# Supporting data

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# Input/Output 2023

### **Europe**

### Input

Wood and Fibre			
Wood <sup>1</sup>	4,883	ktonnes ar	
Market virgin pulp	90	ktonnes ar	
Otherpulp	5	ktonnes ar	
Recovered paper	5,015	ktonnes ar	
Paper or board purchased	1,034 ktonnes ar		
Plastic films, other plastic item (BIB)	37	ktonnes	
Starch (all types)	287	ktonnes ar	
Inorganic raw materials	291	ktonnes ar	
Other organic raw materials	167	ktonnes ar	

Energy							
Energy from fossil fuels	28,927	TJ (Terajoule)					
Energy from purchased biofuels	5,374	TJ					
Electricity from grid	2,115	GWh					

Water			
Waterintake <sup>2</sup>	102	Mm <sup>3</sup>	

### Output

·		
Production		
Papers (all grades)	5,749	ktonnes
Corrugated packaging*	4,865	ktonnes
Board and laminated boards*	423	ktonnes
Converted board*	107	ktonnes
Sacks*	_	ktonnes
Other packaging	34	ktonnes
Direct Emissions to Air		
CO <sub>2</sub> fossil	1,677	ktonnes
CO <sub>2</sub> biogenic	3,481	ktonnes
Dust/particulates from fuels	0.20	ktonnes
SO <sub>x</sub> from processes	0.96	ktonnes
$NO_x$ from processes	2.8	ktonnes
Energy Output		
Electricity to third party	371	GWh
Thermal energy to third party	204	TJ
Biomass sold	627	TJ
Waste		
Hazardous waste	10.8	ktonnes
Non-hazardous waste sent to landfill	157	ktonnes
Non-hazardous waste recovered	455	ktonnes
Other non-hazardous waste	15.3	ktonnes
Discharges to Water		
Waterreleased	95	Mm <sup>3</sup>
COD	28.4	ktonnes
BOD	12.0	ktonnes
Total suspended solids	4.6	ktonnes
Nitrogen	0.53	ktonnes
Phosphorous	0.051	ktonnes

### Notes

- otes
  Wood and sawmill chips as delivered to the mill.
  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 116 to 117. The latter pages show the energy consumption for the production of the paper or board manufactured.

### **The Americas**

### Input

Wood and Fibre						
Wood <sup>1</sup>	908	ktonnes ar				
Market virgin pulp	5	ktonnes ar				
Otherpulp	3	ktonnes ar				
Recovered paper	1,478	ktonnes ar				
Paper or board purchased	457	ktonnes ar				
Plastic films, other plastic item (BIB)	6	ktonnes				
Starch (all types)	67	ktonnes ar				
Inorganic raw materials	32	ktonnesar				
Other organic raw materials	60	ktonnes ar				

Energy							
Energy from fossil fuels	12,250	TJ (Terajoule)					
Energy from purchased biofuels	2,162	TJ					
Electricity from grid	902	GWh					

Water		
Waterintake <sup>2</sup>	30	Mm <sup>3</sup>

### Output

Production

Papers (all grades)	1,471	ktonnes
Corrugated packaging*	1,626	ktonnes
Board and laminated boards*	112	ktonnes
Converted board*	83	ktonnes
Sacks*	64	ktonnes
Other packaging	5	ktonnes
Direct Emissions to Air		
CO <sub>2</sub> fossil	796	ktonnes
CO₂ biogenic	556	ktonnes
Dust/particulates from fuels	0.20	ktonnes
SO <sub>x</sub> from processes	1.01	ktonnes
NO <sub>x</sub> from processes	1.39	ktonnes
Energy Output		
Electricity to third party	_	GWh
Thermal energy to third party	-	TJ
Biomass sold	_	TJ
Waste		
Hazardous waste	1.8	ktonnes
Non-hazardous waste sent to landfill	214	ktonnes
Non-hazardous waste recovered	24	ktonnes
Other non-hazardous waste	2.0	ktonnes
Discharges to Water		
Waterreleased	26.8	Mm <sup>3</sup>
COD	11.1	ktonnes
BOD	2.64	ktonnes
Total suspended solids	3.26	ktonnes
Nitrogen	0.41	ktonnes
Phosphorous	0.028	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 118 to 119. The latter pages show the energy consumption for the production of the paper or board manufactured.

