



Delivering a Better Tomorrow

sustainable development
report 2020

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

We create innovative and sustainable paper-based packaging solutions for our customers, we protect products in transit and precious resources for future generations while caring for each other, the environment and the planet.

We operate across 35 countries with around 46,000 employees in over 350 production sites and revenue of €8.5 billion in 2020.

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A number of activities showcased in this document took place during pre-COVID-19 times when facemasks and social distancing were not required.



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 our 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 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, well-being 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 of 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 104.



Investor acknowledgements



Our reporting suite



Find out more

To find out more information visit smurfitkappa.com/sustainability

Where We Operate

A world leader with operations in 35 countries

We are one of the largest integrated manufacturers of paper-based packaging solutions in the world. We are located in 23 countries in Europe and 12 in the Americas. In Europe, we are the leader by production volume in corrugated packaging and containerboard and in Latin America we are the only large-scale pan-regional player.

Our Business in Numbers

Forestry and plantations (hectares)

68k

Recovered fibre facilities and forestry operations

46

Paper and board mills

34

Converting plants

242

Other production facilities

34



What We Do

Our core activity is to produce paper-based packaging solutions for our 65,000 customers. We are involved in all stages of our supply chain: we collect and purchase waste paper and we grow and purchase wood both 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.

In 2020, we delivered 6.7 million tonnes (13 billion m²) of corrugated packaging to our customers, using most of the 7.0 million tonnes of containerboard produced within our own mill system.



Our Business in Numbers

Production sites

356

Employees

46,000

Countries

35

Investments in more sustainable operations

€1bn

2020 – A year of resilience



Tony Smurfit
Group Chief
Executive Officer

“
At Smurfit Kappa, we recognise our role in society and are committed to protecting the planet, its people, and our stakeholders.”

In 2020 and continuing in 2021, the COVID-19 pandemic placed enormous challenges on society. In Smurfit Kappa we brought our values of Safety, Loyalty, Integrity and Respect to life during this challenging time. Our primary focus was, and is, to protect our employees and continue to meet our customers' needs. We remained operational as a result of our employees dedication and commitment, and I have the utmost respect for our resilient workforce.

We have also seen that the responses to the COVID-19 pandemic have resulted in changing consumer patterns and purchasing trends. As a leader in sustainability and innovation we are well positioned to deliver insights and packaging solutions for our customers as these future trends continue to emerge.

Generating Value for all Stakeholders

The pandemic has further strengthened our view that we need to employ an end-to-end approach to sustainability. This means not only understanding every social, environmental and economic aspect of our business but also the 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.

During the COVID-19 pandemic, the importance of sustainability became even clearer, with citizens demanding change. Climate change, the most challenging issue of our time, has become, in the eyes of many, a climate crisis. Diversity, inclusion and equality are urgent issues for global society. Deforestation and the need to create a circular economy may have received somewhat less attention during 2020, but remain critical issues for the planet and relate directly to our business activity.

Since we started our corporate sustainability journey almost 15 years ago, we have been focusing our efforts on solving these issues while positively impacting our customers, our other stakeholders and playing our part in having a positive impact on the planet.

Generating value for all our stakeholders is what focuses us in becoming a truly sustainable and circular Company. Showing our ambitions and declaring specific and measurable goals will underpin our leadership in sustainability.

The Year's Sustainability Highlights

During 2020, we broadened the Group's commitment to sustainability by introducing ambitious targets in new areas and updating our existing targets bundled under a common theme, Better Planet 2050. We are targeting at least Net Zero fossil emissions by 2050 while increasing our existing 2030 CO₂ intensity reduction target from 40% to 55%. We are also validating with the Science Based Target initiative that our CO₂ reduction target is in line with the objectives of the Paris Agreement. We have strengthened our commitment to water stewardship through a new water usage reduction target and on deforestation, we have a new alliance with the World Wildlife Fund Colombia to work together to promote sustainable practices within the forestry industry. We also further increased our ambition to deliver Chain of Custody certified products to our customers. Finally, we started reporting on the recommendations of the TCFD and the relevant SASB criteria.

We have also set additional targets in the areas of gender balance, employee and community engagement, inclusion and diversity, and ethics and values. This shows our commitment to be an employer of choice by engaging our employees and providing a safe place to work in a global, culturally diverse and inclusive organisation where people can develop to their full potential and that is at one with the communities where we are located.

A number of significant, sustainability-related investments were completed, one of which was a €134 million investment in our kraftliner mill in Austria reducing fossil emissions by 40,000 tonnes. Another significant project was the installation of a waste sludge press in our mill in Cali, Colombia, which reduced the volume of waste we send to landfill by 56,000 tonnes.

In addition, we aligned our financing with our sustainability strategy by incorporating our key sustainability performance indicators in the financing arrangements with our banking consortium.

The Year's Performance

We continue to make progress on our environmental and social targets. Compared with 2019, fossil CO₂ emission intensity was reduced by 7%, water discharge quality improved by 5%, waste to landfill intensity decreased by 18% and Chain of Custody certified packaging deliveries to customers increased by 2%. Our safety performance improved by 29%. These positive developments are the result of a combination of significant investments by the Company and relentless dedication by our people.

2021 and Beyond

The world we live in has – even aside from fighting the COVID-19 virus and the effects it has on society and our lives – immense challenges ahead. If we put sustainability at the heart of our thinking and way of operating, we can make a real contribution to tackling these issues. By collaborating with our value chain partners and like-minded organisations, we can create greater social, economic and environmental value.

All of our ambitions have their challenges, but that is the very point of them: to challenge ourselves to do what is right for society. I hope you enjoy reading our 2020 Sustainable Development Report and I look forward to your feedback (sustainability@smurfitkappa.com).



Tony Smurfit
Group Chief Executive Officer
30 April 2021

Our Better Planet 2050 Targets

Our targets focus on our strategic areas and are designed to align the Group with the UN 2030 Sustainable Development Goals.

Existing	Target	Achievement
Climate Change 	Net Zero Our ambition is to have Net Zero emissions by 2050 with a 55% reduction in fossil fuel emissions intensity by 2030	37.3% reduction in fossil fuel emissions intensity since 2005
Forest 	>95% packaging solutions sold as Chain of Custody certified to customers by 2025	93.8% packaging solutions sold as Chain of Custody certified in 2020
Water 	60% reduction in Chemical Oxygen Demand intensity by 2025	38.2% reduction in Chemical Oxygen Demand intensity since 2005
Waste 	30% reduction in waste to landfill intensity by 2025	23.7% reduction in waste to landfill intensity since 2013
Health and Safety 	5% reduction in Total Recordable Injury Rate annually	29% reduction in Total Recordable Injury Rate in 2020
New targets, reporting from 2021		
People 	Communities 	Water 
25% of management positions held by women by 2024	€24 million will be donated between 2020-2025 to support social, environmental and community initiatives	1% reduction of our water usage intensity annually

2020 – Another year of progress in Sustainability



Jørgen Buhl Rasmussen
Chair of Sustainability Committee

“
The Board considers sustainability of core strategic importance for Smurfit Kappa.”

Sustainability Committee Established in 2019

In 2019, the Board reviewed the Group's sustainability and corporate social responsibility objectives and established a permanent subcommittee of the Board with responsibility for sustainability, reflecting its strategic importance for Smurfit Kappa. As Chair of the Committee, I am pleased to be able to outline in this report the Committee's objectives and activities.

Global Challenges Need to be Addressed

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 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 sustainability in its DNA and is acutely aware of its responsibilities around corporate citizenship and is committed to doing its part in resolving these critical issues. Therefore our ambition is to deliver sustainable growth to 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.

People are the Key to Success

Our success is driven by Smurfit Kappa's highly valued and motivated team. Therefore, the health, safety and well-being of our people is a key priority for us. With a workforce of around 46,000 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 where we are located.

2020 in Review

The Committee, in its first full year, had an active and productive year with the Group completing many projects in its sustainability agenda over the course of 2020 which have been outlined and summarised below and throughout this Sustainable Development Report.

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, 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 2005. Details of the targets of the Better Planet 2050 initiative are included on page 5.

As the business evolved during 2020, the Group has also expanded its focus, embodied in the Better Planet Packaging initiative, to provide customers with innovative, fit-for-purpose sustainable packaging solutions which, for example, reduce their product waste. These solutions not only provide an attractive merchandising medium but also provide efficient and environmentally friendly transport packaging solutions that are renewable, recyclable and biodegradable. The 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 14-17.

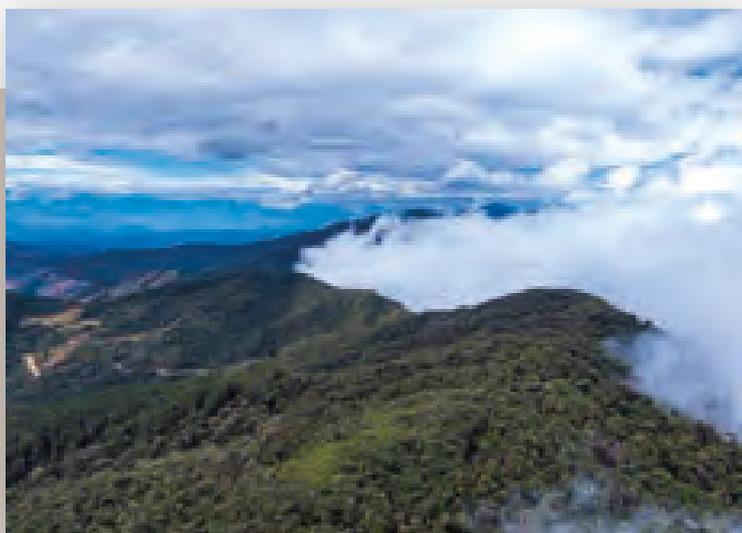
The Committee is also responsible for employee engagement on behalf of the Board. During 2020, the COVID-19 pandemic made direct engagement difficult. For further details on employee engagement, see page 54.

Looking Ahead

The Committee is confident that Smurfit Kappa will successfully continue its sustainability journey in 2021. 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 2021 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
30 April 2021



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, as millions of people take to the streets to advocate for change. We have a responsibility to the 46,000 people that make up Smurfit Kappa around the world, but also to the communities where our operations are located. By creating a safe and inclusive culture, 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 hectares 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 new 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.

Key Achievements in 2020

- Announced targeting Net Zero carbon emissions by 2050 and reached 37.3% CO₂ emissions intensity reduction for our paper and board mills since 2005.
- Achieved 38.2% Chemical Oxygen Demand intensity reduction since 2005.
- Reduced the amount of waste sent to landfill by 23.7% compared with 2013.
- Completed a €134 million investment in a new recovery boiler in Nettingsdorf, Austria, which will decrease our CO₂ emissions by 40,000 tonnes.
- A new waste sludge press decreased the waste sent to landfill for Cali, Colombia by 47%.

➔ Read more on pages 24-45

Reduction of relative CO₂ emissions (since 2005)

-37.3%

Packaging sold as CoC certified

93.8%



People

Empowering People and Communities

Having engaged employees is critical for the success of our business. We are committed to providing a safe place to work for the talented people in our global, culturally diverse organisation. Our commitment also extends to all of the communities we interact with.

Key Achievements in 2020

- Conducted a Group-wide COVID-19 Pulse Survey to ensure our people were safe, supported and connected.
- Set new targets for our people commitments. Amongst others, we have ambitions to increase the number of women in management position to at least 25% by 2024, while we also want to increase female participation in our overall workforce to over 30%.
- Achieved a TRIR reduction of 29% compared with 2019.
- Formed key strategic alliances with The Valuable 500 and Employers Network for Equality and Inclusion, to deliver on our commitment to diversity and inclusion.
- Invested €7.7 million in social projects and made an additional €3 million donation in various COVID-related projects.

➔ Read more on pages 46-61

Reduction of the TRIR since 2019

-29%

Social investments in 2020

€7.7m



Impactful Business

Delivering to all Stakeholders

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

Key Achievements in 2020

- Broadened our Better Planet Packaging initiative.
- Hosted over 100 webinars on sustainable packaging concepts.
- Grew Better Planet Packaging with the introduction of eFashion, eBottle and Clips&Grips.
- Partnered with leading value chain partners.
- Included in Solactive ISS ESG Beyond Plastic Waste Index.
- Support the Goals award for first FTSE100 company with five stars for making the UN 2030 Sustainable Development Goals a reality.
- Rated at A- level for our CDP Climate Change response.
- Announced our support to the Task Force on Climate-related Financial Disclosure project (TCFD) in May.
- Started reporting in line with the relevant SASB criteria.

➔ Read more on pages 62-71

Sustainable packaging webinars hosted

+100

Support the Goals recognition



Our Approach

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 responsible production 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 businesses

Key to strategic priorities:

- Planet
- People
- Impactful Business

1



Sustainable Raw Material

100% of our raw material has a sustainable origin. Recycled fibres make up 75% and the balancing 25% are sustainable virgin wood fibres.

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.

3



Product Design and Innovation

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

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

Being a good, responsible and transparent corporate citizen is important to us. This means recognising our role in society and protecting the environments within which we work – the planet, the people and our business community. Our end-to-end approach to sustainability is about considering, understanding and promoting sustainability at every step of the value chain.

By thinking about the whole of our business and product life cycle, rather than individual parts in isolation, we can collectively achieve more. In looking beyond our own operations and collaborating with our suppliers and like-minded organisations, we can create greater social, economic and environmental value.

Throughout our value chain, from product inception to final disposal, we respect the circular economy and the people, suppliers and communities that we impact. Sustainability is at the core of our thinking and way of operating.

Our Essential Products

We believe paper-based packaging can be one of the answers to the challenges facing the world. By considering our products' entire life cycle – starting with renewable and recycled resources, using data-driven innovation to make our products fit for purpose, and passing the value we preserve on to our customers – we can have a bigger impact on a greater scale. The result is packaging that is better for the planet.

➔ [Read more about Better Planet Packaging on pages 14-17.](#)

Our Circular Processes

Thinking sustainably is not just about the products, but also our processes – how we source the raw materials, create our products, how they are used and what happens when we are finished with them. Through our holistic

approach to product design and manufacture, we can offer right-weighted, fit-for-purpose packaging solutions that minimise inefficiency and waste. Working closely with our suppliers and customers, we design sustainability into every fibre.

➔ [Read more about our achievements on pages 24-45.](#)

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 46,000 people to reach their full potential. Our responsibilities extend to helping local economies and partnering with like-minded organisations to make a bigger contribution.

➔ [Read more about our work on pages 46-61.](#)



4

Paper-based Packaging Production

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

5

Global and Local Customers

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

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.

7

End of Life: Paper Recycling

We participate in paper and packaging recycling through our 44 paper recycling depots in Europe and the Americas. Corrugated packaging is recovered for recycling at a rate of 92%.

Our Approach in Action

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 and more biodegradable and from renewable sources.

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

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 we are finished with them. We design sustainability into every stage of our products' life cycle.

Our Sustainable Raw Material

We start with 100% renewable and recycled resources. 75% of our raw material is recycled fibre and the remaining 25% 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 in order 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 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 45% 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.

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 17% improvement in energy efficiency since 2005 and over 50% of the energy produced is now based on renewable energy.

Since 2005, we have invested close to €1 billion to make our operations more sustainable. Of this, some €850 million has been invested in different energy efficiency and CO₂ reduction projects, over €80 million in best practice water treatment systems and €50 million in projects optimising fibre use and reducing waste.

Working closely with our suppliers, collaborating with our partners in the value chain, sharing best practice and building trusted relationships with our customers, we ensure that the sustainable mindset is always there.

From tree to box, and then another box, we are reducing the cost to the planet every step of the way.

Our Innovative Products

We have a full suite of tools that enables us to consider our customers' packaging requirements at every stage. Through this forensic approach we are able to offer bespoke, right-weighted, fit-for-purpose packaging solutions that support customers' value chains, optimise efficiency and minimise waste and pollution.

The end result is packaging that is better for the planet. It is important that the environmental benefits we preserve in our processes and raw material are shared with our customers, supporting our whole value chain to have less of an impact. And because our paper-based packaging has the highest recycling rate of any packaging – the fibres can be recycled eight times, before being used for energy generation or biodegraded – we are not only lowering our carbon in production and use, but ensuring less ends up in landfill or as litter on land or in the oceans.

Our Talented People

Smurfit Kappa has a responsibility to the people and communities we work with. Our end-to-end approach to sustainability considers our entire global network, meaning doing the right thing not only benefits us, it benefits everyone.

Our people are at the heart of this. By providing 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. Engaged employees are happier and understand how their efforts can contribute to our success.

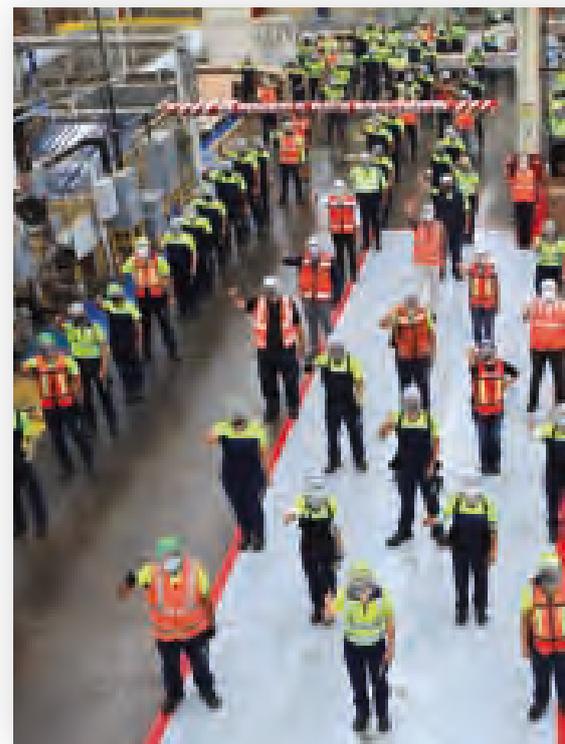
Our Respected Communities

Beyond our employees, our responsibilities extend to helping the communities where we're 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 are, Smurfit Kappa is focused on breaking cycles of poverty and dependence when and where they exist, beginning with the younger generations. Aligned to our Foundation, we work to improve the situation for young people through the lens of: health and nutrition, basic care and education.

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.



Nettingsdorf Good at Heart

“The recovery boiler is the heart of a pulp mill,” says Günter Leitgeb, Pulp Mill Manager of Smurfit Kappa Nettingsdorf, Austria, “and our heart was set on increasing sustainability and circularity, as well as combatting climate change.”

Our Smurfit Kappa Nettingsdorf kraftliner paper mill has initiated a Future Energy Plant project, which upgraded the water treatment plant and installed new drying cylinders on the paper machine. However, the major upgrade is the new recovery boiler.

“We needed the best one on the market – a massive investment of €134 million – but it will pay for itself with a 10% increase in boiler efficiency, as well as combatting climate change by cutting CO₂ emissions by 40,000 tonnes a year,” says Günter. “That’s two-thirds of our emissions and a significant step in the direction of achieving Smurfit Kappa’s target of reducing fossil emissions by 55% by 2030.”

The new boiler recovers inorganic chemicals as smelt and burns wood-material not needed for paper production, recovering the heat as steam. The new advanced steam engine uses this to efficiently generate bioenergy electricity.

It has advanced process controllers and sophisticated software to finely control combustion, allowing reduction of emissions like nitrous oxides, or dust, which has been reduced to a tenth from the situation before at under 5mg per cubic metre. There is also a safety gain – the new boiler has a robot for cleaning the ‘smelt’ spot, formerly a safety concern for workers in any paper mill.

With the plant’s 34% increase in productivity since becoming part of Smurfit Kappa in 1995, the new boiler was needed to cope with the demand. It began operating in June 2020 and will contribute to Smurfit Kappa’s Net Zero emissions target by using CO₂ neutral biofuel.

“In addition to being a benefit for the global environment,” adds Günter, “our new boiler has also made us more popular in our local environment as it also gets rid of all odorous gases!”



Supporting our People’s Well-being

As part of our global Health and Well-being agenda, this year we completed the roll-out of our Employee Assistance Programme (EAP), by putting a service in place across Europe and Mexico.

It is a free and confidential service to help our colleagues and their families cope with any work, life or health concerns.

The programme is available 24/7, in all of our 21 languages and provides:

- Local expert support, consultation and counselling;
- Assistance with meeting challenges and resolving work/life issues;
- Solution-focused counselling with consulting services;
- Services offered away from the workplace, in confidence;

- Caring advisors who can help you choose a support option that suits your needs and learning style; and
- Support in the event of a crisis situation.

“Our experience of the service has been very positive. If an employee needs support with a specific health matter, the programme can support that effort. On the other hand, if we notice that an employee’s behaviour has changed, we can guide him or her to this confidential support system, which is a great help for all of us,” says Jackie McDermott, Head of Engagement and Communication Smurfit Kappa UK.

“In the short time the service has been available to our employees, we have noticed how it helps to know that at times it is ok, not to be ok,” says Cristian Garcia Romano, HR Coordinator Smurfit Kappa Mexico. “In addition to its obvious benefits, the programme has also proved to be great tool for us to build trust with our employees.”

Better Planet Packaging

Delivering innovative solutions

We continue to lead in innovative sustainable packaging solutions for our customers, led by our Better Planet Packaging initiative which provides sustainable solutions today, ready for the challenges of tomorrow.

Develop and Design

We develop and design paper-based packaging concepts and materials with improved functionalities, that are fully renewable, recyclable and biodegradable as alternatives for today's unsustainable packaging solutions.

Support and Implement

We support our customers and other stakeholders to develop a go-to-market strategy and implementation plan for paper-based packaging alternatives.

Educate and Inspire

We educate and inspire all stakeholders to understand the role sustainable packaging can play in addressing the challenges of climate change and waste.

Educate and Inspire

SafeShield – COVID-19 safety desk dividers

In response to the need to protect office workers, children and students during the COVID-19 pandemic, we created SafeShield desk dividers, designed to support social distancing in offices, schools, colleges and universities. SafeShield desk dividers are made of corrugated board, the ultimate single-use hygienic material. Recent studies have shown that COVID-19 has a shorter life span on corrugated than on other materials such as steel and plastic. Our SafeShield desk dividers can be used, replaced and recycled, easily and quickly.





Develop and Design

Grolsch TopClip – functional multi-pack solution for drink cans

Grolsch is making great strides with its goal to become a zero-waste brewery. By replacing all the shrink wrap with our sustainable TopClip in the Netherlands, Grolsch will remove 100,000kg of plastic annually. This is the equivalent of more than 4 million plastic bags. TopClip delivers on both sustainability and functionality as it fully covers the top of can multi-packs, protecting them from contamination and providing excellent handling and branding opportunities.



Support and Implement

Morakniv – Replacing hard plastic packaging for knives

Morakniv is a well-known Nordic knife producer who wanted to celebrate its 125-year anniversary by improving its image and becoming a more sustainable company. It introduced three new products to its existing portfolio and worked with our Better Planet Packaging team to develop a 100% paper-based concept to replace the blister-free hard plastic packaging. The new packaging is user-friendly, practical for on-shelf display and 100% renewable and recyclable.

Better Planet Packaging continued

We have a range of tools and approaches that support our customers' supply chain management and improve consumer experience.

ShelfSmart

The right shelf-ready packaging is proven to boost sales quickly and cost effectively, giving our customers maximum brand benefit where it matters most – at the point of purchase.

ShelfSmart is an innovative retail merchandising service designed to develop scalable, risk-proofed, shelf-ready packaging solutions. This is especially important for food packaging, where lost product ends up as waste which carries a high environmental footprint.

ShelfSmart is also used to verify consumer preferences between current packaging solutions and proposed paper-based packaging solutions.

SupplySmart

SupplySmart is a combination of unique tools, data and expertise that enables customers to optimise their supply chain with improved packaging solutions with the assurance they're making fully risk-assessed decisions that will deliver measurable cost savings and lower environmental impacts.

We engage with customers using a proven six-step methodology, designed to help them make the most informed packaging choices to deliver the best return while reducing their environmental footprints.

eSmart

Our eSmart process is designed to improve all aspects of e-Commerce packaging, from packing line to supply chain to consumer experience, including environmental impacts.

We help customers manage complexity by analysing their e-Commerce business across 12 key areas – including optimising their planning, increasing supply chain efficiency and delivering a positive customer experience. This analysis helps to identify areas for improvement and further development.



eSmart

Manuela Echeverri – e-Commerce pack

Renowned artist Manuela Echeverri wanted people to be able to carry on painting at home during COVID-19 so she designed a kit that would enable them to do just that. Using our e-Commerce tool, eSmart, we developed a micro-corrugated cardboard pack which held all the products (canvas, acrylics, brushes and guides) carefully in place so they were fully protected in transit and could be stored safely once opened. The brightly coloured pack was designed to have a great visual impact from the moment it is received.



ShelfSmart

Safe&Green Cartama – Packaging for avocados

Our team of designers developed a bespoke packaging solution for avocados for Cartama, one that would withstand the journey from Colombia to Japan. The solution is a double wall corrugated box using five layers of virgin paper which meets the high performance expectations and promotes the positive perception of Cartama as a sustainable brand. The solution is shelf-ready with the product in good condition for the consumer to enjoy.

SupplySmart

Rheem – No waste water heater packaging

We helped Rheem, the largest manufacturer of water heating products in North America, to develop a zero landfill packaging solution for two of their water heating products. We carried out a full supply chain analysis using our SupplySmart tool to establish how the pack could be redesigned. The 100% paper-based solution with Hexacomb end caps is a 100% renewable and recyclable packaging solution – positively representing their brand's sustainability message.



Stakeholder Engagement

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 Chain of Custody 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 requiring 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 with 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 Cepi, 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 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.

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 is 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.

How we engage

How we include our stakeholders across our key focus areas



Key activities in 2020

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 Circulation of talent and ideas across operations and geographies to share best practice 	<ul style="list-style-type: none"> Careful research and creating win-win solutions through closed material loops Support local business ecosystems through short supply chains 	<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 	<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"> Over 100 online Better Planet Packaging webinars with customers (see page 63) At the end of 2020, our delivery of certified packaging reached 93.8% (see page 34) 	<ul style="list-style-type: none"> Reporting in line with the TCFD and committed to align our CO₂ target with SBTi Fossil CO₂ reduction by 37.3% (see pages 26-27) COD discharge reduction by 38.2% (see pages 26-27) Waste sent to landfill reduced by 23.7% (see pages 26-27) 	<ul style="list-style-type: none"> Formed key strategic alliances with The Valuable 500 and Employers Network for Equality and Inclusion (see pages 54-57) Developed online approach to our Learning and Development programme to ensure ongoing employee personal growth Improved our TRIR by 29% since 2019 (see page 59) 	<ul style="list-style-type: none"> €4.7 million in social investments (see page 61) €3 million in various COVID-19 related projects 2,400 hours volunteering 1.2 million people impacted 	<ul style="list-style-type: none"> 99.8% of our fibre produced and purchased as CoC certified (see pages 26-27) 46 supplier audit activities (see page 71)

Assessing Materiality

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 2020 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 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 25-27, 47-49, 63-65.

