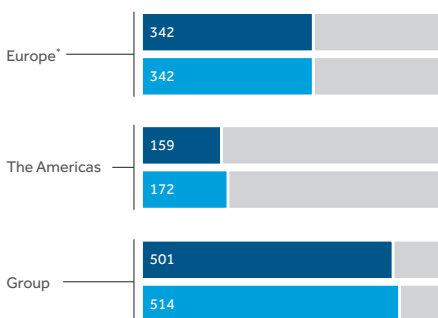
There was clearly a COVID-19 impact on the metrics in 2020, with some reasons for this being more obvious than others, but ultimately resulting in a 29% improvement in TRIR compared to 2019. Sustaining this improvement in 2021 was clearly challenging; nonetheless, we maintained the level and continued with a further modest reduction in TRIR. Since setting ourselves the target to reduce the TRIR by 5% annually in 2018, we have so far reached a total reduction of 42%, which represents an average 14% year-on-year reduction.

In 2021, the MyVoice survey demonstrated that we have a strong commitment throughout our workforce in health and safety. With a Group-wide health and safety engagement score of 77%, our employees agreed that we have a strong health and safety culture. This was also visible in the high number of written comments we received from the survey. Group-wide, 199 of our sites achieved a TRIR of zero for the whole of 2021. Regrettably, we had one subcontractor fatality in our Forest Operations in Colombia. Group-wide we had 13 serious injuries, 12 of which were partial finger amputations.

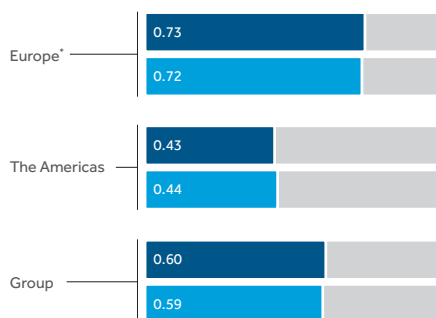
We also launched our Wellbeing for Life programme during our annual Safety Day, part of which included ensuring all employees have access to our Employee Assistance Programme. We continued to build our Safety for Life initiative in both regions; with Europe focusing on a 'I'm thinking of safety because safety never takes a holiday' campaign, and in the Americas on 'three steps for Safety for Life' (looking into safety culture based on authenticity, empowerment and accountability).

In both regions, we successfully piloted and trialled new ways of managing high risk, such as the Energy & Machinery Isolation (LOTOTO) Policy implementation programme. Behaviour continues to be a significant focus area for us and we organised trainings for line managers to support their work with their teams. Additionally, we had over 118,000 safety conversations throughout the year.

Total Recordable Injuries



TRIR



Key: 2020 2021

* The employees reporting to Group functions are included to Group data only since 2021. Previously this data was also included in European figures.

CASE STUDY

Mental Health Strategy in UK

The traditional approach to health and safety has focused on physical safety. However, we increasingly understand the connection between mental and physical wellbeing. The health and safety community has demonstrated that awareness and support for mental health clearly improves the results in the physical safety areas as well.

“We started to pay attention to this link a few years ago,” says Nigel Elias, the Health, Safety and Environment Manager for Smurfit Kappa Corrugated UK and Ireland. The topic came through different feedback channels, among which were our MyVoice surveys and various discussions between colleagues. “We formed a Health and Wellbeing Committee and in April 2019 we presented a proposal for a Colleague Health and Wellbeing Strategy to the UK and Ireland Executive Committee,” Nigel explains.

The ambition of the strategy was to establish an interdependent, safe and healthy work culture for all colleagues.

The strategy aimed to:

- Promote a range of health and wellbeing activities which focus on physical, mental and social health
- While empowering colleagues to take personal responsibility for maintaining and improving their wellbeing

To roll-out the strategy, Smurfit Kappa UK and Ireland asked for external support from a company called Everyday People. With their help they started to build awareness of mental wellbeing, and at the same time train people throughout the organisation to create and become part of a support network.

There are now 250 Mental Health First Aiders and 350 Mental Health First Aid Champions across the business. Each of them has undertaken training, which provides them with the skills to talk to a person who needs support and guide him or her to the best suitable support-activity be it a peer support group, therapy or a group to support people with addictions. In addition, all kinds of communication vehicles are used to ensure that everyone knows: it is okay, not to be okay.

The results of the strategy have been very positive. We receive feedback from colleagues throughout the organisation saying they feel that they can talk more openly about their issues and they feel they are listened to and respected. “We believe that this strategy not only promotes wellbeing, it also promotes greater company engagement and most importantly, when your mind isn’t wandering around, you will be able to focus on your and other’s physical safety, too” concludes Nigel.



350
mental health first aid
champions in UK

250
mental health
first aiders in UK

Communities

We have always believed strongly in being part of the communities in which we are privileged to operate. Through our local operations, we actively support projects that help build a sustainable future for our communities.

Our aim is to make positive, long-lasting changes in the communities in which we operate. We do this by focusing on areas such as education, income-generation, collaboration and participation.

In 2011 we established the Smurfit Kappa Foundation to contribute to funding projects that empower people to improve their lives. We adhere to the highest of ethical and professional standards and our organisational values are brought to life in the projects in which we participate, through our employees' volunteering, our operations; social investments at local level, and the projects we support through the Smurfit Kappa Foundation.

Involved in Communities

We always consider the concerns of the wider community at national and international level. Community involvement builds trust and serves as a link to the issues important to us. Local general managers are expected to represent the Group as part of the local community and play a positive part in its development.

Where relevant, we take part in local community engagement projects and impact assessments. Our operations play a role in education, and supporting locally vulnerable groups with a focus on disadvantaged children and youth. An example of our awareness programmes is our 'Safe at Home and at Smurfit Kappa' approach for which our Mengibar paper mill received the Andalusian Flag Award in 2017.

In our philanthropic work, we focus on self-help initiatives, education and health programmes, and contribute through financial donations and volunteering by local employees. Examples of these can be found on pages 74-77 in this report and in the 'Our Open Community' booklet, available at smurfitkappa.com.

All our European sites and the majority of our sites in the Americas have performed an environmental impact assessment which is typically part of the local operational permit process. Each site has an official community-grievance process and we are committed to following these up. The main reasons for complaints are typically, noise and odour from our operations.

The circular economy has an impact on our communities as well. Smurfit Kappa participates widely in local circular operations. Some examples of these are:

- Delivering district heating from our paper mill to the residents of Piteå, Sweden, with a similar project under development in Nettingsdorf, Austria;
- Supporting municipality water-treatment systems with our effluent, which has nutrients that help treat municipality waste-water in Nettingsdorf, Austria and Nervión, Spain;
- Treating municipality waste-water in Morava, Czech Republic;
- Maintaining rural road structures at our Colombian Forestry Operations; and
- Collecting city-recovered paper in Malaga, Spain.

CASE STUDY

Investing in the Future

Educating and creating better conditions to encourage the development of children and young people will always be an investment in our future. As a socially-responsible company, we are aware of the role we play in the communities in which we operate, and in El Salvador, we have also put this into practice.

The Sub-Urban School Center 'República de Venezuela', known as 'El Colegio', was founded in 1965, with approximately 649 children in attendance during 2021.

During 2020 and 2021, the Smurfit Kappa Foundation donated approximately €180,000 to the Sub-Urban School Center, which was partially allocated to urgent infrastructure repairs, including around 743 metres² of roof replacement, the installation of water channels, construction of a canteen, and renovation of the kindergarten playground, all with the aim of providing the students and teachers with improved spaces for education.

This partnership has motivated organisations like United States Agency for International Development (USAID), who since 2015 has donated the same amount as the Smurfit Kappa Foundation by providing technical assistance, training for teachers, activities in the areas of social cohesion, and by providing furniture and equipment.

El Colegio provides the community with a vision for the future: quality education for their children.

2020 – 2021
€180,000
 donated to the
 Sub-Urban
 School Center





We saw an opportunity to support the local community as well as help achieve Smurfit Kappa's sustainability goals.

Michael Strach, Pulp and Energy Manager, Nettingsdorf



Investment

€134 million
in the Nettingsdorf
Future Energy Plant

CASE STUDY

Warming the Neighbourhood

"Energy costs are going up for households everywhere," says Michael Strach, Pulp and Energy Manager at the Smurfit Kappa paper mill in Nettingsdorf, Austria. "Austrian families spend up to one month's salary per year on heating."

District heating systems, where huge quantities of water are heated and pumped round a neighbourhood for heat and hot water, are well-known in Austria. Around the world, Smurfit Kappa has partnered with energy companies on similar systems, so this project has been a possibility for some time. However, investing €134 million in the Nettingsdorf Future Energy Plant, which greatly reduced CO₂ emissions and fossil-fuel use, created a new opportunity.

"In our pulp and paper production there was waste and temporary excess heat flows which could not be used economically in our process," says Michael. "So, we saw an opportunity to support the local community of Ansfelden, as well as help achieve Smurfit Kappa's sustainable goals, especially our CO₂ goals. This project could deliver heating to 10,000 households, leading to a reduction of CO₂ emissions of 20,000 tonnes per annum."

The Nettingsdorf mill had the heat, but not the expertise, to promote and create a district heating network. Fortunately, an excellent partnership organisation was found: Bioenergie, which has worked on similar systems elsewhere.

Smurfit Kappa has a good history of working in partnership with other organisations. It also helped that the local authority is committed to seeking environmentally-friendly solutions, and Bioenergie also has expertise in gaining government funding.

"A good partnership organisation was essential – we haven't the time or skills to go door-to-door selling heating!" says Michael.

Michael and his team's expertise was needed elsewhere. "I was more concerned with engineering problems, like delivering a constant supply of heat. All mills have shut-downs, but people always need heat. We worked with Bioenergie on creating reserve storage and back-up generation."

"Of course, these are early days," says Michael. "We have the heat sources, but the distribution system takes time to build. Our plan is to go online with it in 2022, so we have quite a busy year ahead!"

The Smurfit Kappa Foundation

The Smurfit Kappa Foundation supports sustainable projects in the countries where we operate. Its primary focus is on projects involving disadvantaged children in the areas of health and nutrition, basic care and early education. The Foundation is particularly interested in projects in which Smurfit Kappa employees or their families are involved and where they would benefit from support from the Foundation. Support from the Foundation is in addition to funding projects may have already received from the local Smurfit Kappa operations.

The Foundation's goal is to end the cycle of poverty and dependence that exists in the communities and countries in which we operate, using the UN 2030 Agenda for Sustainable Development as a guide. The projects it supports tackle global issues with local relevance, and operate under the ethos: 'Give someone a fish and you feed him for a day. Teach a man to fish and you feed him for a lifetime.' The aim is to support sustainable projects which involve input from the local community and are capable of becoming self-sufficient in the long-term.

Progress in 2021

In 2021, whilst our operations continued to support COVID-19 related projects, we returned to our social investment focus areas: supporting our communities with long-lasting changes in areas such as education, income-generation, collaboration and participation.

We estimate that as a Group, including our Smurfit Kappa Foundation, approximately €4.9 million was donated in cash and kind in 2021. This was for a wide range of activities, including children's education, health and social-inclusiveness projects and research.

We also renewed our commitment to support our community work, and set a new target for 2020-2025 to donate over €24 million to social, environmental and community activities. This represents a 20% increase to our annual social investments so far. In addition, we will support volunteering by our employees. Our Employee Volunteering Programmes will support paid time-off for employees to participate in chosen community activities. Reporting against our target, we are now at €12.6 million of €24 million by 2025.

CASE STUDY

Supporting the Homeless to Bounce Back

Depaul is a charity operating in the Republic of Ireland and Northern Ireland, with a mission to support marginalised individuals, couples, and families at risk of, or experiencing, homelessness. The charity has five key focus areas: Prevention, Families and Young People, High Support Accommodation, Health and Rehabilitation, and Housing. Depaul works to release the true potential of people who are at risk of being marginalised, but who, with support and opportunity can find their place in society. The ambition is to break the cycle of homelessness and assist the people who avail of their service to make positive steps and decisions for their lives.

The Smurfit Kappa Foundation supported, with a donation of €200,000, the refurbishment of three of Depaul's family service centres in 2021: Mater Dei, Rendu Apartments and Cloverhill. The Mater Dei and Cloverhill centres in Belfast, Northern Ireland, help families from Northern Ireland to find stability and permanent housing. The Rendu Apartments in Dublin, the Republic of Ireland, offers services for mothers with young children in difficult life situations and at risk of homelessness.

The approach Depaul take is one of compassion, showing respect and an understanding of ensuring people feel safe, especially when coming from challenging situations. The impact and reaction of the refurbishments in all locations has been positive. The families feel welcome and are made to feel at home. In addition, the Depaul team noticed the improvements in the residents' mindsets, becoming more positive and their increased ambitions.

€200,000
to support three family
service centres



10 Years of the Smurfit Kappa Foundation

Celebrating our
10th
anniversary

Projects
159
across 24 countries

Investment
€9.4 million
2012-2021

Arts, culture and music programmes

3

Music school facilities

1

Music therapy centre

6

Music outreach programmes



Child support programmes

11

Centres for disadvantaged children

1

Parenting and childcare programmes

4

Facilities for children taken into care

3

Orphanages

4

Facilities for homeless children

5

Childcare facilities



Community, sports and play facilities

23

Playgrounds, play areas and sensory gardens

16

Childcare sports facilities and equipment

2

Horse-riding facilities

1

Community centre



Education

7

School building and refurbishment projects

10

Provision of computer and schools equipment

5

Education facilities and outreach programmes

6

Classrooms

1

Anti-bullying campaign



Hospital & special needs projects

5

Upgrade of hospital facilities

23

Specialist centres for children with special needs

3

Childhood illness specialist centres

4

Cancer care support units

1

Medical research project

1

Cleft palate centre

1

3-D printer to print prosthetic limbs

1

Multiple Sclerosis carers respite centre



Miscellaneous projects

3

Mini-buses

1

Asylum support programme

1

Book

1

Bush-craft centre

5

Grant a wish



Delivering for all stakeholders

Sustainability creates value and is a core element of our strategy. We collaborate with customers and suppliers, sustainably growing their and our businesses throughout the value chain. Our innovative packaging solutions are material-efficient, produced sustainably and support customers in delivering their sustainability objectives.



Inside this section

78-89

Innovation	84
Governance and Human Rights	86
Sustainable and Responsible Sourcing	88

33.3%

women on the Smurfit Kappa Board

Key Principles

Since 2007, when we started reporting our progress in sustainability, our approach has been to make our performance measurable, transparent and tangible.

We report our progress annually, and have our sustainability data independently assured using Global Reporting Initiative (GRI) Standards. We then convert the data into tangible, unique customer-relevant information to support our innovation and design processes. Certifying our management systems adds transparency and credibility for our stakeholders, and having clear policies helps everyone understand how we govern our performance.

We are committed to managing our business ethically, in accordance with our declared values recognising that good social citizenship, reflected in how we interact with our employees, business partners and local communities, is an integral ingredient in creating a sustainable future.

We believe that ethical business conduct must be promoted from the most senior levels of the business, and fostered through the whole organisation. Smurfit Kappa has specific policies on key areas of sustainability, which are integral in improving future performance.

To sustainably grow our business we favour short supply chains and will work with suppliers aligned with our sustainability principles and policies.

In September 2021, we launched our

Green Finance Framework

SBTi-validated
for our CO₂ target

Support the Goals recognition



IMPACTFUL BUSINESS CONTINUED

We all want our food, clothing and household goods delivered securely, and safe from damage or theft and unnecessary waste. Businesses therefore need fit-for-purpose packaging solutions, which protect the product and deliver it safely to the consumer.

Paper-based packaging offers the most versatile and sustainable solution for manufacturers, retailers and consumers, through any chosen sales channel. It has the highest recycling rate of any packaging which helps to reduce product waste, and in the unlikely event it isn't recycled, it is biodegradable. According to the Food and Agriculture Organisation of the United Nations (FAO), inadequate packaging wastes 20-50% of food in developing countries, compared with only 3-5% in developed countries, where fit-for-purpose packaging ensures safe product-transport. Smurfit Kappa works to promote fit-for-purpose packaging in our operations in both developing and developed countries.

We maximise this sustainability for ourselves, our customers and suppliers, through continuous research.

Our experience and expertise inspire innovative, fit-for-purpose and sustainable packaging solutions.

Sustainable Value Chain is Our Business

Sustainability creates value and is a core element of our strategy. Our approach to it is end-to-end: from procurement at the supplier end, to production and product delivery to our customers, the principle of aligning economic goals with social, community and environmental responsibility is applied throughout.

We collaborate with customers and suppliers, sustainably growing their and our businesses throughout the value chain. Our innovative packaging solutions reduce use of raw materials, helping customers deliver their sustainability objectives. Our business model is circular: our key raw material is recycled fibre and we recover the old corrugated boxes from our value chain to make new ones. We continually search for new synergies within our operations and with our local partners. We work to minimise climate change by maximising the efficient use of resources, thereby reducing pressure on the environment.

Our investors want long-term profitable businesses, so environmental and social responsibility are key factors when choosing companies for investment. Evidence of Smurfit Kappa's continued progress is clear through the many investor ratings and disclosure programmes that we participate in, such as FTSE4Good, Euronext Vigeo Europe 120, STOXX Global ESG Leaders, Ethibel, The Green Economy Mark from the London Stock Exchange, CDP, SEDEX and EcoVadis. Furthermore, paper-based packaging is expected to grow as consumers are increasingly aware of environmental issues and 80% prefer paper-based packaging (Cepi and Paper and Packaging Org Surveys).

We provide industry-leading transparency and detail to our stakeholders of every aspect of our operations, whilst promoting sustainability in our customers' businesses. Smurfit Kappa uses suppliers who adhere to our Sustainable and Responsible Sourcing Policy, our Supplier Code of Conduct, and who are CoC certified where applicable. We audit suppliers on human rights, labour practices and environmental impact.

Creating Tangible Progress

For us, sustainability is not only about mitigating climate change and reducing inefficiency; it is vital to our future as one of the world's largest paper-based packaging companies, and for stimulating innovation and creating new customer demand.

According to the UN Global Compact-Accenture CEO Study on Sustainability, sustainability is essential to a CEO's business strategies, and 88% of investors see it as a competitive advantage. For them, and for our customers, we must demonstrate the link between sustainable business and corporate value.

We integrate sustainable measurement into our business strategy, and throughout our global operations. We know the impact of our sustainable strategy – the facts and figures are in this report, enabling investors to appraise the effect of sustainable performance on our business. We are proud to have received customer awards and investor recognition for our sustainability performance.

EMBEDDING OUR PURPOSE

We are Proud to Create, Protect and Care

Discovering Our Purpose

Our Purpose statement was articulated following an inclusive discovery process that involved participants across the Group. Led by our CEO and involving diverse groups of people, the process uncovered stories of purpose-in-action across different areas of the business. By discovering, sharing and discussing what was essential to different people, we identified the collective motivation that gives all of our work meaning and drives us to sustain and enhance our essential role in the world.

Engaging with Our Purpose

We commenced a communications campaign in June 2021 that used video in multiple language formats across our internal communications platform to engage the entire business with our Purpose. In this initial phase of the campaign, our CEO and other members of the senior management team shared what purpose means to them and identified how our experience of purpose contributes to our unique culture and the positive motivations experienced by employees, partners and customers alike.

