

# Supplementary information





## Supplementary Information 132-152

About this Report	134
GRI Index	135
Task Force on Climate-related Financial Disclosures Index	141
SASB Index	142
Business in the Community, Ireland	143
UN Global Compact	145
Glossary	146
Assurance Report of the Independent Auditor	151

## About this Report

The information in this report covers the international activities of the Smurfit Kappa Group for the calendar year 2022 and also includes some information for early 2023, where mentioned specifically. In this report, we cover the business, environmental and social activities at our own operations, as well as our approach to sourcing and how we support our customers' sustainability targets.

The 2022 Sustainable Development Report will be the Group's first report published on the same day as its Annual Report.

### Acquisitions, Divestitures and Closures 2022

During 2022, Smurfit Kappa acquired three corrugated plants: in Argentina (Argencraft), in Brazil (PaperBox) and in the UK (Atlas Packaging). We also acquired a bag-in-box plant in Spain (Pusa Pack). Our Carson sheet plant was shut down and consolidated into the Baldwin Park corrugated plant in the US, in 2022.

Data on the acquired, opened, sold and closed sites during 2022 is not included for the 2022 data presented in this report. Our reporting policy states that the acquired and opened sites start to report on their first full year in the Group. The sold and closed sites report until the last reporting period in the Group, which for all environmental data is quarterly for paper and board mills and annually for all other operations. The health and safety data for all operations is reported quarterly and the social data annually.

Smurfit Kappa applies a two-year integration policy to the acquired operations. The new operations have to obtain certified management systems required by the Group within this period. The operations start to report about the management systems immediately after obtaining the certificate, issued by a third party. This has the greatest effect on the certified CoC-related reporting.

The Group announced on 20 March 2023 that it had completed its exit from the Russian market. The Group had announced its intention to exit the Russian market in an orderly manner on 1 April 2022 and subsequently entered into an agreement to sell its Russian operations to local management. Following the approval of the Russian authorities and the completion of all necessary administrative processes, the Group's operations in Russia were sold to local management. The operations included a bag-in-box facility and two corrugated plants in St Petersburg, and a corrugated plant in Moscow.

In March 2022, FSC suspended all FSC Certified trade of wood-based products in Russia and Belarus as a consequence of the illegal invasion by Russia of Ukraine. The decision made by the FSC impacted Smurfit Kappa's ability to sell any products as CoC certified from its Russian plants from the beginning of April 2022. As a result, Russian data has been excluded from the reported CoC-related KPIs from 1 April 2022 onwards. The decisions have no impact on any other KPIs for 2022.

### Topics, Issues and Targets

Smurfit Kappa fully recognises that sustainable development embraces social and business issues as well as environmental ones. These issues have been selected on the basis of input from various stakeholder groups. Smurfit Kappa collected and controlled data from all its manufacturing operations that were operational at the end of 2022.

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

Our targets are primarily based on specific emissions, measured against produced tonnes of paper rather than absolute values as the Group is in dynamic growth mode and we also take account of the acquisitions, and opening and closing of facilities. Other information is reported in absolute figures, unless otherwise stated.

We have changed our approach in calculating our charitable donations and we no longer include a monetised value for non-cash donations. This change leads to a restatement of the 2020 and 2021 charitable donations amounts due to the exclusion of monetised non-cash amounts. The impact of this change is a decrease of charitable donations from €7.7 million to €7.4 million in 2020 and from €4.9 million to €4.4 million in 2021.

### Reporting Guidelines, Data Collection

Among the various references used for the development and identification of baseline data included in this report, our reporting has been made in accordance with the GRI Standards, issued by the GRI which is one of the references used for the development and identification of baseline data included in this report.

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 TCFD. Following on from that, this is the Group's third year to report consistent with those recommendations and we expect this to develop and evolve over time (see page 141). The TCFD was established by the Financial Stability Board to develop recommendations in relation to climate-related disclosures that would inform investment and other financial decisions. The recommendations set out an important framework for understanding and analysing climate related risks.

The Sustainability Accounting Standards Board ('SASB') is an independent non-profit organisation that sets standards to guide the disclosure of financially material sustainability information by companies to their investors. The Group's response to the relevant SASB criteria can be found in this report (see page 142).

Every effort has been made to provide data that is as accurate as possible. Data relating to environmental factors is gathered through a Group-wide IT-based reporting system implemented in all Smurfit Kappa operations.

This tool is integrated into the Group's intranet, enabling sites to report their environmental data online according to GRI guidelines into a central database. We make continuous efforts to increase our data quality. This includes improving the user-friendliness of our data collection and developing mill individual reporting protocols. Our protocols and guidelines exceed the scope of the GRI guidelines and are part of the external assurance scope. For the most part, data is based on measured or metered quantities, or on best estimates based on industry knowledge and established calculation factors.

Our GHG emission reporting is based on CO<sub>2</sub> emissions, which is the only material GHG emission for Smurfit Kappa. CO<sub>2</sub> emissions calculations have been based on established fuel consumption and specific CO<sub>2</sub> emission factors. Definitions and calculations for the performance indicators can be found in the glossary on pages 146-150.

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. In 2022, we increased the frequency in reporting across more of our operations to support our reporting timelines. This forms part of the ongoing development of the Group's non-financial data reporting. In 2022, we implemented a new approach to data audits and they now follow the same approach as we use for all financial data.

### External Assurance

As outlined on page 16 the Sustainability Committee of the Board has the responsibility to provide strategic guidance and support to management in the implementation of the Smurfit Kappa Sustainability Strategy. The Group has appointed an external assurance provider, KPMG, to provide limited assurance on the data and the text of the report. This is the 14th Sustainable Development Report that has been externally assured. KPMG's assurance report can be found on page 151.

