



-Certificate Carbonocero-

Granted to SOCIEDAD EXPORTADORA VERFRUT S.A.C.
Peru by Plan21 Foundation for the calculation of its footprint
carbon corresponding to culture, harvest,
packaging and transport to grape and blueberry port

Year: 2021

This organization has become creditor of this certificate for having
calculated The Business Footprint.

IPCC 2006 GHG Protocol
calculation methodology

Carbon footprint of scope 1 and 2:
0.0177 ton CO2E /blueberry base box and
0.0059 TON CO2E/Grape base box.

Certificate N° HC-1-P-23

16 de January de 2023



Certified Company



-Certificate Carbonocero-

-ANNEX 1-

SOCIEDAD EXPORTADORA VERFRUT S.A.C

Grupo Verfrut is a Chilean-owned fruit company dedicated to the production, processing and export of fresh fruit. With its main office in Piura (Caserío El Papayo Mz O, Castilla), it operates in the Fruit Tree and Nut Cultivation sector.

The Verfrut Group is committed to the quality and safety of its products, and has implemented and certified its entire agricultural, production, and packaging system based on international standards, ensuring full traceability of all its products from fields, packing, processing, and even the end consumer.

A. Objective.

Greenhouse gas (GHG) emissions associated with farm activities were calculated, considering both direct and indirect emissions from electricity consumption.

B. Direct emissions.

CO₂, CH₄ and N₂O emissions were taken into account. The density values of the fuels were taken as: Diesel: 0.85 kg/lit, Gasoline: 0.76 kg/lit.

The results come from the sum of the total of all CO₂e emissions (CO₂, N₂O and CH₄). Default N₂O and CH₄ emission factors from land transport and uncertainty ranges were obtained from the 2006 IPCC GHG Guidelines.

C. Indirect emissions.

Electric power consumption:

In 2021 the company consumed 11,012,124 kWh/year. For the calculation, the value for the year 2019 of the Emission Factor of the Peruvian electrical network was used and recommended by the Ministry of the Environment (MINAM): 0.52144 ton CO₂/MWh. (Peru Ministry of the Environment. Emission Factor of the SEIN National Interconnected Electric System).

1. **Direct emissions: 9,500.78**

2. **Indirect emissions: 5,742.16**

3. **Total emissions: 15,242.94**

D. Calculation methodology.

IPCC 2006 GHG Protocol calculation methodology.

The calculations are based on the consumption or use data of the different sources (fossil fuel, oils, refrigerants, etc.), multiplied by an emission factor corresponding to the activity and/or type of fuel, the calorific value and/or the global warming potential, as appropriate to the calculation. When country data were not available, IPCC data were used.

E. Uncertainty Assessment.

The emission factors presented here are almost all obtained from the 2006 IPCC Guidelines with the exception of the emission factor to estimate CO₂ emissions from electricity consumption.



Certificado N° HC-1-P-23