The campaign encourages employees across the business to reflect on the essential role they play in delivering our shared Purpose. Employees were asked to share their stories of creating, protecting and caring experienced within our teams and through interactions with our customers, communities and other stakeholders.

The campaign has prompted many employees to share the stories that make them feel proud to be part of Smurfit Kappa. These diverse stories all illustrate how Smurfit Kappa's Purpose is grounded in what we do

day-to-day, and highlight the importance of sustaining an authentic sense of purpose in our working lives.

Nurturing and Sustaining Our Purpose

We recognise that nurturing our essential Purpose is an ongoing process. For our Purpose to endure, we must ensure that the new generation of talent within Smurfit Kappa connect with, and understand our essential and enduring role. We have engaged a selection of our workforce to build on our Purpose and explore what it means for them. We have asked them to consider what our Purpose will require from each of us in the future as we continue to provide innovative, sustainable products for our customers, support the communities in which we work, and protect the planet that we and future generations depend on.

We create, protect and care.



Discover more: smurfitkappa.com/purpose

CASE STUDY

First Packaging Product to be Credited with Vegan Trademark

Smurfit Kappa Markham Vale has registered its packaging solutions to Vegan Trademark – the first packaging product credited with the trademark. The Vegan Trademark is the oldest and largest vegan verification scheme whose ambition is to give consumers and brands alike advice in their purchasing decisions. The Vegan Trademark encourages the development of vegan options and improving labelling on suitable products, making vegan choices more accessible.

“We’ve been wanting to register vegan packaging for a while now – it fits well to our business approach working with 76% primarily post-consumer recycled fibres and requiring CoC certification of any of our fibres throughout our supply chain and selling nearly 95% of our packaging solutions as FSC certified,” explains Mark Robinson, Senior Business Development Manager at Smurfit Kappa Markham Vale.

To be credited with the Vegan Trademark, a company must be able to demonstrate that its products are free from animal testing and ingredients. “Even though this is obvious for us, we do receive requests for evidencing that our packaging is animal cruelty free. The Vegan Trademark is a good way to confirm this,” says Mark. This is not all, together with the Vegan Trademark experts, the Markham Vale team also discussed the impacts of the packaging product in nature. Corrugated packaging will not cause harm and suffering to animals, in the rare case it ends up in nature.

To achieve the Vegan Trademark, other positive credentials of our packaging are our ambition to reduce our CO₂ footprint by 55% by 2030 and our net zero ambition as well as having an active role in the circular economy and paper recycling.

“Registering for the trademark makes sense for us,” says Mark. “Using the logo on packaging is voluntary for our customers and knowing what the trademark means, is important to our animal product producing customers as well.”



1st

packaging solution
to receive
Vegan Trademark

Responding to our Stakeholders

	What We Believe	What Our Stakeholders Expect from Us	Our Commitments
INNOVATION	<p>We have a responsibility to respond to the challenge facing the environment and society today – to inspire more sustainable packaging solutions.</p> <p>A fundamental challenge with packaging waste is litter; by offering fit-for-purpose packaging solutions we can minimise material waste. Packaging can help to lower a product's environmental footprint, and to protect and promote our customers' products.</p> <p>We can realise these aims through our data-driven innovation approach.</p>	<p>To deliver fit-for-purpose, cost-effective and sustainable packaging solutions to our customers.</p> <p>To develop innovative packaging solutions as our response to the global challenge of litter and packaging waste.</p>	<p>Commitment #1: To inspire more sustainable packaging solutions through:</p> <ul style="list-style-type: none"> • The development of our Better Planet Packaging initiative; • Using our data to improve our processes, products, supply chains, logistics and markets; and • Optimising the use of our InnoTools to support our innovation and design, and leverage our global ideas.
GOVERNANCE AND HUMAN RIGHTS	<p>We operate in an environment with diverse legislation, regulations and cultures. Our Code of Conduct is the fundamental guideline for everybody at Smurfit Kappa from the Board of Directors, officers and employees, as well as all individuals, entities, agents or anyone acting on the Group's behalf – and we require the same from our suppliers.</p> <p>Our Code of Conduct expects adherence to ethical standards, and commitment to quality and service.</p>	<p>To fundamentally comply with regulations and guidelines, have effective corporate governance and respect human rights.</p>	<p>Commitment #1: We are committed to:</p> <ul style="list-style-type: none"> • Having our Code of Conduct available for anyone interested; • Ensuring our stakeholders adhere to the principles of the Code; and • Offering an independent and unbiased channel to raise concerns about breaches to the Code.
SUSTAINABLE AND RESPONSIBLE SOURCING	<p>Sharing our sustainability knowledge, experience and expertise with our suppliers increases the sustainability of our whole value chain. In order to sustainably grow our business, our materials, goods and services must have the right quality and cost, but also be securely and responsibly sourced.</p>	<p>To extend our ethical and sustainable manner of conducting business to our supply chains, and to require our suppliers to continually advance their sustainable footprints.</p>	<p>Commitment #1: We are committed to:</p> <ul style="list-style-type: none"> • Working with suppliers that adhere to our Sustainable and Responsible Sourcing Policy and Supplier Code of Conduct, are CoC certified where applicable, and commit to our Modern Slavery Act Statement; and • Regularly auditing our suppliers to ensure adherence with our key Sustainable and Responsible Sourcing principles.

Progress Made in 2021

Progress made: Our tools: Innobook, Pack Expert, Paper to Box, Shelf Viewer and SupplySmart, were used almost 160,000 times during 2021.

➔ Read more about our progress on [page 84](#)

Progress made: During 2021, no material breaches to our Code of Conduct were made. No material fines were imposed on the Group for any breaches of such laws and regulations in 2021.

➔ Read more about our progress on [pages 86-87](#)

Progress made: During 2021, 22 supplier audit activities took place through our six pillar Sustainable and Responsible Sourcing audit programme.

➔ Read more about our progress on [pages 88-89](#)

Delivering for SDGs

Our product offers a great opportunity for innovation that can have a positive impact for society.

Smurfit Kappa contributes to the realisation of the following SDG and targets:



9.2, 9.4 and 9.5

For Smurfit Kappa, impactful business means respecting people and having responsible governance. These, in turn, have a positive impact on the communities we have operations in.

Smurfit Kappa contributes to the realisation of the following SDGs and targets:



8.7 16.2, 16.5 and 16.10

Smurfit Kappa can extend its impact through its supply chains and through that have an impact on decent work and economic growth.

Smurfit Kappa contributes to the realisation of the following SDG and targets:



8.5, 8.7 and 8.8

Scope

- All Smurfit Kappa operations

- All Smurfit Kappa operations

- All Smurfit Kappa operations

Innovation

Examining the entire supply chain, including packaging, transport, storage and product presentation, will identify more sustainable improvement opportunities than considering each step in isolation.

Holistic Approach

We do not just sell packaging to our customers, we work closely with them, developing value-added solutions to their supply chains. We use a holistic approach to find solutions that are impactful and can be realised on a large scale. This leads to fit-for-purpose packaging solutions that ensure that the packaged product is transported and stored safely and delivered undamaged to the consumer.

As part of our product and process development, we use engineering-based thinking to analyse customer challenges and find creative solutions for specific products and markets. We deliver smarter sustainable solutions to our customers in three ways: Innovation in our processes, Innovation through the supply chain and Innovation in packaging solutions.

With circularity in mind at the design stage, and by optimising both primary and secondary packaging, we can deliver efficiencies in transport, storage and display and ultimately ensure recovery and recycling of our packaging products in recycling channels.

We use Life Cycle Assessments as a tool to understand the environmental footprint of our products and processes but do not rely solely on that. Fit-for-purpose design manages a wider scope of environmental challenges in the packaging design – including the protection of packaged goods from becoming waste – and is therefore the most suitable approach to packaging solutions. Our scorecards help follow-up progress against sustainability KPIs and Smart Services help customers to see through the new solutions from idea to implementation.

We focus both on our own and our customers' supply chains. Our paper-based packaging is designed to minimise resource use, reduce environmental footprint and use material sourced through certified CoC fibre origin management systems. The effective monitoring of our sustainability data enables us to discover new approaches to packaging and supply-chain management and we use our InnoTools – eSmart, SupplySmart and Pack Expert – to understand our customers' supply chains.

To drive innovation for our customers and suppliers, we examine the entire packaging concept to develop a more appropriate, sustainable solution. We also consider changing customer preferences, demographics, regulatory developments and other competitive forces.

Our ambition is to deliver our customers fit-for-purpose packaging solutions, and we focus on using our extensive data and proprietary business tools, such as Paper to Box, to deliver this.

Better Planet Packaging

We understand the challenges and the changes that need to be made to address the climate change crisis and reduce waste across the world. We know this is not easy, but we believe paper-based packaging can be one of the answers. It is naturally better for the planet.

Our Better Planet Packaging initiative's purpose is to create better packaging for a better world for future generations. It seeks to make a positive impact on supply chains around the globe and on millions of consumers, while improving the environmental footprint of packaging and reducing packaging traces on the planet.

By developing optimised and fit-for-purpose paper-based packaging solutions that are designed to be recyclable and are recycled, we can help our customers, entire value chain to reduce their carbon footprint.

We also contribute to a vision of a world without packaging waste by supporting the concept of circularity. As part of that, we play a role in collecting used packaging; the industry reuses more than 90% of this material.

We use our SmartTools to support delivering for Better Planet Packaging. In 2020, we added a new tool, LCALite to our suite of InnoTools. LCALite helps us to have an indicative and fast benchmark of our customer's current packaging solution in comparison to a paper-based packaging solution. This tool is a first source of indication and provides a good overview of a customer's packaging solution's carbon footprint and end-of-life impacts.

Our Approach



Knowledge, experience and passion

Our primary goal is to support our customers through the dedication and creativity of our people. Our people are highly motivated, well trained and have unrivalled packaging expertise, which provides the foundation for our innovation.



Customer focus, understanding our customers' markets

We look past our products and go one step further to provide our customers with the best data and analysis to make better business decisions with minimal risk. Innovation challenges the status quo and is a fundamental part of our strategy. Our approach to innovation is market-driven and focused on solving our customers' challenges, whether through customer insights, packaging solutions development, process improvement or optimising supply-chain efficiency.



Science of innovation

At Smurfit Kappa, innovation is data-driven. We have a supporting network of laboratories, facilities and applications to help us create fit-for-purpose, cost-effective and sustainable packaging solutions.



Creative design thinking

With over 1,000 designers across our business and almost 8,500 packaging concepts, we use cutting-edge technology to provide innovative designs in packaging and displays for our customers.

In 2021, we introduced a new tool to help our design team create innovative and new recyclable and biodegradable paper-based alternatives to plastic void buffers in packaging.

By innovating and understanding the added value of every fibre of our products, the result is greater sustainability, from start to finish. Our Better Planet Packaging approach:

- Uses our strength and industry-leading expertise in innovation to develop sustainable packaging-solutions, especially in plastic substitution, that are renewable, recyclable and recycled, and biodegradable.
- Applies our industry knowledge and expertise on end-to-end supply chain management to help our customers improve the environmental impact and efficiency of their supply chain while also delivering a superior consumer experience.
- Sustainability has been at the core of our business for decades. We will continue to lead the industry by developing new solutions and are committed to managing our operations in a sustainable way.

Circular Aspects of our Products

Our products are designed to protect the packaged goods. While doing so, they have direct and indirect (through our operational sustainability strategies) impacts on our customers' value chains.

Impact of our Products		Direct Impact	Indirect Impact
Impact 1 Refuse		Designing packaging solutions from mono-materials helps our customers to refuse packaging that is difficult to recycle, is therefore not recycled and that is not biodegradable.	Supporting the packaging value chain to reduce packaging waste and uncontrolled litter. Delivering solutions to our customers that help meet the EU Single Use Plastics Directive requirements.
Impact 2 Reduce		Designing packaging solutions that help eliminate non-circular packaging materials with a higher environmental footprint. Ensuring that resource efficiencies are maximised and material waste is reduced by offering fit-for-purpose packaging solutions that optimise the use of packaging materials. Where possible, we produce lighter grammage papers which require less fibre.	We intend to use renewable energy wherever it is economically feasible. This will involve additional use of biomass and scaling-up methods, which use our organic waste to generate energy. It will also involve investments that reduce CO ₂ emissions and increase energy efficiency.
Impact 3 Reuse		Ensuring that where reusing is economically, logistically, hygienically and environmentally unfavourable, our recyclable packaging solutions offer a more sustainable alternative with less environmental impact than using a reusable solution.	Ensuring that we reuse resources in our production wherever possible. For example, using the organic by-product of our production process as biofuel, or reusing materials separated in the paper-making process. We also reuse water in our paper-making processes multiple times, before treating it for discharge.
Impact 4 Recycle		76% of the raw material we use consists of recycled fibres. All paper-based packaging we produce is recyclable. Recycling of our packaging product delivers new corrugated products with the same quality, whereas the majority of plastic packaging, for example, is downcycled.	We continually find ways to recycle the metal, plastic, wood and other non-paper components separated from the recovered paper that is delivered to our mills.
Impact 5 Recover		Ensuring all paper-based packaging we manufacture can be recovered. For example, offering mono-material solutions that are easy to recover for our customers and consumers.	Our corrugated plants recover paper clippings and send them back to paper production at our mills. We close loops and create circularity in our energy production through recovering the high-energy value of any by-products, such as black liquor and biogas, and circulating heat. We also seek synergies with our neighbours where possible.
Impact 6 Renew		We promote sustainable forest management in our own forests and plantations as well as throughout our supply chain, and demand deliveries of fibrous materials to be CoC certified by an internationally accepted forest management standard, FSC, PEFC or SFI.	
Impact 7 Biodegrade		Paper is made of renewable raw materials, with up to 97% fibre and starch; the rest being fillers and ashes, such as calcium carbonate. Renewable materials biodegrade naturally and at the end-of-life are converted to natural materials, such as CO ₂ and water.	

Governance and human rights

We are committed to strive for the highest standards of corporate governance and ethical business conduct. This commitment is instilled across our business, from the boardroom to the factory floor, and throughout our operations and supply chain.

We believe that ethical business conduct must be promoted from the most senior levels of the business, and fostered through the whole organisation. This section outlines Smurfit Kappa's approach to governance in terms of sustainable conduct. We expect the same standards of conduct from our suppliers, and this section also summarises our approach to supplier compliance. For further information on corporate governance, see pages 82-87 of the 2021 Smurfit Kappa Group Annual Report.

Lead from the Top

The overall responsibility for ensuring the Group demonstrates leadership within the paper-based packaging sector, promoting an actionable sustainable development agenda, lies with the Board of Directors.

The Sustainability Committee of the Board has the responsibility to drive and provide overall strategic guidance of our sustainability strategy for the benefit of all our stakeholders. The sustainability strategy continues to focus on the three key pillars: People; Planet; and Impactful Business. In addition, the Group's sustainability strategy, objectives and policies are managed by the Group Executive Committee led by the Group CEO. During 2021 the Group appointed a new Chief Sustainability Officer, reporting into the Group CFO, who forms an important link between the executive, the Board and our broader stakeholder base.

An Executive Sustainability Committee, consisting of key, relevant members of the senior management team, ensures that the sustainability strategy is driven throughout the business and reports to the Sustainability Committee of the Board. It also reports on a regular basis to the Group Executive Committee.

The Sustainability Working Group, consisting of relevant representatives from operations and the Group's head office, ensures that targets are met across all material areas. It also promotes sustainability targets among our customers and suppliers. Both the Executive Sustainability Committee and the Sustainability Working Group are led by our Group Chief Sustainability Officer. Critical concerns in the area of sustainability are communicated to the Board through these committees and by the Group CEO.

Complying with Regulations and Guidelines

It is Group policy to comply, at a minimum, with the relevant laws and regulations in the countries we operate in. We ensure that our employees are aware of relevant guidelines and conduct themselves accordingly.

During 2021, no material fines were imposed on the Group for any breaches of such laws and regulations.

To demonstrate our commitment, wherever possible we go beyond minimum compliance with regulations and maintain the highest reporting standards. Information about our voluntary actions in legal and regulatory matters can be found in sections Planet, People and Impactful Business on pages 30-89. Our entire Sustainable Development Report has a limited assurance by KPMG, in accordance with the 'Comprehensive' option of the GRI Standards.

In addition, each significant business unit is subject to an annual external and independent financial audit conducted by the Group's external Auditor. Most of our business units are subject to local statutory financial audits. The Group also has an Internal Audit function which, during 2021, performed 62 detailed internal audits.

Code of Conduct and Corporate Policies

The Smurfit Kappa Code of Conduct (the Code) applies to the Board of Directors, officers and employees, as well as all individuals, entities, agents or anyone acting on the Group's behalf. The Code is available in 21 languages to ensure accessibility and worldwide compliance.

The Code takes account of the following international conventions and codes:

- International Labour Organisation (ILO) Declaration on Fundamental Principles and Rights at Work (core conventions);
- UN Declaration on Fundamental Human Rights;
- Organisation for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises; and
- UN Global Compact.

The Code provides accessible and understandable guidance for employees in every jurisdiction. Each Smurfit Kappa entity and its employees are required to apply the Code, as well as abiding by the laws and practices of their industry and the jurisdiction in which they operate. It makes clear that personal and professional integrity is essential to conducting business in an ethical manner. The Code also expects adherence to ethical standards, and commitment to quality and service.

Adhering to ethical standards includes the way we interact with external bodies, including anti-corruption and complying with competition laws. We have designed controls to mitigate the risks related to corruption and these are tested during our internal audits. All market-facing employees have been trained on competition law; interactions where there is specific

focus on complying with the law are registered centrally, and are subject to annual self-declaration controls.

During 2021, there were no material incidents reported, which the Group considered to be non-compliant with the Code.

The Code is supplemented by policies relating to our operational and managerial practices. These policies cover Environment, Sustainable Forestry and Fibre Sourcing, Sustainable and Responsible Sourcing, Social Citizenship, and Health and Safety. All our codes and policies are available on our website: www.smurfitkappa.com.

Respecting Human Rights

As a responsible business, we support global human rights and labour standards, and check that our suppliers do too. Smurfit Kappa Group is committed to the application of the principles expressed in the UN Guiding Principles on Business and Human Rights, and the Fundamental Principles and Rights at Work developed by the ILO in all of the countries in which we have (or will have) a presence. Our Social Citizenship Policy Statement reflects our commitment to upholding internationally recognised human rights.

Our Supplier Code of Conduct requires that those who seek to do business with the Group respect and uphold the rights of workers and prohibit the use of child labour and forced labour of any type. For more information on our engagement with suppliers in this area, see our Sustainable and Responsible Sourcing section on pages 88-89.

The Group is subject to the provisions of the UK Modern Slavery Act and publishes an annual Modern Slavery Act Statement, which is available on the Group website at

www.smurfitkappa.com. We also expect our suppliers to comply with the Modern Slavery regulations and conduct audits on them to ensure compliance.

