

Supporting data





Supporting Data

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Input/Output 2022

Europe

Input

Wood and Fibre		
Wood ¹	4,999	ktonnes ar
Market virgin pulp	117	ktonnes ar
Other pulp	10	ktonnes ar
Recovered paper	5,278	ktonnes ar
Paper or board purchased	1,373	ktonnes ar
Plastic films, other plastic item (BIB)	33	ktonnes
Starch (all types)	308	ktonnes ar
Inorganic raw materials	334	ktonnes ar
Other organic raw materials	178	ktonnes ar

Energy

Energy from fossil fuels	30,689	TJ (Terajoule)
Energy from purchased biofuels	5,526	TJ
Electricity from grid	2,197	GWh

Water

Water intake ²	111	Mm ³
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Output

Production		
Papers (all grades)	6,032	ktonnes
Corrugated packaging*	5,347	ktonnes
Board and laminated boards*	404	ktonnes
Converted board*	115	ktonnes
Sacks*	–	ktonnes
Other packaging	33	ktonnes

Direct Emissions to Air

CO ₂ fossil	1,771	ktonnes
CO ₂ biogenic	3,594	ktonnes
Dust/particulates from fuels	0.17	ktonnes
SO _x from processes	0.79	ktonnes
NO _x from processes	2.9	ktonnes

Energy Output

Electricity to third party	400	GWh
Thermal energy to third party	175	TJ
Biomass sold	664	TJ

Waste

Hazardous waste	11.1	ktonnes
Non-hazardous waste sent to landfill	200	ktonnes
Non-hazardous waste recovered	468	ktonnes
Other non-hazardous waste	14.4	ktonnes

Discharges to Water

Water released	100	Mm ³
COD	30.2	ktonnes
BOD	11.8	ktonnes
Total suspended solids	5.2	ktonnes
Nitrogen	0.54	ktonnes
Phosphorous	0.060	ktonnes

Notes

- 1 Wood and sawmill chips as delivered to the mill.
 - 2 Water intake includes rainwater and waste water from another operation.
- * Partly produced with Smurfit Kappa paper or board.
ktonnes ar: kilotonnes as received.

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 120 to 121. The latter pages show the energy consumption for the production of the paper or board manufactured.

The Americas

Input

Wood and Fibre		
Wood ¹	871	ktonnes ar
Market virgin pulp	3	ktonnes ar
Other pulp	2	ktonnes ar
Recovered paper	1,499	ktonnes ar
Paper or board purchased	288	ktonnes ar
Plastic films, other plastic item (BIB)	5	ktonnes
Starch (all types)	67	ktonnes ar
Inorganic raw materials	39	ktonnes ar
Other organic raw materials	66	ktonnes ar

Energy

Energy from fossil fuels	12,739	TJ (Terajoule)
Energy from purchased biofuels	2,233	TJ
Electricity from grid	887	GWh

Water

Water intake ²	31	Mm ³
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Output

Production		
Papers (all grades)	1,491	ktonnes
Corrugated packaging*	1,661	ktonnes
Board and laminated boards*	122	ktonnes
Converted board*	91	ktonnes
Sacks*	72	ktonnes
Other packaging	5	ktonnes

Direct Emissions to Air

CO ₂ fossil	835	ktonnes
CO ₂ biogenic	607	ktonnes
Dust/particulates from fuels	0.17	ktonnes
SO _x from processes	1.32	ktonnes
NO _x from processes	1.41	ktonnes

Energy Output

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

Waste

Hazardous waste	1.7	ktonnes
Non-hazardous waste sent to landfill	253	ktonnes
Non-hazardous waste recovered	20	ktonnes
Other non-hazardous waste	0.1	ktonnes

Discharges to Water

Water released	27.4	Mm ³
COD	11.6	ktonnes
BOD	2.47	ktonnes
Total suspended solids	3.51	ktonnes
Nitrogen	0.36	ktonnes
Phosphorous	0.030	ktonnes

Notes

1 Wood and sawmill chips as delivered to the mill.

2 Water intake includes rainwater and waste water from another operation.

* Partly produced with Smurfit Kappa paper or board.

ktonnes ar: kilotonnes as received.

The table reports total energy consumption of the site, taking into account the fuels used to produce electricity and/or thermal energy sold externally. This results in different figures for these parameters compared to those on pages 122 to 123. The latter pages show the energy consumption for the production of the paper or board manufactured.

