

GHG Emissions						
	Unit	2019	2022	2023	2024	2025
<b>Total emissions by GHG <sup>(1)</sup></b>						
<b>Total GHG emissions</b>	<b>tCO<sub>2</sub>e</b>	<b>14.024.853</b>	<b>12.724.698</b>	<b>13.182.705</b>	<b>13.241.274</b>	<b>12.227.970</b>
Total CO <sub>2</sub> emissions	tCO <sub>2</sub> e	11.822.243	10.811.339	11.354.210	11.476.426	10.612.199
Total CH <sub>4</sub> emissions <sup>(2)</sup>	tCO <sub>2</sub> e	2.168.018	1.880.093	1.795.959	1.732.632	1.585.788
Total N <sub>2</sub> O emissions <sup>(2)</sup>	tCO <sub>2</sub> e	34.589	33.260	32.533	32.214	29.976
<b>Total GHG emissions by scope</b>						
<b>Scope 1</b>	<b>tCO<sub>2</sub>e</b>	<b>13.365.945</b>	<b>12.217.618</b>	<b>12.427.086</b>	<b>12.368.502</b>	<b>11.644.339</b>
Combustion	tCO <sub>2</sub> e	8.772.980	8.198.004	8.481.543	8.441.052	8.055.488
Fugitive	tCO <sub>2</sub> e	250.251	124.428	128.163	96.761	75.386
Mobile	tCO <sub>2</sub> e	139	322	242	234	190
Flaring	tCO <sub>2</sub> e	1.203.206	1.007.182	907.379	956.063	850.682
Venting	tCO <sub>2</sub> e	3.139.370	2.887.682	2.909.759	2.874.391	2.662.593
<b>Scope 2 <sup>(3,4)</sup></b>	<b>tCO<sub>2</sub>e</b>	<b>658.908</b>	<b>507.080</b>	<b>755.619</b>	<b>872.772</b>	<b>583.631</b>
Market-based	tCO <sub>2</sub> e	658.908	507.080	755.619	872.772	583.631
Location-based	tCO <sub>2</sub> e	377.128	304.469	546.308	714.975	364.238
<b>Scope 3 <sup>(5)</sup></b>	<b>tCO<sub>2</sub>e</b>	<b>144.134.129</b>	<b>151.668.187</b>	<b>155.390.417</b>	<b>152.048.756</b>	<b>146.040.030</b>
Category 11 - Use of sold products	tCO <sub>2</sub> e	134.124.230	140.820.542	145.716.662	142.252.923	136.822.486
Category 1 - Purchased goods and services	tCO <sub>2</sub> e	7.654.347	8.857.415	7.868.945	8.135.850	7.723.159
Other categories	tCO <sub>2</sub> e	2.355.552	1.990.230	1.804.810	1.659.984	1.494.384
<b>Total GHG emissions by business</b>						
<b>Upstream GHG emissions</b>	<b>tCO<sub>2</sub>e</b>	<b>8.537.254</b>	<b>7.628.560</b>	<b>7.557.615</b>	<b>7.534.544</b>	<b>6.783.477</b>
Scope 1	tCO <sub>2</sub> e	7.879.355	7.122.319	6.804.721	6.665.402	6.209.772
Scope 2	tCO <sub>2</sub> e	657.899	506.240	752.893	869.141	573.705
Methane - scope 1	tCH <sub>4</sub>	75.344	64.933	61.702	59.398	54.119
Methane - scope 2	tCH <sub>4</sub>	62	233	424	425	441
Carbon intensity	kgCO <sub>2</sub> e/BOE <sup>(7)</sup>	37,14	37,57	36,29	37,01	34,08
<b>Downstream GHG emissions</b>	<b>tCO<sub>2</sub>e</b>	<b>5.487.599</b>	<b>5.096.138</b>	<b>5.625.091</b>	<b>5.706.731</b>	<b>5.444.494</b>
Scope 1	tCO <sub>2</sub> e	5.486.590	5.095.298	5.622.365	5.703.099	5.434.567
Scope 2	tCO <sub>2</sub> e	1.009	840	2.726	3.631	9.926
Methane - scope 1	tCH <sub>4</sub>	2.023	1.980	2.015	2.057	2.075
Methane - scope 2	tCH <sub>4</sub>	-	-	-	-	-
Carbon intensity	kgCO <sub>2</sub> e/BOE <sup>(7)</sup>	40,24	39,05	36,80	37,68	35,76

## Notas

General note:

Ecopetrol's Greenhouse Gas (GHG) emissions inventory is developed in accordance with the ISO 14064-1 standard. The year 2019 has been established as the baseline year due to its significance for tracking and achieving the company's corporate emission-reduction targets.

