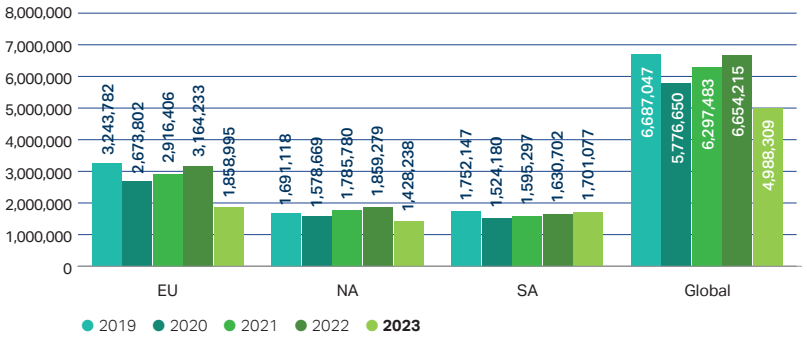
Our planet indicators

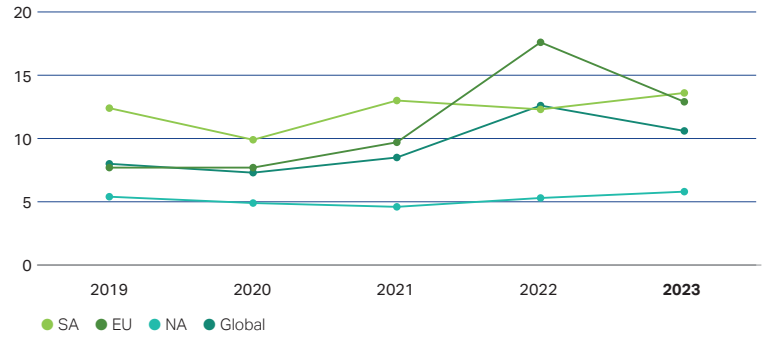
General

Saleable production (adt/annum)



***Globally** there was a decrease. The decrease in **SEU** can be attributed to significant commercial downtime occurred across all mills – as a result of the impact of the global economic downturn on Europe. Low production at Stockstadt Mill contributed further, as production reduced towards closure of the mill which will be completed in Q1FY2024. In **SNA**, there was also significant commercial downtime across all mills. In **SSA**, there was a slight uptick as Ngodwana, Stanger and Saiccor Mills increased production. The biggest contributor was the latter mill – the result of the successful capacity expansion and environmental enhancement project. Ngodwana and Stanger Mills increased production due to better mill stability and improved run rates.*

Purchased energy costs as a percentage of cost of sales (COS) (%)

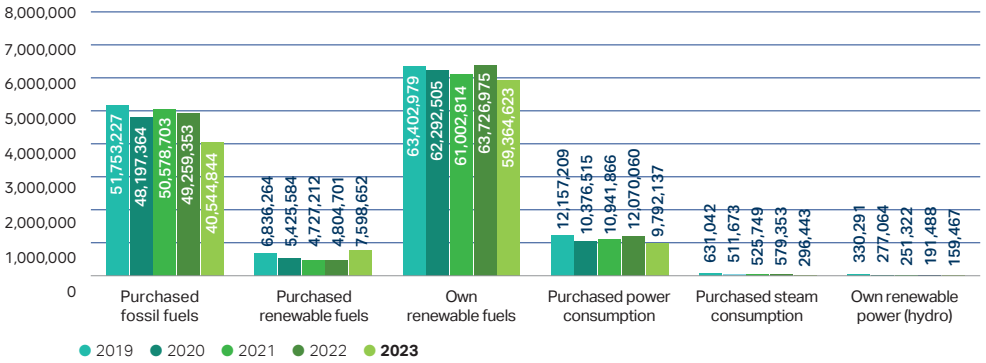


***Globally** there was a decrease. In **SEU**, purchased energy costs have reduced from the peak of 2022 but remain high relative to historical levels. Heightened geopolitical issues may have contributed to additional volatility in energy markets. Since the announcement of the European Green Deal efforts have been made to move towards renewable fuel sources, as highlighted by Gratkorn and Kirkniemi Mill reducing their dependency on fossil fuels and switching to biofuels (see under 'Renewable Energy and Climate Change' in the 2023 Group Sustainability Report). In **SNA**, the increase was due to higher natural gas prices and higher biomass prices at Somerset Mill. In addition, curtailed production at the same mill and the 10% reduction in black liquor led to higher purchases of energy. Increased natural gas use at Cloquet Mill also contributed to the increase. . In **SSA** there was an increase, due primarily to the increase in the cost of purchased power and fuel across all mills.*

Our planet indicators continued

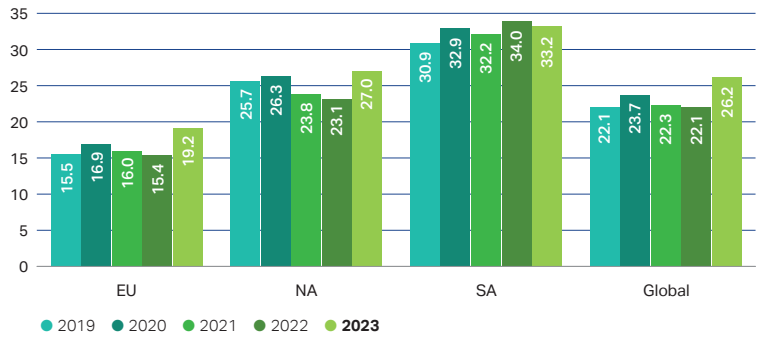
Energy

Energy consumption within organisation (GJ/annum)



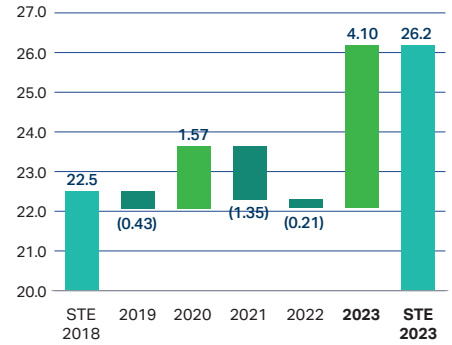
Note: Figures based on net calorific values.