Environmental Data 2022

Paper and Board Mills, Europe

		Nettingsdorf, Austria	Sangüesa, Spain	Facture, France	Piteå, Sweden	Morava, Czech Republic	Wrexen, Germany ⁵	Hoya, Germany ⁵	Zülpich, Germany	Mengibar, Spain
		kl, tl	mg paper	bkl, wtkt	bkl, wtkt	tl, fl	wtkl, sb, tl, fl	tl, fl, cart	tl, fl	fl, tl
Production	ktonnes	418	85	547	659	75	295	430	507	218
Energy										
Electricity										
Co-generated	GWh	154	58	401 ¹	293	–	50	109	149	97
Self-generated	GWh	–	–	–	–	–	–	–	–	–
Hydro power	GWh	–	–	–	–	0.7	0.1	–	–	–
Solar electricity generated on site	GWh	–	–	–	–	–	–	–	–	–
Net grid supply	GWh	123	88	46	262	22	37	54	41	– ²
Total electricity	GWh	277	146	447	556	23	88	163	190	97
Fuel Usage										
Biofuels	TJ	4,301	2,070	9,160	10,049	17	59	93	400	–
Fossil fuels	TJ	674	179	598	173	329	1,226	2,238	2,659	1,500
Total fuels	TJ	4,975	2,249	9,758	10,222 ³	346	1,285	2,331	3,059	1,500
Water Withdrawal										
Surface	Mm ³	15.9	4.5	7.9	26.8	0.5	0.5	–	1.6	1.3
Ground	Mm ³	–	–	0.9	–	0.0	0.6	2.3	0.4	0.0
Grid	Mm ³	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.1
Total water ⁴	Mm ³	16.0	4.7	9.3	27.3	0.5	1.2	2.5	2.0	1.3
Discharges										
To Air										
CO ₂ fossil direct Scope 1	ktonnes	38	13	35	13	18	69	126	157	84
CO ₂ fossil indirect Scope 2	ktonnes	–	17	2	3	10	13	19	14	–
CO ₂ biogenic	ktonnes	467	221	1,091	1,155	1	5	7	46	5
Dust (particulate matter PM)	tonnes	9.8	8.0	27.1	87.3	0.2	0.0	0.0	0.5	0.1
NO _x as NO ₂	tonnes	294	114	589	593	6	32	74	137	66
SO _x as SO ₂	tonnes	8	40	66	24	1	1	1	3	72
To Water										
Process water	Mm ³	5.78	3.81	9.71	10.36	0.32	0.32	2.05	–	1.16
Cooling water	Mm ³	7.98	–	–	16.79	–	0.54	0.07	1.23	–
COD	tonnes	9,233	226	4,062	2,005	44	69	244	–	418
BOD	tonnes	5,618	75	1,107	430	0	4	15	–	11
Total suspended solids	tonnes	799	65	651	246	6	5	72	–	233
Total nitrogen	tonnes	43.6	24.8	108.2	31.8	5.3	0.8	29.7	–	40.7
Total phosphorous	tonnes	3.4	0.5	13.9	6.7	0.2	0.1	1.6	–	3.9
Waste										
Total non-hazardous waste	tonnes	21,800	15,421	54,125	37,990	10,370	11,351	30,910	15,011	26,554
Landfill	tonnes	3,712	4,103	10,181	1,678	4,688	–	–	–	22,962
Recovery	tonnes	18,088	11,318	43,786	36,312	5,682	11,189	30,910	15,011	3,592
Other	tonnes	–	–	158	–	–	162	–	–	–
Hazardous waste	tonnes	180	340	195	133	4	72	30	5,258	40

Notes

- 1 CHP partly or totally outsourced.
- 2 Electricity exported by CHP.
- 3 Part of heat exported outside the Group.