In keeping with the UN Guiding Principles on Business and Human Rights, and the Fundamental principles and Rights at Work developed by the ILO, we are committed to the principles of respect, diversity, working fairly, fair pay, compensation and benefits, and our acquisition practices are in line with these principles as well. They are maintained in every country in which we have a presence and our principles and policies with respect to our employees and suppliers are updated to ensure compliance.

Demonstrating Leadership

Our goal is to be the most sustainable paper-based packaging solutions company globally. To achieve this, we believe it is important to share our sustainability experience with our customers, suppliers and the wider industry.

We are involved with selected trade bodies to influence understanding and share knowledge about embedding sustainability throughout organisations, including:

- Confederation of European Paper Industries (CEPI) – Group and National level membership. Smurfit Kappa’s Group CEO is currently a Board member;
- European Corrugated Packaging Association (FEFCO) – Group and national level membership. Smurfit Kappa’s CEO for Europe is currently a Board member;
- International Corrugated Case Association (ICCA). Smurfit Kappa’s CEO for Europe is currently a Board member; and
- Asociación de Corrugadores del Caribe Centro y Sur América (ACCCSA). Smurfit Kappa’s CFO for the Americas is currently a Board member.

In addition, we are active participants in and signatories to many environmental reporting and sustainability organisations: CDP (formerly Carbon Disclosure Project);

- UN Global Compact;
- UN Global Compact’s CEO Water Mandate;
- The Forest Stewardship Council (FSC);
- The Programme for the Endorsement of Forest Certification (PEFC);
- The Science Based Target initiative (SBTi);

- The Supplier Ethical Data Exchange (SEDEX); and
- World Business Council for Sustainable Development (WBCSD).

Influencing Public Policy for Good

Beyond compliance, Smurfit Kappa upholds standards on a variety of matters material to our business, representing them to the parties concerned, either directly or through industry bodies such as CEPI, FEFCO or the European Round Table of Industrialists (ERT). We also work closely with the Irish Business and Employers’ Confederation (IBEC) and equivalent bodies in other countries. Our Group CEO is a member of the ERT.

At all times, the people representing the views of Smurfit Kappa do so with reference to the Code, and the local laws and regulations which apply to the Group’s operations. There were no significant criticisms of the Group in this respect in 2021.

In line with the Code, no financial contributions were made to political parties in 2021. No national government is a direct investor in Smurfit Kappa.

Our Approach to Tax

As a responsible company, operating globally, Smurfit Kappa is acutely aware of its responsibilities around corporate citizenship. This includes managing and maintaining a sufficient level of tax contribution, which means we do not engage in aggressive tax planning. An example of that is how we approach cross-border transactions, which given the multinational nature of our Company and business, occur on a daily basis. Our transfer pricing policies are aligned with our operating business model and with commercial substance. Transactions between related parties are made on an

arms-length basis in accordance with OECD guidance and principles. Our approach to tax can be found at smurfitkappa.com/tax-strategy

Our business activities generate a significant amount and a variety of taxes including corporate income taxes, value-added taxes, employment taxes, wealth taxes and other transaction taxes. We are committed to complying with tax laws in a fair and responsible manner and to having open and constructive relationships with tax authorities. We embrace our responsibility to pay an appropriate amount of taxes and we engage with international initiatives to improve and simplify tax regimes to achieve a balance that promotes greater transparency and certainty whilst also incentivising investment and growth in countries.

Fiscal Contribution

In 2021, we recorded a corporate income tax expense of €234 million for an effective tax rate of 26%. We paid €239 million in corporate income tax in the period. We also paid dividends of €302 million on which we remitted approximately €33 million in taxes on behalf of our shareholders.

Safe Products and Satisfied Customers

Ensuring our packaging solutions are safe is an integral part of our business. As our packaging is used to deliver and store food products, our products must meet all relevant food safety standards. These include OECD guidelines for Multinational Enterprises and providing statements on food safety and REACH to our customers.

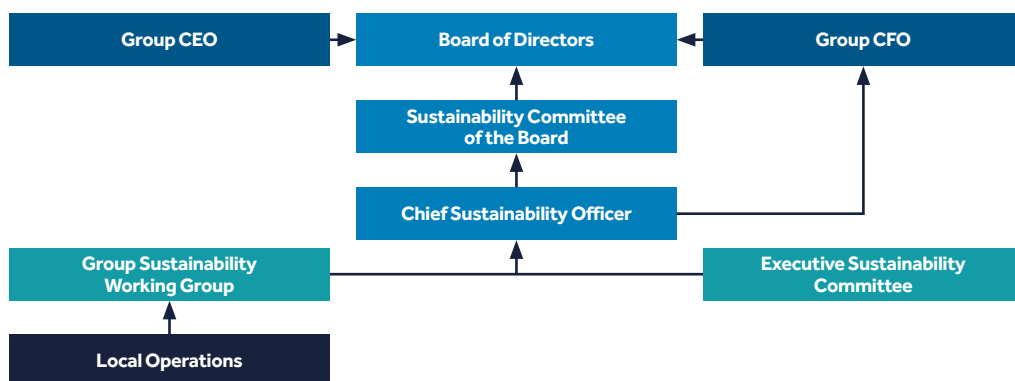
We provide our customers, when required or requested, with support and advice on matters relating to the regulations and/or voluntary codes concerning the health and safety aspects of our products. We have a

central team working on Food Safety to ensure compliance with regulations and provide customers with specific advice if needed. The support we offer is limited to information provided by the customer detailing their individual circumstances.

As a highly customer-centric organisation, we put customer experience at the heart of our operating model. We strive to differentiate ourselves with an enhanced buying experience, and to create measurable value for our customers and key stakeholders.

Delivering a great customer experience calls for disciplined execution and consistent service delivery. We use data and analytics-based insights to review customer journeys and pinpoint the operational improvements that can have the biggest effect. We also use tangible methods and tools to measure customer satisfaction and understand what matters to our customers and how we can deliver it. Our customer relationship (CRM) tools enable us to follow up on customer feedback and capture insights that can maximise customer satisfaction. This drives customer value and loyalty. GDPR requirements are fully complied with when dealing with customer data and analytics.

Sustainability Governance Framework



Sustainable and responsible sourcing

In 2021, we spent €6.2 billion on raw materials, energy, logistics, maintenance/repair, and capital equipment. Sourcing materials, goods and services represents the single largest cost item for Smurfit Kappa. As such, Sustainable and Responsible Sourcing is an integral part of our sustainability vision and strategy.

We want to sustainably grow our business and value chain. That means our materials, goods and services not only have the right quality and cost, but also should be sourced securely in a sustainable and responsible way as described in our Sustainable and Responsible Sourcing Policy and in alignment with the objectives of the 2030 UN SDGs.

By developing more sustainable supply chains in collaboration with our suppliers, we can manage risks and costs, develop new revenue streams, and add value to our brands. We have a Sustainable and Responsible Sourcing audit programme, which helps us deliver against our three pillars of sustainability: Planet, People and Impactful Business.

The programme itself consists of six sections. These are: quality, hygiene, health and safety, business continuity, manufacturing, performance reporting, and environment and sustainable development. Each one has a strong sustainability implication, namely: assessing supplier risks; focusing on relevant supplier processes (especially regarding business continuity); mitigating risks related to environmental, social and equality issues; respecting the right to water sufficiency, safety, accessibility, affordability and reducing waste. During our on-site audits, employees responsible for the areas of the six sections are interviewed. The audit questionnaire will be further updated to reach compliance with the upcoming 'EU Directive on Mandatory Human Rights, Environmental and Good Governance due diligence'.

Our approach to Sustainable and Responsible Sourcing goes beyond regulatory requirements. To deliver our commitments and those of our stakeholders, we have a set of sourcing policies, informed by the

Smurfit Kappa Suppliers' Code of Conduct, Sustainable and Responsible Sourcing Policy, Sustainable Forestry and Fibre Sourcing Policy (see: smurfitkappa.com).

We require our suppliers to participate in commonly accepted best practice and certification schemes. These include good non-financial reporting under the UN Global Compact, GRI Standards and CDP; reporting social data to SEDEX, and adhering to ISO 9001 quality management, ISO 14001 environmental management, ISO 50001 energy management systems, ISO 22001 hygiene management and ISO 45001 on safety, ISO 46001 water-efficiency management – if applicable to the supplier's industry – and HACCP, HALAL, BRC on food safety where relevant.

Leading the way in Sustainable and Responsible Supply Chains

To meet the requirements of our vision and strategy, our suppliers must adhere to the Smurfit Kappa Suppliers' Code of Conduct. Those who do not sign up to it must be committed to a compatible code in compliance with the UN Declaration of Human Rights and the ILO Principles and Rights at Work covering: freedom of association, prohibiting child labour and forced labour, treating employees humanely, working times in accordance with internationally recognised standards, respecting employee contributions, fair compensation with no wage deduction as a disciplinary measure, encouragement of continuous training and development, Health and Safety at work, non-discrimination, prohibiting harassment, bullying, other unfair practices and promoting community involvement. They will recruit, hire and train without regard to race, colour, gender, sexual orientation, age, religion, creed,

national origin, disability or any other legally protected status in the countries where they do business.

Suppliers are also required to follow our Sustainable and Responsible Sourcing Policy, and all other relevant policies which also cover the safeguarding of the natural environment and respecting indigenous peoples and traditional livelihoods.

Suppliers are required to submit a declaration form for compliance with our Sustainable and Responsible Sourcing Policy, our Suppliers' Code of Conduct, our Modern Slavery Act Statement and a Statement on controversial sources of Raw Materials, Goods and Services. In 2021, we updated the first three documents and made them available in the following languages: English, French, German, Italian, Polish, Russian, Spanish and Swedish.

These standards should be extended upstream in the suppliers, supply chain. This declaration is refreshed every three years and we monitor our suppliers' compliance through our Sustainable and Responsible Sourcing audit programme. 337 suppliers have signed this declaration and 57% of our suppliers of key materials, representing 63% of the relevant sourcing spend.

Our Sustainable and Responsible Sourcing programme is founded on risk mapping against our key criteria: overall sourcing spend, global presence, labour rights, working conditions, technological innovation, excellent service and reputation. Risk mapping considers the sourcing categories with the highest impact on our products, and therefore our stakeholders. The most relevant sourcing categories are our key materials (paper and other wood fibre-based materials, starch, chemicals, inks, adhesives and

354
suppliers audited
since 2010

industrial tapes) that are used in our primary production process and form the basis for our packaging solutions we deliver to customers.

The sourcing of wood fibre-based materials, as well as our own forestry operations, are controlled by our Forestry and Fibre Sourcing Policy. A more detailed report on these activities can be found in the Forest section on pages 43-47.

We require the key materials, other goods and services we contract to be produced and delivered sustainably and responsibly. Since launching our Sustainable and Responsible Sourcing programme in 2010, we have audited 354 of our suppliers to ensure they meet our standards. Including reapproval audits and follow-up of improvement plans, 798 activities with suppliers have taken place. As Argentina, Mexico and Colombia are considered the highest risk countries regarding child labour in paper recovery, we have visited since 2014: 193 operations in Argentina, 174 in Mexico and 168 in Colombia.

The same was done in 2017 and during all these visits no cases of child labour were found. In 2020 and 2021 due to COVID-19 restrictions we have sent out requests to confirm commitment. The on-site checks will be repeated in 2022 and 2023.

Six Section Supplier Audit Programme

We also monitor whether suppliers are a member of SEDEX or are assessed on their ethical practices by EcoVadis. We believe on-site audits increase competence and commitment in our supplier base, while training and enhancing our mutual understanding of key requirements. Based on their scoring at the audit, follow-up programmes are designed on a supplier-by-supplier basis. This includes further strengthening their understanding of, and compliance to, Smurfit Kappa's Sustainable and Responsible Sourcing principles and indicators. Since 2010, we have reduced unsatisfactory scores of strategic suppliers by 75% through improvement plans and follow up.

Audits result in a rating against each of the six sections of our Sustainable and Responsible Sourcing programme. If the result is below 'expected performance' (scoring less than 60%), an obligatory improvement programme is devised.

Failure to commit to the improvement action list may, ultimately, lead to termination of the business relationship.

The supplier assessment is repeated every three years through a reapproval audit process.

Our country based risk mapping, combined with supplier audit results, show that 100% of our suppliers of key materials carry moderate to low risk. Our sourcing network includes suppliers ranging from small-scale local companies to large multinationals.

In total, an estimated 75% of our European based suppliers' deliveries can be classified as local. In 2021, supplier improvement opportunities typically included Performance Reporting (14) and Business Continuity management (13). Overall, there were no material findings on our audits that would impact safe and timely deliveries of our products to our customers and we have not come across violations of human rights, labour and/or working conditions.

We hold annual global sourcing seminars in which part of the programme is to train and update the knowledge of our sourcing managers on developments, achievements and challenges in the area of Sustainable and Responsible Sourcing. In 2021 our Global Sourcing Team was trained during an online session. Further 184 other internal, as well as external persons, from 25 countries in both Europe and the Americas that are in contact with suppliers, have been trained on-line.

Progress in 2021

New developments in the auditing process in 2020 and 2021 included an updated questionnaire with a stronger focus on issues related to Smurfit Kappa's Sustainability Targets: Climate Change, Forest, Water, Waste, People, Safety and wellbeing; and Communities. The new questionnaire was rolled out during 2021. We have implemented the requirements to exclude modern slavery practices by our suppliers in our sourcing programme, and increased supplier screening on human rights, diversity and inclusion and environmental aspects regarding energy, water and waste.

To contribute to the objectives of the 2030 UN SDG's, we focus on selected SDGs in our Sustainable and Responsible Sourcing programme. This new focus specifically targets our strategic and key suppliers. We ask our suppliers to support, where material, at least the SDGs where Smurfit Kappa can make an impact. These SDGs are numbers 15 (Forest), 13 and 7 (Climate Action), 12 (Waste), 6 (Water) and 3 (People).

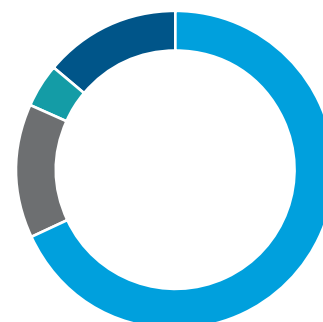
The COVID-19 pandemic made on-site audits only possible in the third and the fourth quarter of the year and we were able to perform 15 audits on-site.

Of the total of 22 activities, one of these was a first-time audit. A total of 89% of all suppliers audited during 2021 scored at least 'expected performance', and the remaining will pass the audit once they complete improvement plans. Following the initial audit, we work with each supplier to identify continual improvement opportunities.

Since the start of the programme in 2010, we have audited 114 strategic suppliers, 70 key suppliers, 47 tactical suppliers and 123 other suppliers. The audit results differ per industry sector. The best compliance to our sustainability objectives has been consistently achieved by suppliers of starch, paper, chemicals and ink. Furthermore, none of our audited suppliers in these industry sectors score below expectation. From all sourcing categories, 10 have been identified as key material and most relevant to our Sustainable and Responsible Sourcing programme. From the key materials, 70% of the spend has been monitored.

Spread over seven regions, we work with 17 external auditors supporting us with their knowledge of local legislations regarding environment, working conditions, labour rights, culture and language. Some have specific experience with industries and/or with our Sustainable and Responsible Sourcing audit programme and nine of them took part in the 2021 on-line training programme.

Supplier Audits by Country
(22 audit activities, 20 suppliers audited)



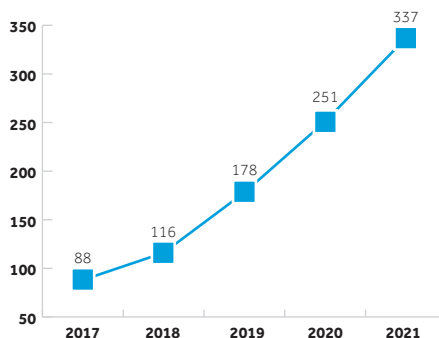
Key:
■ UK/IR – 15
■ DACH – 3
■ BNL – 1
■ Rest of world – 3

Total Sourcing Costs (€m)



Key:
■ Raw material and consumables – 3,653
■ Transportation and storage – 829
■ Capital equipment – 570
■ Energy – 657
■ Maintenance and repairs – 452

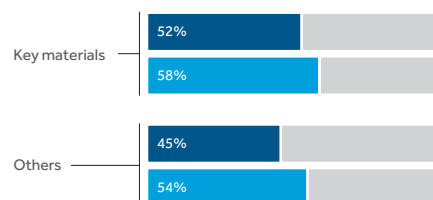
Signed Sustainability Declarations*



* The declarations cover compliance with our Suppliers' Code of Conduct, Modern Slavery Act Statement and Sustainable and Responsible Sourcing Policy.

Average Audit Score

(Initial vs 2021)



Key:
■ Initial audits
■ 2021 level

Supporting Data





Inside this section

90-105

Input/Output	92
Environmental Data	94
Management System Certifications	101
Social Data	102
Sourcing Data	103
Protected Areas and Biodiversity	104

INPUT/OUTPUT 2021

Europe

Input

Wood and Fibre		
Wood ¹	5,214	ktonnes ar
Market virgin pulp	112	ktonnes ar
Other pulp	13	ktonnes ar
Recovered paper	4,999	ktonnes ar
Paper or Board purchased	1,581	ktonnes ar
Plastic films, other plastic item (BIB)	30	ktonnes
Starch (all types)	307	ktonnes ar
Inorganic raw materials	326	ktonnes ar
Other organic raw materials	182	ktonnes ar

Energy

Energy from fossil fuels	29,026	TJ (Terajoule)
Energy from purchased biofuels	5,557	TJ
Electricity from grid	2,226	GWh

Water

Water intake ²	112	Mm ³
---------------------------	-----	-----------------

Output

Production		
Papers (all grades)	5,799	ktonnes
Corrugated packaging*	5,535	ktonnes
Board and laminated boards*	423	ktonnes
Converted board*	113	ktonnes
Sacks*	–	ktonnes
Other packaging	29.9	ktonnes

Direct Emissions to Air

CO ₂ fossil	1,720	ktonnes
CO ₂ biogenic	3,648	ktonnes
Dust/Particulates from fuels	0.18	ktonnes
SO _x from processes	0.84	ktonnes
NO _x from processes	2.9	ktonnes

Energy Output

Electricity to third party	314	GWh
Thermal energy to third party	253	TJ
Biomass sold	636	TJ

Wastes

Hazardous wastes	7.2	ktonnes
Non-hazardous wastes sent to landfill	177	ktonnes
Non-hazardous wastes recovered	452	ktonnes
Other non-hazardous wastes	14.1	ktonnes

Discharges to Water

Water released	103	Mm ³
COD	30.4	ktonnes
BOD	11.9	ktonnes
Total suspended solids	5.5	ktonnes
Total Nitrogen	0.51	ktonnes
Total Phosphorous	0.068	ktonnes

Notes

1 Wood and sawmill chips as delivered to the mill.

2 Water intake includes rainwater and waste water from another operation.

* Partly produced with Smurfit Kappa paper or board.

ktonnes ar: kilotonnes as received.

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 94 to 95. The latter pages show the energy consumption for the production of the paper or board manufactured.

