

METHODOLOGY FOR CALCULATING AND MEASURING CARBON FOOTPRINT

BANCO DE OCCIDENTE decided to include in its sustainable development strategy the evaluation of its contribution to climate change through the elaboration of its GHG emissions inventory and the definition of a roadmap with mitigation and compensation strategies for its GHG emissions. Since 2021, BANCO DE OCCIDENTE has calculated its emissions and has taken into account the emissions generated in 2019, 2020, 2021, 2022 and 2023.

Annually, Banco de Occidente conducts a GHG emissions inventory developed under the **GHG Protocol**, being an outstanding reference for its clarity and consistency in the quantification, monitoring, reporting and validation or verification of GHG emissions and removals.

The **year 2022** is established as the year and baseline for emissions generation due to the stability and verification of the data obtained for that period. For the year **2023** a GHG emissions inventory verified and audited by ICONTEC was presented, which has the most information for its quantification. However, and for the practicality of this exercise, the information was conditioned to a recalculation taking into account information from supplementary material AR6 of the IPCC related to the confirmation of the Global Warming Potential data for refrigerants. for **Scope 1 - Refrigerants**. On the other hand, *Resolution 40447 DE 2022* of the Ministry of Mines and Energy updates the percentages of fuel mixture in Motor Gasoline and Anhydrous Ethanol from 90% to 96% modifying the information of **Scope 1 - Fuels and Scope 3 - Outsourced Transportation**.

Climate change is the most important challenge we face as humanity today, where the reduction of the carbon footprint is imperative for the solution of the ecological overshoot. **BANCO DE OCCIDENTE** is committed to work in the fight against climate change, quantifying and updating its carbon footprint to define the path for the coming years and support the country in its commitments.

RECALCULATION POLICY

As inventory capabilities increase and data availability improves, the methods used to prepare emissions estimates will be updated and refined. Such changes or improvements are desirable when they produce more accurate and complete estimates. It is good practice to recalculate emissions from previous years when methods are changed or improved, new source categories are included in the inventory, or errors in the estimates are detected and corrected.

It should be noted that the following considerations will be taken into account for the adjustment of base year emissions, as recommended by the benchmark:

- Structural changes related to mergers, acquisitions and divestitures, or the incorporation or transfer abroad of processes or activities that generate emissions.
- New emission factors and/or GWPs that provide less uncertainty.
- Changes in calculation methodology, or improvements in the accuracy of emission factors or activity data, that result in a significant change in base year emissions.
- Include between the organizational and operational boundary new lines of business or items that have not been accounted for.
- Change in operational boundaries, ownership and control of sources.
- Discovery of significant errors, or the accumulation of a significant number of minor errors that, in aggregate, have relevant consequences on the level of emissions.

Carbon Footprint Information 2023:

Table 1. Summary of BANCO DE OCCIDENTE's GHG emissions inventory.

	Source	Emissions tCO2e	% of total
Scope 1	Fixed sources	14,21	0,19%
	Mobile sources	13,19	0,18%
	Other consumption (lubricants)	0,00	0,00%
	Fire extinguishers	39,00	0,53%
	Refrigerant gas leaks	1.313,09	17,76%
	Total emissions	1.378,67	18,65%
Scope 2	Emissions from electricity consumption	1.992,65	26,94%
	Total emissions	1.992,65	26,94%
Scope 3	Third-party transportation - freight	714,48	9,66%
	Outsourced transportation collaborators	2.021,47	27,33%
	Partner transportation - flights	63,12	0,85%
	Inputs and raw materials (paper)	51,35	0,69%
	Purchased goods	1.168,63	15,80%
	Waste	4,10	0,06%
	Total emissions	4.023,115	54,40%
Total GHG		7.395,3	100,00%

Source: Authors 2024

Table 2. Emissions through time at BANCO DE OCCIDENTE

	Source	2020	2021	2022	2023
Scope 1	Fixed sources	31,53	34,85	12,93	14,21
	Mobile sources	22,73	32,75	30,00	13,19
	Other consumption	0,00	0,00	0,47	0,00
	Fire extinguishers	0,30	13,67	56,59	39,00
	Refrigerant gas leaks	2.379,77	1.928,96	1.440,21	1.313,09
	Total emissions	2.434,33	2.010,22	1.540,20	1.379,49
Scope 2	Emissions from electricity consumption	2.075,63	1.694,59	1.396,26	1.992,65
	Total emissions	2.075,63	1.694,59	1.396,26	1.992,65
Scope 3	Outsourced transportation	10.848,73	10.158,22	265,82	714,68
	Collaborating transports	0,00	2.918,47	4.092,71	2.021,47
	Transportation - flights	13,99	30,84	170,15	63,12
	Inputs and raw materials	0,00	0,00	92,43	51,35
	Purchased goods	1.269,23	768,52	1.473,20	1.168,63
	Waste	367,20	127,57	9,07	4,10
	Total emissions	12.499,15	14.003,62	6.103,38	4.023,15
Total GHG		17.009,12	17.708,44	9.039,84	7.395,3

Source: Authors 2024

CONCLUSIONS

- The result obtained for BANCO DE OCCIDENTE's carbon footprint for the year 2023 was 7,395.3 tCO2e.
- Direct emissions contributed 1,379.49 tCO2e corresponding to 18.65% of the total inventory.
- Indirect emissions contributed 6,015.80 tCO2e corresponding to 81.35% of the total inventory.

BIBLIOGRAPHY .

- International Organization for Standardization (ISO) 14064- 1: 2020
- Methodology of the "Greenhouse Gas Protocol (GHG Protocol) Corporate Accounting and Reporting Standard".
- Resolution 40447 of 2022 - Ministry of Mines and Energy, Colombia