## GRI Index

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
<b>Universal Standard</b>				
<b>GRI 2: General Disclosures</b>				
<b>The Organisation and its Reporting Practices</b>				
GRI 2	GRI 2:1	Organisational details	SDR	Cover, inside front, back cover
GRI 2	GRI 2:2	Entities included in the organisation's sustainability reporting	SDR	134
GRI 2	GRI 2:3	Reporting period, frequency and contact point	SDR	134 This report covers the period 2022
GRI 2	GRI 2:4	Restatements of information	SDR	134
GRI 2	GRI 2:5	External assurance	SDR	151-152
<b>Activities and Workers</b>				
GRI 2	GRI 2:6	Activities, value chain and other business relationships	SDR	1-33
GRI 2	GRI 2:7	Employees	SDR Data partially incomplete based on gender and region breakdown.	Inside front, 71, 127
GRI 2	GRI 2:8	Workers who are not employees	SDR	127 (footnote)
<b>Governance</b>				
GRI 2	GRI 2:9	Governance structure and composition	AR	100-147
GRI 2	GRI 2:10	Nomination and selection of the highest governance body	AR	100-147
GRI 2	GRI 2:11	Chair of the highest governance body	AR	100-103
GRI 2	GRI 2:12	Role of the highest governance body in overseeing the management of impacts	AR	100-147
GRI 2	GRI 2:13	Delegation of responsibility for managing impacts	SDR	108-111
GRI 2	GRI 2:14	Role of the highest governance body in sustainability reporting	SDR/AR/website	108-111 / 108-109 / smurfitkappa.com/about/corporate-governance
GRI 2	GRI 2:15	Conflicts of interest	AR	108-109
GRI 2	GRI 2:16	Communication of critical concerns	SDR/AR	109-110 / 105-112
GRI 2	GRI 2:17	Collective knowledge of highest governance body	AR	69-72, 104, 108-110, 141-143
GRI 2	GRI 2:18	Evaluation of the performance of the highest governance body	AR	110-111
GRI 2	GRI 2:19	Remuneration policies	AR	117-127
GRI 2	GRI 2:20	Process to determine remuneration	AR	117-127
GRI 2	GRI 2:21	Annual total compensation ratio	AR Currently applies to Ireland only. We have started to voluntarily put together gender pay gap data in the UK and Ireland and build on a further disclosure. In our remuneration report we disclose the complete remuneration policies for our highest paid individuals (AR 120-136)	131
<b>Strategy, Policies and Practices</b>				
GRI 2	GRI 2:22	Statement of sustainable development strategy	SDR	12-19
GRI 2	GRI 2:23	Policy commitments	SDR/website	108-111 / smurfitkappa.com/about/corporate-governance/policies

## GRI Index continued

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
GRI 2	GRI 2:24	Embedding policy commitments	SDR/website	108-111 / smurfitkappa.com/about/corporate-governance/policies
GRI 2	GRI 2:25	Processes to remediate negative impacts	SDR/AR	77, 93 / 97, 112, 116
GRI 2	GRI 2:26	Mechanisms for seeking advice and raising concerns	SDR	77
GRI 2	GRI 2:27	Compliance with laws and regulations	SDR	77, 109, 128
GRI 2	GRI 2:28	Membership associations	SDR	3, 30-31, 108-111
<b>Stakeholder Engagement</b>				
GRI 2	GRI 2:29	Approach to stakeholder engagement	SDR/AR	30-31 / 42-48
GRI 2	GRI 2:30	Collective bargaining agreements	SDR	77
<b>GRI 3: Material Topics</b>				
<b>Disclosures on Material Topics</b>				
GRI 3	GRI 3:1	Process to determine material topics	SDR	32-33
GRI 3	GRI 3:2	List of material topics	SDR	32-33, 40-41, 74-75, 102-103
GRI 3	GRI 3:3	Management of material topics	SDR/partially omitted: Some of the reporting requirements are incomplete. A double materiality assessment commenced in 2022 which will support further disclosure of these requirements	32-33, 40-41, 74-75, 102-103
<b>Category: Economic</b>				
<b>GRI 201: Economic Performance</b>				
GRI 201	GRI 201:1	Direct economic value generated and distributed	AR	2-3, 6-7
GRI 201	GRI 201:2	Financial implications and other risks and opportunities due to climate change	SDR/AR/omitted 202:2 iii and v Incomplete data at the moment. The data will become available as our TCFD evolves	36-41 / 32-36, 68-85
GRI 201	GRI 201:3	Defined benefit plan obligations and other retirement plans	SDR/AR	85, 108-109 / 197-202
GRI 201	GRI 201:4	Financial assistance received from government	SDR	110-111
<b>GRI 202: Market Presence</b>				
GRI 202	GRI 202:1	Ratios of standard entry level wage by gender compared to local minimum wage	SDR	85
GRI 202	GRI 202:2	Proportion of senior management hired from the local community	SDR	76-77, 127
<b>GRI 203: Indirect Economics Impacts</b>				
GRI 203	GRI 203:1	Infrastructure investments and services supported	AR/SDR/ Omitted 203:1c: not applicable to our industry	
GRI 203	GRI 203:2	Significant indirect economic impacts	AR	32-36
<b>GRI 204: Procurement Practice</b>				
GRI 204	GRI 204:1	Proportion of spending on local suppliers	SDR	112-114, 128
<b>GRI 205: Anti-corruption</b>				
GRI 205	GRI 205:1	Operations assessed for risks related to corruption	SDR/AR	76-77, 109-110 / 36 Our Code of Conduct covers anti-corruption
GRI 205	GRI 205:2	Communication and training about anti-corruption policies and procedures	SDR/AR	76-77, 109-110 / 58 Our Code of Conduct covers anti-corruption
GRI 205	GRI 205:3	Confirmed incidents of corruption and actions taken	SDR	109-110 Our Code of Conduct covers anti-corruption

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
<b>GRI 206: Anti-competitive Behaviour</b>				
GRI 206	GRI 206:1	Legal actions for anti-competitive behaviour, anti-trust, and monopoly practices	SDR/AR/ Code of Conduct	76-77, 109-110 / 36, 58 Our Code of Conduct covers anti-corruption
<b>GRI 207: Tax</b>				
GRI 207	GRI 207:1	Approach to tax	SDR	110-111
GRI 207	GRI 207:2	Tax governance, control, and risk management	SDR	110-111
GRI 207	GRI 207:3	Stakeholder engagement and management of concerns related to tax	Website	smurfitkappa.com/ tax-strategy
GRI 207	GRI 207:4	Country-by-country reporting	Omitted: Data incomplete. We expect to have finalised our country-by-country data by 2025	
<b>Category: Environmental</b>				
<b>GRI 301: Materials</b>				
GRI 301	GRI 301:1	Materials used by weight or volume	SDR	51, 118-119, 128
GRI 301	GRI 301:2	Recycled input materials used	SDR	27, 51, 62, 118-119, 128
GRI 301	GRI 301:3	Reclaimed products and their packaging materials	Omitted: not applicable for our industry, SK produces packaging materials for other industries	
<b>GRI 302: Energy</b>				
GRI 302	GRI 302:1	Energy consumption within the organisation	SDR	42-45, 126
GRI 302	GRI 302:2	Energy consumption outside of the organisation	N/A	N/A
GRI 302	GRI 302:3	Energy intensity	SDR	43, 120-126
GRI 302	GRI 302:4	Reduction of energy consumption	SDR	42-45, 120-126
GRI 302	GRI 302:5	Reductions in energy requirements of products and services	Omitted: not applicable for our industry, SK produces packaging materials for other industries	
<b>GRI 303: Water and Effluents</b>				
GRI 303	GRI 303:1	Interactions with water as a shared resource	SDR	56-61
GRI 303	GRI 303:2	Management of water discharge-related impacts	SDR	36-41, 56-61
GRI 303	GRI 303:3	Water withdrawal	SDR We report as cubic metres (m <sup>3</sup> ) instead of megalitres 303:3b we report water withdrawal by individual mills	40-41, 56-60, 118-126, 150
GRI 303	GRI 303:4	Water discharge	SDR We report as cubic metres (m <sup>3</sup> ) instead of megalitres 303:4c we report water discharge by individual mills	40-41, 56-60, 118-126, 150
GRI 303	GRI 303:5	Water consumption	SDR	56-60, 118-126, 150
<b>GRI 304: Biodiversity</b>				
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	52-55, 130-131
GRI 304	GRI 304:2	Significant impacts of activities, products, and services on biodiversity	SDR	52-55
GRI 304	GRI 304:3	Habitats protected or restored	SDR	52-55, 130-131
GRI 304	GRI 304:4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	SDR	52-55, 130-131