Ecopetrol's GHG emissions inventory, for scopes 1, 2 and 3, is structured under the operational control approach. It includes the Cartagena and Barrancabermeja refineries, as well as the assets within the upstream segment where Ecopetrol operates.

The report is consolidated based on the information provided by the operational areas. For certain emission sources that do not yet have complete activity data as of December 2025, projections are developed using the average values recorded throughout the year. Ecopetrol remains committed to continuously enhancing its processes and information systems to ensure that future reporting cycles are finalized with the highest possible level of actual, verified data.

In accordance with the guidelines of ISO 14064-1 and the GHG Protocol, the baseline year emissions in Ecopetrol's inventory are recalculated whenever the company undergoes significant changes such as acquisitions, divestments, and mergers, as well as modifications to calculation methodologies or improvements in the accuracy of emission factors or activity data. This process applies not only to the baseline year but also to the entire historical dataset, ensuring consistency and comparability across reported data. During the reporting period, the organization recalculated the baseline year (2019) and the 2020–2024 historical series for Scope 1 and Scope 2 emissions to reflect changes associated with: i) the inclusion of methane sources identified through measurement campaigns; ii) the incorporation of GHG emissions from Gigante and Abanico assets following their reversion to Ecopetrol's direct operation; and iii) adjustments derived from improvements in the quality of the information used for calculation purposes. In line with the same principles, Scope 3 emissions were recalculated to reflect: i) the adoption of a criterion based on responsibility for transportation costs, aimed at improving transparency in the definition of the organizational boundary and ensuring consistent classification of emissions; ii) a methodological adjustment to remove the previous assumption that the fuel used for maritime transport of exports was of national origin and therefore already accounted for in Category 11; iii) reversion of assets previously operated by partners; and iv) adjustments associated with improvements in the quality of the information used for the calculation (activity data and emission factors).

The recalculated baseline-year emissions amount to 13.365.945 tCO<sub>2</sub>e for Scope 1 (a 3% increase), 658.908 tCO<sub>2</sub>e for Scope 2 (a 0.4% increase), and 144.134.129 tCO<sub>2</sub>e for Scope 3 (a 0.29% increase). All figures presented in this report correspond to the recalculated series to ensure consistency and comparability of the information over time.

(1). Total GHG emissions for Scopes 1 and 2.

(2). The global warming potentials (GWPs) used in the inventory correspond to those reported in the Intergovernmental Panel on Climate Change (IPCC) Fifth Assessment Report (AR5, 2014), considering a 100-year time horizon.

(3). Scope 2 emissions include only purchased electricity, as Ecopetrol does not procure other forms of energy, such as steam, heating, or cooling.

(4). Scope 2 emissions are reported using the market-based method, which includes emissions associated with electricity purchased from the National Interconnected System (SIN for its Spanish acronym) as well as from local generation centers. Although Ecopetrol also calculates Scope 2 emissions using the location-based method, estimated by applying the SIN emission factor to all purchased electricity, the company reports the market-based approach because it yields a higher and more representative figure of its operational reality. It is important to highlight that the purchase of electricity from local suppliers is influenced by factors such as the location of facilities in areas with limited access to the national grid, low system reliability, or, in some cases, opportunities to use gas as part of the decarbonization strategy.

(5). The methane-related emissions reported under Scope 2 correspond to those generated during the thermal energy production process.

(6). Since 2021, Ecopetrol has estimated its Scope 3 emissions inventory for each of the GHG Protocol categories applicable to its operations. Across the entire historical series, Categories 11 and 1 have consistently accounted for more than 99% of total Scope 3 emissions.

(7). Upstream carbon intensity is calculated by dividing the Scope 1 and Scope 2 emissions generated within the segment by the net production of crude, gas, and refined products, expressed in barrels of oil equivalent (BOE). Downstream carbon intensity is calculated by dividing the Scope 1 and Scope 2 emissions from the refining and petrochemical operations by the annual throughput of the Barrancabermeja and Cartagena refineries, also expressed in barrels of oil equivalent (BOE). Both intensity indicators are calculated under the organizational boundary defined by the operational control approach.