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

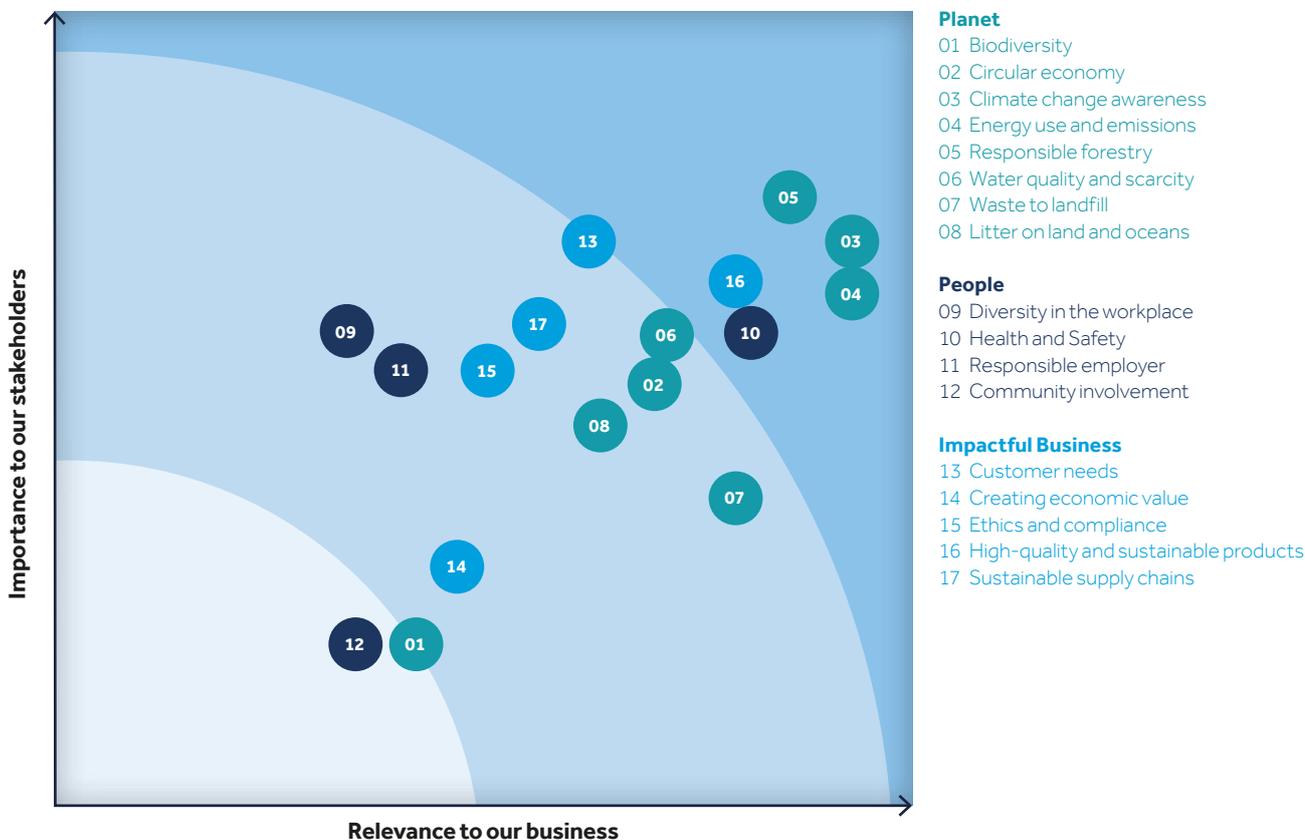
Product use

- **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



Our Strategy

Delivering for UN Sustainable Development Goals

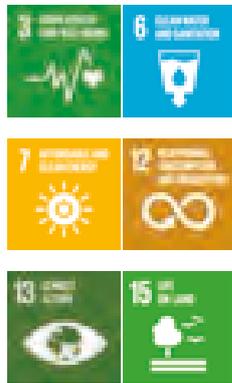
As a leading company in sustainability, we base our ambition of sustainable growth on three pillars: Planet, People and Impactful Business.

This means: continually striving to minimise our environmental impact and practising responsible governance; treating our stakeholders with respect; and creating an impactful business through our products and processes.

Delivering for SDGs (Goals)

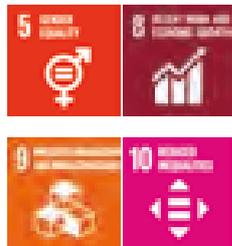
Smurfit Kappa Impacts

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.



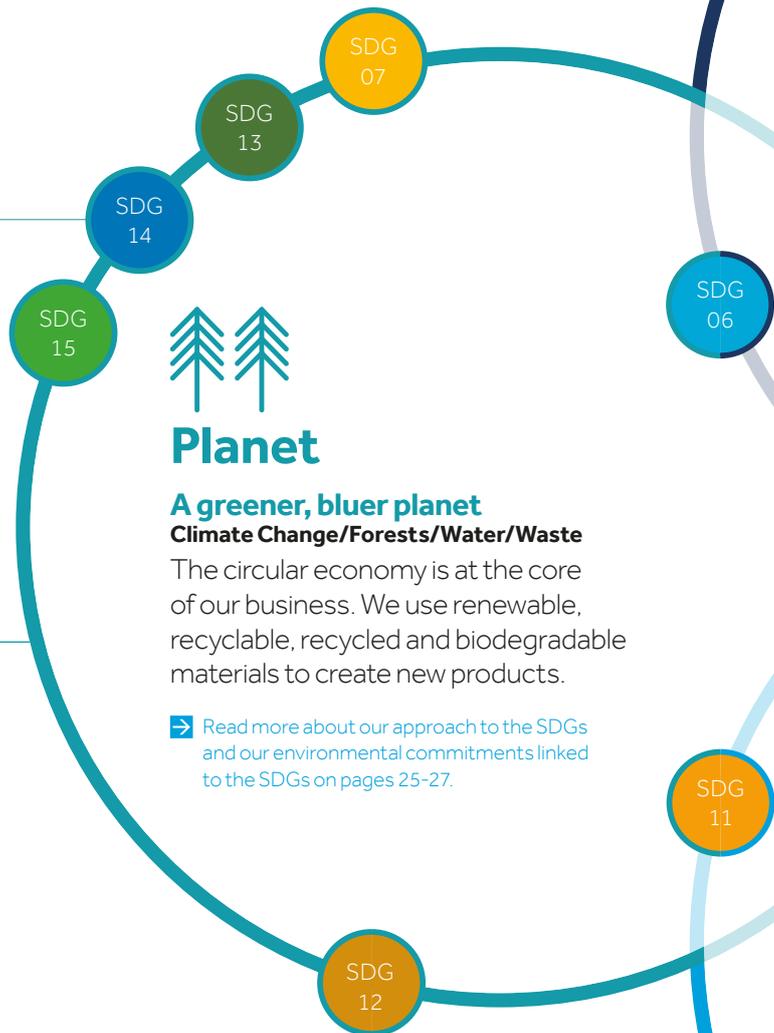
Smurfit Kappa Contributes

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 for these Goals.



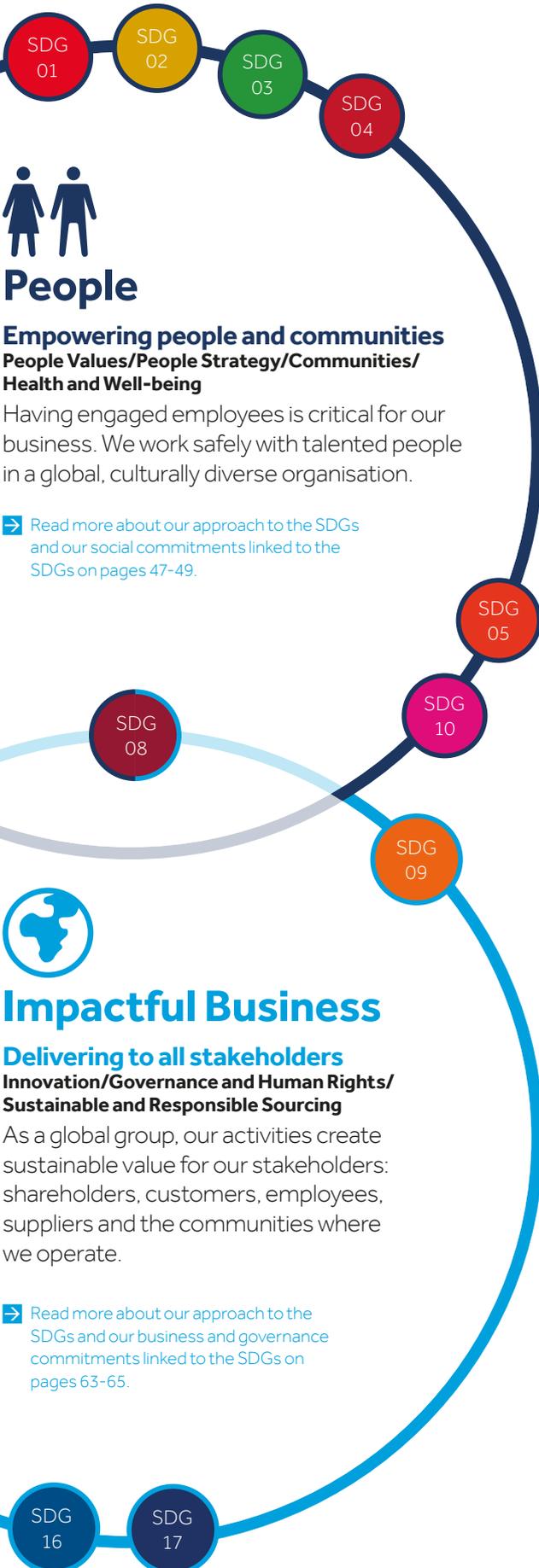
Planet

A greener, bluer planet

Climate Change/Forests/Water/Waste

The circular economy is at the core of our business. We use renewable, recyclable, recycled and biodegradable materials to create new products.

➔ [Read more about our approach to the SDGs and our environmental commitments linked to the SDGs on pages 25-27.](#)



People

Empowering people and communities People Values/People Strategy/Communities/ Health and Well-being

Having engaged employees is critical for our business. We work safely with talented people in a global, culturally diverse organisation.

➔ Read more about our approach to the SDGs and our social commitments linked to the SDGs on pages 47-49.



Impactful Business

Delivering to all stakeholders Innovation/Governance and Human Rights/ Sustainable and Responsible Sourcing

As a global group, our activities create sustainable value for our stakeholders: shareholders, customers, employees, suppliers and the communities where we operate.

➔ Read more about our approach to the SDGs and our business and governance commitments linked to the SDGs on pages 63-65.

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 Net Zero carbon emissions by 2050. We also offer our customers optimised packaging solutions that help them to reduce CO₂ emissions in their value chain.

➔ Find out more on pages 30-33

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 38-41

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 34-37

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 42-45

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 52-53

People Strategy

Employees who find meaning at work are happier, more productive and more engaged. This is why we are constantly further 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.

➔ Find out more on pages 54-57

Health and Well-being

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 58-59

Communities

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

➔ Find out more on pages 60-61

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 66-67

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 68-69

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 70-71

Planet

A greener, bluer planet

For many years, our operations have been designed on a circular economy 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. In 2020, we increased our contribution by targeting Net Zero CO₂ emissions by 2050.



Packaging solutions sold as Chain of Custody certified

93.8%

Reduction of relative waste sent to landfill

-23.7%

Reduction of relative CO₂ emissions (since 2005)

-37.3%

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Waste	42

Key Principles

We operate a circular business model using mostly recycled fibrous raw material. The virgin fibrous 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 75% 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 raw materials for industry and employment.

Key Achievements in 2020

We have set ambitious new targets as part of our Better Planet 2050 initiative, including for Net Zero carbon CO₂ emissions, the first among our industry peers. We also increased our intermediate target to achieve a 55% intensity reduction in our CO₂ emissions by 2030, compared with 2005. In 2020, our steady progress against our CO₂ target reached a 37.3% intensity reduction since 2005, our baseline year.

[→ Read more on pages 31-32](#)

As we look to provide assurance about the sustainable origin of the raw material we use, we increased our Chain of Custody certified packaging deliveries to customers' target to 95% and reached a level of 93.8% in 2020.

[→ Read more on pages 34-35](#)

Chemical Oxygen Demand intensity levels in our water discharge were further reduced in 2020, reaching a 38.2% reduction since 2005 against our target of 60% by 2025. Although we are more a processor of water than a consumer of water, we are committed to sustainable water stewardship and introduced a water intake intensity reduction target for our paper mills of 1% annually.

[→ Read more on pages 39-41](#)

We made significant progress in reducing the amount of waste we send to landfill, achieving a 23.7% reduction of waste per produced tonne of paper in 2020, compared with 2013. We are targeting a 30% reduction by 2025.

[→ Read more on pages 42-43](#)

We completed a €134 million investment in a new recovery boiler at our Smurfit Kappa Nettingsdorf Pulp Mill in Austria, which will decrease our CO₂ emissions by 40,000 tonnes.

A new waste sludge press at our Smurfit Kappa Cali plant in Colombia decreased the waste sent to landfill by 47%.

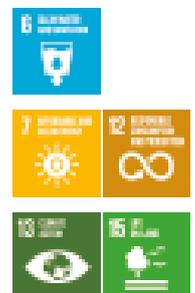
[→ Read more on page 43](#)



Delivering for SDGs

Smurfit Kappa Impacts

Smurfit Kappa has a direct impact on clean water resources, affordable and renewable energy, and forest biodiversity and ecosystems. Through our efforts to reduce the climate impact of our operations as well as our products that help our customers reduce the climate impacts in their supply chain, we contribute to the global climate action. Supplying our customers with sustainable packaging solutions that protect their products from damage and inform consumers of their contents, we are part of the responsible consumption and production chains. We have set measurable targets in all these areas.



Smurfit Kappa Supports

Smurfit Kappa supports local communities through its paper recycling operations, and is part of the infrastructures for sustainable communities. By replacing plastic packaging, our products help preventing plastic litter from entering water bodies and harming water ecosystems, and our Better Planet Packaging initiative helps raise awareness in this area.



Planet continued

Responding to our Stakeholders

Climate Change

What we believe

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 in innovation and product design, develop supportive tools and services, and create packaging solutions for customers that lower their carbon footprint.

What our stakeholders expect from us

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.

Our commitments

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.

Commitment #2: Collaboration with customers to determine carbon footprints of the packaging life cycle.

Forest

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 eight times 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.

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.

Commitment #1: All fibre produced and purchased is CoC certified under FSC, PEFC or SFI (Sustainable Forest Initiative).

Commitment #2: At least 95% of our packaging is certified as CoC certified under FSC, PEFC or SFI.

Commitment #3: All production sites use FSC, PEFC and/or SFI CoC standards.

Water

Over 90% of the water we use is returned to nature in good condition, and the rest is emitted 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.

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.

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.

Commitment #2: Perform environmental impact assessments of the water use of our paper mills (where relevant) and develop water usage measurements.

Commitment #3: At least 1% intensity reduction annually of water intake by our global paper and board mill system with 2020 as reference year.

Waste

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.

Avoiding customers product and packaging waste, 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.

Commitment #1: Decrease the waste sent to landfill by 30% per tonne of product produced by our mill system compared with 2013 levels by 2030.

Progress made in 2020

Progress made: Since 2005, we have reached 37.3% reduction. In 2020, Smurfit Kappa is committed to align its CO₂ target with the Science Based Target initiative and also to support the recommendations of the Task Force for Climate-related Financial Disclosures.

Progress made: Our suite of tools that help to determine the carbon footprint of our customers' packaging were used, on average, 11,000 times a day.

[→ Read more about our progress on pages 30-33](#)

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

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 and Colombia only. We are currently evaluating our Scope 3 emissions in depth and expect this evaluation to be finalised latest in 2022. As we are highly integrated from the sourcing of our key raw materials to the production of our own products, we believe Scope 3 emissions are relatively low compared with our Scope 1 and 2 emissions.

Progress made: We continued to produce and purchase 99.8% of our fibres under fibre origin management systems that are CoC certified in 2020. This is within our margin of 1% variation.

Progress made: 93.8% packaging solutions sold as Chain of Custody certified in 2020.

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

[→ Read more about our progress on pages 34-37](#)

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

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

Progress made: Since 2005, we reached a 38.2% reduction.

Progress made: During 2020 and the first quarter of 2021, two new sites were assessed. All relevant sites have been assessed.

Progress made: New target, first reporting of our progress will be in 2022 over the year 2021.

[→ Read more about our progress on pages 38-41](#)

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

- 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 Chemical Oxygen Demand (COD) in water which is an indicator of the organic content in water.

Progress made: Since 2013, we reached a 23.7% reduction.

[→ Read more about our progress on pages 42-45](#)

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

- 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.

Planet continued

The UN's 2030 Agenda for Sustainable Development calls for action via 17 Sustainable Development Goals, and both the Paris Climate Accord and the EU have set tough carbon targets. By 2030, the Paris Accord aims to limit climate change to under 2°C and the EU commits to reducing CO₂ emissions by 55% compared with 2005 by 2050. 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.

Circularity has been our business model since our inception, so we are in the lead as the circular economy goes mainstream. Our operations in 35 countries, and 356 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.

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.

Climate change has the potential to impact our business operations in a variety of ways. We have identified, assessed and responded to climate-related risks and opportunities and our identified transition and physical risks, have been detailed in our CDP Climate Change response. 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. 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 bio economy 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, break-through technologies must be available by 2030.

Scarce Resources

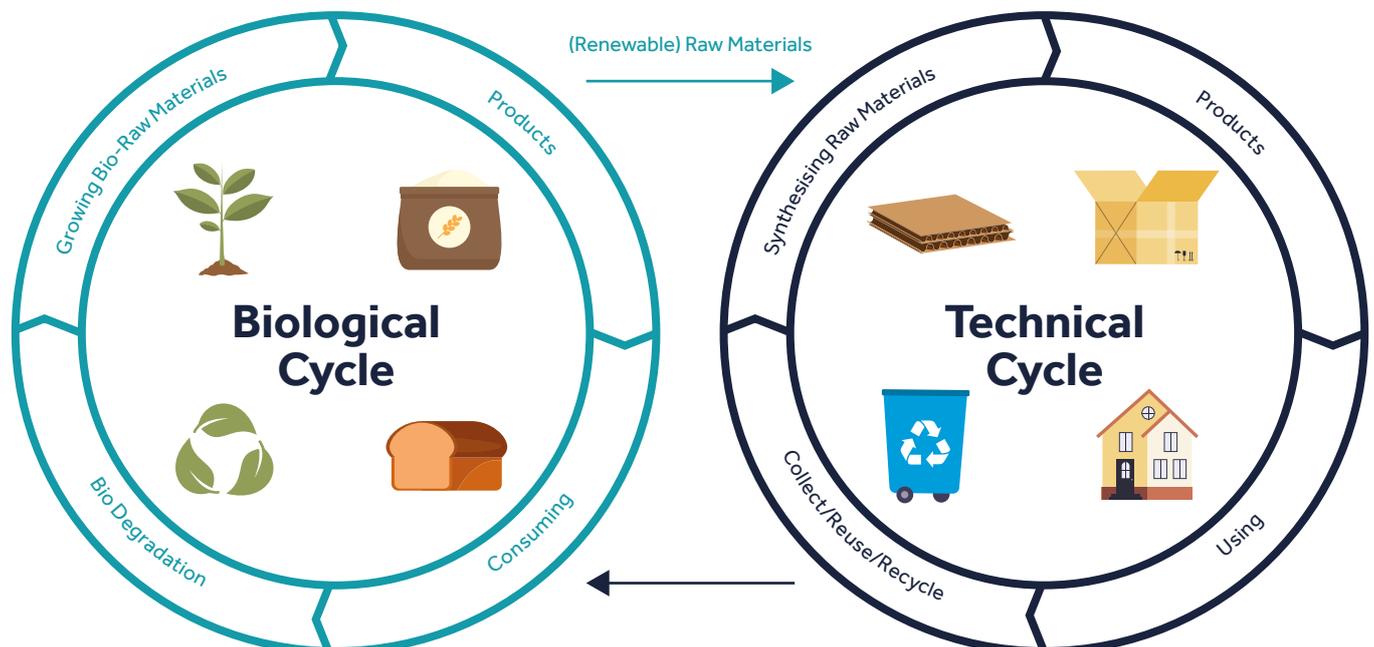
Our stakeholders expect Smurfit Kappa to use sustainable raw materials efficiently, especially forests and fibrous raw material. Halting deforestation is a particular concern for businesses supplying consumer goods and food who tackle this issue in their supply chains. Smurfit Kappa commits to only sourcing 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 here with its 91.6% collection rates and 84.2% recycling rates in Europe.

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

The Circular Economy



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 (diagram on page 28). The biological cycle is called bioeconomy, and covers production and maximal 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 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. However, as a natural, organic raw material, wood fibres lose their quality after an amount of times being recycled. We exist in both bioeconomy and technical cycles of the circular economy, making us an efficient user of 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 wood chips from sawmills, both of which are fully renewable, sustainable and reusable.

A total of 75% of our raw material is recycled fibre – the remaining 25% comes from sustainably managed forests through Chain of Custody certified supply chains. Paper-based packaging has the highest recycling rate of any packaging. Trees sequester 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 recycle our process waters several times, and invest in best practice water treatment. Biogases from this become fuel for our Combined Heat and Power 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 91.6% in 2018. 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 degrades naturally, reducing the environmental footprint of the leakage.

Ingenious Bioeconomy and Circularity Thinking

We believe all environmental improvements matter, and we encourage local solutions. Our Smurfit Kappa paper mill in Piteå, Sweden, and corrugated plants in Bogota and Medellin, Colombia, have both been creative in their efforts to work better for the environment.

Pine resin creates a sidestream of tall oil. This oil is used in the production of biodiesel, a green sustainable non-fossil fuel with lower CO₂ emissions than regular diesel. Pinewoods vary in the amount of tall oil they can produce and some of it gets lost as everything goes through the same process. At the Smurfit Kappa Piteå mill, the team came up with a range of ingenious solutions: from a camera

in the window of the recovery boiler so that the operator could monitor the amount of tall oil; to monitoring the pH balance and the temperature. The tall oil soap must be broken down to extract the useful oil, so a new tailor-made product was created to do this, increasing the extraction efficiency from 33% to 47%. More tall oil means more biodiesel.

In Colombia, two projects are using rainwater to achieve our goal of 1% reduction per year in water consumption.

At the Smurfit Kappa Medellin plant, rainwater storage has increased from 15m³ to 39m³, and is now the preferential supply for the boiler, only switching to the municipal aqueduct if this runs dry.

At Bogota Corrugated, rainwater was collected from the open vehicle area and treated before being used in the plant. €7,000 was invested, leading to 60m³ of water per month being recovered. This project won the Bogota Elite Environment Excellence Award for generating sustainable development.

Smurfit Kappa Piteå paper mill, Sweden



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 fossil 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 production and energy efficiency, 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.

As part of our Better Planet 2050 initiative, we announced our support to the recommendations of the Task Force for Climate-related Financial Disclosures and will have our intermediate CO₂ reduction target validated by the Science Based Target initiative (SBTi).

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.

In line with our Climate Change strategy, we have set targets on reducing our CO₂ emissions by 55% by 2030. To support this, we have set a CO₂ reduction programme that focuses on energy efficiency and a shift towards renewable 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.

Next Generation Energy in France

“It’s an exciting project because it’s working for the future. Everyone knows you can generate power sustainably, but this project will prove you can keep it,” says Rémi Poirson, team leader of the HYFLEXPOWER project at the Smurfit Kappa Saillat paper mill.

“Our Group is targeting Net Zero carbon CO₂ emissions by 2050 and also Smurfit Kappa Saillat paper mill is deeply committed to using renewable energy,” says Remi. There is an issue of availability with most renewable energy sources: when energy demand is high,

the sun cannot be made to shine, or the winds to blow. Storing energy sustainably has always been a challenge for ‘green’ energy.

Partnering with ENGIE, a French energy company specialising in renewable sources, the Smurfit Kappa Saillat Mill created HYFLEXPOWER – a highly innovative and advanced combined hydrogen storage cell and turbine. The Smurfit Kappa Saillat mill will be the first mill in the world to store and generate ‘green’ energy from the national grid, with zero carbon emissions.

As a large user of energy, with its own Combined Heat and Power plant, the Smurfit Kappa Saillat mill is ideally placed for this experiment in storing sustainable energy. It has other advantages as well.

HYFLEXPOWER is a European project – the EU Horizon Framework Programme for Research and Innovation invested €10 million in it, with a further €5 million invested by a number of stakeholders. As it is a research project, these include several universities – in Greece, Sweden, Germany and London. Construction will begin in 2021, with a pilot due to commence in 2022.

“This project is the first of its kind, and will demonstrate our commitment to sustainability and sustainable energy,” concludes Remi.



Carbon Fixed in our Trees in Colombia

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

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.

The model calculates the biomass and mineral composition, including carbon, in each of the compartments or organs, by simulating physical and physiological processes such as photosynthesis,

respiration, partitioning of assimilates and leaf growth, among others, based on climatic information (daily sunshine, maximum and minimum daily temperature), and the location of the plantation planting site (latitude, longitude and altitude).

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. In 2020, 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 9,15 million tonnes of CO₂ eq from the atmosphere in our growing trees inventory that remains at this level year on year.

CO₂ eq sequestration (tonnes)
1,038,617

CO₂ eq storage (tonnes)
9,148,764



Progress in 2020

In 2020, we announced as the first of our peers, targeting Net Zero carbon emissions by 2050 and increased our intermediate carbon CO₂ emission reduction target to 55% by 2030, up from 40% which aligns the target with the EU Green Deal Climate strategy and the Paris Agreement objectives. 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 Combined Heat and Power (CHP) systems; and
 - Improving the efficiency of our existing boilers.
- **Investing in efficient energy use**
 - Investing in technologies that reduce energy consumption; and
 - Re-engineering 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 2020, we achieved a 37.3% 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. The key achievements under energy efficiency and renewable energy during 2020 have been introduced in the following:

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

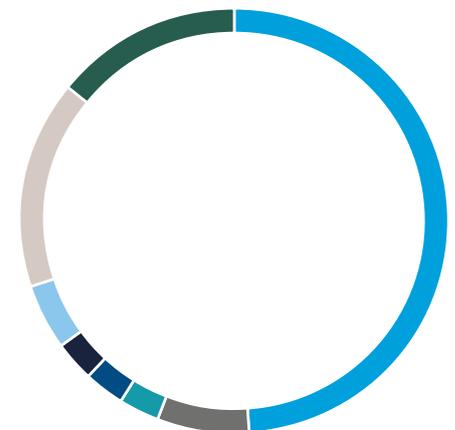
Further progressing in energy efficiency is key in achieving our CO₂ emission reduction targets. Since 2005 we have invested €850 million in more efficient energy generation, technologies that reduce the use of energy and technologies that recover energy. Examples of this are investments in e.g. Combined Heat and Power generation, and heat exchangers. These investments have improved overall energy efficiency in our paper mill system by 17%.

The 2020 key events that resulted in a 37.3% reduction of relative CO₂ emissions compared with 2005 were:

- Smurfit Kappa Nettingsdorf, Austria, started its new recovery boiler in Q2 2020 resulting in 19.6% CO₂ savings per tonne of paper.
- Smurfit Kappa Morava, Czech Republic, had a shoe press installed to improve dryness and using less energy for drying. This resulted in 11.2% CO₂ savings per tonne of paper.
- Smurfit Kappa Wrexen, Germany, had heat recovery equipment installed on both paper machines and resulting in 3.6% CO₂ savings per tonne of paper.
- In addition, grid electricity purchased in Austria, Colombia, the Netherlands and the UK are non-fossil certified, resulting in reductions of Scope 2 emissions.

