

## Environmental Data Performance 2023

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## Total Production

	Total Production			
	2020	2021	2022	2023
	t	t	t	t
IVL Group	15,547,062	16,521,350	16,748,664	<b>16,034,161</b>

## Water

### Water consumption & Intensity

	Total Production				Total water withdrawal (with + without water stress)				Water Intensity			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	t	t	t	t	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup> /t	m <sup>3</sup> /t	m <sup>3</sup> /t	m <sup>3</sup> /t
IVL Group	15,547,062	16,521,350	16,748,664	<b>16,034,161</b>	82,050,413	88,154,619	86,911,133	<b>83,500,378</b>	5.280	5.340	5.190	<b>5.210</b>

### Recycled water

	Total recycled and reused water				Total water recycled (%)				Total water withdrawal (with + without water stress)			
	2020	2021	2022	2023	2020	2021	2022	2023	2020	2021	2022	2023
	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	%	%	%	%	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
IVL Group	5,786,158	5,555,472	6,739,270	<b>6,250,851</b>	6.59	5.93	7.20	<b>6.96</b>	82,050,413	88,154,619	86,911,133	<b>83,500,378</b>

## Water withdrawal

				IVL Group				
				2020	2021	2022	2023	
				m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	
00. Water Reuse/Recycle	01. Total	2	Total water returned to the same source at a similar or better level of quality	4,350,993	3,607,591	891,850	<b>601,448</b>	
01. Water Withdrawal	00. With and Without Water Stress	1	Total water withdrawal (with + without water stress)	82,050,413	88,154,619	86,911,133	<b>83,500,378</b>	
		2	Total water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	78,234,317	84,705,661	85,376,063	<b>82,412,722</b>	
		3	Total water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	3,721,672	3,448,782	1,535,070	<b>1,087,656</b>	
		4	Surface water/rain water withdrawal (with + without water stress) - Total	51,035,459	61,522,902	48,332,122	<b>47,660,402</b>	
		5	Surface water/rain water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	47,395,317	58,361,273	48,239,270	<b>47,415,500</b>	
		6	Surface water/rain water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	3,640,142	3,161,629	92,852	<b>244,902</b>	
		7	Ground water withdrawal (with + without water stress) - Total	12,111,060	7,454,545	11,723,782	<b>11,418,275</b>	
		8	Ground water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	12,109,723	7,453,567	11,293,294	<b>10,988,468</b>	
		9	Ground water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	1,339	979	430,487	<b>429,807</b>	
		10	Sea water withdrawal (with + without water stress) - Total	-	-	-	-	
		11	Sea water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	-	-	-	-	
		12	Sea water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	-	-	
		13	Produced water withdrawal (with + without water stress) - Total	684,830	193,615	129,085	<b>170,647</b>	
		14	Produced water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	627,250	64,141	490	<b>507</b>	
		15	Produced water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	57,580	129,474	128,595	<b>170,141</b>	
		16	Third-party water withdrawal (with + without water stress) - Total	18,216,496	18,979,096	26,726,144	<b>24,251,053</b>	
		17	Third-party water withdrawal (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	18,151,454	18,821,234	25,843,008	<b>24,008,248</b>	
		18	Third-party water withdrawal (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	65,043	158,362	883,135	<b>242,805</b>	
	01. With Water Stress		1	Total water withdrawal (with water stress)	34,673,303	39,501,968	37,566,089	<b>34,203,988</b>
			2	Total water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	34,467,798	39,136,098	37,294,453	<b>34,022,998</b>
			3	Total water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	111,408	276,404	271,636	<b>180,990</b>
			4	Surface water/rain water withdrawal (with water stress) - Total	19,608,256	23,446,101	25,372,029	<b>25,599,863</b>
			5	Surface water/rain water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	19,608,256	23,446,101	25,372,029	<b>25,599,863</b>
			6	Surface water/rain water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	-	-
			7	Ground water withdrawal (with water stress) - Total	3,747,740	3,961,214	3,600,532	<b>3,567,032</b>
			8	Ground water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	3,747,740	3,961,213	3,600,532	<b>3,567,016</b>
			9	Ground water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	-	<b>16</b>
			10	Sea water withdrawal (with water stress) - Total	-	-	-	-
			11	Sea water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	-	-	-	-
			12	Sea water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	-	-
			13	Produced water withdrawal (with water stress) - Total	81,039	153,254	106,889	<b>108,850</b>
			14	Produced water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	34,370	34,585	-	-
			15	Produced water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	46,669	118,669	106,889	<b>108,850</b>
			16	Third-party water withdrawal (with water stress) - Total	11,236,272	11,941,420	8,486,639	<b>4,928,243</b>
			17	Third-party water withdrawal (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	11,171,229	11,783,034	8,321,892	<b>4,856,119</b>
18	Third-party water withdrawal (with water stress) - Other water (> 1000 mg/L total dissolved solids)	65,043	158,362	164,747	<b>72,124</b>			