Energy intensity (GJ/adt)



***Globally** there was an increase. In **SEU**, energy intensity increased across all mills – except for Condino Mill – the result of commercial downtime and reduced production. In **SNA**, energy intensity increased across all mills because of commercial downtime. In **SSA**, there was a slight decrease. At Ngodwana and Stanger Mills this was due primarily to improved production, although there was also a decrease in purchased power at Ngodwana Mill which imported less power due to increased packaging runs. This negated the need to run the energy-intensive groundwood plant. The decrease at Saiccor Mill was attributable to improved production, together with reduced consumption of coal, heavy fuel oil and electricity due to the ramp up of the capacity expansion and environmental enhancement project.*

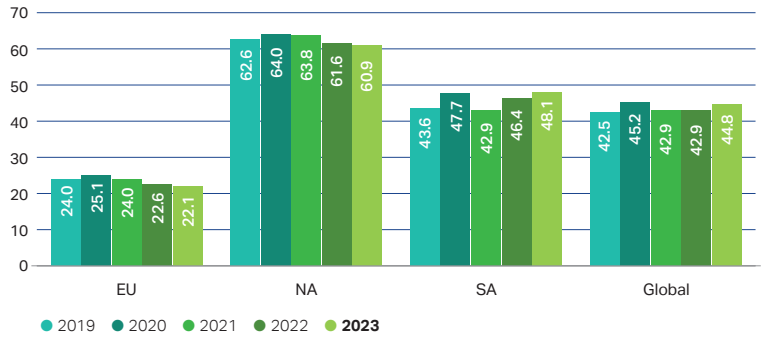
Reduction of energy intensity (GJ/adt)



Our planet indicators continued

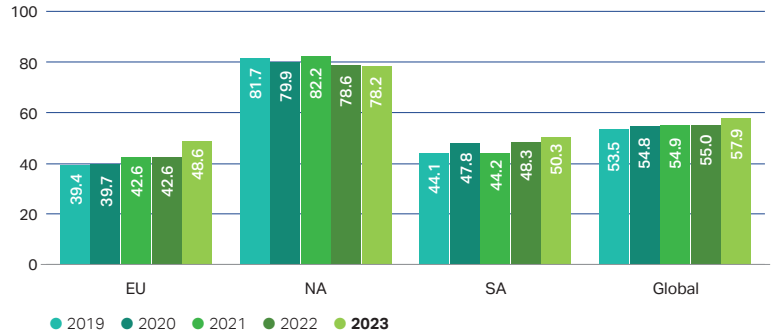
Energy continued

Energy self-sufficiency (%)



Globally *there was a slight increase. In* ***SEU****, apart from Kirkniemi Mill, energy self-sufficiency at the other integrated mills decreased due to lower pulp production which meant fewer own biofuels available for use from pulp process. Additionally, many commercial stops increased specific energy consumption, negatively impacting self-sufficiency. In* ***SNA****, energy self-sufficiency decreased due to reduced pulp production at Somerset and Cloquet Mills. In* ***SSA****, the slight increase was due to the capacity expansion and environmental enhancement project at Saiccor Mill which meant less coal and heavy fuel oil (HFO) were consumed, resulting in increased generation of black liquor and improved availability of the recovery boilers.*

Renewable and clean energy (%)

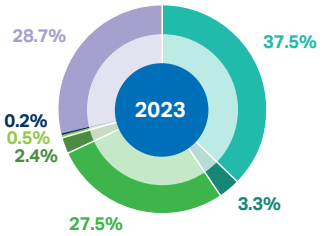


The increase in ***SEU*** *was primarily due to the conversion of boiler 11 at Gratkorn Mill from coal to biomass. Kirkniemi Mill also increased biomass consumption. The increase at Alfeld Mill was due to higher clean energy in purchased power (lower grid emission factor and guarantees of origin purchased). The situation in* ***SNA*** *was stable. In* ***SSA****, the increase was due to the capacity expansion and environmental enhancement project at Saiccor Mill which resulted in increased black liquor generation. The slight increase at Stanger Mill was due to an increase in the renewable energy components from purchased power, as well as reduced coal consumption. The latter is attributable to improvements in the air-to-fuel ratio as well as condition-based soot blowing and cleaning of the boilers.*

Our planet indicators continued

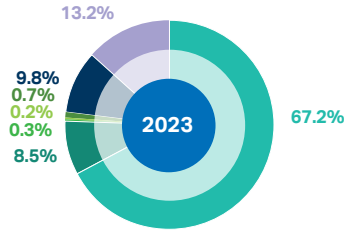
Energy continued

Global fossil energy breakdown (%)



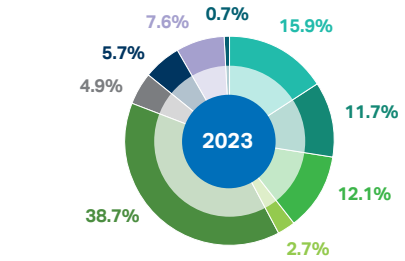
Purchased coal	37.5%
Purchased heavy fuel oil (HFO)	3.3%
Purchased natural gas	27.5%
Tyre derived fuel (TDF)	2.4%
Transport fuel	0.5%
Paraffin/Kerosene	0.0%
Asphaltene	0.2%
Fossil energy in Purchased Power	28.7%

Renewable and nuclear energy breakdown (%)



Own black liquor	67.2%
Own biomass (mostly bark)	8.5%
Own biogas	0.3%
Own generated hydro electricity	0.2%
Combusted sludges	0.7%
Purchased biomass	9.8%
Renewable and nuclear energy in purchased power	13.2%
Own liquid biofuel	0.0%

Fuel sources (%)

