Novartis Health, Safety and Environment (HSE) Data 2021

The 9+3 Reporting Process

HSE data is collected and reviewed on a quarterly basis. Other than where indicated, the 2021 environmental and resource data published in the Novartis in Society Integrated Report are actual data for the period from January through September and best estimates for the period October through December, both of which were made available on December 16, 2021. This data table will be updated with actual data in H1 2022. Significant deviations will be reported on our website and restated in next year's Annual Report. The employees and Health/Safety data are actual from January through December 2021.

Total Production [1000] 13.3 84.1 99.5 12.7 13.2 117.7 13.2 117.7 13.2 117.7 13.2 117.7 13.2 117.7 13.2 117.7 13.2 117.7 13.2 117.7 13.3 1.13 1.13 1.13 1.13 1.13 1.1			Novartis Group ¹					
Total Production (1000 j		2021	2020	2019	2018	2017	2016	
Lost time njury and lineas rate (per 200 000 hours worked) ²	HSE Personnel Total Production [1000 t]							
Total recordable case rate (per 200 000 hours worked) ^{5. 3} 10. 25 0.23 0.35 0.33 0.30 0.24 Energy user on-site and purchased [million GJ] 10. 10 0 1 0 1 0 0 20 Energy user on-site and purchased [million GJ] 10. 10. 10. 10. 10. 10. 10. 10. 10. 10.	Safety							
Fatalities	Lost time injury and illness rate (per 200 000 hours worked) ²							
Energy us on-site and purchased [million GJ]	··· · · · · · · · · · · · · · · · · ·							
Energy use - on-site and purchased [million GJ]		0	1	0	1	0	0	
Energy, Ch-asite generated [million GJ]		9.77	10.85	12.75	12.02	12 20	12 57	
Fenergy, Purchased Imillion GJ								
Energy, Sold [million GJ]								
Energy, Infensity per area [GJ/100m²] 251,5 283,1 314,8 315,0 332,6 337,7								
Water withdrawal [million m²]	Energy, Input from renewable sources [million GJ]	2.36	2.82	2.16	2.61	2.18	2.13	
Water withdraws [million m²] 47.9 54.7 66.8 69.5 72.6 75.9 Water purchased from suppliers [million m²] 42.2 48.7 57.3 59.0 62.4 64.8 64.8 Water from other sources [million m²] 42.2 48.7 57.3 59.0 62.4 64.8 Water from other sources [million m²] 39.5 46.1 55.5 57.9 60.8 62.4 64.8 62.5	Energy, Intensity per area [GJ/100m ²]	251.5	283.1	314.8	315.0	332.6	337.7	
• Water purchased from suppliers [million m²] 5,7 5,9 9,4 10,4 10,1 10,9 • Water purchased from the aquatic environment [million m²] 0.0 0.0 0.0 0.1	Water							
*Water fastracted from the aquatic environment [million m³]	Water withdrawal [million m³]							
· Water from other sources [million m³] 0.0 0.0 0.1 0.1 0.1 Water discharged directly to aputatic environment (cooling water) [million m³] 7.8 8.4 11.2 11.9 12.2 13.0 Water discharged via treatment [million m³] 6.7 7.8 8.4 11.2 11.9 12.2 13.0 Emissions** 1.1 1.1 1.1 1.2 1.3 1.3 1.6 Emissions** 6H3 (million m³) 1.1 1.1 1.1 1.2 1.3 1.3 1.6 Emissions** 6H3 (million m³) 4.7 3.47 3.6 855.1 867.7 885.6 907.7 GHG Scope 1, Velidics [kiCO₂e] 647.0 71.1 88.9 92.2 897.4 973.4 -973.4								
Water discharged directly to 'aquatic environment (cooling water) [million m²] 39,5 46,1 55,5 57,9 60,8 62,4 Water consumption [million m²] 6,7 7,3 10,0 10,6 10,9 11,4 Water (scharged via treatment [million m²] 1,1 1,1 1,2 1,3 1,3 1,6 Emissions*								
Water consumption [million m²]¹ 122 13.0 13.0 14.1 14.2 13.1 13.1 13.1 14.2 13.3 13.1 14.2 13.3 13.3 14.3 13.3 14.3 13.3 14.3 13.3 14.3 1								
