



## ESG DATABOOK 2023



# INTRODUCTION

## DS Smith ESG Databook 2023

This report has been prepared alongside DS Smith Sustainability Report 2023 for stakeholders who require a greater level of quantitative detail about the non-financial performance of DS Smith during the 2022/23 reporting period.

An explanation of performance can be found in Sustainability Report 2023.

### DS Smith ESG Reporting Hub

[dssmith.com/sustainability/reporting-hub](https://dssmith.com/sustainability/reporting-hub)

### Sustainability Report 2023

[dssmith.com/sustainability/report](https://dssmith.com/sustainability/report)

### Annual Report 2023

[dssmith.com/investors/annual-reports](https://dssmith.com/investors/annual-reports)

### Now & Next Sustainability Strategy

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### Results, presentations and investor information

[dssmith.com/investors/results-and-presentations](https://dssmith.com/investors/results-and-presentations)

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### Basis of preparation

## Independent Assurance Statement

Deloitte have provided independent third-party limited assurance in accordance with the International Standard for Assurance Engagements 3000 (ISAE 3000) and Assurance Engagements on Greenhouse Gas Statements (ISAE 3410) issued by the International Auditing and Assurance Standards Board (IAASB) over the selected information, identified with \* in the above table, and other selected information relating to carbon, energy, water, waste, production and employee diversity identified with \* within DS Smith Annual Report 2023, DS Smith Sustainability Report 2023 and DS Smith ESG Databook 2023. Deloitte's full unqualified assurance opinions, which include details of the selected information assured in 2023/22 and 2022/21, can be found on our ESG Reporting Hub.

# ENVIRONMENTAL METRICS

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# GREENHOUSE GAS (GHG) EMISSIONS (GROUP)

Table 1. Group greenhouse gas (GHG) emissions

Metric	Unit	2022/23	2021/22	2019/20 base year	Compared to last year	Compared to base year
Direct (Scope 1) GHG emissions	tonnes CO <sub>2</sub> e	1,542,250 *	2,023,278 *	2,181,890	-24%	-29%
Indirect (Scope 2 market) GHG emissions	tonnes CO <sub>2</sub> e	833,759 *	759,257 *	792,275	10%	5%
Indirect (Scope 2 location) GHG emissions	tonnes CO <sub>2</sub> e	891,267 *	886,062 *	875,544	1%	2%
Indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	5,015,409	5,468,167	5,671,528	-8%	-12%
Total GHG emissions <sup>1</sup>	tonnes CO <sub>2</sub> e	7,391,418	8,250,702	8,645,693	-10%	-15%
Gross Scope 1 and 2 (market) GHG emissions	tonnes CO <sub>2</sub> e	2,376,009 *	2,782,535 *	2,974,165	-15%	-20%
GHG emissions from energy export	tonnes CO <sub>2</sub> e	529,699 *	647,258 *	791,810	-18%	-33%
Net Scope 1 and 2 (market) GHG emissions <sup>2</sup>	tonnes CO <sub>2</sub> e	1,846,310 *	2,135,278 *	2,182,355	-14%	-15%
Energy consumption	MWh	14,407,601 *	15,324,120 *	15,707,667	-6%	-8%
Energy exported	MWh	1,739,186 *	1,774,539 *	1,977,616	-2%	-12%
Total production	tonnes	10,164,657 *	11,014,256 *	10,222,065	-8%	-1%
GHG emissions per tonne of production	kg CO <sub>2</sub> e / t nsp <sup>3</sup>	182 *	194 *	213	-6%	-15%
Out of Scope GHG emissions	tonnes CO <sub>2</sub> e	1,018,232 *	804,880 *	552,789	27%	84%

1. This is the metric used for our science-based target, calculated using the market-based approach.

2. This is calculated as ('Scope 1' + 'Scope 2 (market-based)') - 'GHG emissions from energy exports' to subtract the avoided emissions as a result of energy sales.

3. 't nsp' - metric tonnes net saleable production

\* Independent Assurance has been obtained for the metrics marked with asterisk '\*\*' - see the summary assurance statement on page 2.

# GREENHOUSE GAS (GHG) EMISSIONS (BY OPERATION)

**Table 2. Packaging greenhouse gas (GHG) emissions**

Metric	Unit	2022/23	2021/22	2019/20 base year	Compared to last year	Compared to base year
Direct (Scope 1) GHG emissions	tonnes CO <sub>2</sub> e	<b>276,545</b>	304,977	289,147	-9%	-4%
Indirect (Scope 2 market) GHG emissions	tonnes CO <sub>2</sub> e	<b>140,174</b>	207,981	233,012	-33%	-40%
Indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	<b>3,031,211</b>				
Total GHG emissions	tonnes CO <sub>2</sub> e	<b>3,447,930</b>				
Total production	tonnes	<b>5,042,277</b>	5,587,133	4,962,370	-10%	2%

**Table 3. Paper greenhouse gas (GHG) emissions**

Metric	Unit	2022/23	2021/22	2019/20 base year	Compared to last year	Compared to base year
Direct (Scope 1) GHG emissions	tonnes CO <sub>2</sub> e	<b>1,257,126</b>	1,708,419	1,881,417	-26%	-33%
Indirect (Scope 2 market) GHG emissions	tonnes CO <sub>2</sub> e	<b>692,637</b>	549,624	557,729	26%	24%
Indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	<b>1,259,932</b>				
Total GHG emissions	tonnes CO <sub>2</sub> e	<b>3,209,694</b>				
Total production	tonnes	<b>4,096,111</b>	4,410,438	4,210,858	-7%	-3%

# GREENHOUSE GAS (GHG) EMISSIONS (BY OPERATION)

Table 4. Recycling greenhouse gas (GHG) emissions

Metric	Unit	2022/23	2021/22	2019/20 base year	Compared to last year	Compared to base year
Direct (Scope 1) GHG emissions	tonnes CO <sub>2</sub> e	8,579	9,882	11,326	-13%	-24%
Indirect (Scope 2 market) GHG emissions	tonnes CO <sub>2</sub> e	948	1,652	1,534	-43%	-38%
Indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	126,998				
Total GHG emissions	tonnes CO <sub>2</sub> e	136,525				
Total production	tonnes	1,026,269	1,016,685	1,048,837	1%	-2%

The breakdown of Indirect (Scope 3) GHG emissions by operation is provided for stakeholders who wish to calculate the emissions generated by operation (e.g. a tonne of paper or a tonne of packaging). Note that there is a remaining balance of 597,268 tonnes CO<sub>2</sub>e Indirect (Scope 3) GHG emissions that, whilst included in the Group total, are not easily allocated to manufacturing sites within the above Packaging, Paper or Recycling operations. This includes processing of external recycling sales to other papermakers that does not physically pass through our recycling depots ('traded waste', accounted for in Category 10: Processing of sold products), employee commuting and business travel for employees based at non-manufacturing sites (Category 6: Business travel and Category 7: Employee commuting), non-manufacturing upstream leased assets (Category 8: Upstream leased assets) and principal equity accounted investments (Category 15: Investments).

Until 2022/23, we reported Indirect (Scope 3) GHG emissions on a consolidated basis only and as such no figure for this and Total GHG emissions is provided in the breakdown by operation. See 'Table 1. Group greenhouse gas (GHG) emissions' for the 2021/22 and 2019/20 base year consolidated figures.