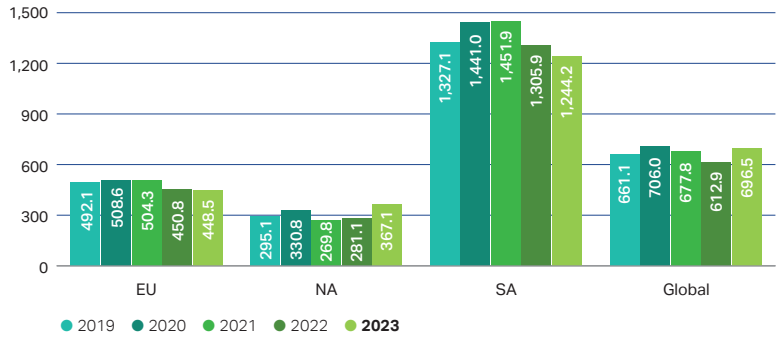


Purchased coal	15.9%
Purchased natural gas	11.7%
Fossil energy in purchased power	12.1%
Other fossil fuel	2.7%
Own black liquor	38.7%
Own biomass (mostly bark)	4.9%
Purchased biomass	5.7%
Renewable and nuclear energy in purchased power	7.6%
Other renewable fuel	0.7%

Our planet indicators continued

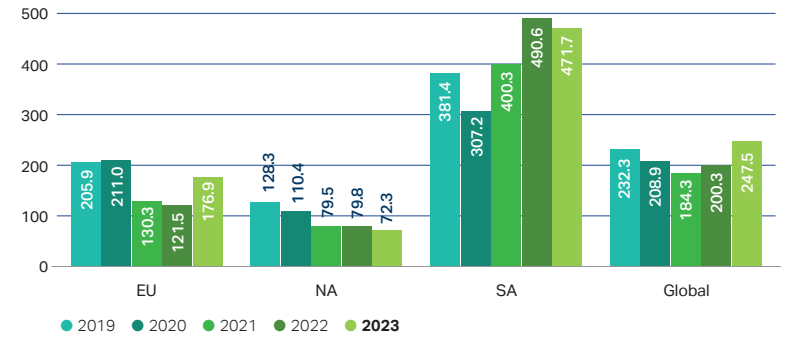
GHG emissions

Direct emissions (Scope 1) (kg CO_2e/adt)



Globally *there was an increase. In* ***SEU*** *the situation was stable. The increase in* ***SNA*** *was attributable to reduced black liquor generation and wood-room generated bark, together with production curtailment. In* ***SSA****, emissions at Saiccor and Stanger Mills decreased. The noticeable decrease at Saiccor is attributed to less coal consumption due to the expansion project and less heavy fuel oil (HFO) required. The decrease at Stanger Mill is attributed to reduced coal consumption due to improvement in operations with regards to changes to air to fuel ratio hence decreasing remaining carbon in ash as well as condition based soot blowing and cleaning.*

Indirect emissions (Scope 2) (kg CO_2e/adt)

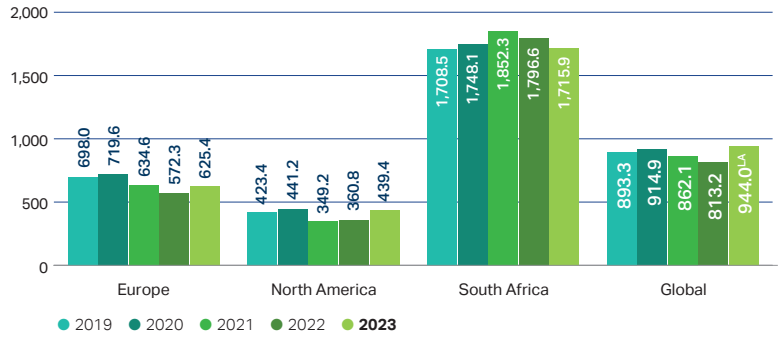


Globally *there was an increase. In* ***SEU*** *the increase was attributable to increased purchased power at Maastricht Mill and the outsourcing of the gas turbine at Carmignano Mill which led to an increase in imported power (Scope 2) and decrease in Scope 1. In* ***SNA****, the decrease was due to lower purchased power demand due to market curtailment. In* ***SSA****, there was a slight decrease at both Lomati and Saiccor Mills – the latter was less reliant on bought-in power.*

Our planet indicators continued

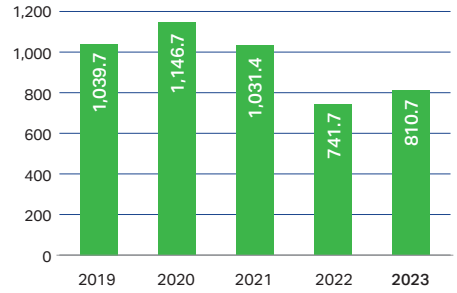
GHG emissions continued

Total specific GHG emissions (Scope 1 and 2) (kgCO_2e/adt)



Globally *there was an increase. In* ***SEU****, absolute Scope 1 and Scope 2 emissions decreased because of low production, but specific emissions increased due to lower production efficiency related to an increase in both frequency and duration for commercial stops. In* ***SNA****, while absolute Scope 1 and Scope 2 emissions reduced, specific emissions increased due to commercial downtime which was the primary driver for the increase in specific Scope 1 and 2 emissions at all mills. In* ***SSA*** *there was a slight decrease. The noticeable decrease at Saiccor Mill was attributable to less coal consumption due to the capacity expansion and environmental upgrade which resulted in less heavy fuel oil being used. The decrease at Stanger Mill was due to reduced coal consumption following improvement in operations with regards to changes to air to fuel ratio hence improving carbon in ash as well as condition-based soot blowing and cleaning. Scope 2 emissions at Lomati and Saiccor Mills decreased, with energy self-sufficiency at the latter mill increasing (less reliant on bought-in power).*

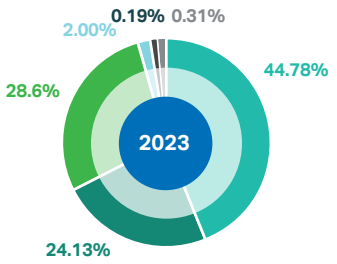
Specific GHG (Scope 1 and Scope 2) emissions per revenue (kg CO_2e/US$ million)



Our planet indicators continued

GHG emissions continued

Scope 3 GHG emission categories (%)



Purchased goods	44.78%
Capital goods	0.00%
Fuel and energy related activities	24.13%
Upstream transport	28.60%
Waste	2.00%
Business travel	0.19%
Employee commuting	0.31%

Scope 3 emissions are defined as indirect emissions not included in Scope 2, occurring from sources that we do not own or control and covering emissions along the value chain.