· Water lost Ingrillion m³] 6.7 7.3 10.0 10.6 10.9 11.4 Water lost Ingrillion m³] 1.1 1.1 1.2 1.3 1.3 1.16 Emissions* CHG 681.6 683.5 859.1 867.7 865.6 907.7 GHG emissions, Total Scope 1 & Scope 2 [ktCO₂e] 647.0 717.1 888.9 92.9 937.4 973.4 GHG Scope 1, Cenhustion & process [ktCO₂e] 867.0 717.1 888.9 92.2 937.4 973.4 GHG Scope 1, Vehicles [ktCO₂e] 88.5 91.3 128.4 145.6 140.1 129.3 GHG Scope 2, Purchased energy, Incatal method [ktCO₂e] 365.7 369.9 456.9 530.0 532.6 610.0 GHG Scope 3, Business travel [ktCO₂e] ° 4.5 11.6 26.6 79.0 75.6 43.6 GHG Scope 3, Business travel [ktCO₂e] ° 310.0 44.5 11.6 26.6 79.0 75.6 43.6 Sulphur Gioxide, SO₂ [I] 4.5 11.6 26.6 79.0 <								
• Water lost [million m²] 1.1 1.1 1.1 1.2 1.3 1.3 1.6 Emissions Pal Emissions B Emissions Pal GHG emissions, Total Scope 1 & Scope 2 Incl. forestry offsets [ktCO₂e] 681.6 683.5 885.1 867.7 865.6 907.7 GHG emissions, Total Scope 1 & Scope 2 [ktCO₂e] 441.7 33.6 29.8 54.9 917.4 973.4 GHG Scope 1, Combustion & process [kttCO₂e] 248.1 266.9 356.6 334.5 330.5 335.1 GHG Scope 1, Combustion & process [kttCO₂e] 485.5 91.3 128.4 145.6 140.1 129.3 GHG Scope 1, Verluchased energy, market-based method [ktCO₂e] 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 2, Purchased energy, location-based method [ktCO₂e] 365.7 220.0 191.3 211.7 200.0 125.5 Halogenated VOCs [I] 310.0 443.0 466.8 79.0 75.6 43.6 Non-halogenated VOCs [I] 310.0 443.0 466.8 490.1 457.2 446.0								
GHG emissions, Total Scope 1 & Scope 2 incl. forestry offsets [kICO₂e] GHG forestry offsets [kICO₂e] GHG comissions, Total Scope 1 & Scope 2 [kICO₂e] GHG comissions, Total Scope 1 & Scope 2 [kICO₂e] GHG scope 1, Combustion & process [kICO₂e] B85 91.3 128.4 145.6 140.1 129.3 35.6 GHG Scope 1, Vehicles [kICO₂e] B85 91.3 128.4 145.6 140.1 129.3 35.6 GHG Scope 2, Purchased energy, market-based method [kICO₂e] B85 91.3 128.4 145.6 140.1 129.3 35.6 GHG Scope 2, Purchased energy, breation-based method [kICO₂e] B85 91.3 128.4 145.6 140.1 129.3 35.6 GHG Scope 2, Purchased energy, breation-based method [kICO₂e] B106 Scope 2, Purchased energy, breation-based method [kICO₂e] B107 Scope 3, Business travel [kICO₂e] B108 Scope 3, Business travel [kICO₂e] B109 Scope 3, Business 4, B109 Scope 3, Business	Water lost [million m³]				1.3	1.3		
• GHG forestry offsets [ktCO ₂ e] 647.0 71.1 88.9 92.6 937.4 733.6 65.7 6HG emissions. Total Scope 1 & Scope 2 [ktCO ₂ e] 248.1 286.9 356.6 334.5 330.5 335.1 • GHG Scope 1. Combustion & process [ktCO ₂ e] 248.1 286.9 356.6 334.5 330.5 335.1 • GHG Scope 2. Purchased energy, market-based method [ktCO ₂ e] 310.4 38.9 404.0 442.4 466.8 568.9 GHG Scope 2. Purchased energy, location-based method [ktCO ₂ e] 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 2. Purchased energy, location-based method [ktCO ₂ e] 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 3. Business travel [ktCO ₂ e] 9 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 3. Business travel [ktCO ₂ e] 9 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 3. Business travel [ktCO ₂ e] 9 365.7 396.9 456.9 530.0 532.6 610.0 GHG Scope 3. Business travel [ktCO ₂ e] 9 365.0 446.0 361.0 443.0 466.8 480.1 457.2 446.0 Mg.		201.0						
GHG emissions. Total Ścope 1 & Scope 2 ktCO ₂ e 428.1 286.9 356.6 334.5 330.5 335.1 351. GHG Scope 1, Combustion & process ktCO ₂ e 248.1 286.9 356.6 334.5 330.5 335.1 351. GHG Scope 1, Vehicles ktCO ₂ e 310.4 338.9 404.0 442.4 466.8 508.9 GHG Scope 2, Purchased energy, market-based method ktCO ₂ e 310.4 338.9 404.0 442.4 466.8 508.9 GHG Scope 2, Purchased energy, colation-based method ktCO ₂ e 365.7 396.9 404.0 442.4 466.8 508.9 GHG Scope 2, Purchased energy, location-based method ktCO ₂ e 35.5 22.0 191.3 211.7 200.0 125.5 Halogenated VOCs 1								