The Americas

Input

Wood and Fibre

Wood ¹	706	ktonnes ar
Market virgin pulp	1	ktonnes ar
Other pulp	2	ktonnes ar
Recovered paper	1,511	ktonnes ar
Paper or Board purchased	482	ktonnes ar
Plastic films, other plastic item (BIB)	5	ktonnes
Starch (all types)	69	ktonnes ar
Inorganic raw materials	45	ktonnes ar
Other organic raw materials	61	ktonnes ar

Energy

Energy from fossil fuels	12,514	TJ
Energy from purchased biofuels	1,619	TJ
Electricity from grid	882	GWh

Water

Water intake ²	27.7	Mm ³
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Output

Production

Papers (all grades)	1,483	ktonnes
Corrugated packaging*	1,688	ktonnes
Board and laminated boards*	112	ktonnes
Converted board*	84	ktonnes
Sacks*	67	ktonnes
Other packaging	4	ktonnes

Direct Emissions to Air

CO ₂ fossil	819	ktonnes
CO ₂ biogenic	566	ktonnes
Dust/Particulates from fuels	0.16	ktonnes
SO _x from processes	1.34	ktonnes
NO _x from processes	1.19	ktonnes

Energy Output

Electricity to third party	–	GWh
Thermal energy to third party	–	TJ
Biomass sold	–	TJ

Wastes

Hazardous wastes	1.61	ktonnes
Non-hazardous wastes sent to landfill	248	ktonnes
Non-hazardous wastes recovered	23.2	ktonnes
Other non-hazardous wastes	0.04	ktonnes

Discharges to Water

Water released	24.4	Mm ³
COD	11.0	ktonnes
BOD	2.96	ktonnes
Total suspended solids	2.95	ktonnes
Total Nitrogen	0.57	ktonnes
Total Phosphorous	0.030	ktonnes

Notes

1 Wood and sawmill chips as delivered to the mill.

2 Water intake includes rainwater and waste water from another operation.

* Partly produced with Smurfit Kappa paper or board.

ktonnes ar: kilotonnes as received.

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 96 to 97. The latter pages show the energy consumption for the production of the paper or board manufactured.

ENVIRONMENTAL DATA 2021

Paper and Board Mills, Europe

		Nettingsdorf, Austria	Sangüesa, Spain	Facture, France	Piteå, Sweden	Morava, Czech Republic	Wrexen, Germany ⁵	Hoya, Germany ⁵	Zülpich, Germany	Mengibar, Spain
		kl, tl	mg paper	bkl, wtkl	bkl, wtkl	tl, fl	wttl, sb, tl, fl	tl, fl, cart	tl, fl	fl, tl
Production	ktonnes	457	87	562	685	74	317	464	526	229
Energy										
Electricity										
Co-generated	GWh	157	57	373 ¹	306	–	57	131	161	101
Self-generated	GWh	–	–	–	–	–	–	–	–	–
Hydro power	GWh	–	–	–	–	2.7	0.1	–	–	–
Net grid supply	GWh	138	91	39	264	21	37	43	31	– ²
Solar electricity generated on site	GWh	–	–	–	–	–	–	–	–	–
Total electricity	GWh	295	148	411	570	24	94	174	192	101
Fuel Usage										
Biofuels	TJ	4,428	2,158	9,160	10,129	13	63	98	274	–
Fossil fuels	TJ	789	218	632	181	345	1,345	2,560	2,941	1,664
Total fuels	TJ	5,217	2,376	9,793	10,309 ³	358	1,409	2,658	3,215	1,664
Water Withdrawal										
Surface	Mm ³	17.2	4.3	7.8	32.6	0.5	0.5	–	1.5	1.4
Ground	Mm ³	–	–	0.9	–	0.0	0.6	2.5	0.4	0.0
Grid	Mm ³	0.1	0.0	0.0	0.2	0.0	0.0	0.2	0.0	0.0
Total water ⁴	Mm ³	17.4	4.5	9.3	33.2	0.5	1.1	2.7	1.9	1.4
Discharges										
To Air										
CO ₂ fossil direct Scope 1	ktonnes	45	14	36	14	19	76	144	215	94
CO ₂ fossil indirect Scope 2	ktonnes	–	24	2	4	11	15	17	12	–
CO ₂ biogenic	ktonnes	535	227	1,067	1,157	1	5	8	31	4
Dust (particulate matter PM)	tonnes	6.6	13.3	33.8	90.3	0.2	0.0	0.0	0.2	0.1
NO _x as NO ₂	tonnes	283	113	482	680	7	36	92	172	75
SO _x as SO ₂	tonnes	14	70	59	33	0	1	2	62	58
To Water										
Process water	Mm ³	5.95	3.90	9.72	12.44	0.31	0.29	2.08	–	1.15
Cooling water	Mm ³	8.35	–	–	20.70	–	0.50	0.08	1.10	–
COD	tonnes	9,698	255	4,065	2,107	41	70	238	–	670
BOD	tonnes	6,006	43	1,030	415	2	4	13	–	75
Total suspended solids	tonnes	865	90	702	540	7	5	77	–	252
Total Nitrogen	tonnes	48.7	18.5	92.2	38.6	6.1	0.7	24.3	–	39.6
Total Phosphorous	tonnes	4.7	2.8	11.3	11.9	0.1	0.1	2.6	–	4.4
Wastes										
Total non-hazardous wastes	tonnes	22,033	15,028	86,267	34,738	9,763	12,349	33,611	17,858	26,473
Landfill	tonnes	3,294	5,955	10,470	2,492	4,597	–	12	4,545	26,366
Recovery	tonnes	18,739	9,073	75,785	32,246	5,166	11,923	33,599	13,313	107
Other	tonnes	–	–	11	–	–	425	0	–	–
Hazardous wastes	tonnes	191	409	174	143	4	57	50	1,768	40

Notes

- 1 CHP partly or totally outsourced.
- 2 Electricity exported by CHP.
- 3 Part of heat exported outside the Group.

4 Total water includes rainwater and waste water from another organisation.

5 Both Hoya and Wrexen consist of two mills on one site, data are aggregated data per site.

Water discharges in *italics*: mills that do not discharge their process water to surface.

Alfa d'Avignon, France	Rethel, France	Sallaat, France	Ania, Italy	Roermond, the Netherlands	Pavenco, the Netherlands	Beograd, Serbia	SSK, United Kingdom	Townsend Hook, United Kingdom	Herzberger, Germany	Nervi6n, Spain	Total Mills
ti	ti	fi, ti	fi, ti	ti, fi	fi, grap pap, ti	ti, fi	ti, fi	fi, ti	sb	sack p	
73	66	255	230	646	586	111	202	234	260	159	6,223
–	–	44 ¹	68	115	–	–	60	76	75	129	1,910
0.0	–	–	–	–	–	–	–	–	0.0	0.0	0.0
–	–	0.8	–	–	–	–	–	–	1.0	–	4.7
28	23	75	– ²	63	363	45	– ²	11	17	61	1,350
–	–	–	–	–	–	–	–	–	–	–	–
28	23	121	68	179	363	45	60	87	93	189	3,265
–	11	104	49	224	1,197	–	43	55	–	3,581	31,586
314	276	1,374	1,377	2,729	1,576	734	1,339	1,369	1,656	114	23,534
314	287	1,478	1,426	2,953	2,774	734	1,382	1,424	1,656	3,695	55,121
1.0	–	1.9	–	2.1	15.5	1.0	–	1.0	3.8	2.6	94.9
–	0.4	–	1.5	–	5.1	–	1.0	0.3	0.0	–	12.7
–	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.9
1.1	0.5	2.0	1.5	2.3	20.8	1.0	1.2	1.3	3.9	2.8	110.5
18	15	77	78	154	90	67	75	77	92	7	1,406
2	1	4	–	–	–	33	–	–	7	16	147
0	2	11	3	20	141	–	4	8	–	368	3,592
0.0	0.1	0.8	0.0	0.0	2.1	4.7	0.0	0.0	1.1	24.1	177.5
20	6	43	21	121	132	86	111	48	40	276	2,845
2	10	1	0	25	8	401	0	4	3	49	803
0.63	0.40	1.62	1.23	1.80	4.79	0.91	0.96	0.82	1.43	2.03	52.46
0.20	–	–	–	–	15.55	–	–	0.16	2.18	–	48.83
725	40	232	111	319	765	3,978	3,699	106	259	1,311	28,687
243	3	7	14	7	32	1,296	1,924	5	16	312	11,448
148	8	74	19	35	144	259	1,689	26	26	122	5,087
26.3	5.9	31.6	12.0	42.2	42.3	6.5	25.9	13.2	2.3	1.0	477.9
3.8	0.4	1.9	1.2	2.6	6.9	1.3	10.1	0.6	0.7	0.2	67.6
3,350	1,899	18,214	17,416	47,159	63,176	17,333	21,617	26,271	31,711	76,141	582,407
658	1,494	17,517	1,779	7,467	2,695	8,648	6,263	3,865	–	62,813	170,928
2,692	405	697	15,637	39,555	60,482	8,684	15,311	22,404	31,485	13,328	410,632
–	–	–	–	138	–	–	44	3	226	–	847
56	6	52	42	14	85	3	124	95	27	27	3,366

bkl: brown kraftliner
cart: carton board
fl: recycled fluting
grap p: graphic paper

mg paper: machine glazed paper
sb: solid board
ti: testliner

wtkl: white top kraftliner
wtli: white top testliner
sack p: sack paper

ENVIRONMENTAL DATA 2021 CONTINUED

Paper and Board Mills, The Americas

		Bernal, Argentina	Coronel Suárez, Argentina	Bento, Brazil	Pirapetinga, Brazil	Uberaba, Brazil
		ti, fi	ti, fi	fi, ti	ti, fi, wtti	ti, fi
Production	ktonnes	85	48	49	124	59
Energy						
Electricity						
Co-generated	GWh	–	–	–	–	–
Self-generated	GWh	–	–	–	–	0.0
Hydro power	GWh	–	–	–	–	–
Solar electricity generated on site	GWh	–	–	–	–	–
Net grid supply	GWh	36	13	18	59	31
Total electricity	GWh	36	13	18	59	31
Fuel Usage						
Biofuels	TJ	–	–	381	844	489
Fossil fuels	TJ	468	298	2	49	6
Total fuels	TJ	468	298	382	893	495
Water Withdrawal						
Surface	Mm ³	–	–	0.1	0.9	–
Ground	Mm ³	0.8	0.3	–	–	0.5
Grid	Mm ³	0.0	–	0.0	0.0	–
Total water ¹	Mm ³	0.8	0.3	0.2	0.9	0.5
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	26	17	0	3	0
CO ₂ fossil indirect Scope 2	ktonnes	12	4	2	6	3
CO ₂ biogenic	ktonnes	0	–	40	89	49
Dust (particulate matter PM)	tonnes	0.0	0.0	55.0	40.7	31.3
NO _x as NO ₂	tonnes	29	19	64	136	58
SO _x as SO ₂	tonnes	3	0	0	11	0
To Water						
Process water	Mm ³	0.41	0.18	–	0.61	0.32
Cooling water	Mm ³	0.30	–	–	–	–
COD	tonnes	58	87	–	155	603
BOD	tonnes	7	17	–	74	174
Total Suspended Solids	tonnes	7	30	–	40	72
Total Nitrogen	tonnes	7.2	1.1	–	13.0	2.8
Total Phosphorous	tonnes	0.4	0.1	–	0.7	0.3
Wastes						
Total non-hazardous wastes	tonnes	9,415	3,854	5,354	13,868	8,583
Landfill	tonnes	2,637	3,824	3,487	13,578	8,422
Recovery	tonnes	6,778	31	1,867	290	161
Other	tonnes	–	–	–	–	–
Hazardous wastes	tonnes	70	18	46	36	9

Notes

¹ Total water includes rainwater and waste water from another organisation.

Water discharges in italic: mills that do not discharge their process water to surface.

	Cali, Colombia	Barranquilla, Colombia	Barbosa, Colombia	Los Reyes, Mexico	Cerro Gordo, Mexico	Monterrey, Mexico	Forney, USA	Total Mills
sc fl, sack p, bkl, p&w, cart, ti, wtkl, pulp		ti, fl	fl, ti	fl, ti	ti, cart, fl	fl, ti	ti, fl	
	240	65	109	137	323	32	324	1,595
	190	20	45	–	–	–	31	286
	0.1	–	0.0	–	–	–	–	0.1
	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–
	107	17	9	70	161	20	111	652
	297	37	54	70	161	20	142	938
	3,569	–	–	–	–	–	132	5,415
	4,644	558	681	745	1,448	242	1,709	10,849
	8,213	558	681	745	1,448	242	1,841	16,263
	19.2	0.6	0.8	–	–	–	–	21.6
	0.2	–	–	0.4	1.5	0.1	–	3.8
	–	0.0	–	–	–	0.1	1.0	1.1
	19.4	0.6	0.8	0.6	1.6	0.2	1.1	26.9
	357	31	45	42	81	14	96	714
	0	0	–	32	73	9	46	186
	351	–	–	–	–	0	17	546
	27.9	2.5	0.7	0.0	0.4	0.0	1.1	159.6
	637	23	51	20	34	26	49	1,145
	1,179	0	79	0	0	0	17	1,290
	19.12	0.47	0.64	0.29	0.86	0.10	0.60	23.61
	–	–	–	–	–	–	0.02	0.32
	6,312	1,544	176	78	608	49	1,154	10,825
	1,426	800	40	4	64	6	287	2,900
	1,577	222	74	6	87	19	793	2,926
	478.3	5.9	3.2	1.3	8.4	0.8	48.5	570.5
	9.3	0.7	1.4	0.5	2.0	0.2	14.4	30.0
	85,582	4,456	9,354	14,580	44,424	4,264	48,090	251,824
	84,583	3,779	7,721	13,779	44,074	2,624	47,785	236,291
	1,000	678	1,633	800	350	1,640	305	15,532
	–	–	–	–	–	–	0	0
	182	15	9	22	36	6	1	450

bkl: brown kraftliner
cart: carton board
fl: recycled fluting
sc fl: semi-chemical fluting

p&w: printing and writing paper
pulp: virgin pulp sold externally
ti: testliner

wtkl: white top kraftliner
wttl: white top testliner
sack p: sack paper

ENVIRONMENTAL DATA 2021 CONTINUED

Operations Total, Europe

		Paper and Board Mills	Integrated Corrugated Operations	Other Packaging Operations	Other Operations	Total Operations
Production	ktonnes	6,223	5,216	463	2,894	
Energy						
Electricity						
Co-generated	GWh	1,910	–	–	–	1,910
Self-generated	GWh	0	–	–	–	0
Hydro power	GWh	5	–	–	–	5
Solar electricity generated on site	GWh	–	–	–	–	–
Net grid supply	GWh	1,350	586	89	5	2,029
Total electricity	GWh	3,265	586	89	5	3,944
Fuel Usage						
Biofuels	TJ	31,586	167	1	–	31,754
Fossil fuels	TJ	23,534	4,579	142	78	28,333
Total fuels	TJ	55,121	4,746	142	78	60,087
Water Withdrawal						
Surface	Mm ³	94.9	0.0	–	–	94.9
Ground	Mm ³	12.7	0.3	0.0	–	12.9
Grid	Mm ³	0.9	1.5	0.1	0.0	2.5
Total water ¹	Mm ³	110.5	1.8	0.1	0.0	112.4
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	1,406	261	8	6	1,682
CO ₂ fossil indirect Scope 2	ktonnes	147	126	19	1	293
CO ₂ biogenic	ktonnes	3,592	18	0	–	3,610
Dust (particulate matter PM)	tonnes	178	3	0	0	181
NO _x as NO ₂	tonnes	2,845	90	3	4	2,942
SO _x as SO ₂	tonnes	803	32	1	3	839
To Water						
Process water	Mm ³	52.5	0.6	0.0	–	53.1
Cooling water	Mm ³	48.8	0.2	0.0	–	49.0
COD ²	tonnes	28,687	1,750	–	–	30,437
BOD ²	tonnes	11,448	437	–	–	11,884
Total suspended solids ²	tonnes	5,087	396	–	–	5,483
Total Nitrogen ²	tonnes	478	37	–	–	515
Total Phosphorous ²	tonnes	68	1	–	–	68
Wastes						
Total non-hazardous wastes	tonnes	582,407	47,813	7,087	6,347	643,655
Landfill	tonnes	170,928	4,343	807	1,076	177,154
Recovery	tonnes	410,632	30,148	5,759	5,271	451,810
Other	tonnes	847	12,704	538	–	14,089
Hazardous wastes	tonnes	3,366	3,417	378	8	7,169

Notes

- 1 Total water includes rainwater and waste water from another organisation.
- 2 Sum of available data (for mills details are reported in individual tables).

Operations Total, The Americas

		Paper and Board Mills	Other Operations	Total Operations
Production	ktonnes	1,595	3,353	
Energy				
Electricity				
Co-generated	GWh	286	–	286
Self-generated	GWh	0	0	1
Hydro power	GWh	–	–	–
Solar electricity generated on site	GWh	–	1	1
Net grid supply	GWh	652	226	878
Total electricity	GWh	938	227	1,165
Fuel Usage				
Biofuels	TJ	5,415	194	5,609
Fossil fuels	TJ	10,849	1,665	12,514
Total fuels	TJ	16,263	1,859	18,122
Water Withdrawal				
Surface	Mm ³	21.6	0.1	21.7
Ground	Mm ³	3.8	0.3	4.1
Grid	Mm ³	1.1	0.5	1.6
Total water ¹	Mm ³	26.9	0.8	27.7
Discharges				
To Air				
CO ₂ fossil direct Scope 1	ktonnes	714	105	819
CO ₂ fossil indirect Scope 2	ktonnes	186	74	260
CO ₂ biogenic	ktonnes	546	20	566
Dust (particulate matter PM)	tonnes	160	3	163
NO _x as NO ₂	tonnes	1,145	42	1,187
SO _x as SO ₂	tonnes	1,290	46	1,336
To Water				
Process water	Mm ³	23.6	0.2	23.8
Cooling water	Mm ³	0.32	–	0.32
COD ²	tonnes	10,825	136.85	10,961
BOD ²	tonnes	2,900	64.89	2,964
Total suspended solids ²	tonnes	2,926	22.60	2,948
Total Nitrogen ²	tonnes	570.5	2.4	572.9
Total Phosphorous ²	tonnes	30.0	0.2	30.2
Wastes				
Total non-hazardous wastes	tonnes	251,824	19,778	271,602
Landfill	tonnes	236,291	12,002	248,293
Recovery	tonnes	15,532	7,680	23,212
Other	tonnes	0	40	41
Hazardous wastes	tonnes	450	1,156	1,606

Notes

- 1 Total water includes rainwater and waste water from another organisation.
- 2 Sum of available data (for mills details are reported in individual tables).