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

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

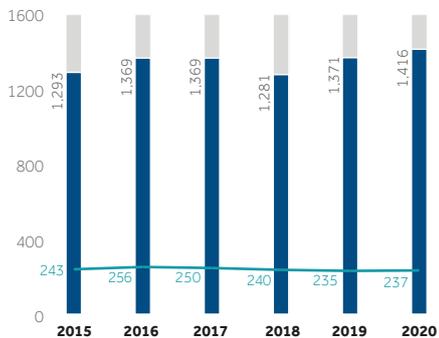


- Key:
- Food supply (farm/sea) as prepared food leaving the factory – 49%
 - Primary packaging – 7%
 - Secondary and transport packaging (Smurfit Kappa's product) – 3%
 - Factory to shop transport – 3%
 - Retail – 3%
 - Consumer shopping – 5%
 - Consumer cooling/freezing – 16%
 - Consumer cooking – 14%

Source: Inkpen, 2008

Planet continued

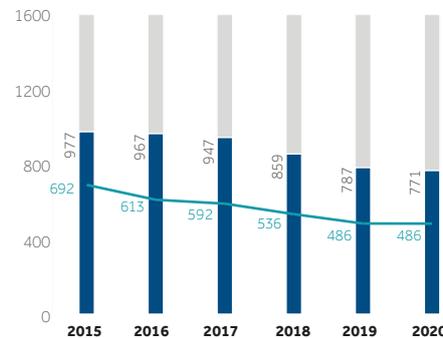
Direct Fossil (Scope 1) CO₂ Emission: European Mills



Key:

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

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



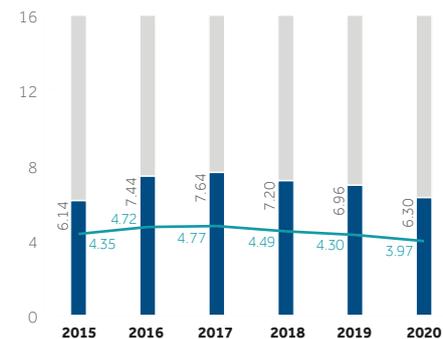
Biofuels: European Mills



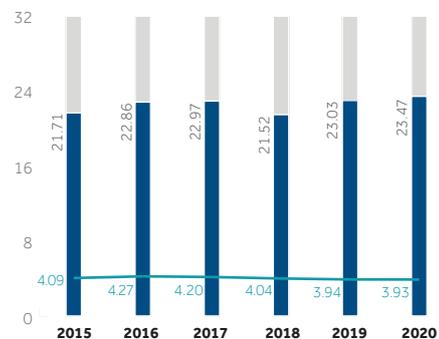
Key:

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

Biofuels: The Americas Mills



Fossil Fuels: European Mills



Key:

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

Fossil Fuels: The Americas Mills



Renewable Energy

To reach our CO₂ emission reduction target, we are moving from fossil to renewable fuels. During 2020, our paper mills used 51.1% biofuels, compared with 37.4% in 2005.

The Smurfit Kappa Nettingsdorf mill in Austria started its bioboiler in April 2020. This further supports our shift to renewable energy. 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. During 2020, our operations in the Netherlands and the UK moved to purchasing CO₂ neutral electricity from the national grid.

Working with our Customers

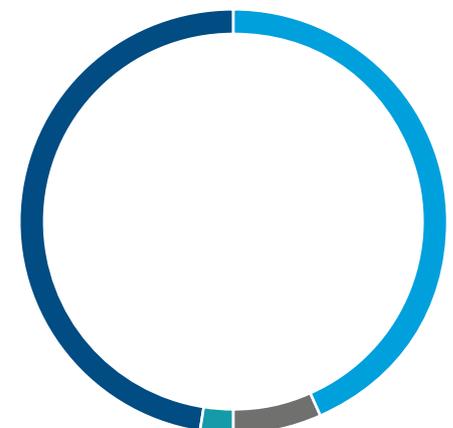
Using a suite of tools, including Paper to Box and Pack Expert, we work with customers to determine their packaging's carbon footprint. These tools provide CO₂ emissions data and other information to optimise solutions. On average in 2020, Paper to Box was used almost 10,000 times per day and Pack Expert over 1,400 times per day. Use of Pack Expert continued to grow from 2019, due to expanded use in the Americas and increased customer interest in using our research-based expertise. As we have achieved a 37.3% reduction of CO₂ emissions, these tools help use this data for our customers' benefit.

Our InnoTools suite of design software also shows customers the carbon footprint for each packaging unit and tracks its development over time.

Emissions from Transport

Since 2017, we have included emissions in our transport-related supply chain decisions. Our strategy focuses on three opportunities to decrease CO₂ emissions: maximising efficiency through payload optimisation and reducing

Direct Fuel Consumption, All Operations



Key:

■ Natural gas – 43.6% ■ Coal – 6.6%
 ■ Other fossil fuels – 2.4% ■ Biofuels – 47.4%

empty mileage; developing a good mix of road, rail and water transport; and using less carbon-intensive fuel technologies. Data management is essential. Since 2018, we have included CO₂ emission data in logistics decision-making for all our European operations which cover 78% of our business. The transport streams and scope of our reporting are described in the diagram below.

In the reported CO₂ 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 2020, these were the equivalent of 348,000 tonnes of CO₂. We also report CO₂ emissions from delivering to customers – all road transport, representing CO₂ emissions of 106,000 tonnes. In 2020, the total of these transport-related emissions represented 453,000 tonnes of CO₂ equivalent.

Whilst CO₂ emission calculation for paper reel transport between our own mills and converting plants is accurate (representing 68% of the total volume), we also have a good estimate for emissions when reels of paper are supplied to our corrugated plants by third parties. While corrugated transport is mainly by road over shorter distances, for all remaining transport we operate a modal mix of 4% rail, 7% water and 89% road transportation, based on shipped volume.

A pilot project to measure transport emissions in the Americas region started in 2019. We have now mapped the transport streams similar to Europe and estimated the transport distances. Given that local transport emission factors are not yet available for Colombia, we have applied the European GLEC reference emission factors to the Colombian transports. The average transport distance in Colombia is 280km and the total transported volume was estimated to be 2 million tonnes. These equal 33,000 tonnes of CO₂ equivalent. This is the first year to calculate transport emissions in this pilot project and the information will become more accurate as we learn from the pilot.

Our operating companies report transport data annually, and we aggregate this in a database where emission calculation is applied based on default CO₂ emission factors from the GLEC reference model (Global Logistics Emissions Council by Smart Freight Centre).

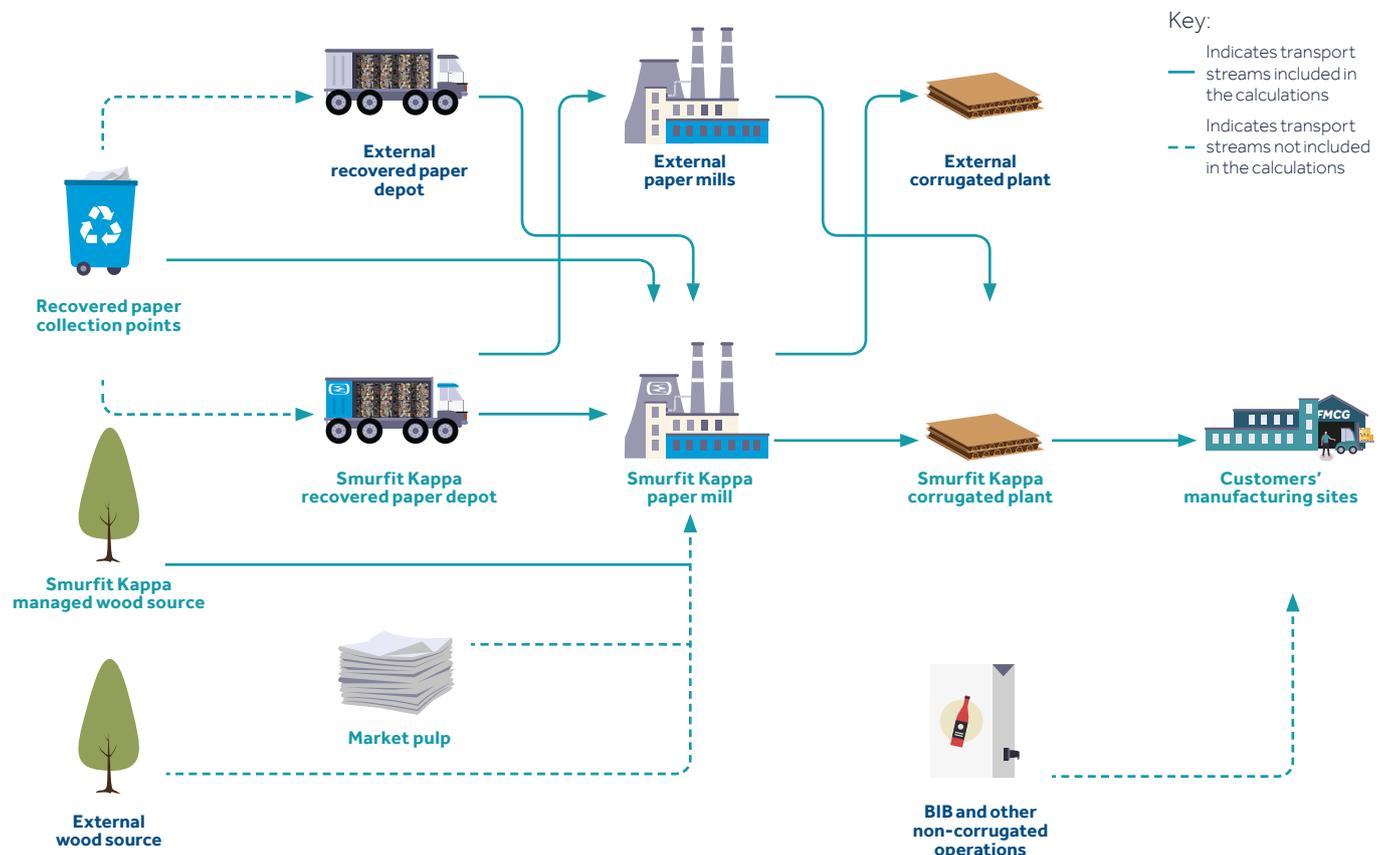
Transport De-carbonisation Strategy

We are currently evaluating our Scope 3 emissions, however, we believe that the largest contributor to our CO₂ GHG Scope 3 emissions are in the transport of our raw materials, intermediate products and the packaging we deliver to customers. Part of our Climate Change strategy is to decarbonise our transportation operations with a focus on the following key elements for paper inbound and outbound transportation in Europe:

- **Modal shift:** CO₂ reduction by shifting transport from road to lower emission transport modes. We are using developing multi modal transportation, leveraging rail, water and a wide range of multi modal transport solutions. Access to rail or waterway transportation is part of our logistics infrastructure investments.
- **Operational efficiency:** CO₂ reduction by optimising transport operations, increasing load fill and tonnage per unit, reducing empty mileage, back loading of trucks to reduce traffic and truck movements, and supply chain network optimisation to reduce transport distances between sources and destinations
- **Fuel efficiency:** CO₂ reduction by leveraging new technology, alternative fuels, and engine efficiency. As Smurfit Kappa mainly operates transportation with third-party transport providers, the strategy is to mutually set targets and monitor progress with our core external transport partners.

The decarbonisation strategy is embedded in our logistics operations and we monitor progress through key performance indicators such as CO₂ emission intensity, distance travelled, unit fill rate, and multi modal mix.

Transport Streams



➔ For complete disclosure of our energy and emissions, see pages 74-82.

Forest

Natural fibres are our main raw material and we use them efficiently. 75% of the fibres we use have been recycled. 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 25% of our raw material supply. We source all our fibrous raw materials sustainably as Chain of Custody certified, including our recycled fibres.

Our raw material is renewable, recyclable, recycled and biodegradable. This makes us part of the bioeconomy which we have explained more in depth on page 28. 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. We also need virgin fibres for food safety and other technical properties of our packaging solutions.

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. Smurfit Kappa buys most of the virgin fibres from suppliers in Europe: 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 Chain of Custody 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 Chain of Custody 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 Chain of Custody.

100% of the wood we use to produce virgin paper or pulp comes, at least, from sustainable non-controversial origin, risk assessed through our FSC and PEFC Chain of Custody system and verified by a third party (FSC Controlled Wood status). 58% of this wood is also from sustainably managed forests certified under the FSC, PEFC and/or SFI schemes. 16% 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 Chain of Custody status makes it 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 Sweden.

Annually, Smurfit Kappa's recycling operations handle some 5.2 million tonnes of recovered paper in Europe, and 2 million tonnes in the Americas. We have a network of 18 recycled paper depots in Europe, and 26 in the Americas, using recovered paper from municipalities, retailers, industries, and our own corrugating and converting operations. All recovered fibre we use is certified Chain of Custody.

Chain of Custody

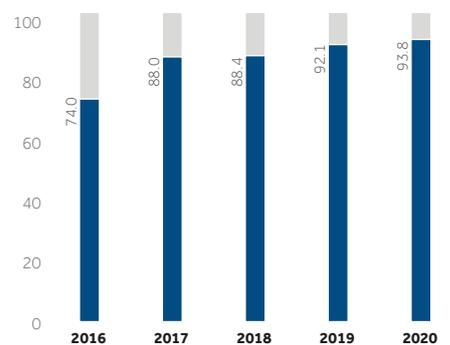
Smurfit Kappa does not source fibre from high deforestation-risk areas including High Conservation Value areas. Through supply chain transparency we ensure our sustainability commitments and fibre origins. We use robust monitoring and third-party auditing of our wood and fibre supply chain.

The best practice to deliver our commitments is through Chain of Custody certification.

Our complete paper mill system has been Chain of Custody 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 2020, 92.7% of our paper was produced as Chain of Custody certified, according to FSC, PEFC or SFI standards. The remaining 7% are from non-controversial fibres in accordance with FSC Controlled Wood standard, and managed through the mills' Chain of Custody certified risk assessment systems.

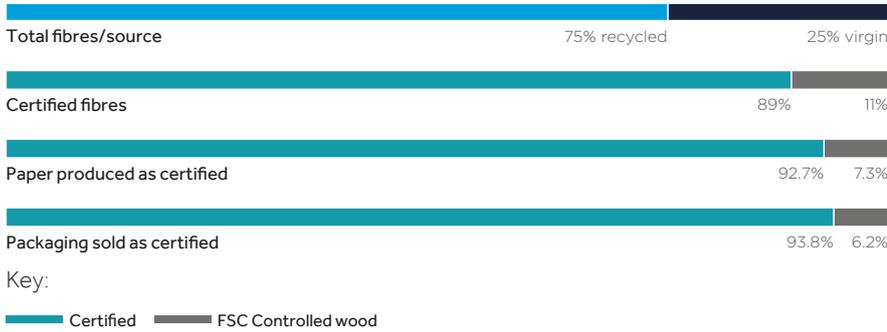
Furthermore, all our converting operations are Chain of Custody certified. We reached our target to sell over 90% of our packaging solutions as Chain of Custody certified at the end of 2016, and during 2020 this increased to 93.8%.

Share of Packaging Products Sold as CoC Certified 2016-2020



Smurfit Kappa Group

Our Certified Raw Materials



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

During 2020, we continued our collaboration with 'Preferred by Nature' (formerly Nepcon) to keep our risk assessment and risk mitigation activities up to date. We continued training local employees in performing supplier due diligence at local level. In addition, 'Preferred by Nature' conducted a second gap analysis of the due diligence system related procedures at Group level that should prevent the purchasing of any wood-based material with a controversial origin. The outcome of this analysis will be used to further strengthen

our related policies/procedures and the implementation of our sustainable fibre sourcing policy requirements. We plan to perform a gap analysis on-site at a sample of our converting sites during 2021.

Although we source most of our wood from Europe, we source wood fibres from 36 countries among which nine are classified as potential high-risk countries: Argentina, Brazil, Bulgaria, Chile, Colombia, Indonesia, Romania, Russia 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.

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 hectares (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. We also conform to comprehensive legal, technical and environmental regulations, subject to annual review.

Our 67,276 ha of forests and plantations in Colombia include:

- 41,722 ha of commercial plantations, of which 4,966 ha are partnerships with private landowners;
- 22,487 ha of protected natural forest; and
- 3,067 ha for infrastructure. In our commercial plantations, 58% of the land is pine, 36% eucalyptus, 4% is being replanted and 2% is dedicated to research. Our Colombian forest management programmes have been certified by FSC since 2003.

Closing a Recycling Loop in Germany

"For most companies it is a burden to collect and responsibly dispose of their own packaging. We saw it as an opportunity to achieve our sustainability goals, as well as to close our gap in raw material supplies," says Henri Vermeulen VP of Smurfit Kappa's European Recycling operations.

In 2019, as part of Germany's commitment to the European Green Deal, they made producers legally responsible for their own packaging waste. Henri's team saw this as an opportunity to close an open loop where other suppliers saw a problem.

The team developed the DUAL Recycling service, using our sustainable closed loop approach to become an even more convenient supplier for our customers. They buy packaging from us, use it, return it, and we convert it back into a valuable raw material: recycled paper fibre. This not only makes life easier for our customers, it forms part of our end-to-end sustainability

commitment. "In fact," says Henri, "it helps solve the imbalance we have in Germany in supply and demand for recovered paper: currently in Germany around 15 million tonnes of recovered paper is collected, but 17.4 million tonnes are needed. The new law helps us close this gap."

No other packaging supplier in Germany is able to do this. Our product is eminently recyclable, and our end-of-life product stewardship goals mean we have available capacity for collection and recycling. Since we use the collected product, customer fees are low, and the paper is recycled in German paper mills. This cuts down on transport miles, helping achieve our ultimate Net Zero emissions goal.

However, even with our tremendous advantages there are still challenges to overcome.

"It's now that our work really begins," says Henri, "we have to negotiate a licence to do this with all the regional authorities. But it helps that we're poised and ready to do it. Meanwhile we're assisting other producers with their DUAL schemes, as it helps everyone to use scarce natural resources efficiently and keep the valuable paper fibre in a sustainable closed loop."



Planet continued

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 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 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 endangered. Our plantations and neighbouring protected forests form important wildlife corridors, contributing to species conservation in the Andean ecosystem, and need careful management.

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

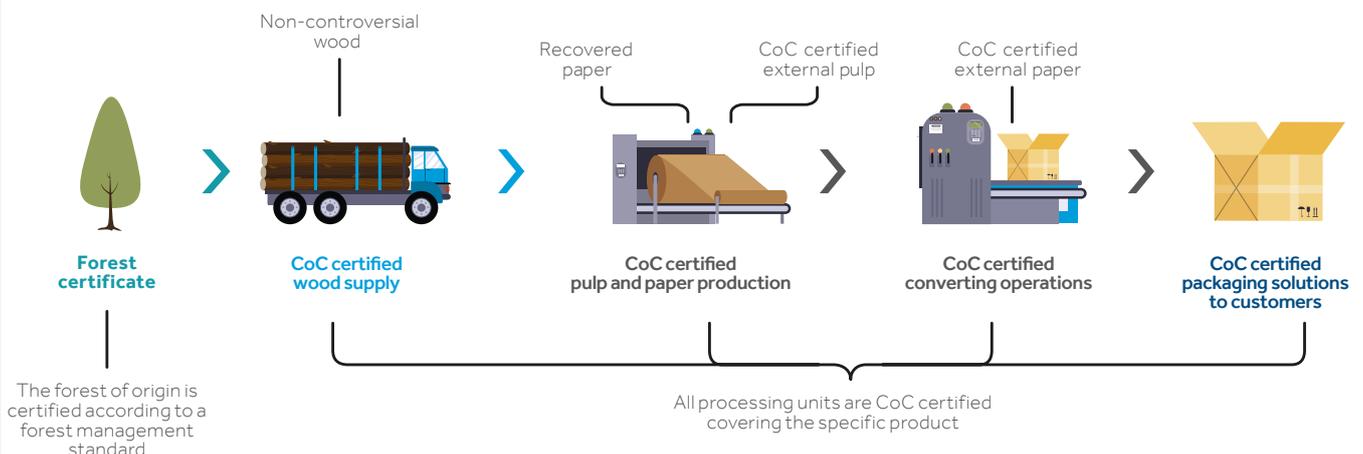
The forest certification related Chain of Custody management systems start from the harvest of the trees. Each operation and entity processing the material has its own Chain of Custody system which covers storage and use of the material, production and shipping of products, documentation of material 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 Chain of Custody certificates.

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

A small amount of fibres used in Chain of Custody 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.

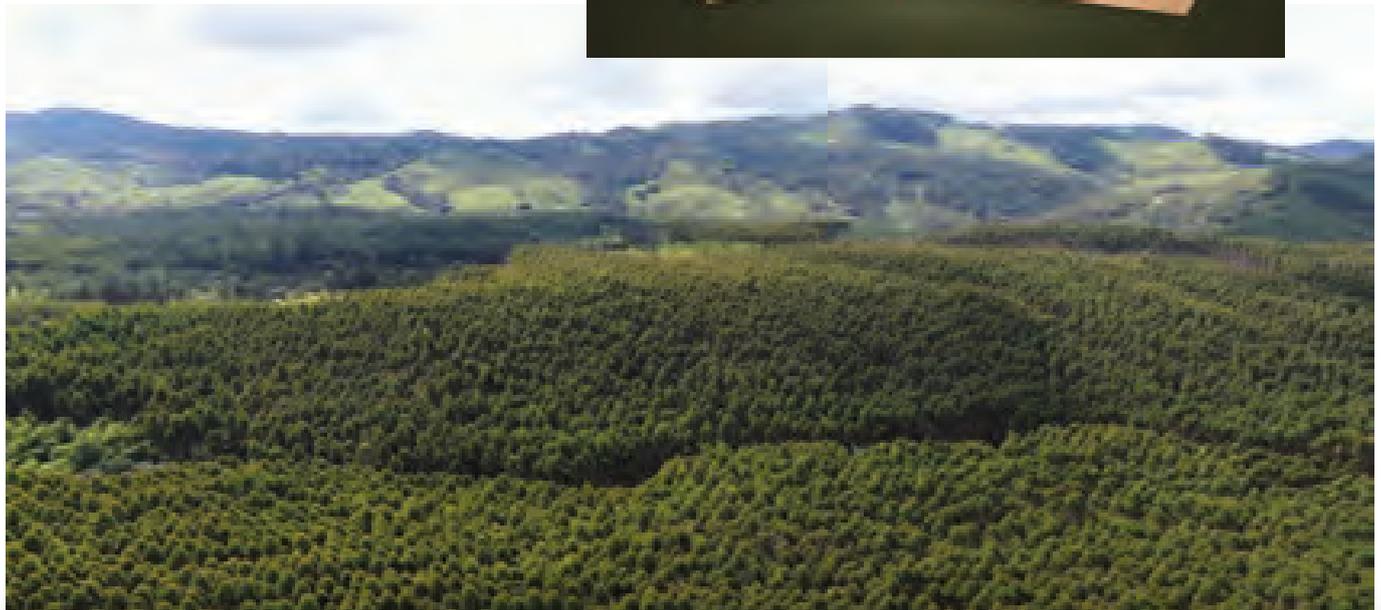
Chain of Custody (CoC) Model



We also work with neighbouring communities, engaging local people in our decision-making. This is especially important in Latin America, where indigenous people may have land rights, and livelihoods are often dependent on forests. In 2020, there were no 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 hectares of forest. In both, we follow local best practice for forest management, as certified by PEFC. Our wood-handling operations are Chain of Custody certified to FSC and PEFC standards.



Protecting the Forests in Colombia

More than half of Colombia is covered by forests. Smurfit Kappa Colombia is the custodian of 67,000 hectares of forest and plantations in the country. 22,000 hectares of this area are protected natural forests devoted to conservation and are home to over 1,200 species of flora and fauna. We know that 53 of these are endangered species, such as the Andean bear, also known as the spectacled bear.

Protecting and promoting natural habitats are an important part of our approach to biodiversity and ecosystem conservation. We do this by developing alliances with third parties, neighbouring communities and organisations, to research and promote sustainable practices. Since 2003, our Colombian plantations have been managed and certified according to the FSC Sustainable Forest Management standard.

One of the organisations we collaborate with is the World Wildlife Fund (WWF) Colombia. WWF is one of the leading global conservation organisations with 6 million members and operations in more than 120 countries across the world. Our continued work together includes many diverse projects, starting out with the Legal Timber Pact in 2009, to help reduce the illegal production of wood in Colombia. This involved the participation of the Ministry of Environment and local environmental authorities.

In 2020, Smurfit Kappa Colombia announced a new alliance with WWF Colombia, with both organisations working together to restore, expand and protect forests and ecosystems.

The alliance is a further example of Smurfit Kappa's commitment to protect the environment and communities to the highest sustainability standards. This initiative will

also support the restoration and conservation programmes that WWF Colombia carries out, working together to stop deforestation and forest degradation through the continued promotion of sustainable practices within the forestry industry, increased surveillance systems to crack down on illegal logging and working closely with Colombian national parks.

"Since 1961, WWF has worked to develop innovative solutions that protect people, communities and wildlife so we are delighted to have formed this partnership with Smurfit Kappa Colombia," tells Sandra Valenzuela, COO of WWF Colombia. Nicolás Pombo, Forestry Division General Manager of Smurfit Kappa Colombia Forest Operation adds "We are proud to be recognised for our sustainable contribution to Colombian and global forests."

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 144 million m³ of water in 2020. Almost all of that – 142 million m³ – was used by our 34 paper and board mills and the remainder is used by our 242 other (packaging) operations. Of the 142 million m³ used by the paper and board mills, 130 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, 80 million m³ was used for processing and 51 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 Combined Heat and Power 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 chapter on page 34).

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. During 2020 and early 2021, we finalised water risk assessments in two more paper mills. Due to the COVID-19 pandemic situation in countries, we have a small delay in finalising the two remaining paper mills in the course of 2021. Water risk assessments focus 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.

