



SANCOFFEE

CARBON FOOTPRINT

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CLIMATE CHANGE

Over the years, the planet's temperature has been increasing exponentially, causing a series of negative effects that have threatened human life, nature, and several economic sectors, such as Coffee Growing. In the fields, the increase in temperature is notable, intense droughts, water scarcity, severe fires, catastrophic storms and declining biodiversity.¹ These shifts may be natural, such as through variations in the solar cycle. But since the 1800s, human activities have been the main driver of climate change.²

¹ United Nations, "[What is Climate Change](#)" 2023

² United Nations, "[What is Climate Change](#)" 2023

The negative impacts on coffee production have affected not only the producers, but the entire chain. In this context, it is important to understand the main sources of Greenhouse Gases³ (GHG) emissions in the sector, so that actions can be taken to mitigate the climate change effects.

³ National Grid, "[Energy explained](#)" 2023





ABOUT THE CARBON PROJECT

Sancoffee has been committed with sustainability since its foundation, whether in terms of environmental preservation or social responsibility, aiming to improve living conditions in the surrounding communities and contribute to the future of the generations to come. So in 2020, for the first time, Sancoffee was able to offset 100% percent of its GHG emissions to become the first coffee coop to achieve Carbon Neutrality in Brazil. Since then, Sancoffee has measured and monitored its GHG emissions year after year, seeking improvement points in its operation.

Export operations are only a part of the impact generated by the coffees supplied by Sancoffee, so it is essential to understand the main sources of emission and removal from coffee farms. In 2021 Sancoffee conducted a carbon balance study with the Gron company of two coffee farms of different sizes, one large and one small. The result showed that both farms were Carbon Negative, which means that the farms removed more GHG than they emitted.

In 2022 we carried out the carbon footprint of 20 farms, creating a more robust database for analysis and identification of actions to reduce GHG emissions. All 20 farms were deemed Carbon Negative, and the project outcomes will guide Sancoffee and farms toward more sustainable agriculture.



COFFEE JOURNEY AT ORIGIN



COFFEE FARM
(PRODUCTION + PROCESSING)



WAREHOUSE + DRY MILL



EXPORTS (FOB)
TRANSPORTATION UP TO THE SEA
PORT





FARMS

CARBON FOOTPRINT

At the same time that coffee farms are responsible for part of GHG emissions related to agricultural activities, such as planting, fertilizing, harvesting, and transportation, the farms are also responsible for a large part of the GHG removals through coffee trees, native forests, and the soil itself.

Therefore, aiming to understand the main GHG emissions and removals from coop and partner farms, and set actions to reduce GHG emissions, Sancofee carried out a Carbon Balance assessment in 20 coop farms, conducted by the company Gron.⁴ The data collection period was from September/2021 to August/2022 (2022/2023 crop), period of the coffee crop year.



The methodology used was the Greenhouse Gases Protocol (GHG protocol) followed by the guidelines of UN's Intergovernmental Panel on Climate Change (IPCC), and also coffee growing scientific literature.

⁴[GRON. 2023](#)