### **Environmental Data 2023**

Paper and Board Mills, Euro	оре										
		Nettingsdorf, Austria	Sangüesa, Spain	Facture, France	Piteå, Sweden	Morava, Czech Republic	Wrexen, Germany⁵	Hoya, Germany⁵	Zülpich, Germany	Mengibar, Spain	
		kl,tl	mg	bkl, wtkl	bkl, wtkl	tl,fl	wttl, sb, rf, tl	ti, fi, cart	fi, ti	fi, ti	
Production	ktonnes	433	71	535	644	67	281	357	484	234	
Energy											
Electricity											
Co-generated	GWh	165	44	405	249	-	48	57	136	99	
Self-generated	GWh	_	_	_	_	_	_	_	_	_	
Hydro power	GWh	-	_	-	_	2.2	0.1	-	_	_	
Net grid supply	GWh	111	84	29	295	18	39	79	50	_	
Solar electricity generated on site	GWh	_	_	-	_	-	_	-	_	_	
Total electricity	GWh	276	128	435	544	21	87	136	185	99	
Fuel Usage											
Biofuels	TJ	4,421	1,736	9,661	10,432	13	59	84	371	20	
Fossilfuels	TJ	777	170	634	162	274	1,180	1,825	2,603	1,556	
Total fuels	TJ	5,198	1,906	10,295	10,593	287	1,238	1,909	2,974	1,576	
Water Withdrawal											
Surface	Mm <sup>3</sup>	13.1	3.8	7.5	26.0	0.4	0.5	_	1.7	1.3	
Ground	Mm³			0.9		0.0	0.6	2.0	0.4	0.0	
Grid	Mm³	0.0	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.1	
Total water <sup>4</sup>	Mm³	13.2	4.0	9.1	26.5	0.4	1.2	2.2	2.2	1.3	
Discharges											
To Air											
CO₂ fossil direct Scope 1	ktonnes	44	12	37	12	15	66	102	158	87	
CO₂ fossil indirect Scope 2	ktonnes	-	13	1	3	8	12	25	15	_	
CO₂ biogenic	ktonnes	431	183	1,002	1,208	1	5	6	39	11	
Dust (particulate matter PM)	tonnes	18.9	7.4	27.4	99.4	0.1	0.0	0.0	0.8	0.1	
NO <sub>x</sub> as NO <sub>2</sub>	tonnes	291	104	618	501	5	31	67	108	69	
SO <sub>x</sub> as SO <sub>2</sub>	tonnes	14	19	53	103	0	1	1	4	56	
To Water	7										
Process water	Mm³	5.85	3.48	9.95	11.21	0.30	0.35	1.89	-	1.09	
Coolingwater	Mm³	7.00	-	-	15.18	-	0.52	0.06	1.35	_	
COD	tonnes	9,637	263	3,952	3,022	36	72	214	-	225	
BOD	tonnes	6,006	42	1,141	815	1	3	12	_	21	
Total suspended solids	tonnes	685	104	548	248	7	5	63	_	68	
Total nitrogen	tonnes	47.2	20.1	105.0	47.8	3.7	1.0	23.8	_	54.7	
Total phosphorous  Waste	tonnes	3.7	0.4	8.5	7.3	0.1	0.1	1.4		2.6	
Waste Total non-hazardous waste	tonnes	19,094	15,557	59,100	32,555	10,092	11,633	27,790	12,070	30,705	
Landfill		2,979	3,077	11,558	1,170	4,853	11,033	16	12,070	24,692	
	tonnes	16,116	12,480	47,542	31,385	5,238	11,504	27,775	12,070	6,014	
Recovery Other	tonnes	16,116	12,480	47,542	31,385	5,238	11,504	27,775	12,070	0,014	
Hazardous waste		69	506	232	132	15	21	75		19	
- I Idzai uous waste	tonnes	09	300	232	132	13	21	73	4,511	19	