# SCOPE 3 GREENHOUSE GAS (GHG) EMISSIONS (GROUP)

Table 5. Scope 3 greenhouse gas (GHG) emissions

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Category 1: Purchased goods and services	tonnes CO <sub>2</sub> e	2,341,614	2,477,300	2,480,272	2,562,626
Category 2: Capital goods	tonnes CO <sub>2</sub> e	161,217	86,304	90,017	96,891
Category 3: Fuel- and energy-related emissions	tonnes CO <sub>2</sub> e	471,063	500,446	494,324	425,243
Category 4: Upstream transportation and distribution	tonnes CO <sub>2</sub> e	377,052	425,362	474,224	407,883
Category 5: Waste generated in operations	tonnes CO <sub>2</sub> e	119,671 *	218,444	231,287	252,834
Category 6: Business travel	tonnes CO <sub>2</sub> e	3,912	1,487	381	4,173
Category 7: Employee commuting	tonnes CO <sub>2</sub> e	5,390	6,062	4,880	7,992
Category 8: Upstream leased assets	tonnes CO <sub>2</sub> e	4,110	4,558	2,009	4,507
Category 9: Downstream transportation and distribution	tonnes CO <sub>2</sub> e	109,260	118,392	112,632	109,381
Category 10: Processing of sold products	tonnes CO <sub>2</sub> e	693,418	725,649	789,587	943,600
Category 12: End-of-life treatment of sold products	tonnes CO <sub>2</sub> e	693,027	827,855	806,397	780,090
Category 15: Investments	tonnes CO <sub>2</sub> e	35,675	76,308	76,308	76,308
<b>Total Indirect (Scope 3) GHG emissions</b>	<b>tonnes CO<sub>2</sub>e</b>	<b>5,015,409</b>	<b>5,468,167</b>	<b>5,562,318</b>	<b>5,671,528</b>
Total upstream indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	3,479,920	3,719,963	3,777,394	3,762,149
Total downstream indirect (Scope 3) GHG emissions	tonnes CO <sub>2</sub> e	1,535,489	1,748,204	1,784,924	1,909,379

Exclusions: Category 11: Use of sold products, Category 13: Downstream leased assets and Category 14: Franchises are excluded on the basis of relevance or materiality. See the basis of preparation.

\* Independent Assurance has been obtained for the metrics marked with asterisk '\*\*' - see the summary assurance statement on page 2.

# ENERGY AND FUEL

Table 6. Energy

Metric	Unit	Renewable sources	Non-renewable sources	Total energy consumed
Consumption of fuel (excluding feedstock)	MWh	2,927,967	7,650,753	10,578,720
Consumption of purchased or acquired electricity	MWh	260,651	1,457,093	1,717,744
Consumption of purchased or acquired steam	MWh	558,188	1,547,377	2,105,565
Consumption of self-generated non-fuel renewable energy	MWh	5,572	-	5,572
<b>Total energy consumption</b>	<b>MWh</b>	<b>3,752,378</b>	<b>10,655,223</b>	<b>14,407,601 *</b>

Table 7. Fuel

Metric	Unit	For self-generation of electricity	For self-generation of heat	For self-generation of steam	For self-cogeneration or trigeneration	Total fuel consumed
Sustainable biomass	MWh	-	-	-	1,237,382	1,237,382
Other renewable fuels	MWh	-	-	-	1,690,586	1,690,586
Coal	MWh	-	38,007	-	-	38,007
Oil	MWh	-	333,249	-	-	333,249
Gas	MWh	-	16,455	1,098,170	6,164,871	7,279,496
<b>Total fuel consumption</b>	<b>MWh</b>	<b>-</b>	<b>387,711</b>	<b>1,098,170</b>	<b>9,092,839</b>	<b>10,578,720</b>

\* Independent Assurance has been obtained for the metrics marked with asterisk "\*" - see the summary assurance statement on page 2.

# ENERGY AND FUEL

**Table 8. Renewables**

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Energy consumption from a renewable source	Percentage	26	21	17	17
Electricity from a renewable source	Percentage	15	13	12	11

**Table 9. Emissions to air**

Metric	Unit	2022/23
CH <sub>4</sub>	tonnes	26
HFCs	tonnes	15

# ENERGY AND FUEL

**Table 10. Energy generation**

Metric	Unit	Total gross generation	Generation that is consumed by DS Smith	Gross generation from renewable sources	Generation from renewable sources that is consumed by DS Smith
Generation of electricity	MWh	1,908,264	474,741	652,462	119,545
Generation of heat	MWh	387,712	387,712	-	-
Generation of steam	MWh	4,590,259	4,590,259	2,154,672	2,154,672

**Table 11. Net energy consumption**

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Energy consumption	MWh	<b>14,407,601</b> *	15,324,120 *	15,446,225	15,707,667
Energy exported	MWh	<b>1,739,186</b> *	1,774,539 *	1,739,114	1,977,616
Energy consumption (net)	MWh	<b>12,668,415</b> *	13,549,581 *	13,707,111	13,730,051

\* Independent Assurance has been obtained for the metrics marked with asterisk "\*" - see the summary assurance statement on page 2.

# WATER

Table 12. Water withdrawals and discharges

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Water withdrawals	m <sup>3</sup>	53,802,571 *	54,644,995 *	55,237,583	57,451,994
Borehole water	m <sup>3</sup>	33,202,877	32,359,020	33,417,463	33,997,190
Municipal water	m <sup>3</sup>	2,270,500	2,062,697	1,950,460	2,858,967
Surface water	m <sup>3</sup>	18,329,194	20,223,278	19,869,660	20,595,838
Water recirculated for reuse	m <sup>3</sup>	146,383	543,325	473,832	-
Water discharges	m <sup>3</sup>	39,159,644 *	41,584,291 *	41,560,885	44,543,734
Fresh surface (river)	m <sup>3</sup>	16,858,349	17,881,245	17,871,181	19,153,806
Brackish surface (sea)	m <sup>3</sup>	19,791,514	19,960,460	19,949,225	21,380,992
Third-party or municipal	m <sup>3</sup>	2,509,781	3,742,586	3,740,480	4,008,936
Total water consumption	m <sup>3</sup>	14,789,310 *	13,604,030 *	14,150,530	12,908,260
Water withdrawals in areas at risk of water stress	Percentage	38	31	36	36

\* Independent Assurance has been obtained for the metrics marked with asterisk "\*" - see the summary assurance statement on page 2.

# WASTE

**Table 13. Waste destinations**

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Total waste	tonnes	1,438,424 *	1,510,728	1,623,229	1,641,493
Recycled	tonnes	912,649 *	949,442	1,056,831	1,038,275
Landspread	tonnes	176,206 *	162,455	184,679	156,123
Incinerated	tonnes	144,932 *	142,911	123,494	105,168
Landfilled	tonnes	204,637 *	255,920 *	258,225	341,927
Recycling rate	Percentage	63	63	65	63
Hazardous waste	tonnes	3,683	3,424	3,120	3,940

\* Independent Assurance has been obtained for the metrics marked with asterisk '\*\*' - see the summary assurance statement on page 2.

# MATERIALS

Table 14. Raw material inputs

Metric	Unit	2022/23	2021/22	2020/21	2019/20
<b>Recycling depots</b>					
Waste for recycling <sup>1</sup>	tonnes	1,091,297	1,093,932	961,182	972,110
<b>Paper mills</b>					
Pulp	tonnes	638,633	647,043	664,043	653,973
Recovered fibre	tonnes	4,013,215	4,439,638	4,608,449	4,489,830
<b>Lumber mill</b>					
Wood from our own forests	tonnes	22,752	77,118	41,252	51,278
Wood purchased externally	tonnes	941,035	1,003,140	1,098,968	932,540
<b>Packaging plants</b>					
Recycled paper	tonnes	3,718,845	4,042,248	3,777,029	3,875,536
Virgin paper	tonnes	892,295	996,388	972,168	945,645
Recycled or chain of custody certified	Percentage	100	100	100	100

1. This is the waste physically processed by our Recycling Depot network and excludes 'traded waste' (waste that is acquired and sold but does not physically enter the boundary of a DS Smith recycling depot).

# MATERIALS

**Table 15. Production outputs**

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Paper mills	tonnes	4,096,111	4,540,718	4,701,920	4,565,262
Packaging plants	tonnes	5,042,246	5,587,133	5,132,884	4,954,015

1. This is the waste physically processed by our Recycling Depot network and excludes 'traded waste' (waste that is acquired and sold but does not physically enter the boundary of a DS Smith recycling depot).