4 Total water includes rainwater and waste water from another organisation.

5 Both Hoya and Wrexen consist of two mills on one site, data are aggregated data per site.

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

Alfa d'Avignon, France	Rethel, France	Saillat, France	Ania, Italy	Verzuolo, Italy	Roermond, the Netherlands	Parencio, the Netherlands	Belgrade, Serbia	SSK, United Kingdom	Townsend Hook, United Kingdom	Herzberger, Germany	Nervión, Spain	Total mills
ti	ti	fl, ti	fl, ti	fl, ti	ti, fl	fl, grap pap, ti	ti, fl	ti, fl	fl, ti	sb	sack pap	
67	62	227	221	433	642	600	122	192	238	251	149	6,436
–	–	38 ¹	65	263	103	–	–	57	80	75	118	2,111
0.01	–	–	–	–	–	–	–	–	–	0.03	0.00	0.04
–	–	1.1	–	–	–	–	–	–	–	0.9	–	2.8
–	–	–	–	–	–	–	–	–	–	–	–	–
26	22	74	– ²	– ²	76	363	47	– ²	6	14	56	1,358
26	22	113	65	263	179	363	47	57	85	90	174	3,472
–	11	65	50	363	234	1,159	–	30	40	–	3,240	31,340
290	269	1,292	1,340	3,016	2,648	1,303	812	1,293	1,384	1,622	109	24,955
290	279	1,357	1,390	3,379	2,882	2,463	812	1,322	1,424	1,622	3,349	56,295
0.9	–	1.8	–	5.9	2.3	15.0	1.2	–	1.0	3.8	2.7	93.6
–	0.4	–	1.6	–	–	5.1	–	1.0	0.4	0.0	–	12.7
–	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.8
1.0	0.4	1.8	1.6	6.0	2.5	20.3	1.3	1.1	1.4	3.8	2.8	108.8
16	15	72	75	170	149	75	66	73	78	91	7	1,441
1	1	4	–	–	–	–	35	–	–	5	11	136
1	1	6	3	43	18	140	–	3	7	–	346	3,569
0.1	0.0	0.6	0.0	0.2	0.0	0.6	7.5	0.0	0.0	2.1	24.8	169.0
8	5	40	20	90	112	115	71	91	57	41	240	2,796
5	3	2	0	1	6	7	462	0	5	6	43	756
0.54	0.36	1.61	1.34	4.53	1.83	4.72	1.03	0.94	0.78	1.49	2.15	54.83
0.15	–	–	–	–	–	15.02	–	–	0.27	2.11	–	44.16
120	39	270	129	399	314	776	4,198	4,109	98	267	1,341	28,360
37	3	5	15	57	11	25	1,373	2,220	4	18	319	11,347
29	8	203	20	31	49	66	274	1,826	27	32	140	4,782
14.7	4.5	31.0	17.3	37.7	35.1	46.3	2.2	20.7	9.8	2.8	1.5	508.6
1.3	0.4	2.6	1.0	2.0	2.8	8.2	1.5	11.9	0.4	1.0	0.3	63.6
3,512	1,735	16,485	18,324	55,133	57,174	68,015	19,689	29,561	23,922	32,689	73,876	623,647
3,484	1,482	15,859	2,505	12,969	10,507	2,550	11,374	16,392	3,334	–	66,004	193,784
28	253	626	15,819	42,162	46,504	65,465	8,315	13,095	20,588	32,062	7,872	428,676
–	–	–	–	3	163	–	–	74	–	627	–	1,187
35	9	29	33	89	27	70	2	105	23	15	68	6,756

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

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

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

Environmental Data 2022 continued

Paper and Board Mills, the Americas

		Bernal, Argentina	Coronel Suárez, Argentina	Bento, Brazil	Pirapetinga, Brazil	Uberaba, Brazil
		t, fl	t	fl, t	t, fl, wtfl	t, fl
Production	ktonnes	80	50	49	124	59
Energy						
Electricity						
Co-generated	GWh	–	–	–	–	–
Self-generated	GWh	–	–	–	–	0.01
Hydro power	GWh	–	–	–	–	–
Solar electricity generated on site	GWh	–	–	–	–	–
Net grid supply	GWh	34	13	19	58	29
Total electricity	GWh	34	13	19	58	29
Fuel Usage						
Biofuels	TJ	–	–	331	928	562
Fossil fuels	TJ	502	300	2	37	6
Total fuels	TJ	502	300	333	965	568
Water Withdrawal						
Surface	Mm ³	–	–	0.1	0.9	–
Ground	Mm ³	0.7	0.3	–	–	0.4
Grid	Mm ³	0.0	–	0.0	0.0	–
Total water ¹	Mm ³	0.7	0.3	0.1	0.9	0.4
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	29	17	0	3	0
CO ₂ fossil indirect Scope 2	ktonnes	10	4	2	6	3
CO ₂ biogenic	ktonnes	0	–	36	99	58
Dust (particulate matter PM)	tonnes	0.0	0.0	44.2	47.4	38.1
NO _x as NO ₂	tonnes	39	14	48	160	76
SO _x as SO ₂	tonnes	3	0	0	4	1
To Water						
Process water	Mm ³	0.32	0.19	–	0.62	0.29
Cooling water	Mm ³	0.32	–	–	–	–
COD	tonnes	45	83	–	222	587
BOD	tonnes	7	15	–	85	234
Total suspended solids	tonnes	4	18	–	22	54
Total nitrogen	tonnes	5.3	2.2	–	5.5	4.9
Total phosphorous	tonnes	0.1	0.0	–	0.8	0.5
Waste						
Total non-hazardous waste	tonnes	8,255	4,059	4,126	13,770	6,156
Landfill	tonnes	3,303	4,026	3,377	13,557	6,069
Recovery	tonnes	4,952	33	715	214	87
Other	tonnes	–	–	35	–	–
Hazardous waste	tonnes	68	22	38	19	8