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

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

·	Alfad'Avignon, France	Rethel, France	Saillat, France	Ania, Italy	Verzuolo, Italy	Roermond, the Netherlands	Parenco, the Netherlands	Belgrade, Serbia	SSK, United Kingdom	Townsend Hook, United Kingdom	Herzberger, Germany	Nervión, Spain	Totalmills
	₽	Ţ.	ती, ध	А, tl	ti, fi	fl, grap pap, tl	ti, A	ti, A	A, tl	sb	sack	∄,ቲ	
	50	53	209	216	408	616	535	120	186	236	214	132	6,080
	_	_	43	61	232	115	_	_	54	71	67	115	1,961
	0.0	_	-	_	-	_	_	_	-		0.0	0.0	0.0
		_	0.7		_	_	_	_	_	_	1.2	_	4.2
	20	19	66	_	-	58	331	47	1	15	12	50	1,326
	_	_	_	_	_	_	_	-	_	_	_	-	_
	20	19	110	61	232	173	331	47	55	86	81	166	3,291
	_	10	58	59	345	234	1,144	-	19	33	-	3,162	31,860
	218	234	1,296	1,276	2,776	2,614	1,232	805	1,187	1,356	1,405	142	23,721
	218	244	1,354	1,335	3,121	2,848	2,376	805	1,205	1,389	1,405	3,304	55,581
	0.8	-	1.8	_	5.6	2.2	12.9	1.2		1.1	3.5	2.4	85.8
		0.3		1.5	0.0	0.0	4.6	0.0	1.0	0.2	0.0	0.0	11.6
	0.8	0.0	0.0	0.0	0.0 5.8	2.4	0.0 17.8	0.0	1.2	1.3	3.5	2.6	100.4
	0.8	0.4	1.0	1.0	5.0	2.4	17.0	1.2	1.2	1.5	3.5	2.0	100.4
	12	13	72	72	157	148	71	68	67	76	78	9	1,377
	1	1	3	_	-	_	_	36	_	_	4	8	130
	1	1	6	4	42	19	126	-	3	8	-	330	3,428
	0.0	0.0	0.6	0.0	0.2	0.0	0.5	8.1	0.0	0.0	0.5	35.8	199.8
	7	9	39	17	103	122	101	70	82	66	39	233	2,683
	6	2	5	0	0	11	5	612	1	3	2	36	932
	0.38	0.32	1.56	1.28	4.63	1.92	4.27	1.01	0.88	0.74	1.41	1.92	54.44
	0.19	- 41	170	1.41	-	7.40	12.93	2.850	7 422	0.35	2.01	1 160	39.59
	56 10	3	138	141 28	440 115	348 14	681 20	2,859 1,197	3,422 1,776	96	172	1,168 278	26,982 11,500
	8		58	16	29	73	100	161	1,742	20	31	151	4,126
	5.0	3.9	17.8	18.0	31.8	46.1	36.4	8.1	21.2	9.1	2.2	2.0	505.0
	1.1	0.5	2.1	0.8	1.7	3.3	6.8	1.0	7.7	0.4	0.7	0.3	50.6
	2,882	1,914	14,507	20,558	40,275	56,684	53,502	15,447	25,539	28,677	29,956	53,498	562,036
	2,866	1,592	14,036	3,386	8,253	5,362	908	8,835	5,696	3,127	58	48,169	150,631
	17	322	471	17,172	32,022	51,185	52,594	6,612	19,770	25,550	29,233	5,328	410,400
	_		-	_	_	138	_	_	74	_	665	_	1,005
	39	5	18	26	433	76	72	3	175	69	31	45	6,571

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

mg paper: machine-glazed paper sb: solidboard tl: testliner wtkl: white top kraftliner wttl: white top testliner sack p: sack paper

# **Environmental Data 2023** continued

# Paper and Board Mills, the Americas

		Bernal, Argentina	Coronel Suárez, Argentina	Bento, Brazil	Pirapetinga, Brazil	Uberaba, Brazil	_
			Coo Sud Arg	Ber	Pira	Ub	
		ti, fi	t, fl	θ,	tl, fl, wttl	ti, fi	
Production	ktonnes	74	51	43	124	60	
Energy							
Electricity							
Co-generated	GWh	-	-	_	-	_	
Self-generated	GWh	_	-	_	-	0.0	
Hydro power	GWh	-	-	_	-	_	
Solar electricity generated on site	GWh	31	13	16	59	30	
Net grid supply	GWh	_	-	_	_	_	
Total electricity	GWh	31	13	16	59	30	
Fuel Usage							
Biofuels	TJ	_	-	331	782	588	
Fossil fuels	TJ	466	288	2	80	6	
Total fuels	TJ	466	288	332	862	594	
Water Withdrawal							
Surface	Mm³	_	-	0.1	0.9	_	
Ground	Mm³	0.7	0.3			0.5	
Grid	Mm³	0.0	-	0.0	0.0	_	
Total water <sup>1</sup>	Mm³	0.7	0.3	0.1	0.9	0.5	
Discharges							
To Air							
CO <sub>2</sub> fossil direct Scope 1	ktonnes	26	16	_	5	_	
CO₂ fossil indirect Scope 2	ktonnes	9	4	2	6	3	
CO₂ biogenic	ktonnes	1	-	35	85	58	
Dust (particulate matter PM)	tonnes	_	-	51.8	38.8	58.8	
NO <sub>x</sub> as NO <sub>2</sub>	tonnes	16	13	46	132	104	
SO <sub>x</sub> as SO <sub>2</sub>	tonnes	12	-	_	2	15	
To Water							
Process water	Mm³	0.57	0.20	_	0.70	0.37	
Coolingwater	Mm³	0.06	-	_	-	_	
COD	tonnes	81	617	_	1,122	384	
BOD	tonnes	18	193	_	465	188	
Total suspended solids	tonnes	8	83	_	110	33	
Total nitrogen	tonnes	6.8	4.7	_	10.0	0.5	
Total phosphorous	tonnes	0.3	0.1	_	0.9	0.4	
Waste							
Total non-hazardous waste	tonnes	9,048	3,779	3,305	12,466	5,201	
Landfill	tonnes	2,820	3,747	2,671	12,162	4,837	
Recovery	tonnes	6,228	32	625	304	364	
Other	tonnes	-	-	9	-	-	
Hazardous waste	tonnes	93	37	2	19	4	
		_					