ENVIRONMENTAL DATA 2021 CONTINUED

Total Group Operations

		All Operations				
		2021	2020	2019	2018	2017
Energy						
Electricity						
Co-generated ¹	GWh	2,196	2,192	2,218	2,282	2,413
Self-generated	GWh	1	1	1	8	15
Hydro power	GWh	5	5	4	4	4
Solar electricity generated on site	GWh	1	1	0		
Grid supply	GWh	2,907	2,841	2,876	2,356	2,344
Total electricity	GWh	5,109	5,040	5,099	4,650	4,778
Fuel Usage						
Biofuels	TJ	37,363	36,965	37,119	36,580	37,158
Fossil fuels	TJ	40,847	41,058	40,735	40,469	43,623
Total fuels	TJ	78,210	78,023	77,854	77,049	80,781
Water Withdrawal						
Surface	Mm ³	116.6	120.9	114.2	99.1	101.0
Ground	Mm ³	17.0	17.0	16.7	10.9	12.7
Grid	Mm ³	4.0	4.0	3.9	3.9	4.2
Total water ²	Mm ³	140.1	144.3	137.1	115.3	119.5
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	2,500	2,545	2,513	2,489	2,670
CO ₂ fossil indirect Scope 2	ktonnes	553	566	808	652	647
CO ₂ biogenic	ktonnes	4,176	4,073	4,066	3,944	4,038
Dust (particulate matter PM)	tonnes	344	383	596	631	666
NO _x as NO ₂	tonnes	4,128	4,400	4,971	5,072	5,385
SO _x as SO ₂	tonnes	2,176	2,395	2,237	2,694	2,569
To Water						
Process water	Mm ³	77.0	80.0	76.2	74.0	76.4
Cooling water	Mm ³	49.3	50.8	49.2	29.7	30.2
COD ³	tonnes	41,398	40,100	42,015	41,316	40,425
BOD ³	tonnes	14,849	15,399	17,449	15,022	14,988
Total suspended solids ³	tonnes	8,431	7,775	7,898	8,004	8,756
Total Nitrogen ³	tonnes	1,088	901	960	1,228	1,374
Total Phosphorous ³	tonnes	99	87	107	224	89
Wastes						
Total non-hazardous wastes	tonnes	915,257	856,862	903,341	853,599	851,241
Landfill	tonnes	426,106	442,038	539,450	519,000	504,522
Recovery	tonnes	475,022	405,801	350,287	323,045	325,585
Other	tonnes	14,129	9,022	13,604	11,553	21,133
Hazardous wastes	tonnes	8,774	10,046	9,655	10,614	8,242

Notes

- 1 CHP partly or totally outsourced.
- 2 Total water includes rainwater and waste water from another organisation.
- 3 Sum of available data (for mills details are reported in individual tables).

MANAGEMENT SYSTEM CERTIFICATIONS

Forestry, Wood Sourcing and Mills

		Quality Management System	Environmental Management System	Health and Safety System		Hygiene Management for Foodstuffs Packaging		Energy Management System	Chain of Custody		
		ISO 9001	ISO 14001	OHSAS 18001	ISO 45001	EN 15593	FSSC 22000	ISO 50001	FSC	PEFC	SFI
Europe											
Wood Sourcing											
ES	Central Forestal				YES				YES	YES	
FR	Comptoir du Pin				YES				YES	YES	
Virgin Mills											
AT	Nettingsdorf	YES	YES		YES	YES			YES	YES	
ES	Nervión	YES	YES		YES	YES		YES	YES	YES	
	Sangüesa	YES	YES		YES	YES			YES	YES	
FR	Facture	YES	YES		YES	YES			YES	YES	
SE	Piteå	YES	YES		YES		YES	YES	YES	YES	
Recycled Mills											
CZ	Morava	YES	YES		YES	YES		YES	YES	YES	
DE	Herzberger	YES	YES		YES	YES		YES	YES	YES	
	Hoya ¹	YES	YES		YES	YES		YES	YES	YES	
	Wrexen ¹	YES	YES		YES	YES		YES	YES	YES	
	Zülpich	YES	YES		YES	YES		YES	YES	YES	
ES	Mengibar	YES	YES		YES	YES			YES	YES	
FR	Alfa D'Avignon	YES	YES			YES			YES	YES	
	Rethel	YES	YES			YES			YES	YES	
	Saillat	YES	YES		YES	YES		YES	YES	YES	
IT	Ania	YES	YES		YES	YES			YES	YES	
NL	Parenco		YES					YES	YES	YES	
	Roermond	YES	YES		YES		YES	YES	YES	YES	
RS	Beograd	YES	YES				YES		YES		
UK	SSK	YES	YES		YES	YES		YES	YES	YES	
	Townsend Hook	YES	YES		YES	YES		YES	YES	YES	
The Americas											
Forestry											
CO	Colombian Forest								YES		
Virgin Mills											
CO	Cali		YES						YES		
Recycled Mills											
AR	Bernal		YES					YES	YES		
	Coronel Suárez		YES						YES		
BR	Bento	YES							YES		
	Pirapetinga	YES							YES		
	Uberaba	YES							YES		
CO	Barbosa		YES						YES		
	Barranquilla		YES						YES		
ME	Cerro Gordo	YES	YES						YES		
	Los Reyes	YES	YES						YES		
	Monterrey	YES	YES						YES		
USA	Forney		YES		YES				YES	YES	YES

Note

¹ Both Hoya and Wrexen consist of two mills on one site, data are aggregated data per site.

SOCIAL DATA

Social Citizenship and Health and Safety

	2021	2020	2019	2018	2017
Social Citizenship (Full-time Employees)					
Total number of employees ¹	48,045	46,688	46,237	44,959	46,418
of whom female (%) ²	20%	19%	19%	19%	19%
Employees leaving the company ³	4,919	4,017	4,842	6,224	1,666
of whom resignation and retirement (%)	69%	64%	64%	58%	74%
Employees joining the company ³	5,778	4,189	5,038	6,675	2,318
Age distribution (%)					
<20 years	1%	1%	1%	1%	1%
21-30 years	17%	16%	17%	17%	17%
31-40 years	25%	25%	24%	24%	25%
41-50 years	27%	27%	28%	28%	29%
51-60 years	26%	26%	25%	25%	24%
>60 years	5%	5%	5%	5%	4%
Employees turnover (%)	11.7%	9.8%	11.7%	15.5%	4.0%
Length of service, above 11 years (%)	46%	47%	48%	49%	49%
Female in management (%)	22%	22%	21%	19%	20%
Parental leave	1,225 employees took parental leave and 1,015 returned from parental leave	1,152 employees took parental leave and 900 returned from parental leave	1,178 employees took parental leave and 1,028 returned from parental leave	1,260 employees took parental leave and 1,126 returned from parental leave	1,095 employees took parental leave and 733 returned from parental leave
of whom female ⁶	371 female employees took parental leave and 238 returned				
Average training hours per employee	18.7	15	22	24	26
By gender ⁶	18.6 male/ 18.9 female				
Health and Safety					
Lost time accidents (LTA) (SK employees)	270	232	325	321	327
Lost time accidents (LTA) (contractors)	63	37	46	48	30
Days lost due to accidents (DLA) (SK employees)	9,090	9,413	11,177	10,683	11,711
Accident severity rate (ASR) (%) (SK employees)	10.39%	11.19%	13.15%	12.65%	13.88%
LTA Frequency Rate (FR)* (SK employees)	0.31	0.28	0.38	0.38	0.39
Total recordable injury rate ⁴	0.59	0.6	0.84	1.01	
Number of restricted workday cases (RWC) (SK employees) ⁵	107	104	135		
Number of medical treatment cases (MTC) (SK Employees) ⁵	137	165	253		
Number of medical treatment cases (MTC) (contractors) ⁶	9				
Total recordable injuries (LTA/RWC/MTC) ⁵	514	501	713		
Fatalities					
Own employees ⁷	0	0	0	0	2
Contractors ⁷	0	1	0	0	0
Subcontractors ⁷	1	1	2	0	0

The amount of contractors and sub-contractors in our business is relatively small. Contractors and sub-contractors are mainly supporting us in major construction and maintenance projects and represent our external suppliers.

Notes

1 Based on full-time equivalent of employees and contractors.

2 Based on SK employees only (excluding contractors).

3 This data has been derived from Hyperion Financial Management data system (HFM). Since 2018, all countries have registered in HFM, and data accuracy has improved.

4 This has led to an increase in the joiners and leavers data compared with 2017.

5 New indicator since 2018.

5 New indicator since 2019.

6 New indicator since 2021.

7 (Sub)contractors have been split into Contractors and Subcontractor since 2021.

* The amount of contractors and sub-contractors in our business is relatively small. Contractors and sub-contractors are mainly supporting us in major construction and maintenance projects and represent our external suppliers.

SOURCING DATA

Sustainable Sourcing and Sustainable Fibre Data

	2021	2020	2019	2018	2017
Sustainable Sourcing data					
Number of audit activities					
Suppliers of key materials	9	21	35	21	51
Tactical and other suppliers	13	25	77	53	60
Satisfactory scores					
Suppliers of key materials	8	20	29	20	45
Tactical and other suppliers	11	24	65	43	46
Sustainable Fibre					
Wood supplied from certified forests ¹	56.2%	57.3%	58%	55%	57%
Wood supplied from non-controversial sources ¹	43.8%	42.7%	42%	45%	43%
Paper produced as certified ¹	92.8%	92.7%	93%	91%	91%
Packaging sold as certified ¹	93.45%	93.8%	92.1%	88.4%	88.0%
External papers purchased through CoC certified supply chains ¹	99.47%	99.2%	98.9%	99.5%	98.5%
Recycled fibres in global production	75.6%	75.4%	75.8%	74.5%	74.4%

Notes

1 FSC, PEFC or SFI CoC certified and FSC Controlled Wood.

PROTECTED AREAS AND BIODIVERSITY

Smurfit Kappa Operations Within or Adjacent to Legally Protected Area or to Areas of High Biodiversity Value

Some of our European sites operates partly in or are adjacent to areas classified by Natura 2000.

Location	Type Plant	Specifics	Status	Area
Austria				
Nettingsdorf	Paper mill	Site adjacent to a protected area	Natura 2000	Hangwälder Ritzlhof AT3147000
Czech Republic				
Morava	Paper mill	Site adjacent to a protected area	Natura 2000	Údolí Moravice CZ0813474
France				
Alfa d'Avignon	Paper mill	Site adjacent to a protected area	Natura 2000	Le Rhône aval FR9301590
Aquitaine	Corrugated site	Site adjacent to a protected area	Natura 2000	Vallée du Ciron FR7200693
Facture	Paper mill	Site partly located in the protected area	ZNIEFF type 1 ZNIEFF type 2 Natura 2000 LPO ZICO	Zone inondable de la basse Leyre Vallées de la grande et de la petite Leyre Vallées de la grande et de la petite Leyre AN1
Germany				
Delitsch	Corrugated site	Site adjacent to a protected area	Natura 2000	Agrarraum und Bergbaufolgelandschaft bei Delitzsch DE4439452
Heppenheim	Board converting site	Site adjacent to a protected area	Natura 2000	Hinterer Bruch südlich Heppenheim DE6317306
Herzberg	3 activities (board mill & corrugated site & converting plan)	Site adjacent to a protected area	Natura 2000 Naturpark Harz	Sieber, oder, Rhume DE 4228331 N°4229-402
Lauenburg	Corrugated site	Site adjacent to a protected area	Natura 2000	Elbe mit Hohem Elbufer von Tesperhude bis Lauenburg mit angr. Fl. DE2628392
St Leon	Corrugated site	Site adjacent to a protected area	Natura 2000	Lußhardt zwischen Reilingen & Karlsdorf DE6717341
Wrexen	Paper mill	Site adjacent to a protected area	Natura 2000	Vogelschutzgebiet Egge DE4419401
The Netherlands				
Parengo	Paper mill	Site adjacent to a protected area	Natura 2000	Rijntakken NL2014038 Veluwe NL3009017
Spain				
Nervión	Paper mill	Site adjacent to a protected area	Natura 2000	Urkiola Natural Park ES213009
Vigo	Corrugated site	Site adjacent to a protected area	Natura 2000	Gándaras de Budiño ES1140011
Sweden				
Eslöv	Corrugated site	Site adjacent to a protected area	Natura 2000	Abullahagen SE0430119
Piteå	Paper mill	Site adjacent to a protected area	Natura 2000	Svensbyfjärden SE0820711

Some Other Sites are Adjacent to Sites Protected by National or Local Status

Location	Type Plant	Specifics	Status	Area
Belgium				
Turnhout	Corrugated site	Site adjacent to a protected area	National legislation	Nature reserve 'Frans Segers'
Denmark				
Kolding	Corrugated site	Site adjacent to a protected area	National legislation	Kolding Havn
Ecuador				
Ecuador sacks	Sack plant	Site adjacent to a protected area	Local legislation	Cerro blanco forest (White forest hill)
France				
Dore	Corrugated site	Site located in a protected area	Local legislation	Parc naturel régional Livradois-Forez
Germany				
Hoya	Paper mill	Site adjacent to a protected area	National legislation	2 : Wiedsee & Bürgerpark
Lübeck	Corrugated site	Site adjacent to a protected area	National legislation	Schellbruch
Schneverdingen	Corrugated site	Site located in a protected area	Local legislation	Water reserve
The Netherlands				
R. Eindhoven	Corrugated site	Site located in a protected area	Local legislation	Philipps de Jongh park
United Kingdom				
Townsend Hook	Paper mill	Site adjacent to a protected area	Local legislation	Holborough and Burham Marshes SSSI

Water Courses where Smurfit Kappa Withdraws or Releases Water that are Classified Sensitive or Protected

- Piteå: paper mill in Sweden discharge process water in the estuary Vargödraget which is classified as protected area Natura 2000 (SE 0820330)

Biodiversity

Threatened species recorded on Smurfit Kappa Colombia Forestry Division's properties

Group	Total	Critical Risk	Endangered	Vulnerable
Birds	19	0	5	14
Flora	22	1	10	11
Mammals	11	1	2	8
Amphibian	1	0	0	1
Total	53	2	17	34

Smurfit Kappa take in consideration the ICUN: International Union for Conservation of Nature, CITIES: International Trade in Endangered Species of Wild Fauna and Flora and MADS: Ministry of Environment and Sustainable Development Colombia.

Supplementary information





Inside this section 106-128

About this Report	108
GRI Index	109
Task Force on Climate Related Financial Disclosures Index	115
SASB Index	116
Business in the Community, Ireland	117
UN Global Compact	119
Glossary	120
Assurance Report of the Independent Auditor	125

ABOUT THIS REPORT

The information in this report covers the international activities of the Smurfit Kappa Group for the calendar year 2021 and also includes some information for early 2022, where mentioned specifically. In this report, we cover the business, environmental and social activities at our own operations, as well as our approach to sourcing and how we support our customers' sustainability targets.

Acquisitions, Divestitures and Closures 2021

During 2021, Smurfit Kappa acquired a paper mill in Italy (Verzuolo), a folding carton operation in Mexico (Cartonbox), and a corrugated plant in Peru (Cartones del Pacifico). We opened a recovered paper depot in Serbia and closed a sack operation in Colombia (Cali Sack) as well as a converting plant in Italy (Emmecco). Two speciality sites were sold in El Salvador (Celpack) and in Ireland (Newspress).

Data on the acquired, opened, sold and closed sites is not included for the 2021 data presented in this report. Our reporting policy states that the acquired and opened sites start to report on their first full year in the Group. The sold and closed sites report until the last reporting period in the Group which for all environmental data is quarterly for paper and board mills and annually for all other operations. The health and safety data for all operations is reported quarterly and the social data annually.

Smurfit Kappa applies a two-year integration policy to the acquired operations. The new operations have to obtain certified management systems required by the Group within this period. The operations start to report about the management systems immediately after obtaining the certificate, issued by a third-party. This has the greatest effect on the certified Chain of Custody related reporting.

Topics, Issues and Targets

Smurfit Kappa fully recognises that sustainable development embraces social and business issues as well as environmental ones. These issues have been selected on the basis of input from various stakeholder groups. Smurfit Kappa collected and controlled data from all its manufacturing operations that were operational at the end of 2021.

No significant changes in the scope, boundary and measurement methods were applied to the report compared with previous years.

Our targets are primarily based on specific emissions, measured against produced tonnes of paper rather than absolute values as the Group is in dynamic growth mode and also subject to opening and closing facilities. Other information is reported in absolute figures, unless otherwise stated.

Reporting Guidelines, Data Collection

Among the various references used for the development and identification of baseline data included in this report, in our reporting the leading standard is the GRI Standards (comprehensive option) issued by the Global Reporting Initiative (GRI).

GRI is an international independent organisation that helps businesses, governments and other organisations understand and communicate the impact of business on critical sustainability issues such as climate change, human rights, corruption and many others.

In May 2020, Smurfit Kappa announced its support for the recommendations by the Task Force on Climate-related Financial Disclosures (TCFD). Following on from that, this is the Group's second year to report in line with those recommendations and we expect this to develop and evolve over time (see page 115). The TCFD was established by the Financial Stability Board to develop recommendations in relation to climate-related disclosures that would inform investment and other financial decisions. The recommendations set out an important framework for understanding and analysing climate-related risks.

The Sustainability Accounting Standards Board (SASB) is an independent non-profit organisation that sets standards to guide the disclosure of financially material sustainability information by companies to their investors. The Group's response to the relevant SASB criteria can be found in this report (see page 116).

Every effort has been made to provide data that is as accurate as possible. Data relating to environmental factors is gathered through a Group-wide IT-based reporting system implemented in all Smurfit Kappa operations.

This tool is integrated into the Group's intranet, enabling sites to report their environmental data online according to GRI guidelines into a central database. We make continuous efforts to increase our data quality. This includes improving the user-friendliness of our data collection and developing mill individual reporting protocols. Our protocols and guidelines exceed the scope of the GRI guidelines and are part of the external assurance scope. For the most part, data is based on measured or metered quantities, or on best estimates based on industry knowledge and established calculation factors.

Our Greenhouse Gas emission reporting is based on CO₂ emissions which is the only material GHG emission for Smurfit Kappa. CO₂ emission calculations have been based on established fuel consumption and specific CO₂ emission factors. Definitions and calculations for the performance indicators can be found in the glossary on pages 120-124.

Ongoing initiatives continue to further standardise the data gathering system to improve data quality and consistency in the use of Group definitions and scope requirements of our key indicators.

We appointed an external assurance provider, KPMG, to provide limited assurance on the data and the text of the report. KPMG's assurance report can be found on page 125.