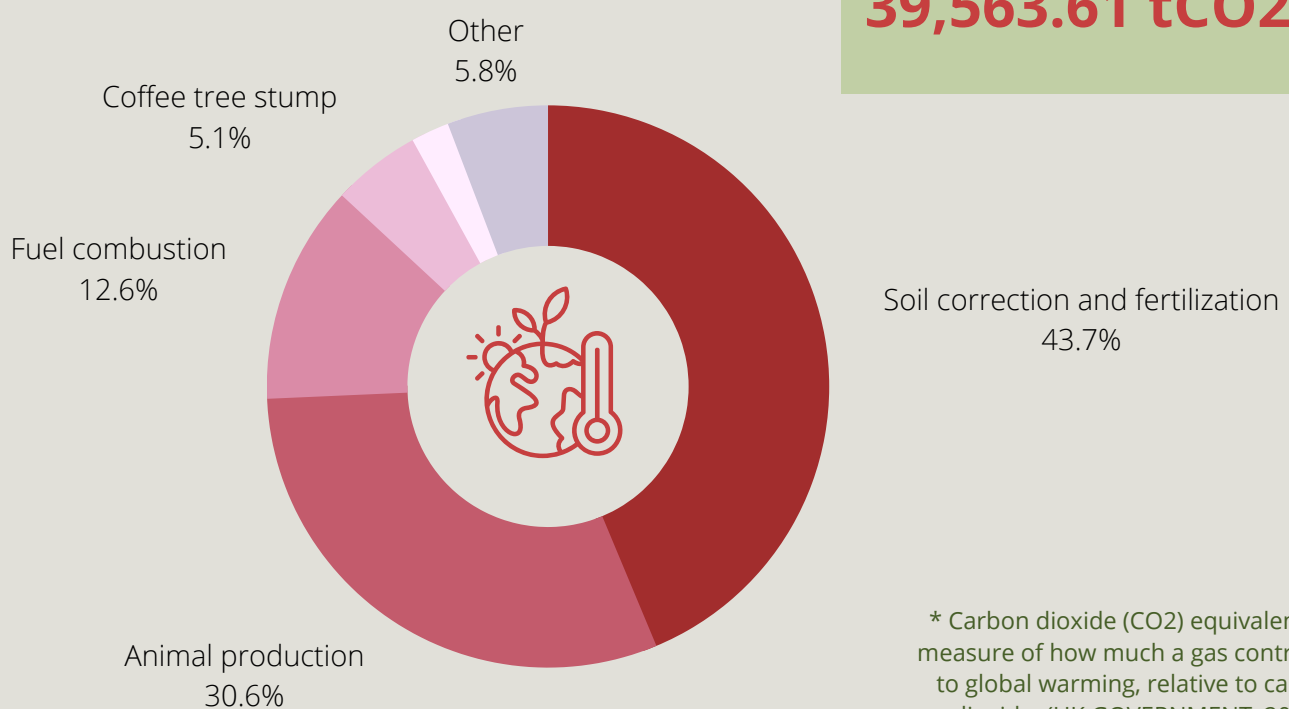




EMISSIONS

After three months of calculations, the results were promising and brought knowledge to trace actions in the pursuit of a more sustainable agriculture. From the overall result, the total GHG emitted was 39,563.61 tCO₂e*. The main sources of emissions were:

39,563.61 tCO₂e



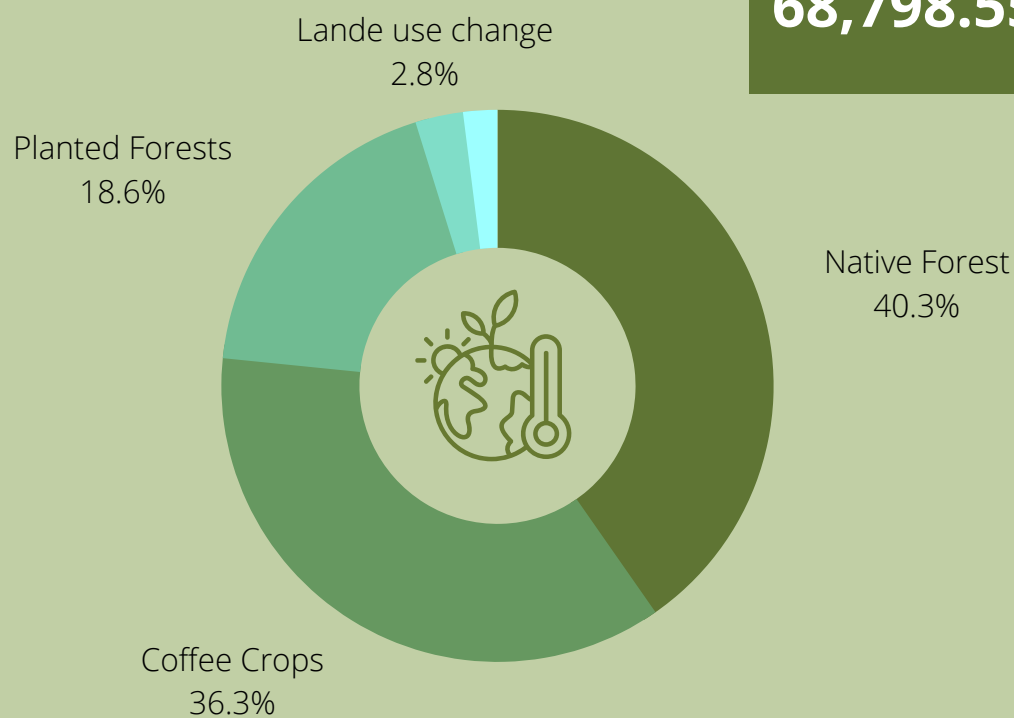
* Carbon dioxide (CO₂) equivalent is a measure of how much a gas contributes to global warming, relative to carbon dioxide. (UK GOVERNMENT, 2014).



REMOVALS

Regarding removals, the total GHG removed by the farms was 68,798.55 tCO₂e, with the main sources being:

68,798.55 tCO₂e





BALANCE

39,563.61 tCO₂e

EMISSIONS

68,798.55 tCO₂e

REMOVALS

- 29,234.94tCO₂e

CARBON NEGATIVE

Considering total emissions and total removals, we conclude that the Sancoffee farms is Carbon Negative.