02. Without Water Stress	1	Total water withdrawal (without water stress)	47,374,540	48,648,193	49,345,044	<b>49,296,389</b>
	2	Total water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	43,766,520	45,480,729	48,081,610	<b>48,389,724</b>
	3	Total water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	3,610,558	3,171,923	1,263,434	<b>906,666</b>
	4	Surface water/rain water withdrawal (without water stress) - Total	31,427,203	38,076,801	22,960,093	<b>22,060,539</b>
	5	Surface water/rain water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	27,787,062	34,915,172	22,867,241	<b>21,815,637</b>
	6	Surface water/rain water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	3,640,142	3,161,629	92,852	<b>244,902</b>
	7	Ground water withdrawal (without water stress) - Total	8,365,888	3,497,792	8,123,250	<b>7,851,243</b>
	8	Ground water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	8,364,549	3,496,813	7,692,762	<b>7,421,452</b>
	9	Ground water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	1,339	979	430,487	<b>429,791</b>
	10	Sea water withdrawal (without water stress) - Total	-	-	-	-
	11	Sea water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	-	-	-	-
	12	Sea water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	-	-
	13	Produced water withdrawal (without water stress) - Total	603,791	40,361	22,196	<b>61,797</b>
	14	Produced water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	592,880	29,556	490	<b>507</b>
	15	Produced water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	10,911	10,805	21,706	<b>61,291</b>
	16	Third-party water withdrawal (without water stress) - Total	7,048,918	7,037,700	18,239,505	<b>19,322,810</b>
	17	Third-party water withdrawal (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	6,980,224	7,037,700	17,521,116	<b>19,152,129</b>
	18	Third-party water withdrawal (without water stress) - Other water (> 1000 mg/L total dissolved solids)	-	-	718,388	<b>170,681</b>