Tables 15 and 16 have been developed compared to last year to aid comprehension. 'Pulp' and 'Virgin fibre' have been consolidated into a single line and 'Other production' removed to simplify the table. It is important to note that whilst operating an integrated model, all of our sites and operating divisions are individual operations that buy and sell from and to external and internal suppliers and customers. This is the main reason why the figures do not balance between tables 14 and 15.

# SOCIAL METRICS

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# EMPLOYEES

Table 16. Employee demographics

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Total number of employees	Number	29,519	29,584	28,864	29,266	31,930
Full-time contract	Percentage	92.4	92.3	92.4	92.4	92.8
Part-time contract	Percentage	3.0	2.3	2.7	2.7	2.6
Temporary contract	Percentage	4.6	5.4	4.9	4.9	4.6
Employees joining	Number	4,869	6,667	4,298	4,537	6,958
Employees leaving	Number	5,034	4,711	3,896	4,435	4,135
Resignation/retirement	Percentage	58	63	50	57	63
Employee turnover	Percentage	16.99	16.09	13.39	14.64	13.84
Voluntary	Percentage	9.83	10.32	6.88	9.03	9.20
Length of service > 10 years	Percentage	42.3	42.6	44.8	45.0	45.6
Employee age <21 years	Percentage	1	1	1	1	1
Employee age 21-30 years	Percentage	14	14	14	14	15
Employee age 31-40 years	Percentage	23	23	22	22	21
Employee age 41-50 years	Percentage	26	26	26	26	26
Employee age 51-60 years	Percentage	28	27	27	27	26
Employee age >61 years	Percentage	6	5	5	5	5
Age unrecorded	Percentage	2	4	5	5	6
Employees under collective bargaining agreements	Percentage	85	85	85	-	-

# EMPLOYEES

Table 17. Gender diversity

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Board of Directors	% female	37.5	37.5	37.5	33.3	22.2
Senior leadership	% female	34.5	31.8	32.4	27.9	28.3
All employees	% female	22.9 *	22.5	21.9	21.7	22.2
Graduate recruitment	% female	50	64	66.7	25	47.4
<b>UK gender pay reporting</b>						
Average (mean) total gender pay gap	Percentage	-2.9	2.2	3.5	4.7	10.2
Average (median) total gender pay gap	Percentage	1.5	6.6	6.2	6.7	10.3

\* Independent Assurance has been obtained for the metrics marked with asterisk '\*\*' - see the summary assurance statement on page 2.

# HEALTH AND SAFETY

Table 18. Health and Safety

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Lost time Accidents (LTAs)	Number	<b>103</b>	110	113	138	140
Employees	Number	<b>91</b>	96	101	119	121
Contractors	Number	<b>12</b>	14	12	19	19
Accident Frequency Rate (AFR)	Number	<b>1.82</b>	1.93	2.04	2.40	2.41
Fatalities	Number	<b>0</b>	0	0	0	1
Total Recordable Injury Rate (TRIR)	Number	<b>1.08</b>	1.42	1.42	1.96	2.08
Lost Time Injury (LTI) Severity Rate	Number	<b>0.12</b>	0.11	0.13	0.13	0.15

# TALENT DEVELOPMENT

Table 19. Training and career progression

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Average hours of training and development	Hours per FTE	32	26	24		
Promotions (positions filled by internal candidates)	Number	696	626	388	427	312

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# BUSINESS ETHICS

Table 20. SMETA (Sedex Members Ethical Trade Audit) non-conformances

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Entitlement to work	Number	0	2	1	4	3
Environment	Number	2	3	3	3	4
Health, safety and hygiene	Number	13	15	30	32	48
Management systems	Number	2	3	16	4	3
Regular employment and wages	Number	4	4	4	8	10
Working hours	Number	4	8	3	4	6
Other	Number	4	3	1	1	2

# CERTIFICATIONS

**Table 21. Management system certifications**

Metric	Unit	2022/23	2021/22	2020/21
ISO 9001	% of sites	72	74	75
ISO 14001	% of sites	55	56	56
ISO 50001	% of sites	100	100	100
ISO 45001 or OHSAS 18001	% of sites	33	33	34
FSC®	% of sites	100	100	100
PEFC	% of sites	2	3	2
SFI	% of sites	2	2	2

**Table 22. Paper certifications**

Metric	Unit	2022/23	2021/22	2020/21
FSC® Mix	% of papers	6	7	7
FSC® Recycled	% of papers	75	73	73
FSC® Controlled Wood	% of papers	19	20	20

# RESPONSIBLE SOURCING

Table 23. Responsible sourcing

Metric	Unit	2022/23	2021/22	2020/21	2019/20	2018/19
Suppliers agreed to our supplier standards	Percentage	78	78	45	11	2
Strategic suppliers agreed to our GSS	Percentage	100	100	100	74	30
Strategic suppliers assessed on sustainability	Percentage	100	100	100	74	
Suppliers engaged in improvement plans	Number	63	68	46	18	
Initiated actions to improve performance	Number	444	330	389	239	
Completed actions to improve performance	Number	222	167	180	139	

# NORMALISATION METRICS

Table 24. Normalisation metrics

Metric	Unit	2022/23	2021/22	2020/21	2019/20
Total revenue	GBP £ million	8,221	7,241	5,976	6,043
Total production	tonnes	10,164,657 *	11,014,256 *	10,445,145	10,222,065
Total employees	Number	29,519	29,584	28,864	29,266

These metrics may be used to normalise quantitative data presented in other parts of this report.

\* Independent Assurance has been obtained for the metrics marked with asterisk '\*\*' - see the summary assurance statement on page 2.

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# BASIS OF PREPARATION FOR SELECTED ESG INFORMATION

## Introduction

This basis of preparation sets out how selected ESG information is prepared and reported in the DS Smith Annual Report 2023, DS Smith Sustainability Report 2023 and DS Smith ESG Databook 2023.

It is our vision that ESG reporting follows the core accounting principles of relevance, completeness, consistency, transparency and accuracy.

Unlike financial accounting, practices for reporting non-financial information are still evolving and therefore it is important to transparently explain the approach we have taken for reporting ESG information.

DS Smith Sustainability Report 2023 includes a glossary (pages 71-74), which may be consulted alongside this basis of preparation.

## Scope

All of the Group is included in Now and Next, our global sustainability programme.

Some Now and Next targets include specific exclusions of certain businesses, and these exclusions are noted where relevant.

For environmental metrics, we include 243 manufacturing sites, comprising: 188 Packaging Plants, 30 Recycling Depots, 16 Paper Mills, four Logistics Depots, four Warehouses and one Lumber Mill.

No acquisitions entered the scope during the reporting period.

Four new constructions, Belchatow, Castelfranco Emilia, Rijeka Depot and Warboys (warehouse), entered into the scope for 2022/23.

Three sites were removed from the scope for 2022/23: De Hoop paper mill, Hoek Van Holland plant and Lana.

A further four sites ceased operation part way through the period (Aylesford,

Casalgrande Sheet, Berlin and Cambridge recycling depot) and data for these sites is included up to the point at which they ceased activity.

The Turku site moved its operations to Pirkkala during the period.

None of these changes meet the base year or prior year recalculation threshold of five per cent of Group Total Direct (Scope 1) GHG emissions and Indirect (Scope 2 market-based) GHG emissions and as such there has been no change made to the 2019/20 base year during this reporting period.

All non-manufacturing properties, e.g. offices, are accounted for within Scope 3 as upstream leased assets.

## Reporting standards

GHG reporting is prepared in accordance with the Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Ed. and Corporate Value Chain (Scope 3) Accounting and Reporting Standard for emissions reporting.

DS Smith Sustainability Report 2023 is prepared following the Global Reporting Initiative (GRI) Standard: Core option and a table is disclosed to present the Sustainability Accounting Standards Board (SASB) Containers & Packaging standard.

