



Mondi Group
Sustainable Development
Consolidated Performance
Data 2021

**TANGiBLE +
RELiABLE**

Consolidated performance data

Financial performance

€ millions, unless otherwise stated	2017	2018	2019	2020	2021
Group revenue	7,096	7,481	7,268	6,663	7,723
Underlying EBITDA	1,482	1,764	1,658	1,353	1,503
Underlying operating profit	1,029	1,318	1,223	925	1,064
Operating profit	968	1,192	1,221	868	1,071
Basic underlying earnings per share (EPS) (euro cents)	148.9	189.1	171.1	129.3	154.0
Basic EPS (euro cents)	137.9	170.1	167.6	120.0	155.9
Capital expenditure cash outflows	(611)	(709)	(757)	(630)	(573)
Net debt	1,532	2,220	2,207	1,791	1,763
ROCE (%)	19.3	23.6	19.8	15.2	16.9

Diversity

Employee numbers across our significant locations of operations ¹	Significant locations (total)		Europe		Russia		South Africa		North America	
	Total	Female	Total	Female	Total	Female	Total	Female	Total	Female
		%		%		%		%		%
Total employees	18,458	21	11,777	19	4,588	26	1,237	20	856	16
Permanent employees	17,351	20	11,058	19	4,234	25	1,203	19	856	16
Temporary employees	1,107	26	719	23	354	30	34	32	0	0
Full-time employees	17,955	20	11,324	17	4,586	25	1,194	20	851	16
Part-time employees	503	60	453	66	2	50	43	12	5	20
New employee hires	2,210	26	1,448	27	481	23	89	28	192	22
Employee turnover	1,675	23	1,034	20	318	29	117	26	206	23

¹ Figures represent almost 70% of employees, including plants/mills with a combined annual sales turnover of more than €70 million, located in Austria, Bulgaria, Czech Republic, Finland, Germany, Hungary, Mexico, Poland, Russia, Slovakia, South Africa, Sweden, Turkey and the US and Group offices in London (UK) and Vienna (Austria). Around 30% of employees are not yet represented in this table and we are assessing Mondi's central human resource information system to improve our coverage

Gender diversity	Male	%	Female	%
Senior directors	5	56	4	44
Senior managers ²	266	80	68	20
Employees ³	21,237	79	5,585	21

² As defined by Mondi and including subsidiary directors in accordance with the definition set out in Section 414C of the UK Companies Act 2006

³ As at 31 December 2021

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Age diversity across our significant locations of operations ⁴	under 30 years old		30-50 years		over 50 years	
	Total	%	Total	%	Total	%
Total employees	2,894	16	10,837	59	4,727	26
New employee hires	1,122	51	866	39	222	10
Employee turnover	505	30	643	38	527	31

⁴ Figures represent almost 70% of employees, including plants/mills with a combined annual sales turnover of more than €70 million, located in Austria, Bulgaria, Czech Republic, Finland, Germany, Hungary, Mexico, Poland, Russia, Slovakia, South Africa, Sweden, Turkey and the US and Group offices in London (UK) and Vienna (Austria). Around 30% of employees are not yet represented in this table and we are assessing Mondi's central human resource information system to improve our coverage

Management by origin 2021	Number
Austria	59
Czech Republic	10
France	2
Hungary	1
Italy	11
Poland	37
Russia	15
Slovakia	5
South Africa	61
Turkey	29
United Kingdom	6
Other nationalities	133

Training

	2017	2018	2019	2020	2021
Employee and contractor training hours ⁵	829,900	819,200	801,900	617,470	741,700

⁵ Including new acquisitions

Coverage of safety in training hours (%)	2021
Safety-focused training	46
Other training	54



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Safety

Number of work-related fatalities	2017	2018	2019	2020	2021
Employees	2	0	0	0	0
Contractors	1	1	2	2	0
Total recordable case rate (per 200,000 hours worked)	0.68	0.68	0.63	0.58	0.62

Audits 2021	Number
Management risk focused audits ⁶	18,028
First line manager task audits ⁷	26,222

⁶ Audits by managers which are focused on checking critical controls such as permit to work, risk assessments and isolation and locking out of energy sources as well as talking to employees on the shop floor

⁷ Supervisors are required to conduct audits of high risk activities to determine if procedures are understood and adhered to when the task is being conducted

Communities

Community and social investments ('000 €)	2017	2018	2019	2020	2021
Health and wellbeing	1,959	2,079	984	911	1,132
Education	731	724	838	760	1,011
Infrastructure and development	6,509	4,697	10,721	5,680	8,495
Enterprise and employment support	432	431	548	1,022	1,004
COVID-19				3,140	54
Environmental protection ⁸					101
Total⁹	9,631	7,931	13,090	11,513	11,797