• GHG Scope 1, Combustion & process [ktCO₂e]								
• GHG Scope 1. Vehicles [ktCO ₂ e] • GHG Scope 2. Purchased energy, market-based method [ktCO ₂ e] • GHG Scope 2. Purchased energy, location-based method [ktCO ₂ e] • GHG Scope 2. Purchased energy, location-based method [ktCO ₂ e] • 365.7 396.9 466.9 530.0 532.6 610.0 GHG Scope 3. Business travel [ktCO ₂ e] • 610.0 GHG Scope 3. Business travel [ktCO ₂ e] • 611.0 GHG Scope 3. Business travel [ktCO ₂ e] • 612.0 GHG Scope 3. Business travel [ktCO ₂ e] • 612.0 GHG Scope 3. Business travel [ktCO ₂ e] • 612.0 G								
• GHG Scope 2, Purchased energy, market-based method [ktCO2e] GHG Scope 2, Purchased energy, location-based method [ktCO2e] GHG Scope 3, Business travel [ktCO2e] 6 GHG Scope 3, GHG Scope 3 GHG Scope 4, GHG Scope 3, GHG Scope 3 GHG Scope 4, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 GHG Scope 3, GHG Scope 3, GHG Scope 3 G								
GHG Scope 3, Business travel [ktC02e] 6 35.5 22.0 191.3 211.7 200.0 125.5 Halogenated VOCs [t] 4.5 310.0 443.0 443.0 466.8 480.1 457.2 446.0 Sulphur dioxide, SO ₂ [t] 2.6 4.3 4.6 13.6 15.4 15.0 Nitrogen oxide, NO _x [t] 190.6 212.2 236.3 236.6 231.1 230.7 Particulates [t] Ozone-depleting substances, emissions caused by losses [tCFC R11e] 8.5 11.6 12.9 58.3 58.4 54.6 Ozone-depleting substances, emissions caused by losses [tCFC R11e] 8.5 11.6 12.9 58.3 58.4 54.6 Ozone-depleting substances, emissions caused by losses [tCFC R11e] 8.5 11.6 12.9 58.3 58.4 58.4 58.6 11.6 12.9 58.3 58.4 58.6 18.6 18.6 215.7 188.2 238.5 358.7 360.9 1.209.5 1.600.7 1.842.3 2.051.4 2.658.9 2.761.0 Emissions into Water, TSS Load [t] Emissions into Water, Nitrogen Load [t] 227.3 240.6 207.5 197.0 246.5 258.6 Emissions into Water, Phosphate Load [t] 227.3 240.6 207.5 197.0 246.5 258.6 Emissions into Water, Phosphate Load [t] 25.5 41.2 34.7 40.0 41.4 47.9 40.0								
Halogenated VOCs [t]	GHG Scope 2, Purchased energy, location-based method [ktCO ₂ e]	365.7	396.9	456.9	530.0	532.6	610.0	
Non-halogenated VOCs [t] 310.0 443.0 406.8 480.1 457.2 446.0 2.6 4.3 4.6 13.6 15.4 15.0 15.0 190.6 21.2 236.3 236.6 231.1 230.7 230.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 231.1 230.7 236.5 236.6 231.1 230.7 236.5 236.6 231.1 230.7 236.5 236.6 231.1 230.7 236.9 236.6 231.1 230.7 236.6 231.1 230.7 236.6 231.1 230.7 236.6 231.1 230.7 236.6 231.1 230.7 236.0 236.0 236.0 231.1 230.7 236.0 236.	GHG Scope 3, Business travel [ktCO ₂ e] ⁶	35.5	22.0	191.3	211.7	200.0	125.5	
Sulphur dioxide, SO ₂ [t] 2.6	Halogenated VOCs [t]	4.5	11.6	26.6	79.0	75.6	43.6	
Nitrogen oxide, NO ₂ [t] 190.6 212.2 236.3 236.6 231.1 230.7 8.5 11.6 12.9 58.3 58.4 54.6 0.0 0.0 0.0 0.0 0.1 0.0 0.1 0.0 0.1 0.0 0.1 Effluents and Waste Emissions into Water, TSS Load [t] 188.6 215.7 198.2 238.5 358.7 360.9 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	Non-halogenated VOCs [t]							
Particulates [t]								
Deptis D								
Effluents and Waste Emissions into Water, TSS Load [t] Emissions into Water, COD Load [t] Emissions into Water, COD Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Phosphate Load [t] Emissions into Water, Phosphate Load [t] Amount of significant HSE fines or penalties [kUSD] Waste Disposal (waste not recycled) [1000 t] Waste Disposal (waste not recycled) [1000 t] Waste Disposal (waste not recycled) [1000 t] ### Acardous Waste to recycling [1000 t] ### Acardous Waste to treatment [1000 t] ### Acardous Waste to incineration [1000 t] ### Acardous