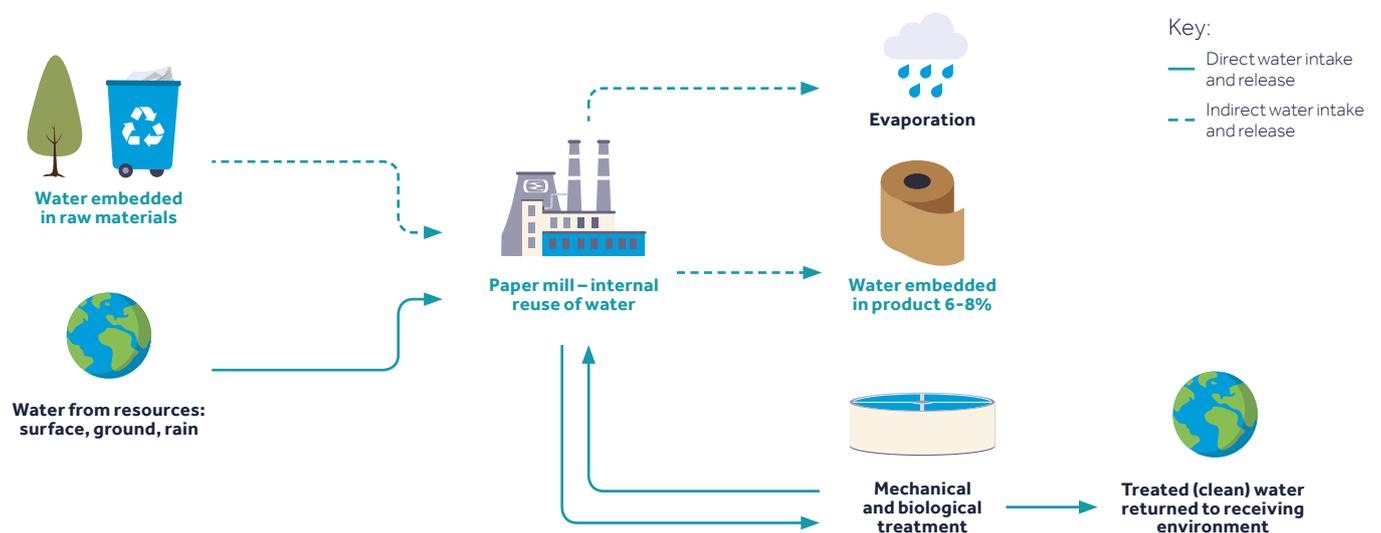
All assessments to date confirmed that our mills' water use has no impact on water availability to neighbouring areas. Only 12% of our paper and board production and just 3% of our water intake takes place in areas of water scarcity. Nevertheless, we always use water sustainably – many of our stakeholders 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 amount of water treatment nutrients. Depending on location, we participate in waterbody management and 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





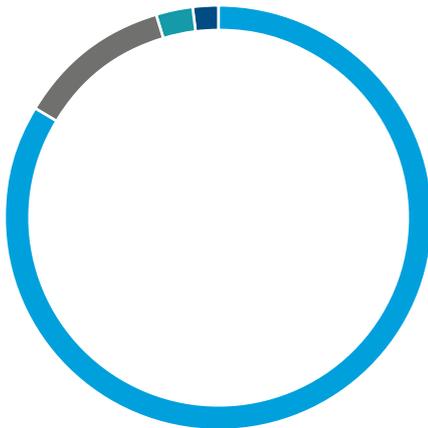
Future-proofing Water Management in the UK

“This should have been a straightforward story,” says Chris Cole, Services Manager at Smurfit Kappa SSK Birmingham UK. The plant had outgrown its 800m³ capacity water treatment reactor and wanted to future-proof the site with a 1,200m³ installation including an Internal Recirculation Reactor. The COVID-19 restrictions, however, meant that the supplier wasn’t able to visit the site to commission the installation.

“We persuaded them to let us commission it ourselves,” says Chris. The Smurfit Kappa SSK team was familiar with the technology from their current reactor and they stayed in contact with the supplier who supplied extra information and photos. Test information was provided promptly, and an industrial placement student was engaged to conduct extra tests.

“The partnership was a great success,” says Chris. “It was commissioned in four weeks, reducing COD levels in sewer discharge by 61%, increased the recycling of water in the processes and shows the Group’s commitment to chain-of-supply relationships.”

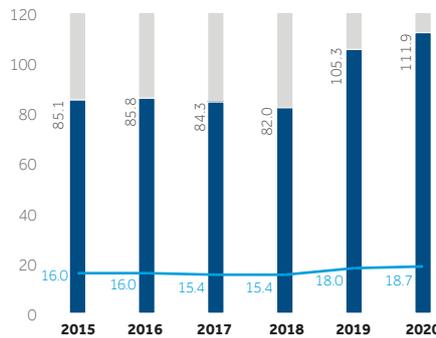
Water Sources – All Operations



Key:

- Surface – 83.8%
- Ground – 11.7%
- Grid – 2.8%
- Other – 1.7%

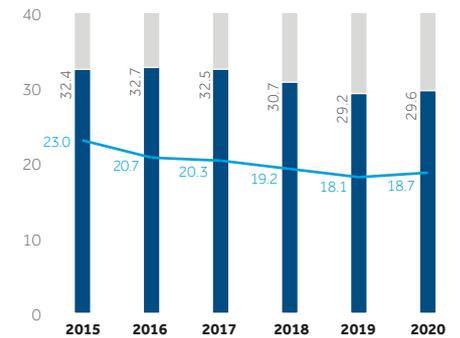
Water Intake: European Mills



Key:

- Absolute – (Mm³)
- Specific – (m³/tonne)

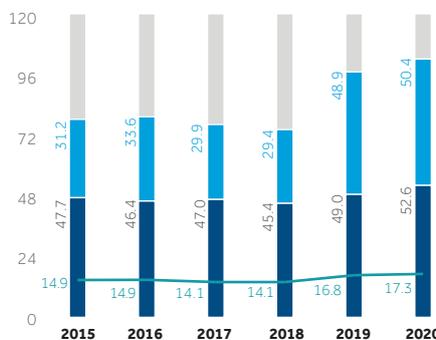
Water Intake: The Americas Mills



Key:

- Absolute – (Mm³)
- Specific – (m³/tonne)

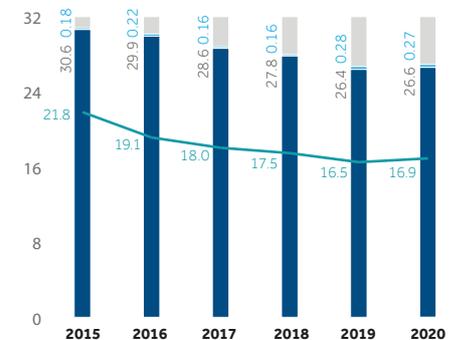
Water Released: European Mills



Key:

- Absolute process – (Mm³)
- Absolute cooling – (Mm³)
- Specific – (m³/tonne)

Water Released: The Americas Mills



Key:

- Absolute process – (Mm³)
- Absolute cooling – (Mm³)
- Specific – (m³/tonne)

Planet continued

Focus on 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.

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 2020, over 96% 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.

To reiterate our water stewardship role we have set a new target to reduce water intake at our paper and board mills by 1% annually per produced tonne of paper.

Progress in 2020

In 2020, 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 2020, the Chemical Oxygen Demand (COD) content of processed water returned to the environment has decreased by 38.2% relative to production, compared with 35% in 2019. This result is mainly due to investments in aerators in the water treatment plant at our Cali mill in Colombia. The aerators improve the oxygen conditions in the lagoon which improves the efficiency of the biological water treatment. This project started in 2019 seeing multiple changes in the water treatment plant that improves efficiency.

Progress was also made at our Smurfit Kappa Uberaba and Pirapetinga mills in Brazil. The investments made in the water treatment plant aeration at the Pirapetinga mill in 2017, continued to deliver further improvements. The Uberaba mill began to achieve results from the investments to its water treatment plant, a project that started in 2019.

In addition, investments were made at our Smurfit Kappa Barbosa and Barranquilla mills in Colombia, where new water treatment plants will start operating in 2021.

In 2020, water intake of all our operations was 144 Mm³, in comparison with 137 Mm³ in 2019. For 2020, compared with 2019, the average water intake by our paper and board mills increased to 18.7 m³ per tonne of paper produced from 18 m³, a 4% increase, mainly due to the inclusion of the Smurfit Kappa Beograd mill (Serbia) to our Group reporting, start of the new boiler at the Smurfit Kappa Nettingsdorf mill (Austria) and changes in paper type in one of the paper machines at our Smurfit Kappa Cali mill (Colombia).

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.

A Circular Approach to Cleaner Water in Colombia

"Smurfit Kappa's new targets for water purity came at a difficult time, but we turned it into an exciting opportunity," says Mauricio Suarez, Paper Mill Superintendent at Smurfit Kappa Barbosa, Colombia.

We have set a global target of a 60% reduction of organic content in water returned to the environment by 2025. However, this target came at the same time as a planned 40% capacity increase for Smurfit Kappa Barbosa, creating a challenge.

This change meant the final effluent figures would not be known until maximum capacity was reached. After the upgrades were installed, it was found the plant has a 100m³/hour capacity – the equivalent of a town of 16,000 people.

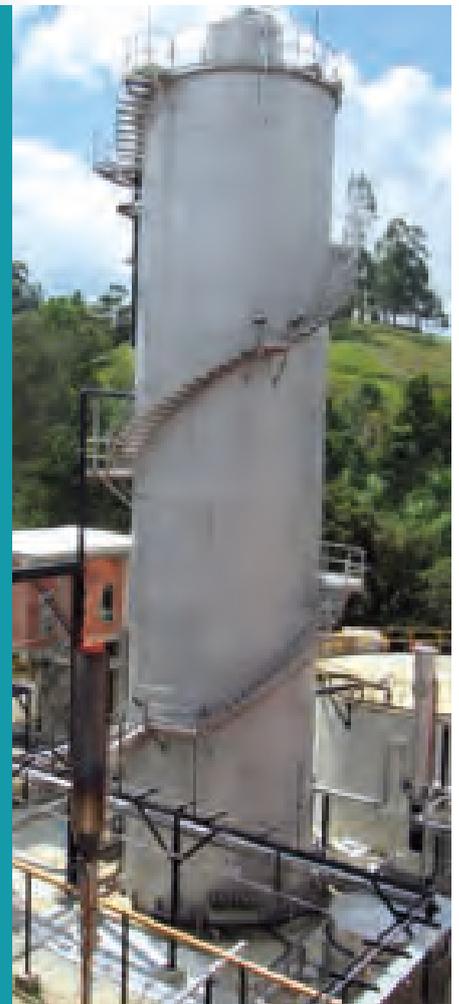
"We could have met our legal obligations in a variety of ways, but we're committed to keeping all our processes sustainable, so we wanted a biological solution," says Mauricio. "Non-biological solutions would have resulted in too much sludge going to landfill, which felt like fulfilling one environmental criterion by not fulfilling another and that is not the way we do things at Smurfit Kappa."

Mauricio and his team worked with the Paper Production Technology team to develop a range of solutions using a circular economy approach, including a homogenisation tank with chemical control, a settler, a sludge dewatering press, and a biogas removal system.

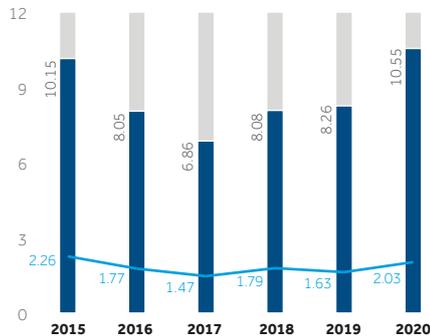
The state-of-the-art new equipment also gave us the opportunity to install a biologically based, circular self-sustaining anaerobic reactor. Although this was a more expensive solution, the environmental benefit was significant: 75% of the contaminants in the water are removed and converted from sludge into biogas, which in turn can be used to produce 'green' electricity. Altogether a really long-term sustainable solution.

Since the new installation started operating in November 2020, the water discharge quality has improved enormously and brought us a big step closer to reaching our water purity target.

"We have received many awards for sustainability," says Mauricio, "but this is the most exciting project I've worked on – the first time a paper company has installed a state-of-the-art water treatment system like this in Colombia."



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



Key:

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

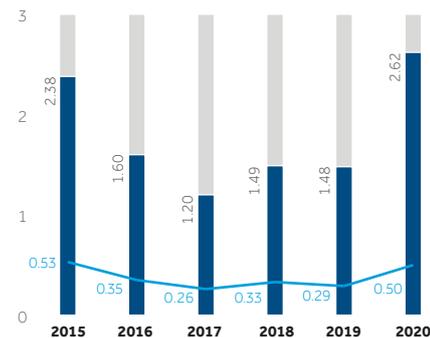
Process Water Discharges* COD: The Americas Mills



Key:

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

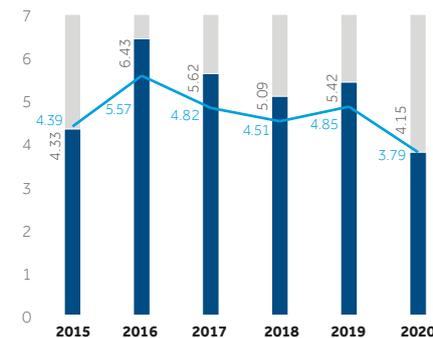
Process Water Discharges* BOD (Biochemical Oxygen Demand): European Mills



Key:

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

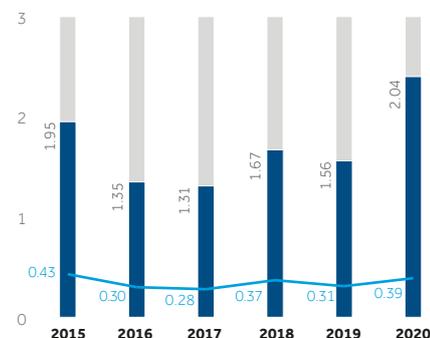
Process Water Discharges* BOD: The Americas Mills



Key:

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

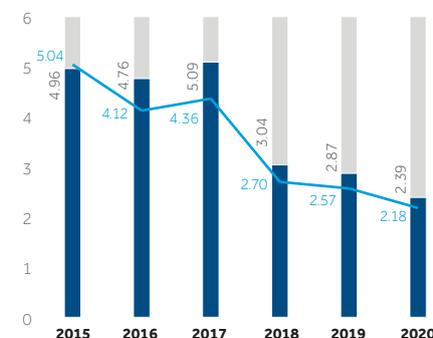
Process Water Discharges* TSS (Total Suspended Solids): European Mills



Key:

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

Process Water Discharges* TSS: The Americas Mills



Key:

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

Keeping Cool with Water in Argentina

The Smurfit Kappa Bernal mill had a challenge with reaching their daily water withdrawal permit and an increasing need for water while their production was growing. “We looked at different solutions that would fit with our equipment,” says Ana Victoria Somoza, Environmental Specialist at the mill.

The mill was hesitant to increase demand to its water treatment plant, as possible undercapacity would become an issue. Another idea was to reuse ‘white water’, which contains only leftover wood fibre but no other contaminants. The problem with this is that white water reduces the Vacuum Pumps’ performance and reduces their lifespan. In 2020, two of the five pumps were replaced by more energy-efficient vacuum pumps as part of Smurfit Kappa’s commitment to energy reduction. These only run with fresh water, potentially increasing the mill’s water intake.

“So we faced a situation in which we needed fresh water for the vacuum pumps but were not able to increase our water withdrawal,” says Ana Victoria. “We decided to look at recycling the water from our cooling towers.”

Improved water circuits which include new cooling towers mean that less fresh water is needed. This solution helped us to reach a water intake need well below our permit, and also contributed to the Group’s commitment to reduce water consumption annually.

“It’s a simple but elegant circular process,” says Ana Victoria, “Its simplicity gives us very controlled management of our water usage – we expect good results now that the new system started at the end of 2020.”



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

Waste

Material efficiency 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 key raw material is wood fibre and, globally, we use 75% of recycled fibres and only 25% virgin. Our products themselves have been designed to reduce waste in packaged goods value chains. Our other raw materials have been explained in the tables on pages 74-75.

Our packaging solutions help prevent waste generated in especially 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 44 shows, 91.6% of old corrugated packaging is being collected for recycling and the industry is currently able to recycle 84.2% of its weight as recycled fibres.

Smurfit Kappa also participates in its product end of life management. Our 44 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. 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.

However, whilst our products are recyclable, we generate under 105kg of non-hazardous waste per tonne of paper and board, 46% of which is recovered. Because the recovered paper bales sent to us by recycling companies often contain unwanted plastic, metals, glass, textiles, sand and other non-usable materials, 54% has to be sent to landfill. On average, it takes 1,078kg 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 55% to the weight of subsequent waste.

To minimise landfill, we reuse our own waste as far as possible. Currently, approximately 46% 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.

Work Against Litter

Litter and 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 84% recycling rate in the graph on page 44), 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 and smart regulatory guidance 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.

Progress in 2020

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 2020, reaching a reduction of 23.7% of waste sent to landfill from our paper mills per tonne of paper since 2013. The improvement from 2019 where we were at 7.1% is mainly due to our investment in sludge press at our Cali mill in Colombia with a reduction of 56 kilotonnes.

Installing a press to remove water from the sludge waste from its water treatment plant, our Cali mill has been able to significantly reduce the weight of the waste. Additionally, the dry content of the waste is now suitable for incineration which adds to the reduced waste sent to landfill. More of the project can be read in the case story on the next page and in our 2019 Sustainable Development Report.

We also made good progress at our Smurfit Kappa Townsend Hook mill in the UK, where multiple projects took place to increase the yield from recovered paper to recycled fibres, increase reject recyclability and to optimise the water treatment plant initially reducing sludge from the water treatment plant. In total, these improvements have reduced the amount of waste sent to landfill by 12 kilotonnes.

The Smurfit Kappa Forney mill in the US experienced issues with the quality of the recovered paper it received during Q1 2019 which had an impact on our progress against the target in 2019. With the issues solved, the Smurfit Kappa Forney mill has made a positive contribution to the 2020 progress.

From Landfill to Circular use in Colombia

Last year the Smurfit Kappa Cali plant in Colombia installed a new screw press to compress the sludge residue from the water treatment plant. Initial results were hopeful, but Alfredo Marin, Technical Director, has an update.

“The press is performing very well,” says Alfredo. In 2020, waste sent to landfill has halved from earlier years, and total sludge weight has reduced to one-third of the 2019 figure.

“Further good news,” says Alfredo, “is that we found ‘sludge pellets’ will burn in our coal boiler, so we can use them as biofuel, further reducing waste sent to landfill in line with the SK goal.”



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 increased from 9,700 tonnes in 2019 to 10,000 tonnes in 2020. The annual amount varies due to maintenance, product additives and hazardous waste tanks taking over a year to fill.

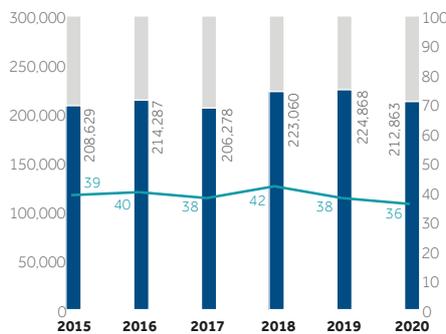
Work Towards Optimised Use of Raw Materials

Our converting operations send paper clippings back to our mills, delivering high-quality recovered fibre. Recycled paper from our corrugating and converting operations comes with minimal auxiliary materials, decreasing waste from the recovered fibre pulping process.

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 at supporting 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.

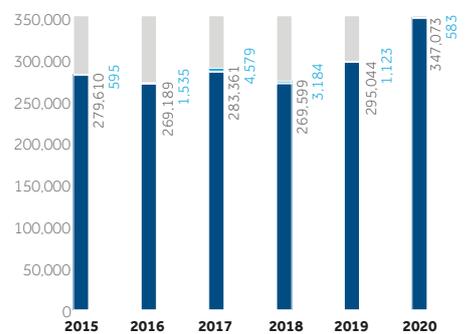
Non-hazardous Wastes

European Mills



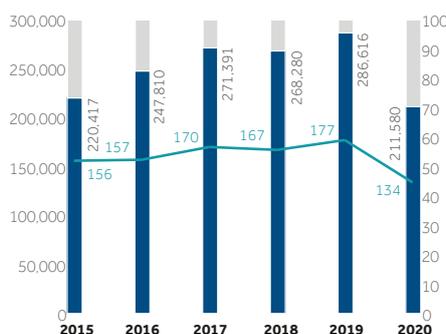
Key:
█ Waste sent to landfill (tonnes)
█ Specific (kg/tonne)

European Mills



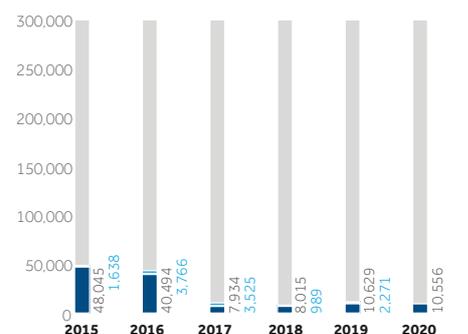
Key:
█ Waste sent to recovery (tonnes)
█ Waste sent to other (tonnes)

The Americas Mills



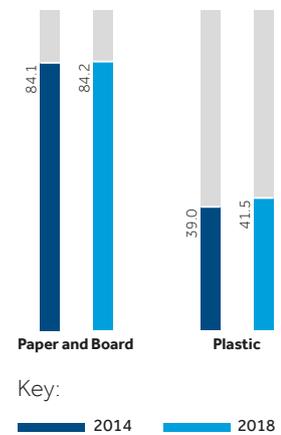
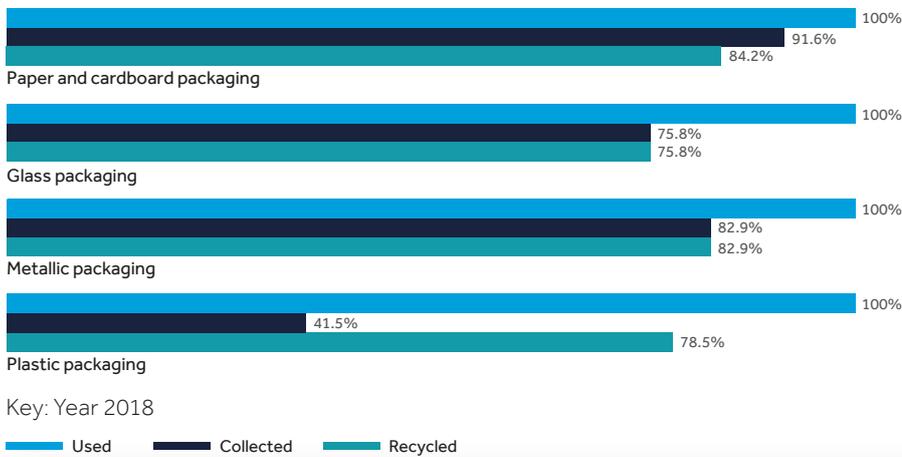
Key:
█ Waste sent to landfill (tonnes)
█ Specific (kg/tonne)

The Americas Mills



Key:
█ Waste sent to recovery (tonnes)
█ Waste sent to other (tonnes)

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



Corrugated Plant Waste Management in Argentina

“Naturally, we are fully committed to the Group’s target to circular economies and reducing landfill,” says Trinidad Andes, Environmental Specialist at Smurfit Kappa Coronel Suárez, Argentina.

Pamela Rey, Environmental Coordinator, continues, “But unlike many of our European colleagues we don’t have a local recycling infrastructure and we are located a long distance from recycling and landfill centres. We had to be resourceful about it!”

Like any plant, the Smurfit Kappa Coronel Suárez Corrugated generates waste from its industrial processes. However teams have worked together to sustainably manage in three main areas: non-hazardous, hazardous, and common waste.

Non-hazardous paper waste has always been recycled on site, but arrangements had to be

made with separate recycling companies to take plastic caps, stretch film and straps. Since 2020, old metal buckles are repurposed within the plant.

“We are also researching transforming cardboard dust into briquettes for fires,” says Trinidad. “But most non-hazardous waste is from the waste water treatment plant. We got the waste classified as non-hazardous in 2019, but we generate approximately 200 tonnes of it annually so it would be great to reuse it.”

“The Corrugated working team has been experimenting with creating building bricks pressed from this waste material. These were going to be tested at a local university before COVID-19 measures were enforced” says Pamela. Hazardous waste, such as oils, lubricants, electronic equipment or batteries, are stored.

Arrangements have been made with different plants or neighbouring companies to deal with these materials before they are sent to ‘security landfills’.

Waste generated by workers in the plant – common waste, recyclable, plastic, and organic waste – is separated, recycled, composted and only landfilled if no alternative solution exists. To make the best use of this, workers bring in waste from their homes so that this can be recycled too.

“The ingenuity and enthusiasm of the plant workers in coming up with these ideas and making use of the plant’s recycling opportunities, plus the encouragement and support from the Group has led to practical, locally based solutions to increase reuse, and reduce landfill to a minimum,” say Trinidad and Pamela.



An Extra Cycle in Paper Recycling in Germany

“The idea is very simple, but it gives a whole extra cycle to our circular economy,” says Siegfried Herrling, Sales Manager at Smurfit Kappa Neuburg, “And the customer is delighted with it.”

Siegfried, together with Oliver Nägele, Key Account Manager, and Jörg Meiritz, General Manager, are the team that worked closely with Topstar GmbH, a major supplier of office furniture with over 30 years of strategic partnership with the Smurfit Kappa Neuburg plant. Furniture, especially chairs, have shapes that are a challenge for damage-free packaging, so they are usually packed in polystyrene.

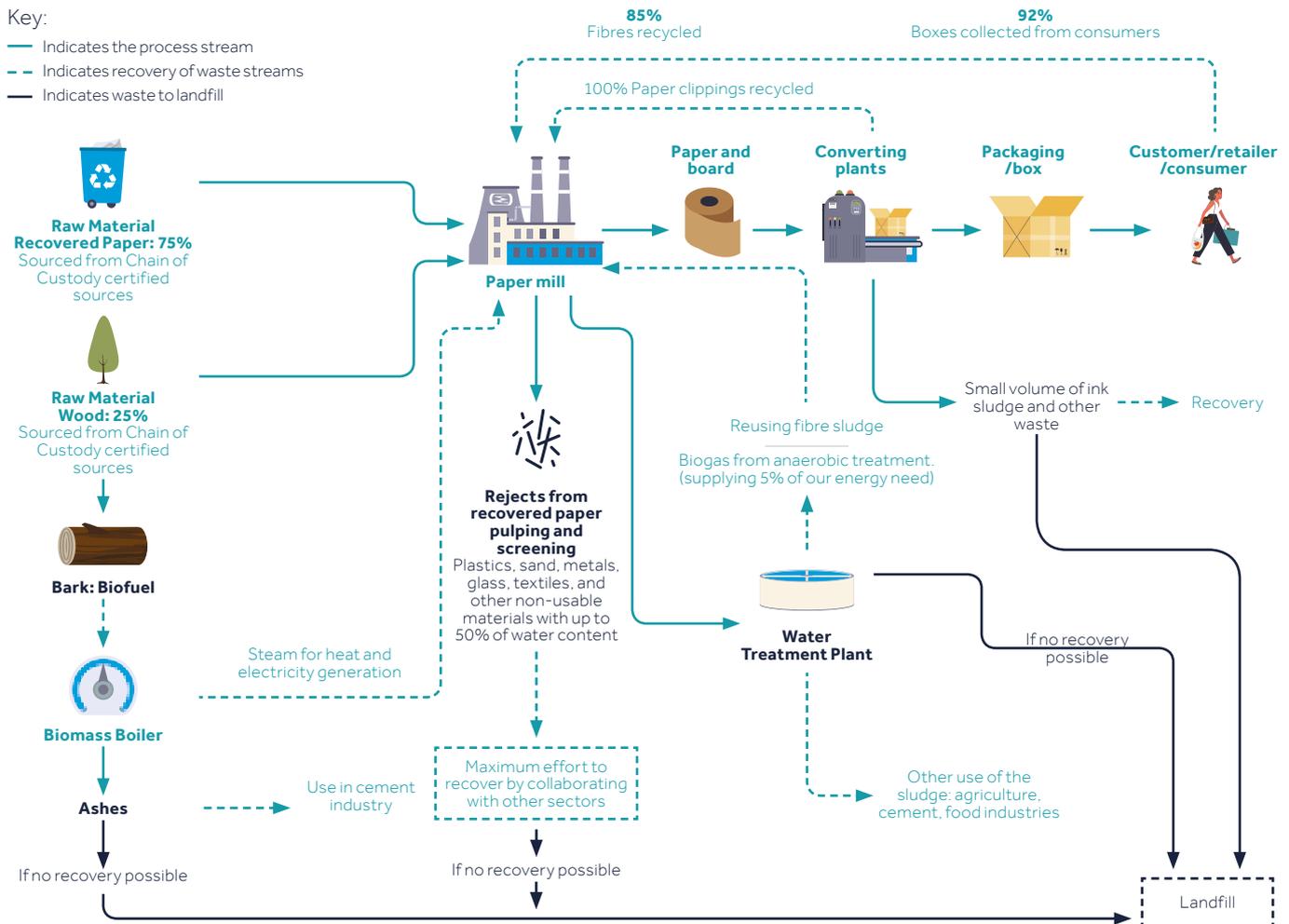
However, polystyrene is an ecologically challenging material – it has a large carbon footprint, is not easily recycled and takes centuries to biodegrade. For Topstar it had the additional problems of being messy and needing a lot of storage space: each item needs its own polystyrene shape.