⁸ Environmental protection category added in 2021 to reflect the MAP2030 commitment focus area for social investment. In past years these investments were part of the category infrastructure and development

⁹ Changes in investment levels over the years do not necessarily represent a change in investment strategy. They are sometimes reflective of the commencement or closure of projects. Most initiatives run over several years and require different levels of investment for each development phase

Consolidated performance data

Forests and fibre procurement

Forestry data 2021	Russia	South Africa	Total
Total area of forestry landholdings (ha)	2,447,249	253,680	2,700,929
Proportion of land set aside for conservation (%)	23	28	24
Number of seedlings planted	3,410,000	19,397,040	22,807,040
Wood self-sufficiency potential ¹⁰ (%)			54

¹⁰ The maximum share of sustainable yield available for harvesting in our own landholdings as a percentage of the total wood fibre consumed by our pulp and paper mills in the reporting period (i.e. 17.3 million m³)

Wood fibre use in the manufacturing process	2017	2018	2019	2020	2021
Wood (internal and external) (million m ³)	16.9	17.4	17.6	18.0	17.3
Pulp (externally procured) (million tonnes)	0.3	0.3	0.3	0.2	0.3
Paper for recycling (million tonnes)	1.3	1.3	1.3	1.3	1.4

Certified pulp procured (%)	2017	2018	2019	2020	2021
FSC™	82	85	93	91	93
PEFC™	11	9	6	3	7
Total	93	94	99	94	100

Certified wood procured (%)	2017	2018	2019	2020	2021
FSC	50	49	46	47	49
PEFC	21	22	26	29	28
Total	71	71	72	76	77

Sustainable solutions

Products that are reusable, recyclable or compostable	2020	2021
% of total revenue ¹¹	76	78

¹¹ See our Mondi 'Path to Circularity Scorecard' on page 27 in our 2021 SD report for details on the methodology applied

Consolidated performance data

Transport and logistic

Modes of transport for our supplies ¹² (%)	2017	2018	2019	2020	2021
Road	59.4	55.0	56.2	57.4	56.0
Ocean	20.6	22.6	22.3	21.9	22.5
Rail	19.7	22.2	21.2	20.6	21.2
Air	0.3	0.2	0.2	0.1	0.2

¹² Based on spend

GHG emissions and energy

CO ₂ e emissions from our pulp and paper mills (tonnes)	2017	2018	2019	2020	2021
Scope 1	3,777,282	3,805,696	3,908,247	3,529,550	3,573,354
Scope 2	691,649	583,031	456,323	429,170	448,449
Total CO₂e	4,468,931	4,388,727	4,364,570	3,958,720	4,021,802

Specific CO ₂ e emissions from our pulp and paper mills (tonnes per tonne of saleable production)	2017	2018	2019	2020	2021
Production-related Scope 1	0.45	0.47	0.49	0.44	0.43
Sales-related Scope 1	0.16	0.16	0.15	0.13	0.13
Scope 1	0.61	0.63	0.64	0.57	0.56
Scope 2	0.11	0.10	0.07	0.07	0.07
Specific total (Scope 1 and 2) CO₂e	0.72	0.72	0.71	0.64	0.63

GHG emissions from our pulp and paper mills, by country 2021	Tonnes
Austria	206,815
Bulgaria	77,764
Czech Republic	423,113
Finland	119,450
Poland	216,153
Russia	1,915,611
Slovakia	130,316
South Africa	856,237
Sweden	21,760
Turkey	54,583
Total	4,021,802



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GHG emissions from our pulp and paper mills 2021 (tonnes)	Scope 1	Scope 2	Total
Dynäs (Sweden)	21,760	0	21,760
Frantschach (Austria)	46,675	0	46,675
Hausmening (Austria)	89,705	26,017	115,722
Kematen (Austria)	36,644	7,773	44,418
Kuopio (Finland)	103,726	15,725	119,450
Merebank (South Africa)	162,854	161,315	324,170
Richards Bay (South Africa)	455,914	76,154	532,068
Ružomberok (Slovakia)	130,316	0	130,316
Stamboljiski (Bulgaria)	29,260	48,504	77,764
Štětí (Czech Republic)	402,490	20,623	423,113
Świecie (Poland)	145,344	70,809	216,153
Syktvykar (Russia)	1,915,611	0	1,915,611
Tire (Turkey)	33,055	21,529	54,583