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

Notes  $1\quad Total\ water includes rainwater and waste water from another organisation.$ 

Cali, Colombia	Barranquilla, Colombia	Barbosa, Colombia	Los Reyes, Mexico	Cerro Gordo, Mexico	Monterrey, Mexico	Forney, USA	Total Mills
bkl, scfl, sackp, cart, bkl, wtkl, wwtl	t, fi	f).	∄,ቲ	tl, cart, fl	f), ti	ţ,	
249	58	108	142	311	31	321	1,573
193	36	50	_		_	9	287
0.0	_	0.0	_		_	-	0.1
-	_	_	_	-	-	-	
110	2	2	68	155	19	132	638
303	38	52	- 68	155	0	141	925
303	36	32	00	155	19	141	923
3,362	_				_	222	5,285
4,623	609	711	749	1,421	199	1,443	10,597
7,985	609	711	749	1,421	199	1,665	15,882
· · · · · · · · · · · · · · · · · · ·				· · · · · ·			·
20.8	0.7	0.8		_			23.2
0.2			0.4	1.6	0.1		3.8
0.0	0.0	_	-	_	0.1	1.2	1.3
21.1	0.7	0.8	0.7	1.6	0.2	1.3	28.8
351	34	46	42	80	11	81	694
_	_	_	27	62	8	47	165
321	- 2.7	2	_	2	_	27	532
37.7 871	2.7	0.2	20	0.2	6	2.2	1,348
829	2	81		10	1	16	968
023					1	10	300
21.17	0.48	0.62	0.43	1.05	0.08	0.43	26.10
_	-	_	_	_	_	0.19	0.26
7,003	245	163	101	306	73	863	10,957
1,135	106	79	14	16	8	347	2,569
2,572	129	37	12	62	7	172	3,224
326.7	6.2	1.0	2.3	7.7	0.6	27.9	394.5
12.1	3.0	0.4	0.3	1.4	0.1	9.3	28.3
83,987	2,861	9,331	13,536	30,677	3,020	37,804	215,015
82,803	275	8,011	12,063	30,141	1,002	37,624	198,156
1,066	2,587	1,320	268	520	2,018	180	15,512
118	17	- 20	1,205	16		-	1,347
225	17	28	22	16	5	-	468

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 2023** continued

# **Total Operations Europe**

		Paperand Board Mills	Integrated Corrugated Operations	Other Packaging Operations	Other Operations	Total Operations
Production	ktonnes	6,080	4,611	394	1,792	12,877
Energy						
Electricity						
Co-generated	GWh	1,961	_	-	-	1,961
Self-generated	GWh	0	_	-	_	0
Hydro power	GWh	4	_	-	_	4
Solar electricity generated on site	GWh	-	6	0	_	6
Net grid supply	GWh	1,326	521	81	4	1,932
Total electricity	GWh	3,291	527	81	4	3,903
Fuel Usage						
Biofuels	TJ	31,860	154	1	-	32,015
Fossil fuels	TJ	23,721	3,950	126	84	27,881
Total fuels	TJ	55,581	4,104	127	84	59,896
Water Withdrawal						
Surface	Mm <sup>3</sup>	85.8	0.0			85.8
Ground	Mm³	11.6	0.2	0.0		11.8
Grid	Mm³	0.8	1.3	0.1	0.0	2.2
Total water <sup>1</sup>	Mm³	100.4	1.5	0.1	0.0	102.0
Discharges						
To Air						
CO₂ fossil direct Scope 1	ktonnes	1,377	227	8	6	1,618
CO₂ fossil indirect Scope 2	ktonnes	130	88	14	0	232
CO₂ biogenic	ktonnes	3,428	16	0	_	3,444
Dust (particulate matter PM)	tonnes	200	2	0	0	202
NO <sub>X</sub> as NO <sub>2</sub>	tonnes	2,683	79	3	4	2,769
SO <sub>X</sub> as SO <sub>2</sub>	tonnes	932	24	2	4	962
To Water						
Process water	Mm <sup>3</sup>	54.4	0.5	-	-	54.9
Cooling water	Mm <sup>3</sup>	39.6	0.1	-	-	39.7
COD <sup>2</sup>	tonnes	26,982	1,415			28,397
BOD <sup>2</sup>	tonnes	11,500	508			12,008
Total suspended solids <sup>2</sup>	tonnes	4,126	477			4,603
Total nitrogen <sup>2</sup>	tonnes	505	27			532
Total phosphorous <sup>2</sup>	tonnes	51	1			52
Waste						
Total non-hazardous waste	tonnes	562,036	51,314	7,732	6,439	627,521
Landfill	tonnes	150,631	4,192	385	1,688	156,896
Recovery	tonnes	410,400	33,395	6,715	4,751	455,261
Other	tonnes	1,005	13,727	632	-	15,364
Hazardous waste	tonnes	6,571	3,749	476	23	10,819