## Water discharge

			IVL Group			
			2022	2023		
			m <sup>3</sup>	m <sup>3</sup>		
02. Water Discharge	00. With and Without Water Stress	1	Total water discharge (with + without water stress)	46,990,764.15	<b>45,576,757.27</b>	
		2	Total water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	38,767,716.32	<b>36,213,751.96</b>	
		3	Total water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	8,223,047.83	<b>9,363,005.32</b>	
		4	Surface water/rain water discharge (with + without water stress) - Total	24,645,274.94	<b>24,566,153.07</b>	
		5	Surface water/rain water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	22,543,111.73	<b>22,120,076.51</b>	
		6	Surface water/rain water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	2,102,163.21	<b>2,446,076.56</b>	
		7	Ground water discharge (with + without water stress) - Total	416,407.58	<b>203,729.20</b>	
		8	Ground water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	334,820.17	<b>140,651.00</b>	
		9	Ground water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	81,587.41	<b>63,078.20</b>	
		10	Sea water discharge (with + without water stress) - Total	2,034,926.90	<b>1,745,449.50</b>	
		11	Sea water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	2,034,926.90	<b>1,745,449.50</b>	
		12	Sea water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	0.00	<b>0.00</b>	
		13	Third-party / municipality / common WWTP water discharge (with + without water stress) - Total	16,937,671.34	<b>15,610,476.11</b>	
		14	Third-party / municipality / common WWTP water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	10,980,923.53	<b>8,847,394.15</b>	
		15	Third-party / municipality / common WWTP water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	5,956,747.81	<b>6,763,081.96</b>	
		16	Third-party for other organization water discharge (with + without water stress) - Total	2,956,483.39	<b>3,450,949.40</b>	
		17	Third-party for other organization water discharge (with + without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	2,873,933.99	<b>3,360,180.80</b>	
		18	Third-party for other organization water discharge (with + without water stress) - Other water (> 1000 mg/L total dissolved solids)	82,549.40	<b>90,768.60</b>	
		01. With Water Stress	1	Total water discharge (with water stress)	22,681,126.29	<b>19,763,325.14</b>
			2	Total water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	19,280,293.72	<b>16,177,767.74</b>
			3	Total water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	3,400,832.58	<b>3,585,557.40</b>
			4	Surface water/rain water discharge (with water stress) - Total	14,089,105.51	<b>13,323,342.47</b>
			5	Surface water/rain water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	13,842,562.37	<b>13,010,518.05</b>
			6	Surface water/rain water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	246,543.14	<b>312,824.42</b>
			7	Ground water discharge (with water stress) - Total	287,722.76	<b>186,444.67</b>
			8	Ground water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	220,385.35	<b>139,285.00</b>
			9	Ground water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	67,337.41	<b>47,159.67</b>
			10	Sea water discharge (with water stress) - Total	1,460,690.80	<b>1,422,689.10</b>
			11	Sea water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	1,460,690.80	<b>1,422,689.10</b>
			12	Sea water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	0.00	<b>0.00</b>
			13	Third-party / municipality / common WWTP water discharge (with water stress) - Total	6,711,486.83	<b>4,694,670.50</b>
			14	Third-party / municipality / common WWTP water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	3,698,315.20	<b>1,553,003.79</b>
			15	Third-party / municipality / common WWTP water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	3,013,171.63	<b>3,141,666.71</b>
			16	Third-party for other organization water discharge (with water stress) - Total	132,120.40	<b>136,178.40</b>
			17	Third-party for other organization water discharge (with water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	58,340.00	<b>52,271.80</b>
			18	Third-party for other organization water discharge (with water stress) - Other water (> 1000 mg/L total dissolved solids)	73,780.40	<b>83,906.60</b>

02. Without Water Stress	1	Total water discharge (without water stress)	24,309,637.86	<b>25,813,432.13</b>
	2	Total water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	19,487,422.60	<b>20,035,984.22</b>
	3	Total water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	4,822,215.26	<b>5,777,447.92</b>
	4	Surface water/rain water discharge (without water stress) - Total	10,556,169.43	<b>11,242,810.60</b>
	5	Surface water/rain water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	8,700,549.36	<b>9,109,558.46</b>
	6	Surface water/rain water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	1,855,620.07	<b>2,133,252.14</b>
	7	Ground water discharge (without water stress) - Total	128,684.82	<b>17,284.53</b>
	8	Ground water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	114,434.82	<b>1,366.00</b>
	9	Ground water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	14,250.00	<b>15,918.53</b>
	10	Sea water discharge (without water stress) - Total	574,236.10	<b>322,760.40</b>
	11	Sea water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	574,236.10	<b>322,760.40</b>
	12	Sea water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	0.00	<b>0.00</b>
	13	Third-party / municipality / common WWTP water discharge (without water stress) - Total	10,226,184.52	<b>10,915,805.61</b>
	14	Third-party / municipality / common WWTP water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	7,282,608.33	<b>7,294,390.36</b>
	15	Third-party / municipality / common WWTP water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	2,943,576.19	<b>3,621,415.25</b>
	16	Third-party for other organization water discharge (without water stress) - Total	2,824,362.99	<b>3,314,771.00</b>
	17	Third-party for other organization water discharge (without water stress) - Freshwater (<= 1000 mg/L total dissolved solids)	2,815,593.99	<b>3,307,909.00</b>
	18	Third-party for other organization water discharge (without water stress) - Other water (> 1000 mg/L total dissolved solids)	8,769.00	<b>6,862.00</b>