GHG emissions by activity (tonnes)	2017	2018	2019	2020	2021
Energy sales-related GHG emissions	1,000,772	944,750	912,030	811,088	828,395
Mills Scope 1 excluding energy sales	2,776,510	2,860,946	2,996,217	2,718,462	2,744,959
Mills Scope 1 emissions from fuel combustion	3,614,281	3,606,254	3,724,295	3,390,534	3,452,197
Mills Scope 1 emissions from use of carbonates	11,945	11,052	11,307	11,520	15,511
Mills Scope 1 emissions from production-related mobile transportation	71,388	73,236	67,661	74,139	77,922
Mills Scope 1 emissions from landfills and wastewater treatment plants	67,516	94,116	72,693	45,391	19,856
Mills Scope 1 emissions from ozone depleting substances	12,152	21,039	32,290	7,966	7,867
Converters Scope 1	146,845	147,493	142,490	137,470	141,973
Converters Scope 2	274,845	261,855	234,515	223,067	181,806

GHG emissions from our pulp and paper mills (tonnes)	2017	2018	2019	2020	2021
Scope 1 GHG emissions from C ¹³	3,582,148	3,578,512	3,690,021	3,357,158	3,428,244
Scope 1 GHG emissions from CH ₄ ¹³	12,155	12,046	12,190	12,861	12,328
Scope 1 GHG emissions from N ₂ O	91,366	88,932	89,746	94,654	89,547
Scope 1 GHG emissions from ozone-depleting substances	8,117	19,655	32,290	7,966	7,867
Scope 2 market-based ¹⁴	691,649	583,031	456,323	429,170	448,449
Scope 2 location-based ¹⁵	806,945	570,382	441,333	380,665	455,891
Biogenic GHG emissions	12,954,968	12,571,767	12,812,150	13,518,291	12,392,133

¹³ Scope 1 GHG emissions include those from fuel combustion and mobile transportation. Additional Scope 1 GHG emissions in 2021 derive from the operation of landfills and wastewater treatment plants (19,856 tonnes) and the use of carbonates (15,511 tonnes)

¹⁴ Market-based method: A method to quantify Scope 2 GHG emissions, based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity bundled with instruments, or unbundled instruments on their own (CDP, 'Accounting of Scope 2 emissions', V3, 2016)

¹⁵ Location-based method: A method to quantify Scope 2 GHG emissions based on average energy generation emission factors for defined locations, including local, sub-national, or national boundaries (CDP, 'Accounting of Scope 2 emissions', V3, 2016)



Consolidated performance data

Scope 3 emissions (tonnes)	2017	2018	2019	2020	2021
Fuel and energy-related activities (not included in Scope 1 or 2)	385,613	589,834	628,002	613,511	622,604
Purchased goods and services	1,867,405	1,853,798	1,840,745	1,853,696	2,325,578
Employee commuting	49,469	49,851	48,984	49,412	28,900
Upstream transportation and distribution	447,613	483,037	465,425	477,332	364,047
Downstream transportation and distribution	259,998	253,453	256,647	257,363	206,465
Business travel	3,904	11,007	11,850	2,145	1,616
Total	3,014,002	3,240,979	3,251,652	3,253,460	3,549,211

Electricity self-sufficiency of our pulp and paper mills (%)	2017	2018	2019	2020	2021
Own electricity produced	95.6	100.2	102.1	103.8	98.7
Electricity purchased	20.9	17.5	14.9	14.4	18.0
Electricity sold	16.5	17.7	17.0	18.1	16.7

Fuel consumption of our pulp and paper mills (million GJ)	2017	2018	2019	2020	2021
Produced from our own biomass	87.8	84.3	86.4	90.5	82.5
Purchased fuel	68.6	70.3	71.3	68.3	68.6

Total fuel consumption from non-renewable sources ¹⁶ (GJ)	2017	2018	2019	2020	2021
Black coal	9,066,155	7,044,927	6,923,940	5,168,909	5,549,786
Brown coal	2,653,284	2,836,275	3,254,698	3,143,412	3,150,767
Heavy fuel oil	729,227	863,764	1,209,792	614,073	951,951
Natural gas	44,025,729	46,785,317	46,035,922	42,421,112	44,129,461
Other fossil fuel	700,496	748,527	1,687,075	1,008,400	1,616,369

¹⁶ Fuels are reported according to their lower heating value (LHV); the emissions factor source is taken from ÜBPV (BGBl II Nr. 339/2007)

