

G L O B A L

I M P A C T

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*environmental  
footprint  
data tables*



STARBUCKS

FISCAL 2023

# environmental footprint data tables

**Annual update of environmental performance:**<sup>1, 2, 3</sup> The following metrics represent detailed reporting of Starbucks environmental performance in FY19, the baseline year for our 2030 environmental targets, FY22, and FY23. Methodological updates and data improvements reflected in the FY23 metrics were applied to the FY19 and FY22 results, which will differ from the data previously reported.

<b>ENERGY CONSUMPTION (MWh)</b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Total Energy Consumption, direct operations<sup>4</sup></b>	<b>2,528,246</b>	<b>2,590,598</b>	<b>2,695,583</b>
Total purchased electricity, direct operations	1,938,962	1,993,936	2,095,815
Percent renewable	71%	71%	77%
Total fuel consumed, direct operations <sup>5</sup>	589,284	596,662	599,768
<b>GREENHOUSE GAS EMISSIONS (MTCO<sub>2</sub>e)<sup>6, 7</sup></b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Scope 1<sup>8</sup></b>	<b>376,745</b>	<b>404,148</b>	<b>401,722</b>
<b>Scope 2</b>			
market-based	324,451	294,242	285,989
location-based	806,148	789,425	835,477
<i>sub-total scope 1 + 2 market-based emissions</i>	<i>701,196</i>	<i>698,390</i>	<i>687,711</i>

<sup>1</sup>The scope of these data is global unless otherwise noted; Direct operations refers to an operational control boundary, inclusive of company owned stores, corporate offices, and manufacturing and distribution facilities; This includes global wholly-owned and partially-owned subsidiaries over which Starbucks has management and operational control. Direct operations excludes licensed stores.

<sup>2</sup>We have updated the methodologies used to develop our environmental inventories; These updates included improved data quality and availability, changes to emissions and water factors, and other methodological changes.

<sup>3</sup>Where possible, reported data aligns with our fiscal year. In some cases, for example utility bills, the data aligns to the nearest month rather than the exact fiscal year end and start dates.

<sup>4</sup>In gigajoules, total energy consumption in FY23 equals 7,544,934 GJ, and total fuel consumed in FY23 equals 2,159,164 GJ.

<sup>5</sup>Fuel types consumed include natural gas, stationary diesel and gasoline, propane, aviation fuel, and mobile vehicle fuel.

<sup>6</sup>Starbucks calculates greenhouse gas emissions in accordance with The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (The GHG Protocol) and uses global warming potential (GWP) values from the Intergovernmental Panel on Climate Change (IPCC) Fourth Assessment Report (AR4); Some Scope 3 GHG emission factor sources utilize IPCC Fifth Assessment Report (AR5) GWP values. More detailed climate-related disclosures are available in [Starbucks CDP Report](#).

<sup>7</sup>FY23 data have been third-party verified by Burns and McDonnell; Their report is available on page 62.

<sup>8</sup>Global refrigerant emissions exclude emissions associated with global offices and non-retail facilities outside the United States and Canada.

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<b>GREENHOUSE GAS EMISSIONS (MTCO<sub>2</sub>e)<sup>6,7</sup>   CONTINUED</b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Scope 3<sup>9</sup></b>			
1 – Purchased goods and services <sup>10,11</sup>	7,630,113	7,830,633	7,580,045
2 – Capital goods	144,036	168,238	188,855
3 – Fuel- and energy-related activities	176,953	175,861	195,153
4 – Upstream transportation and distribution	640,946	683,336	659,692
5 – Waste generated in operations	262,850	275,811	299,098
6 – Business travel <sup>12</sup>	29,343	13,292	26,566
7 – Employee commuting	615,170	707,180	579,557
8 – Upstream leased assets <sup>13</sup>	<i>Not relevant</i>		
9 – Downstream transportation and distribution	293,096	510,801	542,480
10 – Processing of sold products	167,793	162,823	175,815
11 – Use of sold products	59,772	57,817	46,075
12 – End-of-life treatment of sold products	175,345	167,255	170,090
13 – Downstream leased assets <sup>14</sup>	<i>Not relevant</i>		
14 – Franchises	2,355,277	2,928,468	3,084,939
15 – Investments	213,820	304,167	343,722
<i>subtotal scope 3 emissions</i>	<i>12,764,514</i>	<i>13,985,681</i>	<i>13,892,085</i>
<b>Total emissions (scope 1 + 2 market-based + 3)</b>	<b>13,465,710</b>	<b>14,684,071</b>	<b>14,579,796</b>
Percent of total GHG emissions from fluid dairy purchases <sup>15</sup>	18%	16%	18%
Percent of total GHG emissions from green coffee purchases <sup>16</sup>	15%	13%	11%
<b>Percent change in total emissions from FY19 baseline</b>			<b>8%</b>