Notes

1 Total water includes rainwater and waste water from another organisation.

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

	Cali, Colombia	Barranquilla, Colombia	Barbosa, Colombia	Los Reyes, Mexico	Cerro Gordo, Mexico	Monterrey, Mexico	Forney, USA	Total Mills
sc fl, bkl, sack p, bkl, cart, tl, p&w, wttl, wtkl	tl, fl	fl, tl	fl, tl	fl, tl	tl, cart, fl	fl, tl	tl, fl	
270	64	110	140	316	32	319	1,613	
211	34	50	–	–	–	–	13	308
0.12	–	0.02	–	–	–	–	–	0.15
–	–	–	–	–	–	–	–	–
–	–	–	–	–	0	0	–	0
114	3	4	67	158	20	122	642	
326	37	54	67	158	20	135	950	
3,741	–	–	–	–	–	–	207	5,770
4,969	626	733	753	1,430	207	1,512	11,077	
8,710	626	733	753	1,430	207	1,719	16,847	
21.5	0.8	0.8	–	–	–	–	–	24.1
0.2	–	–	0.4	1.5	0.1	–	–	3.6
0.0	0.0	–	–	–	0.1	1.4	–	1.4
21.8	0.8	0.8	0.7	1.5	0.2	1.4	–	29.7
379	35	48	42	80	12	85	730	
6	0	0	27	63	8	46	175	
364	–	–	–	0	0	26	585	
30.8	3.2	0.3	0.0	0.3	0.0	2.1	166.6	
814	36	63	23	34	10	46	1,365	
1,147	1	89	0	3	1	27	1,276	
21.71	0.55	0.67	0.43	0.94	0.09	0.49	26.28	
–	–	–	–	–	–	0.28	0.61	
7,651	532	378	114	459	44	1,281	11,396	
1,263	162	143	10	72	17	406	2,414	
2,679	221	100	11	101	10	225	3,444	
275.6	4.5	0.9	3.1	8.1	1.7	31.8	343.7	
12.2	3.9	0.9	0.4	2.7	0.1	5.7	27.5	
102,966	3,195	11,159	14,701	41,108	3,973	40,204	253,673	
101,707	2,174	9,704	14,096	40,851	1,012	40,046	239,922	
1,249	1,022	1,455	605	257	2,961	158	13,707	
10	–	–	0	–	–	–	45	
182	11	8	18	20	5	0	399	

bkl: brown kraft liner
cart: carton board
fl: recycled fluting
sc fl: semi-chemical fluting

p&w: printing and writing paper
pulp: virgin pulp sold externally
tl: testliner
wtkl: white top kraftliner

wttl: white top testliner
sack p: sack paper

Environmental Data 2022 continued

Total Operations Europe

		Paper and Board Mills	Integrated Corrugated Operations	Other Packaging Operations	Other Operations	Total Operations
Production	ktonnes	6,436	5,058	437	1,867	13,798
Energy						
Electricity						
Co-generated	GWh	2,111	–	–	–	2,111
Self-generated	GWh	0.04	–	–	–	0.04
Hydro power	GWh	3	–	–	–	3
Solar electricity generated on site	GWh	–	4	–	–	4
Net grid supply	GWh	1,358	559	86	4	2,007
Total electricity	GWh	3,472	563	86	4	4,125
Fuel Usage						
Biofuels	TJ	31,340	191	1	–	31,531
Fossil fuels	TJ	24,955	4,378	132	79	29,543
Total fuels	TJ	56,295	4,568	132	79	61,074
Water Withdrawal						
Surface	Mm ³	93.6	0.0	–	–	93.6
Ground	Mm ³	12.7	0.2	0.0	–	12.9
Grid	Mm ³	0.8	1.5	0.1	0.0	2.4
Total water ¹	Mm ³	108.8	1.7	0.1	0.0	110.6
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	1,441	252	8	6	1,706
CO ₂ fossil indirect Scope 2	ktonnes	136	109	16	0	262
CO ₂ biogenic	ktonnes	3,569	20	0	–	3,589
Dust (particulate matter PM)	tonnes	169	2	0	0	171
NO _x as NO ₂	tonnes	2,796	89	3	4	2,891
SO _x as SO ₂	tonnes	756	28	1	4	788
To Water						
Process water	Mm ³	54.8	0.6	0.0	–	55.5
Cooling water	Mm ³	44.2	0.1	–	–	44.3
COD ²	tonnes	28,360	1,827	–	–	30,187
BOD ²	tonnes	11,347	479	–	–	11,825
Total suspended solids ²	tonnes	4,782	421	–	–	5,203
Total nitrogen ²	tonnes	509	31	–	–	540
Total phosphorous ²	tonnes	64	1	–	–	64
Waste						
Total non-hazardous waste	tonnes	623,647	45,674	7,421	6,328	683,070
Landfill	tonnes	193,784	4,377	707	1,302	200,170
Recovery	tonnes	428,676	28,602	6,168	5,026	468,471
Other	tonnes	1,187	12,695	547	–	14,428
Hazardous waste	tonnes	6,756	3,933	426	12	11,127

Notes

- 1 Total water includes rainwater and waste water from another organisation.
- 2 Sum of available data (for mills details are reported in individual tables).