## GRI Index continued

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
<b>GRI 305: Emissions</b>				
GRI 305	GRI 305:1	Direct (Scope 1) GHG emissions	SDR Smurfit Kappa reports based on CO <sub>2</sub> emissions. Other CO <sub>2</sub> emissions are not considered as material	42-45, 118-126, 134, 146-147
GRI 305	GRI 305:2	Energy indirect (Scope 2) GHG emissions	SDR Smurfit Kappa reports based on CO <sub>2</sub> emissions. Other CO <sub>2</sub> emissions are not considered as material	118-126, 134, 146-147
GRI 305	GRI 305:3	Other indirect (Scope 3) GHG emissions	SDR Smurfit Kappa reports based on CO <sub>2</sub> emissions. Other CO <sub>2</sub> equivalent emissions are not considered as material. Our current Scope 3 reporting covers emissions from transport and we are currently expanding our scope. Our biogenic CO <sub>2</sub> emissions are covered in our Scope 1 reporting	48-49
GRI 305	GRI 305:4	GHG emissions intensity	SDR Smurfit Kappa reports based on CO <sub>2</sub> emissions. Other CO <sub>2</sub> emissions are not considered material	4, 22, 34, 37, 40-42, 44-45
GRI 305	GRI 305:5	Reduction of GHG emissions	SDR Smurfit Kappa reports based on CO <sub>2</sub> emissions. Other CO <sub>2</sub> emissions are not considered material	4, 22, 34, 37, 40-45, 146-147
GRI 305	GRI 305:6	Emissions of ozone-depleting substances (ODS)	SDR Due to their specific relevance for our industry, Smurfit Kappa reports SO <sub>x</sub> and NO <sub>x</sub> as individual emissions	SO <sub>x</sub> , NO <sub>x</sub> , 120-126
GRI 305	GRI 305:7	Nitrogen oxides (NO <sub>x</sub> ), sulfur oxides (SO <sub>x</sub> ), and other significant air emissions	SDR	120-126, 147
<b>GRI 306: Waste</b>				
GRI 306	GRI 306:1	Waste generation and significant waste-related impacts	SDR	62, 64-65, 67, 118-126
GRI 306	GRI 306:2	Management of significant waste-related impacts	SDR	22-23, 26-29, 36-41, 62-67, 134
GRI 306	GRI 306:3	Waste generated	SDR	62, 64-65, 67, 118-126
GRI 306	GRI 306:4	Waste diverted from disposal	SDR	62, 67, 118-126
GRI 306	GRI 306:5	Waste directed to disposal	SDR	62, 67, 118-126
<b>GRI 308: Supplier Environmental Assessment</b>				
GRI 308	GRI 308:1	New suppliers that were screened using environmental criteria	SDR	112-115, 128
GRI 308	GRI 308:2	Negative environmental impacts in the supply chain and actions taken	SDR	112-115, 128
<b>Category: Social</b>				
<b>GRI 401: Employment</b>				
GRI 401	GRI 401:1	New employee hires and employee turnover	SDR Data partially incomplete based on age group, gender and region breakdown.	127
GRI 401	GRI 401:2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SDR	85
GRI 401	GRI 401:3	Parental leave	SDR Data partially incomplete based on age group, gender and region breakdown.	127
<b>GRI 402: Labour/Management Relations</b>				
GRI 402	GRI 402:1	Minimum notice periods regarding operational changes	SDR	76-77

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
<b>GRI 403: Occupational Health and Safety</b>				
GRI 403	GRI 403:1	Occupational health and safety management system	SDR	86-91, 127
GRI 403	GRI 403:2	Hazard identification, risk assessment, and incident investigation	SDR	86-91, 127
GRI 403	GRI 403:3	Occupational health services	SDR	86-91
GRI 403	GRI 403:4	Worker participation, consultation, and communication on occupational health and safety	SDR	76-77, 86-91
GRI 403	GRI 403:5	Worker training on occupational health and safety	SDR	86-91
GRI 403	GRI 403:6	Promotion of worker health	SDR	86-91
GRI 403	GRI 403:7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SDR	86-91
GRI 403	GRI 403:8	Workers covered by an occupational health and safety management system	SDR	86-91, 127, 129
GRI 403	GRI 403:9	Work-related injuries	SDR	86-91, 127
GRI 403	GRI 403:10	Work-related ill health	SDR	86-91, 127
<b>GRI 404: Training and Education</b>				
GRI 404	GRI 404:1	Average hours of training per year per employee	SDR	85, 127
GRI 404	GRI 404:2	Programs for upgrading employee skills and transition assistance programs	SDR	71-72, 78-79, 84-85
GRI 404	GRI 404:3	Percentage of employees receiving regular performance and career development reviews	Omitted: data not available. We are currently rolling out our HRIS which will transfer all performance reviews onto a digital system that enables us to collect the data in the coming years	
<b>GRI 405: Diversity and Equal Opportunity</b>				
GRI 405	GRI 405:1	Diversity of governance bodies and employees	SDR/AR	76-77, 80-82 / 104
GRI 405	GRI 405:2	Ratio of basic salary and remuneration of women to men	SDR Information currently available for Ireland and UK	85
<b>GRI 406: Non-discrimination</b>				
GRI 406	GRI 406:1	Incidents of discrimination and corrective actions taken	SDR	76-77, 80-82, 108-109
<b>GRI 407: Freedom of Association and Collective Bargaining</b>				
GRI 407	GRI 407:1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk	SDR	76-77, 108-115
<b>GRI 408: Child Labour</b>				
GRI 408	GRI 408:1	Operations and suppliers at significant risk for incidents of child labour	SDR	112
<b>GRI 409: Forced or Compulsory Labour</b>				
GRI 409	GRI 409:1	Operations and suppliers at significant risk for incidents of forced or compulsory labour	SDR	76-77, 112-115
<b>GRI 410: Security Practices</b>				
GRI 410	GRI 410:1	Security personnel trained in human rights policies or procedures	N/A	
<b>GRI 411: Rights of Indigenous Peoples</b>				
GRI 411	GRI 411:1	Incidents of violations involving rights of indigenous peoples	SDR	54-55, 76
<b>GRI 413: Local Communities</b>				
GRI 413	GRI 413:1	Operations with local community engagement, impact assessments, and development programs	SDR	20-21, 40, 54-55, 72, 74, 92-97
GRI 413	GRI 413:2	Operations with significant actual and potential negative impacts on local communities	SDR	30-31, 70-75, 92-97