<sup>9</sup>Scope 3 emissions utilize Scope 2 location-based emissions values.

<sup>10</sup>Category 1 emissions include land use change (LUC) emissions for purchases of coffee, tea, cocoa, dairy, food, and other beverage ingredients.

<sup>11</sup>Category 1 emissions include the emissions from the goods and services purchased by Starbucks Corporation; Purchases made by licensees for key commodities are included in category 14 as recommended by the GHG Protocol.

<sup>12</sup>Category 6 emissions increased between FY22 and FY23 as global business travel began to rebound to pre-pandemic levels.

<sup>13</sup>Starbucks upstream leased assets are considered de minimis.

<sup>14</sup>Starbucks downstream leased assets are considered de minimis.

<sup>15</sup>Total GHG emissions from fluid dairy purchases are inclusive of fluid dairy categorized in scope 3 category 1 and category 14, and include estimated LUC GHG emissions associated with these purchases.

<sup>16</sup>Total GHG emissions from green coffee purchases are inclusive of estimated LUC GHG emissions associated with these purchases included in scope 3 category 1.

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<b>WATER WITHDRAWALS (MEGALITERS)<sup>7</sup></b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Total water withdrawal</b>	<b>5,634,337</b>	<b>5,113,174</b>	<b>5,132,983</b>
Direct operations <sup>17,18</sup>	22,853	23,818	24,021
Percent water withdrawn from high-risk basins <sup>19</sup>	<i>Not calculated</i>	29%	30%
Indirect: licensed stores <sup>17</sup>	17,525	22,245	24,484
Percent water withdrawn from high-risk basins <sup>19</sup>	<i>Not calculated</i>	45%	46%
Indirect: packaging and agricultural commodities purchased <sup>20,21</sup>	5,593,958	5,067,111	5,084,478
<b>Percent change in total water withdrawal from FY19 baseline</b>			<b>-9%</b>
<b>OPERATIONAL WASTE (THOUSAND METRIC TONS)<sup>7, 22</sup></b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Total weight of non-hazardous operational waste</b>	<b>1,163</b>	<b>1,236</b>	<b>1,367</b>
Direct operations generated <sup>23</sup>	845	916	1,018
Percent organic	52%	53%	52%
Percent diverted <sup>24</sup>	28%	29%	31%
Indirect: generated in licensed stores <sup>25</sup>	318	320	349
Percent organic	56%	57%	58%
Percent diverted <sup>24</sup>	20%	21%	22%
<b>Percent total non-hazardous operational waste, diverted<sup>24</sup></b>	<b>26%</b>	<b>27%</b>	<b>28%</b>

<sup>17</sup>Water withdrawal from stores is calculated using both primary data and estimations; Where primary data are not available, water withdrawal is estimated by applying an average water withdrawal factor derived from withdrawal at U.S. and Canada company-owned stores.

<sup>18</sup>Starbucks withdraws water strictly from local water utilities or similar relevant entities, and as such, all of our water withdrawals are categorized as sourced from third-party water.

<sup>19</sup>Refers to water withdrawals from facilities located in regions of high or extremely-high baseline water stress as defined by WRI Aqueduct tool, which was used to conduct our global water risk assessment.