Total Operations, The Americas

		Paper and Board Mills	Other Operations	Total Operations
Production	ktonnes	1,613	3,491	5,104
Energy				
Electricity				
Co-generated	GWh	308	–	308
Self-generated	GWh	0.15	0.22	0.37
Hydro power	GWh	–	–	–
Solar electricity generated on site	GWh	0	1	1
Net grid supply	GWh	642	241	882
Total electricity	GWh	950	242	1,192
Fuel Usage				
Biofuels	TJ	5,770	204	5,974
Fossil fuels	TJ	11,077	1,662	12,739
Total fuels	TJ	16,847	1,866	18,713
Water Withdrawal				
Surface	Mm ³	24.1	0.1	24.2
Ground	Mm ³	3.6	0.3	3.9
Grid	Mm ³	1.4	0.4	1.9
Total water ¹	Mm ³	29.7	0.9	30.5
Discharges				
To Air				
CO ₂ fossil direct Scope 1	ktonnes	730	104	835
CO ₂ fossil indirect Scope 2	ktonnes	175	72	247
CO ₂ biogenic	ktonnes	585	22	607
Dust (particulate matter PM)	tonnes	167	3	170
NO _x as NO ₂	tonnes	1,365	41	1,406
SO _x as SO ₂	tonnes	1,276	43	1,320
To Water				
Process water	Mm ³	26.3	0.2	26.5
Cooling water	Mm ³	0.61	–	0.61
COD ²	tonnes	11,396	167	11,563
BOD ²	tonnes	2,414	58	2,472
Total suspended solids ²	tonnes	3,444	67	3,512
Total nitrogen ²	tonnes	343.7	13.7	357.4
Total phosphorous ²	tonnes	27.5	0.1	27.6
Waste				
Total non-hazardous waste	tonnes	253,673	19,056	272,730
Landfill	tonnes	239,922	12,665	252,587
Recovery	tonnes	13,707	6,298	20,005
Other	tonnes	45	93	138
Hazardous waste	tonnes	399	1,290	1,689

Notes

- 1 Total water includes rainwater and waste water from another organisation.
- 2 Sum of available data (for mills details are reported in individual tables).

Environmental Data 2022 continued

Total Group Operations

		All Operations				
		2022	2021	2020	2019	2018
Energy						
Electricity						
Co-generated ¹	GWh	2,419	2,196	2,192	2,218	2,282
Self-generated	GWh	0.41	0.58	1.09	0.81	8.14
Hydro power	GWh	3	5	5	4	4
Solar electricity generated on site	GWh	5	1	1	0	–
Grid supply	GWh	2,890	2,907	2,841	2,876	2,356
Total electricity	GWh	5,317	5,109	5,040	5,099	4,650
Fuel Usage						
Biofuels	TJ	37,506	37,363	36,965	37,119	36,580
Fossil fuels	TJ	42,282	40,847	41,058	40,735	40,469
Total fuels	TJ	79,787	78,210	78,023	77,854	77,049
Water Withdrawal						
Surface	Mm ³	117.8	116.6	120.9	114.2	99.1
Ground	Mm ³	16.8	17.0	17.0	16.7	10.9
Grid	Mm ³	4.3	4.0	4.0	3.9	3.9
Total water ²	Mm ³	141.1	140.1	144.3	137.1	115.3
Discharges						
To Air						
CO ₂ fossil direct Scope 1	ktonnes	2,541	2,500	2,545	2,513	2,489
CO ₂ fossil indirect Scope 2	ktonnes	508	553	566	808	652
CO ₂ biogenic	ktonnes	4,195	4,176	4,073	4,066	3,944
Dust (particulate matter PM)	tonnes	341	344	383	596	631
NO _x as NO ₂	tonnes	4,297	4,128	4,400	4,971	5,072
SO _x as SO ₂	tonnes	2,108	2,176	2,395	2,237	2,694
To Water						
Process water	Mm ³	82.0	77.0	80.0	76.2	74.0
Cooling water	Mm ³	44.9	49.3	50.8	49.2	29.7
COD ³	tonnes	41,750	41,398	40,100	42,015	41,316
BOD ³	tonnes	14,297	14,849	15,399	17,449	15,022
Total suspended solids ³	tonnes	8,715	8,431	7,775	7,898	8,004
Total nitrogen ³	tonnes	897	1,088	901	960	1,228
Total phosphorous ³	tonnes	92	99	87	107	224
Waste						
Total non-hazardous waste	tonnes	955,799	915,257	856,862	903,341	853,599
Landfill	tonnes	452,757	426,106	442,038	539,450	519,000
Recovery	tonnes	488,476	475,022	405,801	350,287	323,045
Other	tonnes	14,566	14,129	9,022	13,604	11,553
Hazardous waste	tonnes	12,815	8,774	10,046	9,655	10,614