## GRI Index continued

GRI Standard Number	Disclosure Number	Disclosure Title and Description	Source/Comment	Page(s)
<b>GRI 414: Supplier Social Assessment</b>				
GRI 414	GRI 414:1	New suppliers that were screened using social criteria	SDR	112-115
GRI 414	GRI 414:2	Negative social impacts in the supply chain and actions taken	SDR	100-101, 112-115, 128
<b>GRI 415: Public Policy</b>				
GRI 415	GRI 415:1	Political contributions	SDR	109-110
<b>GRI 416: Customer Health and Safety</b>				
GRI 416	GRI 416:1	Assessment of the health and safety impacts of product and service categories	SDR	111
GRI 416	GRI 416:2	Incidents of non-compliance concerning the health and safety impacts of products and services	SDR	111
<b>GRI 417: Marketing and Labelling</b>				
GRI 417	GRI 417:1	Requirements for product and service information and labelling	Omitted: not applicable for our industry. Our products are business to business and in general no such information is required	
GRI 417	GRI 417:2	Incidents of non-compliance concerning product and service information and labelling	Omitted: not applicable for our industry. Our products are business to business and in general no such information is required	
GRI 417	GRI 417:3	Incidents of non-compliance concerning marketing communications	SDR	108-115
<b>GRI 418: Customer Privacy</b>				
GRI 418	GRI 418:1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	SDR	109-113

## Task Force on Climate-related Financial Disclosures Index

Area	Recommended Disclosures	Source	Page(s)
<b>Governance</b>			
Disclose the organisation's governance around climate-related risks and opportunities.	a) Describe the Board's oversight of climate-related risks and opportunities.	AR 2022 SDR 2022 CDP Climate Change response 2022	AR: 32-33, 69-71 SDR: 108-111 CDP: Section C.1 Governance
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	AR 2022 SDR 2022 CDP Climate Change response 2022	AR: 32-33, 71-72 SDR: 108-111 CDP: Section C.1 Governance
<b>Strategy</b>			
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organisation has identified over the short, medium, and long term.	AR 2022 CDP Climate Change response 2022	AR: 73-81 CDP: Section C.2 Risk and Opportunities
	b) Describe the impact of climate-related risks and opportunities on the organisation's businesses, strategy, and financial planning.	AR 2022 SDR 2022 CDP Climate Change response 2022	AR: 73-81 SDR: 36-49 CDP: Section C.2 Risk and Opportunities and C.3 Business Strategy
	c) Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	AR 2022 CDP Climate Change response 2022	AR: 73-81 CDP: Section C.3 Business Strategy
<b>Risk Management</b>			
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 2022 CDP Climate Change response 2022	AR: 32-33, 82 CDP: Section C.2 Risk and Opportunities
	b) Describe the organisation's processes for managing climate-related risks.	AR 2022 SDR 2022 CDP Climate Change response 2022	AR: 32-33, 82 SDR: 36-49 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 2022	AR: 82
<b>Metrics and Targets</b>			
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 2022 SDR 2022 CDP Climate Change response 2022	AR: 31, 82-84 SDR: 40-49, 118-126 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 emissions, and the related risks.	AR 2022 SDR 2022 CDP Climate Change response 2022	AR: 31, 82-84 SDR: 42-49, 118-126 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 2022 SDR 2022 CDP Climate Change response 2022	AR: 31, 82-84 SDR: 40-49 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)
<b>Topic: Greenhouse Gas Emissions</b>			
RR-PP-110a.1	Gross global Scope 1 emissions	SDR	44-45, 118-126
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	42-49
<b>Topic: Air Quality</b>			
RR-PP-120a.1	Air emissions of the following pollutants: 1 NO <sub>x</sub> (excluding N <sub>2</sub> O); 2 SO <sub>x</sub> ; 3 Volatile organic compounds (VOCs); and 4 Particulate matter (PM), and (5) hazardous air 1. pollutants (HAPs)	SDR NO <sub>x</sub> , SO <sub>x</sub> , 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	118-126
<b>Topic: Energy Management</b>			
RR-PP-130a.1	1 Total energy consumed; 2 Percentage grid electricity; 3 Percentage from biomass; and 4 Percentage from other renewable energy	SDR	118-126
<b>Topic: Water Management</b>			
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	56-61
RR-PP-140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	SDR	58-59
<b>Topic: Supply Chain Management</b>			
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	50-51, 53, 128
RR-PP-430a.2	Amount of recycled and recovered fibre procured	SDR	50-51, 53, 128

## Business in the Community, Ireland

### External Commentary for Smurfit Kappa Sustainable Development Report 2022 Delivering the Future Together

#### Smurfit Kappa Group is a Leading Global Provider of Sustainable Packaging

Smurfit Kappa operates across 36 countries in Europe and the Americas, employs 48,000 people in over 350 production sites and revenue in 2022 was €12.8 billion.

In this Sustainable Development Report (their 16th) Smurfit Kappa conveys the global context in which the business is operating – the global population and inequality is rising; the need for a Just Society is pressing; water scarcity, deforestation and biodiversity loss is increasing; pollution of land and oceans is on the rise and the climate is changing.

It is in this context that Smurfit Kappa's company purpose – to create, protect and care – is placed centre stage. Their purpose informs their strategic business decisions, actions arising and denotes both the company culture and behaviour expected at all levels of the organisation.

The company operates an inspiring circular business model and this 2022 Report describes how Smurfit Kappa's economic goals are aligned with their social, community and environmental responsibilities. Company priorities are synthesised by three headings: Planet, People and Impactful Business.

#### Impactful Business

The goal of packaging is to protect and promote customer products, but the unique selling point ('USP') of paper-based packaging is that it is also 100% renewable, recyclable and biodegradable.

The USP of Smurfit Kappa is that they are also involved in all stages of the supply chain – from collecting and purchasing recovered paper, to growing and purchasing wood to supply the 'fibrous raw material' needed by their paper mills to produce the full range of paper that can be converted into an array of packaging options. It is on account of this that Smurfit Kappa's packaging products support their customers' own sustainability strategies by providing them with 'sustainable, circular and innovative packaging solutions'.

Working with Smurfit Kappa, Danone will be able to eliminate 798 tonnes of plastic per year for their Alpro brand (page 8). A Spanish drinks producer has been able to remove all bubble wrap and polystyrene to protect a single bottle during shipment by switching to a flexible, corrugated material which can be adapted to different bottle sizes and is widely recycled (page 9).

Smurfit Kappa's suite of tools also help to determine the carbon footprint of customers' packaging, providing CO<sub>2</sub> emissions data and other information to enable customer solutions to be fully optimised.