Waste to incineration [1000 t] ### Acardous Waste to landfill [1000 t] ### Acardous Waste to landfill [1000 t] ### Acardous Waste to recycling [1000 t] ### Acardous Waste to recycling [1000 t] ### Acardous Waste to recycling [1000 t] ### Acardous Waste to Incineration [1000 t] ### Acardous Waste to Incineration [1000 t] ### Acardous Waste to recycling [1000 t] ### Acardous Waste to incineration [1000 t] ### Acardous Waste recycled [%] ### Acardous Waste to incineration [1000 t] ### Acardous Waste recycled [%] ### Acardous Waste recycled								
Emissions into Water, TSS Load [t] 188.6 215.7 198.2 238.5 358.7 360.9 Emissions into Water, COD Load [t] 1,209.5 1,606.7 1,842.3 2,051.4 2,658.9 2,761.0 Emissions into Water, Nitrogen Load [t] 227.3 240.6 207.5 197.0 246.5 258.6 Emissions into Water, Phosphate Load [t] 25.5 41.2 34.7 40.0 41.4 47.9 Amount of significant HSE fines or penalties [kUSD] 0.0 5.3 13.7 67.4 9.4 4.0 Waste Disposal (waste not recycled) [1000 t] 29.4 42.0 54.1 59.9 60.8 67.5 Hazardous Waste to recycling [1000 t] 15.9 28.7 58.8 57.5 54.7 50.5 Hazardous Waste to treatment [1000 t] 11.1 1.6 4.0 4.5 4.9 4.4 Hazardous Waste to Inandfill [1000 t] 0.7 0.0 </td <td></td> <td>0.0</td> <td>0.0</td> <td>0.0</td> <td>0.1</td> <td>0.0</td> <td>0.1</td>		0.0	0.0	0.0	0.1	0.0	0.1	
Emissions into Water, COD Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Phosphate Load [t] Amount of significant HSE fines or penalties [kUSD] Waste Disposal (waste not recycled) [1000 t] Waste Disposal (waste not recycled) [1000 t] Waste Disposal (waste not recycling [1000 t] Hazardous Waste to recycling [1000 t] Hazardous Waste to treatment [1000 t] Hazardous Waste to treatment [1000 t] Hazardous Waste to incineration [1000 t] Hazardous Waste to incineration [1000 t] Hazardous Waste to landfill [1000 t] Hazardous Waste recycled [%] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to treatment [1000 t] Non-Hazardous Waste to incineration [1000 t] Non-Hazardous Waste to incineration [1000 t] Non-Hazardous Waste to treatment [1000 t] Non-Hazardous Waste to incineration [1000 t] Non-Hazardous Waste recycled [%] Non-Hazardous Waste Nation [Nation [Nat		100 6	215.7	100.2	220 5	250 7	260.0	
Emissions into Water, Nitrogen Load [t] Emissions into Water, Nitrogen Load [t] Emissions into Water, Phosphate Load [t] Amount of significant HSE fines or penalties [kUSD] O.0 Emissions into Water, Phosphate Load [t] Emissions into Water, Phosphate Load [t] Amount of significant HSE fines or penalties [kUSD] O.0 Emissions into Water, Phosphate Load [t] Emissions into Water, Phosphate Load [t] Emissions into Water, Phosphate Load [t] 25.5 41.2 34.7 40.0 41.4 47.9 40.0 Emissions into Water, Phosphate Load [t] Emissions into Water, Phosphate Load [t] 25.5 41.2 34.7 40.0 41.4 47.9 40.0 Emissions into Water, Phosphate Load [t] 25.5 41.2 34.7 40.0 41.4 47.9 60.8 67.5 67.5 67.5 67.5 67.7 67.6 67.7 67.6 67.7								
Emissions into Water, Phosphate Load [t] Amount of significant HSE fines or penalties [kUSD] Waste Disposal (waste not recycled) [1000 t] Hazardous Waste to recycling [1000 t] Hazardous Waste to recycling [1000 t] Hazardous Waste to incineration [1000 t] Hazardous Waste to incineration [1000 t] Hazardous Waste to landfill [1000 t] Hazardous Waste to landfill [1000 t] Hazardous Waste to recycled [%] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to incineration [1000 t] Non-Hazardous Waste to landfill [1000 t] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to recycling [1000 t] Non-Hazardous Waste to treatment [1000 t] Non-Hazardous Waste to treatment [1000 t] Non-Hazardous Waste to incineration [1000 t] Non-Hazardous Waste to landfill [1000 t] Non-Hazardous Waste to landfill [1000 t] Non-Hazardous Waste to landfill [1000 t] Non-Hazardous Waste recycled [%] Non-Hazardous Waste recycled [%] Non-Hazardous Waste recycled [%] Debris (non-operational waste), Hazardous [1000 t] Non-Operational waste), Hazardous [1000 t]								