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).

Planet Overview People Impactful business Supporting data  ${\bf Supplementary\,Information}$ 

# **Total Operations, The Americas**

		Paper and Board Mills	Other Operations	Total Operations
Production	ktonnes	1,573	3,946	5,519
Energy				
Electricity				
Co-generated	GWh	287	_	287
Self-generated	GWh	-	_	_
Hydro power	GWh	-	_	_
Solar electricity generated on site	GWh	-	1	1
Net grid supply	GWh	638	259	897
Total electricity	GWh	925	260	1,185
Fuel Usage				
Biofuels	ŢĴ	5,285	228	5,513
Fossil fuels	ŢĴ	10,597	1,653	12,250
Total fuels	TJ	15,882	1,881	17,763
Water Withdrawal				
Surface	Mm³	23.2	0.1	23.3
Ground	Mm³	3.8	0.4	4.2
Grid	Mm³	1.3	0.4	1.7
Total water <sup>1</sup>	Mm³	28.8	0.9	29.7
Discharges				
To Air				
CO <sub>2</sub> fossil direct Scope 1	ktonnes	694	103	797
CO₂ fossil indirect Scope 2	ktonnes	165	70	235
CO₂ biogenic	ktonnes	532	25	557
Dust (particulate matter PM)	tonnes	192	3	195
NO <sub>x</sub> as NO <sub>2</sub>	tonnes	1,348	38	1,386
$SO_X$ as $SO_2$	tonnes	968	42	1,010
To Water				
Process water	Mm³	26.1	0.2	26.3
Cooling water	Mm³	0.30	_	0.30
COD <sup>2</sup>	tonnes	10,957	146.00	11,103
BOD <sup>2</sup>	tonnes	2,569	67.00	2,636
Total suspended solids <sup>2</sup>	tonnes	3,224	31.00	3,255
Total nitrogen <sup>2</sup>	tonnes	395.0	13.0	408.0
Total phosphorous <sup>2</sup>	tonnes	28.0	0.1	28.0
Waste				
Total non-hazardous waste	tonnes	215,015	24,679	239,694
Landfill	tonnes	198,156	15,883	214,039
Recovery	tonnes	15,512	8,171	23,683
Other	tonnes	1,347	625	1,972
Hazardous waste	tonnes	468	1,317	1,785
				· · · · · · · · · · · · · · · · · · ·