A particularly significant indication of how Smurfit Kappa is embedding sustainability and circularity into the company's capital structure is the recent publication of its first Green Bond Allocation and Impact Report detailing the use of the proceeds of its inaugural €1 billion dual-tranche Green Bond, issued in September 2021.

#### Planet

Smurfit Kappa runs an energy-intensive manufacturing business and it is to be expected that their environmental priorities are Climate Change, Forest, Water and Waste.

76% of Smurfit Kappa's raw material is recycled fibre with the remaining 24% coming from renewable Chain of Custody Certified wood.

Important too is the fact that their CO<sub>2</sub> emission targets were validated by the SBTi in 2021 and reporting is consistent with TCFD recommendations. In 2022, CO<sub>2</sub> emissions were reduced by 43.9% (since 2005), a strong indication the 55% reduction target by 2030 will be reached.

Since 2005, Smurfit Kappa has invested €994 million in 1) more efficient energy generation; 2) technologies to reduce the use of energy; and 3) technologies that recover energy. These investments have improved overall energy efficiency in the paper mill system by 20.6%.

Regarding the management of water, efforts are focused on continuing to decrease water in-take and further improve the quality of the water discharged from paper and board mills. Since 2005, Smurfit Kappa has invested €129 million in best practice water treatment systems, leading to a reduction of 36.9% Chemical Oxygen Demand.

Waste sent to landfill from paper mills has been reduced by 24% since 2013 and a target has been set to reduce waste to landfill intensity by 30% by 2025.

We noted that in a pioneering recycling programme, Smurfit Kappa recycled waste collected across 3,000 Walmart stores in Mexico - winning Smurfit Kappa the Award for Sustainable Supplier of the Year 2022.

As a sector leader, we encourage Smurfit Kappa to consider further data disclosures including metrics on emissions and water use per unit of product produced, as this will enable customers and investors to evaluate the progress of various products and compare them against competitors.

In an excellent example of Biodiversity and Ecosystem conservation, we learned that one third of the land Smurfit Kappa owns and manages in Colombia is dedicated to conservation. Working with local universities to understand the flora and fauna, some 3,000 species have been identified in both the natural and rehabilitated forests, some of which are endangered.

One of the endangered species now thriving in the Smurfit Kappa forests is the Andean Bear believed to have disappeared completely from the region. In 2022, Nutresa Group (a leading multinational food manufacturing company) presented Smurfit Kappa Colombia with an award for being an Exemplary Supplier in the area of Environmental and Social Sustainability.

#### People

We noted the 13.6% global reduction in the Total Recordable Injury Rate in 2022, from 2021.

The description of the new Guardian Angel Programme at Smurfit Kappa Querétaro also stood out. The purpose of this new programme is for 'employees to feel taken care of, listened to and always protected'. As Guardian Angel of the Month, a staff member walks the shop floor, talks to colleagues about safety and wellbeing and in doing this, is able to collect ideas and suggestions for improvements. This effort at listening and responding by making small changes is already showing improvements in the work environment and is increasing engagement.

Additionally, analysis of the comments submitted to the 2021 employee survey 'My Voice' has helped evolve the Smurfit Kappa HR strategy and identify key areas where employees want the company to do more e.g., provide a digital workplace with multi-lingual communication.

In response, Smurfit Kappa is now in the process of developing a Digital Employee Mobile App to give all colleagues, office and factory based, instant access to important communications and an enhanced

## Business in the Community, Ireland continued

employee experience in their respective language. Another outcome of the employee consultation has been the development of SK RISE – a programme to support the career development and personal aspirations of female employees, delivered by the Irish Management Institute.

Currently women comprise 38.5% of the Smurfit Kappa Board and 23.5% of management positions are held by women. A target is in place to have 25% female representation in management positions across the Group by 2024.

The 'Everyone Programme' has a goal to reduce discrimination at work and ensure Smurfit Kappa workplaces are more inclusive. An action being taken as a result of this goal is that Smurfit Kappa plants in Spain, in collaboration with the Red Cross, have started a programme to give training opportunities to single mums, immigrants, those over 45 and victims of gender violence.

Smurfit Kappa has been continuing to educate colleagues on the Code of Conduct and Speak Up Service launched in December 2019. In 2022, we noted that 80 cases were reported to the Speak Up service resulting in 29 corrective actions or improvements.

Regarding their Supply Chain, a key step in the onboarding of new suppliers includes the completion of a Declaration of Compliance with the Smurfit Kappa Sustainable and Responsible Sourcing Policy, Supplier Code of Conduct, Modern Slavery Statement and the Statement of the Controversial Sources of Raw Materials, Goods and Services. Relevant suppliers also must comply with the Sustainable Forestry and Fibre Sourcing Policy.

Suppliers are audited on human rights, labour practices and environmental impact. Ongoing monitoring of suppliers focuses on Argentina, Mexico, Colombia and Brazil, identified as higher risk countries for child labour in paper recovery.

Concerned about the communities in which they are located, Smurfit Kappa has donated €18.4 million to projects in the areas of Health, Education and Environmental Protection since 2020. In 2022, €2.4 million was donated to the Ukraine Appeal, to fund initiatives such as relocating and accommodating Smurfit Kappa employees from Ukraine. Funds were also provided through donations from the Smurfit Kappa Foundation in tandem with colleagues participating in fundraising activities across the globe.

### Leading the Way

Smurfit Kappa's governance structure on sustainability is described well on page 110. Good detail is also provided on how key stakeholders are engaged regarding the areas of circularity, inclusivity and innovation and how the issues deemed most important to both stakeholders and business operations are determined. We recommend including figures on stakeholder engagement frequency and numbers engaged. This is both relevant to the materiality assessment and, as a global organisation, it is critical to ensure broad coverage of the widest possible range of stakeholder views.

Smurfit Kappa's leadership in their sector is also demonstrated by their board membership of the Confederation of Europe Paper Industries ('Cepi'), the Europe Corrugated Packaging Association ('FEFCO') and the International Corrugated Case Association ('ICCA'). The company is also a signatory of environmental reporting and sustainability organisations including the CDP, the FSC, SBTi and the WBCSD. As a company that has been consistently named 'Industry Top Rated', it is imperative that Smurfit Kappa uses this leadership space to promote sector-wide transformation on social and environmental sustainability.

An assessment of the link between shareholder value and ESG would also support the foundation of how sustainability and economic value are interdependent.

We noted that Smurfit Kappa's strategic priorities are aligned with the UN Sustainable Development Goals and throughout this report, each progress update includes an update on the relevant SDG.

Consistent since 2009, the 2022 Smurfit Kappa Sustainable Development Report has been assured by an independent third-party assurance provider and the GRI Standards have been applied.

### Final Comment

Smurfit Kappa is clear that to tackle global challenges, a new way of thinking is required alongside the ability to innovate. Even though they have a strong sustainable business model (based on a product made with 100% renewable, recyclable and biodegradable primary raw material), business processes will need to continue to evolve to meet carbon emission, water and waste reduction targets utilising advancing technologies.