Where useful, guidance from reputable disclosure bodies, such as CDP, is followed.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

**Restatement in 2022/23**

The 'Outside of Scopes' GHG emissions metric has been restated for 2019/20, 2020/21 and 2021/22 to include the biogenic CO<sub>2</sub> value, as labelled 'outside of scopes' by the Greenhouse Gas Protocol to ensure complete accounting for the emissions generated.

The 'Accident Frequency Rate' metric for 2021/22 has been restated from 1.91 (as published) to 1.93 (corrected). This is owed to a lost time accident occurring during the period but reported after the publication of the report.

The 'Pulp' metric for 2019/20, 2020/21 and 2021/22 has been restated to consolidate two lines reported separately as 'Pulp' and 'Virgin fibre' to simplify our reporting.

**Environmental metrics**

This section sets out how we measure and report selected environmental metrics.

In all of the environmental information that is collected from sites, Data Providers are

encouraged to observe the following data quality hierarchy: 1. preference is given to primary information (e.g. information obtained from meters preferably or if unavailable, invoices), followed by 2. secondary information (e.g. calculated values from a known, written and replicable methodology), followed by 3. secondary information created using estimated amounts (e.g. based on historic performance or averages) being the least preferred, but sometimes necessary option. It is reasonable to use estimates where primary information is unavailable, incomplete or of poor quality, for example, for newly acquired sites. Where there are uncertainties relating to the quality of information, this is noted in reporting.

**GHG emissions**Scope

Manufacturing sites

Metrics

Total GHG emissions (metric tonnes CO<sub>2</sub>),  
Direct (Scope 1) GHG emissions (metric

tonnes CO<sub>2</sub>e), Indirect (Scope 2) (market-based) GHG emissions (metric tonnes CO<sub>2</sub>e), Indirect (Scope 2) (location-based) GHG emissions (metric tonnes CO<sub>2</sub>e), Indirect (Scope 3) GHG emissions (metric tonnes CO<sub>2</sub>e), Out of scope GHG emissions (metric tonnes CO<sub>2</sub>e).

GHG emissions from energy export (metric tonnes CO<sub>2</sub>e), Gross Scope 1 and 2 (market) GHG emissions (tonnes CO<sub>2</sub>e), Net Scope 1 and 2 (market) GHG emissions (tonnes CO<sub>2</sub>e) and GHG emissions (net) per tonne of production (kg CO<sub>2</sub>e / t nsp).

Note that in prior years, 'Gross Scope 1 and 2 (market) GHG emissions' was referred to as 'Total GHG emissions (Scope 1 + Scope 2 (market))' and 'Net Scope 1 and 2 (market) GHG emissions' was referred to as 'Total GHG emissions (net)'. Whilst we have renamed these metrics for clarity, there has been no change to the underlying definitions or methodology as set out below.

Definitions

'Total GHG emissions': Greenhouse Gas emissions, sum of 'Direct Scope 1 GHG emissions' + 'Indirect Scope 2 (market-based) GHG emissions' + 'Indirect Scope 3 GHG emissions'.

**Scope 1**

'Direct (Scope 1) GHG emissions': GHG emissions arising from fuels combusted for the purpose of energy generation owned by the company, for example, emissions from combustion in owned boilers, furnaces, vehicles, etc.

The CO<sub>2</sub>e figure includes the six Kyoto protocol greenhouse gas emissions, where relevant: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphurhexafluoride (SF<sub>6</sub>).

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

Based on materiality, our manufacturing sites scope and financial control consolidation approach, emissions from refrigerant gases losses within air conditioning units or within the transformers of electrical circuits are excluded.

Renewable fuels (e.g. biomass, biogas and heavy black liquor) release CO<sub>2</sub>, N<sub>2</sub>O and CH<sub>4</sub> emissions when they are combusted.

- CO<sub>2</sub> emissions are accounted for separately as 'Outside of scopes' emissions (see 'Outside of scopes GHG emissions')
- N<sub>2</sub>O and CH<sub>4</sub> emissions are accounted for within the Scope 1 figure.

The process emissions generated by one of our Kraftliner mills are included in our inventory. This is calculated at:

- 0.440 metric tonnes CO<sub>2</sub>e per tonne of carbonate (for calcium carbonate)
- 0.415 metric tonnes CO<sub>2</sub>e per tonne of carbonate (for sodium carbonate)  
(Source: European Union, 2012).

### Scope 2

'Indirect (Scope 2) GHG emissions': GHG emissions arising from the generation of purchased electricity, steam, heat or cooling consumed by the company that is purchased or otherwise brought into our organisational boundary. These emissions physically occur at the facility where the energy is generated.

'Indirect (Scope 2) (market-based) GHG emissions' reflect supplier-specific emissions from energy sources purposefully chosen.

'Indirect (Scope 2) (location-based) GHG emissions' reflect average emissions from energy sources (e.g. grid-average emission factor for electricity purchased in a given country).

If unspecified, Indirect (Scope 2) (market-based) GHG emissions is used.

Where available, the supplier-specific (market-based) factor is applied in the market-based figure, as this better reflects the actual GHG emissions arising from a

given energy source. Where unavailable, the AIB residual mix factor is applied. For regions in which this is unavailable, the IEA grid-average factor is applied.

### Scope 3

'Indirect (Scope 3) GHG emissions': GHG emissions arising from all other sources as a consequence of our activities but occurring from sources not owned by us.

See the section 'Scope 3'

### Emissions from energy export

'GHG emissions from energy export': GHG emissions calculated at the country-level AIB residual-mix grid factor for electricity generated on site and delivered to the national grid or other external client and calculated at the natural gas factor for exported steam. This figure excludes condensate returned to a third-party as these emissions have already been accounted for elsewhere in the inventory.

### Totals and intensity metric

'Gross Scope 1 and 2 (market) GHG emissions': 'Direct (Scope 1) GHG emissions' + 'Indirect (Scope 2 market) GHG emissions'.

'Net Scope 1 and 2 (market) GHG emissions': 'Direct (Scope 1) GHG emissions' + 'Indirect (Scope 2 market) GHG emissions', after subtracting 'GHG emissions from energy exports' to subtract the avoided emissions as a result of energy sales.

'GHG emissions (net) per tonne of production': 'Net Scope 1 and 2 (market) GHG emissions' divided by 'Total production', to calculate an average GHG emissions arising per average tonne of net saleable production across our Packaging, Paper and Recycling operations. It is typically expressed in kg CO<sub>2</sub>e / t nsp (kilograms per tonne of carbon dioxide equivalent per tonne of net saleable production).

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

Boundary

We apply a financial control boundary.

Emission factors

Emission factors are obtained from the Department for Business, Energy & Industrial Strategy (BEIS) 'Greenhouse gas reporting: conversion factors' (2021) for all fuels.

Where available, we use the emissions factor for purchased energy from the supplier (Scope 2 market-based value). If this figure is unavailable, the AIB (Association of Issuing Bodies) (2021) emission factors are applied and if this figure is unavailable, the IEA (International Energy Agency) (2021) emission factors are applied. For all sources, the BEIS emission conversion factors or supplier-specific 'bespoke' factors are the preferred emission factors for consistency and accuracy.

Third party suppliers meet electricity and steam demand for selected paper mills at emission factors estimated at:

- Aschaffenburg Mill by a third party CHP at an emission factor estimated at 238 kg CO<sub>2</sub>e/MWh for steam and 229 kg CO<sub>2</sub>e/MWh for electricity
- Belisce Mill and Packaging Plant by a third party CHP figured by a combination of natural gas and flare gas, with a factor estimated at 240 kg CO<sub>2</sub>e/MWh
- Kemsley Mill electricity at 336kg CO<sub>2</sub>e/MWh and steam from a primary source at 206 kg CO<sub>2</sub>e/MWh and at a secondary source at 55 kg CO<sub>2</sub>e/MWh
- Rouen Mill steam at 381 kg CO<sub>2</sub>e/MWh
- Witzenhausen Mill by a third party CHP at an emission factor estimated at 33 kg CO<sub>2</sub>e/MWh for steam and electricity.