A team of Topstar and Smurfit Kappa managers and product developers worked on an innovative solution using the site’s waste corrugated cardboard. Usually this would be recycled, however Topstar had the idea of shredding it and using it as packing material. It could then be packed in paper bag ‘cushions’, which would take up very little space until needed. Smurfit Kappa Neuburg provided technical support installing the

bag-making machine, and regularly supplies the extra 20% waste cardboard needed for all the bags required. That turned out to be a lot of bags – the scheme has been running since 2018, producing 2 million bags per year and promoting our circular economy model.

“It’s not just good sustainability and chain-of-supply management – it’s good business,” says Siegfried. “We now supply 100% of Topstar’s packaging needs. People in Germany are dedicated recyclers, so the bags go straight back into the paper cycle when the furniture is unpacked, as the filling is 100% corrugated – the best recycling material. The bags are made at the site, so we’ve reduced transport miles by 90% and carbon emissions by 99%. That’s 16,550 tonnes less carbon.”

Production Waste Streams



➔ For complete disclosure of our wastes, please see pages 74-82.

People

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.



Reduction of the TRIR since 2019

-29%

Social investments in 2020

€7.7m

Number of employees

46,000

Inside this section

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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 well-being of our people at work, on their journey to and from work and home.

This is why Smurfit Kappa strives to constantly evolve and improve its People Strategy and why our four pillars have been developed. Underpinning these strategic pillars are the five fundamentals of our HR strategy.

[→ Read more on pages 54-57](#)

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

Key Achievements 2020

When COVID-19 began to spread across the world, we acted swiftly to protect each other, while supporting our customers and our communities. Mid-year, we conducted a Group-wide COVID-19 Employee Engagement Pulse Survey to ensure our people felt safe, supported and connected, and to understand if they felt our response to the pandemic was effective.

[→ Read more on pages 50, 55](#)

Throughout the year, we reinforced our People commitments with new or updated targets, including:

- An increase to at least 25% of women in management positions by 2024, along with an ambition to have at least a 30% female representation in the total workforce.
- An improvement of our employee engagement by at least 3% every two years until 2025 (measured via MyVoice surveys).
- Having a 100% completion level of the Learning and Development programmes in our Smurfit Kappa Academy.
- Offering a Speak Up Service for anonymous reporting of any (possible) wrongdoing for our employees and other stakeholders.

[→ Read more on pages 48-49](#)

We kept on improving our Health and Safety results and achieved a 29% TRIR reduction compared with 2019.

[→ Read more on pages 58-59](#)

To deliver on our commitment to diversity and inclusion, during 2020 we formed key strategic alliances with The Valuable 500 and Employers Network for Equality and Inclusion.

[→ Read more on page 56](#)

We invested €7.7 million in social projects by our sites and our foundations, which includes a €3 million donation that the Group made to various COVID-19 related projects to protect our communities from the harms of the pandemic.

[→ Read more on page 61](#)

Delivering for SDGs

Smurfit Kappa Impacts

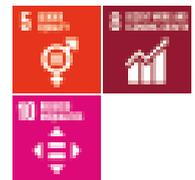
The Health and Safety of everybody on our sites is a key priority for our stakeholders. We focus on being an employer of choice, offering meaningful jobs. We are also committed to a 5% reduction in our Total Recordable Injury Rate annually, and have an ambition to deliver zero accidents on our sites. By doing all of this, we can directly impact the SDG3, as well as the good safety and well-being of our employees.



Smurfit Kappa Contributes

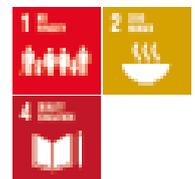
As a good corporate citizen, we play our part in society by creating decent work and delivering economic growth in the communities where we are located. We are committed to delivering gender equality, reducing social inequality and ensuring that every member of our 46,000 strong team feels a sense of belonging.

Additionally, both Smurfit Kappa and its teams are committed to making a contribution to each of the communities in which we operate.



Smurfit Kappa Supports

As a responsible employer, we are committed to the UN targets to end poverty and hunger, along with offering a quality education. We support these efforts through the work our teams do in their communities and through the Smurfit Kappa Foundation, all of which are focused on disadvantaged children's health and nutrition, basic care, and early education.



People continued

Responding to our Stakeholders

People Values

What we believe

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.

With a workforce of over 46,000 people, fostering diversity, inclusion and belonging is important to us.

We truly value our diverse mix of people, who bring so much to our organisation.

What our stakeholders expect from us

Our stakeholders expect us to be a unifying force for our 46,000 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.

Our commitments

Commitment #1: By 2024 we will strive to have a 25% female representation in management positions across the Group.

Commitment #2: Provide a 'Speak Up Service' where our employees and all stakeholders can report wrongdoing or possible wrongdoing in full confidence, ensuring 100% of allegations are fully investigated and actioned accordingly in a timely and professional manner.

People Strategy

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.

Our employees are the very centre of our business.

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.

We are also expected to be inclusive to all employees, no matter what their background.

Commitment #1: At least 3% improvement every two years in employee engagement until 2025 (MyVoice surveys as reference).

Commitment #2: 100% implementation of all L&D programmes within our Global Smurfit Kappa Academy.

Safety and Well-being

As an industrial business operating in 35 countries with around 46,000 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.

We engage our employees with policies and procedures to deliver, innovate and produce in a safe environment.

Our stakeholders expect us to provide a safe and healthy working environment, and promote a health and safety culture that encompasses all who work with us, whether it is directly or indirectly.

Commitment #1: Reduce Total Recordable Injury Rate by at least 5% annually for the next three years.

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.

Communities

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.

By supporting local education, income generation, collaboration and participation, we can strengthen communities and keep them attractive to our future workforce.

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.

Commitment #1: Our Employee Volunteering Programmes will support paid time off for employees to participate in chosen community activities.

Commitment #2: Between 2020-2025 we will donate over €24 million to support social, environmental and community initiatives (20% more than the previous five years).

Progress made in 2020

Progress made: New Target in 2021.

Progress made: New Target in 2021.

[Read more about our progress on pages 52-53](#)

Delivering for SDGs

As a good corporate citizen, we play our part in society by creating decent work for our 46,000 strong team. We are committed to delivering gender equality, reducing social inequality and ensuring our employees have fair pay and freedom for association.

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



5.1, 5.2, 5.5, 5.B and 5.C 8.5, 8.7, 8.8 and 8.B 10.2

Scope

- All Smurfit Kappa operations.

Progress made: New Target in 2021.

Progress made: New Target in 2021.

[Read more about our progress on pages 54-57](#)

As a responsible employer, we are ensuring a working culture in which every member of our 46,000-strong team feels engaged, appreciated as they are and 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:



8.5, 8.7, 8.8 and 8.B 10.2

- All Smurfit Kappa operations.

Progress made: We reached a 29% reduction in comparison with 2019.

Progress made: In 2020, we had 232 accidents.

[Read more about our progress on pages 58-59](#)

The safety and well-being of everybody on our sites is a value for Smurfit Kappa. Our focus extends to work place well-being and work-life balance.

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



3.3, 3.4., 3.5 and 3.9

- All Smurfit Kappa operations.

Progress made: New Target in 2021.

Progress made: We invested €7.7 million in social projects in 2020, including an additional €3 million donation for various COVID-19 support projects.

[Read more about our progress on pages 60-61](#)

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, reducing social inequality.

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



8.5 10.2

- 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 continued

In these extraordinary times, when COVID-19 has changed how we live, work and interact with each other, what really stands out is our people's resilience, determination and dedication.

During this unique and unexpected year, it is our commitment to our people, our focus on employee engagement and communication, our team collaboration, and our embedded culture; combined with our strong values of Safety, Loyalty, Integrity and Respect, which has led to our continued success this year.

Decent work is part of the UN 2030 Sustainable Development Goals, as well as major Human Rights declarations, and it is the objective of the International Labour Organisation (ILO) agenda. Decent work involves 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 there is equality of opportunity and treatment for all women and men.

Smurfit Kappa unites some 46,000 people around the world. Our inclusive culture is dedicated to leveraging our expertise and diversity, and to working together to drive the organisation forward. Together, we are committed to building a better tomorrow for our customers, our shareholders, our communities and for all of our employees. Our materiality assessment shows that the key areas of focus for us as an employer are being a responsible employer, diversity in the workplace, with health and safety as our most important areas of focus.

At the start of 2020, we began to implement our new and evolved People Strategy. However, at that time no-one could have imagined COVID-19 developing in all the countries in which we do business. We immediately used our collective

strengths to protect each other, doing all we could to support our organisation, customers and communities. The quality of our people, along with our organisational flexibility, were valuable assets in responding to COVID-19, while delivering to all stakeholders throughout the year.

During the year, as we continued to learn, adapt and live with COVID-19, we achieved all our objectives, some ahead of schedule, and successfully delivered the first phase of our new People Strategy. Mid-year, we also conducted a Group-wide COVID-19 Employee Engagement Pulse Survey to ensure our people felt safe, supported and connected, and to get their feedback about our response to the pandemic. Their response was positive, and their ideas invaluable.

'Smurfit Kappa Lift-Off – Me@MyBest' Programme in Ireland

For the past two years, Smurfit Kappa has been a patron of The Trinity Centre for People with Intellectual Disabilities (TCPID). It aims to provide people with intellectual disabilities with the opportunity to participate in a higher education programme, designed to enhance their capacity to fully participate in society as independent adults.

This year, we continued our support by developing a bespoke development programme called 'Smurfit Kappa Lift-Off – Me@MyBest' programme.

The programme comprised eight weekly modules, covering some of the main business functions and was aimed at helping the graduates understand what it is like to work in a professional environment, while also helping them to sharpen their workplace skills.

Employees at Smurfit Kappa Group Headquarters in Dublin volunteered their time to facilitate these online training sessions for the TCPID students, with the eight-week course concluding with an online graduation ceremony.

“Due to the innovative approach taken by the team at Smurfit Kappa, not only were we able to continue our wonderful partnership, but even more of our students benefited from their business know-how, through this online approach.”

Marie Devitt
Pathways Coordinator
Trinity Centre for People with Intellectual Disabilities



Unlimited Wheels in Spain

Keen to promote the inclusion of people with disabilities in sport, Smurfit Kappa Valencia came together to support the II Grand Prix Spanish Cup of Adapted cycling. The initiative is aimed at raising awareness of adapted cycling, and the wonderful sporting opportunities that it can provide to those with certain disabilities.

“Our work is all about raising awareness for adapted cycling and having a company such as Smurfit Kappa and its employees involved in our events is invaluable in helping us raise this awareness. We are delighted to be working with them.”

**Ruth Aguillar, Paralympics Athlete
President, Unlimited Wheels**



Our number one priority was supporting our people's safety throughout the pandemic. Our four key strategic HR pillars: Employee Experience for Performance; Inclusion, Diversity and Belonging; People Development and Talent Management, and Rewards and Recognition, as well as our HR Foundations, ensured our people were safe, fully supported by management, and connected to each other, as well as the wider organisation, when we had to work differently, and in some cases apart.

Additionally, the core foundations of our HR Strategy have underpinned organisational performance. Health and Safety has been at the forefront of everything we have done, while our Code of Conduct and Speak Up Service has been rolled out in 21 languages and is now embedded across the organisation.

Risks and Opportunities

Attracting Talent and Maintaining Diversity

One of the most important challenges for Smurfit Kappa is attracting the talent we need for internal succession planning and leadership continuity. This is due to our industry's nature, and the business-to-business environment in which we operate. 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 over 46,000 employees, across 35 countries, located in our 356 sites.

We aim to attract talented people and help all our employees grow their careers and deliver on their potential. This will realise our ambition for the organisation and drive us forward.

Developing the organisation's culture of talent management is vital to our success; it guarantees high performance and safeguards the values underpinning our organisation.

We have also made changes and improvements to our recruitment processes to ensure we are attracting the best and most diverse top talent available, while also introducing a more flexible approach to working arrangements to ensure a better work/life balance for our workforce.

The past year has particularly underlined the strength of talent we have at every level of the organisation. This has been clearly demonstrated over the past year, when we have had to be extremely organised and agile to overcome the immediate challenges of the COVID-19 pandemic, while having the resilience needed to continue to adapt, innovate and thrive for the longer term.

In 2020, we revisited our people commitments and as part of that work, we strengthened our People Strategy by converting those commitments into measurable targets. Our updated commitments and targets have been introduced in the table on pages 48-49.

Health and Safety Culture

Any manufacturing company operating with large machinery, complex logistics and round-the-clock shift work, will tell you that health and safety is both a challenge and an opportunity.

At Smurfit Kappa, we promote a Health and Safety culture founded on authenticity, empowerment and accountability.

Health and Safety is one of our core values and we believe that safe operation is non-negotiable – no task is so important that it cannot be done safely.

The health, safety and well-being of our teams across the world, is of paramount importance to us. It is a key component of our Company values which are; Safety, Loyalty, Integrity and Respect. Our vision is that every day, every Smurfit Kappa employee returns home safely and happily.

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.

No Discrimination

Smurfit Kappa prohibits discrimination on the grounds of age, disability, faith, gender, sexual orientation or gender identity, marital or civil partnership, 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 2020. 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 2020, 18 of our operations were subjected to SEDEX Members Ethical Trade Audits.

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 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 2020, 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 72% 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 2020 page 47.

Modern Slavery Act

Smurfit Kappa is subject to the provisions of the UK Modern Slavery Act. During 2018, we updated our principles and policies with respect to our employees and suppliers to ensure compliance. See also our Annual Report 2020 page 48.

Ensuring Ethical Behaviour

Last year we launched a new approach to our Group ethics management processes and governance, providing enhanced reporting channels and improved case management systems.

The 'Speak Up' platform was made available in Q4 2019 in order to guarantee a management process that aligns 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. The service is available 24/7/365 and guarantees user confidentiality and/or anonymity and assurance of non-retaliation.

As part of the continuation of this project, Group HR launched a worldwide communication campaign to all employees in March 2020. In response to the extensive communications campaign, we have seen a three-fold increase in reporting in the course of the year.

Our objective was to ensure that in every site, from office to production, every employee was made aware of our new Code of Conduct and Speak Up service, both available in all of the languages used across our organisation.

Following its full first year of usage, the system now provides us with the opportunity to analyse the global data, implement proactive actions and mitigate further risks. Since its launch, the system has gradually been used more and more to reach 53 cases at the end of the year, amongst which six were substantiated. Each of the cases reported were thoroughly investigated and we took the appropriate action such as training, policy review, discipline or even termination depending on the type of issue.



Global Manager Programme (GMP)

Every year we support the on-boarding of our newly appointed General or Mill Managers so they successfully enter their new roles. The training introduces the Group functions and services, as well as supporting the development of our management community.

During the programme we spend time discussing sustainability and community involvement. Each participant is tasked with sharing a success story from their site or region with their colleagues, and as a group, they then choose their favourite community project. This year's favourite project comes from Mexico.

Building the Promise of a Future, Mexico

Gabriela Rojas, Corporate Financial Controller, was proud to present the Smurfit Kappa Mexico 'Seeds for Education' programme to her fellow GMP participants. "The Smurfit Kappa Mexico Foundation aims to foster citizen participation and connect our employees with the projects it supports. One of these projects is focused on encouraging young people to remain in education, with the aim of securing an academic degree," she explains.

'Seeds for Education' is a programme in which Smurfit Kappa associates can sponsor Mexico's young people who are top of their class, but in danger of dropping out of the educational system due to lack of resources. There are currently 56 Smurfit Kappa sponsors in the programme. These sponsors, together with the Smurfit Kappa Mexico Foundation, help in funding the programme.

"The average education age level in Mexico is nine years old, which is equal to middle school level," says Gabriela. "After that, many

families struggle to provide further education for their children. The 'Seeds for Education' programme has identified this challenge, and works to encourage young people to finish high-school and even think about going to college. Ideally, young people will join Smurfit Kappa after finishing their studies and find great jobs in our different functions," added Gabriela.

The children supported by the programme are between six and 18 years old. Their applications to the programme are evaluated by the Smurfit Kappa Mexico Foundation and are based on their performance and attendance at school.

Gabriela and her colleagues have received a lot from their collaboration with 'Seeds for Education'. "I have learned over the years that one of my main roles, which is sometimes as important as being a team leader for SK, is the role I play in the community. After receiving letters expressing gratitude from the boy I am sponsoring, I am more than motivated to continue with the programme and expand this project around the globe" says Gabriela.



People strategy

We have evolved our People Strategy for 2020-2023, which we believe will continue to ensure that the business is set for success from a people perspective.

Our People Strategy is based on four key pillars:

- Employee Experience for Performance
- Inclusion, Diversity and Belonging
- People Development and Talent Management
- Rewards and Recognition

Underpinning our four strategic pillars are the five fundamentals of our HR strategy; Safety and Well-being, Legal Framework, Industrial Relations, HR Information Systems and Internal Communications.

We focus on these five fundamentals to ensure the health and well-being 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.

For more information on our strategy, see the diagram below.

Employee Experience for Performance

Our ambition is 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.

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 50% of our workforce have a seniority exceeding 11 years, which provides a great mix of experience in the workplace.

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 2020

As we began our work in the area of Employee Experience at the start of year, we were committed to building a community of highly engaged employees through; the creation of a continuous listening strategy, a two-way digital communications plan that would reach deep into the hearts of our mill and plants, while also creating an employee value proposition for all generations in Smurfit Kappa.

Since 2014, to make sure we engage our employees to be part of the Smurfit Kappa success, we have deployed MyVoice, a staff engagement survey which reaches all of our people at our mills, plants and offices. The full

Smurfit Kappa People Strategy 2020-2023

	<p>Employee Experience for Performance</p> <p>Throughout 2020, COVID-19 gave us an opportunity to learn; and opened us up to new possibilities. We have been discovering new efficient and effective ways of working, collaborating and supporting each other. This has helped us to adapt quickly to changing conditions and work environments.</p>	<p>Inclusion, Diversity and Belonging: Remained a Key Focus</p> <p>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 over 46,000 employees, across 35 countries, located in our 350+ sites.</p>	
	<p>People Development and Talent Management</p> <p>The past year has underlined the strength of talent we have at every level of the organisation. We have depth and strength to our leadership, which has allowed us to be agile. This ensured we were able to overcome the immediate challenges of the COVID-19 pandemic, while having the resilience needed to continue to adapt, innovate and thrive for the longer term.</p>	<p>Rewards and Recognition: Played a Key Role During 2020</p> <p>In December, we communicated and implemented a unique Employee COVID-19 Recognition Award for all permanent employees. This was to thank them for their commitment during this difficult time, when we not only delivered for all our key stakeholders, but went above and beyond to fulfil our role as an essential partner across many crucial supply chains.</p>	

Five Fundamentals of our HR Strategy

Safety and Well-being

Legal Framework

Industrial Relations

HR Information Systems

Internal Communications

survey was repeated in 2017, with a pulse survey in 2019. We had planned to undertake another full survey in 2020, but due to COVID-19, this was replaced with our Group-wide Pulse Survey on safety during COVID-19. The full MyVoice survey will now take place in the second quarter of 2021.

We use the momentum created by the various surveys to improve our change management systems and use this information to provide better insights and inform our decision-making. The past year has seen many of our Employee Experience activities accelerated. Our communications cadence, under the theme of 'Safe, Supported and Connected', has been fundamental to informing and engaging our 46,000 employees across the Group. As referred to earlier, the Company-wide Pulse Survey, which you can read about on page 60, allowed us to provide a direct feedback loop for all colleagues, during the COVID-19 pandemic.

Another core area of focus was evolving our ways of working. COVID-19 has provided us with an opportunity to accelerate this, as our business and our employees have new expectations on the future of work based on our learnings during the year. In December we introduced a new business initiative called 'MyWork', a new, smarter way of working. MyWork will allow us to take forward the efficient ways of working we have experienced during COVID-19, while we continue to invest in providing our teams with the tools and technology they will need to be successful and deliver. We have embraced these new efficient ways of working together, while building on our culture and values, supporting our aspiration of being a 'Globally Admired Employer of Choice'.

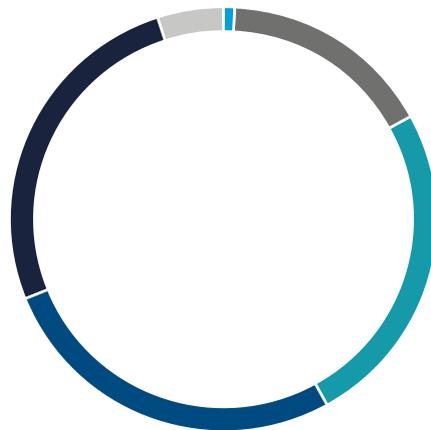
Inclusion, Diversity and Belonging

Our ambition is to create an inclusive workplace where everyone has a real sense of belonging and can be their authentic selves at work, every day. We truly value the diversity of our 46,000 employees who bring so much to our organisation in terms of culture, perspective, leadership and innovative thinking.

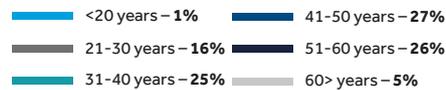
Embracing and celebrating these differences is a core component of our **EveryOne** programme. We have continued to advance our commitment to nurturing an inclusive culture, where all employees can thrive and contribute to our success.

We are committed to promoting equality of opportunity for all employees and those yet to join the Smurfit Kappa family. Our aim is to create a work environment in which all individuals can contribute, free from discrimination or harassment, and in which 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).

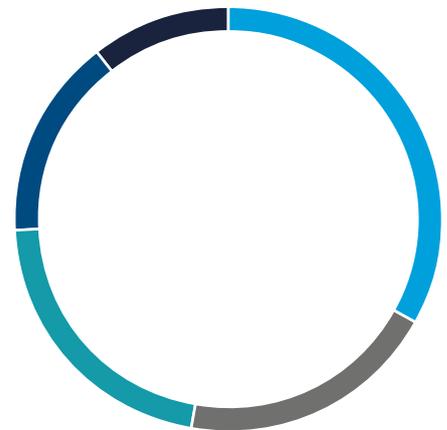
Employee by Age Group



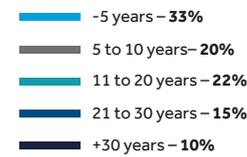
Key:



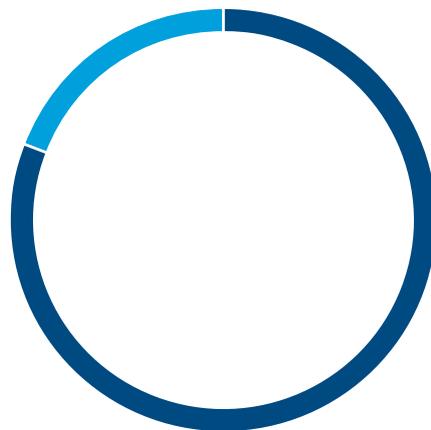
Length of Service



Key:



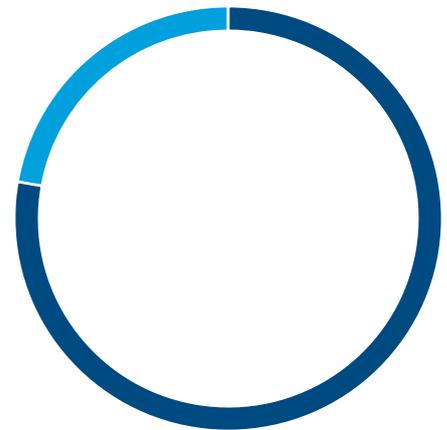
Total Employees by Gender



Key:



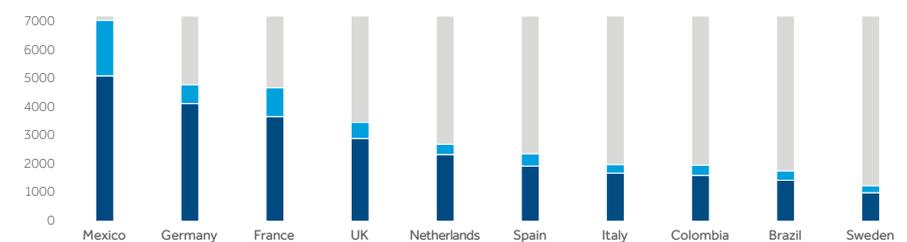
Management by Gender



Key:



Top 10 Countries, Total Employees by Gender



Key:



People continued

Progress 2020

To help deliver on this agenda, we have been making progress by forming key strategic alliances. Earlier this year we announced that we joined 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 was 19% in 2020, equal compared with 2019, our manager population and Executive Committee female representation increased. At Board level, female representation is now at 33%, up from 23% in 2017, with our Group Executive Committee at 31%, 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%, 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 will implement in January 2021.

During the year, across Smurfit Kappa, we celebrated a series of events, which have now become highlights on our annual Inclusion and Diversity calendar. Two such events were International Women's Day (March) and International Pride Day (June) in 2020. 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 17 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.

In addition to the work done at Group level, considerable work happened during 2020 at a local level across our global business where countries innovated to adapt and carry on with their learning events.

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 2020

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 have also created a blended (online and in person) Smurfit Kappa Academy programme of events for 2021. The programmes we have designed, continue to have a strong focus on building networks and connections with colleagues and will maintain and enhance the learning objectives of our key programmes.

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.

Leading in Uncertain Times, Global

Supporting our leaders to lead the organisation, during a time of unprecedented uncertainty, has been a big focus for Smurfit Kappa over the past year. This was not easy to achieve, as this support would normally have been delivered face-to-face. Therefore, in May 2020, we hosted the first online Smurfit Kappa leadership webinar, with our CEO and the INSEAD Business School titled 'Leading in Uncertainty'.

The event was attended by over 300 senior executives from across the Group and was connected to our Open Leadership programme at INSEAD. The programme was designed to support our nine 'Open Leadership' capabilities, under the four headings of: Leading Self, Leading People, Leading the Organisation and Leading the Market. This session was a great opportunity to showcase new ways to connect with senior leaders, while discussing important topics such as communicating in a crisis, leading and embracing change and the role of leadership during the COVID-19 pandemic.





Take Five by the Hive

“The Smurfit Kappa SSK mill is three miles from the centre of Birmingham, occupies 22 acres of land including several green spaces,” says Paul Jones, Production Superintendent at the Smurfit Kappa SSK Paper Mill.

It was Paul who suggested using some of this space for bee-keeping, as a way to bring the country into the city, while helping bees thrive in an unlikely location. The idea came as the mill’s employee engagement team was looking for projects for colleagues to work together on.

Working with Darren Welcome, an urban beekeeper, and Maria Ryan, Head of Human Resources, they founded the ‘Smurfit Kappa SSK Bee Team’. Shortly after, in May 2020, they welcomed three colonies of Buckfast bees, naming their hives Smith, Stone and Knight, after the mill’s original founders.

“This was during the COVID-19 lockdowns,” says Maria, “so it was a welcome distraction, creating huge employee engagement, and a generally beneficial effect on workplace relations.” “Everyone just works on this together,” continues Paul.

Maria aims to extend the project by running a ‘Take five by the Hive’ campaign as part of the Mental Health Awareness Strategy, to promote enjoyment of nature and mindfulness – staff have already begun work on planters.

