

CARBON PASS PROGRAM V.1 2023

**FORWARDING CARBON FOOTPRINT IN
LIVESTOCK AND MEAT
PRODUCTION/PROCESSING/DISPATCHING**

Chain of Custody*

*Valid for integration with HCPG v1.2022 or HCIP&O v1 2023

I. Value Chain Points (VCP) where Carbon Pass (CP) must be issued to forward verified information of the Carbon Footprint of the product

1. Livestock Production: From cradle to farm gate
2. Slaughterhouse: From farm gate to dispatching point of slaughtered and packaged meat product (port or airport at the country of origin)
3. Dealer: From dispatching point to dealer cold store gate (country of destination).
4. Retail (Supermarket/Restaurant): From dealer cold store gate to restaurant or supermarket

II. General steps to forward Carbon Footprint from one VCP to the next one

1. Organization selling Livestock, with third party verified carbon footprint, ask for a Carbon Pass to forward information to slaughterhouse
2. LSQA issue Carbon Pass to the slaughterhouse and ask them to fill in the form of the corresponding stage. LSQA audits by assessment of documental registers and data following CP v.1 2023 requirements (see section III).
3. LSQA can make no programmed in situ audit to the organization.
4. If evaluation is positive, LSQA issue Carbon Pass and Carbon Footprint is forwarded to next stage organization who can also ask LSQA to issue it Carbon Pass to new client in the chain.
5. If evaluation is negative the organization can recalculate the data provided until achieve the conformity with CP v.1 2023 requirements (see section III) or decline the option of using the mark of certification provided by livestock producer. No Carbon Pass is issued.

III. Required information to issue a Carbon Pass at each VCP

1. Livestock Production: From cradle to farm gate

Upstream 1 GHG source of emission (UE1)	Core 1 GHG sources of emission and removals (CE1 +Eluc- CR1)	Downstream 1 GHG emission
1. Production of raw materials and goods (seeds, living cells, fertilizers)	3. Enteric fermentation of Cow for breeding 4. Land Use, Land Use Change due to conversion of seed to vegetal protein 5. Enteric fermentation in producing/fattening livestock (Vegetal protein conversion into animal protein) 6. Nutrients input and recirculation as raw material (Manure management and application of fertilizers) 7. Effluent treatment within the farm 8. Production and consumption of fuels, oils, lubricants, and refrigerants used in operations, cleaning and maintenance, administration, purchase, sales, and marketing 9. Organic carbon sequestration in soil due to grassland management	10. Waste treatment outside the farm

Transportation 1 GHG sources of emission (TE1)

11. Production and consumption of fuels, oils, and lubricants used in transportation to the farm

Compensation 1 (C1)

12. Carbon Credits Units (Verra/Gold S)

*Producer must hold a third party verification of the Carbon Footprint to require the issue of Carbon Pass and forward information to the slaughterhouse

Net Balance of Livestock Production (Kg CO2 eq/Kg Livestock) = NBLP

UE1 +	TE1+	CE1+Eluc-CR1 +	DE1 -	C 1=	NBLP
1+2	11	3+4+5+6+7+8-9	10	12	Final* Value Forwarded

2. Slaughterhouse: From farm gate to dispatching point of slaughtered and packaged meat product

Upstream 2 Net Balance of livestock production (NBLP2*)	Processing and Packaging GHG sources of emission and removals (EPP - RPP)	Downstream 2 GHG emission (DE2)
1. NBLP2	2. Enteric fermentation and manure management of cattle until sacrifice. 3. Effluent treatment within the farm 4. Production and consumption of fuels, oils, and lubricants used in operation, cleaning, maintenance, administration, purchase, sales, and marketing 5. Electricity consumption 6. Refrigerants	7. Waste treatment outside the farm 8. Production and consumption of fuels, oils, and lubricants used in transportation to the Port/Airport (dispatch point)

Transportation 2 GHG sources of emission (TE2)

9. Production and consumption of fuels, oils, and lubricants used in transportation from farm to slaughterhouse and from the point of sale of all significant goods purchased

Compensation 2 (C2)