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 2023** continued

### **Total Group Operations**

					All Operations				
		2023	2022	2021	2020	2019			
Energy									
Electricity									
Co-generated <sup>1</sup>	GWh	2,248	2,419	2,196	2,192	2,218			
Self-generated	GWh	-	_	1	1	1			
Hydro power	GWh	4	3	5	5	4			
Solar electricity generated on site	GWh	7	5	1	1	0			
Net Grid supply	GWh	2,829	2,890	2,907	2,841	2,876			
Total electricity	GWh	5,088	5,317	5,109	5,040	5,099			
Fuel Usage									
Biofuels	TJ	37,528	37,506	37,363	36,965	37,119			
Fossil fuels	TJ	40,131	42,282	40,847	41,058	40,735			
Total fuels	TJ	77,659	79,787	78,210	78,023	77,854			
Water Withdrawal									
Surface	Mm <sup>3</sup>	109.0	117.8	116.6	120.9	114.2			
Ground	Mm³	16.0	16.8	17.0	17.0	16.7			
Grid	Mm <sup>3</sup>	3.9	4.3	4.0	4.0	3.9			
Total water <sup>2</sup>	Mm <sup>3</sup>	131.7	141.1	140.1	144.3	137.1			
Discharges									
To Air	·								
CO₂ fossil direct Scope 1	ktonnes	2,415	2,541	2,500	2,545	2,513			
CO₂ fossil indirect Scope 2	ktonnes	467	508	553	566	808			
CO₂ biogenic	ktonnes	4,000	4,195	4,176	4,073	4,066			
Dust (particulate matter PM)	tonnes	397	341	344	383	596			
NO <sub>x</sub> as NO <sub>2</sub>	tonnes	4,155	4,297	4,128	4,400	4,971			
SO <sub>x</sub> as SO <sub>2</sub>	tonnes	1,972	2,108	2,176	2,395	2,237			
To Water									
Process water	Mm <sup>3</sup>	81.2	82.0	77.0	80.0	76.2			
Cooling water	Mm <sup>3</sup>	40.0	44.9	49.3	50.8	49.2			
COD <sup>3</sup>	tonnes	39,500	41,750	41,398	40,100	42,015			
BOD <sup>3</sup>	tonnes	14,644	14,297	14,849	15,399	17,449			
Total suspended solids <sup>3</sup>	tonnes	7,858	8,715	8,431	7,775	7,898			
Total nitrogen <sup>3</sup>	tonnes	940	897	1,088	901	960			
Total phosphorous <sup>3</sup>	tonnes	80	92	99	87	107			
Waste	·								
Total Non hazardous waste	tonnes	867,215	955,799	915,257	856,862	903,341			
Landfill	tonnes	370,935	452,757	426,106	442,038	539,450			
Recovery	tonnes	478,944	488,476	475,022	405,801	350,287			
Other	tonnes	17,336	14,566	14,129	9,022	13,604			
Hazardous waste	tonnes	12,604	12,815	8,774	10,046	9,655			

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 Citizenship and Health and Safety

Social Citizenship (Full-time Employees)	2023	2022	2021	2020	2019
Total number of employees <sup>1</sup>	46,982	48,058	48,045	46,688	46,237
of whom female (%) <sup>2</sup>	20.6%	20%	20%	19%	19%
Employees leaving the company <sup>3</sup>	5,221	5,421	4,919	4,017	4,842
of whom resignation and retirement (%)	67%	74%	69%	64%	64%
Employees joining the company <sup>3</sup>	4,679	5,705	5,778	4,189	5,038
Age distribution (%)	40/	40/	10/	40/	40/
<20 years	1%	1%	1%	1%	1%
21-30 years	16%	17%	17%	16%	17%
31-40 years	24%	24%	25%	25%	24%
41-50 years	26%	27%	27%	27%	28%
51-60 years	26%	26%	26%	26%	25%
>60 years	6%	5%	5%	5%	5%
Employees turnover (%)	12.5%	12.7%	11.7%	9.8%	11.7%
Length of service, above 11 years (%)	45%	46%	46%	47%	48%
Female in management (%)	25.1%	23.5%	22%	22%	21%
	1,372 employees took parental leave and 1,133 returned from	1,423 employees took parental leave and 1,201 returned from	1,225 employees took parental leave and 1,015 returned from	1,152 employees took parental leave and 900 returned from	1,178 employees took parental leave and 1,028 returned from
Parentalleave	parental leave	parental leave	parental leave	parental leave	parental leave
$of whom female  ^6$	421 female employees took parental leave and 265 returned	383 female employees took parental leave and 260 returned	371 female employees took parental leave and 238 returned		
Average training hours per employee	22	21	18.7	15	22
By gender <sup>6</sup>	22.2 Male / 21.4 Female	20.9 Male/ 22.5 Female	18.6 Male/ 18.9 Female		
Health and Safety					
Lost time accidents (LTA) (SK employees)	279	277	270	232	325
Lost time accidents (LTA) (contractors)	45	58	63	37	46
Days lost due to accidents (DLA) (SK employees)	9,858	8,890	9,090	9,413	11,177
Accident severity rate (ASR) (%) (SK employees)	11.56%	10.08%	10.39%	11.19%	13.15%
LTA frequency rate (FR)* (SK employees)	0.33	0.31	0.31	0.28	0.38
Total recordable injury rate <sup>4</sup>					
	0.53	0.51	0.59	0.60	0.84
Number of restricted workday cases (RWC) (SK employees)		0.51	0.59	0.60	135
Number of restricted workday cases (RWC) (SK employees) <sup>5</sup> Number of medical treatment cases (MTC) (SK employees) <sup>5</sup>	68				
Number of restricted workday cases (RWC) (SK employees) <sup>5</sup> Number of medical treatment cases (MTC) (SK employees) <sup>5</sup> Number of medical treatment cases (MTC) (contractors) <sup>6</sup>	68	68	107	104	135
Number of medical treatment cases (MTC) (SK employees) <sup>5</sup>	68 106	68 109	107 137	104	135
Number of medical treatment cases (MTC) (SK employees) $^{\rm 5}$ Number of medical treatment cases (MTC) (contractors) $^{\rm 6}$	68 106 11	68 109 12	107 137 9	104 165	135 253
Number of medical treatment cases (MTC) (SK employees) <sup>5</sup> Number of medical treatment cases (MTC) (contractors) <sup>6</sup> Total recordable injuries (LTA/RWC/MTC) <sup>5</sup> Fatalities	68 106 11	68 109 12	107 137 9	104 165	135 253
Number of medical treatment cases (MTC) (SK employees) <sup>5</sup> Number of medical treatment cases (MTC) (contractors) <sup>6</sup> Total recordable injuries (LTA/RWC/MTC) <sup>5</sup>	68 106 11 453	68 109 12 454	107 137 9 514	104 165 501	135 253 713