Also based on the results, we could identify some actions to reduce GHG emissions at the farm level. These are:

- Seek new technologies aiming sustainable practices;
- Make partnerships to better understand and implement initiatives do reduce the GHG emissions;
- Use compost aiming to reduce the use of synthetic fertilizers;
- Use biological products aiming at the reduction of agrochemicals;
- Adopt the use of clean energy by installing a photovoltaic plant or biodigesters;
- Implementation of the Bio Recovery Project, which aims to recover degraded areas on the farms.



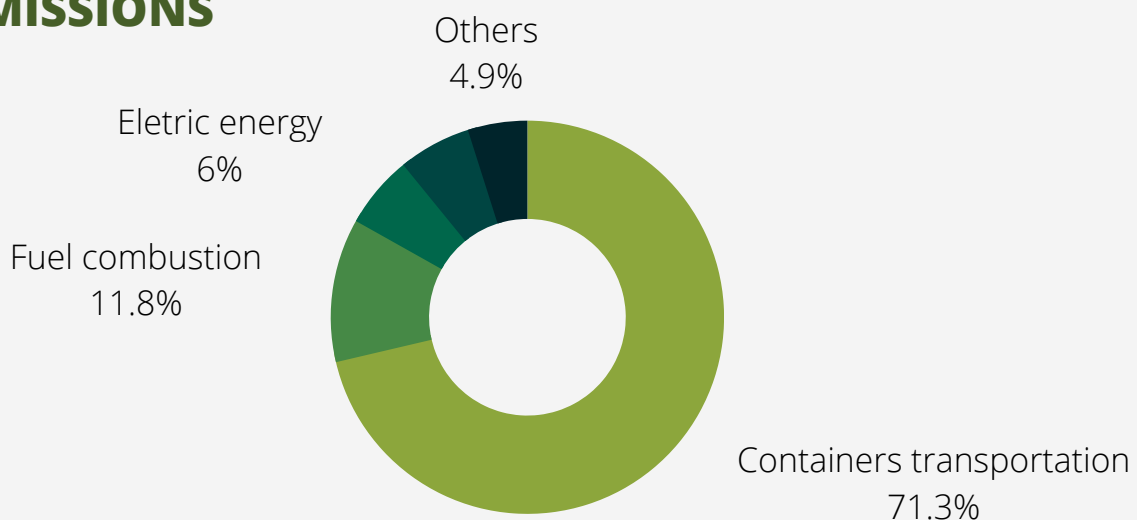


SANCOFFEE'S CARBON FOOTPRINT

Sancoffee's carbon assessment conducted in 2022, by the Brazilian company Green Solutions, refers to the 2021 emissions. Sancoffee's total emissions correspond to **166 tons of CO₂e**. The methodology used was the Greenhouse Gases Protocol (GHG protocol) followed by the guidelines of UN's Intergovernmental Panel on Climate Change (IPCC).

TOTAL EMISSIONS IN 2021
166 tCO₂e

EMISSIONS





SANCOFFEE **OFFSET**

A carbon credit is a certificate representing one metric ton of carbon dioxide equivalent that is either prevented from being emitted into the atmosphere (emissions avoidance/reduction) or removed from the atmosphere as the result of a carbon-reduction project.⁵

⁵ McKinsey & Company. "[How the voluntary carbon market can help address climate change](#)" 2020

To offset its emissions, Sancoffee purchased 166 credits from *The Envira Amazonia Project - A Tropical Forest Conservation Project* in Acre, Brazil, validated and verified by **Verra Carbon Standard**.⁶

⁶ Verra. "[Verified Carbon Standard](#)" 2023

Project Register:

<https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=175889>



In addition to offsetting, actions were taken to reduce the cooperative's GHG emissions:

- Photovoltaic panels were installed on the warehouse roof to use clean energy starting in 2023;
- And the Zero Waste project was also implemented, aiming to gradually reduce the solid residues from our operations.



166 tCO₂e - 166 tCO₂e =
Emitted Offset



Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 17 Aug 2022, 166 Verified Carbon Units (VCUs) were retired on behalf of:

Sancoffee

Project Name

The Envira Amazonia Project - A Tropical Forest Conservation Project in Acre, Brazil

VCU Serial Number

11177-299633477-299633642-VCS-VCU-352-VER-BR-14-1382-02082012-31122013-1

Additional Certifications

CCB-Biodiversity Gold; CCB-Climate Gold; CCB-Community Gold; CCB-Gold

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COFFEE JOURNEY AT ORIGIN



COFFEE FARMS

(PRODUCTION + PROCESSING)

< - 29,234.94 tCO₂e removed >



SANCOFFEE

< 166 tCO₂e offset >

WAREHOUSE + DRY MILL

EXPORTS (FOB)
TRANSPORTATION UP TO THE SEA
PORT





Any questions, please contact:

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