Waste Disposal (waste not recycled) [1000 t] 29.4 42.0 54.1 59.9 60.8 67.5 Hazardous Waste to recycling [1000 t] 15.9 28.7 58.8 57.5 54.7 50.5 Hazardous Waste to treatment [1000 t] 1.1 1.6 4.0 4.5 4.9 4.4 Hazardous Waste to incineration [1000 t] 17.4 31.6 37.2 42.8 43.1 49.2 Hazardous Waste to landfill [1000 t] 0.7 0.0 0.0 0.0 0.0 0.0 Hazardous Waste recycled [%] 45.3 % 46.3 % 58.8 % 54.9 % 53.2 % 48.5 % Non-Hazardous Waste to recycling [1000 t] 83.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to landfill [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-Hazardous Waste to landfill [1000 t] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 %<	Emissions into Water, Phosphate Load [t]							
Hazardous Waste to recycling [1000 t] 15.9 28.7 58.8 57.5 54.7 50.5 Hazardous Waste to treatment [1000 t] 1.1 1.6 4.0 4.5 4.9 4.4 Hazardous Waste to incineration [1000 t] 17.4 31.6 37.2 42.8 43.1 49.2 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Hazardous Waste to landfill [1000 t] 17.4 51.8 58.8 58.8 59.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to recycling [1000 t] 18.3 59.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to incineration [1000 t] 19.5 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to incineration [1000 t] 19.5 0.5 3 8.4 8.1 8.7 9.2 Non-Hazardous Waste to Indiffill [1000 t] 19.5 0.5 89.2 87.2 88.2 87.2 881.7 882.0 881.3 80.2 80.2 80.2 80.2 80.2 80.2 80.2 80.2	Amount of significant HSE fines or penalties [kUSD]	0.0	5.3	13.7	67.4	9.4	4.0	
Hazardous Waste to treatment [1000 t] 1.1 1.6 4.0 4.5 4.9 4.4 Hazardous Waste to incineration [1000 t] 17.4 31.6 37.2 42.8 43.1 49.2 Hazardous Waste to landfill [1000 t] 0.7 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Hazardous Waste recycled [%] 18.3 46.3 58.8 54.9 53.2 48.5 58.8 54.9 53.2 48.5 58.8 54.9 53.2 55.4 56.7 57.2 57.2 55.4 56.7 57.2 57.4 57.2 57.2 57.4 57.2 57.2 57.4 57.2 57.2 57.4 57.2 57.2 57.4 57.2 57.2 57.2 57.4 57.2 57.2 57.2 57.4 57.2 57.2 57.2 57.2 57.2 57.4 57.2 57.2 57.2 57.2 57.2 57.2 57.2 57.2	Waste Disposal (waste not recycled) [1000 t]	29.4	42.0	54.1	59.9	60.8	67.5	
Hazardous Waste to incineration [1000 t] 17.4 31.6 37.2 42.8 43.1 49.2 Hazardous Waste to landfill [1000 t] 0.7 0.0 0.0 0.0 0.0 0.0 Hazardous Waste recycled [%] 45.3 % 46.3 % 58.8 % 54.9 % 53.2 % 48.5 % Non-Hazardous Waste to recycling [1000 t] 83.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to landfill [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-hazardous Waste recycled [%] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1	Hazardous Waste to recycling [1000 t]							
Hazardous Waste to landfill [1000 t] 0.7 0.0 0.0 0.0 0.0 0.0 Hazardous Waste recycled [%] 45.3 % 46.3 % 58.8 % 54.9 % 53.2 % 48.5 % Non-Hazardous Waste to recycling [1000 t] 83.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to landfill [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-hazardous Waste recycled [%] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1								