- 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.

  A Now indicator since 2018.

- New indicator since 2019. New indicator since 2021.

- New Indicators since 2021.

  (Sub)contractors have been split into Contractors and Subcontractor since 2021.

  The amount of contractors and sub-contractors in our business is relatively small.

  Contractors and sub-contractors are mainly supporting us in major construction and maintenance projects and represent our external suppliers.

# **Sourcing Data**

### Sustainable Sourcing and Sustainable Fibre Data

	2023	2022	2021	2020	2019
Sustainable Sourcing Data					
Number of audit activities <sup>1</sup>					
Suppliers of key materials	286	66	9	21	35
Tactical and other suppliers	1,170	55	13	25	77
Satisfactory Scores					
Suppliers of key materials	179	50	8	20	29
Tactical and other suppliers	641	37	11	24	65
Sustainable Fibre					
Wood supplied from certified forests <sup>2</sup>	56.8%	56.9%	56.2%	57.3%	57.8%
Wood supplied from non-controversial sources <sup>2</sup>	43.2%	43.1%	43.8%	42.7%	42.2%
Paper produced as certified <sup>2</sup>	92.8%	93.0%	92.8%	92.7%	92.6%
Packaging sold as certified <sup>2</sup>	95.5%	94.3%	93.5%	93.8%	92.1%
External papers purchased through CoC certified supply chains <sup>2</sup>	99.5%	99.2%	99.5%	99.2%	98.9%
Recycled fibres in global production	76.5%	76.2%	75.6%	75.4%	75.8%

### **Environmental Incidents 2023**

### Significant Environmental Non-compliances in 2023\*

Site	Significant Environmental Non-compliance	Details
Belgrade, Serbia	Water	A new water treatment plant started in September 2023 bringing the water discharge to compliant levels.
Coronel Suárez, Argentina	Water	The water treatment plant update with an aerobic reactor is delayed and is now expected to be finalised in 2024.
Facture, France	Noise	Noise insulation work has been made in several parts of the mill during 2023. We are waiting for the authorities to assess following these updates.
Mengibar, Spain	Noise	The site is awaiting guidance on new local permit limits to understand the actions needed to resolve the issue.
Mengibar, Spain	Water	The water treatment plant was updated with a new reactor during 2022 and we are waiting for the water treatment plant to stabilise to compliant levels.

 $<sup>* \</sup>quad A significant environmental non-compliance is a non-compliance that requires a change to existing infrastructure at the site, often requiring a CapEx. \\$ 

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. As from October 2022 we have started to implement an online platform in our German organisation for supplier assessments. Also we have started audits at our paper mills, being suppliers to our converting

entities.

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

Overview Planet People Impactful business Supporting data Supplementary Information