## Water returned

			Total water returned to the same source at a similar or better level of quality			
			2020	2021	2022	2023
			m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>	m <sup>3</sup>
<b>Combined PET</b>	Integrated PET	Aromatics (Feedstock)	0.00	0.00	0.00	<b>0.00</b>
		Aromatics (PTA)	0.00	0.00	0.00	<b>0.00</b>
		PET	3,339,282.20	2,760,846.00	0.00	<b>0.00</b>
	Packaging	Packaging	0.00	0.00	0.00	<b>0.00</b>
	Recycling	Recycling	0.00	120,614.00	0.00	<b>8,002.00</b>
<b>Fibers</b>	Fibers Hygiene	Hygiene (Non-Wovens)	33,659.00	0.00	0.00	<b>0.00</b>
		Hygiene (Staple Fibers)	0.00	0.00	68,033.00	<b>75,772.00</b>
	Fibers Lifestyle	Lifestyle	0.00	0.00	21,279.00	<b>21,478.00</b>
	Fibers Mobility	Mobility	978,052.00	726,131.00	802,538.00	<b>496,196.00</b>
	Fibers Wool	Wool	0.00	0.00	0.00	<b>0.00</b>
<b>IOD</b>	IOD	IOD	0.00	0.00	0.00	<b>0.00</b>
		IOD Downstream	0.00	0.00	0.00	<b>0.00</b>
		IOD Midstream	0.00	0.00	0.00	<b>0.00</b>
		IOD Upstream	0.00	0.00	0.00	<b>0.00</b>
<b>JV</b>	JV	JV	0.00	0.00	0.00	<b>0.00</b>
<b>Grand Total</b>			4,350,993.20	3,607,591.00	891,850.00	<b>601,448.00</b>

## Energy

Direct energy breaks up	
Coal	17,806,805 GJ
Natural gas	79,115,199 GJ
Others	2,218,230 GJ
Direct energy sold	(2,340,503) GJ
Biogenic / Biomass	728,630 GJ
Total energy	97,528,362 GJ
Total Renewable energy	1,408,918 GJ

	IVL Group	
	2022	2023
	GJ	GJ
00. Total Indirect energy consumption (electricity, cooling, steam purchased from outside of IVL group)	25,746,951.98	<b>23,376,495.79</b>
01. Electricity Purchased from conventional sources (e.g. natural gas, coal, nuclear, heating oil)	18,130,002.02	<b>17,392,103.15</b>
02. Purchased steam	7,696,224.54	<b>6,021,350.75</b>
03. Purchased heating	295,577.07	<b>291,878.13</b>
04. Purchased cooling	5,445.97	<b>7,106.69</b>
05. Purchased Chilled Water	44,766.47	<b>41,828.04</b>
06. Purchased Compressed Air	83,919.45	<b>76,537.80</b>
07. Renewable electricity generated and consumed	37,268.68	<b>59,530.42</b>
08. Renewable electricity purchased through certificate	716,324.84	<b>620,906.51</b>
09. Total direct electricity sold	-659,970.67	<b>-472,446.25</b>
10. Total Steam Sold + Heat Sold	-586,479.22	<b>-650,230.04</b>
11. Total indirect electricity sold	-16,127.18	<b>-12,069.41</b>



## Renewable electricity consumption

Segment	% Renewable Electricity			
	2020	2021	2022	2023
<b>CPET</b>	3.68%	12.39%	2.79%	<b>2.16%</b>
<b>FIBERS</b>	3.56%	4.30%	4.42%	<b>4.87%</b>
<b>IOD</b>	0.00%	0.00%	3.08%	<b>3.16%</b>
<b>IVL</b>	3.25%	8.44%	3.33%	<b>3.14%</b>

Segment	Renewable Electricity Consumed (MWh)			
	2020	2021	2022	2023
<b>CPET</b>	124,821	438,072	97,652	<b>71,676</b>
<b>FIBERS</b>	65,950	90,757	85,602	<b>90,571</b>
<b>IOD</b>	-	2	25,988	<b>26,722</b>
<b>IVL</b>	190,771	528,831	209,243	<b>188,969</b>

Segment	Total Electricity Consumed (MWh)			
	2020	2021	2022	2023
<b>CPET</b>	3,392,124	3,536,787	3,505,595	<b>3,311,767</b>
<b>FIBERS</b>	1,850,768	2,112,002	1,935,781	<b>1,861,592</b>
<b>IOD</b>	625,777	614,745	843,111	<b>845,405</b>
<b>IVL</b>	5,868,669	6,263,534	6,284,488	<b>6,018,764</b>