Total fuel consumption from renewable sources (GJ)	2017	2018	2019	2020	2021
Biomass purchased	13,360,345	13,939,473	14,087,189	15,649,478	15,109,521
Black liquor/base liquor – thickened	74,032,219	71,468,423	72,833,265	75,573,074	67,899,197
Own biomass	10,674,486	9,872,304	10,029,633	11,132,981	11,067,273
Other renewable fuel	3,414,622	3,312,916	3,858,592	4,086,796	3,804,661

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Fuel sources for our pulp and paper mills (%)	2017	2018	2019	2020	2021
Renewables	65	64	64	67	65
Black liquor	47.3	46.2	46.2	47.6	44.9
Purchased biofuel	8.8	9.2	9.1	10.0	10.2
Own biomass	6.8	6.4	6.4	7.0	7.3
Other biofuel	2.0	1.9	2.3	2.4	2.3
Non-renewables	35	36	36	33	35
Natural gas	27.1	29.2	28.2	26.7	28.2
Black coal	5.8	4.6	4.4	3.3	3.7
Brown coal	1.7	1.8	2.1	2.0	2.1
Other fossil fuel	0.5	0.6	1.4	1.0	1.3

Production-related specific energy (GJ per tonne of saleable production)	2017	2018	2019	2020	2021
Electricity consumption	3.98	3.97	3.97	4.12	3.85
Heat consumption	12.48	12.67	12.28	12.34	12.09
Total energy consumption in our pulp and paper mills	16.46	16.64	16.25	16.46	15.94

Energy use from our pulp and paper mills (GJ)	2017	2018	2019	2020	2021
Electricity purchased	5,217,232	4,250,850	3,623,860	3,468,404	4,492,261
Own biomass	87,791,377	84,334,769	86,413,615	90,493,076	82,463,662
Purchased biofuel	13,690,293	14,258,347	14,393,349	15,949,253	15,416,484
Fossil fuels consumed	54,887,101	55,999,985	56,902,394	52,355,906	53,189,825
Heat purchased	63,996	83,545	73,088	67,916	85,313
Energy sales	(10,081,724)	(10,198,309)	(9,835,515)	(9,903,293)	(10,223,595)
Total	151,568,275	148,729,187	151,570,791	152,431,261	145,423,950

Energy use from our converting operations (GJ)	2017	2018	2019	2020	2021
Electricity purchased	1,965,292	1,948,379	1,866,083	1,812,319	1,856,343
Fossil fuels consumed	2,287,791	2,278,825	2,209,033	2,152,938	2,208,509
Purchased biofuel					505
Heat purchased	174,977	182,561	195,472	203,891	231,658
Total	4,428,060	4,409,764	4,270,588	4,169,149	4,297,016

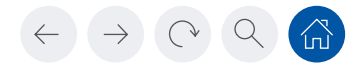
Electricity purchased from renewable sources (%)	2017	2018	2019	2020	2021
	2	2	9	5	43

Consolidated performance data

Water, air and waste

Water

Water input (m ³)	2017	2018	2019	2020	2021
Potable water input	22,620,731	24,332,544	27,180,356	24,449,849	22,613,894
Non-potable water	284,450,814	279,126,563	279,119,444	292,820,897	286,035,617
Second-class water	11,928,377	9,290,059	8,218,302	7,402,517	6,877,029
Surface water	246,973,299	247,081,374	252,751,131	266,062,494	260,456,157
Ground water	25,549,137	22,755,130	18,150,011	19,355,887	18,702,431
Total water input (m³)	307,071,545	303,459,107	306,299,800	317,270,746	308,649,511
Waste water from third parties and other Mondi operations	38,669,589	36,288,548	36,972,077	36,163,409	32,976,656
Total water input (%)	2017	2018	2019	2020	2021
Non-potable water	93	92	91	92	93
Potable water	7	8	9	8	7
Contact and non-contact water use (m³)	2017	2018	2019	2020	2021
Non-contact water	98,448,861	97,438,070	99,317,853	108,202,843	97,319,962
Contact water	205,435,261	202,783,297	203,736,411	205,031,869	204,645,033



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Effluent (water discharges) (m³)	2017	2018	2019	2020	2021
Discharge via on-site or off-site treatment	231,652,362	228,523,805	235,836,629	234,436,270	238,071,181
Discharge direct to surface water without treatment	88,590,582	85,031,235	87,798,958	97,123,157	84,536,495
Discharge to irrigate land	50,645	54,660	50,474	42,777	40,066
Discharge sent to third parties for recycling or reuse of water	7,747,028	1,634,045	1,200,584	1,146,288	1,768,855
Total water output	328,040,616	315,243,745	324,886,644	332,748,492	324,416,596
Waste water from third parties and other Mondi operations	38,669,589	36,288,548	36,972,077	36,163,409	32,976,656
Total water output (excluding third parties)	289,371,027	278,955,197	287,914,568	296,585,082	291,439,940
Water discharged to ocean/sea	21,429,777	22,095,268	21,243,214	16,772,673	17,813,740
Water discharged to rivers	306,610,839	293,148,477	303,643,430	315,975,819	306,602,856