# **Management System Certifications**

# Forestry, Wood Sourcing and Mills

		Quality Management System	Environmental Management System	Health and Safety System		nagement for s Packaging	Energy Management System	Ch	ain of Custo	ody
		ISO 9001	ISO 14001	ISO 45001	EN 15593	FSSC22000	ISO 50001	FSC	PEFC	SFI
Europ										
	Sourcing									
ES	Central Forestal			YES				YES	YES	
FR	Comptoir du Pin			YES				YES	YES	
Virgin										
AT	Nettingsdorf	YES	YES		YES			YES	YES	
ES	Nervión	YES	YES		YES		YES	YES	YES	
	Sangüesa	YES	YES		YES			YES	YES	
FR	Facture	YES	YES			YES	YES	YES	YES	
SE	Piteå	YES	YES	YES		YES	YES	YES	YES	
	cled Mills									
CZ	Morava	YES	YES		YES		YES	YES	YES	
DE	Herzberger	YES	YES		YES		YES	YES	YES	
	Hoya <sup>1</sup>	YES	YES		YES		YES	YES	YES	
	Wrexen <sup>1</sup>	YES	YES		YES		YES	YES	YES	
	Zülpich	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	YES	
	Saillat	YES	YES	YES	YES		YES	YES	YES	
IT	Ania	YES	YES	YES	YES			YES	YES	
	Verzuolo	YES	YES				YES	YES	YES	
NL	Parenco		YES				YES	YES	YES	
	Roermond	YES	YES			YES	YES	YES	YES	
RS	Belgrade	YES	YES			YES		YES		
UK	SSK	YES	YES		YES		YES	YES	YES	
	Townsend Hook	YES	YES	YES			YES	YES	YES	
The A	mericas									
Fores	try									
СО	Colombian Forest							YES		
Virgin										
СО	Cali		YES					YES		
	cled Mills									
AR	Bernal	YES	YES				YES	YES		
	Coronel Suárez	YES	YES				YES	YES		
BR	Bento	YES						YES		
	Pirapetinga	YES						YES		
	Uberaba	YES						YES		
СО	Barbosa		YES					YES		
	Barranquilla		YES					YES		
ME	Cerro Gordo	YES	YES					YES		
	Los Reyes	YES	YES					YES		
	Monterrey	YES	YES					YES		
USA	Forney		YES	YES				YES	YES	YES

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

# **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	Plant Type	Specifics	Status	Area
Austria				
Nettingsdorf	Paper mill Paper mill	Site adjacent to a protected area	Natura 2000	Hangwälder Ritzlhof AT 3147000
Czech Republic				
Morava	Paper mill Paper mill	Site adjacent to a protected area	Natura 2000	Údolí Moravice CZ0813474
France				
Alfa d'Avignon	Paper mill Paper mill	Site adjacent to a protected area	Natura 2000	Le Rhône aval FR9301590
Aquitaine	Corrugated site	Site adjacent to a protected area	Natura 2000	Vallée du Ciron FR7200693
			ZNIEFF type 1 ZNIEFF type 2	Zone inondable de la basse Leyre Vallées de la grande et de la petite Leyre FR7200721
			Natura 2000	Vallées de la grande et de la petite Leyre
Facture	Papermill	Site partly located in the protected area	LPO ZICO	AN1
Germany				
Delitzsch	Corrugated site	Site adjacent to a protected area	Natura 2000	Agrarraum und Bergbaufolgelandschaft bei Delitzsch DE4439452
				Hinterer Bruch südlich Heppenheim
Heppenheim	Board converting site	Site adjacent to a protected area	Natura 2000	DE6317306
Herzberg	Three activities (board mill & corrugated site & converting plan)	l 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
StLeon	Corrugated site	Site adjacent to a protected area	Natura 2000	Lußhardt zwischen Reilingen & Karlsdorf DE6717341
Wrexen	Paper mill Paper mill	Site adjacent to a protected area	Natura 2000	Gebiet DE4420304 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	Plant Type	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				
Ecuadorsacks	Sack plant	Site adjacent to a protected area	Locallegislation	Cerro blanco forest
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	Waterreserve
The Netherlands				
R. Eindhoven	Corrugated site	Site located in a protected area	Locallegislation	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

 $Pite \verb§a: paper mill in Sweden discharges process water in the estuary Vargödraget, which is classified as protected area Natura 2000 (SE 0820330)$ 

### Biodiversity

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

Group	Total	Critical Risk	Endangered	Vulnerable
Birds	17	0	6	11
Flora	12	1	5	6
Mammals	10	0	4	6
Amphibian	1	0	0	1
Total	40	1	15	24

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

NOTE: In 2023, a complete review of the databases was carried out since the beginning of the project, and it was identified that species from external studies to the heritage of the forestry project had been included and considered as reported within the SKC forestry patrimony. After this review, the total number of the species within the SKC patrimony decreased from 2909 to only 1414.

The updated CITES, IUCN and MADS databases consulted removed 17 species previously included in the endangered species category classification and included 5 new species. As a result, from the 52 endangered species reported in 2022, this year we are reporting 40. During 2023, 1414 species have been identified: 808 trees, 508 birds, 97 mammals and one amphibian. Among all the identified species, 40 have been classified under some endangered scheme.