GRI INDEX

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
Category: General Disclosures				
GRI 102: General Standard Disclosures				
Organisational Profile				
GRI 102	GRI 102:1	Name of the organisation	SDR	Cover
GRI 102	GRI 102:2	Activities, brands, products, and services	SDR	4-5
GRI 102	GRI 102:3	Location of headquarters	SDR	back cover
GRI 102	GRI 102:4	Location of operations	SDR/AR	5 / 4-5
GRI 102	GRI 102:5	Ownership and legal form	AR	78-117
GRI 102	GRI 102:6	Markets served	SDR/Website	5
GRI 102	GRI 102:7	Scale of the organisation	SDR/AR	5 / 1, 4-5
GRI 102	GRI 102:8	Information on employees and other workers	SDR/AR	56-77, 102, 108/ 64-75
GRI 102	GRI 102:9	Supply chain	SDR	20-21, 80, 87-89, 103
GRI 102	GRI 102:10	Significant changes to the organisation and its supply chain	SDR	108
GRI 102	GRI 102:11	Precautionary Principle or approach	SDR	36
GRI 102	GRI 102:12	External initiatives	SDR	1, 79-87
GRI 102	GRI 102:13	Membership of associations	SDR	1, 86-87
Strategy				
GRI 102	GRI 102:14	Statement from senior decision-maker	SDR	12-16
GRI 102	GRI 102:15	Key impacts, risks, and opportunities	SDR	1, 12-15, 19, 26-27, 30-89
Ethics and Integrity				
GRI 102	GRI 102:16	Values, principles, standards, and norms of behaviour	SDR/AR	86-87 / 82-87
GRI 102	GRI 102:17	Mechanisms for advice and concerns about ethics	SDR/Website: Whistleblower policy/ AR	62, 86-87/ 75
Governance				
GRI 102	GRI 102:18	Governance structure	AR	78-117
GRI 102	GRI 102:19	Delegating authority	SDR	86-87
GRI 102	GRI 102:20	Executive-level responsibility for economic, environmental, and social topics	SDR	86-87
GRI 102	GRI 102:21	Consulting stakeholders on economic, environmental, and social topics	SDR/AR	24-25 / 44-47
GRI 102	GRI 102:22	Composition of the highest governance body and its committees	AR	78-117
GRI 102	GRI 102:23	Chair of the highest governance body	AR	78-81
GRI 102	GRI 102:24	Nominating and selecting the highest governance body	AR	78-117
GRI 102	GRI 102:25	Conflicts of interest	AR	82-83
GRI 102	GRI 102:26	Role of highest governance body in setting purpose, values, and strategy	AR	78-117
GRI 102	GRI 102:27	Collective knowledge of highest governance body	AR	54, 56-57, 82-83, 113-114
GRI 102	GRI 102:28	Evaluating the highest governance body's performance	AR	83-86
GRI 102	GRI 102:29	Identifying and managing economic, environmental, and social impacts	SDR	26-27, 86-87
GRI 102	GRI 102:30	Effectiveness of risk management processes	AR	34-38
GRI 102	GRI 102:31	Review of economic, environmental, and social topics	SDR	86-87 – The Sustainability Committee of the Board met six times in 2021
GRI 102	GRI 102:32	Highest governance body's role in sustainability reporting	SDR/AR/Website	86-87/ 82-83, 113-114
GRI 102	GRI 102:33	Communicating critical concerns	SDR/AR	86/82-87
GRI 102	GRI 102:34	Nature and total number of critical concerns	SDR	15, 62, 86
GRI 102	GRI 102:35	Remuneration policies	AR	92-95
GRI 102	GRI 102:36	Process for determining remuneration	AR	92-95
GRI 102	GRI 102:37	Stakeholders' involvement in remuneration	AR	92

GRI INDEX CONTINUED

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 102	GRI 102:38	Annual total compensation ratio	AR	Limited due to confidentiality Executive Directors' remuneration report in AR 94-109
GRI 102	GRI 102:39	Percentage increase in annual total compensation ratio	AR	104-106
Stakeholder Engagement				
GRI 102	GRI 102:40	List of stakeholder groups	SDR/AR	24-25/ 44-45
GRI 102	GRI 102:41	Collective bargaining agreements	SDR	62
GRI 102	GRI 102:42	Identifying and selecting stakeholders	SDR/AR	24-25 / 44-45
GRI 102	GRI 102:43	Approach to stakeholder engagement	SDR/AR	24-25 / 44-45
GRI 102	GRI 102:44	Key topics and concerns raised	SDR	27, 31-35, 57-61, 79-83
Reporting Practices				
GRI 102	GRI 102:45	Entities included in the consolidated financial statements	AR	188-189
GRI 102	GRI 102:46	Defining report content and topic boundaries	SDR	27, 31-35, 57-61, 79-83, 108
GRI 102	GRI 102:47	List of material topics	SDR	26-27
GRI 102	GRI 102:48	Restatements of information	SDR	108
GRI 102	GRI 102:49	Changes in reporting	SDR	108
GRI 102	GRI 102:50	Reporting period	SDR	The report covers the period 2021
GRI 102	GRI 102:51	Date of most recent report	SDR	Published 30 April 2021
GRI 102	GRI 102:52	Reporting cycle	SDR	Annual, 108
GRI 102	GRI 102:53	Contact point for questions regarding the report	SDR	Back cover
GRI 102	GRI 102:54	Claims of reporting in accordance with the GRI Standards	SDR	86, 108
GRI 102	GRI 102:55	GRI content index	SDR	109-114
GRI 102	GRI 102:56	External assurance	SDR	125-126
GRI 103: Management Approach				
Reporting Practices				
GRI 103	GRI 103:1	Explanation of the material topic and its boundary	SDR	26-27, 31-35, 57-61, 79-83
GRI 103	GRI 103:2	The management approach and its components	SDR/AR	86 / 113
GRI 103	GRI 103:3	Evaluation of the management approach	SDR/AR	86 / 113
Category: Economic				
GRI 201: Economic Performance				
GRI 201	GRI 201:1	Direct economic value generated and distributed	AR	1, 4-5
GRI 201	GRI 201:2	Financial implications and other risks and opportunities due to climate change	SDR/AR	31-35 / 34-38, 54-61
GRI 201	GRI 201:3	Defined benefit plan obligations and other retirement plans	SDR/AR	70, 86-87 / 164-168
GRI 201	GRI 201:4	Financial assistance received from government	SDR	87
GRI 202: Market Presence				
GRI 202	GRI 202:1	Ratios of standard entry-level wage by gender compared with local minimum wage	SDR	70
GRI 202	GRI 202:2	Proportion of senior management hired from the local community	SDR	62, 124
GRI 203: Indirect Economics Impacts				
GRI 203	GRI 203:1	Infrastructure investments and services supported	SDR	74-77
GRI 203	GRI 203:2	Significant indirect economic impacts	AR	34-38
GRI 204: Procurement Practice				
GRI 204	GRI 204:1	Proportion of spending on local suppliers	SDR	88-89, 123

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 205: Anti-corruption				
GRI 205	GRI 205:1	Operations assessed for risks related to corruption	SDR/AR	62, 86 / 38 – Our Code of Conduct covers anti-corruption
GRI 205	GRI 205:2	Communication and training about anti-corruption policies and procedures	SDR/AR	62, 86 / 53 – Our Code of Conduct covers the items of this criteria
GRI 205	GRI 205:3	Confirmed incidents of corruption and actions taken	SDR	86 – Our Code of Conduct covers the items of this criteria
GRI 206: Anti-competitive Behaviour				
GRI 206	GRI 206:1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	SDR/AR Reporting limited by our materiality assessment	62, 86 / 38 – Our Code of Conduct covers the items of this criteria
GRI 207: Tax				
GRI 207	GRI 207:1	Approach to tax	SDR	87
GRI 207	GRI 207:2	Tax governance, control, and risk management	SDR	87
GRI 207	GRI 207:3	Stakeholder engagement and management of concerns related to tax	Website: smurfitkappa.com/tax-strategy	
GRI 207	GRI 207:4	Country-by-country reporting		Omitted: work in progress
Category: Environmental				
GRI 301: Materials				
GRI 301	GRI 301:1	Materials used by weight or volume	SDR	92-93
GRI 301	GRI 301:2	Recycled input materials used	SDR	41, 43, 92-93
GRI 301	GRI 301:3	Reclaimed products and their packaging materials	SDR	N/A SK produces packaging materials for other industries
GRI 302: Energy				
GRI 302	GRI 302:1	Energy consumption within the organisation	SDR	35, 36-40, 100, 120-121
GRI 302	GRI 302:2	Energy consumption outside of the organisation	SDR	Omitted: n/a
GRI 302	GRI 302:3	Energy intensity	SDR	38, 94-100
GRI 302	GRI 302:4	Reduction of energy consumption	SDR	36-39, 94-100
GRI 302	GRI 302:5	Reductions in energy requirements of products and services	SDR	38-40, 84
GRI 303: Water				
GRI 303	GRI 303:1	Interactions with water as a shared resource	SDR	48-51
GRI 303	GRI 303:2	Management of water discharge-related impacts	SDR	31-35, 48-51
GRI 303	GRI 303:3	Water withdrawal	SDR 303:3 b and c omitted: no sufficient data	48, 92-100, 123
GRI 303	GRI 303:4	Water discharge	SDR 303:3 b and c omitted: no sufficient data	50-51, 92-100, 123
GRI 303	GRI 303:5	Water consumption	SDR	48-51, 92-100
GRI 304: Biodiversity				
GRI 304	GRI 304:1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	SDR/Website	46-47, 104-105
GRI 304	GRI 304:2	Significant impacts of activities, products, and services on biodiversity	SDR	46-47
GRI 304	GRI 304:3	Habitats protected or restored	SDR/Website	46-47, 104-105
GRI 304	GRI 304:4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SDR/Website	46-47, 104-105

GRI INDEX CONTINUED

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 305: Emissions				
GRI 305	GRI 305:1	Direct (Scope 1) GHG emissions	SDR Smurfit Kappa reports based on CO ₂ emissions only. Other CO ₂ equivalent emissions are not considered material	38-39, 92-97, 108, 120-121
GRI 305	GRI 305:2	Energy indirect (Scope 2) GHG emissions	SDR Smurfit Kappa reports based on CO ₂ emissions only. Other CO ₂ equivalent emissions are not considered material	94-100, 108, 120-121
GRI 305	GRI 305:3	Other indirect (Scope 3) GHG emissions	SDR	40-42
GRI 305	GRI 305:4	GHG emissions intensity	SDR Smurfit Kappa reports based on CO ₂ emissions only. Other CO ₂ equivalent emissions are not considered material	2, 6-7, 19, 25, 31, 35, 39
GRI 305	GRI 305:5	Reduction of GHG emissions	SDR Smurfit Kappa reports based on CO ₂ emissions only. Other CO ₂ equivalent emissions are not considered material	2, 6-7, 19, 25, 31, 35-40, 120-121
GRI 305	GRI 305:6	Emissions of ozone-depleting substances (ODS)	SDR Due to their specific relevance for our industry, we report SO _x and NO _x as individual emissions	SO _x , NO _x , 94-97
GRI 305	GRI 305:7	Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	SDR	94-97, 121
GRI 306: Waste				
GRI 306	GRI 306:1	Waste generation and significant waste-related impacts	SDR	52, 54-55, 92-100
GRI 306	GRI 306:2	Management of significant waste-related impacts	SDR	6-7, 20-23, 31-35, 52-55, 108.
GRI 306	GRI 306:3	Waste generated	SDR	52, 54, 92-100
GRI 306	GRI 306:4	Waste diverted from disposal	SDR	52, 92-100
GRI 306	GRI 306:5	Waste directed to disposal	SDR	52, 92-100
GRI 307: Environmental Compliance				
GRI 307	GRI 307:1	Non-compliance with environmental laws and regulations	SDR	86
GRI 308: Supplier Environmental Assessment				
GRI 308	GRI 308:1	New suppliers that were screened using environmental criteria	SDR	88-89, 103
GRI 308	GRI 308:2	Negative environmental impacts in the supply chain and actions taken	SDR	88-89, 103
Category: Social				
GRI 401: Employment				
GRI 401	GRI 401:1	New employee hires and employee turnover	SDR	102
GRI 401	GRI 401:2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SDR	70
GRI 401	GRI 401:3	Parental leave	SDR	102

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 402: Labour/Management Relations				
GRI 402	GRI 402:1	Minimum notice periods regarding operational changes	SDR	62
GRI 403: Occupational Health and Safety				
GRI 403	GRI 403:1	Occupational Health and Safety Management System	SDR	71-73
GRI 403	GRI 403:2	Hazard identification, risk assessment, and incident investigation	SDR	71-73, 102
GRI 403	GRI 403:3	Occupational health services	SDR	71-73
GRI 403	GRI 403:4	Worker participation, consultation, and communication on occupational Health and Safety	SDR	62, 71-73
GRI 403	GRI 403:5	Worker training on occupational Health and Safety	SDR	71-73
GRI 403	GRI 403:6	Promotion of worker health	SDR	70-73
GRI 403	GRI 403:7	Prevention and mitigation of occupational Health and Safety impacts directly linked by business relationships	SDR	71-73
GRI 403	GRI 403:8	Workers covered by an occupational Health and Safety management system	SDR	71-73, 101-102
GRI 403	GRI 403:9	Work-related injuries	SDR	71-73, 102
GRI 403	GRI 403:10	Work-related ill health	SDR	71-73, 102
GRI 404: Training and Education				
GRI 404	GRI 404:1	Average hours of training per year per employee	SDR	102
GRI 404	GRI 404:2	Programmes for upgrading employee skills and transition assistance programmes	SDR	58, 64-65, 68-69
GRI 404	GRI 404:3	Percentage of employees receiving regular performance and career development reviews	Omitted: insufficient data	
GRI 405: Diversity and Equal Opportunity				
GRI 405	GRI 405:1	Diversity of governance bodies and employees	SDR/ AR	62, 65 / 112
GRI 405	GRI 405:2	Ratio of basic salary and remuneration of women to men	Omitted: insufficient data. SK rewards are based on merit.	
GRI 406: Non-discrimination				
GRI 406	GRI 406:1	Incidents of discrimination and corrective actions taken	SDR	62, 67-68, 86
GRI 407: Freedom of Association and Collective Bargaining				
GRI 407	GRI 407:1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	SDR	62, 86-89
GRI 408: Child Labour				
GRI 408	GRI 408:1	Operations and suppliers at significant risk for incidents of child labour	SDR	62, 86, 88-89
GRI 409: Forced or Compulsory Labour				
GRI 409	GRI 409:1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	SDR	62, 88-89
GRI 410: Security Practices				
GRI 410	GRI 410:1	Security personnel trained in human rights policies or procedures	N/A	
GRI 411: Rights of Indigenous Peoples				
GRI 411	GRI 411:1	Incidents of violations involving rights of indigenous peoples	SDR	No incidents were recorded in 2021
GRI 412: Human Rights Assessment				
GRI 412	GRI 412:1	Operations that have been subject to human rights reviews or impact assessments	SDR	62
GRI 412	GRI 412:2	Employee training on human rights policies or procedures		Omitted: previous training in 2014
GRI 412	GRI 412:3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	SDR	62

GRI INDEX CONTINUED

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 413: Local Communities				
GRI 413	GRI 413:1	Operations with local community engagement, impact assessments, and development programmes	SDR	24-25, 56-61, 74-77
GRI 413	GRI 413:2	Operations with significant actual and potential negative impacts on local communities	SDR	24-25, 56-61, 74-77
GRI 414: Supplier Social Assessment				
GRI 414	GRI 414:1	New suppliers that were screened using social criteria	SDR	88-89
GRI 414	GRI 414:2	Negative social impacts in the supply chain and actions taken	SDR	80, 88-89, 103
GRI 415: Public Policy				
GRI 415	GRI 415:1	Political contributions	SDR	86-87
GRI 416: Customer Health and Safety				
GRI 416	GRI 416:1	Assessment of the Health and Safety impacts of product and service categories	SDR	87
GRI 416	GRI 416:2	Incidents of non-compliance concerning the Health and Safety impacts of products and services	SDR	87
GRI 417: Marketing and Labelling				
GRI 417	GRI 417:1	Requirements for product and service information and labelling	SDR	N/A*
GRI 417	GRI 417:2	Incidents of non-compliance concerning product and service information and labelling	SDR	N/A*
GRI 417	GRI 417:3	Incidents of non-compliance concerning marketing communications	SDR	87-89
GRI 418: Customer Privacy				
GRI 418	GRI 418:1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		No substantiated complaints identified
GRI 419: Socioeconomic Compliance				
GRI 419	GRI 419:1	Non-compliance with laws and regulations in the social and economic area	SDR	87-88

Notes

* Our products are business to business and in general no such information is required.

TASK FORCE ON CLIMATE RELATED FINANCIAL DISCLOSURES ('TCFD') INDEX

Area	Recommended Disclosures	Source	Page(s)
Governance			
Disclose the organisation's governance around climate-related risks and opportunities.	a) Describe the Board's oversight of climate-related risks and opportunities.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 34-35, 54, 56 SDR 2021: 86-87 CDP: Section C.1 Governance
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 34-35, 56-57 SDR 2021: 86-87 CDP: Section C.1 Governance
Strategy			
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	AR 2021 CDP Climate Change response 2021	AR: 57-58, 60-61 CDP: Section C.2 Risk and Opportunities
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 57-58, 60-61 SDR 2021: 32-42 CDP: Section C.2 Risk and Opportunities and C.3 Business Strategy
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	AR 2021 CDP Climate Change response 2021	AR: 58-59 CDP: Section C.3 Business Strategy
Risk Management			
Disclose how the organisation identifies, assesses, and manages climate-related risks.	a) Describe the organisation's processes for identifying and assessing climate-related risks.	AR 2021 CDP Climate Change response 2021	AR: 34-35, 59 CDP: Section C.2 Risk and Opportunities
	b) Describe the organisation's processes for managing climate-related risks.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 34-35, 59 SDR 2021: 32-42 CDP: Section C.2 Risk and Opportunities
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management.	AR 2021	AR: 59
Metrics and Targets			
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 33, 58-59, 62-63 SDR 2021: 34-42, 92-100 CDP: Section C.4 Targets and Performance and Section C.6 Emissions Data
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 33, 58-59, 62-63 SDR 2021: 36-42, 92-100 CDP: Section C.4 Targets and Performance and Section C.6 Emissions Data
	c) Describe the targets used by the organisation to manage climate-related risks and opportunities and performance against targets.	AR 2021 SDR 2021 CDP Climate Change response 2021	AR: 33, 58-59, 62-63 SDR 2021: 34-42 CDP: Section C.4 Targets and Performance

AR – Annual Report

SDR – Sustainable Development Report

CDP – Carbon Disclosure Project

SASB INDEX

Code	Accounting Metric	Source	Page(s)
Topic: Greenhouse Gas Emissions			
RR-PP-110a.1	Gross global Scope 1 emissions	SDR	39, 92-100
RR-PP-110a.	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	SDR	36-42
Topic: Air Quality			
RR-PP-120a.1	Air emissions of the following pollutants: 1 (NO _x (excluding N ₂ O); 2 SO _x ; 3 Volatile organic compounds (VOCs); and 4 Particulate matter (PM), and (5) hazardous air 1. pollutants (HAPs)	SDR NO _x , SO _x , and PM (dust) are part of the HAPs. Other relevant HAPs and relevant VOCs are being reported to the local authorities depending on the local requirements stipulated in the permits	92-100
Topic: Energy Management			
RR-PP-130a.1	1 Total energy consumed; 2 Percentage grid electricity; 3 Percentage from biomass; and 4 Percentage from other renewable energy	SDR	92-100
Topic: Water Management			
RR-PP-140a.1	1 Total water withdrawn; and 2 Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	SDR	48-51
RR-PP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	SDR	48, 50
Topic: Supply Chain Management			
RR-PP-430a.1	Percentage of wood fibre sourced from: 1 Third-party certified forestlands and percentage to each standard; and 2 Meeting other fibre sourcing standards and percentage to each standards	SDR	43, 45, 103
RR-PP-430a.2	Amount of recycled and recovered fibre procured	SDR	43, 45, 103

BUSINESS IN THE COMMUNITY, IRELAND

Continued Delivery for a Better Tomorrow

Smurfit Kappa Group has always employed an 'end-to-end' approach to sustainability and it is clear from their 2021 Report, that managing the business through the COVID-19 pandemic has reinforced the value of this approach.