Outside of scopes GHG emissions

The CO<sub>2</sub> emissions that arise from the release of biologically sequestered carbon (e.g. from the combustion of biomass in the virgin papermaking process) are reported separately as 'out of scope' GHG emissions.

These are calculated based on BEIS 'Greenhouse gas reporting: conversion factors' applied to the renewable fuels consumed. In the absence of an emission factor for heavy black liquor from a reputable source, we treat this fuel as biomass as this fuel originates from the same primary raw material.

The CO<sub>2</sub> emissions from renewable fuels are considered as Net Zero to account for the CO<sub>2</sub> absorbed by fast-growing bioenergy sources during their growth. The N<sub>2</sub>O and CH<sub>4</sub> emissions from renewable fuels are included within the Scope 1 figure (see 'Scope 1'), as these are not absorbed during growth. See the BEIS (2021) 'Bioenergy' tab for guidance.

Data

GHG emissions are calculated using fuel and energy information collected on a monthly basis from sites in scope and held within a central database. The activity data (see 'Energy') is converted and stored in a default base unit of measure (MWh), multiplied by an emission conversion factor to calculate GHG emissions.

Following the Greenhouse Gas Protocol, combusted fossil fuels are Direct (Scope 1) GHG emissions and imported energy sources are Indirect (Scope 2) GHG emissions. Included in Direct (Scope 1) GHG emissions, where applicable, are emissions from natural gas, flare gas, coal, fuel oil, liquid petroleum gas (LPG), diesel and petrol. Included in Indirect (Scope 2) GHG emissions, where applicable, are: emissions from purchased grid electricity or imported steam or heat generated by third parties. Included in GHG emissions from energy exports are the energy (electricity, biogas, steam, condensate and hot water) generated and exported.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

### Targets

By 2030, reduce Scope 1, 2 and 3 GHG emissions 46% compared to 2019 and reach Net Zero GHG emissions by 2050.

The official SBTi target wording is:

DS Smith commits to reduce absolute scope 1, 2\* and 3 GHG emissions 46.2% by FY2030 from a FY 2019 base year. DS Smith commits that 76% of its suppliers by emissions covering purchased goods and services will have science-based targets by FY2027. \*The target boundary includes land-related emissions and removals from bio-energy feedstocks.

### Base year

The base year for this period is 2019/20.

### Recalculation and restatement

It may be necessary to recalculate base year or historic performance to make meaningful comparisons of historic information.

Base year emissions are checked at the beginning of every reporting period to

ensure that there are no material structural changes (e.g. acquisitions or disposals) that may trigger a base year recalculation if structural changes result in an increase or decrease in emissions greater than 5 per cent.

In the case of a disposal, emissions are removed from the base year and historic years and in the case of an acquisition, emissions are added to the base year and historic years.

It may be necessary to recalculate historic performance to adjust for structural changes to meaningfully measure progress and this may require estimating historic performance of acquisitions. This may result in a restatement if the base year and historic years are recalculated.

There has been no recalculation and restatement as a result of structural changes in this reporting period.

### Carbon trading

There is no carbon trading reflected in the GHG emissions information reported.

### Percentage gross total Scope 1 emissions covered under emissions-limiting regulations

This metric is prepared in accordance with the SASB Containers & Packaging Sustainability Accounting Standard (October 2018) (metric RT-CP-110a.1. Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations).

### Scope

The Direct (Scope 1) GHG emissions (metric tonnes CO<sub>2</sub>e) of our European Paper mills that are covered under the European Union Emissions Trading System (EU ETS) and our UK Paper mill that is covered under the UK Emissions Trading Scheme (UK ETS).

### Calculation

The total amount of Direct (Scope 1) GHG emissions (metric tonnes CO<sub>2</sub>e) that are covered under emissions-limiting regulations divided by the Group total Direct (Scope 1) GHG emissions (metric tonnes CO<sub>2</sub>e).

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

### Scope 3 GHG emissions

The majority of our greenhouse gas emissions occur in the value chain. We use The Corporate Value Chain (Scope 3) Accounting and Reporting Standard to assess our entire value chain emissions impact and identify where to focus reduction activities.

We conducted a screening exercise to determine which of the Scope 3 categories are most significant in size within our value chain, considering factors such as our ability to influence. This led to the inclusion of the majority of the Scope 3 categories, with some exclusions justified in the sections below.

#### Category 1 Purchased Goods and Services

These are the cradle-to-gate emissions arising from all of the goods and services bought in the reporting period. For production-related procurement, emissions are calculated using the average-product method. We applied BEIS emission factors to calculate the emissions

generated from paper purchased from external suppliers by our Paper Sourcing platform and from paper for recycling traded by our Recycling Division.

The emissions arising from all other procurement, including production-related procurement (e.g. inks and adhesives, chemicals, printing and tooling) and non-production-related procurement (e.g. facility management, professional services and IT and telecom) are estimated using a spend-based method, with DEFRA (now BEIS) emission factors applied. Owing to challenges with obtaining timely spend data, some of the emissions in this category are based on Q1-3 data which is then extrapolated to a full financial year.

#### Category 2 Capital goods

These are the cradle-to-gate emissions arising from all of the capital goods (e.g. machinery and infrastructure) bought in the reporting period. These emissions are calculated using a spend-based method, with DEFRA (now BEIS) emission factors

applied. Assumptions are made relating to the type of capital good purchase.

#### Category 3 Fuel and energy-related activities

These are the well-to-tank emissions arising from all of the fuel bought in the reporting period and the transmission and distribution emissions, including losses, arising from all of the energy consumed in the reporting period. Sites report fuel and energy consumption data on a monthly basis, based on meter readings, invoices and other sources (see 'Energy'). BEIS emission factors are applied to all fuel and energy sources.

#### Category 4 Upstream transportation and distribution

These are the emissions arising from transporting goods to our sites by third parties during the reporting period and sold products shipped by DS Smith to customers in the reporting period. The emissions are estimated by taking the total weight of all inputs (e.g. papers, additives

and adhesives) physically shipped to our sites from suppliers and the total weight of production physically shipped away from our sites to our customers. We assume that 100 per cent of inputs are transported to our sites by third parties and that 50 per cent of production is transported away from our sites by carriers paid for by DS Smith (we assume that the other 50 per cent of production is transported away from our sites by carriers paid for by the customer, and therefore accounted for in Category 9 - Downstream transportation and distribution). Sites report all inputs and production based on primary data such as invoices, delivery notes and production systems. This is collected on a monthly basis from sites in scope and held within a central database. We assume an average distance travelled of 200 kilometres and apply the BEIS 'Freighting goods', 'HGV (all diesel)', 'All HGVs' tonne.km emission factor to estimate the emissions in this category.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

**Category 5****Waste generated in operations**

These are the emissions arising from treating the waste that entered and left our physical site boundary during the reporting period. Sites report waste data on a monthly basis, based on waste transfer notes, invoices and other sources (see 'Waste').

The BEIS 'Waste disposal', 'Refuse', 'Commercial and industrial waste' emission factors are applied:

- Recycled - Closed-loop
- Landspread - Composting
- Incinerated - Combustion
- Landfilled - Landfill

From 2019/20 to 2021/22, the landfill emission factor was applied to landspread waste. This has been updated with the composting emission factor, which we consider a more appropriate emission factor to use in lieu of a published BEIS emission factor for landspread.

**Category 6****Business travel**

These are the emissions arising from all business travel (air, rail, road and hotel stays) during the reporting period. These emissions are calculated by our travel management companies using business travel invoice information.

**Category 7****Employee commuting**

These are the emissions arising from the transportation of people to and from their DS Smith workplace during the reporting period. This is estimated using data from the UK Government Department for Transport statistics 'National Travel Survey', which includes average distance travelled by purpose and main mode in England in 2019. This includes various modes of transport (e.g. car, motorbike, bus), which were mapped to BEIS emission factors (e.g. 'Business travel - land', 'Cars (by size)', 'Average car', 'Average motorbike', 'Average local bus'). The average commuting emissions were then calculated based on

employee and contingent worker numbers for each site.