“We had this idea that to engage our own employees, we should ask them how to engage with our neighbours, and it works,” tells Maria. “The hives create a welcoming habitat for birds and insects, while also providing a quiet area for employees to relax,” added Paul.

Additionally, the Corrugated Division designed paper packaging for the honey, which was sold to raise money for local food banks. We also have future plans to use money raised from the honey sales, to fund local allotment owners to grow produce, which will also be donated to the food banks.

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.

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 recently published their report, which shows an improvement over the last few years.

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

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.

In setting our rewards 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 well-being of our employees.

Progress 2020

As 2020 came into focus, we began our four-year plan to review our approach to Rewards and Recognition across Smurfit Kappa. Its purpose was to ensure we had a fair and competitive package of compensation benefits in place, which compared favourably with the market.

We recognise how critical it is for employees to be appreciated at work, because it confirms both they and their work are valued. It is also critical that our rewards 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.

The work earlier this year began by helping our senior managers fully understand their total rewards package. We designed ‘Total Rewards’ statements for our top 500 managers, which were then communicated directly to them.

The Group ensures 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.

It was also decided, by our top 500 senior managers, that they would donate their share of a COVID-19 award made available to the entire workforce, to a fund to help support the families of colleagues who had died due to COVID-19 related illnesses during the year.

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 and 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 with 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.

Safety and well-being

The well-being of our workforce is something we take very seriously. Health and Safety is the most material topic that Smurfit Kappa has in the area of Corporate Social Responsibility.

Having our products produced in a safe and healthy environment is important to all of our stakeholders, especially our employees, their families and the communities where we operate.

The health, safety and well-being 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 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 anybody visiting our sites. Our Health and Safety community has identified six high-risk areas for which specific tools have been developed to promote 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.

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. It is our policy to:

- Promote a culture of openness, involvement and dignity in the workplace; we are all responsible for each other's Health and Safety;
- 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;

- Review workplace incidents so there is consistent reporting, investigation and, where appropriate, identification of improvement opportunities that strengthen our Health and Safety Management Systems;
- Comply with all applicable legal requirements and implement good Health and Safety practice by effective deployment of our Health and Safety Management Systems;
- 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 and Safety 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.

Your Safety During COVID-19

The health and safety of our people came into even sharper focus during the COVID-19 pandemic. Its effects caused unprecedented disruption for our employees and in order to connect directly and demonstrate how much we care for our people, we undertook a Group-wide Pulse Survey in May.

The aim of the survey was to help us understand if our response to COVID-19 was appropriate; to get feedback from all levels in the organisation; to help understand what we could do better; and to understand how our people were feeling about the pandemic. This year we dedicated our annual 'Smurfit Kappa Safety Week' to the survey, which was focused on 'SKG – Your Safety during COVID-19'.

We asked colleagues how they were feeling; if they felt the leadership was doing enough to help keep them stay safe; and if we could do more. We asked for feedback on our new

PPE and safety procedures and we also wanted to understand if they were happy with our level and frequency of communications.

The results of the survey showed broad support of our COVID-19 approach. We received positive scores of over 90%, across all four areas of the survey: Concern and Connection; Employee Wellness Health and Safety; Senior Leadership Response and Communication and Work Effectiveness.

Survey responses

20,416



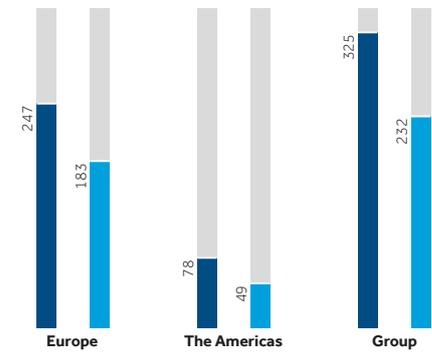
Emergency Doctor System in Mexico

Smurfit Kappa Atlas was the first of our sites in Mexico to be impacted by COVID-19.

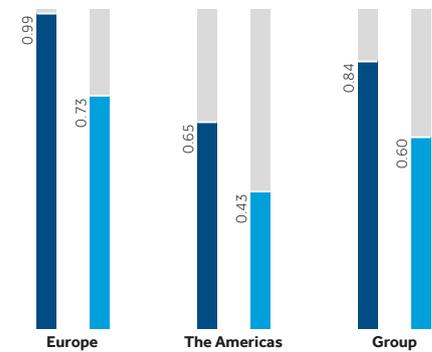
As the national health system was overloaded, the corrugated plant ensured that all its employees would get the best chance for treatment and recovery. In collaboration with the local Labour Union, an Emergency Doctor system was established. Seven Red Cross doctors were hired to treat our people either through home visits or telephone calls, providing tests, medicine and care. The system worked so well that it was copied at our other sites throughout Mexico.



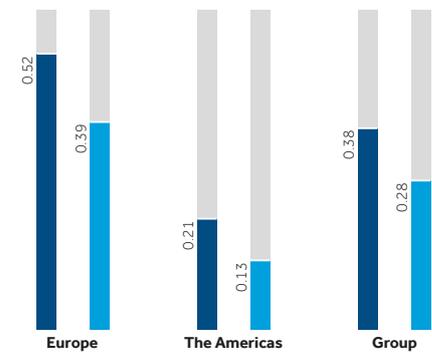
Number of Accidents



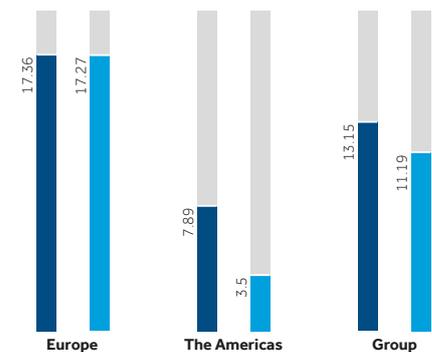
Total Recordable Injury Rate



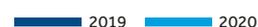
Lost Time Accident Frequency Rate



Lost Time Accident Severity Rate (%)



Key:



Focus on Behaviour

Alongside our COVID-19 new ways of working, we also kept our focus on our business as usual progress and continued to deliver our core Safety and Well-being 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 in order to improve the safety culture and leadership, particularly, front-line operational leaders, which will continue into 2021 and beyond, and our strong audit programme remains in place despite disruption due to COVID-19.

The well-being of our employees is also core to our agenda. Learning from an initiative started in the UK, in the third quarter 2020, we launched a new Employee Assistance Programme (EAP) and made it available to all of our European colleagues and their families. This means we now have an EAP programme in place across the entire organisation, as it has now also been introduced in Mexico.

Progress in 2020

In 2020, our global Health and Safety performance carried on the positive trend set in recent years, achieving a 29% reduction in our key metric Total Recordable Injury Rate (TRIR) compared with 2019.

There are focused safety improvement plans and strategies across our business that have proved to be effective in delivering stronger performance with the lowest number of incidents or injuries.

Equally, we recognise that it is not just about counting incidents that have happened 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.

It is notable that this is the third full year that our primary measure of performance was TRIR – we changed in the knowledge that achieving 'zero' will be more progressive.

Despite our best efforts, regrettably we had two contractor fatalities during 2020, at our Smurfit Kappa Amboise plant in France and the Smurfit Kappa Forestry Operations in Colombia. This has made us even more determined to ensure our leaders and managers re-double their efforts to be ambassadors of good health and safety and to ensure our people step-up to take personal responsibility.

Our COVID-19 management and control has been very effective as illustrated in the case study on this and the previous page. We have ensured with a robust set of consistently applied control measures, our people have remained as safe as possible and our operations were able to supply our customers. In the Americas, we have implemented initiatives that have effectively mitigated the risk of COVID-19, both internally and within our operator's communities. We have provided dedicated medical staff for our employees in our Latin American countries, held daily leadership-driven case management and provided personal protective equipment to our employees and their families.

People continued

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 high ethical and professional standards and our values of Safety, Loyalty, Integrity and Respect have been displayed right across our business and are clearly illustrated in the projects in which we participate, through our employees' volunteering, our operations social investments at local level, as well as all the projects we support through our 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.

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 60–61 in this report and in the Our Open Community booklet, available at www.smurfitkappa.com.

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;
- Supporting municipality water treatment systems with our effluent that 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.

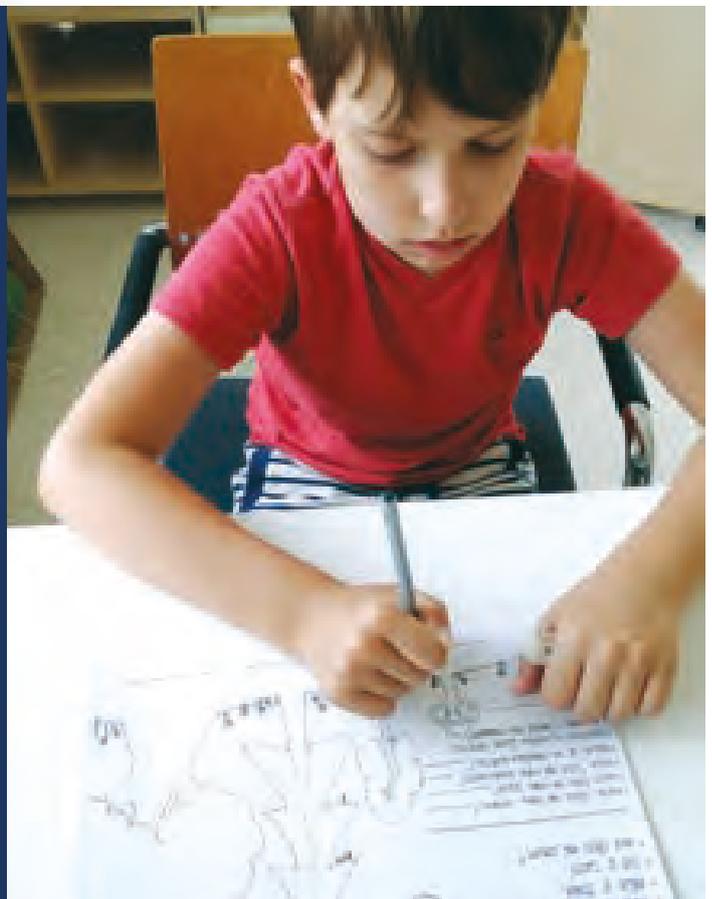
Helping Autistic Children in the Czech Republic

A brand new class for children with autism has recently opened in Olomouc in the Czech Republic, providing a brighter future for local families. Responding to a call for funding, Smurfit Kappa Olomouc jumped into action, engaging the help of the Smurfit Kappa Foundation. We worked together to fund the creation of a new library and the purchase of specialist equipment for this much needed project.

The result is a new service, available to local children with autism, which teaches through Applied Behavioural Analysis (ABA) – a method that has been used very successfully for teaching children with this type of lifelong developmental disability.

“My son is now able to follow simple instructions: water the lavender, put on his shirt, he is even able to go to the store for 10 items from a list. In January 2020, this would have been mission impossible.”

Mr. Nábělek, founder of ABA class



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 might already receive 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 a man 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 2020

This year, COVID-19 has played an enormous part in shaping our actions, with many of the activities focusing on helping communities overcome the challenges of the pandemic. To this end, during the year we donated €3m to COVID-19 related causes such as; food for the hungry, support for the homeless, provided PPE to the vulnerable and even helped to set up and kit-out field hospitals in some of our communities.

We estimate that as a Group, including our Smurfit Kappa Foundation, approximately €7.7 million was donated in cash and kind in 2020. 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.

Online Crafting in Colombia

In their free time, the Forestry division in Smurfit Kappa Colombia has been working with rural women, in order to develop new skills in creating produce that they can sell, or even use in their own homes.

This year the project had to adapt because of the ongoing pandemic, bringing their courses online.

"It has been so positive. I have learned many skills, including how to use social networks to participate in the courses regardless of living far from urban areas."

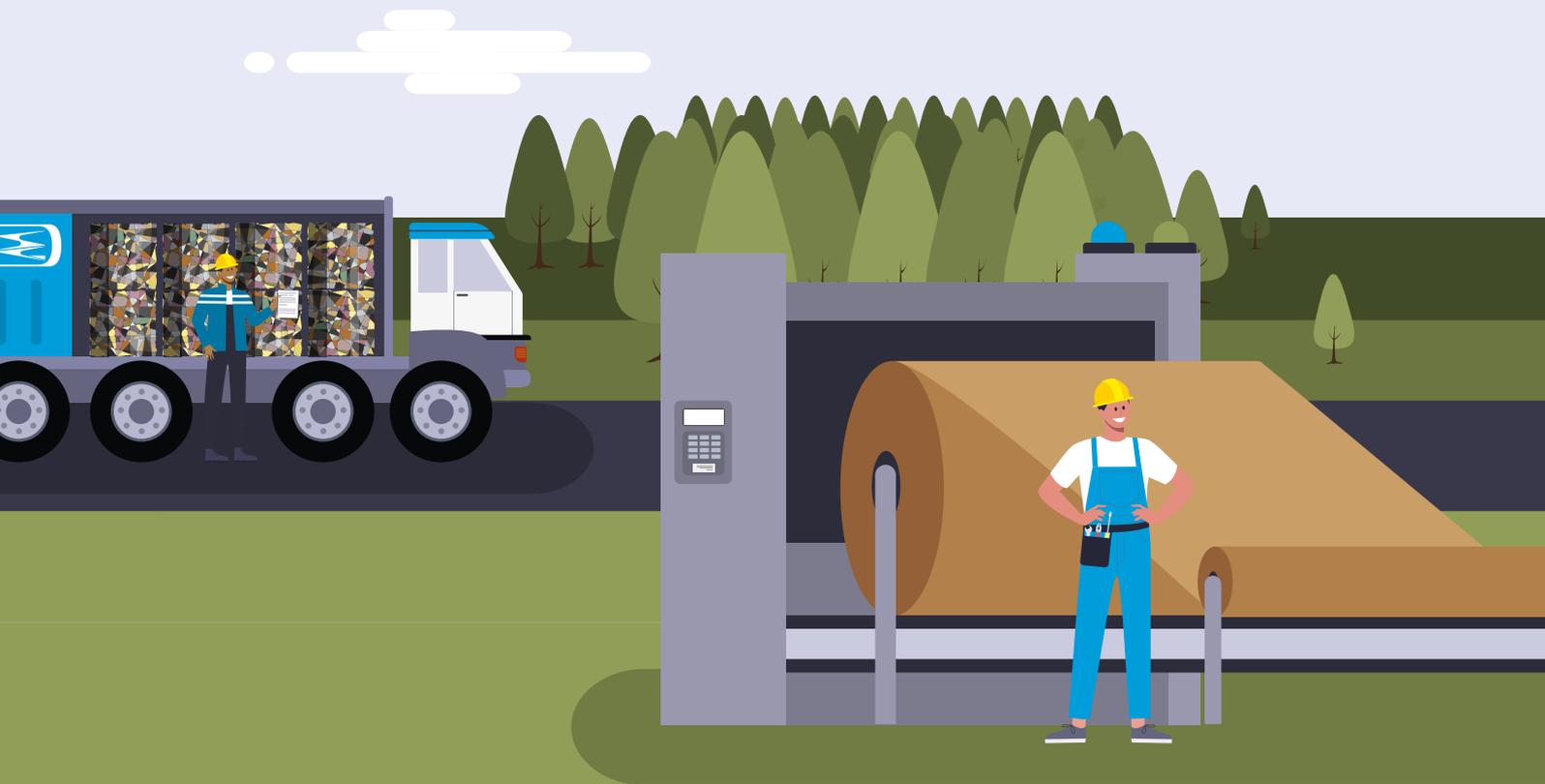
Jackeline López, Student of the Arts and Trades, Riosucio-Caldas



Impactful Business

Delivering to 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.



Sustainable packaging webinars hosted

+100

Support the Goals recognition



Inside this section

Innovation	66
Governance and Human Rights	68
Sustainable and Responsible Sourcing	70

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 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.

Key Achievements 2020

We broadened our Better Planet Packaging (BPP) initiative to improve all areas of end-to-end sustainable packaging – from reducing our packaging’s environmental impact, to having a positive effect in our customers’ supply chains.

As part of our BPP initiative, we had over 100 webinars sharing sustainable packaging concepts with our customers. Our BPP concept family grew with eFashion, eBottle and Clips&Grips portfolios supporting our customers with improved packaging solutions. We also partnered with leading value chain partners for sustainable packaging solutions.

[➔ Read more on page 66](#)

We were included in the Solactive ISS ESG Beyond Plastic Waste Index in 2020, which recognises companies active in the reduction of plastic waste and our Climate Change response in CDP is at A- level.

In early 2021, we received an award for being the first FTSE100 company to be given five stars by Support the Goals, which recognises companies for their contribution to making the UN 2030 Sustainable Development Goals a reality.

We announced our support for the recommendations of the Task Force for Climate-related Financial Disclosures and are reporting on page 94 in line with these recommendations. We also started reporting in line with the Sustainable Accounting Standards Board criteria.

[➔ Read more on pages 94-95](#)

46 supplier audits were conducted during 2020 through our seven section Sustainable and Responsible Sourcing audit programme.

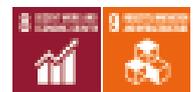
[➔ Read more on pages 70-71](#)

Delivering for SDGs

Smurfit Kappa Contributes

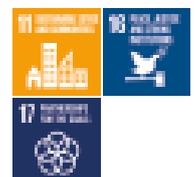
Integrating sustainability into our business is essential to sustain long-term profitability. This means making an impact through our products, respecting people and having responsible governance.

These in turn have a positive impact on the communities we have operations in. Our products offer a great opportunity for innovation that can have a positive impact for society.



Smurfit Kappa Supports

Smurfit Kappa supports local communities through the employment it creates, its waste paper collection activities, synergies with our neighbours such as contributing to district heating, through the volunteer and community work done locally and through the charitable donations from local operations and Smurfit Kappa’s Foundations.



Impactful Business continued

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 legislations, 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 the ethical and sustainable manner of conducting business to our supply chains, and that we 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, Supplier Code of Conduct, are Chain of Custody 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.

We all want our food, clothing and household goods delivered securely and safe from damage or theft. Businesses therefore need fit-for-purpose packaging solutions, which protect the product and delivers 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 and it also helps reduce product waste. 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.

We maximise this sustainability for ourselves, our customers and suppliers, through continuous research. Our experience and expertise inspire innovative packaging solutions, making sustainability integral.

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. This can be seen in the many investor ratings and disclosure programmes that we participate in, such as FTSE4Good, Euronext Vigeo Europe 120, STOXX Global ESG Leaders, Ethibel’s sustainable

Progress made in 2020

Progress made: Use of our InnoTools: PackExpert and Paper to Box in a day in 2020: over 11,000.

[→ Read more about our progress on page 66](#)

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

Scope

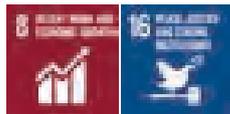
- All Smurfit Kappa operations.

Progress made: During 2020, no material fines were imposed on the Group for any breaches of such laws and regulations.

[→ Read more about our progress on pages 68-69](#)

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

- All Smurfit Kappa operations.

Progress made: During 2020, 46 supplier audit activities took place through our seven pillar Sustainable and Responsible Sourcing audit programme.

[→ Read more about our progress on pages 70-71](#)

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

- All Smurfit Kappa operations.

investment register, 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 Chain of Custody 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 CEOs' 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.

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-adding 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.

We focus on circularity, by optimising both primary and secondary packaging, we can deliver efficiencies in transport, storage and display and finally ensure recovery and recycling of our

packaging products in recycling channels. Our scorecards help follow-up sustainable progress 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 virgin and recycled-fibre based packaging is designed to minimise resource use, reduce environmental footprint and use material sourced through certified Chain of Custody 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 performance packaging for which we use our Paper to Box tool.

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 packaging environmental footprint 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 and the industry reuses more than 90% of this material in our closed loop business model.

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 gives good understanding about packaging solutions' 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 over 7,500 packaging concepts, we use cutting-edge technology to provide innovative designs in packaging and displays for our customers.

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 	<p>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.</p>	<p>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.</p>
Impact 2 Reduce 	<p>Designing packaging solutions that help eliminate non-circular packaging materials with a higher environmental footprint. Ensuring that resource efficiency 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.</p>	<p>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 fossil CO₂ emissions and increase energy efficiency.</p>
Impact 3 Reuse 	<p>Ensuring that where reusing is economically and environmentally unfavourable, our recyclable packaging solutions offer a more sustainable alternative with less environmental impact than using a reusable solution.</p>	<p>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.</p>
Impact 4 Recycle 	<p>75% of the raw material we use consists of recycled fibres. All paper-based packaging we produce is recyclable.</p> <p>Recycling of our packaging product delivers new corrugated products with the same quality, whereas the majority of plastic packaging, for example, is downcycled.</p>	<p>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.</p>
Impact 5 Recover 	<p>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.</p>	<p>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.</p>
Impact 6 Renew 	<p>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 Chain of Custody certified by an internationally accepted forest management standard, FSC, PEFC or SFI.</p>	
Impact 7 Biodegrade 	<p>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 CO₂ and water.</p>	

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 68-72 of the 2020 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 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.

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. They will also report 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 VP Sustainable Development who reports to 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 2020, 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 24-71. Our entire Sustainable Development Report is assured by KPMG, in accordance with the 'Comprehensive' level 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 2020, performed 65 detailed internal financial and IT audits.

Code of Conduct and Corporate Policies

The Smurfit Kappa Group 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 Co-operation 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.

During 2020, 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 demands 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 70-71.

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 operations, 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 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 2020. In line with the Group’s Code, no financial contributions were made to political parties in 2020. 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 www.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 2020, we recorded a corporate income tax expense of €201 million for an effective tax rate of 27%. We paid €194 million in corporate income tax in the period. We also paid dividends of €260 million on which we remitted approximately €21 million in taxes on behalf of our shareholders.

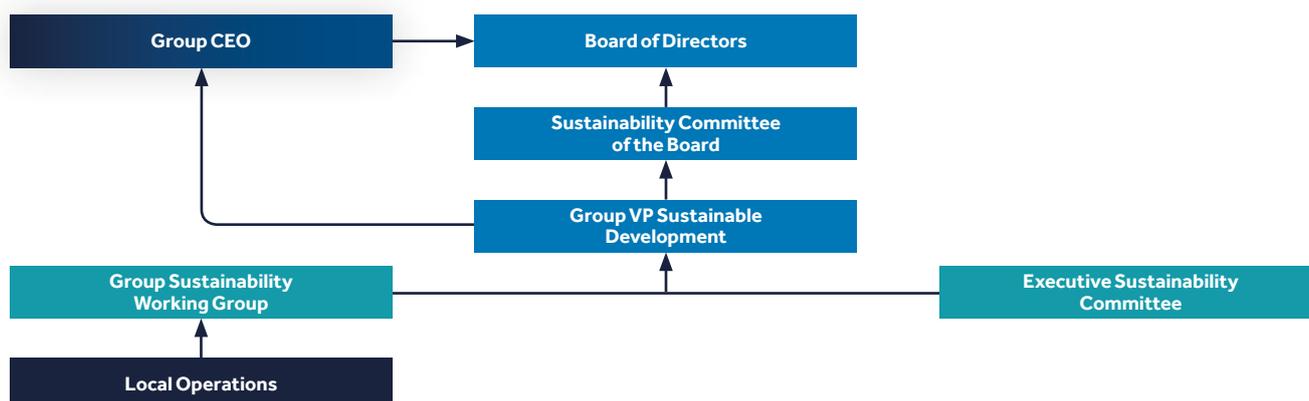
Safe Products and Satisfied Customers

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 food safety standards. These include OECD guidelines for Multinational Enterprises and providing statements on food safety and REACH to our customers. These are available on request through our website.

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.

Sustainability Governance Framework



Sustainable and responsible sourcing

In 2020, we spent €4.7 billion on raw materials, energy, logistics, maintenance/repair, and investment goods. 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 seven sections. These are: quality, hygiene and safety, business continuity, operations, continual improvement, service and technical support and environmental 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; respect the right to water sufficiency, safety, acceptability, accessibility, affordability and reducing waste by meeting food safety requirements. During our on-site audits, employees responsible for the areas of the seven sections are interviewed.

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: www.smurfitkappa.com/policies).

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

OHSAS 18001/ISO 45001 on safety, ISO 46001 water efficiency management and HACCP, HALAL, BRC on food safety.

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 disciplinary measure, encouragement of continuous training and development, Health and Safety at work, non-discrimination, prohibit 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 sign a declaration 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. These standards should be extended upstream in the suppliers supply chain. This declaration is signed every three years and we monitor our suppliers' compliance through our Sustainable and Responsible Sourcing audit programme. 251 suppliers have signed this declaration and 67% of our suppliers of key materials, representing 77% 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 as we have described in the third paragraph of this section. 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 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 these 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 34-37.

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 been auditing 354 of our suppliers to ensure they meet our standards. Including re-approval audits and follow-up of improvement plans 774 activities with suppliers have taken place.

Seven 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 seven sections of our Sustainable and Responsible Sourcing programme. If the result is below 'acceptable' (scoring less than 40%), an obligatory improvement programme is devised. Major non conformities need to be addressed within two weeks and resolved within six months. Minor non conformities need to be solved within 12 months during a surveillance audit.

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 re-approval audit process.

Our risk mapping, combined with supplier audit results, show that 81% of our suppliers of key materials audited in 2020 carry moderate to low risk. Our sourcing network includes suppliers ranging from small-scale local companies to large multinationals.

In total, an estimated 70% of our suppliers' deliveries can be classified as local. In 2020, supplier improvement opportunities typically included Environmental Management systems (14), Health and Safety systems (13) and Business Continuity management (9). 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.

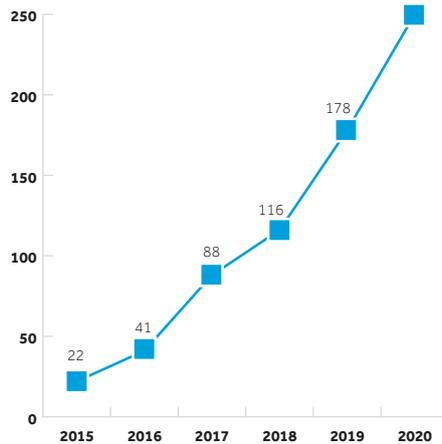
We hold annual global sourcing seminars in which part of the programme is to train and update the knowledge of our sourcing managers on developments, achievements and challenges in the area of Sustainable and Responsible Sourcing. In 2020, in-depth training for local sourcing teams were held in Poland and Spain.

Progress in 2020

New developments in the auditing process this year included an updated questionnaire with a stronger focus on issues related to Smurfit Kappa's Sustainability Targets; Climate Change, Forest, Water, Waste and People. The new questionnaire will be 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 Change), 12 (Waste), 6 (Water) and 3 (People).

Signed Sustainability Declarations*



* The declarations cover compliance with our Suppliers' Code of Conduct, Modern Slavery Act Statement and Sustainable and Responsible Sourcing Policy.

The COVID-19 pandemic made on-site audits only possible at the beginning of the year and we were able to perform eight audits on-site and continued our programme with 26 desktop scans. Desktop scans are thorough audits of available documentation, including sustainability reports, policies and codes of business conduct.