Segment	Energy Intensity (GJ/t)			
	2020	2021	2022	2023
<b>CPET</b>	4.401	4.385	4.232	<b>4.249</b>
<b>FIBERS</b>	10.88	10.85	10.78	<b>10.56</b>
<b>IOD</b>	14.74	13.84	14.14	<b>14.36</b>
<b>IVL</b>	7.134	6.996	7.293	<b>7.540</b>

segment	Total direct energy (GJ)			
	2020	2021	2022	2023
<b>CPET</b>	36,977,687	37,924,776	34,597,601	<b>32,260,064</b>
<b>FIBERS</b>	11,738,870	13,129,427	11,274,892	<b>10,729,570</b>
<b>IOD</b>	41,390,788	41,561,373	50,527,955	<b>54,538,728</b>
<b>IVL</b>	90,107,345	92,615,576	96,400,448	<b>97,528,362</b>

Segment	Total Energy consumption (GJ)			
	2020	2021	2022	2023
<b>CPET</b>	47,538,460	49,668,975	46,431,570	<b>43,187,019</b>
<b>FIBERS</b>	19,014,442	21,753,595	19,118,406	<b>18,239,842</b>
<b>IOD</b>	44,492,646	44,161,142	56,597,424	<b>59,477,997</b>
<b>IVL</b>	111,045,549	115,583,712	122,147,400	<b>120,904,857</b>

Segment	Total indirect energy (GJ)			
	2020	2021	2022	2023
<b>CPET</b>	10,560,774	11,744,200	11,833,969	<b>10,926,955</b>
<b>FIBERS</b>	7,275,572	8,624,167	7,843,514	<b>7,510,272</b>
<b>IOD</b>	3,101,858	2,599,769	6,069,469	<b>4,939,269</b>
<b>IVL</b>	20,938,204	22,968,136	25,746,952	<b>23,376,496</b>

Segment	Total Production (t)			
	2020	2021	2022	2023
<b>CPET</b>	10,801,222	11,326,833	10,972,257	<b>10,163,907</b>
<b>FIBERS</b>	1,747,259	2,004,005	1,773,108	<b>1,727,871</b>
<b>IOD</b>	3,017,564	3,190,511	4,003,300	<b>4,142,384</b>
<b>IVL</b>	15,566,045	16,521,350	16,748,664	<b>16,034,161</b>

## Raw material

### Total Material consumption 2023

Details	External Raw material	% with total External Raw material	Total Internal + External Raw material	% with total Total internal + external Raw material
	<b>COMBINED PET</b>			
Biobased material	9,175	0.13%	9,175	0.09%
Non-renewable raw material	6,720,238	94.03%	9,690,503	94.01%
PCR raw material	372,086	5.21%	562,851	5.46%
Packaging raw material	45,424	0.64%	45,595	0.44%
Total Raw material	7,146,924	100.00%	10,308,124	100.00%

Details	External Raw material	% with total External Raw material	Total Internal + External Raw material	% with total Total internal + external Raw material
	<b>FIBERS</b>			
Biobased material	19,390	1.44%	29,709	1.42%
Non renewable Raw material	1,249,161	92.89%	1,961,749	93.74%
PCR raw material	31,369	2.33%	51,444	2.46%
Packaging raw material	44,907	3.34%	49,774	2.38%
Total Raw material	1,344,827	100.00%	2,092,674	100.00%

Details	External Raw material	% with total External Raw material	Total Internal + External Raw material	% with total Total internal + external Raw material
	<b>IOD</b>			
Biobased material	126,506	3.89%	184,198.51	4.71%
Non renewable Raw material	3,117,648	95.80%	3,713,852	95.03%
PCR raw material	0.00%	0.00%		0.00%
Packaging raw material	10,080	0.31%	10,080	0.26%
Total Raw material	3,254,234.19	100.00%	3,908,131	100.00%

Details	2022		2023	
Biobased material	151,099	1.24%	155,071	1.32%
Non renewable Raw material	11,600,338	95.14%	11,166,246	95.06%
PCR raw material	342,961	2.81%	324,256	2.76%
Packaging raw material	98,994	0.81%	100,411	0.85%
Total Raw material	12,193,392	100%	11,745,985	100%

## GHG Intensity

Location based / Market based GHG emissions absolute and intensities.