Our Scope 3 carbon footprinting is based on guidelines provided by the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (also referred to as the Scope 3 Standard). Sappi is committed to acting responsibly throughout its entire value chain. Calculating Scope 3 emissions will allow Sappi to make decisions not only based on price but also on the environmental performance of suppliers and service providers. Integrated and non-integrated mills are more comparable when the total Scope 1, Scope 2 and Scope 3 emissions are considered.

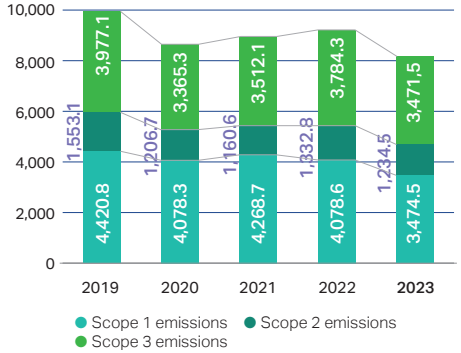
The GHG Protocol divides Scope 3 emissions into 15 categories. Sappi reports upstream emissions (categories 1 to 7 comprising emissions from purchased goods and services, capital goods, fuel and energy related activities, upstream transportation and distribution, waste generated, business travel and employee commuting).

Downstream emissions in categories 8, 9 and 11 are not applicable to Sappi.

We do not include categories 10 and 12 downstream emissions as we are unable to reasonably estimate emissions associated with the various end uses of our products.

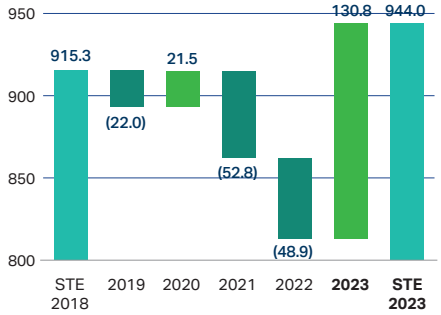
We do not have line of sight to what the end product and end of life of our products will be.

Absolute Scope 1, Scope 2 and Scope 3 GHG emissions (mil kg CO_2e)



***Globally**, absolute Scope 1, 2 and 3 emissions decreased. In **SEU**, the reduced production for the reporting year is reflected in the decreased absolute Scope 1, Scope 2 and Scope 3 emissions. The reduced production impact is directly observed through the drop in consumption of fuel sources, except for purchased renewable fuels that increased significantly, and the overall reduced demand for purchased electricity across the region. In **SNA**, absolute Scope 2 emissions have decreased due to a significant drop in production resulting in less demand for purchased electricity. Absolute Scope 3 emissions indicated a decrease due to a significant drop in raw material purchases, transportation of raw materials and transportation of products to customers, all resulting from production curtailment. In **SSA**, absolute Scope 1 and Scope 2 remained stable. An increase was noted in absolute Scope 3 emissions. A significant contribution was due to increased business travel. In addition, Ngodwana, Stanger and Saiccor Mills increased their Scope 3 emissions. The latter mill increased in the categories of purchased goods, upstream transport, and waste, most likely due to the increase since the capacity expansion and environmental enhancement project, given additional timber volumes and chemical consumption. Increased production can be correlated to an increase in the purchased goods category for both Ngodwana and Stanger Mills. Across all mills, in terms of upstream transportation of coal via road increased.*

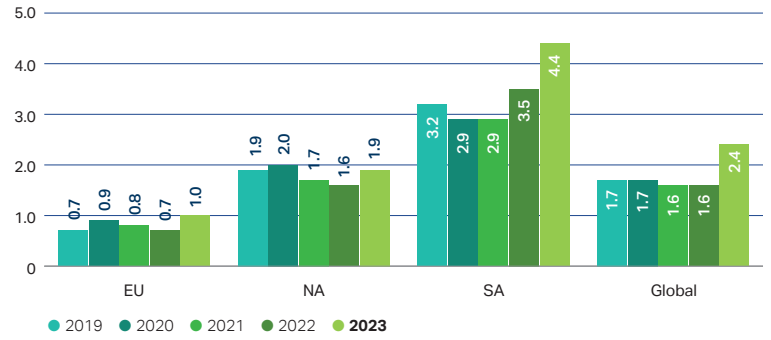
Reduction of GHG emissions intensity (kg CO_2/adt)



Our planet indicators continued

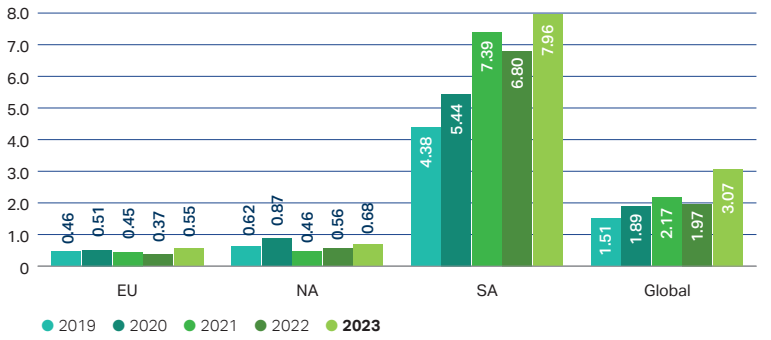
Air emissions

Specific NOx air emissions (kg/adt)



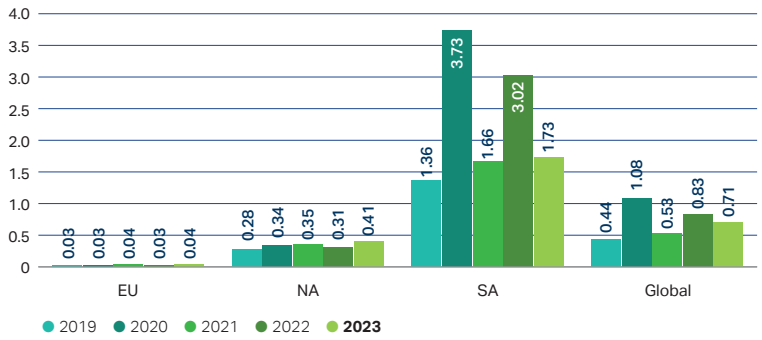
***Globally** there was an increase. In **SEU**, this was due to the fact that biomass fuels were still combusted at Alfeld, Ehingen, Gratkorn and Kirkniemi Mills, but production decreased significantly. In **SNA**, the increase was due to commercial downtime. In **SSA**, the increase at Ngodwana Mill, was due to the tertiary air control in the chemical recovery furnace not being optimised during testing, with the pulverised fuel boiler increase attributable to the fuel source. Stanger and Tugela Mills increased due to poor quality coal received.*