**Category 8****Upstream leased assets**

These are the emissions arising from fuel and energy consumption associated with assets not accounted for within Scopes 1 and 2, e.g. gas and electricity used to power leased office buildings during the reporting period. This is based on estimated energy consumption obtained from 'Average electricity consumption per employee in the tertiary sector in the EU-28 Member States, 2015' and 'Average final gas consumption per employee in the tertiary sector in the UK-28 Member States, 2015' data (Source: Eurostat), which is applied to the total number of FTEs at each facility not already accounted for within Scopes 1 and 2. Country-level IEA emission factors are then applied to the estimated fuel and energy consumption at each facility to calculate the emissions arising from that fuel and energy consumption.

**Category 9****Downstream transportation and distribution**

These are the emissions arising from transporting sold products shipped by the customer during the reporting period. We assume that 50 per cent of production is transported away from our sites by carriers paid for by the customer (we assume that the other 50 per cent of production is transported away from our sites by carriers paid for by DS Smith, and therefore accounted for in Category 4 - Upstream transportation and distribution). Sites report all production based on primary data such as invoices, delivery notes and production systems. This is collected on a monthly basis from sites in scope and held within a central database. We assume an average distance travelled of 200 kilometres and apply the BEIS 'Freighting goods', 'HGV (all diesel)', 'All HGVs' tonne.km emission factor to estimate the emissions in this category.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

**Category 10****Processing of sold products**

These are the emissions arising from transforming sold paper for recycling into paper reels (i.e. external Recycling division sales to customers who produce paper from the sold product) and from transforming sold paper reels into packaging (i.e. external Paper division sales to customers who produce packaging from the sold product) in the reporting period. This is calculated using production data. Sites report all production based on primary data such as invoices, delivery notes and production systems. This is collected on a monthly basis from sites in scope and held within a central database. For calculating the emissions arising from transforming sold paper for recycling into paper reels, we take the total external recycling sales volume to third party paper mills and apply an emission factor that is calculated based on fuel and energy data from our own papermaking operations. This is 'GHG emissions per tonne of

production' (see 'GHG emissions'), which is the product of 'Total GHG emissions (net energy exported)' divided by 'Total production', to calculate an average GHG emissions arising per average tonne of production for our papermaking operations. This emission factor (344 kg CO<sub>2</sub>e/t nsp in 2022/23) is applied to the total volume of external sales from our recycling operations. For calculating the emissions arising from transforming sold paper reels into packaging, we take the total external paper sales volume to third party packaging producers and apply an emission factor that is calculated based on fuel and energy data from our own packaging operations. This is 'GHG emissions per tonne of production' (see 'GHG emissions'), which is the product of 'Total GHG emissions (net energy exported)' divided by 'Total production', to calculate an average GHG emissions arising per average tonne of production for our packaging operations. This emission factor (83 kg CO<sub>2</sub>e/t nsp in 2022/23) is applied to

the total volume of external sales from our paper operations. We take only external sales in this category as sales to other DS Smith operations (e.g. our own paper mills feeding our own packaging plants) are already accounted for in Scopes 1 and 2.

**Category 11****Use of sold products**

This category is judged irrelevant, as although we sell some machinery (e.g. forming and case sealing machines), it is difficult to calculate these emissions, which are not expected to contribute significantly to total Scope 3 emissions. Our primary product is corrugated packaging which does not consume energy when it is in use.

**Category 12****End of life treatment of sold products**

These are the emissions arising from the expected final disposal by end-consumers of the products sold during the reporting period. We take only external sales in this category so as not to double-count end-of-

life treatment for products that are processed in other DS Smith operations (e.g. our own paper mills feeding our own packaging plants). This is calculated using production data. Sites report all production based on primary data such as invoices, delivery notes and production systems. This is collected on a monthly basis from sites in scope and held within a central database. As these are future expected emissions not necessarily occurring within the reporting period, assumptions about the end-of-life treatment methods used by consumers are necessary. We assume that 81.5 per cent of total products sold externally will be recycled (Eurostat, 2020), meaning that 18.5 per cent of total products sold externally will be disposed of using an alternative waste destinations. We use Eurostat data covering the management of waste operations in the European Union - 28 countries (2013-2020), to estimate the waste destination for this remainder.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

BEIS ('Waste disposal', 'Paper', 'Paper and board: Paper', closed-loop, combustion and landfill) emission factors are applied to each destination to cover the total volume of products sold.

### Category 13

#### Downstream leased assets

This category is judged irrelevant as although we lease some assets (e.g. recycling balers), it is difficult to calculate these emissions, which are not expected to contribute significantly to total Scope 3 emissions. Our primary product is corrugated packaging which does not consume energy when it is in use.

### Category 14

#### Franchises

This category is judged irrelevant as we do not operate franchises within our business.

### Category 15 - Investments

These are the emissions associated with the principal equity (the Group's associates) accounted investments in the reporting period (see DS Smith Annual

Report 2023, page 158). These financed emissions are calculated in accordance with the PCAF standards, with BEIS emission factors applied to the ownership interest (attribution factor).

This category decreased compared to last year as a result of the impairment of the Group's investment in an associate RKTU in Ukraine. The invasion of Ukraine by Russia resulted in significant damage to the assets of the Group's associate and fundamentally compromised the ability to realise the interest held. Accordingly, it has been removed from the greenhouse gas inventory.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

**Fuel and energy**Scope

Manufacturing sites

Metrics

Energy consumption (MWh)

Fossil fuels (MWh), Electricity, steam, heat and cooling (MWh), Renewable fuels (MWh)

Energy exported (MWh)

Energy consumption (net) (MWh)

Definitions

'Energy consumption' is all fuel and energy inputs consumed. As a calculation, this is the sum of 'Fossil fuels', 'Electricity, steam, heat and cooling' and 'Renewable fuels'.

'Fossil fuels' is all fossil fuels consumed for energy purposes, e.g. natural gas.

'Electricity, steam, heat and cooling' is all energy purchased or acquired, e.g. grid electricity.

'Renewable fuels' is all renewable fuels consumed for energy purposes, e.g. biomass.

'Energy exported' is all of the energy generated that is not consumed but sent to a third-party, e.g. electricity exported to the national grid.

'Energy consumption (net)' is total energy consumption after subtracting total energy exported.

Data

Energy is calculated using fuel and energy information collected on a monthly basis from sites in scope and held within a central database. This information is taken from meter readings, invoices and other sources. The data is converted from the unit of measure it is entered and stored in a default base unit of measure (MWh, at the lower heating value, where relevant) for each energy input. It is then summarised and aggregated at various levels. These are summed into the 'Fossil fuels', 'Electricity, Steam, Heat and Cooling' and 'Renewable fuels' calculations. Included in 'Fossil fuels', where applicable, are natural gas, flare gas, coal, fuel oil, liquid petroleum gas (LPG),

diesel and petrol. Included in 'Electricity, Steam, Heat and Cooling', where applicable, are electricity purchased from the grid, steam purchased from third party, hot water purchased from third party, condensate returned from third party and self-generated renewable energy. Included in 'Renewable fuels', where applicable, are biomass, biogas and heavy black liquor.

In certain cases, specific data obtained from laboratory samples is used to determine the energy content of various fuel sources.

**Production**Scope

Manufacturing sites

Metrics

Total production (metric tonnes)

Definitions

'Total production' is the sum of the net saleable production (output) from our three main operations, Packaging, Paper and Recycling that is sold to internal and

external customers. This includes Packaging (boxes, sheets and other), Paper reels (and other), Wood products (sold by our Timber business) and recovered fibre and other materials (e.g. glass, metals, plastic and wood) processed and sold through our Recycling depot network. The Recycling figures exclude 'traded waste', i.e. volumes sold that do not physically pass through our Recycling Depot network.