2023				
Segment	Market based Emission Scope2	GHG scope 1 + Market based emissions	GHG intensity Scope 1+2 Market based	GHG intensity Market based
<b>CPET</b>	1,057,985	3,837,218.48	0.3775	0.1041
<b>FIBERS</b>	1,004,448	1,837,459.36	1.0634	0.5813
<b>IOD</b>	313,227	3,803,512.55	0.9182	0.0756
<b>IVL</b>	2,375,660	<b>9,478,190.39</b>	0.5911	0.1482

2023						
Segment	Total Location-based Scope2 CO2e	Total Scope 1 CO2e	Production	GHG intensity Scope1	GHG intensity Scope 2	GHG intensity Scope1+2
<b>CPET</b>	1,100,189.78	2,779,233.76	10.164,907.01	0.1082	0.2734	0.3817
<b>FIBERS</b>	974,165.93	833,011.39	1,727,870.64	0.5638	0.4821	1.0459
<b>IOD</b>	404,053.84	3,490,285.37	4,142,383.64	0.0975	0.8426	0.9401
<b>IVL</b>	2,478,409.55	7,102,530.52	16,034,161.29	0.1546	0.4430	0.5975
Total	<b>9,580,940.07</b>					

## Waste

2023		
	Total waste	% waste
Total Waste generated	463,310	100%
Recycled and reused	245,122	52.9%
Incineration with energy recovery	104,333	22.5%
Incineration without energy recovery	7,343	1.6%
Landfilled	83,566	18.0%
Others	22,946	5.0%

Waste diversion including incineration with energy recovery		Diversion rates with Energy recovery		
		2021	2022	2023
CPET	Including incineration with energy recovery	56.77%	49.79%	<b>59.71%</b>
FIBERS	Including incineration with energy recovery	91.63%	93.35%	<b>93.65%</b>
IOD	Including incineration with energy recovery	75.85%	78.59%	<b>75.92%</b>
Total	Including incineration with energy recovery	74.80%	71.92%	<b>75.43%</b>

## Stack emissions

	Total NOx emissions			
	2020	2021	2022	2023
	t	t	t	t
IVL Group	4,936.92	12,432.76	7,536.25	<b>7,447.80</b>
	Total PM emissions			
	2020	2021	2022	2023
	t	t	t	t
IVL Group	871.67	914.93	1,137.47	<b>1,217.19</b>
	Total SOx emissions			
	2020	2021	2022	2023
	t	t	t	t
IVL Group	4,658.03	6,999.04	5,730.22	<b>5,708.02</b>
	Total VOC emissions			
	2020	2021	2022	2023
	t	t	t	t
IVL Group	3,298.13	2,364.11	4,287.09	<b>3,253.37</b>

## COD / BOD / TSS

	(a) Total wastewater generated and sent to Wastewater Treatment Plant (WWTP) at site		(b) Total wastewater discharged outside the site / third party treatment plant		(c) COD Discharge		(d) BOD Discharge		(e) TSS Discharge	
	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>
	m <sup>3</sup>	<b>m<sup>3</sup></b>	m <sup>3</sup>	<b>m<sup>3</sup></b>	t	<b>t</b>	t	<b>t</b>	t	<b>t</b>
IVL Group	32,871,606	<b>31,831,551</b>	46,882,624	<b>44,941,189</b>	8,272	<b>3,125</b>	3,005	<b>973</b>	651	<b>636</b>

	(f) Oil and Grease Discharge		(k) Discharge 1 - Wastewater generated and sent to Wastewater Treatment Plant (WWTP) at site		(l) Discharge 1 - Wastewater discharged outside the site / third party treatment plant		(m) Discharge 2 - Wastewater generated and sent to Wastewater Treatment Plant (WWTP) at site		(e) TSS Discharge	
	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>	2022	<b>2023</b>
	m <sup>3</sup>	<b>m<sup>3</sup></b>	m <sup>3</sup>	<b>m<sup>3</sup></b>	t	<b>t</b>	t	<b>t</b>	t	<b>t</b>
IVL Group	995	<b>84</b>	32,741,187	<b>31,693,458</b>	40,610,144	<b>39,635,762</b>	130,418	<b>138,092</b>	6,272,480	<b>5,305,427</b>