Specific SOx air emissions (kg/adt)



***Globally** there was increase. In **SEU**, this was attributable to a decrease in saleable production of paper, compared to pulp production for the four integrated mills – Alfeld, Ehingen, Gratkorn and Stockstadt. In **SNA**, commercial downtime was the biggest contributor to the increase. In **SSA**, the increase was due to higher sulphur content in coal used at Stanger and Tugela Mills.*

Specific total particulate matter air emissions (kg/adt)

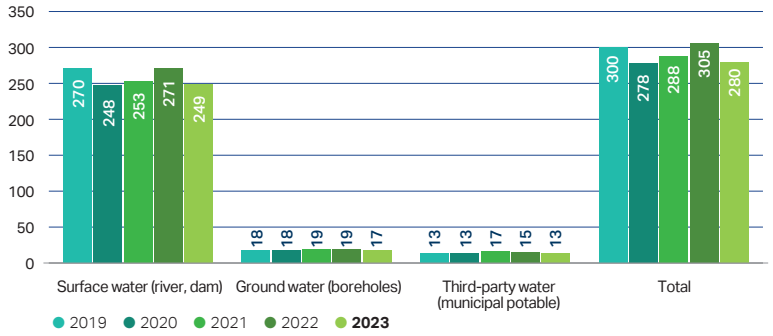


***Globally** there was a decrease. In **SEU**, the slight increase was due to the resumption of coal combustion at Stockstadt Mill, required by the German Government because of the energy crisis. In **SNA**, the increase was due to commercial downtime. In **SSA**, there was a decrease – most significantly at Tugela Mill due to the successful commissioning of particulate matter abatement equipment on the coal-fired boilers. There was also a decrease at Ngodwana Mill.*

Our planet indicators continued

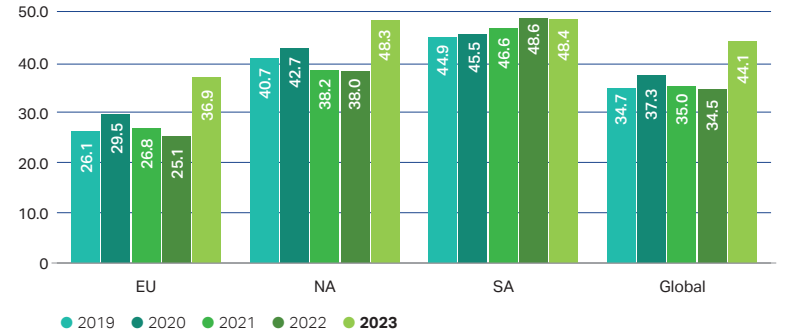
Water

Total water withdrawal by source (mil m³/annum)



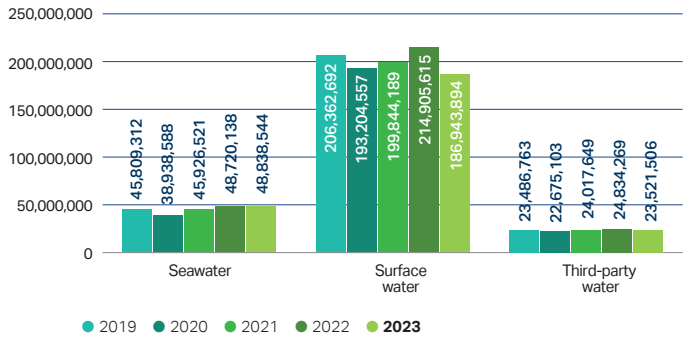
***Globally** there was a decrease. In **SEU** and **SNA**, the absolute amount decreased because of significantly reduced production. In **SSA**, there was a slight decrease. Stanger Mill abstracted less water after the successful implementation of the backwash recovery and re-use project. Tugela Mill produced less product than FY22, but the major factor was closing of dilution water.*

Specific process water extracted (m³/adt)



***Globally** there was an increase. In **SEU** and **SNA**, the increase was due to market curtailment. In **SSA**, the situation was stable.*

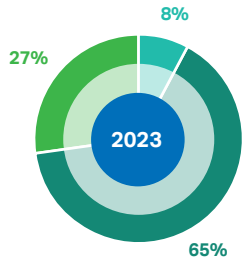
Total water discharge by destination (m³/annum)



Our planet indicators continued

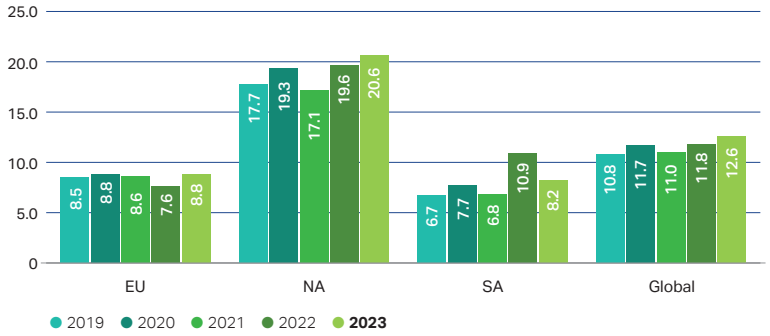
Water discharge by quality

Level of total water discharge treatment (%)



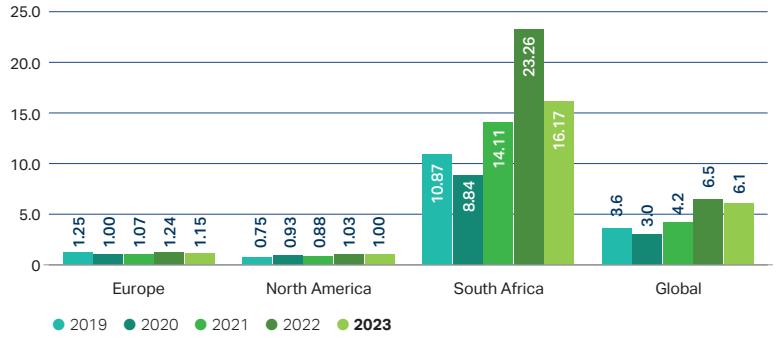
Tertiary treatment	8%
Secondary treatment	65%
Primary treatment	27%
Environment with no treatment and third-party discharge	0%