Alongside a relentless focus on business process continuous improvement and innovation, Smurfit Kappa has visibly increased their efforts on employee engagement, wellbeing and Inclusion, Diversity & Equality. We look forward to reading about the impact and outcome of this increased emphasis in future reports.

In 2022, the EU published the Corporate Responsibility Reporting Directive ('CSRD') the aim of which is to put sustainability and financial reporting on an equal footing.

Due to the nature of the business model, focus on circularity and experience in transparent reporting, Smurfit Kappa will be ideally placed to fulfil the requirements of the CSRD. However, the key difference will be the requirement of one report rather than two. Based on what we know of the work of Smurfit Kappa, they will find a way to do this well.

**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 135-140 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
<b>Human Rights</b>	
1 Businesses should support and respect the protection of internationally proclaimed human rights; and	2:9; 2:12-14; 2:19; 2:22-23; 3:1-3; 403:1,4; 405:1-2; 406:1; 407:1; 408:1; 409:1; 411:1; 412:1-3; 414:1-2; 418:1
2 Businesses should make sure that they are not complicit in human rights abuses.	2:23; 3:1-3; 406:1; 407:1; 408:1; 409:1; 411:1; 412:1
<b>Labour</b>	
3 Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	2:23; 2:26; 2:30; 3:1-3; 402:1; 403:1,4
4 Businesses should uphold the elimination of all forms of forced and compulsory labour;	2:23; 2:26; 2:30; 3:1-3; 406:1; 408:1; 409:1
5 Businesses should uphold the effective abolition of child labour; and	2:23; 3:1-3; 408:1; 409:1
6 Businesses should uphold the elimination of discrimination in respect of employment and occupation.	2:23; 2:30; 3:1-3; 401:2; 405:1-2; 406:1; 407:1
<b>Environment</b>	
7 Businesses are asked to support a precautionary approach to environmental challenges;	2:12-14; 2:22-23; 3:1-3; 201:2; 302:1; 303:1-2; 304:1; 304:3; 305:4-5; 306:1-2
8 Businesses should undertake initiatives to promote greater environmental responsibility; and	2:23; 3:1-3; 201:2; 301:1-2; 302:1; 302:3-5; 303:1-5; 304:1-4; 305:1-7; 306:1-5; 308:1-2
9 Businesses should encourage the development and diffusion of environmentally friendly technologies.	3:2-3; 201:2; 301:1-2; 302:3-5; 303: 1-5; 304:1-4; 305:4-5; 306:1-2
<b>Anti-corruption</b>	
10 Businesses should work against corruption in all its forms, including extortion and bribery.	2:5; 2:9; 2:19; 2:23; 2:26; 3:1; 3-3; 205:1-3; 413:2



# Glossary

## Climate Change, Energy and Air Emissions

<b>Bioeconomy</b>	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.
<b>Bioenergy</b>	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.
<b>Biofuels</b>	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.
<b>Biomass</b>	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.
<b>Black liquor</b>	Residue from pulping containing organic compounds (such as lignin). This residue is burnt to produce energy and to recover the chemicals.
<b>By-product</b>	Secondary or incidental products deriving from manufacturing process and are not the primary product. A by-product can be marketable.
<b>Carbon dioxide equivalent CO<sub>2</sub>-eq</b>	A measure used to compare the emissions from various greenhouse gases based upon their climate change potential (CCP). The CO <sub>2</sub> -eq carbon dioxide equivalent for other emissions is derived by multiplying the amount of the emission by the associated CCP factor.
<b>Carbon footprint</b>	Carbon released to the atmosphere during the life cycle of a product from cradle to grave.
<b>CDP</b>	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.
<b>CHP</b>	Combined Heat and Power: a combination of a boiler and a gas and/or steam turbine that simultaneously produces electricity and thermal energy (steam) by burning fuels. This system is considered to be the most efficient technology in industries using both steam and electricity. When mills sell part of their produced steam to an external party or have net electricity export (selling more to an external party than purchasing), the consumption of fuel and emissions reported for these mills is adjusted to report only that part used to produce paper. This adjustment is based on a reference heat boiler with an efficiency of 90%, which is also used by CEPI and the European Commission for EU ETS benchmark calculations. Electricity from a CHP is called co-generated electricity while all other internal generation is expressed as self-generated.
<b>CHP (outsourced)</b>	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.
<b>Climate change</b>	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.
<b>Co-generated electricity</b>	Electricity generated by a CHP system belonging to Smurfit Kappa or from an outsourced CHP system.
<b>CO<sub>2</sub> biogenic</b>	Carbon dioxide emitted when burning biofuels. This CO <sub>2</sub> is considered to be carbon neutral as it is removed from the atmosphere and stored in biomass within a short period of time.
<b>CO<sub>2</sub> fossil</b>	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).
<b>CO<sub>2</sub> indirect</b>	Fossil carbon dioxide generated externally in the production of electricity purchased from the grid. Source: IEA CO <sub>2</sub> Emissions from Fuel Combustion, OECD/IEA, Paris, 2016.
<b>Energy efficiency</b>	Energy efficiency is the goal to reduce the amount of energy required to provide products and services.
<b>Energy Union</b>	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.
<b>European Union Emissions Trading System – EU ETS</b>	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.
<b>Dust</b>	Particles coming from the combustion of fuels. Dust emissions are measured mainly by the mills. Where dust is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1. Ecoinvent is a life cycle inventory database for energy systems, materials, transports and chemicals.
<b>Fossil fuels</b>	Fuels originating from non-renewable resources (gas, oil, coal, peat and lignite).
<b>GHG emissions</b>	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.
<b>GJ</b>	Gigajoule, a unit of energy that generally applies to fuel. 1 gigajoule (GJ) = 1 billion joules = 10 <sup>9</sup> joules.

### Climate Change, Energy and Air Emissions continued

<b>Green electricity certificate</b>	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.
<b>Grid supply</b>	Electricity purchased from a national distribution network.
<b>GWh</b>	Unit of energy, generally applies to electricity. 1 GWh (GigaWatt hour) = 1 million kWh (kiloWatt hour).
<b>Net zero</b>	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.
<b>NO<sub>x</sub></b>	Mix of nitrogen oxides (NO and NO <sub>2</sub> ) calculated as NO <sub>2</sub> (nitrogen dioxide) coming from combustion of fuels. They can contribute to the acidification of soil and water. NO <sub>x</sub> emissions are measured mainly by the mills. Where NO <sub>x</sub> is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
<b>Paris Agreement</b>	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.
<b>Self-generated electricity</b>	Electricity generated by an electricity generator without recovery of steam.
<b>Sequestration</b>	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.
<b>SO<sub>x</sub></b>	Mix of sulphur oxides calculated as SO <sub>2</sub> coming from combustion of fuels. Sulphur dioxide contributes to the acidification of soil and water. SO <sub>x</sub> emissions are measured mainly by the mills. Where SO <sub>x</sub> is not measured (converting plants), emissions are calculated from fuel consumption using the emission factors listed in the Ecoinvent database version 2.1.
<b>PJ</b>	Petajoule, a unit of energy. 1 petajoule = 1000 terajoules = 10 <sup>15</sup> joules.
<b>TJ</b>	Terajoule, a unit of energy that generally applies to fuel. 1 terajoule = 1000 gigajoules = 10 <sup>12</sup> joules.
<b>21st Conference of the Parties – COP 21</b>	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