Notes

1 CHP partly or totally outsourced.

2 Total water includes rainwater and waste water from another organisation.

3 Sum of available data (for mills details are reported in individual tables).

Social Data

Social Citizenship and Health and Safety

	2022	2021	2020	2019	2018
Social Citizenship (Full-time Employees)					
Total number of employees ¹	48,058	48,045	46,688	46,237	44,959
of whom female (%) ²	20%	20%	19%	19%	19%
Employees leaving the company ³	5,421	4,919	4,017	4,842	6,224
of whom resignation and retirement (%)	74%	69%	64%	64%	58%
Employees joining the company ³	5,705	5,778	4,189	5,038	6,675
Age distribution (%)					
<20 years	1%	1%	1%	1%	1%
21-30 years	17%	17%	16%	17%	17%
31-40 years	24%	25%	25%	24%	24%
41-50 years	27%	27%	27%	28%	28%
51-60 years	26%	26%	26%	25%	25%
>60 years	5%	5%	5%	5%	5%
Employees turnover (%)	12.7%	11.7%	9.8%	11.7%	15.5%
Length of service, above 11 years (%)	46%	46%	47%	48%	49%
Female in management (%)	23.5%	22%	22%	21%	19%
Parental leave	1,423 employees took a parental leave and 1,201 returned from parental leave	1,225 employees took parental leave and 1,015 returned from parental leave	1,152 employees took parental leave and 900 returned from parental leave	1,178 employees took parental leave and 1,028 returned from parental leave	1,260 employees took parental leave and 1,126 returned from parental leave
of whom female ⁶	383 female employees took parental leave and 260 returned	371 female employees took parental leave and 238 returned			
Average training hours per employee	21	18.7	15	22	24
By gender ⁶	20.9 Male/22.5 Female	18.6 Male/18.9 Female			
Health and Safety					
Lost time accidents (LTA) (SK employees)	277	270	232	325	321
Lost time accidents (LTA) (contractors)	58	63	37	46	48
Days lost due to accidents (DLA) (SK employees)	8,890	9,090	9,413	11,177	10,683
Accident severity rate (ASR) (%) (SK employees)	10.08%	10.39%	11.19%	13.15%	12.65%
LTA frequency rate (FR)* (SK employees)	0.31	0.31	0.28	0.38	0.38
Total recordable injury rate ⁴	0.51	0.59	0.60	0.84	1.01
Number of restricted workday cases (RWC) (SK employees) ⁵	68	107	104	135	
Number of medical treatment cases (MTC) (SK employees) ⁵	109	137	165	253	
Number of medical treatment cases (MTC) (contractors) ⁶	12	9			
Total recordable injuries (LTA/RWC/MTC) ⁵	454	514	501	713	
Fatalities					
Own employees	0	0	0	0	0
Contractors ⁷	0	0	1	0	0
Sub-contractors ⁷	1	1	1	2	0

Notes

- 1 Based on full-time equivalent of employees and contractors.
- 2 Based on SK employees only (excluding contractors).
- 3 This data has been derived from Hyperion Financial Management data system (HFM). Since 2018, all countries have registered in HFM, and data accuracy has improved. This has led to an increase in the joiners and leavers data compared with 2017.
- 4 New indicator since 2018.

5 New indicator since 2019.

6 New indicator since 2021.

7 (Sub)contractors have been split into contractors and sub-contractors since 2021.
* The amount of contractors and sub-contractors in our business is relatively small. Contractors and sub-contractors are mainly supporting us in major construction and maintenance projects and represent our external suppliers.

Sourcing Data

Sustainable Sourcing and Sustainable Fibre Data

	2022	2021	2020	2019	2018
Sustainable Sourcing Data					
Number of audit activities¹					
Suppliers of key materials	66	9	21	35	21
Tactical and other suppliers	55	13	25	77	53
Satisfactory Scores					
Suppliers of key materials	50	8	20	29	20
Tactical and other suppliers	37	11	24	65	43
Sustainable Fibre					
Wood supplied from certified forests ²	56.9%	56.2%	57.3%	57.8%	55.0%
Wood supplied from non-controversial sources ²	43.1%	43.8%	42.7%	42.2%	45.0%
Paper produced as certified ²	93.0%	92.8%	92.7%	92.6%	91.0%
Packaging sold as certified ^{2,3}	94.3%	93.5%	93.8%	92.1%	88.4%
External papers purchased through CoC certified supply chains ^{2,4}	99.2%	99.5%	99.2%	98.9%	99.5%
Recycled fibres in global production	76.2%	75.6%	75.4%	75.8%	74.5%