Specific chemical oxygen demand (COD) (kg/adt)



***Globally** there was an increase. In **SEU** and **SNA**, absolute COD decreased while specific COD increased due to commercial downtime. In **SSA**, there was a decrease. This was due to lower bagasse volumes at Stanger Mill. Tugela Mill also showed a decrease. Saiccor Mill has been excluded from this parameter as it is the only mill in the group to use the sulphite pulping process in the production of dissolving pulp. (Both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process.)*

Specific total suspended solids (TSS) (kg/adt)

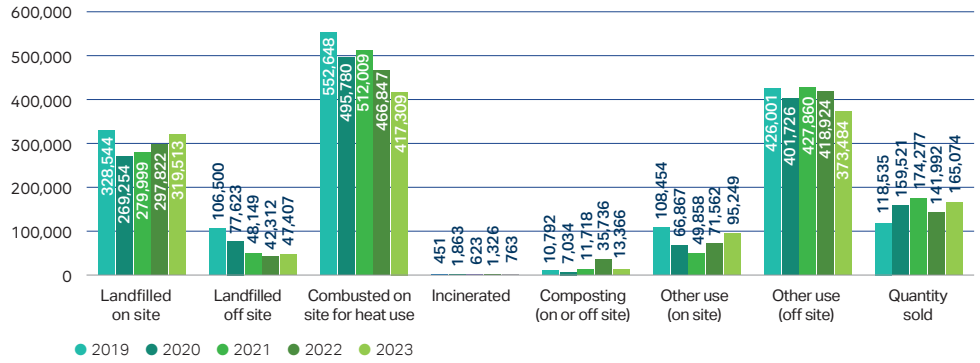


***Globally** there was a slight decrease. In **SEU**, the decrease was mainly due to the debottlenecking of the sludge press and the magnesium oxide project in Gratkorn Mill's bleaching section. In **SNA**, absolute TSS reduced, however, on a specific basis the magnitude of the reduction was less significant due to market curtailment. In **SSA** the decrease was due mainly to a reduction at Saiccor Mill.*

Our planet indicators continued

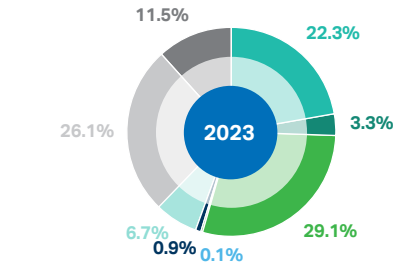
Waste

Disposal methods of solid waste (ton/annum)

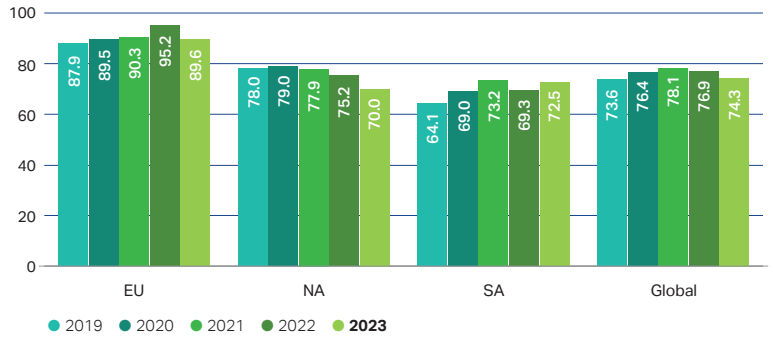


Globally *there was a slight decrease. In* ***SEU*** *the significant decrease was due to low production. In* ***SNA****, there was an increase in landfilled sludge at Matane Mill. In* ***SSA****, less waste was landfilled as more waste was used on site and sold.*

Disposal methods of solid waste (%)



Waste diverted from disposal (%)

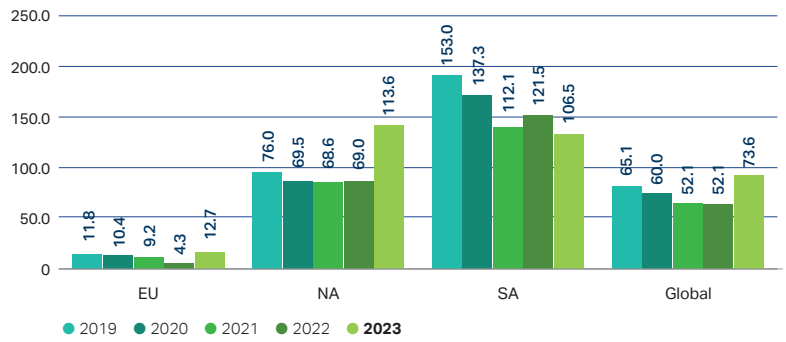


Globally *there was a slight decrease. In* ***SEU****, the decrease was due to a six-month standstill at the coal boiler at Gratkorn Mill (now converted to biomass). In* ***SNA****, reduced pulp production meant a decrease in bark production and incineration, thereby reducing the percentage of waste beneficiated. In* ***SSA*** *there was a slight increase as Saiccor Mill found an external offset for bark and wood waste, while Ngodwana Mill beneficiated and sold more fibre sludge and ash.*

Our planet indicators continued

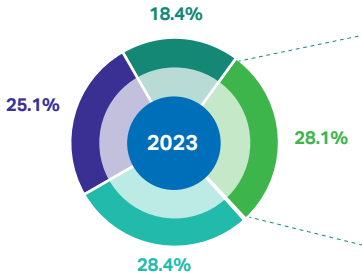
Waste continued

Specific landfilled solid waste (kg/adt)