Data

Production is calculated using production information collected on a monthly basis from sites in scope and held within a central database. For Packaging plants, this includes where applicable, volumes by size (ksm - thousand square metre) and other volumes by weight (tonnes). Where applicable, sites provide average grammage (basis weight) of board produced or converted to calculate weight from size. For Paper mills, this includes where applicable, paper reels (tonnes) and other products (tonnes).

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

For Recycling depots, this includes where applicable, recycled fibre sold as a product (tonnes) and recycled other materials sold as a product (tonnes). Production information is obtained from a variety of sources. The information may be entered in a variety of units of measurement and is converted and stored in a default base unit of measure (tonnes). It is then summarised and aggregated at various levels.

### Material inputs

#### Metrics

Waste collected for recycling

#### Definitions

This is the waste physically processed by our Recycling depot network and excludes 'traded waste'. 'Traded waste' is waste that is acquired and sold but does not physically enter the boundary of a DS Smith site.

#### Data

This information is collected on a monthly basis from Recycling depots and held within a central database.

### Water

#### Scope

Manufacturing sites

#### Metrics

Total water withdrawals (m<sup>3</sup>)

Borehole (m<sup>3</sup>)

Municipal (m<sup>3</sup>)

Surface (m<sup>3</sup>)

Water recirculated for reuse (m<sup>3</sup>)

Total water discharges (m<sup>3</sup>)

Total water consumption (m<sup>3</sup>)

Water withdrawals at mills in areas at risk of water stress (m<sup>3</sup> / t nsp)

#### Definitions

'Total water withdrawals' is the total water withdrawn into the boundary from all sources for any use. This includes borehole (e.g. from a well), municipal (e.g. from a utility company) and surface water (e.g. from a river, reservoir or harvested rainwater) sources.

'Total water discharges' is the total water effluents and other water leaving the boundary and released into the natural environment. This includes to fresh surface (river), brackish surface (sea) or third-party water destinations.

'Total water consumption' is the total water withdrawals that are not discharged back into the water environment or to a third-party.

As a calculation, this is ('Total water withdrawals' + 'Water recirculated for reuse') - 'Total water discharges'.

#### Data

Water is calculated using water information collected on a monthly basis from sites in scope and held within a central database. Sites in scope report water withdrawal from relevant sources, as applicable, including borehole, municipal or surface sources. Where applicable, a site may report a volume of water that is reused to account for water that is cycled in the process more than once before being

returned to the water environment. Water information is obtained from meter readings, invoices and other sources. The information may be entered in a variety of units of measurement and is converted and stored in a default base unit of measure (m<sup>3</sup>). It is then summarised and aggregated at various levels.

#### Targets

By 2030, reduce water withdrawal by 1% per tonne of production per year at mills in areas at risk of water stress compared to 2019

Maintain a water management plan at 100% of our sites in water stressed areas

Water withdrawals at paper mills located in regions at risk of water stress

#### Scope

Alcolea, Aschaffenburg, Kemsley, Lucca, Pazardzhik, Reading and Rouen paper mills. An analysis is conducted during the reporting period to ensure that the scope remains appropriate, as indicated by the WRI Aqueduct Water Risk Atlas tool.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

Metric

Water withdrawals at paper mills located in regions at risk of water stress (per metric tonne of net saleable production) (m<sup>3</sup>/t nsp).

Definitions

This metric includes Paper Division Paper Mills that are considered as being at 'high' or 'extremely high' risk of water stress, as indicated by the WRI Aqueduct Water Risk Atlas, under a 'business as usual' future water stress scenario (ws3028tl).

WRI defines 'water stress' as 'an indicator of competition for water resources [that] is defined informally as the ratio of demand for water by human society divided by available water'.

Calculation

Water withdrawals at mills located in regions of water stress is calculated as the 'Total water withdrawals (m3)' divided by the 'Total production (metric tonnes)' for the sites in scope.

**Waste**Scope

Manufacturing sites

Metrics

Total waste (metric tonnes)

Recycled (metric tonnes)

Landspread (metric tonnes)

Incinerated (metric tonnes)

Landfilled (metric tonnes)

Definitions

'Total waste' is the total of 'Recycled', 'Landspread', 'Incinerated' and 'Landfilled'.

'Recycled' is the total volume of process waste sent to recycling treatment.

'Landspread' is the total volume of process waste sent to landspread treatment.

'Incinerated' is the total volume of process waste sent to incineration treatment.

'Landfilled' is the total volume of process waste sent to landfill treatment.

These metrics include both on-site and off-site waste processing and direct processing or processing via a third-party.

There may be local legal requirements that specify that certain waste must be treated in a certain way.

These metrics do not include office waste or waste generated by exceptional projects such as construction or demolition works, but include other solid process waste leaving the boundary.

These metrics do not include waste sold as a product (e.g. in our Recycling Depot network, see 'Production').

**Waste recycled**

Waste sent to recycling predominantly includes process waste, such as fibre materials, that are recycled (by internal or external recyclers), as well as any other waste that is recycled according to, amongst other factors, local definitions and recycling infrastructure. This may include waste that is sent directly to a recycler or indirectly via a third party.

This may include, for example, cardboard, paper, paper reel cores, scrap metal or scrap wood, such as cutting forms (the 'cutter' used to score cardboard).

'Process waste' excludes waste generated by exceptional projects, such as construction or demolition works, but includes other process waste that leaves the physical site boundary to be recycled.

**Waste landspread**

Waste sent to landspread predominantly includes process waste, such as sludge, as well as any other waste that is landspread according to, amongst other factors, local definitions. This may include waste that is sent directly or indirectly via a third party.

'Process waste' excludes waste generated by exceptional projects, such as construction or demolition works, but includes other process waste that leaves the physical site boundary to be landspread.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

### Waste incinerated

Waste sent to incineration predominantly includes process waste that is incinerated according to, amongst other factors, local definitions. This may include waste that is sent directly or indirectly via a third party and includes waste incinerated with and without energy recovery.

'Process waste' excludes waste generated by exceptional projects, such as construction or demolition works, but includes other process waste that leaves the physical site boundary to be incinerated.

### Waste landfilled

Waste sent to landfill predominantly includes non-fibre materials that enter our processes from contaminated paper and cardboard waste streams (e.g. plastic wrap around papers), where alternative waste treatment methods are unavailable. In the first stage of the paper-making process, contaminants are removed during pulping and screening. Ragger rope is used to

capture and remove contaminants from the paper stream, such as plastic and metal.

Our journey to zero waste to landfill includes diverting rejected materials from landfill to turn contaminants into something useful once more, for example, at Lucca Mill where sludge has been utilised to produce bricks.

### Data

Waste is calculated using waste information collected on a monthly basis from sites in scope and held within a central database. Waste information is obtained from waste transfer notes, invoices and other sources. The information may be entered in a variety of units of measurement and is converted and stored in a default base unit of measure (tonnes). It is then summarised and aggregated at various levels.

### Targets

By 2030, send zero waste to landfill.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

**Social metrics**

This section sets out how we measure and report selected social metrics.

This information is obtained from a variety of reporting systems. Where there are uncertainties relating to the quality of information, this is noted in reporting.

**Community contribution**

There are a range of ways in which we actively contribute to the communities in which we operate through volunteering employee time, making in-kind donations of product or services and providing financial contributions. Using the B4S1 Framework, the global standard in measuring and managing a company's social impact, this estimate includes cash contribution, DS Smith Charitable Foundation contribution, EMF partnership contribution, time contribution, in-kind giving and management overheads.

We focused on quantifying large, coordinated activities that are easily captured within our Community Tracker,

although there will be other initiatives that are not quantified. The time contribution is estimated based on an average hourly personnel expense per FTE in the previous reporting period.

**Employees**

Employees leaving/joining excludes employee turnover owed to divestments and includes contingent workers. These workers are not included in the 'Total number of employees' figure.

