

2023 Emissions by Scope ⁽¹⁾⁽²⁾		
Scope	Primary (MB) mtons CO2e	Secondary (LB) mtons CO2e
Scope 1	136	136
Scope 2	513	7,048
Total	649	7,184

2023 Scope 3 Emissions by Category ⁽¹⁾⁽²⁾	
Source	mtons CO2e
C1 - Purchased Goods & Services	44,051
C3 - Fuel & Energy-Related Activities	2,585
C5 - Waste generated in operations	174
C6 - Business travel	4,733
C7 - Employee commuting	4,404
C8 - Upstream Leased Assets	-
C11 - Use of sold products	2,270
C13 - Downstream leased assets	357
C15 - Financed Emissions	47
Total	58,621

2022 Emissions by Scope ⁽¹⁾⁽²⁾		
Scope	Primary (MB) mtons CO2e	Secondary (LB) mtons CO2e
Scope 1	154	154
Scope 2	673	7,051
Total	827	7,205

2022 Scope 3 Emissions by Category ⁽¹⁾⁽²⁾	
Source	mtons CO2e
C1 - Purchased Goods & Services	35,362
C3 - Fuel & Energy-Related Activities	2,640
C5 - Waste generated in operations	136
C6 - Business travel	2,441
C7 - Employee commuting	3,833
C8 - Upstream Leased Assets	-
C11 - Use of sold products	2,883
C13 - Downstream leased assets	316
C15 - Financed Emissions	48
Total	47,659

2021 Emissions by Scope ⁽¹⁾⁽²⁾		
Scope	Primary (MB) mtons CO2e	Secondary (LB) mtons CO2e
Scope 1	160	160
Scope 2	1,193	6,707
Total	1,353	6,867

2021 Scope 3 Emissions by Category ⁽¹⁾⁽²⁾	
Source	mtons CO2e
C1 - Purchased Goods & Services	30,520
C3 - Fuel & Energy-Related Activities	2,188
C5 - Waste generated in operations	133
C6 - Business travel	950
C7 - Employee commuting	3,446
C8 - Upstream Leased Assets	8
C11 - Use of sold products	3,044
C13 - Downstream leased assets	413
C15 - Financed Emissions	19
Total	40,721

2020 Emissions by Scope ⁽¹⁾⁽²⁾		
Scope	Primary (MB) mtons CO2e	Secondary (LB) mtons CO2e
Scope 1	230	230
Scope 2	3,743	7,586
Total	3,973	7,816

2020 Scope 3 Emissions by Category ⁽¹⁾⁽²⁾	
Source	mtons CO2e
C1 - Purchased Goods & Services	33,084
C3 - Fuel & Energy-Related Activities	2,807
C5 - Waste generated in operations	117
C6 - Business travel	1,798
C7 - Employee commuting	3,064
C8 - Upstream Leased Assets	8
C11 - Use of sold products	2,026
C13 - Downstream leased assets	413
C15 - Financed Emissions	21
Total	43,338

2019 Emissions by Scope ⁽¹⁾⁽²⁾		
Scope	Primary (MB) mtons CO2e	Secondary (LB) mtons CO2e
Scope 1	272	272
Scope 2	4,426	7,721
Total	4,698	7,993

2019 Scope 3 Emissions by Category ⁽¹⁾⁽²⁾	
Source	mtons CO2e
C1 - Purchased Goods & Services	37,706
C3 - Fuel & Energy-Related Activities	2,847
C5 - Waste generated in operations	677
C6 - Business travel	9,052
C7 - Employee commuting	5,453
C8 - Upstream Leased Assets	8
C11 - Use of sold products	2,026
C13 - Downstream leased assets	417
C15 - Financed Emissions	22
Total	58,208

¹ Carbon footprint metrics for 2019, 2020, 2021, 2022, and 2023 verified with limited assurance. They may differ from those previously published due to retroactive recalculations made in accordance with the GHG Protocol. (Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard REVISED EDITION. World Resources Institute. Copyright © World Resources Institute and World Business Council for Sustainable Development, March 2004. Page 35-37).

<https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf#page=37>

² MB or market-based: A method to quantify the scope 2 GHG emissions of a reporter based on GHG emissions emitted by the generators from which the reporter contractually purchases electricity bundled with contractual instruments, or contractual instruments on their own.

LB or location-based: A method to quantify scope 2 GHG emissions based on average energy generation emission factors for defined geographic locations, including local, subnational, or national boundaries.

Source: GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard, World Resource Institute, 2015. Page 26. Scope 2 Guidance_Final_Sept26.pdf
https://ghgprotocol.org/sites/default/files/standards/Scope%20%20Guidance_Final_Sept26.pdf



MSCI 2019-2021 Emissions ⁽¹⁾⁽²⁾	2023	2022	2021	2020	2019	2023 YoY Change	2022 YoY Change	2021 YoY Change	2020 YoY change	2019-2023 Change
Primary (MB) mtons CO2e	649	827	1,353	3,973	4,698	-22%	-39%	-66%	-15%	-86%
Secondary (LB) mtons CO2e	7,184	7,205	6,867	7,816	7,993	0%	5%	-12%	-2%	-10%
Scope 3 Total	58,621	47,659	40,721	43,338	58,208	23%	17%	-6%	-26%	1%

¹Carbon footprint metrics for 2019, 2020, 2021, 2022, and 2023 verified with limited assurance. They may differ from those previously published due to retroactive recalculations made in accordance with the GHG Protocol. (Greenhouse Gas Protocol A Corporate Accounting and Reporting Standard REVISED EDITION, World Resources Institute, Copyright © World Resources Institute and World Business Council for Sustainable Development, March 2004. Page 3537). <https://ghgprotocol.org/sites/default/files/standards/ghg-protocol-revised.pdf#page=37>

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Source: GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard, World Resource Institute, 2015. Page 26. Scope 2 Guidance_Final_Sept26.pdf

https://ghgprotocol.org/sites/default/files/standards/Scope2%20Guidance_Final_Sept26.pdf

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