Hazardous Waste recycled [%] 45.3 % 46.3 % 58.8 % 54.9 % 53.2 % 48.5 % Non-Hazardous Waste to recycling [1000 t] 83.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to incineration [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-hazardous Waste to landfill [1000 t] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1								
Non-Hazardous Waste to recycling [1000 t] 83.9 59.9 57.7 57.2 55.4 56.7 Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to incineration [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-Hazardous Waste to landfill [1000 t] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1								
Non-Hazardous Waste to treatment [1000 t] 0.3 0.5 0.4 0.2 0.3 0.6 Non-Hazardous Waste to incineration [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-Hazardous Waste to landfill [1000 t] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1								
Non-Hazardous Waste to incineration [1000 t] 5.0 5.3 8.4 8.1 8.7 9.2 Non-Hazardous Waste to landfill [1000 t] 4.8 3.0 4.1 4.2 3.7 4.2 Non-hazardous Waste recycled [%] 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % Debris (non-operational waste), Hazardous [1000 t] 7 0.6 0.5 0.4 6.4 4.4 18.1								
Non-Hazardous Waste to landfill [1000 t] Non-hazardous Waste recycled [%] 4.8 89.2 % 87.2 % 81.7 % 82.0 % 81.3 % 80.2 % 81.3 % 80.2 % 81.3 % 80.2 %	Non-Hazardous Waste to incineration [1000 t]							
Debris (non-operational waste), Hazardous [1000 t] ⁷ 0.6 0.5 0.4 6.4 4.4 18.1	Non-Hazardous Waste to landfill [1000 t]							
	Non-hazardous Waste recycled [%]	89.2 %	87.2 %	81.7 %	82.0 %	81.3 %	80.2 %	
Debris (non-operational waste), Non-Hazardous [1000 t] ⁶ 7.0 14.0 32.5 59.9 451.1 112.8	Debris (non-operational waste), Hazardous [1000 t] ⁷							
	Debris (non-operational waste), Non-Hazardous [1000 t] ⁶	7.0	14.0	32.5	59.9	451.1	112.8	

¹ HSE data for Novartis Group reflects continuing operations according to the criteria set out by the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard.

² Includes Novartis associates and third-party personnel managed by Novartis associates.

³ Includes all work-related injury and illness, whether leading to lost time or not.

⁴ Our Group internal definition of "Water Consumption" is the sum of all water discharged via treatment and of all water lost, and as such is different from CDP/GRI definitions, which would correspond to water lost in the above table. This change was made to ensure that we focus on reducing the water we use, which requires treatment before being returned to the environment.

⁵ Full Scope 3 data will be published in H2 2022 in our <u>HSE data supplement</u> and in our <u>CDP report</u>.

⁶ 2021 data includes indirect emissions from air travel, train travel, car rentals and hotel stays. The methodology changed in 2021, with previous years' data covering emissions from air travel only. This is part of a calculation effort to expand the Scope 3 category 6 emission activities reported and part of a wider Scope 3 calculation review that aims to increase the coverage to more than 90% of the overall Scope 3. New to 2021, air travel emissions now also cover radiative forcing, which multiplies the indirect emissions by 1.9. The published metric represents actual data from January 1, 2021 through December 31, 2021, which was made available on January 5, 2022. This data may be updated after the reporting date as emissions are calculated based on bookings, which may be adjusted after the reporting period.

⁷ Debris is non-operational waste from demolition or construction of new buildings and any other constructive or landscape changes.