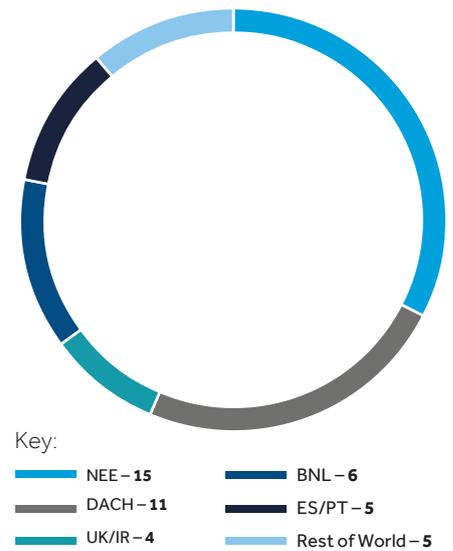
Of the total of 46 activities, 23 of these were first-time audits, including on-site and off-line audits. 18% were conducted on strategic suppliers and 35% on suppliers of key materials. A total of 94% of all suppliers audited during 2020 scored at least mark 'acceptable' (2019: 87%), and the remaining 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 107 strategic suppliers, 70 key suppliers, 44 tactical suppliers and 126 other suppliers, on top of our internal audits. 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 unsatisfactory. From all sourcing categories, ten have been identified as key material and most relevant to our Sustainable and Responsible Sourcing programme. From the key materials, 82% of the spent has been monitored.

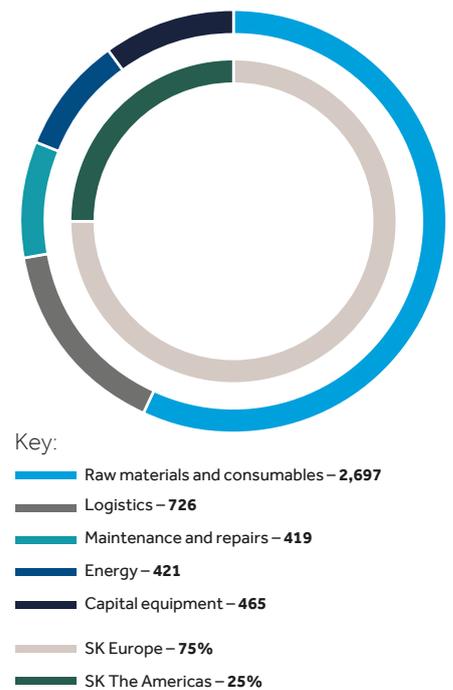
Spread over seven regions, we work with 17 external auditors supporting us with their knowledge of local legislations regarding environment, working conditions, labour rights, culture and language. Some have specific experience with industries and/or with our Sustainable and Responsible Sourcing audit programme.

Supplier Audits by Country

(46 audit activities, 45 companies audited)

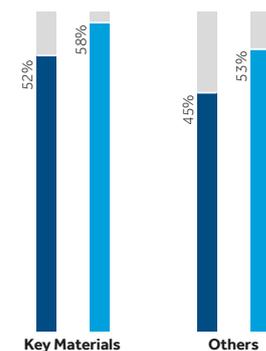


Total Sourcing Costs (€m)



Average Audit Score

(Initial vs 2020)



Key: Initial Audits (dark blue), 2020 level (light blue)

Supporting data





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Input/Output 2020

Europe

Input

Wood and fibre		
Wood ¹	4,913	ktonnes ar
Market virgin pulp	81.6	ktonnes ar
Other pulp	20.0	ktonnes ar
Recovered paper	4,813	ktonnes ar
Paper or board purchased	1,470	ktonnes ar
Plastic films, other plastic item (BIB)	26.6	ktonnes
Starch (all types)	293	ktonnes ar
Inorganic raw materials	311	ktonnes ar
Other organic raw materials	174	ktonnes ar

Energy

Energy from fossil fuels	28,635	TJ (terajoule)
Energy from purchased biofuels	5,582	TJ
Electricity from grid	2,180	GWh

Water

Water intake ²	114	Mm ³
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Output

Production		
Papers (all grades)	5,575	ktonnes
Corrugated packaging*	5,138	ktonnes
Board and laminated boards*	398	ktonnes
Converted board*	112	ktonnes
Sacks*	–	ktonnes
Other packaging	25.8	ktonnes

Direct emissions to air

CO ₂ fossil	1,711	ktonnes
CO ₂ biogenic	3,454	ktonnes
Dust from fuels	0.21	ktonnes
SO _x from processes	0.87	ktonnes
NO _x from processes	3.1	ktonnes

Energy output

Electricity to third party	304	GWh
Thermal energy to third party	167	TJ
Biomass sold	607	TJ

Wastes

Hazardous wastes	8.8	ktonnes
Non-hazardous wastes sent to landfill	219	ktonnes
Non-hazardous wastes recovered	387	ktonnes
Other non-hazardous wastes	8.8	ktonnes

Discharges to water

Water released	104	Mm ³
COD	26.6	ktonnes
BOD	10.9	ktonnes
Total suspended solids	5.0	ktonnes
Nitrogen	0.46	ktonnes
Phosphorous	0.063	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 76 to 77. The latter pages show the energy consumption for the production of the paper or board manufactured.

Input/Output 2020

The Americas

Input

Wood and fibre		
Wood ¹	891	ktonnes ar
Market virgin pulp	2.71	ktonnes ar
Other pulp	3.16	ktonnes ar
Recovered paper	1,454	ktonnes ar
Paper or board purchased	528	ktonnes ar
Plastic films, other plastic item (BIB)	4.72	ktonnes
Starch (all types)	66.6	ktonnes ar
Inorganic raw materials	59.4	ktonnes ar
Other organic raw materials	57.7	ktonnes ar

Energy

Energy from fossil fuels	13,082	TJ
Energy from purchased biofuels	1,843	TJ
Electricity from grid	850	GWh

Water

Water intake ²	30.4	Mm ³
---------------------------	------	-----------------

Output

Production		
Papers (all grades)	1,474	ktonnes
Corrugated packaging*	1,533	ktonnes
Board and laminated boards*	111	ktonnes
Converted board*	78.8	ktonnes
Sacks*	60.3	ktonnes
Other packaging	4.24	ktonnes

Direct emissions to air

CO ₂ fossil	870	ktonnes
CO ₂ biogenic	639	ktonnes
Dust from fuels	0.17	ktonnes
SO _x from processes	1.53	ktonnes
NO _x from processes	1.28	ktonnes

Energy output

Electricity to third party	–	GWh
Thermal energy to third party	–	TJ
Biomass sold	–	TJ

Wastes

Hazardous wastes	1.23	ktonnes
Non-hazardous wastes sent to landfill	223	ktonnes
Non-hazardous wastes recovered	18.8	ktonnes
Other non-hazardous wastes	0.21	ktonnes

Discharges to water

Water released	27.2	Mm ³
COD	13.5	ktonnes
BOD	4.49	ktonnes
Total suspended solids	2.76	ktonnes
Nitrogen	0.44	ktonnes
Phosphorous	0.024	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 with those on pages 78 to 79. The latter pages show the energy consumption for the production of the paper or board manufactured.

Environmental Data 2020

Paper and Board Mills, Europe

		Nettingsdorf, Austria	Sangüesa, Spain	Facture, France	Piteå, Sweden	Morava, Czech Republic	Wrexen, Germany ⁵	Hoya, Germany ⁵	Zülpich, Germany	Mengíbar, Spain
		bkl, tl	mg paper	bkl, wtkl, wtcl	bkl, wtkl	tl, fl	wtcl, sb, fl, tl	tl, fl, cart	fl, tl	fl, tl
Production	ktonnes	433	77	468	693	75	296	442	494	232
Energy										
Electricity										
Co-generated	GWh	150	44	337 ¹	316	–	57	128	169	101
Self-generated	GWh	–	–	–	–	–	–	–	–	–
Hydro power	GWh	–	–	–	–	2.8	0.1	–	–	–
Net grid supply	GWh	137	94	31	262	21	36	42	24	– ²
Solar electricity generated on site	GWh	–	–	–	–	–	–	–	–	–
Total electricity	GWh	286	139	368	578	24	94	170	193	101
Fuel usage										
Biofuels	TJ	4,146	1,942	8,095	10,416	17	61	75	325	–
Fossil fuels	TJ	824	230	674	151	336	1,337	2,492	2,833	1,701
Total fuels	TJ	4,970	2,172	8,769	10,567 ³	353	1,398	2,567	3,158	1,701
Water withdrawal										
Surface	Mm ³	15.6	4.6	7.6	30.8	0.4	0.5	–	1.5	1.3
Ground	Mm ³	–	–	0.6	–	0.0	0.6	2.3	0.4	0.0
Grid	Mm ³	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0
Total water ⁴	Mm ³	15.8	4.8	8.8	31.4	0.4	1.1	2.5	2.0	1.4
Discharges										
To air										
CO ₂ fossil direct	ktonnes	46	15	39	13	19	75	140	223	95
CO ₂ fossil indirect	ktonnes	–	27	2	3	11	15	17	10	–
CO ₂ biogenic	ktonnes	509	207	970	1,108	1	5	7	37	6
Dust	tonnes	31.6	4.7	42.3	101.7	0.2	0.0	0.0	0.0	0.1
NO _x as NO ₂	tonnes	298	107	600	652	8	37	117	194	90
SO _x as SO ₂	tonnes	50	87	73	59	1	1	2	82	84
To water										
Process water	Mm ³	5.67	4.30	9.50	12.51	0.32	0.30	1.83	–	1.03
Cooling water	Mm ³	7.33	–	–	18.80	–	0.48	0.08	1.13	–
COD	tonnes	8,040	282	3,551	1,795	37	65	232	–	574
BOD	tonnes	5,023	45	1,007	225	1	3	13	–	15
Total suspended solids	tonnes	858	96	593	255	5	4	67	–	275
Total Nitrogen	tonnes	43.4	12.2	97.7	38.0	4.9	0.5	19.3	–	38.4
Total Phosphorous	tonnes	3.7	0.6	13.5	10.0	0.4	0.1	2.1	–	3.5
Wastes										
Total non-hazardous wastes	tonnes	19,942	13,291	70,101	36,007	9,688	9,965	33,327	20,583	24,219
Landfill	tonnes	3,171	3,546	8,513	2,528	4,677	–	–	6,475	24,097
Recovery	tonnes	16,772	9,745	61,588	33,479	5,011	9,834	33,281	14,108	122
Other	tonnes	–	–	–	–	–	131	46	–	–
Hazardous wastes	tonnes	264	377	605	230	17	18	69	2,356	20

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 italic: mills that do not discharge their process water to surface.

Alfa d'Avignon, France	Rethel, France	Saillat, France	Ania, Italy	Roermond, the Netherlands	Parenco, the Netherlands	Beograd, Serbia	SSK, United Kingdom	Townsend Hook, United Kingdom	Herzberger, Germany	Nervión, Spain	Total mills
tl	tl	fl, tl	tl, fl	tl, fl	fl, grap pap, tl	tl, fl	tl, fl	fl, tl	sb	sack p	
73	66	241	221	639	580	108	202	232	251	153	5,973
–	–	43 ¹	66	121	–	–	59	75	71	125	1,863
0.0	–	–	–	–	–	–	–	–	0.0	0.0	0.0
–	–	1.1	–	–	–	–	–	–	0.9	–	5.0
26	24	67	– ²	57	384	48	–	13	20	59	1,345
–	–	–	–	–	–	–	–	–	–	–	–
26	24	111	66	178	384	48	59	89	92	185	3,214
–	7	147	51	243	1,198	–	38	52	–	3,469	30,282
340	271	1,250	1,338	2,758	1,591	590	1,293	1,775	1,578	115	23,474
340	278	1,397	1,388	3,000	2,789	590	1,331	1,827	1,578	3,584	53,757
1.0	–	1.8	–	2.3	19.6	1.6	–	1.0	3.8	2.8	96.2
–	0.4	–	1.6	–	5.4	–	1.0	0.6	0.0	–	12.9
–	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.8
1.1	0.5	1.8	1.6	2.5	25.2	1.6	1.2	1.6	3.8	3.0	112.0
19	15	70	75	156	91	56	73	100	89	7	1,416
2	2	5	–	–	–	38	–	–	8	17	157
1	3	15	4	20	146	–	4	7	–	369	3,417
0.0	0.0	0.6	0.0	0.0	2.3	2.1	0.0	0.0	2.0	20.0	207.5
20	8	33	35	136	144	80	106	51	36	281	3,032
5	13	1	0	22	6	300	1	4	5	33	827
0.64	0.40	1.40	1.40	1.98	4.88	1.19	0.87	0.76	1.34	2.27	52.60
0.21	–	–	–	–	19.59	–	–	0.54	2.26	–	50.42
150	46	170	136	326	685	2,245	4,832	114	138	1,427	24,846
60	2	3	15	7	21	1,186	2,475	4	9	340	10,455
12	8	45	19	29	219	361	1,557	31	24	153	4,612
5.3	5.9	26.7	18.0	45.1	45.2	4.0	11.6	11.0	2.3	1.4	430.7
1.3	0.6	1.3	1.3	3.2	5.9	0.8	12.5	0.6	0.5	0.2	62.2
3,569	2,155	17,941	15,395	45,012	60,437	21,329	23,184	25,176	26,580	82,618	560,518
753	1,566	17,736	3,648	6,865	26,398	7,830	8,860	5,123	–	81,079	212,863
2,816	589	205	11,747	38,020	34,039	13,498	14,324	19,981	26,374	1,539	347,073
–	–	–	–	128	–	–	0	72	206	–	583
22	1	77	62	13	98	1	96	22	43	11	4,401

bkl: brown kraftliner
cart: carton board
fl: recycled fluting
grap p: graphic paper

mg paper: machine glazed paper
sb: solid board
tl: testliner

wtkl: white top kraftliner
wttl: white top testliner
sack p: sack paper

Environmental Data 2020

Paper and Board Mills, The Americas

		Bernal, Argentina	Coronel Suárez, Argentina	Bento, Brazil	Pirapetinga, Brazil	Uberaba, Brazil
		ti, fi	ti, fi	fi, ti	fi, ti, wttl	ti, fi
Production	ktonnes	66	48	49	121	59
Energy						
Electricity						
Co-generated	GWh	–	–	–	–	–
Self-generated	GWh	–	–	–	–	0.0
Hydro power	GWh	–	–	–	–	–
Solar electricity generated on site	GWh	–	–	–	–	–
Net grid supply	GWh	31	14	18	58	34
Total electricity	GWh	31	14	18	58	34
Fuel usage						
Biofuels	TJ	–	–	372	923	468
Fossil fuels	TJ	383	294	2	38	6
Total fuels	TJ	383	294	373	960	475
Water withdrawal						
Surface	Mm ³	–	–	0.1	1.0	–
Ground	Mm ³	0.7	0.2	–	–	0.4
Grid	Mm ³	0.0	–	0.0	0.0	–
Total water ¹	Mm ³	0.7	0.2	0.2	1.0	0.4
Discharges						
To air						
CO ₂ fossil direct	ktonnes	22	16	0	3	0
CO ₂ fossil indirect	ktonnes	11	5	2	7	4
CO ₂ biogenic	ktonnes	0	–	40	99	46
Dust	tonnes	0.0	0.0	56.3	42.9	25.9
NO _x as NO ₂	tonnes	26	25	54	120	48
SO _x as SO ₂	tonnes	3	0	0	7	0
To water						
Process water	Mm ³	0.39	0.15	–	0.64	0.26
Cooling water	Mm ³	0.27	–	–	–	–
COD	tonnes	53	91	–	222	446
BOD	tonnes	7	9	–	80	157
Total suspended solids	tonnes	5	20	–	41	61
Total Nitrogen	tonnes	4.5	0.9	–	3.8	1.6
Total Phosphorous	tonnes	0.1	0.1	–	0.8	0.4
Wastes						
Total non-hazardous wastes	tonnes	5,798	3,620	3,673	15,552	7,014
Landfill	tonnes	1,780	3,620	2,827	15,388	6,933
Recovery	tonnes	4,018	–	846	164	81
Other	tonnes	–	–	–	–	–
Hazardous wastes	tonnes	32	11	12	13	6

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
	p&w, sc fl, sack p, cart, bkl, pulp, wtkl, wttl	tl, fl	fl, tl	fl, tl	tl, cart, fl	fl, tl	tl, fl	
	261	60	110	125	323	33	330	1,584
	212	31	48	–	–	–	38	329
	–	–	0.0	–	–	–	–	0.0
	–	–	–	–	–	–	–	–
	–	–	–	–	–	–	–	–
	116	2	5	68	158	20	107	632
	328	34	53	68	158	20	145	960
	4,265	–	–	–	–	–	271	6,298
	5,437	613	706	719	1,433	252	1,613	11,495
	9,702	613	706	719	1,433	252	1,883	17,793
	22.1	0.6	0.9	–	–	–	–	24.6
	0.2	–	–	0.4	1.4	0.1	–	3.5
	–	0.0	–	–	–	0.1	1.2	1.2
	22.3	0.6	0.9	0.6	1.4	0.2	1.2	29.6
	423	34	47	40	81	14	91	771
	–	–	–	33	76	9	45	191
	397	–	–	–	–	0	33	615
	37.2	1.5	1.2	0.0	1.7	0.0	2.2	168.8
	765	19	56	22	34	10	57	1,236
	1,366	0	86	0	1	0	23	1,486
	21.95	0.44	0.75	0.31	0.87	0.09	0.72	26.56
	–	–	–	–	–	–	–	0.27
	5,700	1,800	3,181	65	775	44	1,071	13,449
	1,659	784	1,364	4	90	7	285	4,447
	1,428	142	591	4	98	16	292	2,698
	356.5	6.7	7.6	1.9	9.4	0.8	42.8	436.3
	11.4	0.5	1.6	0.9	2.2	0.3	5.1	23.5
	64,953	3,064	7,734	11,814	46,227	4,608	48,078	222,136
	62,863	2,338	6,396	11,483	45,514	4,552	47,887	211,580
	2,090	726	1,338	332	713	56	191	10,556
	–	–	–	–	–	–	–	–
	141	13	6	10	34	5	0	282

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
tl: testliner

wtkl: white top kraftliner
wtl: white top testliner
sack p: sack paper

Environmental Data 2020

Operations Total, Europe

		Paper and Board Mills	Integrated Corrugated Operations	Other Packaging Operations	Other Operations	Total Operations
Production	ktonnes	5,973	4,832	444	2,670	
Energy						
Electricity						
Co-generated	GWh	1,863	–	–	–	1,863
Self-generated	GWh	0	1	–	–	1
Hydro power	GWh	5	–	–	–	5
Solar electricity generated on site	GWh	–	–	–	–	–
Net grid supply	GWh	1,345	559	87	4	1,995
Total electricity	GWh	3,214	559	87	4	3,864
Fuel usage						
Biofuels	TJ	30,282	163	1	–	30,446
Fossil fuels	TJ	23,474	4,294	134	75	27,976
Total fuels	TJ	53,757	4,456	134	75	58,422
Water withdrawal						
Surface	Mm ³	96.2	0.0	–	–	96.2
Ground	Mm ³	12.9	0.3	0.0	–	13.2
Grid	Mm ³	0.8	1.4	0.1	0.0	2.3
Total water ¹	Mm ³	112.0	1.8	0.1	0.0	113.8
Discharges						
To air						
CO ₂ fossil direct	ktonnes	1,416	245	8	6	1,674
CO ₂ fossil indirect	ktonnes	157	124	20	1	301
CO ₂ biogenic	ktonnes	3,417	17	0	–	3,435
Dust	tonnes	207	3	0	0	211
NO _x as NO ₂	tonnes	3,032	85	3	4	3,124
SO _x as SO ₂	tonnes	827	35	1	3	867
To water						
Process water	Mm ³	52.6	0.7	0.0	–	53.3
Cooling water	Mm ³	50.4	0.1	0.0	–	50.5
COD ²	tonnes	24,846	1,727	–	–	26,573
BOD ²	tonnes	10,455	455	–	–	10,910
Total suspended solids ²	tonnes	4,612	405	–	–	5,017
Total Nitrogen ²	tonnes	431	30	–	–	460
Total Phosphorous ²	tonnes	62	1	–	–	63
Wastes						
Total non-hazardous wastes	tonnes	560,518	40,487	6,455	6,967	614,428
Landfill	tonnes	212,863	4,101	617	1,018	218,599
Recovery	tonnes	347,073	28,560	5,447	5,936	387,016
Other	tonnes	583	7,826	391	13	8,813
Hazardous wastes	tonnes	4,401	3,864	544	3	8,811

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 2020

Operations Total, The Americas

		Paper and Board Mills	Other Operations	Total Operations
Production	ktonnes	1,584	3,419	
Energy				
Electricity				
Co-generated	GWh	329	–	329
Self-generated	GWh	0	1	1
Hydro power	GWh	–	–	–
Solar electricity generated on site	GWh	–	1	1
Net grid supply	GWh	632	215	846
Total electricity	GWh	960	216	1,176
Fuel usage				
Biofuels	TJ	6,298	221	6,519
Fossil fuels	TJ	11,495	1,587	13,082
Total fuels	TJ	17,793	1,809	19,601
Water withdrawal				
Surface	Mm ³	24.6	0.1	24.7
Ground	Mm ³	3.5	0.3	3.8
Grid	Mm ³	1.2	0.4	1.7
Total water ¹	Mm ³	29.6	0.8	30.4
Discharges				
To air				
CO ₂ fossil direct	ktonnes	771	100	870
CO ₂ fossil indirect	ktonnes	191	74	265
CO ₂ biogenic	ktonnes	615	23	639
Dust	tonnes	169	3	172
NO _x as NO ₂	tonnes	1,236	40	1,276
SO _x as SO ₂	tonnes	1,486	43	1,529
To water				
Process water	Mm ³	26.6	0.1	26.7
Cooling water	Mm ³	0.27	0.00	0.27
COD ²	tonnes	13,449	78	13,527
BOD ²	tonnes	4,447	42	4,489
Total suspended solids ²	tonnes	2,698	60	2,758
Total Nitrogen ²	tonnes	436.3	4.1	440.4
Total Phosphorous ²	tonnes	23.5	0.2	23.7
Wastes				
Total non-hazardous wastes	tonnes	222,136	20,298	242,434
Landfill	tonnes	211,580	11,859	223,439
Recovery	tonnes	10,556	8,230	18,785
Other	tonnes	–	209	209
Hazardous wastes	tonnes	282	952	1,234

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 2020

Total Group Operations

		All Operations				
		2020	2019	2018	2017	2016
Energy						
Electricity						
Co-generated ¹	GWh	2,192	2,218	2,282	2,413	2,297
Self-generated	GWh	1	1	8	15	33
Hydro power	GWh	5	4	4	4	5
Solar electricity generated on site	GWh	1	–	–	–	–
Grid supply	GWh	2,841	2,876	2,356	2,344	2,422
Total electricity	GWh	5,040	5,099	4,650	4,778	4,757
Fuel usage						
Biofuels	TJ	36,965	37,119	36,580	37,158	36,014
Fossil fuels	TJ	41,058	40,735	40,469	43,623	43,802
Total fuels	TJ	78,023	77,854	77,049	80,781	79,816
Water withdrawal						
Surface	Mm ³	120.9	114.2	99.1	101.0	102.2
Ground	Mm ³	17.0	16.7	10.9	12.7	13.7
Grid	Mm ³	4.0	3.9	3.9	4.2	4.0
Total water ²	Mm ³	144.3	137.1	115.3	119.5	121.2
Discharges						
To air						
CO ₂ fossil direct	ktonnes	2,545	2,513	2,489	2,670	2,684
CO ₂ fossil indirect	ktonnes	566	808	652	647	691
CO ₂ biogenic	ktonnes	4,073	4,066	3,944	4,038	3,936
Dust	tonnes	383	596	631	666	590
NO _x as NO ₂	tonnes	4,400	4,971	5,072	5,385	5,313
SO _x as SO ₂	tonnes	2,395	2,237	2,694	2,569	3,034
To water						
Process water	Mm ³	80.0	76.2	74.0	76.4	77.1
Cooling water	Mm ³	50.8	49.2	29.7	30.2	33.9
COD ³	tonnes	40,100	42,015	41,316	40,425	41,794
BOD ³	tonnes	15,399	17,449	15,022	14,988	14,326
Total suspended solids ³	tonnes	7,775	7,898	8,004	8,756	8,596
Total Nitrogen ³	tonnes	901	960	1,228	1,374	983
Total Phosphorous ³	tonnes	87	107	224	89	126
Wastes						
Total non-hazardous wastes	tonnes	856,862	903,341	853,599	851,241	847,521
Landfill	tonnes	442,038	539,450	519,000	504,522	487,186
Recovery	tonnes	405,801	350,287	323,045	325,585	347,328
Other	tonnes	9,022	13,604	11,553	21,133	13,007
Hazardous wastes	tonnes	10,046	9,655	10,614	8,242	6,826

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

	2020	2019	2018	2017	2016
Social citizenship (full-time employees)					
Total number of employees ¹	46,685	46,237	44,959	46,418	45,314
of whom female (%) ²	19%	19%	19%	19%	18%
Employees leaving the company ³	4,017	4,842	6,224	1,666	1,687
of whom resignation and retirement (%)	64%	64%	58%	74%	64%
Employees joining the company ³	4,189	5,038	6,675	2,318	2,054
Age distribution (%)					
<20 years	1%	1%	1%	1%	1%
21-30 years	16%	17%	17%	17%	17%
31-40 years	25%	24%	24%	25%	25%
41-50 years	27%	28%	28%	29%	29%
51-60 years	26%	25%	25%	24%	24%
>60 years	5%	5%	5%	4%	4%
Employees turnover (%)	9.8%	11.7%	15.5%	4.0%	4.1%
Length of service, above 11 years (%)	47%	48%	49%	49%	50%
Female in management (%)	22%	21%	19%	20%	19%
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	490 employees took parental leave and 401 returned from parental leave
Average training hours per employee	15	22	24	26	20
Health and Safety					
Lost time accidents (LTA)	232	325	321	327	352
Contractor lost time accidents (CLTA)	37	46	48	30	45
Days lost due to accidents (DLA)	9,413	11,177	10,683	11,711	11,166
Accident severity rate (ASR) (%)	11.19%	13.15%	12.65%	13.88%	13.43%
Frequency rate (FR)	0.28	0.38	0.38	0.39	0.42
Total Recordable Injury Rate ⁴	0.60	0.84	1.01		
Number of Restricted Workday Cases (RWC) (SK Employees) ⁵	104	135			
Number of Medical Treatment Cases (MTC) (SK Employees) ⁵	165	253			
Total Recordable Injuries (LTA/RWC/MTC) ⁵	501	713			
Fatalities					
Own employees	0	0	0	2	1
(Sub) contractors	2	3	0	0	1

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. This has led to an increase in the joiners and leavers data compared with 2017.

4 New indicator since 2018.

5 New indicator since 2019.

Sourcing Data

Sourcing and Sustainable Fibre Data

	2020	2019	2018	2017	2016
Sourcing data					
Number of audit activities					
Suppliers of key materials	21	35	21	51	55
Tactical and other suppliers	25	77	53	60	30
Satisfactory scores					
Suppliers of key materials	20	29	20	45	52
Tactical and other suppliers	24	65	43	46	22
Sustainable fibre					
Wood supplied from certified forests ¹	57.3%	58%	55%	57%	59%
Wood supplied from non-controversial sources ¹	42.7%	42%	45%	43%	41%
Paper produced as certified ¹	92.7%	93%	91%	91%	91%
Packaging sold as certified ¹	93.8%	92.1%	88.4%	88.0%	74.0%
External papers purchased through CoC certified supply chains ¹	99.2%	98.9%	99.5%	98.5%	²
Recycled fibres in global production	75.4%	75.8%	74.5%	74.4%	74.0%

Notes

¹ FSC, PEFC or SFI CoC certified and FSC Controlled Wood.