<sup>20</sup>Water withdrawal from packaging and agricultural commodities is estimated using country-level or regional water scarcity data from the World Food Lifecycle Database (WFLDB). Reporting of this category aligns with our GHG inventory, scope 3, category 1.

<sup>21</sup>Water withdrawals for green coffee are based on direct water withdrawals and water consumption factors from WFLDB.

<sup>22</sup>We are not reporting on waste discarded by customers out of our stores and instead have expanded our reporting of packaging materials.

<sup>23</sup>Reporting of this category aligns with the GHG inventory, scope 3, category 5.

<sup>24</sup>We measure waste diverted away from landfill or incineration as waste materials recycled, remarketed, composted, donated, or sold to be processed into animal feed.

<sup>25</sup>Licensed store non-hazardous waste generation is estimated based on company-owned store information; This does not include construction and demolition waste or electronic waste; Reporting of this category aligns with the GHG inventory, scope 3, category 14.

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<b>PACKAGING MATERIALS (THOUSAND METRIC TONS)<sup>26</sup></b>	<b>FY19</b>	<b>FY22</b>	<b>FY23</b>
<b>Total weight of packaging material</b>	<b>319</b>	<b>330</b>	<b>345</b>
Percent of packaging made from recycled or renewable materials	25%	29%	28%
Percent of materials recyclable, compostable or reusable	48%	47%	49%
Direct: total weight of packaging materials purchased by Starbucks Corporation <sup>27</sup>	208	220	226
Indirect: total weight of packaging materials purchased by licensees for Starbucks retail operations <sup>28</sup>	110	109	119
<b>Total weight of plastic packaging materials<sup>29</sup></b>	<b>125</b>	<b>130</b>	<b>137</b>
Total weight of virgin plastic packaging materials	118	117	122
Percent change in virgin plastic packaging materials from FY19 baseline			3%
Percent of plastic packaging that is reusable, recyclable or compostable <sup>30</sup>	30%	22%	27%
Percent of post-consumer recycled content used in plastic packaging	3%	4%	4%
<b>Total weight of customer packaging<sup>31</sup></b>	<b>145</b>	<b>167</b>	<b>172</b>
Total weight of customer packaging – paper	70	77	78
Total weight of customer packaging – plastic	75	89	92
Total weight of customer packaging – other <sup>32</sup>	0	1	1
Percent of customer packaging that is reuseable, recyclable, or compostable	10%	12%	14%
Percent of customer packaging made from recycled or renewable materials	19%	23%	24%
<b>Percent change in virgin fossil fuel derived materials in customer packaging from FY19 baseline<sup>33</sup></b>			<b>11%</b>

<sup>26</sup>Data represent packaging materials used in our direct operations and licensed stores and all other packaging materials purchased by Starbucks Corporation. This aligns with our GHG Inventory and Ellen MacArthur Foundation Global Commitment reporting boundaries. Starbucks branded products sold outside of our stores is part of a licensed model of the Global Coffee Alliance with Nestlé, while our global ready-to-drink businesses operate under collaborative relationships with PepsiCo and others. The Starbucks branded packaging used by Channel Development business partners are part of their commitments and reporting.

<sup>27</sup>Reporting of this category aligns with packaging materials reported in the GHG inventory under scope 3, category 1.

<sup>28</sup>Reporting of this category aligns with packaging materials reported in the GHG inventory under scope 3, category 14.

<sup>29</sup>FY19 and FY22 inventories have been recalculated to align with methodology changes and data quality improvements made as part of the FY23 inventory; These results may differ from what has been previously submitted to Ellen MacArthur Foundation Global Commitment and WWF ReSource Plastic and we anticipate restating these metrics in our 2023 reporting to these organizations.

<sup>30</sup>In assessing the recyclability of our portfolio, Starbucks has aligned with the New Plastics Economy 2022 Recycling Rate Survey results.

<sup>31</sup>Customer packaging is packaging designed to accompany a customer transaction.

<sup>32</sup>In reporting for this category, “other” material includes aluminum, steel, glass, textile, and wood.

<sup>33</sup>Starbucks defines virgin plastic packaging material as any plastic material that is neither biobased nor made with recycled content.