10. Carbon Credits Units (Verra/Gold S)

$$*NBLP2 = NBLP \times CF$$

CF= Mass based conversion Factor from Livestock to Packaged Product

CF = Kg Livestock entering the slaughterhouse/Kg Packaged Product

Net Balance of Processed and Packaged Meat At dispatch point

(Kg CO2 eq/Kg Packaged Meat) = NBPP

NBLP+	TE2 +	Epp +	DE2-	C2 =	NBPP
1	9	2+3+4+5+6	7+8	10	Final Value Forwarded

3. Dealer: From dispatching point (port, airport of origin country) to dealer cold store gate (country of destination).

Upstream 3 Net Balance of Processed and Packaged Meat (NBPP)	Transporting and Storage (TS)	Downstream 3 GHG emission (DE3)
1. NBPP	2. Production and consumption of fuels, oils, refrigerants, and lubricants used in transportation from the dispatch point at the country of origin. 3. Effluent treatment within the facilities 4. Production and consumption of fuels, oils, and lubricants used in operation, cleaning, maintenance, administration, purchase, sales, and marketing 5. Electricity consumption 6. Refrigerants	7. Waste treatment outside the farm

Compensation 3 (C3)

8. Carbon Credits Units (Verra/Gold S)
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Net Balance of Processed and Packaged Meat

At dealer storage

(Kg CO2 eq/Kg Packaged Meat) = NBDS

NBPP	TS	DE3 -	C3 =	NBDS
1	2+3+4+5+6	7	8	Final Value Forwarded

4. Retail (Supermarket/Restaurant): From dealer cold store gate to restaurant or supermarket

Upstream 4 Net Balance at dealer Storage (NBDS)	Storage 4 (S4)	Downstream 4 GHG emission (DE4)
1. NBDS	3. Effluent treatment within the facilities 4. Production and consumption of fuels, oils, and lubricants used in operation, cleaning, maintenance, administration, purchase, sales, and marketing 5. Electricity consumption 6. Refrigerants	7. Waste treatment outside the farm

Transportation 4 GHG sources of emission (TE4)

2. Production and consumption of fuels, oils, refrigerants and lubricants used in transportation from storage to retail

Compensation 4 (C4)

8. Carbon Credits Units (Verra/Gold S)
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Net Balance of Processed and Packaged Meat

At Retail (Kg CO₂ eq/Kg Packaged Meat) = NBR

NBDS +	TE4 +	S4 +	DE4 -	C4 =	NBR
1	2	3+4+5+6	7	8	Final Carbon Footprint at retail

IV. Benefits of Carbon Pass

Carbon Pass is an auditable instrument for the Chain of Custody of livestock already certified as “Carbon Neutral” or “Low Carbon.”

Provides:

1. Environmental Accountability
2. Market advantage
3. Consumer trust
4. Risk Management

V. When is issued the Carbon Pass?

The Producer must ask LSQA to issue the CP each time he sells to a Slaughterhouse intending to use the mark of certification (label) on the packaged final product.

VI. Who provides the information to fill in the Carbon Pass?


The slaughterhouse forwarding information to its client must fill in the forms. Then, LSQA verifies it following an audit process.

If the slaughterhouse also has third-party verification of their carbon footprint for the same period of the slaughtering, then the CP is filled with actual verified data, LSQA review documentation, and may ask for a non-programmed audit following ISO 14064-3. In this case, the CP came with a light green background in the final forwarded data.

3. Forwarded GHG Emission Information for processed and packaged product		
Default Values Applied (Implies agreement for the Terms&Conditions of CoC Non Programmed Audit)	No	
Verified Actual Data (Valid only for HCIP&O Certification System with type of CoC selected)	Yes	

NBPP Kg CO2eq /PKg	NBPP	0,59
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ANNEX A : Carbon Pass Forms (Stages 1 and 2)