<b>Asociación de Corrugadores del Caribe Centro y Sur América (ACCCSA)</b>	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.
<b>CEPI</b>	CEPI, the Confederation of European Paper Industries. It is a non-profit organisation representing the European pulp and paper industry.
<b>EcoVadis</b>	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.
<b>ELCD</b>	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).
<b>ERT</b>	The European Round Table of Industrialists (ERT) is a forum bringing together around 60 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.
<b>ESG</b>	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.
<b>Ethibel</b>	The Ethibel Sustainability Index Excellence Europe lists 200 European companies that display the best performance in terms of corporate social responsibility.
<b>Euronext Vigeo</b>	The Euronext Vigeo indices comprise the highest-ranking listed companies as evaluated in terms of their performance in corporate social responsibility.
<b>FAO</b>	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.
<b>FEFCO. The European Federation of Corrugated Board Manufacturers</b>	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.
<b>FTSE4Good</b>	The FTSE4Good Index series is designed to measure the performance of companies demonstrating strong environmental, social and governance practices.



## Glossary continued

### Organisations continued

<b>Global Reporting Initiative (GRI)</b>	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.
<b>ICCA</b>	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.
<b>ILO</b>	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.
<b>Irish Business and Employers Confederation (IBEC)</b>	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.
<b>OECD</b>	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.
<b>SBTi</b>	The Science Based Targets initiative (SBTi) drives ambitious climate action in the private sector by enabling organisations to set science-based emissions reduction targets. The SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the World Wide Fund for Nature (WWF).
<b>SDGs</b>	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.
<b>SEDEX</b>	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.
<b>STOXX Global ESG Leaders</b>	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 Morningstar Sustainability. 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.
<b>Support the Goals</b>	Support the Goals is an initiative to reward businesses for supporting the UN Sustainable Development Goals. The simple rating system is a roadmap to guide businesses on how to improve
<b>TCFD. Task Force on Climate-Related Financial Disclosures:</b>	The Task Force on Climate-related Financial Disclosures is an industry-led effort, chaired by Michael Bloomberg, with 32 global expert members from the private sector. The Task Force's remit was to develop voluntary climate-related disclosures that could 'promote more informed investment, credit, and insurance underwriting decisions.' The TCFD recommendations describe information that companies should disclose to help investors, lenders, and insurance underwriters better understand how companies' oversee and manage climate-related risks and opportunities as well as the material risks and opportunities to which companies are exposed.
<b>UN 2030 Agenda</b>	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'.
<b>UN Global Compact's CEO Water Mandate</b>	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.
<b>WBCSD</b>	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.
<b>4evergreen</b>	4evergreen is a cross-industry alliance of over 100 members representing the entire lifecycle of fibre-based packaging, sharing expertise to develop tools and guidelines for an even more sustainable sector. The goal is to reach a 90% recycling rate for fibre-based packaging by 2030.

### Certifications: Forest and Other

<b>Deforestation</b>	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.
<b>FSC</b>	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.

### Certifications: Forest and Other continued

<b>FSSC 22000</b>	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.
<b>ISO 9001</b>	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of quality management.
<b>ISO 14001</b>	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of environmental management.
<b>ISO 50001 Energy Management Systems</b>	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.
<b>Non-controversial origin</b>	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.
<b>ISO 45001</b>	Scheme certified by independent third party that ensures that the operation certified applies internationally recognised standards and procedures of occupational health and safety management.
<b>PEFC</b>	Programme for the Endorsement of Forest Certification. PEFC is an independent, non-governmental organisation that promotes sustainably managed forests through independent third-party certification.
<b>Reforestation</b>	Reforestation is the natural or intentional restocking of existing forests and woodlands (forestation) that have been depleted.
<b>SFI</b>	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.
<b>EU Timber Regulation</b>	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.

### Products, Raw Materials and Other

<b>Containerboard</b>	Papers and boards mainly used in the manufacture of corrugated board. They are made from virgin or recycled fibres. Included are kraftliner, testliner, semi-chemical fluting and recycled fluting.
<b>Corrugated board</b>	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).
<b>EPS</b>	Expanded and Extruded Polystyrene is a rigid, closed cell, thermoplastic foam material, produced from solid beads of polystyrene. Used for thermo insulation purposes.
<b>Fluting</b>	The wave-formed middle layer in corrugated board.
<b>Kraftliner</b>	Paper manufactured mainly from virgin wood fibres.
<b>Testliner</b>	Paper manufactured from recycled fibres.
<b>Inorganic raw materials</b>	Raw material used for manufacturing our products that are not organic, such as fillers, sodium hydroxide, sodium sulphate and calcium oxide.
<b>Other organic raw materials</b>	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.
<b>Location information</b>	Local: The country where we operate. In sourcing local refers to Smurfit Kappa country of operations. Significant locations of operation: Smurfit Kappa has high volume production – can be a country or region within a country. In sourcing, suppliers' location, we buy material from.
<b>Raggers</b>	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'.
<b>Recovered paper</b>	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.
<b>Recovery</b>	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.
<b>Recycling</b>	Converting material into new materials and products. In the paper industry this refers to converting recycled fibres back to paper and finding new uses for other raw materials produced alongside recovered paper instead of sending them to landfill.
<b>Reduction</b>	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.
<b>Renewing</b>	Using renewable raw materials in a sustainable manner and maintaining the natural ability of the material to be renewed.
<b>Reuse</b>	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.
<b>Virgin fibre</b>	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.