**Gender diversity**Scope

Entire global business (Group)

Metric

All employees (% female)

Definition

This metric refers to the total number of employees (full time and part time, of any contract type) and the voluntarily self-reported (by the employee) gender of the employee that is stored on our global HR system on the last day of the financial year, i.e. 30th April 2023 for 2022/23.

Contingent workers, who are self-employed people hired through agencies that we have a service contract with and seasonal workers are excluded as they are not considered employees of DS Smith.

Data

Gender is self-declared by the employee, from a selection of 'male', 'female' or 'not declared' during the onboarding process and is stored in local payroll systems and in our global HR system.

This system provides the total number of employees and the metric is derived by dividing the total number of employees with 'female' on their record by the total number of employees.

**Other related metrics**

Senior leadership (% female)

Board of Directors (% female)

These metrics are a subset of the 'All employees (% female)' metric.

Senior leadership (% female)

This is defined in accordance with the requirements of the FTSE Women Leaders' Review, as those on our four Executive Committees - the Global Operating Committee (GOC), Global Strategy Committee (GSC), M&A Committee and Health, Safety, Environment and Sustainability Committee (HSES), and their direct reports.

Note, in previous reports this metric was referred to as 'Senior management (% female)'. It has been renamed to align with the requirements of the FTSE Women Leaders Review, but the definition and figures remain unchanged.

Board of Directors (% female)

This is defined as the Plc Board, the biographies for whom can be found in DS Smith Annual Report 2023.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

### Training and development

#### Metric

Average hours of training and development

#### Scope

Partial data coverage, representing  
c. 82 per cent of the workforce at this time.

#### Metric

Promotions (positions filled by internal  
candidates)

#### Scope

Partial data coverage representing UK  
employees only at this time.

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

## Now & Next Sustainability Strategy

### Circularity

In this table, 'SR' refers to  
DS Smith Sustainability Report 2023

Metric	Target	Notes	Ref
Percentage of fibre use optimised for individual supply chains	By 2025, optimise fibre for individual supply chains in 100 per cent of new packaging solutions	'Optimisation' is determined by BSIR level, see page 14 of DS Smith Sustainability Report 2023.	SR, p. 14
Number of pieces of problem plastic removed	By 2025, help our customers to take one billion pieces of problem plastic off supermarket shelves		SR, p. 12
Total waste sent to landfill	By 2030, send zero waste to landfill	See pages 37-38	SR, p.15
Percentage of packaging that is reusable or recyclable	Continue to manufacture 100 per cent recyclable and reusable packaging	Packaging or a component of a packaging solution that has been conceived and designed to accomplish within its life cycle (a minimum of two trips or rotations) or recycled (recycled in practice and at scale, equal to or greater than $\geq 95\%$ of the total pack weight is recyclable as this pack would be accepted by and processed in paper mills as per CPI recyclability guidelines) by the end consumer. We now consider this target 'achieved' because greater than 99.7% of our packaging volume meets this standard, enabling recyclability in practice and at scale. For the remaining less than 0.3% volume that is presently not either recyclable in practice or at scale, such as some barrier coatings and foam, we continue to push for circular alternatives.	SR, p. 17

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

## Now & Next Sustainability Strategy

### Carbon

In this table, 'SR' refers to  
DS Smith Sustainability Report 2023

Metric	Target	Notes	Ref
Total GHG emissions	By 2030, reduce Scope 1, 2 and 3 GHG emissions by 46 per cent compared to 2019	The official SBTi target wording is as follows: DS Smith commits to reduce absolute Scope 1, 2 and 3 GHG emissions 46.2% by FY 2030 from at FY 2019 base year. The target boundary includes land-related emissions and removals from bioenergy feedstocks.	SR, p. 21
Percentage of purchased goods and services emissions from suppliers with a science-based target	By 2027, encourage 100 per cent of our strategic suppliers to set their own science-based targets	We define 'strategic suppliers' as companies with whom we have a long-term, mutually cooperative relationship with mutual commitment where significant and ongoing value is accrued to both parties through operational capabilities. Within our current Scope 3 inventory, we estimate that these companies generate c. 76 per cent of emissions in Scope 3 Category 1: Purchased Goods and Services. This figure may change as we adopt supplier-specific emission factors in our inventory. The official SBTi wording is as follows: DS Smith commits that 76% of its suppliers by emissions covering purchased goods and services will have science-based targets by FY 2027.	SR, p. 22

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

## Now & Next Sustainability Strategy

### People & Communities

In this table, 'SR' refers to  
DS Smith Sustainability Report 2023

Metric	Target	Notes	Ref
Percentage of our people engaged on the circular economy (%)	By 2025, engage 100 per cent of our people on the circular economy		SR, p. 36
Number of people engaged on the circular economy (Number)	By 2030, engage 10 million people on the circular economy and circular lifestyles		SR, p. 36
Accident Frequency Rate (AFR) (Number)	Reduce the Accident Frequency Rate (AFR) every year	The Accident Frequency Rate (AFR) figure is for employees only. This figure has been restated for 2021/22 (correction from 1.91).	SR, p. 29
Percentage of senior leadership, female employees (%)	By 2030, improve gender diversity towards 40 per cent women in senior leadership and set an aspiration for other protected characteristics	See page 39	SR, p. 32
Percentage of sites completed SEDEX SAQ (%)	By 2025, complete SEDEX SAQ roll out to all sites and perform appropriate auditing of SAQs	Supplier Ethical Data Exchange Self-Assessment Questionnaire. The metric is the percentage of sites to whom SEDEX is rolled-out.	SR, p. 34
Percentage of our sites engaged in community activities (%)	100 per cent of our sites engaged in community activities each year	Scope: sites with greater than 50 full time employees	SR, p. 42

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

## Now & Next Sustainability Strategy

### Nature

In this table, 'SR' refers to  
DS Smith Sustainability Report 2023

Metric	Target	Notes	Ref
Number of our paper mills with biodiversity programmes in place (Number)	By 2025, biodiversity programmes in place at each of our paper mills	13 out of our 15 paper mills had launched their biodiversity programmes in 2022/23, which comprise a series of projects and activities to support biodiversity on site and in collaboration with the local community.	SR, p. 50
Water withdrawals at paper mills located in regions at risk of water stress (per metric tonne of net saleable production) (m <sup>3</sup> /t nsp)	By 2030, 10 per cent reduction in water withdrawal per tonne of production at mills at risk of water stress compared to 2019	See pages 36-37	SR, p. 53

## BASIS OF PREPARATION FOR SELECTED ESG INFORMATION CONTINUED

### Now & Next Sustainability Strategy

#### Miscellaneous

There are a number of Now & Next targets that have been achieved over the years, and as such have become 'business as usual' practice.

There are some important exclusions to note in relation to these claims.

In this table, 'SR' refers to DS Smith Sustainability Report 2023

Metric	Notes	Ref
100 per cent of the papers we use are either recycled or chain of custody certified (minimum FSC® controlled wood standard).	Scope: paper purchased through our centralised Paper Sourcing platform, which comprises by far the vast majority of external papers purchased. This presently excludes our Total Marketing Support business.	SR, p. 49
100 per cent of our forests are managed under sustainable forest management certifications (FSC®, PEFC, SFI)	Forests in North America and Iberia.	SR, p. 49
100 per cent of our sites are FSC® certified	Scope: Packaging, Paper and Paper Sourcing operations that manufacture or trade products derived from timber are FSC® certified, demonstrating to our customers that forest-derived materials have been produced to FSC's rigorous standards.	SR, p. 49
100 per cent of our in-scope sites maintain ISO 50001 Energy Management System certification	Scope: Sites that on aggregate cover 90 per cent of the Group energy consumption for the prior year.	SR, p. 21

### Comments about our Sustainability Report

We are committed to continuing to develop our Sustainability Report to keep our stakeholders informed about the progress we are making.

The team can be contacted via email at [sustainability@dssmith.com](mailto:sustainability@dssmith.com).

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