In the words of Group CEO Tony Smurfit, Smurfit Kappa has not only deepened their "understanding of every social, environmental and economic aspect of our business but also the interdependencies between them."

It is this kind of clarity that sets Smurfit Kappa apart from other companies, and not only within the packaging sector.

Their 'end-to-end' approach means that Smurfit Kappa is involved in all stages of its supply chain – from the collection and purchasing of wastepaper to the growing and purchasing of wood (to supply the raw material needed by their paper mills to produce the full range of packaging paper required for their customer-tailored, innovative designs).

Smurfit Kappa paper is then converted into corrugated containers that they deliver to customers using a combination of rail, water and road-based transportation.

Environmental Progress & Innovation

Smurfit Kappa's environmental priorities are Climate Change, Forest, Water and Waste.

We were delighted to see that in 2021, the company's CO₂ reduction target was validated by the SBTi.

Smurfit Kappa's sustainability targets are ambitious. Aiming to reach *at least* net zero emissions by 2050, they have set a target of a 55% reduction in fossil emission intensity by 2030. They are already making strides as by 2021, they achieved a 41.3% reduction.

Other notable successes in 2021 include a 20% improvement in the energy efficiency of Smurfit Kappa paper mills (since 2005); a 29.2% reduction in waste sent to landfill and a 6.2% reduction in water consumption. The company is aiming for a 60% reduction in Chemical Oxygen Demand intensity by 2030, having achieved a 38.5% reduction by 2021.

The company has also committed to 95% of packaging solutions being sold as Chain of Custody Certified by 2025, having achieved 93.45% in 2021.

We are interested in the continued focus on material efficiency. Paper clippings from operations are returned to paper mills as recovered fibre; organic by-products (e.g., wood bark, dust and black liquor (biogas from biological water treatment) are used as biofuel; some water treatment sludges become soil improvers in road construction; water ash is used in the cement industry.

One of the many USPs of Smurfit Kappa is their capability to reduce the carbon footprint of customers (and their customers), while also helping the value chain to avoid waste packaging.

In their 2021 Report, examples include Smurfit Kappa:

- Designing a 100% renewable, recyclable, biodegradable corrugated fruit box for Roberto's Mangos to replace their plastic crate packaging, simplifying logistics and reducing costs.
- Designing a 100% renewable, recyclable, biodegradable tamper-proof Click-to-Lock Box, to provide a sustainable alternative to the traditional plastic box used for laundry pods, significantly reducing CO₂ emissions during production.
- Having the first packaging solution to receive a Vegan Trademark globally demonstrating that their product is animal cruelty-free.

Another indication of Smurfit Kappa's long experience of integrating sustainability to the core of the business is that the inaugural green bond launched by Smurfit Kappa in September 2021 was "over-subscribed multiple times and secured the company the lowest-ever coupon for a corporate at our credit rating with a strong participation from dark green investors".

This is a significant endorsement of the company's approach to producing circular products, utilising certified sustainable raw materials and implementing circular production processes that are continuously improving (via the setting of targets to do exactly this, as evidenced by their publicly available sustainability reports going back as far as 2007).

Smurfit Kappa's investment in efficient energy generation, efficient energy use and moving to neutral biofuels and other renewable solutions is needed. Steady progress is being made such as the use of 51.8% biofuels in paper mills in 2021, compared with 37.4% in 2005.

We noted Smurfit Kappa's assessment of all CO₂ emission sources to give necessary insight on their Scope 3 emissions. Targets are in the process of being set (with data already being collected and reported for Transport emissions for all European operations).

The commitment of Smurfit Kappa to Biodiversity and Ecosystem Conservation and Sustainable Forest Management is described well on pages 46-47 as a further means to mitigate climate change.

Corporate Governance

Corporate Governance is an area where Smurfit Kappa notably places a significant amount of emphasis.

The Board Sustainability Committee provides the overall guidance for the Group Sustainability Strategy (focusing on People, Planet and an Impactful Business). The Sustainability Strategy is managed by the Group Executive Committee, led by the Group CEO. An Executive Sustainability Committee ensures the Sustainability Strategy is driven throughout the business and reports to the Board Sustainability Committee and the Group Executive Committee. The Sustainability Working Group ensures targets set are met across all material areas and also promotes these targets with customers and suppliers.

Both the Executive Sustainability Committee and the Sustainability Working Group are led by the Group Chief Sustainability Officer, who reports to the CFO.

We noted that during 2021, the Smurfit Kappa Board of Directors invested additional time to develop a greater understanding of the climate risks and opportunities that are presenting. This activity stemmed from an objective "to enhance TCFD disclosure and uphold the highest standards of corporate governance and ethical business conduct."

At Board level, female representation in 2021 is at 33.3%, up from 23% in 2017. Female representation at the Group Executive Committee is at 30.8%, up from 0% in 2017. Female representation in management positions is at 22%.

Stakeholder Engagement & Human Rights

We appreciate the detail provided on the topic of stakeholder engagement (pages 25, 34 & 35) as it forms a key tenet of the success of Smurfit Kappa. Multi-level engagement with customers, investors, employees and communities enables Smurfit Kappa to keep their fingers on the pulse of key issues. Leadership in this area is also demonstrated by the involvement via board positions on bodies such as the Confederation of European Paper Industries (CEPI), the European Corrugated Packaging Association (FEFCO) and the International Corrugated Case Association (ICCA).

BUSINESS IN THE COMMUNITY, IRELAND CONTINUED

What is particularly interesting in the 2021 Report is the inclusion of the section on how Smurfit Kappa went about re-examining the Purpose of the company to determine how it is lived meaningfully, every day, by employees at all levels across all areas of the business.

The Purpose discovery process uncovered many stories of 'purpose in action.' By allocating time to share and discuss what was essential to different people, the collective motivation that gives various day jobs meaning was identified and will continue to act as a driver to sustain the work, culture and behaviour of the company. The Smurfit Kappa Purpose (*We Create, Protect & Care*) also informs strategic business decisions and actions.

Supplier engagement by Smurfit Kappa is also becoming increasingly robust in that suppliers are now required to submit a declaration form for compliance with the Sustainable & Responsible Sourcing Policy, the Supplier Code of Conduct, the Smurfit Kappa Modern Slavery Statement and the Statement of the Controversial Sources of Raw Materials, Goods and Services. Suppliers that have signed this declaration to date represent 63% of the relevant sourcing spend. Suppliers are also audited on human rights, labour practices and environmental impact.

Summary

In this Report, Smurfit Kappa Group demonstrates their leadership in sustainability in a range of ways, not least by further increasing their ambitions and targets in the areas of carbon reduction, employee engagement, gender balance, diversity and inclusion and community impact.

Case studies are used well throughout and in many instances highlight the significant ability of the company to work in partnership and collaborate with other companies and organisations, a skill likely to be drawn on extensively in the years ahead to address the growing need for carbon emissions in the value chain to be reduced further.

The report identifies inequality as a major societal challenge. There is a strong commitment to local communities, further evidenced by the €4.9 million ring-fenced for social investments in 2021. It is important Smurfit Kappa continues to build and adapt its vision when it comes to tackling inequality, further assessing how operations have the potential for negative as well as positive impact on people and communities.

In particular, we encourage Smurfit Kappa to bring together its environmental and social agendas closer together using a Just Transition lens, and incorporating a reflection on how a company of this size and scope can deliver a Just Society.

We were impressed by how Smurfit Kappa's paper mill in Nettingsdorf Austria supported the setting-up of a district heating system in Ansfelden (again by using a partnership approach), heating up to 10,000 households and reducing 20,000 tonnes of CO₂ emissions annually. From a community engagement perspective – with Smurfit Kappa's experience in partnering with energy companies on similar systems around the world, combined with the significant rise in energy costs and the urgent need for renewable energy solutions – projects like these could be prioritised.

Consistent since 2009, the Smurfit Kappa Group Sustainable Development Report has been assured by an independent third-party assurance provider. The 'Comprehensive' option of the GRI Standards has also been applied.

We appreciated the focus on visual presentation throughout this Report. It is possible to read key information at a glance, and how it links to both the business strategy and the UN SDGs.

Tomás Sercovich
CEO

UN GLOBAL COMPACT

Smurfit Kappa became a supporter of the United Nations Global Compact (UNGC), a worldwide corporate citizenship initiative, in 2010.

As a network of more than 12,000 corporate participants and other stakeholders in some 170 countries, it is the largest voluntary corporate responsibility initiative in the world. Supporters of the UNGC promote 10 core principles in the areas of human rights, labour, environment and anti-corruption. These principles are listed in the table below.

As a part of this commitment, Smurfit Kappa will report on the Company's corporate responsibility activities and performance in an annual Communication On Progress (COP), using the annual Sustainable Development Report as the platform for this communication.

The Sustainable Development Report provides a number of examples of ongoing activities, as well as relevant key performance indicators, which illustrate Smurfit Kappa's support for the 10 Global Compact principles in its everyday business. Measurements of performance related to the Global Compact principles are given using indicators provided by the Global Reporting Initiative (GRI), wherever feasible. In particular, GRI performance indicators relating to human rights, labour and anti-corruption principles are presented in the Social Development section, while environmental performance indicators reported in the Environment section. A complete GRI index can be found on pages 109-114 of the Report.

The following table shows how our performance in relation to each UN Global Compact principle can be reported using a number of GRI performance indicators. This is based on guidance documents published by the UN Global Compact.

UNGC Principles	GRI Indicators
Human Rights	
1 Businesses should support and respect the protection of internationally proclaimed human rights; and	403:1,4; 405:1-2; 406:1; 407:1; 408:1; 409:1; 410:1; 411:1; 412:1-3; 414: 1-2; 418:1
2 Businesses should make sure that they are not complicit in human rights abuses.	406:1; 407:1; 408:1; 409:1; 410:1; 411:1; 412:1
Labour	
3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	402:1; 403:1,4
4 Businesses should uphold the elimination of all forms of forced and compulsory labour;	410:1
5 Businesses should uphold the effective abolition of child labour; and	409:1
6 Businesses should uphold the elimination of discrimination in respect of employment and occupation.	203:1; 401:2; 405:2; 407:1; 414:1-2
Environment	
7 Businesses are asked to support a precautionary approach to environmental challenges;	201:2; 305:4-5; 306:5
8 Businesses should undertake initiatives to promote greater environmental responsibility; and	301:1-2; 302:1-5; 303:1-5; 304:1-4; 305:1-7; 306:1-5; 307:1; 308:1-2; 417:1-2
9 Businesses should encourage the development and diffusion of environmentally friendly technologies.	301:2; 302:3-5; 303: 3-5; 305:4-5; 306:5
Anti-corruption	
10 Businesses should work against corruption in all its forms, including extortion and bribery.	205:1-2; 413:2



GLOSSARY

Climate Change, Energy and Air Emissions

Bioeconomy	Smurfit Kappa uses the European Commission definition for bioeconomy as production of renewable biological resources and the conversion of these resources and waste streams into value-added products, such as food, feed, bio-based products and bioenergy.
Bioenergy	Bioenergy is one of the many diverse resources available to help meet our demand for energy. It is classified as a form of renewable energy derived from biomass – organic material – that can be used to produce heat, electricity, transportation fuels and products.
Biofuels	Fuels coming from biomass: wood rejects, bark, black liquor, pitch oil, certain parts of mixed wastes and biogas produced during the anaerobic treatment of water.
Biomass	Biomass is an energy resource derived from plant- and algae-based material that includes crop wastes, forest residues, purpose-grown grasses, woody energy crops, algae, industrial wastes, sorted municipal solid waste, urban wood waste and food waste. Biomass is the only renewable energy source that can offer a viable supplement to petroleum-based liquid transportation fuels – such as gasoline, jet and diesel fuel – in the near to mid term. It can also be used to produce valuable chemicals for manufacturing, as well as power to supply the grid.
Black liquor	Residue from pulping containing organic compounds (such as lignin). This residue is burnt to produce energy and to recover the chemicals.
By-product	Secondary or incidental products deriving from manufacturing process and are not the primary product. A by-product can be marketable.
Carbon dioxide equivalent CO₂-eq	A measure used to compare the emissions from various greenhouse gases based upon their climate change potential (CCP). The CO ₂ -eq carbon dioxide equivalent for other emissions is derived by multiplying the amount of the emission by the associated CCP factor.
Carbon footprint	Carbon released to the atmosphere during the life cycle of a product from cradle to grave.
CDP	CDP (formerly the 'Carbon Disclosure Project') is an organisation based in the United Kingdom which encourages large corporations from the world's major economies to disclose their greenhouse gas emissions and climate change strategies.
CHP	Combined Heat and Power: a combination of a boiler and a gas and/or steam turbine that simultaneously produces electricity and thermal energy (steam) by burning fuels. This system is considered to be the most efficient technology in industries using both steam and electricity. When mills sell part of their produced steam to an external party or have net electricity export (selling more to an external party than purchasing), the consumption of fuel and emissions reported for these mills is adjusted to report only that part used to produce paper. This adjustment is based on a reference heat boiler with an efficiency of 90%, which is also used by CEPI and the European Commission for EU ETS benchmark calculations. Electricity from a CHP is called co-generated electricity while all other internal generation is expressed as self-generated.
CHP (outsourced)	A CHP installation, belonging to an external party, located at or near a Smurfit Kappa site for delivering electricity and steam to the Smurfit Kappa production facility. All fuel and electricity used for the production of paper as well as emissions related to that are included in the figures for the Smurfit Kappa production facility.
Climate change	The United Nations Framework Convention on Climate Change (UNFCCC) defines it as a change of climate that is attributed directly or indirectly to human activity, altering the composition of the global atmosphere.
Co-generated electricity	Electricity generated by a CHP system belonging to Smurfit Kappa or from an outsourced CHP system.
CO₂ biogenic	Carbon dioxide emitted when burning biofuels. This CO ₂ is considered to be carbon neutral as it is removed from the atmosphere and stored in biomass within a short period of time.
CO₂ fossil	Carbon dioxide emitted when burning fossil fuels for the production of paper. The calculation is based on international guidelines from the carbon content of each fuel (WRI/WBCSD GHG protocol).
CO₂ indirect	Fossil carbon dioxide generated externally in the production of electricity purchased from the grid. Source: IEA CO ₂ Emissions from Fuel Combustion, OECD/IEA, Paris, 2016.
Energy efficiency	Energy efficiency is the goal to reduce the amount of energy required to provide products and services.
Energy Union	The Energy Union strategy is focused on boosting energy security, creating a fully integrated internal energy market, improving energy efficiency, decarbonising the economy (not least by using more renewable energy) and supporting research, innovation and competitiveness.
European Union Emissions Trading System – EU ETS	EU ETS, also known as the European Union Emissions Trading Schemes, is the most extensive greenhouse gas emissions trading scheme in the world. It was launched in 2005 to combat global warming and is a major pillar of EU climate policy.
Dust	Particles coming from the combustion of fuels. Dust emissions are measured mainly by the mills. Where dust is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1. Ecoinvent is a life cycle inventory database for energy systems, materials, transports and chemicals.
Fossil fuels	Fuels originating from non-renewable resources (gas, oil, coal, peat and lignite).
GHG emissions	A greenhouse gas (GHG) is any gaseous compound in the atmosphere that is capable of absorbing infrared radiation, that is trapping and holding heat in the atmosphere. By increasing the heat in the atmosphere, greenhouse gases are responsible for the greenhouse effect, which leads to global warming.
GJ	Gigajoule, a unit of energy that generally applies to fuel. 1 gigajoule (GJ) = 1 billion joules = 10 ⁹ joules.

Climate Change, Energy and Air Emissions *continued*

Green electricity certificate	A tradable commodity for electricity units generated using renewable energy sources. Definition of renewable energy source is a variable depending on certificate trading scheme, typically solar, hydro, wind, geothermal or biomass. A certificate of origin covers other energy sources than certificate of renewable origin.
Grid supply	Electricity purchased from a national distribution network.
GWh	Unit of energy, generally applies to electricity. 1 GWh (GigaWatt hour) = 1 million kWh (kiloWatt hour).
Net zero	To achieve net zero emissions, we work towards achieving a state in which the activities at our paper and board mills in our gate-to-gate value chain result in no net impact on the climate from greenhouse gas emissions. The key effort for Smurfit Kappa is to move from fossil-based fuels to carbon neutral fuels and improve its energy efficiency.
NO_x	Mix of nitrogen oxides (NO and NO ₂) calculated as NO ₂ (nitrogen dioxide) coming from combustion of fuels. They can contribute to the acidification of soil and water. NO _x emissions are measured mainly by the mills. Where NO _x is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
Paris Agreement	Agreement within the framework of the United Nations Framework Convention on Climate Change dealing with greenhouse gases, emissions mitigation, adaptation and finance. An agreement on the language of the treaty was negotiated by representatives of 195 countries during COP21 in December 2015.
Self-generated electricity	Electricity generated by an electricity generator without recovery of steam.
Sequestration	Carbon sequestration describes the long-term storage of carbon dioxide or other forms of carbon to either mitigate or defer global warming and avoid dangerous climate change.
SO_x	Mix of sulphur oxides calculated as SO ₂ coming from combustion of fuels. Sulphur dioxide contributes to the acidification of soil and water. SO _x emissions are measured mainly by the mills. Where SO _x is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
PJ	Petajoule, a unit of energy. 1 petajoule = 1000 terajoules = 10 ¹⁵ joules.
TJ	Terajoule, a unit of energy that generally applies to fuel. 1 terajoule = 1000 gigajoules = 10 ¹² joules.
21st Conference of the Parties – COP 21	The 2015 United Nations Climate Change Conference was held in Paris, France, from 30 November to 12 December 2015. It was the 21st yearly session of the Conference of the Parties to the 1992 United Nations Framework Convention on Climate Change and the 11th session of the Meeting of the Parties to the 1997 Kyoto Protocol.

Organisations

Asociación de Corrugadores del Caribe Centro y Sur América (ACCCSA)	Organisation of corrugated cardboard manufacturers in the Latin American region, whose objective is to exchange experiences, ideas and technological knowledge that will benefit and consolidate the entire Latin American corrugator sector.
CEPI	CEPI, the Confederation of European Paper Industries. It is a non-profit organisation representing the European pulp and paper industry.
EcoVadis	EcoVadis brings Buyers and Suppliers together to efficiently drive CSR and sustainability performance across 150 sectors and 120 countries to reduce risk and drive innovation in their supply chains.
ELCD	European Reference Life Cycle Database. The ELCD has been developed within the 'European Platform on Life Cycle Assessment' by the Joint Research Centre, Institute for Environment and Sustainability (JRC-IES).
ERT	The European Round Table of Industrialists (ERT) is a forum bringing together around 50 Chief Executives and Chairpersons of major multinational companies of European parentage covering a wide range of industrial and technological sectors, working to strengthen competitiveness in Europe. The group works at both national and European levels.
ESG	Environmental, social and corporate governance (ESG) criteria refer to three main factors investors consider with regards to a firm's ethical impact and sustainable practices.
Ethibel	The Ethibel Sustainability Index Excellence Europe lists 200 European companies that display the best performance in terms of corporate social responsibility.
Euronext Vigeo	The Euronext Vigeo indices comprise the highest-ranking listed companies as evaluated in terms of their performance in corporate social responsibility.
FAO	The Food and Agriculture Organisation (FAO) is specialised agency of the United Nations that leads international efforts to defeat hunger. The goal is to achieve food security for all and make sure that people have regular access to enough high-quality food to lead active, healthy lives. With over 194 member states, FAO works in over 130 countries worldwide.
FEFCO. The European Federation of Corrugated Board Manufacturers	FEFCO is a non-profit organisation representing the interests of the industry across Europe and addressing a wide range of issues, from technical topics to economical questions. The role of the Federation is to investigate economic, financial, technical and marketing issues of interest to the corrugated packaging industry, to analyse all factors that may influence the industry and to promote and develop its image.
FTSE4Good	The FTSE4Good Index series is designed to measure the performance of companies demonstrating strong environmental, social and governance practices.