## Glossary continued

Social Citizenship and Health and Safety	
<b>Accident</b>	An undesirable or unfortunate happening that occurs unintentionally and usually results in harm, injury, damage or loss.
<b>Contractor</b>	This refers to all contract staff agency workers provided by a third party staff agency, where the invoice is accounted in the P&L as part of 'wages and salaries'.
<b>Lost time accident (LTA)</b>	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.
<b>Lost time accident frequency rate</b>	Refers to the number of lost time accidents per 100,000 hours worked. LTA frequency rate = number of LTA x 100,000/total number of hours worked.
<b>Lost time accident severity rate</b>	Refers to the total number of days lost per 100,000 hours worked. LTA severity rate = number of days lost x 100,000/total number of hours worked.
<b>Number of days lost</b>	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.
<b>Senior Management</b>	Executive Teams or similar positions.
<b>Subcontractor</b>	This refers to workers who provide services to Smurfit Kappa but work for third party organisations (e.g. Cleaners, Security, Catering) – where Smurfit Kappa is not directly responsible for paying their 'wages and salaries'.
<b>Total recordable incident rate (TRIR)</b>	Refers to the total number of recordable injury cases per 100,000 hours worked by Smurfit Kappa employees. Number of recordable injuries (lost time accident + restricted workday case + medical treatment case) x 100,000/total hours worked by all Smurfit Kappa employees during the period covered.
<b>Universal Declaration of Human Rights</b>	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.
<b>Workforce</b>	The workforce, or labour force, is the labour pool in employment; it is generally used to describe those working for a company or industry.
Water	
<b>BOD</b>	Biochemical Oxygen Demand (unit: mg O <sub>2</sub> /litre) refers to the level of oxygen uptake by microorganisms in a sample of water measured over a period of five days.
<b>COD</b>	Chemical Oxygen Demand (COD) is the most commonly used test to measure the amount of organic compounds in water (unit: mg O <sub>2</sub> /litre). The result indicates the level of all organic compounds that can be oxidised by a strong oxidising agent.
<b>Process water</b>	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.
<b>Total N (Nitrogen)</b>	Sum of organic nitrogen, ammonia (NH <sub>3</sub> ) and ammonium (NH <sub>4</sub> <sup>+</sup> ) discharged with the process water.
<b>Total P (Phosphorous)</b>	Sum of phosphorous compounds discharged with the process water.
<b>Total suspended solids (TSS)</b>	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.
<b>Water impact assessment</b>	Assessing potential risk from water availability and quantity, covering multiple aspects specific to each geographical locations.
Waste	
<b>Waste</b>	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.
<b>Total non-hazardous waste</b>	Sum of all non-hazardous waste whatever its destination. Each category of non-hazardous wastes is defined and reported.
<b>Non-hazardous waste landfill</b>	Part of the non-hazardous wastes that are disposed of in either internal or external landfill in accordance with national legislation.
<b>Non-hazardous waste recovery</b>	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.
<b>Non-hazardous waste other</b>	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.
<b>Hazardous waste</b>	A hazardous waste is a waste with properties that make it dangerous or capable of having a harmful effect on human health or the environment. Residues of oils and other hazardous wastes (building wastes containing asbestos, ink residues, etc.).

## Assurance Report of the Independent Auditor

To: the members of Smurfit Kappa Group plc

### Our Conclusion

We have reviewed the Sustainable Development Report 2022 (hereafter 'the Report') of Smurfit Kappa Group plc (hereafter 'Smurfit Kappa') based in Dublin, Ireland, for the year ended 31 December 2022.

A review is aimed at obtaining a limited level of assurance.

Based on our review nothing has come to our attention that causes us to believe that the Report is not prepared, in all material respects, in accordance with the reporting criteria as described in the 'Reporting criteria' section of our Report.

The Report comprises a representation of the policy of Smurfit Kappa with regard to sustainability and the thereto related business operations, events and achievements during the year. Smurfit Kappa is the parent company of a group of entities. The Report incorporates the consolidated information of this group of entities to the extent as specified in 'About this Report' in the Report.

### Basis for our Conclusion

We have conducted our review in accordance with Dutch law, including Dutch Standard 3810N 'Assurance-opdrachten inzake maatschappelijke verslagen' (Assurance engagements relating to sustainability reports), which is a specified Dutch Standard that is based on the International Standard on Assurance Engagements ('ISAE') 3000 'Assurance engagements other than audits or reviews of historical financial information'. Our responsibilities under this standard are further described in the 'Our responsibilities for the review of the Report' 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 is prepared in accordance with the Sustainability Reporting Standards of the Global Reporting Initiative ('GRI Standards') and in accordance with the applied supplemental reporting criteria as disclosed in the Supplementary Information section of the Sustainable Development Report. The GRI Standards used are listed in the GRI Content Index as disclosed on pages 135-140 of the Sustainable Development Report.

The absence of an established practice on which to draw, to evaluate and measure sustainability information allows for different, but acceptable, measurement techniques and can affect comparability between entities and over time.

Consequently, the Report needs to be read and understood together with the reporting criteria used.

### 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. Inherent to prospective information, the actual future results are uncertain. We do not provide any assurance on the assumptions and achievability of prospective information in the Report.

References to external sources or websites in the Report are not part of the sustainability information as reviewed by us. Therefore, we do not provide assurance on this information.

Our conclusion is not modified in respect of these matters.

### Directors' Responsibilities

Directors of Smurfit Kappa are responsible for the preparation of the Report in accordance with the applicable criteria as described in the 'Reporting criteria' section of our Report, including the identification of stakeholders and the definition of material matters. Directors of Smurfit Kappa are also responsible for selecting and applying the reporting criteria and for determining that these reporting criteria are suitable for the legitimate information needs of stakeholders, taking into account applicable law and regulations related to reporting. The choices made by the Directors regarding the scope of the Report and the reporting policy are summarised on page 134 of the Sustainable Development Report 2022.

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.

### Our Responsibilities for the Review of the Report

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, than for a reasonable assurance engagement. The level of assurance obtained in review is therefore substantially less than the assurance obtained in an audit.

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 other relevant legal and regulatory 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 stakeholders' dialogue and the reasonableness of estimates made by the Management Board;
- Obtaining through inquiries a general understanding of control environment, processes and information systems relevant to the preparation of the sustainability information, but not to obtain assurance evidence about their implementation or their operating effectiveness;
- Identifying areas of the Report with a higher risk of misleading or unbalanced information or material misstatements, whether due to error or fraud. Designing and performing further assurance procedures aimed at determining the plausibility of the sustainability information responsive to this risk analysis. These procedures consisted, among others of:

## Assurance Report of the Independent Auditor continued

- Interviewing management and relevant staff at corporate level responsible for the strategy, policy and results;
- Interviewing relevant staff responsible for providing the information for, carrying out internal control procedures over, and consolidating the data in the Report;
- Determining the nature and extent of review procedures for the group components and locations. For this, the nature, extent and risk profile of these components are decisive. Based thereon we selected the components and locations to visit. The visits to Baldwin Park, Belgrade, Cali, Fature, Monterrey and Tijuana in the United States, Serbia, Colombia, France and Mexico are aimed at, on a local level, validating source data and evaluating the design and implementation of internal controls and validation procedures;
- Obtaining assurance information that the Report reconciles with underlying records of Smurfit Kappa;
- Reviewing, on a limited test basis, relevant internal and external documentation; and
- Performing an analytical review of the data and trends.
- Evaluating the presentation, structure and content of the Report; and
- Considering whether the Report as a whole, including the disclosures, reflects the purpose of the reporting criteria used.

Amstelveen, 28 March 2023  
KPMG Accountants N.V.

D.A.C.A.J. Landesz Campen RA  
Partner