Emissions to water (tonnes)	2017	2018	2019	2020	2021
Emissions to water, COD	42,711	48,349	48,549	36,843	34,141
Emissions to water, AOX	170	150	153	122	109
Emissions to water, TSS	7,259	11,417	9,307	5,793	4,165

Water footprint by type 2021¹⁷ (%)	2021
Green water	
from purchased wood	62.2
from own wood	14.6
from purchased pulp	1.1
from recovered paper	15.7
Blue water	
ground water	0.2
surface water	2.5
potable water	0.2
second-class water	0.1
Grey water	3.3

17 Representing a total of approximately 10.2 billion m³

Consolidated performance data

Air					
Air emissions (tonnes)	2017	2018	2019	2020	2021
Total NOx emissions from processes	11,048	10,398	11,031	10,918	10,696
TRS from processes	56	55	44	48	48
Total particulate emissions	921	1,023	928	961	1,003
Total SO ₂ emissions from processes	1,447	1,567	1,276	1,059	1,242
Particulate emissions from processes (tonnes)	2017	2018	2019	2020	2021
Particulate emissions from drying of pulp	2	2	1	1	1
Particulate emissions from bark boiler	165	140	105	72	48
Particulate emissions from lime kiln	79	65	71	90	81
Particulate emissions from auxiliary boilers	161	158	157	126	110
Particulate emissions from recovery boiler	503	655	593	670	762
Particulate emissions from other sources (allocated to paper production)	11	0	0	0	0
Particulate emissions from other sources (allocated to pulp production)	2	2	0	1	1
Total	921	1,023	928	961	1,003
Emissions of ozone-depleting substances (kg)	2017	2018	2019	2020	2021
HFC	4,289	10,101	15,949	3,917	3,482
HCFC	1,420	740	413	274	426
CFC	1	0	0	0	0
Halons	0	0	0	0	0
PFC	0	0	0	0	0
Total	5,710	10,841	16,361	4,191	3,908

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Waste					
Waste to landfill (tonnes)	2017	2018	2019	2020	2021
Non-hazardous waste landfilled	191,462	231,261	227,196	176,054	142,533
Hazardous waste landfilled	455	1,054	1,390	297	289
Total	191,917	232,315	228,585	176,351	142,822
Hazardous waste (tonnes)	2017	2018	2019	2020	2021
Hazardous waste treated	11,445	11,061	11,448	11,563	11,471
Hazardous waste incinerated	3,593	5,683	3,225	3,960	3,551
Hazardous waste recycled/reused	2,298	3,854	2,695	2,574	2,331
Hazardous waste landfilled	455	1,054	1,390	297	289
Total	17,792	21,653	18,757	18,394	17,642
Non-hazardous waste (tonnes)	2017	2018	2019	2020	2021
Non-hazardous waste treated	7,247	7,007	7,175	8,106	8,313
Non-hazardous waste incinerated	49,400	52,447	62,702	72,777	111,485
Non-hazardous waste recycled/reused	846,862	825,364	745,255	691,273	751,906
Non-hazardous waste landfilled	191,462	231,261	227,196	176,054	142,533
Total	1,094,972	1,116,080	1,042,327	948,209	1,014,237
Total debris¹⁸ (tonnes)	2017	2018	2019	2020	2021
Non-hazardous debris	57,911	74,928	260,571	67,686	50,562
Hazardous debris	91	153	287	6,363	191
Total	58,002	75,081	260,858	74,049	50,753
18 Process-related waste, which is disposed on landfill, is reported as "hazardous waste to landfill" or "non-hazardous waste to landfill". Debris from construction activities on-site (including soil) is also monitored, but reported separately					
Total solid waste (tonnes)	2017	2018	2019	2020	2021
	1,170,765	1,212,814	1,321,943	1,040,652	1,082,633



[Click here for definitions of key terminology.](#)

For definitions of any of the terms used in this index please see the glossary of our Sustainable Development report.



[Click here to download our consolidated performance data in excel.](#)

To make our key performance tables more accessible and convenient, we have included them in a downloadable spreadsheet.