Environmental Incidents 2022

Significant Environmental Non-compliances in 2022*

Site	Significant Environmental Non-Compliance	Details
Barranquilla, Colombia	Water	A new water treatment plant has now started to run and the site is expected to be compliant in 2023.
Belgrade, Serbia	Water	Construction work for a new water treatment plant has started and is expected to be finalised in 2023.
Coronel Suárez, Argentina	Water	The water treatment plant will be updated with an anaerobic reactor which is expected to be finalised in 2023.
Facture, France	Noise	Noise insulation work has been started in several parts of the mill and is expected to be finalised in 2023.
Mengíbar, Spain	Noise	The site is awaiting guidance on local new permit limits to drive how the issue is resolved.
Mengíbar, Spain	Water	The water treatment plant was updated with a new reactor during 2022 and the site is expected to be compliant in 2023.
Sangüesa, Spain	Air	The site is adjusting the operation of its lime kiln and we expect this to resolve the issue in 2023.

* A significant environmental non-compliance is a non-compliance that requires a change to existing infrastructure at the site, often requiring a CapEx.

Notes

- 1 An 'audit activity' could be an initial or re-approval audit, a follow-up on improvement plan, an internal audit or an assessment by an external platform. From 2022 onwards we report on all audit activities.
- 2 FSC, PEFC or SFI CoC certified and FSC Controlled Wood.
- 3 Russian data has been excluded from CoC-related KPIs from 1 April 2022 (see page 134). The result including Russia for the full year was 92.7%.
- 4 Russian data has been excluded from CoC-related KPIs from 1 April 2022 (see page 134). The result including Russia for the full year was 94.1%.

Management System Certifications

Forestry, Wood Sourcing and Mills

		Quality Management System	Environmental Management System	Health and Safety System	Hygiene Management for Foodstuffs Packaging		Energy Management System	Chain of Custody		
		ISO 9001	ISO 14001	ISO 45001	EN 15593	FSSC 22000	ISO 50001	FSC	PEFC	SFI
Europe										
Wood Sourcing										
ES	Central Forestal			YES				YES	YES	
FR	Comptoir du Pin			YES				YES	YES	
Virgin Mills										
AT	Nettingsdorf	YES	YES	YES	YES			YES	YES	
ES	Nervión Sangüesa	YES	YES	YES	YES		YES	YES	YES	
		YES	YES	YES	YES			YES	YES	
FR	Facture	YES	YES	YES		YES		YES	YES	
SE	Piteå	YES	YES	YES		YES	YES	YES	YES	
Recycled Mills										
CZ	Morava	YES	YES	YES	YES		YES	YES	YES	
DE	Herzberger	YES	YES	YES	YES		YES	YES	YES	
	Hoya ¹	YES	YES	YES	YES		YES	YES	YES	
	Wrexen ¹	YES	YES	YES	YES		YES	YES	YES	
	Zülpich	YES	YES	YES	YES		YES	YES	YES	
ES	Mengibar	YES	YES	YES	YES			YES	YES	
FR	Alfa D'Avignon	YES	YES		YES			YES	YES	
	Rethel	YES	YES		YES			YES	YES	
	Saillat	YES	YES	YES	YES		YES	YES	YES	
IT	Ania	YES	YES	YES	YES			YES	YES	
	Verzuolo	YES	YES					YES	YES	
NL	Parenco Roermond	YES	YES	YES		YES	YES	YES	YES	
RS	Belgrade	YES	YES			YES		YES		
UK	SSK	YES	YES	YES	YES		YES	YES	YES	
	Townsend Hook	YES	YES	YES			YES	YES	YES	
The Americas										
Forestry										
CO	Colombian Forest							YES		
Virgin mills										
CO	Cali		YES					YES		
Recycled Mills										
AR	Bernal	YES	YES				YES	YES		
	Coronel Suárez	YES	YES				YES	YES		
BR	Bento	YES						YES		
	Pirapetinga	YES						YES		
	Uberaba	YES						YES		
CO	Barbosa Barranquilla		YES					YES		
ME	Cerro Gordo	YES	YES					YES		
	Los Reyes	YES	YES					YES		
	Monterrey	YES	YES					YES		
USA	Forney		YES	YES				YES	YES	YES

Note

1 Both Hoya and Wrexen consist of two mills on one site, data are aggregated data per site.

Protected Areas and Biodiversity

Smurfit Kappa Operations Within or Adjacent to Legally Protected Area or to Areas of High Biodiversity Value

Some of our European sites operates partly in or are adjacent to areas classified by Natura 2000.