² Data not assured.

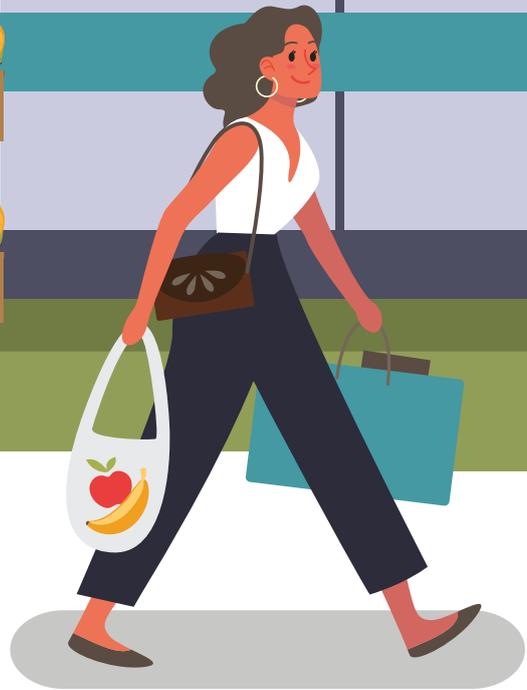
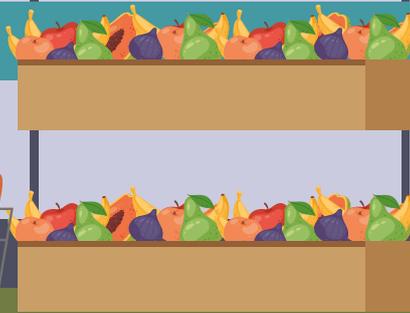
Supplementary information



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supermarket



About this Report

The information in this report covers the international activities of the Smurfit Kappa Group for the calendar year 2020 and also includes some information for early 2021, where mentioned specifically.

Acquisitions in 2020

No acquisitions were completed during 2020.

Smurfit Kappa applies a two-year integration process for acquired operations. Third-party certified management systems as required by the Group will be put in place within this period by these operations. The operations start to report about these systems immediately after their certification. This process has the greatest effect on the certified Chain of Custody related reporting.

Acquisitions and Divestments in 2021

No acquisitions and/or divestments were completed in 2021 until the date of this report.

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 data from all its manufacturing operations that were operational at the end of 2020.

No significant changes in the scope, boundary and measurement methods were applied to the report compared with previous years.

Our targets are 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.

The reporting of employee and Health and Safety data reflects the situation at the end of 2020.

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) 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 for Climate-related Financial Disclosures (TCFD). Following on from that, this is the Group's first year to report in line with those recommendations and we expect this to develop and evolve over time (see page 94). 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. In this report, the Group initiates its response to the relevant SASB criteria (see page 95).

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. 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 99-103.

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 104.

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	2-3
GRI 102	GRI 102:3	Location of headquarters	SDR	back cover
GRI 102	GRI 102:4	Location of operations	SDR/AR	2-3/4-5
GRI 102	GRI 102:5	Ownership and legal form	AR	64-104
GRI 102	GRI 102:6	Markets served	SDR/Website	2-3
GRI 102	GRI 102:7	Scale of the organisation	SDR/AR	2-3/2-5
GRI 102	GRI 102:8	Information on employees and other workers	SDR/AR	46-61, 84, 88/52-63
GRI 102	GRI 102:9	Supply chain	SDR	10-11, 64-65, 69-71, 85
GRI 102	GRI 102:10	Significant changes to the organisation and its supply chain	SDR/AR	88/122-126
GRI 102	GRI 102:11	Precautionary Principle or approach	AR	32-35, 68
GRI 102	GRI 102:12	External initiatives	SDR	1, 62-69
GRI 102	GRI 102:13	Membership of associations	SDR	1, 68-69
Strategy				
GRI 102	GRI 102:14	Statement from senior decision-maker	SDR	4-7
GRI 102	GRI 102:15	Key impacts, risks, and opportunities	SDR	1, 4-5, 9, 20-23, 24-71
Ethics and integrity				
GRI 102	GRI 102:16	Values, principles, standards, and norms of behaviour	SDR/AR	68-69/68-72
GRI 102	GRI 102:17	Mechanisms for advice and concerns about ethics	SDR/Website: Whistleblower policy/AR	52, 68-69/63
Governance				
GRI 102	GRI 102:18	Governance structure	AR	64-104
GRI 102	GRI 102:19	Delegating authority	SDR	68-69
GRI 102	GRI 102:20	Executive-level responsibility for economic, environmental, and social topics	SDR	68-69
GRI 102	GRI 102:21	Consulting stakeholders on economic, environmental, and social topics	SDR/AR	18-19/40-43
GRI 102	GRI 102:22	Composition of the highest governance body and its committees	AR	64-104
GRI 102	GRI 102:23	Chair of the highest governance body	AR	64-67
GRI 102	GRI 102:24	Nominating and selecting the highest governance body	AR	64-104
GRI 102	GRI 102:25	Conflicts of interest	AR	68-69
GRI 102	GRI 102:26	Role of highest governance body in setting purpose, values, and strategy	AR	64-104
GRI 102	GRI 102:27	Collective knowledge of highest governance body	AR	68-69
GRI 102	GRI 102:28	Evaluating the highest governance body's performance	AR	69
GRI 102	GRI 102:29	Identifying and managing economic, environmental, and social impacts	SDR	20-21, 68-69
GRI 102	GRI 102:30	Effectiveness of risk management processes	AR	32-35
GRI 102	GRI 102:31	Review of economic, environmental, and social topics	SDR	68 – The Sustainability Committee of the Board met five times in 2020
GRI 102	GRI 102:32	Highest governance body's role in sustainability reporting	SDR/AR/WEBSITE	68-69/68, 100-101
GRI 102	GRI 102:33	Communicating critical concerns	SDR/AR	68/68-72
GRI 102	GRI 102:34	Nature and total number of critical concerns	SDR	68-69
GRI 102	GRI 102:35	Remuneration policies	AR	76-78
GRI 102	GRI 102:36	Process for determining remuneration	AR	76-78
GRI 102	GRI 102:37	Stakeholders' involvement in remuneration	AR	76
GRI 102	GRI 102:38	Annual total compensation ratio	AR	76-78
GRI 102	GRI 102:39	Percentage increase in annual total compensation ratio	AR	91-92

GRI Index continued

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
Stakeholder engagement				
GRI 102	GRI 102:40	List of stakeholder groups	SDR/AR	18-19/40-41
GRI 102	GRI 102:41	Collective bargaining agreements	SDR	52
GRI 102	GRI 102:42	Identifying and selecting stakeholders	SDR/AR	18-19/40-41
GRI 102	GRI 102:43	Approach to stakeholder engagement	SDR/AR	18-19/40-41
GRI 102	GRI 102:44	Key topics and concerns raised	SDR	21, 25-27, 47-49, 63-65
Reporting practices				
GRI 102	GRI 102:45	Entities included in the consolidated financial statements	AR	176-177
GRI 102	GRI 102:46	Defining report content and topic boundaries	SDR	21, 25-27, 47-49, 63-65, 88
GRI 102	GRI 102:47	List of material topics	SDR	20-21
GRI 102	GRI 102:48	Restatements of information	SDR	88
GRI 102	GRI 102:49	Changes in reporting	SDR	88
GRI 102	GRI 102:50	Reporting period	SDR	The report covers the period calendar year 2020
GRI 102	GRI 102:51	Date of most recent report	SDR	Published 29 April 2020
GRI 102	GRI 102:52	Reporting cycle	SDR	Annual, 88
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	88
GRI 102	GRI 102:55	GRI content index	SDR	89-93
GRI 102	GRI 102:56	External assurance	SDR	104
GRI 103: management approach				
Reporting practices				
GRI 103	GRI 103:1	Explanation of the material topic and its boundary	SDR	25-27, 47-49, 63-65
GRI 103	GRI 103:2	The management approach and its components	SDR/AR	68/100
GRI 103	GRI 103:3	Evaluation of the management approach	SDR/AR	68/100
Category: economic				
GRI 201: economic performance				
GRI 201	GRI 201:1	Direct economic value generated and distributed	AR	2-5
GRI 201	GRI 201:2	Financial implications and other risks and opportunities due to climate change	SDR/AR	25-29/32-35, 50-51
GRI 201	GRI 201:3	Defined benefit plan obligations and other retirement plans	SDR/AR	57, 68-69/150-154
GRI 201	GRI 201:4	Financial assistance received from government	SDR	69
GRI 202: market presence				
GRI 202	GRI 202:1	Ratios of standard entry-level wage by gender compared with local minimum wage	SDR	57
GRI 202	GRI 202:2	Proportion of senior management hired from the local community	SDR	52
GRI 203: indirect economics impacts				
GRI 203	GRI 203:1	Infrastructure investments and services supported	AR	118-119, 159
GRI 203	GRI 203:2	Significant indirect economic impacts	AR	32-35
GRI 204: procurement practices				
GRI 204	GRI 204:1	Proportion of spending on local suppliers	SDR	70-71
GRI 205: anti-corruption				
GRI 205	GRI 205:1	Operations assessed for risks related to corruption	SDR/AR	52, 68/35 – Our Code of Conduct covers anti-corruption
GRI 205	GRI 205:2	Communication and training about anti-corruption policies and procedures	SDR/AR	68/48 – Our Code of Conduct covers the items of this criteria
GRI 205	GRI 205:3	Confirmed incidents of corruption and actions taken	SDR	68 – Our Code of Conduct covers the items of this criteria

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 206: anti-competitive behaviour				
GRI 206	GRI 206:1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	SDR/AR	68/35 – Our Code of Conduct covers the items of this criteria.
GRI 207: tax				
GRI 207	GRI 207:1	Approach to tax	SDR	69
GRI 207	GRI 207:2	Tax governance, control, and risk management	SDR	69
GRI 207	GRI 207:3	Stakeholder engagement and management of concerns related to tax	SDR	69
GRI 207	GRI 207:4	Country-by-country reporting	SDR	69
Category: environmental				
GRI 301: materials				
GRI 301	GRI 301:1	Materials used by weight or volume	SDR	74-75
GRI 301	GRI 301:2	Recycled input materials used	SDR	34-35, 74-75
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	27, 30-33, 82, 99
GRI 302	GRI 302:2	Energy consumption outside of the organisation	SDR	32-33, 82, 99
GRI 302	GRI 302:3	Energy intensity	SDR	31, 76-82
GRI 302	GRI 302:4	Reduction of energy consumption	SDR	30-32, 76, 82
GRI 302	GRI 302:5	Reductions in energy requirements of products and services	SDR	31, 33
GRI 303: water				
GRI 303	GRI 303:1	Interactions with water as a shared resource	SDR	38-41
GRI 303	GRI 303:2	Management of water discharge-related impacts	SDR	25-27, 38-41
GRI 303	GRI 303:3	Water withdrawal	SDR	39, 74-82
GRI 303	GRI 303:4	Water discharge	SDR	39, 74-82
GRI 303	GRI 303:5	Water consumption	SDR	38-41, 74-82
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	35-37
GRI 304	GRI 304:2	Significant impacts of activities, products, and services on biodiversity	SDR	35-37
GRI 304	GRI 304:3	Habitats protected or restored	SDR/Website	35-37
GRI 304	GRI 304:4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SDR/Website	35-37
GRI 305: emissions				
GRI 305	GRI 305:1	Direct (Scope 1) GHG emissions	SDR	31-32, 74-79
GRI 305	GRI 305:2	Energy indirect (Scope 2) GHG emissions	SDR	76-82
GRI 305	GRI 305:3	Other indirect (Scope 3) GHG emissions	SDR	32-33
GRI 305	GRI 305:4	GHG emissions intensity	SDR	5, 9, 19, 24-25, 27, 32
GRI 305	GRI 305:5	Reduction of GHG emissions	SDR	5, 9, 19, 24-25, 27, 31-33
GRI 305	GRI 305:6	Emissions of ozone-depleting substances (ODS)	SDR	SO _x , NO _x , 76-79
GRI 305	GRI 305:7	Nitrogen oxides (NO _x), sulphur oxides (SO _x), and other significant air emissions	SDR	76-79

GRI Index continued

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 306: effluents and waste				
GRI 306	GRI 306:1	Water discharge by quality and destination	SDR	76-82
GRI 306	GRI 306:2	Waste by type and disposal method	SDR	76-82
GRI 306	GRI 306:3	Significant spills	SDR	No significant spills in 2020
GRI 306	GRI 306:4	Transport of hazardous waste	SDR	76-79
GRI 306	GRI 306:5	Water bodies affected by water discharges and/or runoff	Website	www.smurfitkappa.com/sustainability/performance
GRI 307: environmental compliance				
GRI 307	GRI 307:1	Non-compliance with environmental laws and regulations	SDR	68
GRI 308: supplier environmental assessment				
GRI 308	GRI 308:1	New suppliers that were screened using environmental criteria	SDR	70-71, 85
GRI 308	GRI 308:2	Negative environmental impacts in the supply chain and actions taken	SDR	70-71, 85
Category: social				
GRI 401: employment				
GRI 401	GRI 401:1	New employee hires and employee turnover	SDR	84
GRI 401	GRI 401:2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SDR	57
GRI 401	GRI 401:3	Parental leave	SDR	84
GRI 402: labour/management relations				
GRI 402	GRI 402:1	Minimum notice periods regarding operational changes	SDR	52
GRI 403: occupational Health and Safety				
GRI 403	GRI 403:1	Occupational Health and Safety Management System	SDR	58-59
GRI 403	GRI 403:2	Hazard identification, risk assessment, and incident investigation	SDR	58-59, 84
GRI 403	GRI 403:3	Occupational health services	SDR	58-59
GRI 403	GRI 403:4	Worker participation, consultation, and communication on occupational Health and Safety	SDR	52, 54-58
GRI 403	GRI 403:5	Worker training on occupational Health and Safety	SDR	58-59
GRI 403	GRI 403:6	Promotion of worker health	SDR	13, 51, 58-59
GRI 403	GRI 403:7	Prevention and mitigation of occupational Health and Safety impacts directly linked by business relationships	SDR	58-59
GRI 403	GRI 403:8	Workers covered by an occupational Health and Safety management system	SDR	58-59, 83-84
GRI 403	GRI 403:9	Work-related injuries	SDR	58-59, 84
GRI 403	GRI 403:10	Work-related ill health	SDR	58-59, 84
GRI 404: training and education				
GRI 404	GRI 404:1	Average hours of training per year per employee	SDR	84
GRI 404	GRI 404:2	Programmes for upgrading employee skills and transition assistance programmes	SDR	51, 54, 56-57
GRI 404	GRI 404:3	Percentage of employees receiving regular performance and career development reviews	SDR	51, 54, 56-57
GRI 405: diversity and equal opportunity				
GRI 405	GRI 405:1	Diversity of governance bodies and employees	SDR/AR	52, 55/99
GRI 405	GRI 405:2	Ratio of basic salary and remuneration of women to men	SDR	57
GRI 406: non-discrimination				
GRI 406	GRI 406:1	Incidents of discrimination and corrective actions taken	SDR	52, 55, 68
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	52, 68-71

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 408: child labour				
GRI 408	GRI 408:1	Operations and suppliers at significant risk for incidents of child labour	SDR	52, 68, 70-71
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	52, 70-71
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 2020
GRI 412: human rights assessment				
GRI 412	GRI 412:1	Operations that have been subject to human rights reviews or impact assessments	SDR	52
GRI 412	GRI 412:2	Employee training on human rights policies or procedures	SDR	SDR 2014 p26
GRI 412	GRI 412:3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	SDR	52
GRI 413: local communities				
GRI 413	GRI 413:1	Operations with local community engagement, impact assessments, and development programmes	SDR	18-19, 46-49, 60-61
GRI 413	GRI 413:2	Operations with significant actual and potential negative impacts on local communities	SDR	18-19, 46-49, 60-61
GRI 414: supplier social assessment				
GRI 414	GRI 414:1	New suppliers that were screened using social criteria	SDR	70-71
GRI 414	GRI 414:2	Negative social impacts in the supply chain and actions taken	SDR	64-65, 70-71, 85
GRI 415: public policy				
GRI 415	GRI 415:1	Political contributions	SDR	68-69
GRI 416: customer Health and Safety				
GRI 416	GRI 416:1	Assessment of the Health and Safety impacts of product and service categories	SDR	69
GRI 416	GRI 416:2	Incidents of non-compliance concerning the Health and Safety impacts of products and services	SDR	69
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	68-71
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	68-69

* 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 2020 SDR 2020 CDP Climate Change response 2020	AR: 32-33 SDR 2020: 68-69 CDP: Section C.1 Governance
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	AR 2020 SDR 2020 CDP Climate Change response 2020	AR: 32-33 SDR 2020: 68-69 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.	CDP Climate Change response 2020	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.	CDP Climate Change response 2020	CDP: Section C.2 Risk and Opportunities and Section 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.	CDP Climate Change response 2020	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 2020 CDP Climate Change response 2020	AR: 32-33 CDP: Section C.2 Risk and Opportunities
	b) Describe the organisation's processes for managing climate-related risks.	AR 2020 SDR 2020 CDP Climate Change response 2020	AR: 32-33 SDR 2020: 28-33 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 2020	AR: 32-35
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 2020 SDR 2020 CDP Climate Change response 2020	AR: 31, 50-51 SDR 2020: 25-27, 30-33, 74-82 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 2020 SDR 2020 CDP Climate Change response 2020	AR: 31, 50-51 SDR 2020: 30-33, 74-82 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 2020 SDR 2020 CDP Climate Change response 2020	AR: 31, 50-51 SDR 2020: 26-27, 30-33 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	32, 74-79
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	30-33
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.	74-79
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	74-79
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	38-41
RR-PP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	SDR	38, 40
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	34-35, 85
RR-PP-430a.2	Amount of recycled and recovered fibre procured	SDR	34-35, 85

Business in the Community, Ireland

For the last 14 years, Smurfit Kappa Group has been reporting their sustainability performance. *Delivering a Better Tomorrow*, the Group's 2020 Sustainable Development Report is undoubtedly their best to date.

The qualitative and quantitative information and data is comprehensive; a range of case studies highlight examples of significantly innovative practices; further ambitious targets have been set; the report has been compiled according to best practice standards in sustainability reporting and is externally assured by KPMG in accordance with the comprehensive level of the GRI Standard.

Most notable however is that the confidence in the tone and language used, could only come from a company who has placed the commitment to sustainability at the heart of their business, where end to end sustainability is the business strategy. The Smurfit Kappa strengths of the circular business model, health and safety, stakeholder engagement and the ability to innovate are emphasised even more when challenged by a global pandemic and when the urgent need to mitigate climate change has become the issue of the day.

Smurfit Kappa is one of the largest integrated manufacturers of paper-based packaging solutions in the world. They are the leading provider of sustainable packaging in how they integrate sustainability into the fabric of their operations. They operate in 35 countries, have 65,000 customers, employ 46,000 people, manage 356 production sites, and in 2020, generated a revenue of €8.5 billion.

Governance and Strategy

Smurfit Kappa aligns economic goals with social, community and environmental responsibilities. Financing has been aligned with their sustainability strategy by incorporating the key sustainability performance indicators in the financing arrangements with their banking consortium.

Smurfit Kappa's sustainable growth ambition is based on the three pillars of Planet, People and Impactful Business. Since 2019, Smurfit Kappa has had a permanent sub-committee of the Board on sustainability whose role it is to align the Group's sustainability strategy with global best practice to *generate sustainable value for all stakeholders*: customers, investors, employees, suppliers and communities. The commitments to continuous improvement are clearly conveyed, with specific targets set. Where relevant, targets are also aligned with the UN 2030 Sustainable Development Goals and a detailed description is given of how Smurfit Kappa impacts, contributes to and supports the delivery of the Goals.

Notably, Smurfit Kappa is now reporting in line with the recommendations of the Task Force on Climate-related Financial Disclosure, will have their CO₂ target validated by the Science Based Target Initiative and has started reporting in line with the Sustainable Accounting Standards Board criteria.

Stakeholder Engagement and Materiality

Smurfit Kappa continuously engages with stakeholders and it is evident this is key to their ongoing success. Their commitment to ensuring ongoing dialogue with customers, investors, employees, suppliers and communities supports their ability to identify additional ways to expand their circular business model and innovate. Their approach to engagement and materiality assessment is well described on pages 19-21. We noted that in 2020, their materiality assessment was evaluated against the impact of COVID-19 on account of its relevance to the Health and Safety priority.

The 'Speak-Up' platform, introduced in 2019 and available 24/7/365 allows all stakeholders to report any issue or instance of wrongdoing, guaranteeing user confidentiality and assurance of non-retaliation. We were interested to see that a three-fold increase in reporting was the result in 2020 and of the 53 cases reported, six were substantiated and actions taken.

Climate Change Mitigation

To address 'the most pressing issue of our time', Smurfit Kappa is intent on reducing CO₂ emissions throughout the value chain by increasing energy efficiency, using renewable energy, leveraging expertise and technological capability to lower customer carbon footprints and decrease supply chain emissions via transport optimisation.

We noted that Smurfit Kappa are the first of their peers to target net zero carbon emissions by 2050. Their new 2030 carbon emission reduction target is 55% (up from 40%) in line with the Paris Agreement objectives. Already, Smurfit Kappa has achieved a 37.3% reduction in fossil fuel emission intensity since 2005.

On account of the largest contributor to their Scope 3 GHG emissions being in the transport of raw materials, intermediate products and the packaging delivered to customers, Smurfit Kappa is focusing on decarbonising the transport operations for paper inbound and outbound transportation in Europe by leveraging lower emission transport modes, increasing operational efficiency (e.g. increasing load fill and reducing transport distances between source and destination) and working with third party transport providers to mutually set targets to maximise fuel efficiency.

Circular Economy and Supporting Customer Objectives

Smurfit Kappa is inspirational in how it uses circular economy practices that support their customers' objectives on sustainability. Their Better Planet Packaging initiative is well described on pages 66-67. Using renewable, recyclable, recycled and bio-degradable materials, combined with responsible production processes, Smurfit Kappa can create bespoke packaging solutions that in turn helps customers optimise efficiencies, minimise waste and more easily attain their goals on improved sustainability performance.

We very much appreciate how sustainability is designed into all stages of the life cycle of their packaging, from the sustainable raw materials used to where by-products such as wood bark are used as biofuel and where some water treatment sludges become soil improvers in road construction.

In addition, Smurfit Kappa collaborates with customers to determine the carbon footprint of the packing lifecycle. Customers are provided with the ability to track the carbon footprint of every box so they can measure and reduce their own supply chain emissions.

Innovation

In a detailed report such as this, it is interesting to read examples of practices that bring to life Smurfit Kappa's circular business model and support the improved supply chain management of customers. These include where:

- 1 The Smurfit Kappa Saillat paper mill has partnered with a French energy company to create an innovative combined hydrogen storage cell and turbine. This mill will be the first in the world to generate and store 'green' electricity with zero carbon emissions.
- 2 The TopClip designed for Grolsch will remove 100,000 kg of plastic annually, improve functionality and allow for greater ease of handling.
- 3 A circular water treatment solution in Smurfit Kappa Barbosa, Colombia is removing 75% of water contaminants for conversion from sludge into biogas to produce 'green' electricity.
- 4 Topstar, a major supplier of office furniture in Germany is now better able to meet customer needs while increasing recycling of waste cardboard, by shredding it to use as a packing material, reducing transport miles by 90% and carbon emissions by 99%.

Diversity and Inclusion

Smurfit Kappa's commitment to inclusion, diversity and belonging is defined as 'where everyone has a real sense of belonging and can be their authentic selves at work every day'. The purpose of their new 'EveryOne' programme is to celebrate the value of the diversity in culture, perspective, leadership and innovative thinking and we noted the strategic alliances made with the Valuable 500 (on disability inclusion) and the Employers Network for Equality and Inclusion.

On gender equality, very much welcome is that at Board level, female representation is now at 33% (up from 17% in 2017) and the Group Executive Committee is at 31% (up from 0% in 2017!) demonstrating significant progress. Targets have been set to ensure female gender representation across the Group is above 30% by 2024 and to increase the number of women in management positions by 25%.

Human Rights

Sourcing materials, goods and services represents the single largest cost item for Smurfit Kappa (€4.7 billion in 2020). On account of this, sustainable and responsible sourcing is integral to the company's vision and strategy.

Suppliers are asked to sign a declaration for compliance with the Sustainable and Responsible Sourcing Policy, the Supplier Code of Conduct, the Chain of Custody Certification where applicable, the Modern Slavery Statement and the Statement on Controversial Sourcing of Raw Materials, Goods and Services. To date, 251 suppliers have signed this declaration, 67% of suppliers of Key Materials representing 77% of the relevant sourcing spread. Smurfit Kappa is keen to see these standards extended upstream in their suppliers' supply chain. In 2020, 46 suppliers were audited using the Smurfit Kappa Sustainable Sourcing audit programme on human rights, labour practices and environmental impact. Further details are provided on pages 70-71.

Conclusion

A lot of information is contained in this report and it is inspirational to see Smurfit Kappa deepening their approach to sustainability management and raising the ambition of what they would like to achieve across the full value chain. The journey to net zero and the setting of science-based targets will challenge all companies but based on their experience and achievements to date, we believe Smurfit Kappa will be ready to meet them, leveraging their circular economy proficiency, agility and expertise in stakeholder engagement, collaboration and innovation.

We recommend Smurfit Kappa further explores how to leverage its level of influence to advocate for increasing levels of ambition on carbon management and human rights due diligence and further raise its own ambitions on inclusion and local community action.

We look forward to the next edition.

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 89-93 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. 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.
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.

Glossary 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.
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.
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	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.
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.
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.

Glossary continued

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.
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.
Products and raw materials	
Containerboard	Papers and boards mainly used in the manufacture of corrugated board. They are made from virgin or recovered 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).
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.

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.
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 recovered 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.
Health and Safety	
Accident	An undesirable or unfortunate happening that occurs unintentionally and usually results in harm, injury, damage or loss.
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. $LTA \text{ frequency rate} = \frac{\text{number of LTA} \times 100,000}{\text{total number of hours worked}}$.
Lost time accident severity rate	Refers to the total number of days lost per 100,000 hours worked. $LTA \text{ severity rate} = \frac{\text{number of days lost} \times 100,000}{\text{total number of hours worked}}$.
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.
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) $\times 100,000 / \text{total hours worked by all Smurfit Kappa employees during the period covered}$.
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 readers of the Sustainable Development Report 2020 of Smurfit Kappa

Our Conclusion

We have reviewed the Sustainable Development Report 2020 (hereafter 'the Report') of Smurfit Kappa Group plc (hereafter 'Smurfit Kappa') based in Dublin, Ireland, for the year ended 31 December 2020. A review is aimed at obtaining a limited level of assurance.

Based on the procedures performed 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 performed 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 88-93 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.

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 summarised on pages 18-21 of the Sustainable Development Report 2020.

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 (virtual) visits to Nervión, Sangüesa, Cordovilla, Hexacomb Aoz, Parencó, Elcorr and Vandra in Spain and The Netherlands 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;
 - Performing an analytical review of the data and trends.
- 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.

We have communicated with the Board of Directors regarding, among other matters, the planned scope and timing of the review and significant findings that we identify during our review.

Amstelveen, 30 April 2021

KPMG Accountants N.V.
Danielle Landeszen Campen RA
Partner



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