GLOSSARY CONTINUED

Organisations continued

Global Reporting Initiative (GRI)	GRI is an independent international organisation for sustainability reporting, since 1997. GRI helps businesses and governments worldwide understand and communicate their impact on critical sustainability issues such as climate change, human rights, governance and social well-being. This enables real action to create social, environmental and economic benefits for everyone. The GRI Sustainability Reporting Standards are developed with true multi-stakeholder contributions and rooted in the public interest.
ICCA	The International Corrugated Case Association (ICCA), formed in 1961, contributes to the well-being of the corrugated packaging industry worldwide by supporting and enhancing the work of association members.
ILO	International Labour Organisation (ILO) is the only tripartite United Nations agency. Since 1919, the ILO brings together governments, employers and workers of 187 member states, to set labour standards, develop policies and devise programmes promoting decent work for all women and men.
Irish Business and Employers Confederation (IBEC)	IBEC is Ireland's largest lobby group representing Irish business both domestically and internationally. Its membership is home-grown, multinational, big and small, spanning every sector of the economy.
OECD	Organisation for Economic Co-operation and Development (OECD), provides a forum in which governments can work together to share experiences and find solutions to common problems, work with governments to understand what drives economic, social and environmental changes, measure productivity and global flows of trade and investment, analyse and compares data to predict future trends, establishes international standards in a wide range of aspects, from agriculture and taxes to the safety of chemical products.
SDGs	The Sustainable Development Goals (SDGs) define global sustainable development priorities and aspirations for 2030 and seek to mobilise global efforts around a common set of goals and targets. The SDGs call for worldwide actions among governments, business and civil society to end poverty and create a life of dignity and opportunity for all, within the boundaries of the planet.
SEDEX	As the largest collaborative platform for sharing ethical supply chain data, SEDEX is an innovative and effective supply chain management solution, helping companies to reduce risk, protect company reputation and improve supply chain practices.
STOXX Global ESG Leaders	The STOXX Global ESG Leaders index offers a representation of the leading global companies in terms of environmental, social and governance criteria, based on ESG indicators provided by Sustainalytics. The index is made of the following three ESG sub-indices: the STOXX Global ESG Environmental Leaders, the STOXX Global ESG Social Leaders and the STOXX Global ESG Governance Leaders indices.
TCFD. Task Force on Climate-Related Financial Disclosures:	The Task Force on Climate-related Financial Disclosures is an industry-led effort, chaired by Michael Bloomberg, with 32 global expert members from the private sector. The Task Force's remit was to develop voluntary climate-related disclosures that could "promote more informed investment, credit, and insurance underwriting decisions." The TCFD recommendations describe information that companies should disclose to help investors, lenders, and insurance underwriters better understand how companies' oversee and manage climate-related risks and opportunities as well as the material risks and opportunities to which companies are exposed.
UN 2030 Agenda	The 2030 Agenda for Sustainable Development was launched by a UN Summit in New York on 25-27 September 2015 and is aimed at ending poverty in all its forms. The UN 2030 Agenda envisages 'a world of universal respect for human rights and human dignity, the rule of law, justice, equality and non-discrimination'. It is grounded in the Universal Declaration on Human Rights and international human rights treaties and emphasises the responsibilities of all states to respect, protect and promote human rights. There is a strong emphasis on the empowerment of women and of vulnerable groups such as children, young people, persons with disabilities, older persons, refugees, internally displaced persons and migrants. The Agenda's 17 Sustainable Development Goals (SDG), and their 169 targets, aim at eradicating poverty in all forms and 'seek to realise the human rights of all and achieve gender equality'.
UN Global Compact's CEO Water Mandate	The CEO Water Mandate is a UN Global Compact initiative that mobilises business leaders on water, sanitation and the Sustainable Development Goals. Endorsers of the CEO Water Mandate commit to continuous progress against six core elements of water stewardship and in so doing understand and manage their own water risks.
WBCSD	The World Business Council for Sustainable Development is a CEO-led organisation of forward-thinking companies that galvanises the global business community to create a sustainable future for business, society and the environment.

Certifications: Forest and Other

Deforestation	Deforestation, clearance or clearing is the removal of a forest or stand of trees where the land is thereafter converted to a non-forest use.
FSC	The Forestry Stewardship Council (FSC) is an independent, non-governmental organisation established to promote the responsible management of the world's forests through independent third-party certification.
FSSC 22000	These standards specify requirements for a food safety management system where an organisation in the food chain needs to demonstrate its ability to control food safety hazards in order to ensure that food is safe at the time of human consumption.
ISO 9001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of quality management.
ISO 14001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of environmental management.

Certifications: Forest and Other *continued*

ISO 50001 Energy Management Systems	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of energy usage: improvement of efficiency, reduction of consumption and energy security.
Non-controversial origin	Virgin wood or wood fibre which has been verified as having a low probability of including wood from any of the following categories, in line with FSC and PEFC schemes: a) Illegally harvested wood. b) Wood harvested in violation of traditional and civil rights. c) Wood harvested in forests in which high conservation values are threatened by management activities. d) Wood harvested in forests being converted from natural and semi-natural forests to plantations or non-forest use. e) Wood from forests in which genetically modified trees are planted.
OHSAS 18001/ ISO 45001	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of occupational health and safety management.
PEFC	Programme for the Endorsement of Forest Certification. PEFC is an independent, non-governmental organisation that promotes sustainably managed forests through independent third-party certification.
Reforestation	Reforestation is the natural or intentional restocking of existing forests and woodlands (forestation) that have been depleted.
SFI	SFI Inc. (Sustainable Forest Initiative) is an independent, non-profit organisation dedicated to promoting sustainable forest management. Companies are certified Chain of Custody according to the SFI standard through independent third-party certification.
EU Timber Regulation	The EU Timber Regulation is a regulation aims to reduce illegal logging by ensuring that no illegal timber or timber products can be sold in the EU, applies to wood and wood products being placed for the first time on the EU market.

Water

BOD	Biochemical Oxygen Demand (unit: mg O ₂ /litre) refers to the level of oxygen uptake by microorganisms in a sample of water measured over a period of five days.
COD	Chemical Oxygen Demand (COD) is the most commonly used test to measure the amount of organic compounds in water (unit: mg O ₂ /litre). The result indicates the level of all organic compounds that can be oxidised by a strong oxidising agent.
Process water	Quantity of water containing organic compounds released into the environment (river, sea) after internal water treatment or released to an external treatment plant (municipal water treatment). In all cases, levels of pollutants released are reported as outputs of the Company even in the case of operations that send process water to external treatment.
Total N (nitrogen)	Sum of organic nitrogen, ammonia (NH ₃) and ammonium (NH ₄ ⁺) discharged with the process water.
Total P (phosphorous)	Sum of phosphorous compounds discharged with the process water.
Total suspended solids (TSS)	Refers to the level of small solid particles discharged with the process water. Total suspended solids are those solids retained on a glass fibre filter dried to a constant weight at 103-105°C.
Water impact assessment	Assessing potential risk from water availability and quantity, covering multiple aspects specific to each geographical locations.

Products and Raw Materials

Containerboard	Papers and boards mainly used in the manufacture of corrugated board. They are made from virgin or recycled fibres. Included are kraftliner, testliner, semi-chemical fluting and recycled fluting.
Corrugated board	Structured board made by a corrugator usually formed by gluing one wave-formed liner (called fluting) in the middle of two flat-facing sheets of containerboard (kraftliner or testliner).
EPS	Expanded and Extruded Polystyrene is a rigid, closed cell, thermoplastic foam material, produced from solid beads of polystyrene. Used for thermo insulation purposes.
Fluting	The wave-formed middle layer in corrugated board.
Kraftliner	Paper manufactured mainly from virgin wood fibres.
Testliner	Paper manufactured from recycled fibres.
Inorganic raw materials	Raw material used for manufacturing our products that are not organic, such as fillers, sodium hydroxide, sodium sulphate and calcium oxide.
Other organic raw materials	Raw materials used for manufacturing our products that are organic excluding fibres, starch or plastic raw materials which are reported individually. This category includes oil, lubricant and organic additives, such as colourant or dyes.
Location information	Local: The country where we operate. In sourcing local refers to Smurfit Kappa country of operations. Significant locations of operation: Smurfit Kappa has high volume production – can be a country or region within a country. In sourcing, suppliers' location, we buy material from.
Raggers	In the beginning of the repulping process in which recovered paper is returned into pulp, non-fibrous materials are being removed from the recovered paper. Plastics, strapping and other floating materials are collected from the mass with a rope called a 'ragger'.
Recovered paper	Recovered paper refers to used paper and board separately collected and classified for the purpose of recycling, which is then used as raw material in the manufacture of new paper and paperboard.

GLOSSARY CONTINUED

Products and Raw Materials continued

Recovery	Recovery refers to extracting selected materials for a specific use. In the paper industry this means recovery of fibres in recycled paper or the recovery of energy value in the final stage of the material life cycle.
Recycling	Converting material into new materials and products. In the paper industry this refers to converting recycled fibres back to paper and finding new uses for other raw materials produced alongside recovered paper instead of sending them to landfill.
Reduction	This can either mean finding the most materially efficient ways to use raw materials or replacing a more harmful raw material with a less harmful one and thus reducing its harmful impact.
Renewing	Using renewable raw materials in a sustainable manner and maintaining the natural ability of the material to be renewed.
Reuse	Reuse is the action or practice of using something again, whether for its original purpose (conventional reuse) or to fulfil a different function (creative reuse or repurposing) without changing its form in between.
Virgin fibre	Pulp obtained through a chemical process used to remove lignin from wood. As a result, the fibre can be used to produce paper. The lignin residue and other organic compounds are subsequently collected and used in the formation of black liquor.

Social Citizenship and Health and Safety

Accident	An undesirable or unfortunate happening that occurs unintentionally and usually results in harm, injury, damage or loss.
Contractor	This refers to all contract staff agency workers provided by a third party staff agency, where the invoice is accounted in the P&L as part of 'wages and salaries'.
Lost time accident (LTA)	Refers to a work-related injury incident sustained by a Smurfit Kappa employee while performing their work duties that results in their absence from their scheduled work after the day of the incident.
Lost time accident frequency rate	Refers to the number of lost time accidents per 100,000 hours worked. LTA frequency rate = number of LTA x 100,000/total number of hours worked.
Lost time accident severity rate	Refers to the total number of days lost per 100,000 hours worked. LTA severity rate = number of days lost x 100,000/total number of hours worked.
Number of days lost	Refers to the number of days lost arising from any lost time accident. When counting the number of days lost due to an accident, the day of the accident is not counted as a lost day.
Senior Management	Executive Teams or similar positions.
Subcontractor	This refers to workers who provide services to Smurfit Kappa but work for third party organisations (e.g. Cleaners, Security, Catering) – where Smurfit Kappa is not directly responsible for paying their 'wages and salaries'.
Total recordable incident rate	Refers to the total number of recordable injury cases per 100,000 hours worked by Smurfit Kappa employees. Number of recordable injuries (lost time accident + restricted workday case + medical treatment case) x 100,000/total hours worked by all Smurfit Kappa employees during the period covered.
Universal Declaration of Human Rights	The Universal Declaration of Human Rights (UDHR) is a milestone document in the history of human rights. Drafted by representatives with different legal and cultural backgrounds from all regions of the world, the Declaration was proclaimed by the United Nations General Assembly in Paris on 10 December 1948 (General Assembly resolution 217 A) as a common standard of achievements for all peoples and all nations. It sets out, for the first time, fundamental human rights to be universally protected and it has been translated into over 500 languages.
Workforce	The workforce, or labour force, is the labour pool in employment; it is generally used to describe those working for a company or industry.

Wastes

Wastes	Wastes are classified as non-hazardous wastes or hazardous wastes, and are reported separately. Wood wastes and corrugated board shavings are excluded. All amounts of wastes are reported in mass as disposed.
Total non-hazardous wastes	Sum of all non-hazardous waste whatever its destination. Each category of non-hazardous wastes is defined and reported.
Non-hazardous wastes landfill	Part of the non-hazardous wastes that are disposed of in either internal or external landfill in accordance with national legislation.
Non-hazardous wastes recovery	Part of non-hazardous wastes that are reused or recycled or composted or used in agriculture or incinerated with energy recovery. The incineration facility is classified as a recovery operation if the efficiency of the plant complies with the definition laid down in Annex II of the Directive 2008/98/EC on waste.
Non-hazardous wastes other	Part of non-hazardous wastes that do not belong to the two previous categories. This includes wastes incinerated without energy recovery or wastes for which the final disposal is uncertain.
Hazardous waste	A hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Residues of oils and other hazardous wastes (building wastes containing asbestos, ink residues, etc.).

ASSURANCE REPORT OF THE INDEPENDENT AUDITOR

To: the members of Smurfit Kappa Group plc

Our conclusion

We have reviewed the Sustainable Development Report 2021 (hereafter 'the Report') of Smurfit Kappa Group plc (hereafter 'Smurfit Kappa') based in Dublin, Ireland, for the year ended 31 December 2021. A review is aimed at obtaining a limited level of assurance.

Based on our review nothing has come to our attention that causes us to believe that the Report is not prepared, in all material respects, in accordance with the reporting criteria as described in the 'Reporting criteria' section of our report.

The Report comprises a representation of the policy of Smurfit Kappa with regard to sustainability and the thereto related business operations, events and achievements during the year. Smurfit Kappa is the parent company of a group of entities. The Report incorporates the consolidated information of this group of entities to the extent as specified in 'About this Report' in the Report.

Basis for our conclusion

We have conducted our review in accordance with Dutch law, including Dutch Standard 3810N 'Assurance-opdrachten inzake maatschappelijke verslagen' (Assurance engagements relating to sustainability reports), which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements (ISAE) 3000 'Assurance engagements other than audits or reviews of historical financial information'. This engagement is aimed to obtain limited assurance. Our responsibilities in this regard are further described in the 'Auditor's responsibilities' section of our report.

We are independent of Smurfit Kappa in accordance with the 'Verordening inzake de onafhankelijkheid van accountants bij assurance-opdrachten' (ViO, Code of Ethics for Professional Accountants, a regulation with respect to independence). Furthermore, we have complied with the 'Verordening gedrags- en beroepsregels accountants' (VGBA, Dutch Code of Ethics). We believe the assurance we have obtained is sufficient and appropriate to provide a basis for our conclusion.

Reporting Criteria

The Report needs to be read and understood together with the reporting criteria. Smurfit Kappa is solely responsible for selecting and applying these reporting criteria, taking into account applicable law and regulations related to reporting.

The reporting criteria used for the preparation of the Report are based on the Sustainability Reporting Standards of the Global Reporting Initiative (GRI) and the applied supplemental reporting criteria as disclosed on pages 107-114 of the Report.

Materiality

Based on our professional judgement we determined materiality levels for each relevant part of the Report and for the sustainability information as a whole. When evaluating our materiality levels, we have taken into account quantitative and qualitative considerations as well as the relevance of information for both stakeholders and the company.

Limitations to the scope of our review

The Report includes prospective information such as ambitions, strategy, plans, expectations and estimates. Inherently the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Report.

References to external sources or websites in the Report are not part of the sustainability information as reviewed by us. Therefore, we do not provide assurance on this information.

Our conclusion is not modified in respect to these matters.

Directors' Responsibilities

Directors of Smurfit Kappa are responsible for the preparation of the Report in accordance with the applicable criteria as described in the 'Reporting criteria' section of our report, including the identification of stakeholders and the definition of material matters. The choices made by the Directors regarding the scope of the Report and the reporting policy are summarized on page 108 of the Sustainable Development Report 2021.

Furthermore, the Directors are responsible for such internal control as it determines is necessary to enable the preparation of the Report is free from material misstatement, whether due to fraud or error.

Auditor's responsibilities

Our responsibility is to plan and perform our review in a manner that allows us to obtain sufficient and appropriate assurance evidence for our conclusion.

Procedures performed to obtain a limited level of assurance are aimed to determine the plausibility of information and vary in nature and timing, and are less in extent, compared to a reasonable assurance engagement. The level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

We apply the 'Nadere Voorschriften Kwaliteitssystemen' (NVKS, Regulations for Quality management systems) and accordingly maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

We have exercised professional judgement and have maintained professional skepticism throughout the review, in accordance with the Dutch Standard 3810N, ethical requirements and independence requirements.

Our review included among others:

- Performing an analysis of the external environment and obtaining an understanding of relevant societal themes and issues, and the characteristics of the company;
- Evaluating the appropriateness of the reporting criteria used, their consistent application and related disclosures in the Report. This includes the evaluation of the results of stakeholder dialogue and the reasonableness of estimates made by the Management Board;
- Obtaining an understanding of the reporting processes for the Report, including obtaining a general understanding of internal control relevant to our review;
- Identifying areas of the Report where a material misstatement, whether due to fraud or error, are most likely to occur, designing and performing assurance procedures responsive to these areas, and obtaining assurance information that is sufficient and appropriate to provide a basis for our conclusion. These procedures included, amongst others:
 - Interviewing management and relevant staff at corporate level responsible for the strategy, policy and results;
 - Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures over, and consolidating the data in the Report;
 - Determining the nature and extent of review procedures for the group components and locations. For this, the nature, extent and risk profile of these components are decisive. Based thereon we selected the components and locations to visit. The visits to Forney, San Antonio, Fort Worth, Mengibar, Saillat, St Leon Rot and Rheinwelle in the United States, Spain, France and Germany are aimed at, on a local level, validating source level data and evaluating the design and implementation of internal controls and validation procedures;
 - Obtaining assurance information that the Report reconciles with underlying records of Smurfit Kappa;
 - Reviewing, on a limited test basis, relevant internal and external documentation; and
 - Performing an analytical review of the data and trends.

ASSURANCE REPORT OF THE INDEPENDENT AUDITOR CONTINUED

- Evaluating the consistency of the sustainability information with the information in the annual report which is not included in the scope of our review;
- Evaluating the presentation, structure and content of the Report; and
- Considering whether the Report as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

Amstelveen, 14 April 2022

KPMG Accountants N.V.
Danielle Landesz Campen RA
Partner

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Confirmation of rights to use the trademarks:



The mark of
responsible forestry





Smurfit Kappa

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