Location	Type Plant	Specifics	Status	Area
Austria				
Nettingsdorf	Paper mill	Site adjacent to a protected area	Natura 2000	Hangwälder Ritzlhof AT3147000
Czech Republic				
Morava	Paper mill	Site adjacent to a protected area	Natura 2000	Vallée du Ciron FR7200693
France				
Alfa d'Avignon	Paper mill	Site adjacent to a protected area	Natura 2000	Le Rhône aval FR9301590
Aquitaine	Corrugated site	Site adjacent to a protected area	Natura 2000	Údolí Moravice CZ0813474
Facture	Paper mill	Site partly located in the protected area	ZNIEFF type 1 ZNIEFF type 2 Natura 2000 LPO ZICO	Zone inondable de la basse Leyre Vallées de la grande et de la petite Leyre Vallées de la grande et de la petite Leyre AN1
Germany				
Delitzsch	Corrugated site	Site adjacent to a protected area	Natura 2000	Agrarraum und Bergbaufolgelandschaft bei Delitzsch DE4439452
Heppenheim	Board converting site	Site adjacent to a protected area	Natura 2000	Hinterer Bruch südlich Heppenheim DE6317306
Herzberg	Three activities (board mill & corrugated site & converting plan)	Site adjacent to a protected area	Natura 2000 Naturpark Harz	Sieber, oder, Rhume DE 4228331 N°4229-402
Lauenburg	Corrugated site	Site adjacent to a protected area	Natura 2000	Elbe mit Hohem Elbufer von Tesperhude bis Lauenburg mit angr. Fl. DE2628392
St Leon	Corrugated site	Site adjacent to a protected area	Natura 2000	Lußhardt zwischen Reilingen & Karlsdorf DE6717341
Wrexen	Paper mill	Site adjacent to a protected area	Natura 2000	Vogelschutzgebiet Egge DE4419401
The Netherlands				
Parenco	Paper mill	Site adjacent to a protected area	Natura 2000	Rijntakken NL2014038 Veluwe NL3009017
Spain				
Nervión	Paper mill	Site adjacent to a protected area	Natura 2000	Urkiola Natural Park ES213009
Vigo	Corrugated site	Site adjacent to a protected area	Natura 2000	Gándaras de Budiño ES1140011
Sweden				
Eslöv	Corrugated site	Site adjacent to a protected area	Natura 2000	Abullahagen SE0430119
Welltilverkaren	Corrugated site	Site adjacent to a protected area	Natura 2000	Abullahagen SE0430119
Piteå	Paper mill	Site adjacent to a protected area	Natura 2000	Svensbyfjärden SE0820711

Some Other Sites are Adjacent to Sites Protected by National or Local Status

Location	Type Plant	Specifics	Status	Area
Belgium				
Turnhout	Corrugated site	Site adjacent to a protected area	National legislation	Nature reserve 'Frans Segers'
Denmark				
Kolding	Corrugated site	Site adjacent to a protected area	National legislation	Kolding Havn
Ecuador				
Ecuador sacks	Sack plant	Site adjacent to a protected area	Local legislation	Cerro blanco forest (White forest hill)
France				
Dore	Corrugated site	Site located in a protected area	Local legislation	Parc naturel régional Livradois-Forez
Germany				
Hoya	Paper mill	Site adjacent to a protected area	National legislation	2: Wiedsee & Bürgerpark
Lübeck	Corrugated site	Site adjacent to a protected area	National legislation	Schellbruch
Schneverdingen	Corrugated site	Site located in a protected area	Local legislation	Water reserve
The Netherlands				
R. Eindhoven	Corrugated site	Site located in a protected area	Local legislation	Philipps de Jongh park
United Kingdom				
Townsend Hook	Paper mill	Site adjacent to a protected area	Local legislation	Holborough and Burham Marshes SSSI

Water Courses Where Smurfit Kappa Withdraws or Releases Water that are Classified Sensitive or Protected

- Piteå: paper mill in Sweden discharge process water in the estuary Vargödraget, which is classified as protected area Natura 2000 (SE 0820330)

Biodiversity

Threatened species recorded on Smurfit Kappa Colombia Forestry Division's properties

Group	Total	Critical Risk	Endangered	Vulnerable
Birds	19	0	5	14
Flora	22	1	10	11
Mammals	10	1	2	7
Amphibian	1	0	0	1
Total	52	2	17	33

Smurfit Kappa take into consideration the ICUN: International Union for Conservation of Nature, CITIES: International Trade in Endangered Species of Wild Fauna and Flora and MADS: Ministry of Environment and Sustainable Development Colombia.