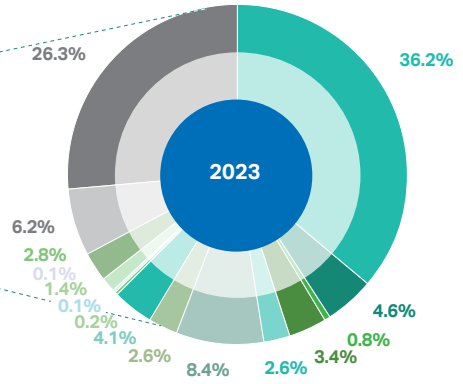
***Globally** there was an increase. In **SEU** the increase was due to reduced paper production which reduced more than pulp production. In **SNA** the increase was because absolute material landfilled was driven by an increase in landfilled sludge at Matane Mill. The specific landfilled numbers were driven by this absolute increase and the commercial downtime at all sites. In **SSA**, all mills disposed less waste to landfill (except for Stanger Mill which is already on a very low base). Tugela Mill generated less waste because of lower production in 2023. The mills are actively pursuing beneficiation opportunities specifically for ash, fibre sludge and biomass.*

Global breakdown of solid waste types in Sappi (%)



Bark (from own operations)	28.4%
Sludge (from pulp and paper mill and biological treatment)	25.1%
Boiler ashes	18.4%
Other	28.1%

Global breakdown of 'other' solid waste types in Sappi (%)



Wood Waste (knots, sawdust, slivers, fines oversize, pallets, other wood)	36.2%
Paper and packaging waste	4.6%
Other combustible waste	0.8%
Green liquor dregs/sodium sulphate rejects	3.4%
Slaker rejects	2.6%
Lime mud	8.4%
Wires and felts	0.0%
Domestic Waste	2.6%
Plastics, polystyrene, plastic packaging	4.1%
Hazardous Waste	0.2%
Used oil	0.1%
Other/scrap metals, iron, empty cans	1.4%
Oil contaminated waste	0.1%
Other waste (rolls, small chemicals, grinding roll waste etc)	2.8%
Other waste	6.2%
Waste used for capping purposes (t/annum)	26.3%

Our planet indicators continued

Air emissions

	GRI reference	Unit	2019	2020	2021	2022	2023
NO_X	305-7	kg/annum	11,024,920	9,784,051	9,913,230	10,555,399	**11,980,180**
		kg/adt	1.7	1.7	1.6	1.6	**2.4**
SO_X		kg/annum	10,030,272	10,858,503	13,591,003	13,004,256	**15,219,372**
		kg/adt	1.5	1.9	2.2	2.0	**3.1**
Particulate matter		kg/annum	2,909,061	6,190,461	3,327,250	5,482,422	**3,521,928**
		kg/adt	0.4	1.1	0.5	0.8	**0.7**

Our planet indicators continued

GHG emissions

	GRI reference	Unit	2019	2020	2021	2022	2023
Scope 1	305-1a	million kg CO_2eq/annum	4,421	4,078	4,269	4,079	**3,474**
	305-4	kg CO_2eq/adt	661.1	706.0	677.8	612.9	**696.5**
Scope 1 emissions from							
CO_2	305-1b	million kg CO_2eq/annum	4,099	3,763	3,961	3,772	**3,169**
CH_4		million kg CO_2eq/annum	264	261	254	253	**253**
N_2O		million kg CO_2eq/annum	58	54	53	53	**52**
Biogenic emissions	305-1c	million kg CO_2eq/annum	7,074	6,803	6,622	6,877	**6,730**
Scope 2	305-2a	million kg CO_2eq/annum	1,553	1,207	1,161	1,333	**1,234**
	305-4	kg CO_2eq/adt	232.3	208.9	184.3	200.3	**247.5**
Scope 3	305-3a	million kg CO_2eq/annum	3,977	3,365	3,512	3,784	**3,472**
	305-4	kg CO_2eq/adt	594.7	582.6	557.7	568.7	**695.9**
Scope 3 emissions from							
Purchased goods	305-3d	million kg CO_2eq/annum	1,829	1,404	1,491	1,675	**1,554**
Capital goods		million kg CO_2eq/annum	11	–	–	–	**–**
Fuel and energy-related activities		million kg CO_2eq/annum	924	817	983	984	**838**
Upstream transport		million kg CO_2eq/annum	1,113	1,048	953	1,041	**993**
Waste		million kg CO_2eq/annum	81	82	72	71	**69**
Business travel		million kg CO_2eq/annum	7.2	2.7	0.6	2.6	**6.7**
Employee commuting		million kg CO_2eq/annum	12.5	12.2	11.9	11.2	**10.6**
Scope 1 and Scope 2 GHG emissions	305-4	million kg CO_2eq/annum	5,974	5,285	5,429	5,411	**4,709**
		kg CO_2eq/adt	893.3	914.9	862.1	813.2	**944.0**
		kg CO_2eq/US$ million	1,039.7	1,146.7	1,031.4	741.7	**810.7**

Our planet indicators continued

Water and effluents

	GRI reference	Unit	2019	2020	2021	2022	2023
Process water extracted[1]	Own measure	m³/annum	231,916,239	215,411,083	220,689,614	229,361,378	**219,989,082**
		m³/adt	34.7	37.3	35.0	34.5	**44.1**
Water withdrawal by source							
Surface water	303-3a	m³/annum	270,074,169	247,517,140	252,542,848	271,081,060	**249,024,177**
Ground water		m³/annum	17,568,103	17,625,043	18,651,590	18,942,446	**17,082,980**
Third party		m³/annum	12,669,958	12,602,513	16,635,673	14,903,148	**13,498,544**
Total withdrawal	303-a	m³/annum	300,312,230	277,744,696	287,830,111	304,926,654	**279,605,701**
		m³/adt	44.9	48.1	45.7	45.8	**56.1**
Water withdrawal by source from water-stressed areas[2]							
Surface water	303-3b	m³/annum	–	–	–	56,277,224	**46,342,044**
Ground water		m³/annum	–	–	–	413,931	**387,251**
Third party		m³/annum	–	–	–	–	**–**
Total water withdrawal from water-stressed areas[2]	303-3b	m³/annum	–	–	–	56,691,155	**46,729,295**
	Own measure	m³/adt	–	–	–	8.5	**9.4**
	Own measure	%	–	–	–	18.6	**16.7**
Water discharge by destination							
Seawater	303-4a	m³/annum	45,809,312	38,938,588	45,926,521	48,720,138	**48,838,544**
Surface water		m³/annum	206,362,692	193,204,557	199,844,189	214,905,615	**186,943,894**
Third party water		m³/annum	23,486,763	22,675,103	24,017,649	24,834,269	**23,521,506**
Groundwater		m³/annum	–	–	–	–	**–**
Total water discharge	303-4a	m³/annum	275,658,766	254,818,248	269,788,359	288,460,022	**259,303,945**
		m³/adt	41.2	44.1	42.8	43.3	**52.0**