		https://www.lsga.com.uy/Certificaciones/Huella-en-Producto	
Carbon Pass (CP) for Carbon Neutral Livestock Production			
Applies under HCPG v.1 2022/CoC or HCIP&O v.1 2023		Label Register	001/23
Raw Material		Slaughterhouse	
Code Track for Anidated Carbon Pass	Ejemplo 49261	Ejemplo	49570
Distributor/ Intermediate		Final Selling Point	
Date of Issuance of Packaged Product CP	12/04/23	Date of Issuance Livestock CP	09/01/22
Supplier		Receiver	
Name	Ejemplo	Name	Fill in the name of client if available
Address		Address	
Address 1			
Certification System			
HCIP&O v.1 2023			
Certificate Register		Contract Number (if available)	
Dispatch/Shipping Point (DP)	Montevideo International Port		
Receiving Point, if available (RP)	Ej. MIA Intl Airport	Terrestrial Transport to DP	yes
Estimated date of dispatch	Ej. 05/30/2023		
1. General Information			
Type of Product (P)	Carbon Neutral Meat	Type of Chain of Custody (CoC)	Physical Segregation
Type of Raw Material (RM)	Carbon Neutral Livestock		
Additional Information			
Country of Origin of Raw Material	Uruguay		
Quantity of Raw Material Processed	44100	Liveweight Kg (LWKg)	
Quantity of final product packaged	22932	Packaged Product Kg (PKg)	
Quantity of Packaged Product Dispatched in this Order	14523	Dispatched Packaging Product Kg (PKg)	Conversion Factor Kg Livestock to Packaged Product Kg
Net verified CO2 eq balance Livestock Production (Farm Gate) NBLP	FALSO	Kg Co2 eq/LWKg	1,92

2. Forwarded GHG information of Livestock			
The Raw Material complies with the requirements of the Certification System for the Type of Raw Material declared			yes
If Yes please indicate wich standard are involved and third party verification organization who verified	ISO 14064-1; INTE B5, ISO 17065 and HCPG v.1 2022	LSQA	
The Quantity of the Raw Material Processed is available in the Stock Certificated Livestock Register of LSQA			yes
The impact for the transportation of the Raw Material to the Slaughterhouse was taken into account in forwarded information received at the enter of the slaughterhouse?			no
NBPL= UE1+TE1+CE1+Eluc+CR1+DE1-C1			
UE1 = Farm Upstream emissions from production of seeds, living cells, fertilizers, electricity production and distribution)	Kg CO2eq /PKg	UE1	0,013
CE1 = Farm Core Emission from enteric fermentation of cow for breeding, land use, (seed to vegetal protein), enteric fermentation in producing/fattening livestock (Vegetal protein conversion into animal protein), nutrients input and recirculation as raw material (Manure management and application of fertilizers), effluent treatment within the farm, production and consumption of fuels, oils, lubricants and refrigerants used in operations, cleaning and maintenance, administration, purchase, sales, and marketing	Kg CO2eq /PKg	CE1	0,38
Eluc= Emission from land use change at farm	Kg CO2eq /PKg	Eluc	0,00
CR1 = Core Removals from Organic Carbon Sequestration in Soil due Grassland management	Kg CO2eq /PKg	CR1	-0,48
DE1 = Farm Downstream GHG emission due to waste treatment outside the farm	Kg CO2eq /PKg	DE1	0,00
C1 = Carbon Credits Units (Verra/Gold S)	Kg CO2eq /PKg	C1	0,00
TE1 = Emission from farm upstream transportation: Production and consumption of fuels, oils and lubricants used in transportation to the farm	Kg CO2eq /PKg	TE1	0,001
	NBPL Kg CO2eq /PKg	NBPL	-0,090

ANNEX A : Carbon Pass Forms (Stages 1 and 2)

3. Forwarded GHG Emission Information for processed and packaged product			
Default Values Applied (Implies agreement for the Terms&Conditions of CoC Non Programmed Audit)			No
Verified Actual Data (Valid only for HCIP&O Certification System with type of CoC selected)			Yes
Type of transportation			
To the Slaughter House	Terrestrial	To the dispatching point	Terrestrial
NBPP= Net Balance of Processed and Packaged Meat At dispatch point	Dispatch point (port/airport)	Ton CO2 eq /PKg	0,59
NBPP= NBLP+TE2+Epp+DE2-C2			
Epp = Enteric fermentation and manure management of cattle until sacrifice, Effluent treatment within the farm, Production and consumption of fuels, oils and lubricants used in operation, cleaning, maintenance, administration, purchase, sales, and marketing, Electricity consumption, Refrigerants	Kg CO2eq /PKg	Epp	0,32
DE2 = Production and consumption of fuels, oils and lubricants used in transportation to the Port/Airport (dispatch point)	Kg CO2eq /PKg	DE2	0,02
TE2 = Slaughterhouse upstream transportation of livestock	Kg CO2eq /PKg	TE2	0,34
C1 = Carbon Credits Units (Verra/Gold S)	Kg CO2eq /PKg	C2	0,00
NBPP	Kg CO2eq /PKg	NBPP	0,59