Our planet indicators continued

Water and effluents continued

	GRI reference	Unit	2019	2020	2021	2022	2023
Water discharge by destination in water-stressed areas[2]							
Seawater	303-4c	m³/annum	–	–	–	–	**–**
Surface water		m³/annum	–	–	–	49,288,436	**39,108,843**
Third-party water		m³/annum	–	–	–	–	**–**
Groundwater		m³/annum	–	–	–	10,251	**9,381**
Total water discharge in water-stressed areas[2]	303-4a	m³/annum	–	–	–	49,288,436	**39,108,843**
	Own measure	m³/adt	–	–	–	7.4	**7.8**
	Own measure	%	–	–	–	17.1	**15.1**
Water discharge by level of treatment							
Discharge to a third party without treatment	GRI clause 2.4.2	m³/annum	26,979	24,280	27,875	28,760	**26,429**
Primary treatment		m³/annum	64,178,344	56,252,506	67,395,510	72,863,518	**69,081,013**
Secondary treatment		m³/annum	188,297,171	178,602,866	179,352,223	189,431,971	**169,652,824**
Tertiary treatment		m³/annum	23,156,273	19,938,596	23,012,751	26,135,773	**20,543,680**
Total water consumption[3]	303-5a	m³/annum	24,653,463	22,926,448	18,041,753	16,466,632	**20,301,758**
		m³/adt	3.7	4.0	2.9	2.5	**4.1**
		%	8.2	8.3	6.3	5.4	**7.3**
Total consumption[3] in water stressed areas[2]	303-5a	m³/annum	–	–	–	7,402,720	**7,620,452**
	Own measure	m³/adt	–	–	–	1.1	**1.5**
	Own measure	%	–	–	–	2.4	**2.7**

Notes

1 *Process water refers to water used for the manufacturing process only. Process water excludes non-contact cooling water (SEU and SNA), water to the community, irrigation water, unused water back to the source, water for mill domestic use, and water sold to municipalities and third parties.*

2 *The water risk status of associated basins is based on the WWF Water Risk Filter for physical risk(s). Physical risk(s) comprise water scarcity, flooding, water quality and ecosystem status. Reported figures for water stress allocation is based on the seven different aspects integrated within the Water scarcity parameter (aridity index, water depletion, baseline water stress, blue water scarcity, available water remaining, drought frequency probability, and projected change in drought occurrence).*

3 *The term Water consumption refers to the withdrawal portions that are no longer available for use by the ecosystem or local community due to incorporation into products, generated into waste or due to release into the atmosphere through evaporation, and is therefore not returned back to surface water, groundwater, seawater or a third party over the course of the reporting period.*

Our planet indicators continued

Effluent quality

	GRI reference	Unit	2019	2020	2021	2022	2023
COD[1]	303-2	kg/annum	64,015,359	60,614,493	61,989,786	70,271,171	**53,315,640**
		kg/adt	10.8	11.7	11.0	11.8	**12.6**
TSS	303-2	kg/annum	23,953,736	17,301,899	26,577,986	42,753,637	**30,439,890**
		kg/adt	3.6	3.0	4.2	6.5	**6.1**

Note

[1] *Saiccor Mill has been excluded from this parameter as it is the only mill in the group to use the sulphite pulping process in the production of dissolving pulp. (Both Ngodwana and Cloquet Mills use the prehydrolysis kraft pulping process.)*

Waste

	GRI reference	Unit	2019	2020	2021	2022	2023
Specific waste to landfill	Own measure	kg/adt	65.1	60.0	52.1	51.1	**73.6**
Waste generated by type							
Hazardous	306-5b	t/annum	1,871	2,704	2,024	1,183	**918**
Non-hazardous	306-5c	t/annum	1,650,054	1,476,964	1,502,469	1,475,337	**1,431,247**
Total	306-5a	t/annum	1,651,925	1,479,668	1,504,492	1,476,520	**1,432,165**
% hazardous waste		%	0.11	0.18	0.13	0.08	**0.06**
Waste beneficiated	306-4a	t/annum	1,216,430	1,130,927	1,175,721	1,135,061	**1,064,482**
	Own measure	%	73.6	76.4	78.1	76.9	**74.3**

Our planet indicators continued

Energy

	GRI reference	Unit	2019	2020	2021	2022	2023
Total energy consumption within organisation	302-1	GJ/annum	147,857,277	136,801,840	140,630,797	147,179,507	**130,777,595**
		MWh/annum	41,071,466	38,000,511	39,064,110	40,883,196	**36,327,110**
Breakdown of energy consumption within organisation							
Purchased fossil fuels	302-1a and b	GJ/annum	51,753,227	48,197,364	50,578,703	49,259,353	**40,544,844**
Purchased renewable fuels		GJ/annum	6 836 264	5,425,584	4,727,212	4,804,701	**7,598,652**
Own renewable fuels		GJ/annum	63,402,979	62,292,505	61,002,814	63,726,975	**59,364,623**
Purchased power consumption		GJ/annum	12,157,209	10,376,515	10,941,866	12,070,060	**9,792,137**
Purchased steam consumption		GJ/annum	631,042	511,673	525,749	579,353	**296,443**
Own renewable power (hydro)		GJ/annum	330,291	277,064	251,322	191,488	**159,467**
Energy intensity	302-3	GJ/adt	22.1	23.7	22.3	22.1	**26.2**
Reduction of specific energy consumption	302-4	GJ/adt	(0.4)	1.6	(1.4)	(0.2)	**4.1**
Renewable and clean energy	Own measure	%	53.5	53.8	54.9	55.0	**57.9**